

The Available Solution



CYCLO[®] DRIVE

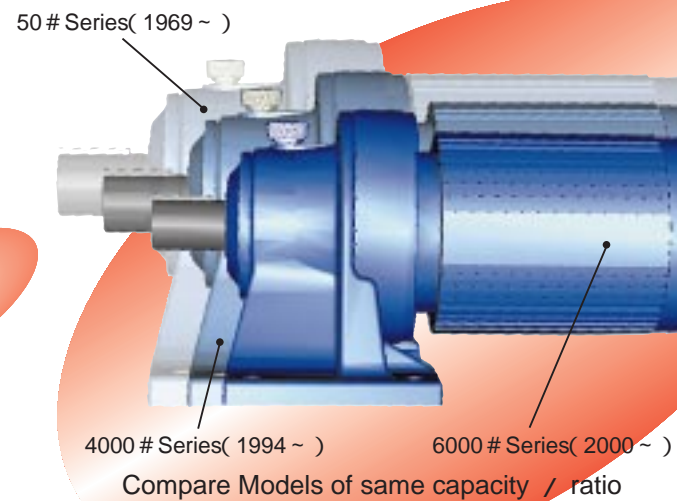
Gearmotors & Speed Reducers

6000
Series

**WHAT DO YOU THINK OF THIS?
THESE ARE THE ADVANTAGES OF THE NEWEST CYCLO,
6000 SERIES:**

**LIGHTER WEIGHT
MORE COMPACT**

Compared to previous models of the same power and ratio, the new Cyclo 6000 Series has :
Higher rated load capacity
Decreased weight-up to 40% lighter



QUIETER OPERATION

Redesigned teeth reduce noise, provide smoother operation.



GREATER VERSATILITY

More frame sizes, gear ratios and motor capacities.
New 0.25kW, 0.55kW, 1.1kW and 3.0kW selections.
A full line of motor capabilities suitable for applications all over the world.
See the available combinations shown on the next page.



"IT" SUPPORT

Our technical support includes many information technology innovations. Drawings and other technical data, as well as fast responses to questions, can be obtained at our Web site :

<http://www.shi.co.jp/ptc/>



AVAILABLE COMBINATION

A UNIQUE CONCEPT IN GEAR-MOTORS AND SPEED REDUCERS

Combinations with 4P motor **Ratio6 ~ 119**

Ratio	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
O/p Speed	50Hz	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	
r/min	60Hz	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	
MOTOR (kW x P)	0.1 x 4																	
	0.2 x 4																	
	0.25 x 4																	
	0.4 x 4																	
	0.55 x 4																	
	0.75 x 4																	
	1.1 x 4																	
	1.5 x 4																	
	2.2 x 4																	
	3.0 x 4																	
	3.7 x 4																	
	5.5 x 4																	
	7.5 x 4																	
	11 x 4																	
	15 x 4																	
18.5 x 4																		
22 x 4																		
30 x 4																		
37 x 4																		
45 x 4																		
55 x 4																		
75 x 4																		

Combinations with 6P motor **Ratio11 ~ 87**

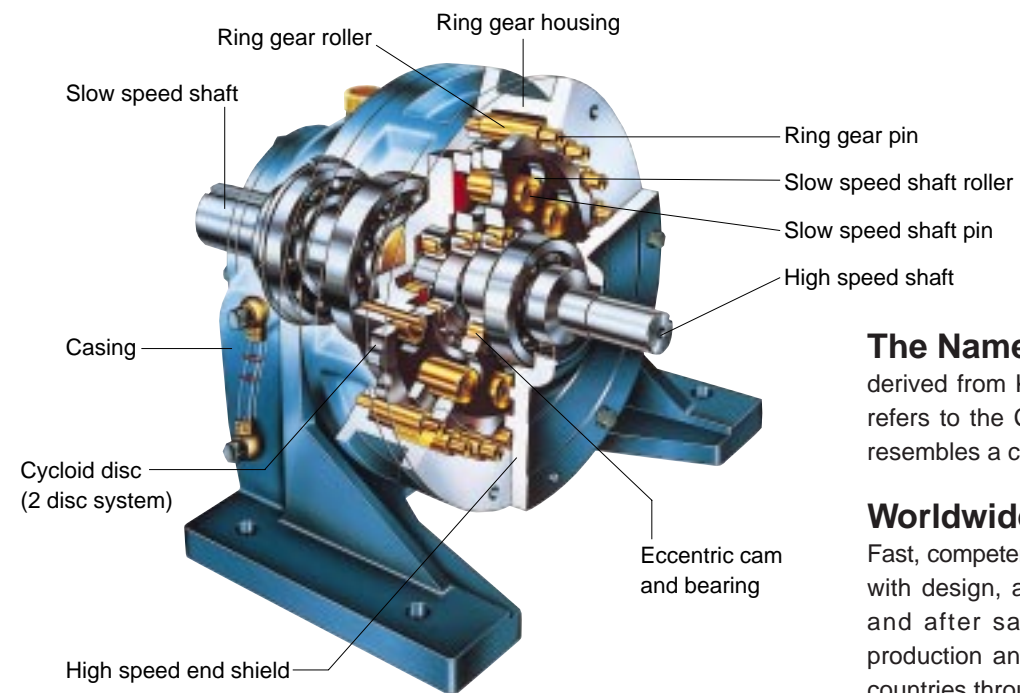
Ratio	11	15	21	29	43	59	87
O/p Speed	50Hz	89.1	65.3	46.7	33.8	22.8	11.3
r/min	60Hz	106	77.7	55.5	40.2	27.1	13.4
MOTOR (kW x P)	15 x 6						
	18.5 x 6						
	22 x 6						
	30 x 6						
	37 x 6						
	45 x 6						
	55 x 6						
	75 x 6						
90 x 6							
110 x 6							
132 x 6							

Added combinations are marked by color.

Combinations with 4P motor **Ratio104 ~ 7569**

Ratio	104	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
O/p Speed	50Hz	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98	1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	
r/min	60Hz	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	
MOTOR (kW x P)	0.1 x 4																											
	0.2 x 4																											
	0.25 x 4																											
	0.4 x 4																											
	0.55 x 4																											
	0.75 x 4																											
	1.1 x 4																											
	1.5 x 4																											
	2.2 x 4																											
	3.0 x 4																											
	3.7 x 4																											
	5.5 x 4																											
	7.5 x 4																											
	11 x 4																											
	15 x 4																											
18.5 x 4																												
22 x 4																												
30 x 4																												
37 x 4																												
45 x 4																												
Output Torque N · m	24	24	24	24	24	24	24	24	24	24	45	24	45	24	45	24	150	24	45	150	150	150	150	525	525	525	525	
	7350	31300	7630	43700	46000	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	

Added combinations are marked by color.



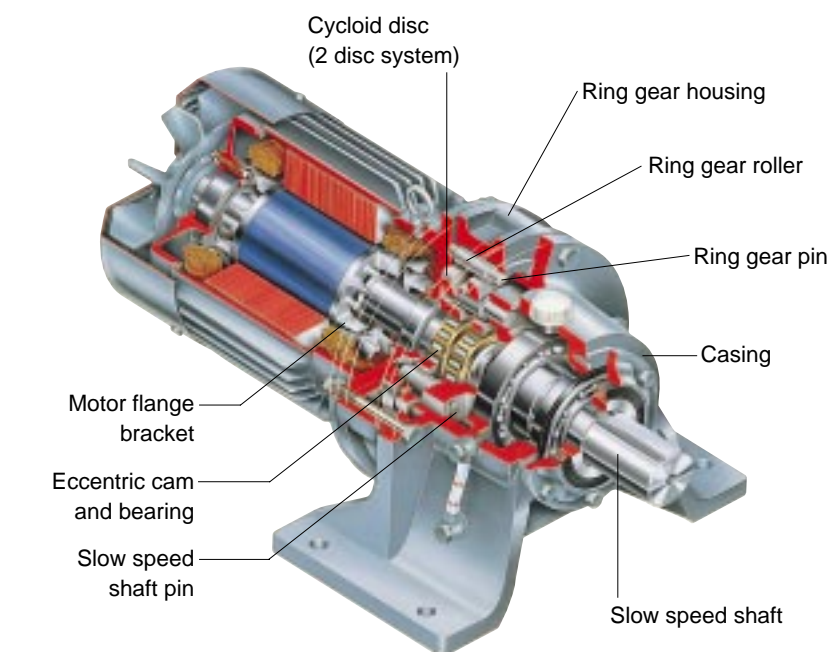
The Name CYCLO
derived from Kyklos the Greek word for circle, refers to the CYCLO disc, whose outer profile resembles a cycloidal curve.

Worldwide Product Support
Fast, competent technical advice and assistance with design, application selection, installation, and after sales service is available from production and distribution centers in over 30 countries throughout the world.

Many Possibilities
of mechanical and electrical power transmission and control are available in the complete CYCLO product range. CYCLO means the available solution. Get in touch with us, we will be happy to provide whatever information you need.

70 Years of Product Development
The unique CYCLO operating principle was invented by the German engineer Lorenz Braren in 1931. His ingenious design has continued its progressive development up to the present day.

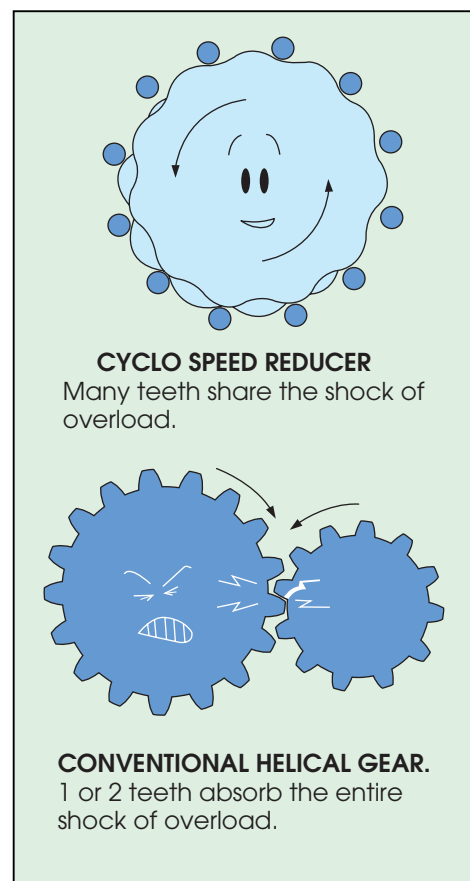
More than 7,000,000 Units Sold
Sumitomo Heavy Industries, Ltd. Power Transmission & Controls Group, a world leader in power transmission control, has produced more than 7,000,000 CYCLO DRIVES, CYCLO DRIVE Gearmotors, and Speed Reducers. They are used daily in industries throughout the world, replacing the more conventional helical, worm, and spur gear units.



Power Transmission Experience
In addition to a wide range of application knowledge, we can offer 70 years of advanced power transmission drive experience.

Quality System Certification
Sumitomo Heavy Industries, Ltd. Nagoya Plant, Power Transmission & Controls Group has achieved the Quality System Certification according to ISO 9001, EN29001, BS5750 Part 1:1987, JIS Z9901:1991 Standard for design and manufacture of mechanical speed reducers, mechanical speed variators, electric motors, and gearmotors.

FEATURES AND BENEFITS



Overload Capacity - 500%

Because the CYCLO's external gear has an epitrochoidal tooth profile, which provides a high contact ratio, the teeth can't be sheared off. It has the strength to withstand overload shocks that break the teeth of ordinary reducers.

Outstanding Reliability-2 Year Warranty

CYCLO speed reducers are known for outstanding reliability and extended operating lifetime. With proper care, 20 years of problem-free operation is not unusual. This reliability is not only due to high material specifications, component quality controls and careful assembly procedures, but also due to the complete absence of sliding friction. Correctly sized and selected CYCLO gearmotors and speed reducers are covered by a two-year warranty.

Robust Construction

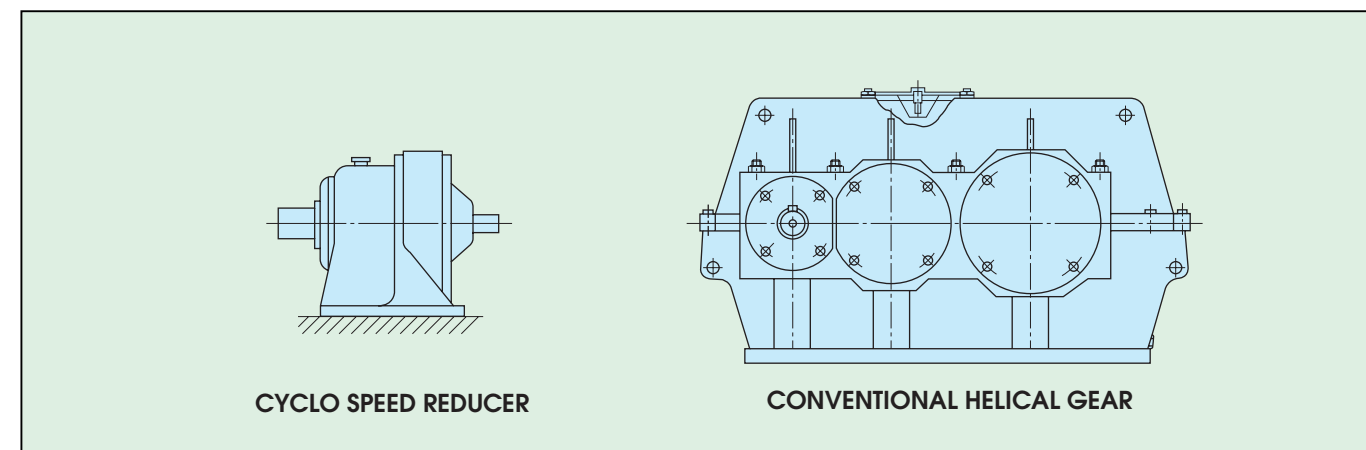
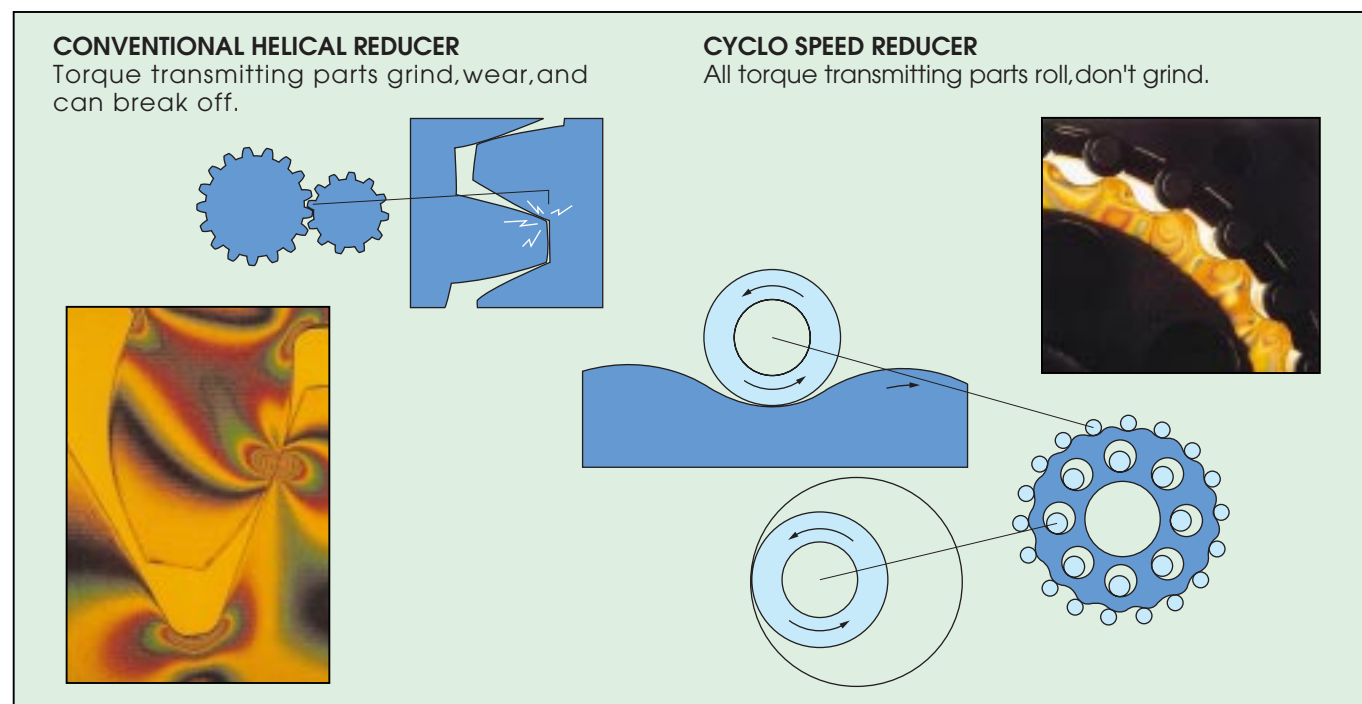
CYCLO housings are made of gray cast iron, except for the two smallest sizes, which are aluminium. All the power transmitting components are made from 52100 bearing grade steel that is hardened and ground.

Ideal for Dynamic Applications

Since inertia is very low, the CYCLO speed reducer is ideally suited for frequent start-stop-reversing duties in combination with an adjustable frequency inverter.

Low Noise

When compared with the sliding tooth contact of conventional gearing, the rolling contact of the CYCLO system reduces noise levels.



Compact Size

Single stage reduction ratios are available from 6:1 to 119:1, double stage up to 7,569:1 and triple stage up to almost 1,000,000:1. Fewer stages provide a much smaller footprint and envelope.

Overall Economy

Competitive initial cost, high reliability, long life and minimal maintenance give CYCLO speed reducers superior overall economy when compared to conventional gearboxes.

Motor Integral to the CYCLO

Standard gearmotors have directly fitted three-phase motors that meet JIS. Brakemotors are available upon request. Consult the factory when a two-speed motor is required.

Very Compact Size

A compact precision design motor has been developed for integral coupling with the CYCLO DRIVE.

Extruded Aluminium Alloy Motor Frame

50% stronger than die cast aluminium.

Low Inertia

The compact motor design keeps inertia low and makes this motor an ideal match for the low inertia CYCLO speed reducer.

Excellent Heat Dissipation

Outstanding heat dissipation makes the CYCLO gearmotor ideal for adjustable frequency inverter applications.



BASIC INFORMATION & RECOMMENDATION

Drive Ratings

Standard CYCLO speed reducers are designed and built for long, maintenance-free, 10-hour daily service under conditions of uniform load. When your application involves more severe conditions, catalog ratings must be divided by the proper service factor, or the actual load must be multiplied by this factor.

Shaft Rotation

For single and triple reduction units, the slow speed shaft turns in the direction opposite to that of the high speed shaft. For double reduction units, the slow speed and high speed shafts turn in the same direction. The slow and high speed shafts are coaxial for all reductions.

Shaft Connections

A pulley, sprocket or pinion should be mounted as close to the shaft bearing as possible and ideally, in order to avoid undue bearing load and shaft deflection, not with the point of radial load beyond the midpoint of the protruding shaft. Never over tighten belts or chains. Careful and accurate installation is essential for efficient and trouble-free operation. Before installing, the shafts should be checked to make sure that they are parallel and level. Accuracy of alignment after mounting can be checked with a string or straight edge held against the faces of the sprocket or pulley hubs.

Couplings should be properly aligned the limits specified by the manufacturer and checked carefully prior to initial startup. In order for it to give the required fit, the coupling bore diameter and tolerance should be appropriate to the gearbox shaft diameter and tolerance.

Control of Shaft Load

When power is transmitted through spur gear, belts, pulleys, or chains, radial forces are applied to the shafts. The radial capacities are calculated from load centering and compared to the allowable radial load.

Installation

Be sure to install and operate CYCLO drives in compliance with applicable local and national safety codes. Appropriate guards for rotating shafts should always be used.

Mounting Considerations

Horizontal and vertical oil-lubricated units should be mounted in exact planes whenever possible. When they are mounted on inclined surfaces, minor modifications are necessary since inclined mounting could lower the oil level. However, overfilling the unit with oil may cause leakage through the air vent, foaming, churning and consequently overheating. Please contact the factory.

Lubrication Information

The smaller CYCLO units up to size 6125 and some multiple reduction units are grease lubricated. All other units are oil lubricated as standard.

Grease Lubricated

All grease lubricated units are filled with grease at our factory and arrive ready for use.

a) Lifetime Grease Lubrication

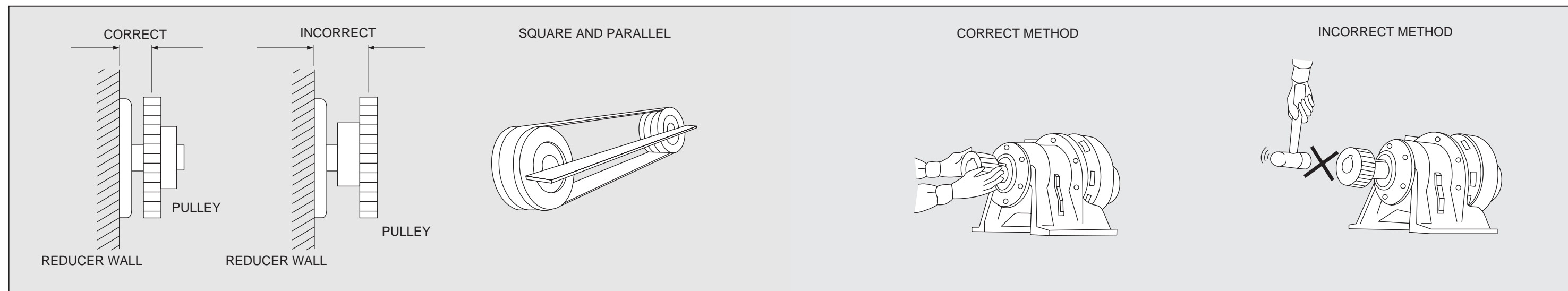
CYCLO units up to size 6125 are grease lubricated for life and suitable for any mounting position. These sizes are filled with SHELL ALVANIA RA grease at our factory and are maintenance-free for 20,000 operating hours or 4 to 5 years.

b) Other Grease Lubrication

Grease lubricated units larger than size 6125 are usually filled with SHELL ALVANIA R2 grease at our factory. These units are quipped with grease nipples and vent plugs to allow for periodic regreasing.

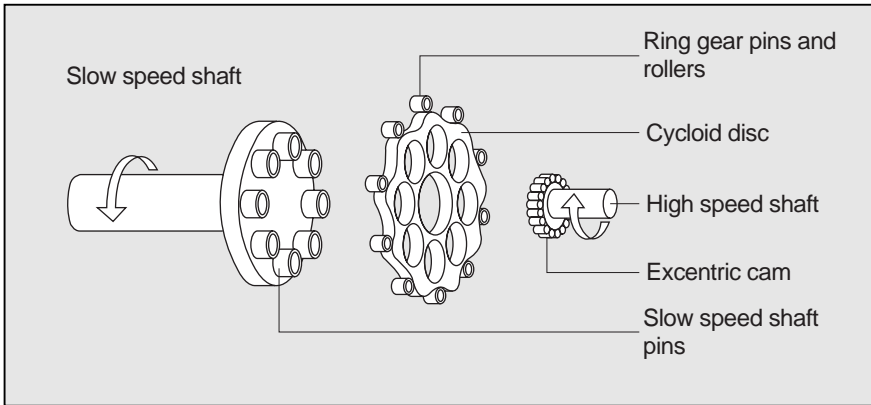
Oil Lubricated Units

Oil lubricated units must be filled to the correct level with oil before operating. Choose an appropriate oil viscosity that suits the installation ambient temperature. For recommended oil types and viscosity grades, please refer to our current Operating and maintenance manual.



HOW IT WORKS

The unique CYCLO speed reducing system is based on an ingeniously simple principle that offers many benefits to the designer and user of power transmission drives. Basically, the speed reducer has only three major moving parts:



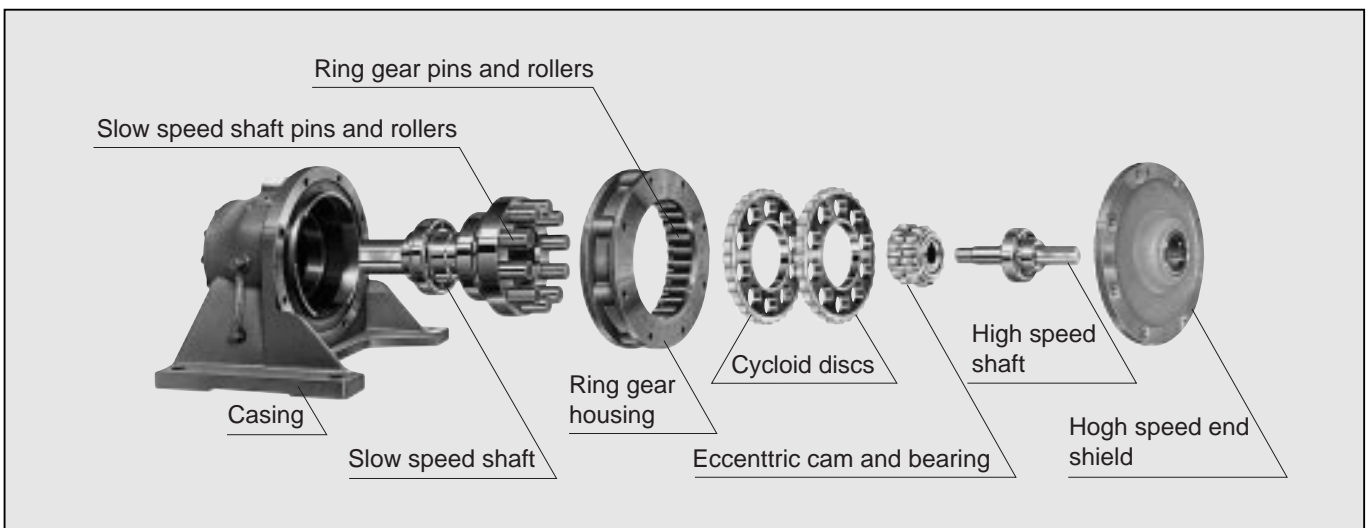
- * High speed input shaft with integrally mounted eccentric cam and roller bearing assembly
- * Cycloid discs
- * Slow speed shaft assembly

As the eccentric cam rotates, it rolls the cycloid discs around the internal circumference of the stationary ring gear.

The resulting action is similar to that of a wheel rolling around the inside of a ring. As the wheel (cycloid disc) travels in a clockwise path around the ring (ring gear housing), the wheel itself turns slowly on its own axis in a counter-clockwise direction. In the CYCLO system the cycloidal profile around the outer edge of the disc engages progressively with the rollers of the fixed ring gear housing to produce a reverse rotation at reduced speed. For each complete revolution of the high speed shaft, the cycloid disc turns one cycloidal tooth pitch in the opposite direction. In general, there is one less cycloidal tooth around the disc than there are pins in the fixed ring gear housing, which results in reduction ratios equal to the number of cycloidal teeth on the disc. (Note: For some ratios, there are two less teeth per cycloid disc than there are pins in the ring gear housing.)

The reduced rotation of the cycloid discs is transmitted to the slow speed shaft by means of drive pins and rollers that engage with holes located around the middle of each disc.

Typically, a two disc system is used with a double eccentric cam which increases the torque capacity and offers an exceptionally smooth, vibration-free drive.

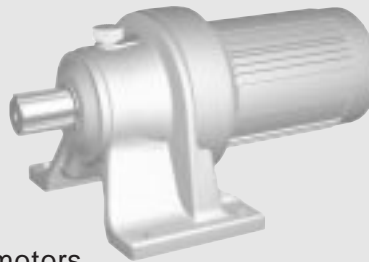


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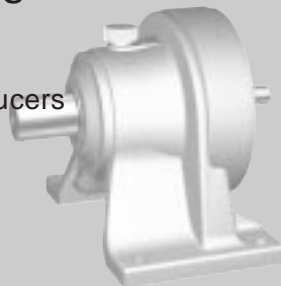
CYCLO® GEARMOTORS

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Nomenclature of gearmotors	A-3
Selection	A-4
Load Factor	A-6
Selection Tables	A-10
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Dimension Tables	A-124



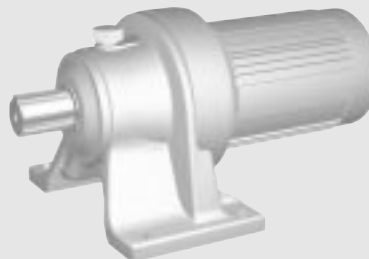
CYCLO® SPEED REDUCERS

Standard Specification	B-2
Nomenclature of Speed Reducers	B-3
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CYCLO® GEARMOTORS(AF MOTORS FOR INVERTER)

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HIGH EFFICIENCY MOTORS

GEAR MOTOR E SERIES-LOW REDUCTION RATIO ^{1/3} ~ ^{1/10}	D-5
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TECHNICAL DATA

Reducer	E-3
Motor	E-31
Common	E-55

BASIC MOTOR SPECIFICATIONS

Table 1. 3-Phase Induction Motors.

: Standard Insulation
: Manufactured Models

Specification	Indoor Type (JP44)		Outdoor Type (JPW44)		Corrosion Proof Class 2		Insulation Class								Two Speed Motors (Constant Torque)	Inverter Motors (Constant Torque)				
	Capacity(kW)	P	4	6	4	6	4	6	E	B		F		H		Indoor Type	Outdoor Type			
									4	4	6	4	6	4	6	4/8	4	6	4	6
0.1																				
0.2																				
0.25																				
0.4																				
0.55																				
0.75																				
1.1																				
1.5																				
2.2																				
3.0																				
3.7																				
5.5																				
7.5																				
11																				
15																				
18.5																				
22																				
30																				
37																				
45																				
55																				
Remarks	Continuous Rating & Applicable Voltage : 200V 50/60Hz · 220V 60Hz(400V 50/60Hz · 440V 60Hz) Applicable Voltage. Provided that the base frequency for driving an inverter is 60Hz.																			

Table 2. 3-Phase Induction Motors with Built-in Brakes.

: Standard Insulation
: Manufactured Models

Specification	Indoor Type (JP44)		Outdoor Type (JPW44)		Corrosion Proof Class 2		Insulation Class								Two Speed Motors (Constant Torque)	Inverter Motors (Constant Torque)				
	Capacity(kW)	P	4	6	4	6	4	6	E	B		F		H		Indoor Type	Outdoor Type			
									4	4	6	4	6	4	6	4/8	4	6	4	6
0.1																				
0.2																				
0.25																				
0.4																				
0.55																				
0.75																				
1.1																				
1.5																				
2.2																				
3.0																				
3.7																				
5.5																				
7.5																				
11																				
15																				
18.5																				
22																				
30																				
37																				
Remarks	Continuous Rating & Applicable Voltage : 200V 50/60Hz · 220V 60Hz(400V 50/60Hz · 440V 60Hz) Brake Insulation : B type Provided that the base frequency for driving an inverter is 60Hz.																			

- Notes : 1. Motors with output kW specifications other than as listed in Tables 1 ~ 4 are also manufactured .Consult factory.
Examples : Special voltage, dust-proof, humidity proof, tropical treatment high temperature, ship use, dual shaft(round & square shaft)
CSA Standard , NEMA Standard, etc. For other corresponding Standards, refer to Comparison of Sumitomo Standards with International Standards on Page E50 ~ 53 of Technical Information.
- Standard protection type : Indoor Type JP44, JP54, Outdoor Type JPW44, JPW54.
 - Using an inverter drive, start-up lubrication properties and thermal rating must be reviewed for selection of the proper Cyclo reducer from size combination. Advise us of ambient temperature, input r/min, mounting method, load characteristics and other conditions of use.
 - When the standard electric motor is driven by an inverter, the dielectric withstand voltage of the electric motor may have to be taken into account if the inverter has a high carrier frequency(typical in IGBT)with high input voltage(400V or more) or if it has a long wiring distance. Consult factory in such a case.

Table 3. Safety Increased Explosion-proof (eG3) 3-Phase Induction Motor

: Standard Insulation
: Manufactured Models

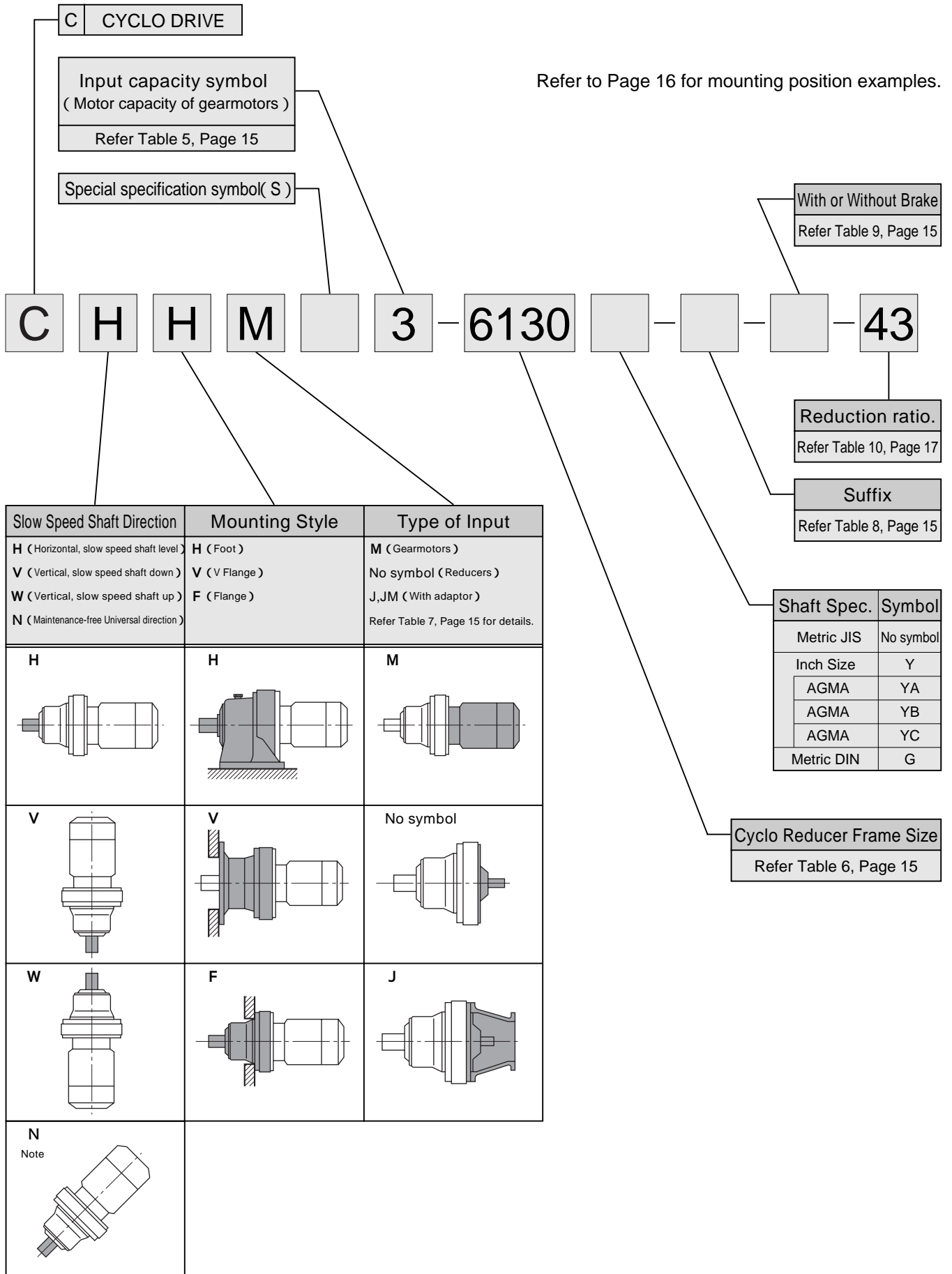
Specification		Indoor Type (JP44)		Outdoor Type (JPW44)		Corrosion Proof Class 2		Insulation Class			
Capacity(kW)	P	4	6	4	6	4	6	B		F	
								4	6	4	6
0.1											
0.2											
0.4											
0.75											
1.5											
2.2											
3.7											
5.5											
7.5											
11											
15											
18.5											
22											
30											
37											
45											
55											
Remarks		Continuous Rating. Applicable Voltage : 200V、220V、350V、380V、400V、440V、50/60Hz									

Table 4. Pressure-tight Explosion-proof (d2G4) 3-Phase Motor

: Standard Insulation
: Manufactured Models

Specification		Indoor Type (JP44)		Outdoor Type (JPW44)		Corrosion Proof Class 2		Insulation Class			Inverter Motors Constant Torque	
Capacity(kW)	P	4	6	4	6	4	6	B		F	Indoor Type	Outdoor Type
								4	4	6	4	6
0.1												
0.2												
0.4												
0.75												
1.5												
2.2												
3.7												
5.5												
7.5												
11												
15												
22												
30												
37												
Remarks		Continuous Rating. Applicable Voltage : 200V、220V、350V、380V、400V、440V、50/60Hz (For inverter drive) 200V 60Hz 220V 60Hz 400V 60Hz 440V 60Hz Applicable inverter : Applicable only to Sumitomo inverters. (Refer to Inverter catalogue.)										

NOMENCLATURE



Note : N : Universal Mounting Maintenance-free is for Frame Size up to 6125(Single stage) 6125DB(Double stage)

Table 5. Input Capacity Symbol (Motor capacity of gearmotors)

4P	Capacity symbol	01	02	03	05	08	1	1H	2	3	4	5
	kW (HP)	0.1 (1/8)	0.2 (1/4)	0.25 (1/3)	0.4 (1/2)	0.55 (3/4)	0.75 (1)	1.1 (1.5)	1.5 (2)	2.2 (3)	3.0 (4)	3.7 (5)
	Capacity symbol	8	10	15	20	25	30	40	50	60	75	100
	kW (HP)	5.5 (7.5)	7.5 (10)	11 (15)	15 (20)	18.5 (25)	22 (30)	30 (40)	37 (50)	45 (60)	55 (75)	75 (100)

6P	Capacity symbol	206	256	306	406	506	606	756	1006	1256	1506	1756
	kW (HP)	15 (20)	18.5 (25)	22 (30)	30 (40)	37 (50)	45 (60)	55 (75)	75 (100)	90 (125)	110 (150)	132 (175)

Table 6 Cyclo Reducer Frame Size.

Single Reduction	Single Reduction	Double Reduction (Output side + Input side)	Double Reduction (Output side + Input side)
6060	6245	6060DA 6060 + 6060	6175DB 6175 + 6105
6065	6255	6065DA 6065 + 6065	6175DC 6175 + 6125
6070	6265	6070DA 6070 + 6065	6180DA 6180 + 6105
6075	6275	6075DA 6075 + 6065	6180DB 6180 + 6135
6080		6090DA 6090 + 6075	6185DA 6185 + 6105
6085		6095DA 6095 + 6075	6185DB 6185 + 6135
6090		6100DA 6100 + 6075	6190DA 6190 + 6125
6095		6105DA 6105 + 6075	6190DB 6190 + 6135
6100		6120DA 6120 + 6075	6195DA 6195 + 6125
6105		6120DB 6120 + 6095	6195DB 6195 + 6135
610H		6125DA 6125 + 6075	6205DA 6205 + 6125
6110		6125DB 6125 + 6095	6205DB 6205 + 6135
6115		6130DA 6130 + 6075	6215DA 6215 + 6135
6120		6130DB 6130 + 6095	6215DB 6215 + 6165
6125		6130DC 6130 + 6105	6225DA 6225 + 6135
612H		6135DA 6135 + 6075	6225DB 6225 + 6175
6130		6135DB 6135 + 6095	6235DA 6235 + 6165
6135		6135DC 6135 + 6105	6235DB 6235 + 6185
6140		6140DA 6140 + 6075	6245DA 6245 + 6165
6145		6140DB 6140 + 6095	6245DB 6245 + 6185
614H		6140DC 6140 + 6105	6255DA 6255 + 6175
6160		6145DA 6145 + 6075	6255DB 6255 + 6195
6165		6145DB 6145 + 6095	6265DA 6265 + 6195
616H		6145DC 6145 + 6105	6275DA 6275 + 6195
6170		6160DA 6160 + 6095	
6175		6160DB 6160 + 6105	
6180		6160DC 6160 + 6125	
6185		6165DA 6165 + 6095	
6190		6165DB 6165 + 6105	
6195		6165DC 6165 + 6125	
6205		6170DA 6170 + 6095	
6215		6170DB 6170 + 6105	
6225		6170DC 6170 + 6125	
6235		6175DA 6175 + 6095	

H type is option.

Table 7. Type of Motor Connection

Type of Motor Connection	Without Motor	With Motor
Integral Motor		M
Free Shaft	-	
W/C-Face Adaptor	J	JM
W/Quill I/P Adaptor	X	XM
Beier	B	BM
With Clutch Brake		CM
With Fluid Coupling		RM

Table 8. Suffix Designation

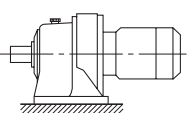
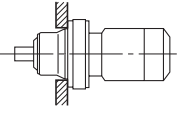
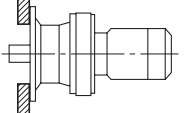
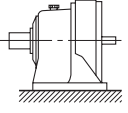
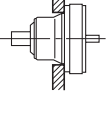
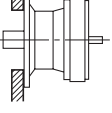
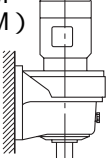
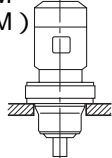
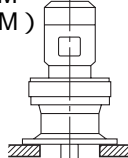
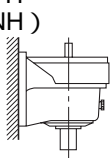
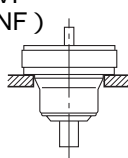
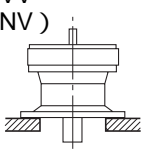
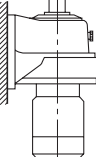
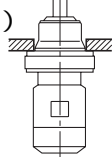
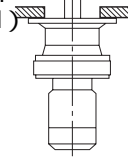
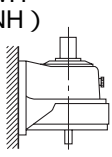
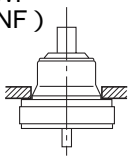
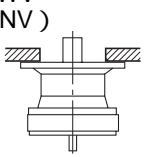
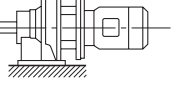
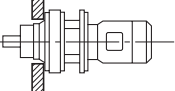

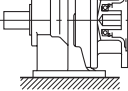
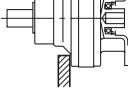
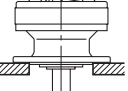
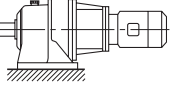
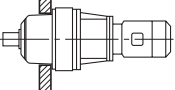

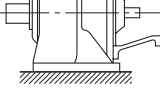
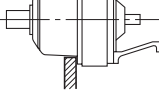
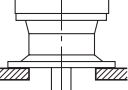
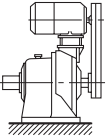
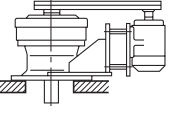
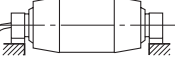
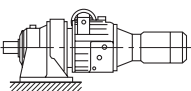
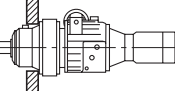

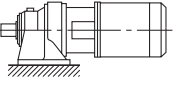
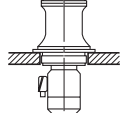
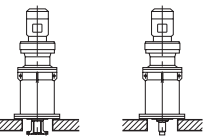
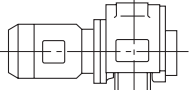
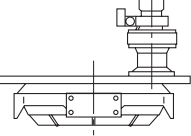
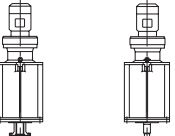
Reducer Specification	Symbol	Motor Specification	Symbol
Torque Limiter	TL	AF Motor	AV
Light Heavy Radial	R1	Servo Motor	SV
High Cap. Brg. Ductile Casing	R2	DC Motor	DV
Baseplate	BP	High Efficiency Motor	ES
HH Type Ceiling	H1		
Modification Left Wall	H2		
Modification Right Wall	H3		
Low Backlash	LB		

Table 9. Brake (Integral Only)

Brake	Symbol
NO	
YES	B

MOUNTING POSITIONS

N : Universal Mounting Maintenance-free is for Frame Size up to 6125(Single stage) 6125DB(Double stage)

Gearmotors			Speed Reducers		
CHHM (CNHM) 	CHFM (CNFM) 	CHVM (CNVM) 	CHH (CNH) 	CHF (CNF) 	CHV (CNV) 
CVHM (CNHM) 	CVFM (CNFM) 	CVVM (CNVM) 	CVH (CNH) 	CVF (CNF) 	CVV (CNV) 
CWHM (CNHM) 	CWFM (CNFM) 	CWVM (CNVM) 	CWH (CNH) 	CWF (CNF) 	CWV (CNV) 
CHHXM (CNHXM)  Input side Hollow shaft	CHF XM (CNFXM)  Input side Hollow shaft	CVV XM (CNV XM)  Input side Hollow shaft	CHHM (CNHX)  Input side Hollow shaft	CHF X (CNFX)  Input side Hollow shaft	CVV X (CNV X)  Input side Hollow shaft
CHHJM (CNHJM)  With Adaptpr	CHFJM (CNFJM)  With Adaptpr	CVVJM (CNVJM)  With Adaptpr	CHHJ  With Adaptpr	CHFJ  With Adaptpr	CVVJ  With Adaptpr
CHHPM  Top Mount Type	CVVPM  Side Mount Type	CPM  Cyclo motor pully			
CHHBM  Beier Cyclo Variator	CHF BM  Beier Cyclo Variator	CVV BM  Beier Cyclo Variator			
CHHCM  Cyclo Pack with Clutch Brake	C11WM  Cyclo capstan	C14VM C15VM  Vertical special base mount			
C10CM  Cyclo wheel	CPC  Center post type	C17VM C18VM  Vertical special base mount			

Because we constantly strive to satisfy individual user requirements, we can provide a wide variety of other special models in addition to those shown above. Please contact us for additional information.

Table 10. Available Reduction Ratios.

Single Reduction									
6	8	11	13	15	17	21	25	29	35
43	51	59	71	87	119				
Double Reduction									
104 (13 × 8)	121 (11 × 11)	143 (13 × 11)	165 (15 × 11)	195 (15 × 13)	231 (21 × 11)	273 (21 × 13)	319 (29 × 11)	377 (29 × 13)	473 (43 × 11)
559 (43 × 13)	649 (59 × 11)	731 (43 × 17)	841 (29 × 29)	1003 (59 × 17)	1247 (43 × 29)	1479 (87 × 17)	1849 (43 × 43)	2065 (59 × 35)	2537 (59 × 43)
3045 (87 × 35)	3481 (59 × 59)	4437 (87 × 51)	Note 1 5133 (87 × 59)	6177 (87 × 71)	7569 (87 × 87)				

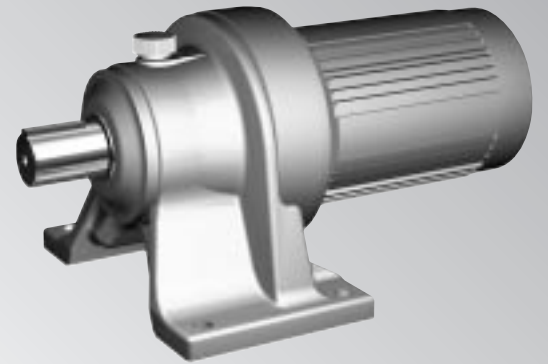
Note1 : Frame size 6205 # ~ 6265 # are (59 × 87).

Table 11. Other Reduction Ratios.

Under certain conditions, the following reduction ratios may also be available, please consult us.(The following output shaft r/min, is an example when coupled with a 4-pole motor)

Reduction Ratio	88 (11 × 8)	90 (15 × 6)	102 (17 × 6)	120 (15 × 8)	126 (21 × 6)	136 (17 × 8)	150 (25 × 6)	168 (21 × 8)	169 (13 × 13)	174 (29 × 6)	187 (17 × 11)	200 (25 × 8)	210 (35 × 6)	221 (17 × 13)	225 (15 × 15)	
Output speed r/min	50Hz	16.5	16.1	14.2	12.1	11.5	10.7	9.67	8.63	8.58	8.33	7.75	7.25	6.90	6.56	6.44
	60Hz	19.9	19.4	17.2	14.6	13.9	12.9	11.7	10.4	10.4	10.1	9.36	8.75	8.33	7.92	7.78
Reduction Ratio	232 (29 × 8)	255 (17 × 15)	258 (43 × 6)	275 (25 × 11)	280 (35 × 8)	289 (17 × 17)	306 (51 × 6)	315 (21 × 15)	325 (25 × 13)	344 (43 × 8)	354 (59 × 6)	357 (21 × 17)	375 (25 × 15)	385 (35 × 11)	408 (51 × 8)	
Output speed r/min	50Hz	6.25	5.69	5.62	5.27	5.18	5.02	4.74	4.60	4.46	4.22	4.10	4.06	3.87	3.77	3.55
	60Hz	7.54	6.86	6.87	6.36	6.25	6.06	5.72	5.56	5.38	5.09	4.94	4.90	4.67	4.55	4.29
Reduction Ratio	425 (25 × 17)	426 (71 × 6)	435 (29 × 15)	441 (21 × 21)	455 (35 × 13)	472 (59 × 8)	493 (29 × 17)	522 (87 × 6)	525 (35 × 15)	561 (51 × 11)	568 (71 × 8)	595 (35 × 17)	609 (29 × 21)	625 (25 × 25)	645 (43 × 15)	
Output speed r/min	50Hz	3.41	3.40	3.33	3.29	3.19	3.07	2.94	2.78	2.76	2.58	2.55	2.44	2.38	2.32	2.25
	60Hz	4.12	4.11	4.02	3.97	3.85	3.71	3.55	3.35	3.33	3.12	3.08	2.94	2.87	2.80	2.71
Reduction Ratio	663 (51 × 13)	696 (87 × 8)	725 (29 × 25)	735 (35 × 21)	765 (51 × 15)	767 (59 × 13)	781 (71 × 11)	867 (51 × 17)	875 (35 × 25)	885 (59 × 15)	903 (43 × 21)	923 (71 × 13)	957 (87 × 11)	1015 (35 × 29)	1065 (71 × 15)	
Output speed r/min	50Hz	2.19	2.08	2.00	1.97	1.90	1.89	1.86	1.67	1.66	1.64	1.61	1.57	1.52	1.43	1.36
	60Hz	2.64	2.51	2.41	2.38	2.29	2.28	2.24	2.02	2.00	1.98	1.94	1.90	1.83	1.72	1.64
Reduction Ratio	1071 (51 × 21)	1075 (43 × 25)	1131 (87 × 13)	1207 (71 × 17)	1225 (35 × 35)	1239 (59 × 21)	1275 (51 × 25)	1305 (87 × 15)	1475 (59 × 25)	1491 (71 × 21)	1505 (43 × 35)	1711 (59 × 29)	1775 (71 × 25)	1785 (51 × 35)	1827 (87 × 21)	
Output speed r/min	50Hz	1.35	1.35	1.28	1.20	1.18	1.17	1.14	1.11	0.98	0.97	0.96	0.85	0.82	0.81	0.79
	60Hz	1.63	1.63	1.55	1.45	1.43	1.41	1.37	1.34	1.19	1.17	1.16	1.02	0.99	0.98	0.96
Reduction Ratio	2059 (71 × 29)	2175 (87 × 25)	2193 (51 × 43)	2485 (71 × 35)	2523 (87 × 29)	2601 (51 × 51)	3009 (59 × 51)	3053 (71 × 43)	3621 (71 × 51)	3741 (87 × 43)	4189 (71 × 59)	5041 (71 × 71)				
Output speed r/min	50Hz	0.70	0.67	0.66	0.58	0.57	0.56	0.48	0.47	0.40	0.39	0.45	0.29			
	60Hz	0.85	0.80	0.80	0.70	0.69	0.67	0.58	0.57	0.48	0.47	0.42	0.35			

Input speed
50Hz : 1450r/min
60Hz : 1750r/min



CYCLO[®] GEARMOTORS



STANDARD SPECIFICATIONS

Gearmotors

Item		Standard Specification			Standard Specification with Built-in Brake		
Motor	Capacity Range	0.1kW × 4P ~ 55kW × 4P 15kW × 6P ~ 55kW × 6P			0.1kW × 4P ~ 30kW × 4P· FB Brake(Non Asbestos) 37kW × 4P ESB Brake		
	Enclosure	Totally enclosed fan cooled type (0.1kW × 4P totally enclosed non ventilated)			Totally enclosed fan cooled type (0.1kW × 4P totally enclosed non ventilated)		
	Power Source	55kW and smaller 200V 50/60Hz 220V 60Hz			37kW and smaller 200V 50/60Hz 220V 60Hz		
	Insulation	Insulation	P	4P	6P	Insulation	P
		Class E	0.1 ~ 0.4kW			Class E	0.1 ~ 0.4kW
		Class B	0.55 ~ 22kW		15kW	Class B	0.55 ~ 22kW
		Class F	30 ~ 55kW		18.5 ~ 55kW	Class F	30 ~ 37kW
	Time Rating	Continuous rating			Continuous rating		
	Terminal box position & lead wire direction	On the left side viewed from the load side. Regarding the draw out hole direction, refer to Table A-1.			On the left side viewed from the load side. Regarding the draw out hole direction, refer to Table A-1.		
	Lead wiring (Lug type)	Lead wires	P	4P	6P	Lead wires	P
3		0.1 ~ 7.5kW (Direct starting)			5	0.1 ~ 7.5kW (Direct starting)	
6		Note: 2 11 ~ 55kW (λ - starting available)	Note: 2 15 ~ 55kW (λ - starting available)		8	Note: 2 11 ~ 37kW (λ - starting available)	
Standards	According to JIS						
Cyclo Drive	Lubrication Method	Grease lubricated and oil lubricated models available.					
	Speed reduction method	Internal planetary gear mechanism with trochoidal curved tooth profile.					
	Direction of output shaft rotation	Single reduction	Clockwise rotation		As observed from the load when connected to R-U, S-V, T-W motors.		
	Double reduction	Counter-clockwise rotation					
Ambient Conditions	Installation location	Indoors(Minimal dust and humidity)					
	Ambient temperature	- 10 °~ 40					
	Ambient humidity	Under 85%					
	Elevation	Under 1,000 meters					
	Atmosphere	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.					
Method of Mounting	CHHM type-with slow speed shaft in horizontal direction and with legs. CVVM type-with slow speed shaft down in vertical direction and with mount. (No restrictions in mounting position of maintenance-free grease lubricated models, and the 2nd digit of type symbol provides " N ")						
Method of coupling with driven machine	Coupling, gears, chain sprocket or belt.						
Painting	Type : Acrylic modified phthalic Colour : Equivalent to mancel 6.5PB 3.6/8.2.						

Notes : 1. Refer to the technical section(Page E-31 ~ 54)for motor specification other than standard one.
2. λ - start is also available. Please consult us.

Table A-1. Direction of Withdrawing Lead Wire.

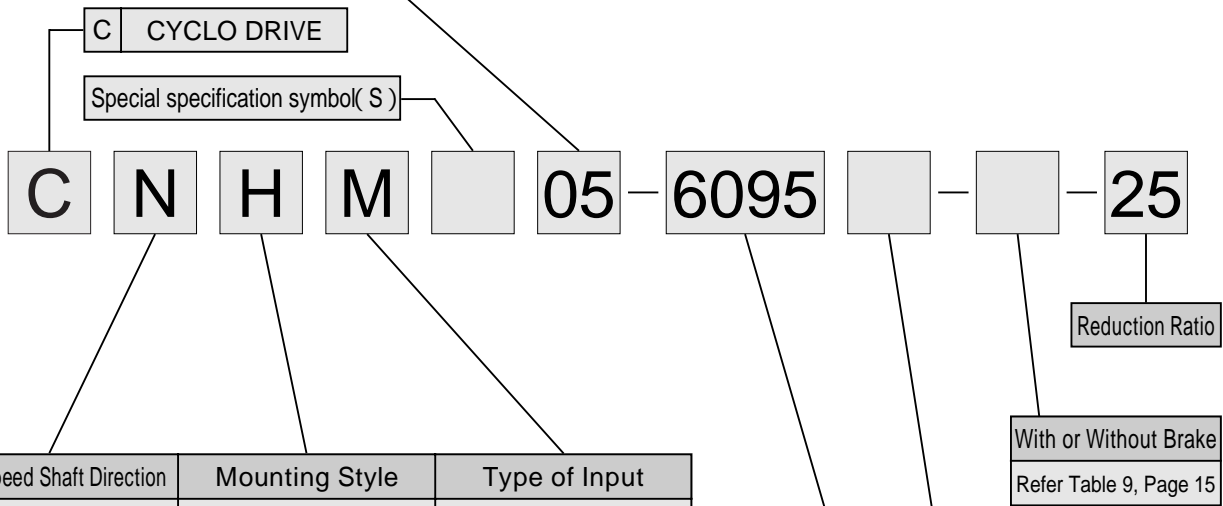
Main frame mounting direction	Indoors(Standard)
Horizontal Type(Slow speed shaft in horizontal direction).	
Vertical Type(Slow speed shaft in vertical direction).	

Note: Whenever not specified, the above direction shall be used. When the direction of withdrawal from the terminal box is other than specified above, refer to Page E-34.

NOMENCLATURE & MOUNTING POSITIONS

Table A-2. Motor Capacity Symbol

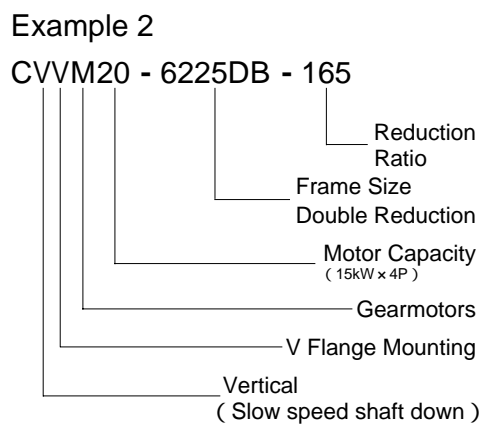
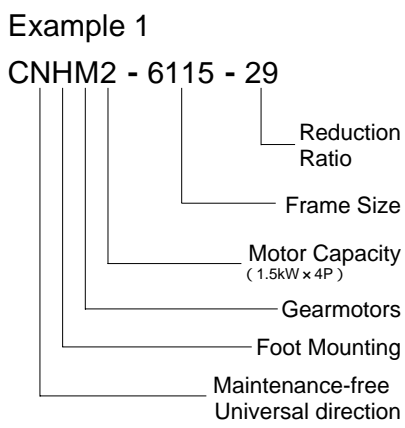
4 P	Capacity Symbol	01	02	03	05	08	1	1H	2	3	4	5	8	10	15	20	25	30	40	50	60	75	100
	kW (HP)	0.1 (1/8)	0.2 (1/4)	0.25 (1/3)	0.4 (1/2)	0.55 (3/4)	0.75 (1)	1.1 (1.5)	1.5 (2)	2.2 (3)	3.0 (4)	3.7 (5)	5.5 (7.5)	7.5 (10)	11 (15)	15 (20)	18.5 (25)	22 (30)	30 (40)	37 (50)	45 (60)	55 (75)	75 (100)
6 P	Capacity Symbol	206	256	306	406	506	606	756	1006	1256	1506	1756											
	kW (HP)	15 (20)	18.5 (25)	22 (30)	30 (40)	37 (50)	45 (60)	55 (75)	75 (100)	90 (125)	110 (150)	132 (175)											



Slow Speed Shaft Direction	Mounting Style	Type of Input
H (Horizontal, slow speed shaft level)	H (Foot)	M (Gearmotors)
V (Vertical, slow speed shaft down)	V (V Flange)	JM (With adaptor)
N (Maintenance-free Universal direction)	F (Flange)	

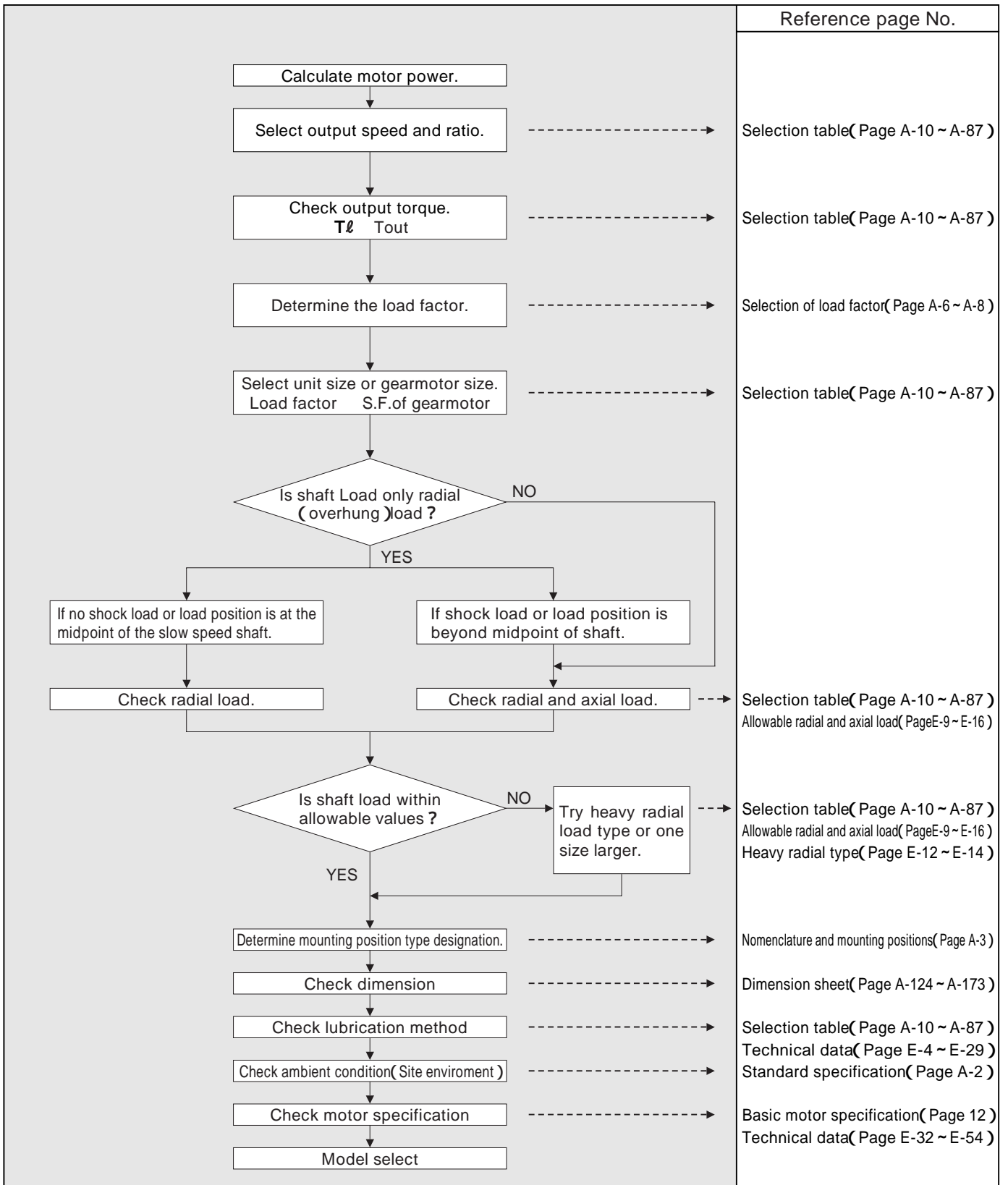
Shaft Spec.	Symbol
Metric JIS	No symbol
Inch Size	Y
AGMA	YA
AGMA	YB
AGMA	YC
Metric DIN	G

For examples of nomenclature, and mounting positions please refer to page 16.



Cyclo Reducer Frame Size
Refer Table 6, Page 15

GEARMOTOR MODEL SELECTION



T_l : Actual transmitted torque at output shaft.[N·m, kgf·m]
 T_{out} : Output torque of gearmotor.[N·m, kgf·m]
 Pro : Allowable radial load of output shaft.[N, kgf]

GEARMOTOR MODEL SELECTION EXAMPLE

Conditions, selection and result	: Conditions	: Selected item	Reference page No.
Load power $P\ell$ Motor power	: $P\ell = 0.7\text{kW}$ 0.75kW		Basic motor specification(Page 12)
Electrical source Output speed Ratio	: 200V 50Hz : 33.7 r/min 1450(r/min)/33.7(r/min) = 43 1/43		Selection table(Page A-28)
Actual transmitted torque $T\ell$ Checking output torque	: $T\ell = 178\text{N} \cdot \text{m}$ 178 N · m 202 N · m		Selection table(Page A-28)
Type of application Duty cycle Load factor Checking load factor	: Chain conveyor(uniform load) : 24 hours / day U = 1.2 1.2(Load factor) 1.44(Service factor of gearmotor)		Selection of load factor table A-3, A-4(Page A-6 ~ A-8) Selection table(Page A-28)
Capacity symbol - Frame size - Ratio	1-6105-43		Selection table(Page A-28)
Coupling with driven machine Pitch circle radius of sprocket R Radial load position Check radial load	: Chain : $R = 122.67/2000 = 0.061(\text{m})$: Midpoint of the output shaft $Pr = T\ell/R$ Pro/Cf 178/0.061 = 2918 N 5400/1 = 5400 N		Selection table(Page A-28) Allowable radial and axial load(Page E-9 ~ E-11)
Select unit size	1-6105-43 is selected		
Shaft position Mounting Type designation	: Horizontal : Foot mount CNHM		Nomenclature and mounting positions(Page A-3)
Checking dimension			Dimension sheet(Page A-124)
Checking lubrication method	MF : Maintenance-free, grease lubrication		Selection table(Page A-28) Technical data(Page E-4)
Ambient condition Checking ambient condition	: Indoor, ambient temp 20 OK		Standard specification(Page A-2)
Motor specification Checking motor specification	: 200V 50Hz without brake, indoor OK		Basic motor specification(Page 12) Standard specification(Page A-2) Technical data(Page E-32 ~ E-54)
Model selected	CNHM1-6105-43 200V 50Hz Indoor, without brake		

$T\ell$: Actual transmitted torque at output shaft.[N · m, kgf · m]
 T_{out} : Output torque of gearmotor.[N · m, kgf · m]
 Pr : Actual radial load at output shaft.[N, kgf]
 Pro : Allowable radial load of output shaft.[N, kgf]

SELECTION OF LOAD FACTOR

The Load Factor is rated for the characteristics of the driven machine.

The tabulated ratings are based on a running time of 10 hours per day with uniform load.

For your reference, please see method ① and ② shown below.

① Recommended Load Factor by the Driven Application.

	U	: Uniform load
Load Factor	M	: Moderate shock
	H	: Heavy shock

Table A-3. Reducer Load Factor.

Daily duty	~ 3 hours/day			~ 10 hours/day			24 hours/day		
	U	M	H	U	M	H	U	M	H
Load Factor	0.80	1.00	1.35	1.00	1.20	1.50	1.20	1.35	1.60

Table A-4. Recommended Load Classifications.

Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD
*Aerator		bucket - uniform load	U	small waste-conveyor-chain	M	washers & thickeners	M
Agitators.		bucket - heavy load	M	sorting table	M	winders	U
pure liquids	U	bucket - cont.	U	tipple hoist conveyor	M	*Printing Presses	
liquids & solids	M	centrifugal discharge	U	tipple hoist drive	M	Pullers	
liquids - variable density	M	escalators	U	transfer conveyors	M	barge haul	H
Blowers		freight	M	transfer rolls	M	Pumps	
centrifugal	U	gravity discharge	U	tray drive	M	centrifugal	U
lobe	M	*man lifts	M	trimmer feed	M	proportioning	M
vane	U	*passenger	M	waste conveyor	M	reciprocating single acting,	
Brewing & Distilling		**Extruders(Plastics)		Machine Tools		3 or more cylinders	M
bottling machinery	U	blow molders	M	bending roll	M	double acting,	
brew kettles, cont. duty	U	coating	U	punch press-gear driven	H	2 or more cylinders	M
cookers - cont. duty	U	film	U	*notching press-belt driven	M	*single acting, 1 or 2 cylinders	M
mash tubs - cont. duty	U	pipe	U	plate planers	H	*double acting, single cylinder	M
scale hopper, frequent starts	M	pre-plasticizers	M	tapping machine	H	rotary-gear type	U
Can Filling Machines	U	rods	U	other machine tools		rotary-lobe, vane	U
*Cane Knives	M	sheet	U	main drives	M	Rubber & Plastics Industries	
Car Dumpers	H	tubing	U	auxiliary drives	U	**crackers	H
Car Pullers	M	Fans		Metal Mills		laboratory equipment	M
Clarifiers	U	centrifugal	U	draw bench carriage &		**mixing mills	H
Classifiers	M	*cooling towers	U	main drive	M	**refiners	M
Clay Working Machinery		induced draft	U	forming machines	H	**rubber calendars	M
brick press	H	*forced draft	M	*pinch, dryer & scrubber rolls,		**rubber milK 2 on line)	M
briquette machine	H	induced draft	M	reversing	M	**rubber milK 3 on line)	U
clay working machinery	M	large(mine, etc.)	M	slitters	M	*sheeter	M
pug mill	M	large(industrial)	M	table conveyors-non-reversing		*tire building machines	M
Compressors		light(small diameter)	U	group drives	M	*tire & tube press openers	M
centrifugal	U	Feeders		individual drives	H	**tubers & strainers	M
lobe	M	apron	M	*table conveyors-reversing	M	**warming mills	M
reciprocating, multi-cylinder	M	belt	M	wire drawing & flattening	M	Sand Muller	M
reciprocating, single-cylinder	H	disc	U	machine	M	Screens	
Conveyors - Uniformly		reciprocating	H	wire winding machine	M	air washing	U
Loaded or Fed		screw	M	Mills, Rotary Type		rotary-stone or gravel	M
apron	U	Food industry		**ball	M	traveling water intake	U
assembly	U	beet slicer	M	**cement kilns	M	Sewage Disposal Equipment	
belt	U	cereal cooker	U	**dryers & coolers	M	bar screens	U
bucket	U	dough mixer	M	kilns	M	chemical feeders	U
chain	U	meat grinders	M	**pebble	M	collectors, circuline or	
flight	U	Generators(not welding)	U	**rod, plain & wedge bar	M	straightline	U
oven	U	Hammer mills	H	tumbling barrels	H	dewatering screws	M
screw	U	Hoists		Mixers		grit collectors	U
Conveyors - Heavy Duty		heavy duty	H	concrete mixers, cont.	M	scum breakers	M
Not Uniformly Fed		medium duty	M	concrete mixers, intermittent	M	slow or rapid mixers	M
apron	M	skip hoist	M	constant density	U	sludge collectors	U
assembly	M	Laundry Washers		variable density	M	thickeners	M
belt	M	reversing	M	Oil Industry		vacuum filters	M
bucket	M	Laundry Tumblers	M	chillers	M	Slab Pushers	M
chain	M	Line Shaft		*oil well pumping	M	*Steering Gear	
flight	M	driving processing equipment	M	paraffin filter press	M	Stokers	U
*live roll	M	light	U	rotary kilns	M	Sugar Industry	
oven	M	other line shafts	U	Paper Mills		*cane knives	M
reciprocating	H	Lumber Industry		agitator(mixers)	M	**crushers	M
screw	M	barkers - hydraulic -		barker-auxiliaries-hydraulic	M	**mills	H
shaker	H	mechanical	H	barker-mechanical	M	Textile Industry	
Cranes(Except for Dry Dock		burner conveyor	M	barking drum	H	batchers	M
Cranes)		chain saw & drag saw	H	beater & pulper	M	calendars	M
main hoists		chain transfer	H	bleacher	U	cards	M
*bridge travel		craneway transfer	H	calendars	M	dry cans,	M
*trolley travel		de-barking drum	H	calendars-super	H	dryers	M
Crusher		edger feed	M	converting machine,		dyeing machinery	M
ore	H	gang feed	H	except cutters, platers	M	*knitting machines	M
stone	H	green chain	M	conveyors	U	looms	M
**sugar	M	live rolls	H	couch	M	mangles	M
Dredges		log haul-locline	H	cutters-platers	H	nappers	M
cable reels	M	log haul-well type	H	cylinders	M	pads	M
conveyors	M	log turning device	H	dryers	M	*range drives	
cutter head drives	H	main log conveyor	H	Paper Mills		slashers	M
jig drives	H	off bearing rolls	M	felt stretcher	M	soapers	M
maneuvering winches	M	planer feed chains	M	felt whipper	H	spinners	M
pumps	M	planer floor chains	M	jordans	M	tenter frames	M
screen drive	H	planer tilting hoist	M	log haul	H	washers	M
stackers	M	re-saw merry-go-round conveyor	M	presses	U	winders	M
utility winches	M	roll cases	H	pulp machine reel	M	*Windlass	
*Dry Dock Cranes		slab conveyor	H	stock chests	M		
Elevators		small waste-conveyor-belt	U	suction roll	U		

For machines not listed above, please consult us.

Remarks: * - Refer to factory.

** - To be selected on basis of 24 hr. service only.

② Recommended Load Factor Modifications for Frequent Start-Stop Operation.

Please see table A-5 and A-6.

Table A-5. Number of Starts-Stops and Load Factor.

Number of starts-stops (Times/hour)	~ 3 hours/day			~ 10 hours/day			24 hours/day		
	I	II	III	I	II	III	I	II	III
~ 10	0.80	1.00	1.20	1.00	1.10	1.35	1.20	1.25	1.50
~ 200	0.85	1.10	1.30	1.10	1.30	1.50	1.25	1.50	1.65
~ 500	0.90	1.20	1.40	1.15	1.45	1.60	1.30	1.60	1.75

$$\text{The ratio of Moment of Inertia (The ratio of } GD^2 \text{)} = \frac{\text{Total Moment of Inertia (} GD^2 \text{) as seen from the motor shaft}}{\text{Moment of Inertia (} GD^2 \text{) of motor}}$$

Load Factor	I : Allowable ratio of Moment of Inertia (GD^2)	0.3
	II : Allowable ratio of Moment of Inertia (GD^2)	3
	III : Allowable ratio of Moment of Inertia (GD^2)	10

Note : 1. The number of starts-stops includes brake or clutch operation times.

Note : 2. Consult us when starting under loaded conditions.

Table A-6. MOTOR THERMAL RATING (C x Z)

Motor Power kW	Allowable C x Z (35%ED)	Allowable C x Z (35%ED ~ 50%ED)	Allowable C x Z (50%ED ~ 80%ED)	Allowable C x Z (80%ED ~ 100%ED)	Motor moment of inertia kg · m ²		Motor GD ² kgf · m ²	
					Standard	With brake	Standard	With brake
0.1	3200	3000	2000	1200	0.00033	0.00035	0.0013	0.0014
0.2	2200	2800	2800	2500	0.00050	0.00055	0.002	0.0022
0.25	2200	2800	2800	2500	0.00050	0.00055	0.002	0.0022
0.4	1800	2200	1500	1500	0.00065	0.00068	0.0026	0.0027
0.55	1800	2200	1500	1500	0.00101	0.00111	0.00405	0.00445
0.75	1400	1400	800	500	0.00120	0.00130	0.0048	0.0052
1.1	1400	1400	800	500	0.00185	0.00208	0.0074	0.0083
1.5	1200	1200	500	400	0.00213	0.00235	0.0085	0.0094
2.2	1000	900	400	200	0.00333	0.00373	0.0133	0.0149
3.0	1000	900	400	200	0.00810	0.00700	0.0325	0.0281
3.7	800	800	800	700	0.00848	0.00958	0.0339	0.0383
5.5	300	300	200	150	0.01143	0.01253	0.0457	0.0501
7.5	400	350	300	300	0.02675	0.03025	0.1070	0.121
11	200	200	150	150	0.03750	0.04100	0.1500	0.164

C x Z calculated below (1) to (3) should be less than allowable C x Z listed in Table A-6.

(1) Obtain the C value.

$$C = \frac{GD_M^2 + GD_L^2}{GD_M^2}$$

GD_M² : Moment of inertia (kgf · m²) or GD² (kg · m²) of motor.
 GD_L² : Total moment of inertia (kgf · m²) or GD² (kg · m²) of load as seen from the motor.

(2) Obtain the Z value, number of starts per hour.

(a) Assume that one operating period consists of "on time" t_a (sec), "off time" t_b (sec) and the motor is started n_r (times/cycle)

$$Z_r = \frac{3600n_r}{t_a + t_b} \text{ (times/hr)}$$

(b) When inching, n_i (times / cycle) is included in 1 cycle (t_a+t_b), the number of inching times per hour Z_i, and then included in the number of starts.

$$Z_i = \frac{3600n_i}{t_a + t_b} \text{ (times/hr)}$$

(c) Calculate Z (times/hr) by (a) and (b).

$$Z = Z_r + \frac{1}{2} \cdot Z_i = \frac{3600}{t_a + t_b} \cdot \left(n_r + \frac{1}{2} n_i \right) \text{ (times/hr)}$$

(3) Calculate C multiplied by Z.

Use the C obtained in step (1) and Z in step (2).

(4) Obtain the duty cycle %ED and check with table above.

$$\%ED = \frac{t_a}{t_a + t_b} \times 100$$

0.1 kW 50 Hz

Motor Speed n_1

4P

1450r/min

Gearmotors

Selection Tables

Dimension Tables

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	3.75	0.383	2.00	804	82.0	01	- 6060	- 6	A-124	A-140	A-156	MF	MF	MF
181	5.01	0.510	2.00	921	93.9	01	- 6060	- 8	A-124	A-140	A-156	MF	MF	MF
132	6.88	0.702	2.00	1180	120	01	- 6060	- 11	A-124	A-140	A-156	MF	MF	MF
112	8.13	0.829	2.00	1180	120	01	- 6060	- 13	A-124	A-140	A-156	MF	MF	MF
96.7	9.39	0.957	2.00	1180	120	01	- 6060	- 15	A-124	A-140	A-156	MF	MF	MF
85.3	10.6	1.08	2.00	1180	120	01	- 6060	- 17	A-124	A-140	A-156	MF	MF	MF
69.0	13.1	1.34	1.83	1180	120	01	- 6060	- 21	A-124	A-140	A-156	MF	MF	MF
58.0	15.6	1.59	1.10	1180	120	01	- 6060	- 25	A-124	A-140	A-156	MF	MF	MF
			1.66	1180	120	01	- 6065	- 25	A-124	A-140	A-156	MF	MF	MF
			2.30	1770	180	01	- 6070	- 25	A-124	A-140	A-156	MF	MF	MF
50.0	18.1	1.85	1.10	1180	120	01	- 6060	- 29	A-124	A-140	A-156	MF	MF	MF
			1.65	1180	120	01	- 6065	- 29	A-124	A-140	A-156	MF	MF	MF
			2.26	1770	180	01	- 6070	- 29	A-124	A-140	A-156	MF	MF	MF
41.4	21.9	2.23	1.10	1180	120	01	- 6060	- 35	A-124	A-140	A-156	MF	MF	MF
			1.37	1180	120	01	- 6065	- 35	A-124	A-140	A-156	MF	MF	MF
			2.05	1770	180	01	- 6070	- 35	A-124	A-140	A-156	MF	MF	MF
33.7	26.9	2.74	1.12	1180	120	01	- 6065	- 43	A-124	A-140	A-156	MF	MF	MF
			1.67	1770	180	01	- 6070	- 43	A-124	A-140	A-156	MF	MF	MF
			2.23	1770	180	01	- 6075	- 43	A-124	A-140	A-156	MF	MF	MF
28.4	31.9	3.25	1.00	1770	180	01	- 6070	- 51	A-124	A-140	A-156	MF	MF	MF
			1.43	1770	180	01	- 6075	- 51	A-124	A-140	A-156	MF	MF	MF
			1.92	2560	261	01	- 6080	- 51	A-124	A-140	A-156	MF	MF	MF
24.6	36.9	3.76	1.00	1770	180	01	- 6070	- 59	A-124	A-140	A-156	MF	MF	MF
			1.36	1770	180	01	- 6075	- 59	A-124	A-140	A-156	MF	MF	MF
			1.85	2560	261	01	- 6080	- 59	A-124	A-140	A-156	MF	MF	MF
20.4	44.4	4.53	1.20	2560	261	01	- 6080	- 71	A-124	A-140	A-156	MF	MF	MF
			1.65	2560	261	01	- 6085	- 71	A-124	A-140	A-156	MF	MF	MF
			2.52	3340	340	01	- 6090	- 71	A-124	A-140	A-156	MF	MF	MF
16.7	54.4	5.55	1.21	2560	261	01	- 6085	- 87	A-124	A-140	A-156	MF	MF	MF
			2.11	3340	340	01	- 6090	- 87	A-124	A-140	A-156	MF	MF	MF
13.9	61.6	6.28	0.97	1770	180	01	- 6075DA	- 104	A-131	A-147	A-163	MF	MF	MF
			2.43	3340	340	01	- 6090DA	- 104	A-131	A-147	A-163	MF	MF	MF
12.2	74.5	7.59	1.25	3340	340	01	- 6090	- 119	A-124	A-140	A-156	MF	MF	MF
			1.45	3340	340	01	- 6095	- 119	A-124	A-140	A-156	MF	MF	MF
			2.10	5400	550	01	- 6100	- 119	-	-	-	MF	MF	MF
12.0	71.7	7.31	2.09	3340	340	01	- 6090DA	- 121	A-131	A-147	A-163	MF	MF	MF
10.1	84.8	8.64	1.77	3340	340	01	- 6090DA	- 143	A-131	A-147	A-163	MF	MF	MF
8.79	97.8	9.97	1.53	3340	340	01	- 6090DA	- 165	A-131	A-147	A-163	MF	MF	MF
			2.04	3340	340	01	- 6095DA	- 165	A-131	A-147	A-163	MF	MF	MF
7.44	116	11.8	1.30	3340	340	01	- 6090DA	- 195	A-131	A-147	A-163	MF	MF	MF
			1.73	3340	340	01	- 6095DA	- 195	A-131	A-147	A-163	MF	MF	MF
			2.16	5400	550	01	- 6100DA	- 195	A-131	A-147	A-163	MF	MF	MF
6.28	137	14.0	1.10	3340	340	01	- 6090DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.46	3340	340	01	- 6095DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.83	5400	550	01	- 6100DA	- 231	A-131	A-147	A-163	MF	MF	MF
5.31	162	16.5	1.24	3340	340	01	- 6095DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.54	5400	550	01	- 6100DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.85	5400	550	01	- 6105DA	- 273	A-131	A-147	A-163	MF	MF	MF
4.55	189	19.3	1.06	3220	328	01	- 6095DA	- 319	A-131	A-147	A-163	MF	MF	MF
			1.59	5400	550	01	- 6105DA	- 319	A-131	A-147	A-163	MF	MF	MF
			2.75	9810	1000	01	- 6120DA	- 319	A-131	A-147	A-163	MF	MF	MF
3.85	223	22.8	0.89	3150	321	01	- 6095DA	- 377	A-131	A-147	A-163	MF	MF	MF
			1.12	5400	550	01	- 6100DA	- 377	A-131	A-147	A-163	MF	MF	MF
			1.34	5400	550	01	- 6105DA	- 377	A-131	A-147	A-163	MF	MF	MF
			2.33	9810	1000	01	- 6120DA	- 377	A-131	A-147	A-163	MF	MF	MF
3.07	280	28.6	1.07	5400	550	01	- 6105DA	- 473	A-131	A-147	A-163	MF	MF	MF
			1.87	9810	1000	01	- 6120DA	- 473	A-131	A-147	A-163	MF	MF	MF

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

0.1 kW 60 Hz	Motor Speed n ₁
	4 P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	3.11	0.317	2.00	756	77.1	01	- 6060	- 6	A-124	A-140	A-156	MF	MF	MF
219	4.15	0.423	2.00	866	88.3	01	- 6060	- 8	A-124	A-140	A-156	MF	MF	MF
159	5.70	0.581	2.00	1180	120	01	- 6060	- 11	A-124	A-140	A-156	MF	MF	MF
135	6.74	0.687	2.00	1180	120	01	- 6060	- 13	A-124	A-140	A-156	MF	MF	MF
117	7.78	0.793	2.00	1180	120	01	- 6060	- 15	A-124	A-140	A-156	MF	MF	MF
103	8.81	0.898	2.00	1180	120	01	- 6060	- 17	A-124	A-140	A-156	MF	MF	MF
83.3	10.9	1.11	2.00	1180	120	01	- 6060	- 21	A-124	A-140	A-156	MF	MF	MF
70.0	13.0	1.32	1.10	1180	120	01	- 6060	- 25	A-124	A-140	A-156	MF	MF	MF
			1.66	1180	120	01	- 6065	- 25	A-124	A-140	A-156	MF	MF	MF
			2.30	1770	180	01	- 6070	- 25	A-124	A-140	A-156	MF	MF	MF
60.3	15.0	1.53	1.10	1180	120	01	- 6060	- 29	A-124	A-140	A-156	MF	MF	MF
			1.66	1180	120	01	- 6065	- 29	A-124	A-140	A-156	MF	MF	MF
			2.26	1770	180	01	- 6070	- 29	A-124	A-140	A-156	MF	MF	MF
50.0	18.1	1.85	1.10	1180	120	01	- 6060	- 35	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120	01	- 6065	- 35	A-124	A-140	A-156	MF	MF	MF
			2.11	1770	180	01	- 6070	- 35	A-124	A-140	A-156	MF	MF	MF
40.7	22.3	2.27	1.13	1180	120	01	- 6065	- 43	A-124	A-140	A-156	MF	MF	MF
			1.70	1770	180	01	- 6070	- 43	A-124	A-140	A-156	MF	MF	MF
			2.26	1770	180	01	- 6075	- 43	A-124	A-140	A-156	MF	MF	MF
34.3	26.4	2.70	1.00	1770	180	01	- 6070	- 51	A-124	A-140	A-156	MF	MF	MF
			1.43	1770	180	01	- 6075	- 51	A-124	A-140	A-156	MF	MF	MF
			1.92	2560	261	01	- 6080	- 51	A-124	A-140	A-156	MF	MF	MF
29.7	30.6	3.12	1.00	1770	180	01	- 6070	- 59	A-124	A-140	A-156	MF	MF	MF
			1.36	1770	180	01	- 6075	- 59	A-124	A-140	A-156	MF	MF	MF
			1.85	2560	261	01	- 6080	- 59	A-124	A-140	A-156	MF	MF	MF
24.6	36.8	3.75	1.20	2560	261	01	- 6080	- 71	A-124	A-140	A-156	MF	MF	MF
			1.87	2560	261	01	- 6085	- 71	A-124	A-140	A-156	MF	MF	MF
			2.52	3340	340	01	- 6090	- 71	A-124	A-140	A-156	MF	MF	MF
20.1	45.1	4.60	1.21	2560	261	01	- 6085	- 87	A-124	A-140	A-156	MF	MF	MF
			2.11	3340	340	01	- 6090	- 87	A-124	A-140	A-156	MF	MF	MF
16.8	51.1	5.21	1.17	1770	180	01	- 6075DA	- 104	A-131	A-147	A-163	MF	MF	MF
			2.94	3340	340	01	- 6090DA	- 104	A-131	A-147	A-163	MF	MF	MF
14.7	61.7	6.29	1.25	3340	340	01	- 6090	- 119	A-124	A-140	A-156	MF	MF	MF
			1.51	3340	340	01	- 6095	- 119	A-124	A-140	A-156	MF	MF	MF
			2.10	5400	550	01	- 6100	- 119	-	-	-	MF	MF	MF
14.5	59.4	6.06	2.52	3340	340	01	- 6090DA	- 121	A-131	A-147	A-163	MF	MF	MF
12.2	70.2	7.16	2.14	3340	340	01	- 6090DA	- 143	A-131	A-147	A-163	MF	MF	MF
10.6	81.0	8.26	1.85	3340	340	01	- 6090DA	- 165	A-131	A-147	A-163	MF	MF	MF
			2.47	3340	340	01	- 6095DA	- 165	A-131	A-147	A-163	MF	MF	MF
8.97	95.8	9.76	1.57	3340	340	01	- 6090DA	- 195	A-131	A-147	A-163	MF	MF	MF
			2.09	3340	340	01	- 6095DA	- 195	A-131	A-147	A-163	MF	MF	MF
			2.61	5400	550	01	- 6100DA	- 195	A-131	A-147	A-163	MF	MF	MF
7.58	113	11.6	1.32	3340	340	01	- 6090DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.76	3340	340	01	- 6095DA	- 231	A-131	A-147	A-163	MF	MF	MF
			2.20	5400	550	01	- 6100DA	- 231	A-131	A-147	A-163	MF	MF	MF
6.41	134	13.7	1.49	3340	340	01	- 6095DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.86	5400	550	01	- 6100DA	- 273	A-131	A-147	A-163	MF	MF	MF
			2.24	5400	550	01	- 6105DA	- 273	A-131	A-147	A-163	MF	MF	MF
5.49	157	16.0	1.28	3280	334	01	- 6095DA	- 319	A-131	A-147	A-163	MF	MF	MF
			1.91	5400	550	01	- 6105DA	- 319	A-131	A-147	A-163	MF	MF	MF
			3.32	9810	1000	01	- 6120DA	- 319	A-131	A-147	A-163	MF	MF	MF
4.64	185	18.9	1.08	3230	329	01	- 6095DA	- 377	A-131	A-147	A-163	MF	MF	MF
			1.35	5400	550	01	- 6100DA	- 377	A-131	A-147	A-163	MF	MF	MF
			1.62	5400	550	01	- 6105DA	- 377	A-131	A-147	A-163	MF	MF	MF
			2.81	9810	1000	01	- 6120DA	- 377	A-131	A-147	A-163	MF	MF	MF
3.70	232	23.7	1.29	5400	550	01	- 6105DA	- 473	A-131	A-147	A-163	MF	MF	MF
			2.26	9810	1000	01	- 6120DA	- 473	A-131	A-147	A-163	MF	MF	MF

0.1kW
50 • 60Hz

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.59	331	33.8	0.91	4380	446	01	- 6105DA	- 559	A-131	A-147	A-163	MF	MF	MF
			1.58	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.90	9810	1000				A-131	A-147	A-163	MF	MF	MF
2.23	385	39.2	1.36	9810	1000	01	- 6120DA	- 649	A-131	A-147	A-163	MF	MF	MF
			1.64	9810	1000				A-131	A-147	A-163	MF	MF	MF
1.98	433	44.2	1.21	9810	1000	01	- 6120DA	- 731	A-131	A-147	A-163	MF	MF	MF
			1.45	9810	1000				A-131	A-147	A-163	MF	MF	MF
1.72	499	50.8	1.26	9810	1000	01	- 6125DA	- 841	A-131	A-147	A-163	MF	MF	MF
1.45	595	60.6	1.06	9810	1000	01	- 6125DA	- 1003	A-131	A-147	A-163	MF	MF	MF
1.16	739	75.3	0.85	9810	1000	01	- 6125DA	- 1247	A-131	A-147	A-163	MF	MF	MF

<h1>0.2 kW</h1> <h1>50 Hz</h1>	Motor Speed n ₁
	4 P
	1450r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	7.51	0.765	1.00	798	81.4	02	- 6060	- 6	A-124	A-140	A-156	MF	MF	MF
			1.43	798	81.4				A-124	A-140	A-156	MF	MF	MF
			1.74	1390	142				A-124	A-140	A-156	MF	MF	MF
			2.04	1390	142				A-124	A-140	A-156	MF	MF	MF
181	10.0	1.02	1.00	912	93.0	02	- 6060	- 8	A-124	A-140	A-156	MF	MF	MF
			1.43	912	93.0				A-124	A-140	A-156	MF	MF	MF
			1.74	1540	157				A-124	A-140	A-156	MF	MF	MF
			2.04	1540	157				A-124	A-140	A-156	MF	MF	MF
132	13.8	1.40	1.00	1180	120	02	- 6060	- 11	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120				A-124	A-140	A-156	MF	MF	MF
			1.74	1730	176				A-124	A-140	A-156	MF	MF	MF
			2.04	1730	176				A-124	A-140	A-156	MF	MF	MF
112	16.3	1.66	1.00	1180	120	02	- 6060	- 13	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120				A-124	A-140	A-156	MF	MF	MF
			1.74	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.04	1770	180				A-124	A-140	A-156	MF	MF	MF
96.7	18.8	1.91	1.00	1180	120	02	- 6060	- 15	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120				A-124	A-140	A-156	MF	MF	MF
			1.74	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.04	1770	180				A-124	A-140	A-156	MF	MF	MF
85.3	21.3	2.17	1.00	1180	120	02	- 6060	- 17	A-124	A-140	A-156	MF	MF	MF
			1.41	1180	120				A-124	A-140	A-156	MF	MF	MF
			1.74	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.04	1770	180				A-124	A-140	A-156	MF	MF	MF
69.0	26.3	2.68	1.14	1180	120	02	- 6065	- 21	A-124	A-140	A-156	MF	MF	MF
			1.60	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.04	1770	180				A-124	A-140	A-156	MF	MF	MF
58.0	31.3	3.19	0.83	1180	120	02	- 6065	- 25	A-124	A-140	A-156	MF	MF	MF
			1.15	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.47	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.70	2560	261				A-124	A-140	A-156	MF	MF	MF
			2.38	2560	261				A-124	A-140	A-156	MF	MF	MF
50.0	36.3	3.70	0.83	1180	120	02	- 6065	- 29	A-124	A-140	A-156	MF	MF	MF
			1.13	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.43	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.70	2560	261				A-124	A-140	A-156	MF	MF	MF
			2.34	2560	261				A-124	A-140	A-156	MF	MF	MF

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.13	275	28.0	1.09	5400	550	01	6105DA	559	A-131	A-147	A-163	MF	MF	MF
			1.91	9810	1000	01	6120DA	559	A-131	A-147	A-163	MF	MF	MF
			2.29	9810	1000	01	6125DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	319	32.5	1.65	9810	1000	01	6120DA	649	A-131	A-147	A-163	MF	MF	MF
			1.98	9810	1000	01	6125DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	359	36.6	1.46	9810	1000	01	6120DA	731	A-131	A-147	A-163	MF	MF	MF
			1.75	9810	1000	01	6125DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	413	42.1	1.53	9810	1000	01	6125DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	493	50.2	1.28	9810	1000	01	6125DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	612	62.4	1.03	9810	1000	01	6125DA	1247	A-131	A-147	A-163	MF	MF	MF

<h1>0.2 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4 P
	1750r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	6.22	0.634	1.00	751	76.6	02	6060	6	A-124	A-140	A-156	MF	MF	MF
			1.43	751	76.6	02	6065	6	A-124	A-140	A-156	MF	MF	MF
			1.74	1310	134	02	6070	6	A-124	A-140	A-156	MF	MF	MF
			2.04	1310	134	02	6075	6	A-124	A-140	A-156	MF	MF	MF
219	8.29	0.846	1.00	859	87.5	02	6060	8	A-124	A-140	A-156	MF	MF	MF
			1.43	859	87.5	02	6065	8	A-124	A-140	A-156	MF	MF	MF
			1.74	1450	148	02	6070	8	A-124	A-140	A-156	MF	MF	MF
			2.04	1450	148	02	6075	8	A-124	A-140	A-156	MF	MF	MF
159	11.4	1.16	1.00	1170	119	02	6060	11	A-124	A-140	A-156	MF	MF	MF
			1.43	1170	119	02	6065	11	A-124	A-140	A-156	MF	MF	MF
			1.74	1630	166	02	6070	11	A-124	A-140	A-156	MF	MF	MF
			2.04	1630	166	02	6075	11	A-124	A-140	A-156	MF	MF	MF
135	13.5	1.37	1.00	1180	120	02	6060	13	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120	02	6065	13	A-124	A-140	A-156	MF	MF	MF
			1.74	1720	175	02	6070	13	A-124	A-140	A-156	MF	MF	MF
			2.04	1720	175	02	6075	13	A-124	A-140	A-156	MF	MF	MF
117	15.6	1.59	1.00	1180	120	02	6060	15	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120	02	6065	15	A-124	A-140	A-156	MF	MF	MF
			1.74	1730	176	02	6070	15	A-124	A-140	A-156	MF	MF	MF
			2.04	1730	176	02	6075	15	A-124	A-140	A-156	MF	MF	MF
103	17.6	1.80	1.00	1180	120	02	6060	17	A-124	A-140	A-156	MF	MF	MF
			1.43	1180	120	02	6065	17	A-124	A-140	A-156	MF	MF	MF
			1.74	1770	180	02	6070	17	A-124	A-140	A-156	MF	MF	MF
			2.04	1770	180	02	6075	17	A-124	A-140	A-156	MF	MF	MF
83.3	21.8	2.22	1.17	1180	120	02	6065	21	A-124	A-140	A-156	MF	MF	MF
			1.60	1770	180	02	6070	21	A-124	A-140	A-156	MF	MF	MF
			2.04	1770	180	02	6075	21	A-124	A-140	A-156	MF	MF	MF
70.0	25.9	2.64	0.83	1180	120	02	6065	25	A-124	A-140	A-156	MF	MF	MF
			1.15	1770	180	02	6070	25	A-124	A-140	A-156	MF	MF	MF
			1.47	1770	180	02	6075	25	A-124	A-140	A-156	MF	MF	MF
			1.70	2550	260	02	6080	25	A-124	A-140	A-156	MF	MF	MF
			2.38	2550	260	02	6085	25	A-124	A-140	A-156	MF	MF	MF
60.3	30.1	3.07	0.83	1180	120	02	6065	29	A-124	A-140	A-156	MF	MF	MF
			1.13	1770	180	02	6070	29	A-124	A-140	A-156	MF	MF	MF
			1.43	1770	180	02	6075	29	A-124	A-140	A-156	MF	MF	MF
			1.70	2560	261	02	6080	29	A-124	A-140	A-156	MF	MF	MF
			2.34	2560	261	02	6085	29	A-124	A-140	A-156	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load P_{ro}		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
41.4	43.8	4.46	1.03	1770	180	02	6070	35	A-124	A-140	A-156	MF	MF	MF
			1.36	1770	180	02	6075	35	A-124	A-140	A-156	MF	MF	MF
			1.64	2560	261	02	6085	35	A-124	A-140	A-156	MF	MF	MF
			3.06	3340	340	02	6090	35	A-124	A-140	A-156	MF	MF	MF
33.7	53.8	5.49	1.12	1770	180	02	6075	43	A-124	A-140	A-156	MF	MF	MF
			1.47	2560	261	02	6085	43	A-124	A-140	A-156	MF	MF	MF
			2.18	3340	340	02	6090	43	A-124	A-140	A-156	MF	MF	MF
28.4	63.8	6.51	1.21	2560	261	02	6085	51	A-124	A-140	A-156	MF	MF	MF
			1.66	3340	340	02	6090	51	A-124	A-140	A-156	MF	MF	MF
			2.04	3340	340	02	6095	51	A-124	A-140	A-156	MF	MF	MF
24.6	73.8	7.53	1.17	2560	261	02	6085	59	A-124	A-140	A-156	MF	MF	MF
			1.55	3340	340	02	6090	59	A-124	A-140	A-156	MF	MF	MF
			1.68	3340	340	02	6095	59	A-124	A-140	A-156	MF	MF	MF
			2.58	5400	550	02	6100	59	A-124	A-141	A-157	MF	MF	MF
20.4	88.8	9.06	0.83	2380	243	02	6085	71	A-124	A-140	A-156	MF	MF	MF
			1.26	3340	340	02	6090	71	A-124	A-140	A-156	MF	MF	MF
			1.39	3340	340	02	6095	71	A-124	A-140	A-156	MF	MF	MF
			2.18	5400	550	02	6100	71	A-124	A-141	A-157	MF	MF	MF
16.7	109	11.1	1.06	3340	340	02	6090	87	A-124	A-140	A-156	MF	MF	MF
			1.32	3340	340	02	6095	87	A-124	A-140	A-156	MF	MF	MF
			2.17	5400	550	02	6100	87	A-124	A-141	A-157	MF	MF	MF
13.9	123	12.6	1.22	3340	340	02	6090DA	104	A-131	A-147	A-163	MF	MF	MF
			1.47	3340	340	02	6095DA	104	A-131	A-147	A-163	MF	MF	MF
			2.03	5400	550	02	6100DA	104	A-131	A-147	A-163	MF	MF	MF
12.2	149	15.2	1.05	5400	550	02	6100	119	A-124	A-141	A-157	MF	MF	MF
			1.43	5400	550	02	6105	119	A-124	A-141	A-157	MF	MF	MF
12.0	143	14.6	1.12	3340	340	02	6095DA	121	A-131	A-147	A-163	MF	MF	MF
			1.74	5400	550	02	6100DA	121	A-131	A-147	A-163	MF	MF	MF
			2.14	5400	550	02	6105DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	170	17.3	1.08	3340	340	02	6095DA	143	A-131	A-147	A-163	MF	MF	MF
			1.47	5400	550	02	6100DA	143	A-131	A-147	A-163	MF	MF	MF
			1.77	5400	550	02	6105DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	196	19.9	1.02	3340	340	02	6095DA	165	A-131	A-147	A-163	MF	MF	MF
			1.53	5400	550	02	6105DA	165	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	02	6120DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	231	23.6	0.87	3340	340	02	6095DA	195	A-131	A-147	A-163	MF	MF	MF
			1.08	5400	550	02	6100DA	195	A-131	A-147	A-163	MF	MF	MF
			1.30	5400	550	02	6105DA	195	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	02	6120DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	274	27.9	1.10	5400	550	02	6105DA	231	A-131	A-147	A-163	MF	MF	MF
			1.91	9810	1000	02	6120DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	324	33.0	0.93	5400	550	02	6105DA	273	A-131	A-147	A-163	MF	MF	MF
			1.61	9810	1000	02	6120DA	273	A-131	A-147	A-163	MF	MF	MF
			1.95	9810	1000	02	6125DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	378	38.6	1.38	9810	1000	02	6120DA	319	A-131	A-147	A-163	MF	MF	MF
			1.67	9810	1000	02	6125DA	319	A-131	A-147	A-163	MF	MF	MF
			2.06	14700	1500	02	6130DA	319	A-132	A-148	A-164	G	G	G
3.85	447	45.6	1.16	9810	1000	02	6120DA	377	A-131	A-147	A-163	MF	MF	MF
			1.41	9810	1000	02	6125DA	377	A-131	A-147	A-163	MF	MF	MF
			1.75	14700	1500	02	6130DA	377	A-132	A-148	A-164	G	G	G
3.07	561	57.2	1.12	9810	1000	02	6125DA	473	A-131	A-147	A-163	MF	MF	MF
			1.39	14700	1500	02	6130DA	473	A-132	A-148	A-164	G	G	G
			1.68	14700	1500	02	6135DA	473	A-132	A-148	A-164	G	G	G
			2.15	16000	1630	02	6140DA	473	A-132	A-148	A-164	G	G	G
2.59	663	67.6	0.95	9810	1000	02	6125DA	559	A-131	A-147	A-163	MF	MF	MF
			1.18	14700	1500	02	6130DA	559	A-132	A-148	A-164	G	G	G
			1.42	14700	1500	02	6135DA	559	A-132	A-148	A-164	G	G	G
			1.85	16000	1630	02	6140DA	559	A-132	A-148	A-164	G	G	G

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load P_{ro} is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	36.3	3.70	1.06	1770	180	02	6070	35	A-124	A-140	A-156	MF	MF	MF
			1.40	1770	180	02	6075	35	A-124	A-140	A-156	MF	MF	MF
			1.86	2560	261	02	6085	35	A-124	A-140	A-156	MF	MF	MF
			3.06	3340	340	02	6090	35	A-124	A-140	A-156	MF	MF	MF
40.7	44.6	4.54	1.13	1770	180	02	6075	43	A-124	A-140	A-156	MF	MF	MF
			1.47	2560	261	02	6085	43	A-124	A-140	A-156	MF	MF	MF
			2.18	3340	340	02	6090	43	A-124	A-140	A-156	MF	MF	MF
34.3	52.9	5.39	1.21	2560	261	02	6085	51	A-124	A-140	A-156	MF	MF	MF
			1.66	3340	340	02	6090	51	A-124	A-140	A-156	MF	MF	MF
			2.11	3340	340	02	6095	51	A-124	A-140	A-156	MF	MF	MF
29.7	61.2	6.24	1.17	2560	261	02	6085	59	A-124	A-140	A-156	MF	MF	MF
			1.55	3340	340	02	6090	59	A-124	A-140	A-156	MF	MF	MF
			1.87	3340	340	02	6095	59	A-124	A-140	A-156	MF	MF	MF
			2.58	5400	550	02	6100	59	A-124	A-141	A-157	MF	MF	MF
24.6	73.6	7.50	0.94	2510	256	02	6085	71	A-124	A-140	A-156	MF	MF	MF
			1.26	3340	340	02	6090	71	A-124	A-140	A-156	MF	MF	MF
			1.51	3340	340	02	6095	71	A-124	A-140	A-156	MF	MF	MF
			2.18	5400	550	02	6100	71	A-124	A-141	A-157	MF	MF	MF
20.1	90.2	9.20	1.06	3340	340	02	6090	87	A-124	A-140	A-156	MF	MF	MF
			1.51	3340	340	02	6095	87	A-124	A-140	A-156	MF	MF	MF
			2.17	5400	550	02	6100	87	A-124	A-141	A-157	MF	MF	MF
16.8	102	10.4	1.47	3340	340	02	6090DA	104	A-131	A-147	A-163	MF	MF	MF
			1.77	3340	340	02	6095DA	104	A-131	A-147	A-163	MF	MF	MF
			2.15	5400	550	02	6100DA	104	A-131	A-147	A-163	MF	MF	MF
14.7	123	12.6	1.05	5400	550	02	6100	119	A-124	A-141	A-157	MF	MF	MF
			1.43	5400	550	02	6105	119	A-124	A-141	A-157	MF	MF	MF
14.5	119	12.1	1.35	3340	340	02	6095DA	121	A-131	A-147	A-163	MF	MF	MF
			2.10	5400	550	02	6100DA	121	A-131	A-147	A-163	MF	MF	MF
			2.15	5400	550	02	6105DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	140	14.3	1.30	3340	340	02	6095DA	143	A-131	A-147	A-163	MF	MF	MF
			1.78	5400	550	02	6100DA	143	A-131	A-147	A-163	MF	MF	MF
			2.14	5400	550	02	6105DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	162	16.5	1.23	3340	340	02	6095DA	165	A-131	A-147	A-163	MF	MF	MF
			1.85	5400	550	02	6105DA	165	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	02	6120DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	192	19.5	1.04	3340	340	02	6095DA	195	A-131	A-147	A-163	MF	MF	MF
			1.31	5400	550	02	6100DA	195	A-131	A-147	A-163	MF	MF	MF
			1.57	5400	550	02	6105DA	195	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	02	6120DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	227	23.1	1.32	5400	550	02	6105DA	231	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	02	6120DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	268	27.3	1.12	5400	550	02	6105DA	273	A-131	A-147	A-163	MF	MF	MF
			1.95	9810	1000	02	6120DA	273	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	02	6125DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	313	31.9	1.66	9810	1000	02	6120DA	319	A-131	A-147	A-163	MF	MF	MF
			2.01	9810	1000	02	6125DA	319	A-131	A-147	A-163	MF	MF	MF
			2.15	14700	1500	02	6130DA	319	A-132	A-148	A-164	G	G	G
4.64	370	37.7	1.40	9810	1000	02	6120DA	377	A-131	A-147	A-163	MF	MF	MF
			1.70	9810	1000	02	6125DA	377	A-131	A-147	A-163	MF	MF	MF
			2.11	14700	1500	02	6130DA	377	A-132	A-148	A-164	G	G	G
3.70	465	47.4	1.36	9810	1000	02	6125DA	473	A-131	A-147	A-163	MF	MF	MF
			1.68	14700	1500	02	6130DA	473	A-132	A-148	A-164	G	G	G
			2.02	14700	1500	02	6135DA	473	A-132	A-148	A-164	G	G	G
			2.15	16000	1630	02	6140DA	473	A-132	A-148	A-164	G	G	G
3.13	549	56.0	1.15	9810	1000	02	6125DA	559	A-131	A-147	A-163	MF	MF	MF
			1.42	14700	1500	02	6130DA	559	A-132	A-148	A-164	G	G	G
			1.71	14700	1500	02	6135DA	559	A-132	A-148	A-164	G	G	G
			2.15	16000	1630	02	6140DA	559	A-132	A-148	A-164	G	G	G

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.23	769	78.4	0.82	9810	1000	02	- 6125DA	- 649	A-131	A-147	A-163	MF	MF	MF
			1.19	14700	1500				A-132	A-148	A-164	G	G	G
			1.36	14700	1500				A-132	A-148	A-164	G	G	G
			1.78	16000	1630				A-132	A-148	A-164	G	G	G
1.98	867	88.3	1.08	14700	1500	02	- 6135DA	- 731	A-132	A-148	A-164	G	G	G
			1.58	16000	1630				A-132	A-148	A-164	G	G	G
1.72	997	102	0.94	14700	1500	02	- 6135DA	- 841	A-132	A-148	A-164	G	G	G
			1.23	16000	1630				A-132	A-148	A-164	G	G	G
			1.37	16000	1630				A-132	A-148	A-164	G	G	G
1.45	1190	121	0.88	14700	1500	02	- 6135DA	- 1003	A-132	A-148	A-164	G	G	G
			1.15	16000	1630				A-132	A-148	A-164	G	G	G
1.16	1480	151	0.93	15200	1540	02	- 6145DA	- 1247	A-132	A-148	A-164	G	G	G
0.702	2450	250	0.86	22100	2250	02	- 6165DA	- 2065	A-133	A-149	A-165	G	G	G
0.476	3610	368	0.87	29500	3010	02	- 6175DA	- 3045	A-133	A-149	A-165	G	G	G

0.25 kW 50 Hz	Motor Speed n ₁
	4 P
	1450 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	9.39	0.957	1.14	795	81.1	03	- 6065	- 6	A-124	A-140	A-156	MF	MF	MF
			1.39	1390	141				A-124	A-140	A-156	MF	MF	MF
			1.63	1390	141				A-124	A-140	A-156	MF	MF	MF
			2.37	1930	197				A-124	A-140	A-156	MF	MF	MF
181	12.5	1.28	1.14	908	92.5	03	- 6065	- 8	A-124	A-140	A-156	MF	MF	MF
			1.39	1530	156				A-124	A-140	A-156	MF	MF	MF
			1.63	1530	156				A-124	A-140	A-156	MF	MF	MF
			2.37	2090	213				A-124	A-140	A-156	MF	MF	MF
132	17.2	1.75	1.14	1180	120	03	- 6065	- 11	A-124	A-140	A-156	MF	MF	MF
			1.39	1720	175				A-124	A-140	A-156	MF	MF	MF
			1.63	1720	175				A-124	A-140	A-156	MF	MF	MF
			2.37	2310	236				A-124	A-140	A-156	MF	MF	MF
112	20.3	2.07	1.14	1180	120	03	- 6065	- 13	A-124	A-140	A-156	MF	MF	MF
			1.39	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.63	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.37	2490	254				A-124	A-140	A-156	MF	MF	MF
96.7	23.5	2.39	1.14	1180	120	03	- 6065	- 15	A-124	A-140	A-156	MF	MF	MF
			1.39	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.63	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.37	2560	261				A-124	A-140	A-156	MF	MF	MF
85.3	26.6	2.71	1.13	1180	120	03	- 6065	- 17	A-124	A-140	A-156	MF	MF	MF
			1.39	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.63	1770	180				A-124	A-140	A-156	MF	MF	MF
			2.37	2560	261				A-124	A-140	A-156	MF	MF	MF
69.0	32.8	3.35	0.91	1180	120	03	- 6065	- 21	A-124	A-140	A-156	MF	MF	MF
			1.28	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.63	1770	180				A-124	A-140	A-156	MF	MF	MF
			1.91	2560	261				A-124	A-140	A-156	MF	MF	MF
58.0	39.1	3.99	1.18	1770	180	03	- 6075	- 25	A-124	A-140	A-156	MF	MF	MF
			1.36	2560	261				A-124	A-140	A-156	MF	MF	MF
			1.90	2560	261				A-124	A-140	A-156	MF	MF	MF
50.0	45.4	4.62	1.14	1770	180	03	- 6075	- 29	A-124	A-140	A-156	MF	MF	MF
			1.36	2560	261				A-124	A-140	A-156	MF	MF	MF
			1.87	2560	261				A-124	A-140	A-156	MF	MF	MF

- Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.70	638	65.0	0.98	9810	1000	02	6125DA	649	A-131	A-147	A-163	MF	MF	MF
			1.43	14700	1500	02	6130DA	649	A-132	A-148	A-164	G	G	G
			1.65	14700	1500	02	6135DA	649	A-132	A-148	A-164	G	G	G
			2.15	16000	1630	02	6145DA	649	A-132	A-148	A-164	G	G	G
2.39	718	73.2	1.31	14700	1500	02	6135DA	731	A-132	A-148	A-164	G	G	G
			1.91	16000	1630	02	6145DA	731	A-132	A-148	A-164	G	G	G
2.08	826	84.2	1.14	14700	1500	02	6135DA	841	A-132	A-148	A-164	G	G	G
			1.48	16000	1630	02	6140DA	841	A-132	A-148	A-164	G	G	G
			1.51	16000	1630	02	6145DA	841	A-132	A-148	A-164	G	G	G
1.74	985	100	1.07	14700	1500	02	6135DA	1003	A-132	A-148	A-164	G	G	G
			1.39	16000	1630	02	6145DA	1003	A-132	A-148	A-164	G	G	G
1.40	1220	125	1.12	16000	1630	02	6145DA	1247	A-132	A-148	A-164	G	G	G
0.847	2030	207	1.04	22100	2250	02	6165DA	2065	A-133	A-149	A-165	G	G	G
0.575	2990	305	1.05	29500	3010	02	6175DA	3045	A-133	A-149	A-165	G	G	G

0.25 kW 60 Hz	Motor Speed n ₁
	4P
	1750r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	7.78	0.793	1.14	749	76.3	03	6065	6	A-124	A-140	A-156	MF	MF	MF
			1.39	1310	133	03	6070	6	A-124	A-140	A-156	MF	MF	MF
			1.63	1310	133	03	6075	6	A-124	A-140	A-156	MF	MF	MF
			2.37	1810	185	03	6080	6	A-124	A-140	A-156	MF	MF	MF
219	10.4	1.06	1.14	855	87.2	03	6065	8	A-124	A-140	A-156	MF	MF	MF
			1.39	1450	147	03	6070	8	A-124	A-140	A-156	MF	MF	MF
			1.63	1450	147	03	6075	8	A-124	A-140	A-156	MF	MF	MF
			2.37	1970	201	03	6080	8	A-124	A-140	A-156	MF	MF	MF
159	14.3	1.45	1.14	1160	118	03	6065	11	A-124	A-140	A-156	MF	MF	MF
			1.39	1620	165	03	6070	11	A-124	A-140	A-156	MF	MF	MF
			1.63	1620	165	03	6075	11	A-124	A-140	A-156	MF	MF	MF
			2.37	2180	222	03	6080	11	A-124	A-140	A-156	MF	MF	MF
135	16.8	1.72	1.14	1180	120	03	6065	13	A-124	A-140	A-156	MF	MF	MF
			1.39	1710	174	03	6070	13	A-124	A-140	A-156	MF	MF	MF
			1.63	1710	174	03	6075	13	A-124	A-140	A-156	MF	MF	MF
			2.37	2340	239	03	6080	13	A-124	A-140	A-156	MF	MF	MF
117	19.4	1.98	1.14	1180	120	03	6065	15	A-124	A-140	A-156	MF	MF	MF
			1.39	1720	175	03	6070	15	A-124	A-140	A-156	MF	MF	MF
			1.63	1720	175	03	6075	15	A-124	A-140	A-156	MF	MF	MF
			2.37	2420	247	03	6080	15	A-124	A-140	A-156	MF	MF	MF
103	22.0	2.25	1.14	1180	120	03	6065	17	A-124	A-140	A-156	MF	MF	MF
			1.39	1770	180	03	6070	17	A-124	A-140	A-156	MF	MF	MF
			1.63	1770	180	03	6075	17	A-124	A-140	A-156	MF	MF	MF
			2.37	2540	258	03	6080	17	A-124	A-140	A-156	MF	MF	MF
83.3	27.2	2.77	0.94	1180	120	03	6065	21	A-124	A-140	A-156	MF	MF	MF
			1.28	1770	180	03	6070	21	A-124	A-140	A-156	MF	MF	MF
			1.63	1770	180	03	6075	21	A-124	A-140	A-156	MF	MF	MF
			1.91	2470	252	03	6080	21	A-124	A-140	A-156	MF	MF	MF
70.0	32.4	3.30	1.18	1770	180	03	6075	25	A-124	A-140	A-156	MF	MF	MF
			1.36	2540	259	03	6080	25	A-124	A-140	A-156	MF	MF	MF
			1.90	2540	259	03	6085	25	A-124	A-140	A-156	MF	MF	MF
60.3	37.6	3.83	1.14	1770	180	03	6075	29	A-124	A-140	A-156	MF	MF	MF
			1.36	2560	261	03	6080	29	A-124	A-140	A-156	MF	MF	MF
			1.87	2560	261	03	6085	29	A-124	A-140	A-156	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
41.4	54.7	5.58	1.09	1770	180	03	- 6075	- 35	A-124	A-140	A-156	MF	MF	MF
			1.31	2560	261	03	- 6085	- 35	A-124	A-140	A-156	MF	MF	MF
			2.45	3340	340	03	- 6090	- 35	A-124	A-140	A-156	MF	MF	MF
33.7	67.3	6.86	0.89	1500	152	03	- 6075	- 43	A-124	A-140	A-156	MF	MF	MF
			1.18	2560	261	03	- 6085	- 43	A-124	A-140	A-156	MF	MF	MF
			1.74	3340	340	03	- 6090	- 43	A-124	A-140	A-156	MF	MF	MF
			2.41	3340	340	03	- 6095	- 43	A-124	A-140	A-156	MF	MF	MF
28.4	79.8	8.13	0.96	2490	253	03	- 6085	- 51	A-124	A-140	A-156	MF	MF	MF
			1.33	3340	340	03	- 6090	- 51	A-124	A-140	A-156	MF	MF	MF
			1.63	3340	340	03	- 6095	- 51	A-124	A-140	A-156	MF	MF	MF
			2.24	5400	550	03	- 6100	- 51	A-124	A-141	A-157	MF	MF	MF
24.6	92.3	9.41	0.94	2390	244	03	- 6085	- 59	A-124	A-140	A-156	MF	MF	MF
			1.24	3340	340	03	- 6090	- 59	A-124	A-140	A-156	MF	MF	MF
			1.34	3340	340	03	- 6095	- 59	A-124	A-140	A-156	MF	MF	MF
			2.06	5400	550	03	- 6100	- 59	A-124	A-141	A-157	MF	MF	MF
20.4	111	11.3	1.11	3340	340	03	- 6095	- 71	A-124	A-140	A-156	MF	MF	MF
			1.74	5400	550	03	- 6100	- 71	A-124	A-141	A-157	MF	MF	MF
			2.02	5400	550	03	- 6105	- 71	A-124	A-141	A-157	MF	MF	MF
16.7	136	13.9	1.05	3340	340	03	- 6095	- 87	A-124	A-140	A-156	MF	MF	MF
			1.73	5400	550	03	- 6100	- 87	A-124	A-141	A-157	MF	MF	MF
			2.01	5400	550	03	- 6105	- 87	A-124	A-141	A-157	MF	MF	MF
13.9	154	15.7	1.17	3340	340	03	- 6095DA	- 104	A-131	A-147	A-163	MF	MF	MF
			1.72	5400	550	03	- 6105DA	- 104	A-131	A-147	A-163	MF	MF	MF
			3.41	9810	1000	03	- 6120DB	- 104	A-131	A-147	A-163	MF	MF	MF
12.2	186	19.0	1.14	5400	550	03	- 6105	- 119	A-124	A-141	A-157	MF	MF	MF
12.0	179	18.3	0.89	3340	340	03	- 6095DA	- 121	A-131	A-147	A-163	MF	MF	MF
			1.39	5400	550	03	- 6100DA	- 121	A-131	A-147	A-163	MF	MF	MF
			1.72	5400	550	03	- 6105DA	- 121	A-131	A-147	A-163	MF	MF	MF
			2.93	9810	1000	03	- 6120DB	- 121	A-131	A-147	A-163	MF	MF	MF
10.1	212	21.6	0.87	3340	340	03	- 6095DA	- 143	A-131	A-147	A-163	MF	MF	MF
			1.18	5400	550	03	- 6100DA	- 143	A-131	A-147	A-163	MF	MF	MF
			1.42	5400	550	03	- 6105DA	- 143	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	- 6120DA	- 143	A-131	A-147	A-163	MF	MF	MF
			2.48	9810	1000	03	- 6120DB	- 143	A-131	A-147	A-163	MF	MF	MF
8.79	245	24.9	0.82	3340	340	03	- 6095DA	- 165	A-131	A-147	A-163	MF	MF	MF
			1.23	5400	550	03	- 6105DA	- 165	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	- 6120DA	- 165	A-131	A-147	A-163	MF	MF	MF
			2.15	9810	1000	03	- 6120DB	- 165	A-131	A-147	A-163	MF	MF	MF
7.44	289	29.5	1.04	5400	550	03	- 6105DA	- 195	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	- 6120DA	- 195	A-131	A-147	A-163	MF	MF	MF
			1.82	9810	1000	03	- 6120DB	- 195	A-131	A-147	A-163	MF	MF	MF
6.28	342	34.9	0.88	4940	504	03	- 6105DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.52	9810	1000	03	- 6120DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.84	9810	1000	03	- 6125DB	- 231	A-131	A-147	A-163	MF	MF	MF
5.31	405	41.2	1.29	9810	1000	03	- 6120DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.56	9810	1000	03	- 6125DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.93	14700	1500	03	- 6130DB	- 273	A-132	A-148	A-164	G	G	G
4.55	473	48.2	1.10	9810	1000	03	- 6120DA	- 319	A-131	A-147	A-163	MF	MF	MF
			1.33	9810	1000	03	- 6125DA	- 319	A-131	A-147	A-163	MF	MF	MF
			1.65	14700	1500	03	- 6130DA	- 319	A-132	A-148	A-164	G	G	G
			1.99	14700	1500	03	- 6135DB	- 319	A-132	A-148	A-164	G	G	G
3.85	559	56.9	1.13	9810	1000	03	- 6125DA	- 377	A-131	A-147	A-163	MF	MF	MF
			1.40	14700	1500	03	- 6130DA	- 377	A-132	A-148	A-164	G	G	G
			1.68	14700	1500	03	- 6135DA	- 377	A-132	A-148	A-164	G	G	G
			2.19	16000	1630	03	- 6140DB	- 377	A-132	A-148	A-164	G	G	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	45.4	4.62	1.12	1770	180	03	6075	35	A-124	A-140	A-156	MF	MF	MF
			1.48	2560	261	03	6085	35	A-124	A-140	A-156	MF	MF	MF
			2.45	3340	340	03	6090	35	A-124	A-140	A-156	MF	MF	MF
40.7	55.7	5.68	0.90	1740	178	03	6075	43	A-124	A-140	A-156	MF	MF	MF
			1.18	2560	261	03	6085	43	A-124	A-140	A-156	MF	MF	MF
			1.74	3340	340	03	6090	43	A-124	A-140	A-156	MF	MF	MF
			2.41	3340	340	03	6095	43	A-124	A-140	A-156	MF	MF	MF
34.3	66.1	6.74	0.96	2560	261	03	6085	51	A-124	A-140	A-156	MF	MF	MF
			1.33	3340	340	03	6090	51	A-124	A-140	A-156	MF	MF	MF
			1.69	3340	340	03	6095	51	A-124	A-140	A-156	MF	MF	MF
			2.24	5400	550	03	6100	51	A-124	A-141	A-157	MF	MF	MF
29.7	76.5	7.79	0.94	2540	259	03	6085	59	A-124	A-140	A-156	MF	MF	MF
			1.24	3340	340	03	6090	59	A-124	A-140	A-156	MF	MF	MF
			1.49	3340	340	03	6095	59	A-124	A-140	A-156	MF	MF	MF
			2.06	5400	550	03	6100	59	A-124	A-141	A-157	MF	MF	MF
24.6	92.0	9.38	1.20	3340	340	03	6095	71	A-124	A-140	A-156	MF	MF	MF
			1.74	5400	550	03	6100	71	A-124	A-141	A-157	MF	MF	MF
			2.24	5400	550	03	6105	71	A-124	A-141	A-157	MF	MF	MF
20.1	113	11.5	1.20	3340	340	03	6095	87	A-124	A-140	A-156	MF	MF	MF
			1.73	5400	550	03	6100	87	A-124	A-141	A-157	MF	MF	MF
			2.26	5400	550	03	6105	87	A-124	A-141	A-157	MF	MF	MF
16.8	128	13.0	1.42	3340	340	03	6095DA	104	A-131	A-147	A-163	MF	MF	MF
			1.72	5400	550	03	6105DA	104	A-131	A-147	A-163	MF	MF	MF
			4.11	9810	1000	03	6120DB	104	A-131	A-147	A-163	MF	MF	MF
14.7	154	15.7	1.14	5400	550	03	6105	119	A-124	A-141	A-157	MF	MF	MF
14.5	149	15.1	1.08	3340	340	03	6095DA	121	A-131	A-147	A-163	MF	MF	MF
			1.68	5400	550	03	6100DA	121	A-131	A-147	A-163	MF	MF	MF
			1.72	5400	550	03	6105DA	121	A-131	A-147	A-163	MF	MF	MF
			3.53	9810	1000	03	6120DB	121	A-131	A-147	A-163	MF	MF	MF
12.2	176	17.9	1.04	3340	340	03	6095DA	143	A-131	A-147	A-163	MF	MF	MF
			1.42	5400	550	03	6100DA	143	A-131	A-147	A-163	MF	MF	MF
			1.71	5400	550	03	6105DA	143	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	6120DA	143	A-131	A-147	A-163	MF	MF	MF
			2.99	9810	1000	03	6120DB	143	A-131	A-147	A-163	MF	MF	MF
10.6	203	20.7	0.98	3340	340	03	6095DA	165	A-131	A-147	A-163	MF	MF	MF
			1.48	5400	550	03	6105DA	165	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	6120DA	165	A-131	A-147	A-163	MF	MF	MF
			2.59	9810	1000	03	6120DB	165	A-131	A-147	A-163	MF	MF	MF
8.97	239	24.4	1.25	5400	550	03	6105DA	195	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	6120DA	195	A-131	A-147	A-163	MF	MF	MF
			2.19	9810	1000	03	6120DB	195	A-131	A-147	A-163	MF	MF	MF
7.58	284	28.9	1.06	5400	550	03	6105DA	231	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	6120DA	231	A-131	A-147	A-163	MF	MF	MF
			2.22	9810	1000	03	6125DB	231	A-131	A-147	A-163	MF	MF	MF
6.41	335	34.2	1.56	9810	1000	03	6120DA	273	A-131	A-147	A-163	MF	MF	MF
			1.72	9810	1000	03	6125DA	273	A-131	A-147	A-163	MF	MF	MF
			2.33	14700	1500	03	6130DB	273	A-132	A-148	A-164	G	G	G
5.49	392	39.9	1.33	9810	1000	03	6120DA	319	A-131	A-147	A-163	MF	MF	MF
			1.61	9810	1000	03	6125DA	319	A-131	A-147	A-163	MF	MF	MF
			1.72	14700	1500	03	6130DA	319	A-132	A-148	A-164	G	G	G
			2.40	14700	1500	03	6135DB	319	A-132	A-148	A-164	G	G	G
4.64	463	47.2	1.36	9810	1000	03	6125DA	377	A-131	A-147	A-163	MF	MF	MF
			1.69	14700	1500	03	6130DA	377	A-132	A-148	A-164	G	G	G
			1.72	14700	1500	03	6135DA	377	A-132	A-148	A-164	G	G	G
			2.65	16000	1630	03	6140DB	377	A-132	A-148	A-164	G	G	G

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load P_{ro}		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.07	701	71.5	0.90	9810	1000	03	- 6125DA	- 473	A-131	A-147	A-163	MF	MF	MF
			1.11	14700	1500				A-132	A-148	A-164	G	G	G
			1.34	14700	1500				A-132	A-148	A-164	G	G	G
			1.72	16000	1630				A-132	A-148	A-164	G	G	G
			1.75	16000	1630				A-132	A-148	A-164	G	G	G
2.59	828	84.4	1.13	14700	1500	03	- 6135DA	- 559	A-132	A-148	A-164	G	G	G
			1.48	16000	1630				A-132	A-148	A-164	G	G	G
			1.65	16000	1630				A-132	A-148	A-164	G	G	G
2.23	962	98.0	1.09	14700	1500	03	- 6135DA	- 649	A-132	A-148	A-164	G	G	G
			1.42	16000	1630				A-132	A-148	A-164	G	G	G
1.98	1080	110	0.87	14700	1500	03	- 6135DA	- 731	A-132	A-148	A-164	G	G	G
			1.26	16000	1630				A-132	A-148	A-164	G	G	G
1.72	1250	127	1.10	16000	1630	03	- 6145DA	- 841	A-132	A-148	A-164	G	G	G
1.45	1490	152	0.92	16000	1630	03	- 6145DA	- 1003	A-132	A-148	A-164	G	G	G

0.4 kW 50 Hz	Motor Speed n_1
	4 P
	1450 r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load P_{ro}		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	15.0	1.53	1.02	1370	140	05	- 6075	- 6	A-124	A-140	A-156	MF	MF	MF
			1.48	1920	196				A-124	A-140	A-156	MF	MF	MF
			1.95	1920	196				A-124	A-140	A-156	MF	MF	MF
181	20.0	2.04	1.02	1510	154	05	- 6075	- 8	A-124	A-140	A-156	MF	MF	MF
			1.48	2080	212				A-124	A-140	A-156	MF	MF	MF
			1.95	2080	212				A-124	A-140	A-156	MF	MF	MF
132	27.5	2.81	1.02	1680	171	05	- 6075	- 11	A-124	A-140	A-156	MF	MF	MF
			1.48	2300	234				A-124	A-140	A-156	MF	MF	MF
			1.95	2300	234				A-124	A-140	A-156	MF	MF	MF
112	32.5	3.32	1.02	1770	180	05	- 6075	- 13	A-124	A-140	A-156	MF	MF	MF
			1.48	2470	251				A-124	A-140	A-156	MF	MF	MF
			1.95	2470	251				A-124	A-140	A-156	MF	MF	MF
96.7	37.5	3.83	1.02	1770	180	05	- 6075	- 15	A-124	A-140	A-156	MF	MF	MF
			1.48	2550	260				A-124	A-140	A-156	MF	MF	MF
			1.95	2550	260				A-124	A-140	A-156	MF	MF	MF
85.3	42.5	4.34	1.02	1770	180	05	- 6075	- 17	A-124	A-140	A-156	MF	MF	MF
			1.48	2560	261				A-124	A-140	A-156	MF	MF	MF
			1.95	2560	261				A-124	A-140	A-156	MF	MF	MF
69.0	52.6	5.36	1.02	1770	180	05	- 6075	- 21	A-124	A-140	A-156	MF	MF	MF
			1.38	2560	261				A-124	A-140	A-156	MF	MF	MF
			1.90	3340	340				A-124	A-140	A-156	MF	MF	MF
58.0	62.6	6.38	1.19	2560	261	05	- 6085	- 25	A-124	A-140	A-156	MF	MF	MF
			1.68	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.17	3340	340				A-124	A-140	A-156	MF	MF	MF
50.0	72.6	7.40	1.17	2560	261	05	- 6085	- 29	A-124	A-140	A-156	MF	MF	MF
			1.56	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.96	3340	340				A-124	A-140	A-156	MF	MF	MF
41.4	87.6	8.93	0.82	2560	261	05	- 6085	- 35	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.90	3340	340				A-124	A-140	A-156	MF	MF	MF
33.7	108	11.0	1.09	3340	340	05	- 6090	- 43	A-124	A-140	A-156	MF	MF	MF
			1.51	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.95	5400	550				A-124	A-141	A-157	MF	MF	MF

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load P_{ro} is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.70	581	59.2	1.08	9810	1000	03	- 6125DA	- 473	A-131	A-147	A-163	MF	MF	MF
			1.34	14700	1500				A-132	A-148	A-164	G	G	G
			1.62	14700	1500				A-132	A-148	A-164	G	G	G
			1.72	16000	1630				A-132	A-148	A-164	G	G	G
			2.11	16000	1630				A-132	A-148	A-164	G	G	G
3.13	686	70.0	1.37	14700	1500	03	- 6135DA	- 559	A-132	A-148	A-164	G	G	G
			1.72	16000	1630				A-132	A-148	A-164	G	G	G
			2.00	16000	1630				A-132	A-148	A-164	G	G	G
2.70	797	81.2	1.32	14700	1500	03	- 6135DA	- 649	A-132	A-148	A-164	G	G	G
			1.72	16000	1630				A-132	A-148	A-164	G	G	G
2.39	898	91.5	1.05	14700	1500	03	- 6135DA	- 731	A-132	A-148	A-164	G	G	G
			1.53	16000	1630				A-132	A-148	A-164	G	G	G
2.08	1030	105	1.21	16000	1630	03	- 6145DA	- 841	A-132	A-148	A-164	G	G	G
			1.74	1230	126				1.11	16000	1630	03	- 6145DA	- 1003

0.4 kW 60 Hz	Motor Speed n ₁
	4P
	1750r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	12.4	1.27	1.02	1290	132	05	- 6075	- 6	A-124	A-140	A-156	MF	MF	MF
			1.48	1810	184				A-124	A-140	A-156	MF	MF	MF
			1.95	1810	184				A-124	A-140	A-156	MF	MF	MF
219	16.6	1.69	1.02	1430	145	05	- 6075	- 8	A-124	A-140	A-156	MF	MF	MF
			1.48	1960	200				A-124	A-140	A-156	MF	MF	MF
			1.95	1960	200				A-124	A-140	A-156	MF	MF	MF
159	22.8	2.33	1.02	1590	162	05	- 6075	- 11	A-124	A-140	A-156	MF	MF	MF
			1.48	2160	220				A-124	A-140	A-156	MF	MF	MF
			1.95	2160	220				A-124	A-140	A-156	MF	MF	MF
135	27.0	2.75	1.02	1680	171	05	- 6075	- 13	A-124	A-140	A-156	MF	MF	MF
			1.48	2320	237				A-124	A-140	A-156	MF	MF	MF
			1.95	2320	237				A-124	A-140	A-156	MF	MF	MF
117	31.1	3.17	1.02	1680	171	05	- 6075	- 15	A-124	A-140	A-156	MF	MF	MF
			1.48	2400	245				A-124	A-140	A-156	MF	MF	MF
			1.95	2400	245				A-124	A-140	A-156	MF	MF	MF
103	35.3	3.59	1.02	1770	180	05	- 6075	- 17	A-124	A-140	A-156	MF	MF	MF
			1.48	2510	256				A-124	A-140	A-156	MF	MF	MF
			1.95	2510	256				A-124	A-140	A-156	MF	MF	MF
83.3	43.5	4.44	1.02	1770	180	05	- 6075	- 21	A-124	A-140	A-156	MF	MF	MF
			1.38	2450	250				A-124	A-140	A-156	MF	MF	MF
			1.90	3340	340				A-124	A-140	A-156	MF	MF	MF
70.0	51.8	5.28	1.19	2520	256	05	- 6085	- 25	A-124	A-140	A-156	MF	MF	MF
			1.68	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.17	3340	340				A-124	A-140	A-156	MF	MF	MF
60.3	60.1	6.13	1.17	2560	261	05	- 6085	- 29	A-124	A-140	A-156	MF	MF	MF
			1.56	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.96	3340	340				A-124	A-140	A-156	MF	MF	MF
50.0	72.6	7.40	0.82	2560	261	05	- 6085	- 35	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.90	3340	340				A-124	A-140	A-156	MF	MF	MF
40.7	89.2	9.09	1.09	3340	340	05	- 6090	- 43	A-124	A-140	A-156	MF	MF	MF
			1.51	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.95	5400	550				A-124	A-141	A-157	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load P_{ro}		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CFHM	CNVM CVVM	CNHM CHHM	CNFM CFHM	CNVM CVVM
28.4	128	13.0	1.02	3320	339	05	- 6095	- 51	A-124	A-140	A-156	MF	MF	MF
			1.40	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.94	5400	550				A-124	A-141	A-157	MF	MF	MF
24.6	148	15.1	0.84	3300	336	05	- 6095	- 59	A-124	A-140	A-156	MF	MF	MF
			1.29	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.70	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.15	7610	776				A-125	A-141	A-157	MF	MF	MF
20.4	178	18.1	1.27	5400	550	05	- 6105	- 71	A-125	A-141	A-157	MF	MF	MF
			1.67	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.90	7610	776				A-125	A-141	A-157	MF	MF	MF
16.7	218	22.2	1.26	5400	550	05	- 6105	- 87	A-125	A-141	A-157	MF	MF	MF
			1.65	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.90	7610	776				A-125	A-141	A-157	MF	MF	MF
13.9	247	25.1	1.07	5400	550	05	- 6105DA	- 104	A-131	A-147	A-163	MF	MF	MF
			2.13	9810	1000				A-131	A-147	A-163	MF	MF	MF
12.0	287	29.2	1.07	5400	550	05	- 6105DA	- 121	A-131	A-147	A-163	MF	MF	MF
			1.83	9810	1000				A-131	A-147	A-163	MF	MF	MF
10.1	339	34.6	0.88	5400	550	05	- 6105DA	- 143	A-131	A-147	A-163	MF	MF	MF
			1.07	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.55	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.86	9810	1000				A-131	A-147	A-163	MF	MF	MF
8.79	391	39.9	1.07	9810	1000	05	- 6120DA	- 165	A-131	A-147	A-163	MF	MF	MF
			1.34	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.61	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.99	14700	1500				A-132	A-148	A-164	G	G	G
7.44	462	47.1	1.07	9810	1000	05	- 6120DA	- 195	A-131	A-147	A-163	MF	MF	MF
			1.36	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.69	14700	1500				A-132	A-148	A-164	G	G	G
			2.03	14700	1500				A-132	A-148	A-164	G	G	G
6.28	548	55.8	1.07	9810	1000	05	- 6125DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.42	14700	1500				A-132	A-148	A-164	G	G	G
			1.72	14700	1500				A-132	A-148	A-164	G	G	G
			2.24	16000	1630				A-132	A-148	A-164	G	G	G
5.31	647	66.0	0.97	9810	1000	05	- 6125DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.07	14700	1500				A-132	A-148	A-164	G	G	G
			1.45	14700	1500				A-132	A-148	A-164	G	G	G
			1.89	16000	1630				A-132	A-148	A-164	G	G	G
4.55	756	77.1	0.83	9810	1000	05	- 6125DA	- 319	A-131	A-147	A-163	MF	MF	MF
			1.03	14700	1500				A-132	A-148	A-164	G	G	G
			1.62	16000	1630				A-132	A-148	A-164	G	G	G
			1.81	16000	1630				A-132	A-148	A-164	G	G	G
3.85	894	91.1	1.05	14700	1500	05	- 6135DA	- 377	A-132	A-148	A-164	G	G	G
			1.53	16000	1630				A-132	A-148	A-164	G	G	G
			1.96	22100	2250				A-133	A-149	A-165	G	G	G
3.07	1120	114	0.84	14700	1500	05	- 6135DA	- 473	A-132	A-148	A-164	G	G	G
			1.07	16000	1630				A-132	A-148	A-164	G	G	G
			1.55	22100	2250				A-133	A-149	A-165	G	G	G
			1.87	22100	2250				A-133	A-149	A-165	G	G	G
2.59	1330	135	1.03	15900	1620	05	- 6145DA	- 559	A-132	A-148	A-164	G	G	G
			1.58	22100	2250				A-133	A-149	A-165	G	G	G
			1.91	29500	3010				A-133	A-149	A-165	G	G	G
2.23	1540	157	0.89	16000	1630	05	- 6145DA	- 649	A-132	A-148	A-164	G	G	G
			1.14	22100	2250				A-133	A-149	A-165	G	G	G
			1.36	22100	2250				A-133	A-149	A-165	G	G	G
			1.64	29500	3010				A-133	A-149	A-165	G	G	G
			2.05	29500	3010				A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load P_{ro} is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N• m	kgf• m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
34.3	106	10.8	1.06	3340	340	05	- 6095	- 51	A-124	A-140	A-156	MF	MF	MF
			1.40	5400	550	05	- 6100	- 51	A-124	A-141	A-157	MF	MF	MF
			1.94	5400	550	05	- 6105	- 51	A-124	A-141	A-157	MF	MF	MF
29.7	122	12.5	0.93	3340	340	05	- 6095	- 59	A-124	A-140	A-156	MF	MF	MF
			1.29	5400	550	05	- 6100	- 59	A-124	A-141	A-157	MF	MF	MF
			1.77	5400	550	05	- 6105	- 59	A-124	A-141	A-157	MF	MF	MF
			2.15	7610	776	05	- 6110	- 59	A-125	A-141	A-157	MF	MF	MF
24.6	147	15.0	1.40	5400	550	05	- 6105	- 71	A-125	A-141	A-157	MF	MF	MF
			1.67	7610	776	05	- 6110	- 71	A-125	A-141	A-157	MF	MF	MF
			1.90	7610	776	05	- 6115	- 71	A-125	A-141	A-157	MF	MF	MF
20.1	180	18.4	1.41	5400	550	05	- 6105	- 87	A-125	A-141	A-157	MF	MF	MF
			1.65	7610	776	05	- 6110	- 87	A-125	A-141	A-157	MF	MF	MF
			1.90	7610	776	05	- 6115	- 87	A-125	A-141	A-157	MF	MF	MF
16.8	204	20.8	1.07	5400	550	05	- 6105DA	- 104	A-131	A-147	A-163	MF	MF	MF
			2.57	9810	1000	05	- 6120DB	- 104	A-131	A-147	A-163	MF	MF	MF
14.5	238	24.2	1.07	5400	550	05	- 6105DA	- 121	A-131	A-147	A-163	MF	MF	MF
			2.21	9810	1000	05	- 6120DB	- 121	A-131	A-147	A-163	MF	MF	MF
12.2	281	28.6	1.07	5400	550	05	- 6105DA	- 143	A-131	A-147	A-163	MF	MF	MF
			1.07	9810	1000	05	- 6120DA	- 143	A-131	A-147	A-163	MF	MF	MF
			1.87	9810	1000	05	- 6120DB	- 143	A-131	A-147	A-163	MF	MF	MF
			2.24	9810	1000	05	- 6125DB	- 143	A-131	A-147	A-163	MF	MF	MF
10.6	324	33.0	1.07	9810	1000	05	- 6120DA	- 165	A-131	A-147	A-163	MF	MF	MF
			1.62	9810	1000	05	- 6120DB	- 165	A-131	A-147	A-163	MF	MF	MF
			1.94	9810	1000	05	- 6125DB	- 165	A-131	A-147	A-163	MF	MF	MF
			2.41	14700	1500	05	- 6130DB	- 165	A-132	A-148	A-164	G	G	G
8.97	383	39.1	1.07	9810	1000	05	- 6120DA	- 195	A-131	A-147	A-163	MF	MF	MF
			1.64	9810	1000	05	- 6125DB	- 195	A-131	A-147	A-163	MF	MF	MF
			2.04	14700	1500	05	- 6130DB	- 195	A-132	A-148	A-164	G	G	G
			2.45	14700	1500	05	- 6135DB	- 195	A-132	A-148	A-164	G	G	G
7.58	454	46.3	1.07	9810	1000	05	- 6125DA	- 231	A-131	A-147	A-163	MF	MF	MF
			1.72	14700	1500	05	- 6130DB	- 231	A-132	A-148	A-164	G	G	G
			2.07	14700	1500	05	- 6135DB	- 231	A-132	A-148	A-164	G	G	G
			2.70	16000	1630	05	- 6140DB	- 231	A-132	A-148	A-164	G	G	G
6.41	536	54.7	1.07	9810	1000	05	- 6125DA	- 273	A-131	A-147	A-163	MF	MF	MF
			1.07	14700	1500	05	- 6130DA	- 273	A-132	A-148	A-164	G	G	G
			1.75	14700	1500	05	- 6135DB	- 273	A-132	A-148	A-164	G	G	G
			2.28	16000	1630	05	- 6140DB	- 273	A-132	A-148	A-164	G	G	G
5.49	627	63.9	1.01	9810	1000	05	- 6125DA	- 319	A-131	A-147	A-163	MF	MF	MF
			1.07	14700	1500	05	- 6130DA	- 319	A-132	A-148	A-164	G	G	G
			1.95	16000	1630	05	- 6140DB	- 319	A-132	A-148	A-164	G	G	G
			2.19	16000	1630	05	- 6145DB	- 319	A-132	A-148	A-164	G	G	G
4.64	741	75.5	1.07	14700	1500	05	- 6135DA	- 377	A-132	A-148	A-164	G	G	G
			1.85	16000	1630	05	- 6145DB	- 377	A-132	A-148	A-164	G	G	G
			2.37	22100	2250	05	- 6160DA	- 377	A-133	A-149	A-165	G	G	G
3.70	929	94.7	1.01	14700	1500	05	- 6135DA	- 473	A-132	A-148	A-164	G	G	G
			1.07	16000	1630	05	- 6140DA	- 473	A-132	A-148	A-164	G	G	G
			1.87	22100	2250	05	- 6160DA	- 473	A-133	A-149	A-165	G	G	G
			2.26	22100	2250	05	- 6165DA	- 473	A-133	A-149	A-165	G	G	G
3.13	1100	112	1.07	16000	1630	05	- 6145DA	- 559	A-132	A-148	A-164	G	G	G
			1.91	22100	2250	05	- 6165DA	- 559	A-133	A-149	A-165	G	G	G
			2.30	29500	3010	05	- 6170DA	- 559	A-133	A-149	A-165	G	G	G
2.70	1280	130	1.07	16000	1630	05	- 6145DA	- 649	A-132	A-148	A-164	G	G	G
			1.38	22100	2250	05	- 6160DA	- 649	A-133	A-149	A-165	G	G	G
			1.65	22100	2250	05	- 6165DA	- 649	A-133	A-149	A-165	G	G	G
			1.98	29500	3010	05	- 6170DA	- 649	A-133	A-149	A-165	G	G	G
			2.47	29500	3010	05	- 6175DA	- 649	A-133	A-149	A-165	G	G	G

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
1.98	1730	177	1.21	22100	2250	05	- 6165DA	- 731	A-133	A-149	A-165	G	G	G
			1.46	29500	3010				A-133	A-149	A-165	G	G	G
			1.82	29500	3010				A-133	A-149	A-165	G	G	G
1.72	1990	203	1.05	22100	2250	05	- 6165DA	- 841	A-133	A-149	A-165	G	G	G
			1.58	29500	3010				A-133	A-149	A-165	G	G	G
			1.45	2380	242				0.88	22100	2250	05	- 6165DA	- 1003
1.06	29500	3010	A-133	A-149	A-165	G	G	G						
1.32	29500	3010	A-133	A-149	A-165	G	G	G						
1.16	2960	301	1.07	29500	3010	05	- 6175DA	- 1247	A-133	A-149	A-165	G	G	G
0.980	3510	357	0.90	29500	3010	05	- 6175DA	- 1479	A-133	A-149	A-165	G	G	G
0.572	6020	613	0.83	41200	4200	05	- 6185DA	- 2537	A-133	A-149	A-165	G	G	G

<h1>0.55 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1
	4 P
	1450 r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	20.6	2.10	1.08	1910	195	08	- 6080	- 6	A-124	A-140	A-156	MF	MF	MF
			1.41	1910	195				A-124	A-140	A-156	MF	MF	MF
			2.09	2850	291				A-124	A-140	A-156	MF	MF	MF
181	27.5	2.81	1.08	2070	211	08	- 6080	- 8	A-124	A-140	A-156	MF	MF	MF
			1.41	2070	211				A-124	A-140	A-156	MF	MF	MF
			2.09	3180	324				A-124	A-140	A-156	MF	MF	MF
132	37.9	3.86	1.08	2280	232	08	- 6080	- 11	A-124	A-140	A-156	MF	MF	MF
			1.41	2280	232				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
112	44.7	4.56	1.08	2450	249	08	- 6080	- 13	A-124	A-140	A-156	MF	MF	MF
			1.41	2450	249				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
96.7	51.6	5.26	1.08	2520	257	08	- 6080	- 15	A-124	A-140	A-156	MF	MF	MF
			1.41	2520	257				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
85.3	58.5	5.96	1.08	2560	261	08	- 6080	- 17	A-124	A-140	A-156	MF	MF	MF
			1.41	2560	261				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
69.0	72.3	7.37	1.00	2560	261	08	- 6085	- 21	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.75	3340	340				A-124	A-140	A-156	MF	MF	MF
58.0	86.0	8.77	0.86	2510	256	08	- 6085	- 25	A-124	A-140	A-156	MF	MF	MF
			1.22	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.57	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.31	5400	550				A-124	A-141	A-157	MF	MF	MF
50.0	99.8	10.2	0.85	2300	235	08	- 6085	- 29	A-124	A-140	A-156	MF	MF	MF
			1.14	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.43	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.20	5400	550				A-124	A-141	A-157	MF	MF	MF
41.4	120	12.3	1.11	3340	340	08	- 6090	- 35	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.77	5400	550				A-124	A-141	A-157	MF	MF	MF
33.7	148	15.1	1.10	3320	338	08	- 6095	- 43	A-124	A-140	A-156	MF	MF	MF
			1.42	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.96	5400	550				A-124	A-141	A-157	MF	MF	MF

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.39	1440	146	1.46	22100	2250	05	- 6165DA	- 731	A-133	A-149	A-165	G	G	G
			1.76	29500	3010				A-133	A-149	A-165	G	G	G
			2.19	29500	3010				A-133	A-149	A-165	G	G	G
2.08	1650	168	1.27	22100	2250	05	- 6165DA	- 841	A-133	A-149	A-165	G	G	G
			1.91	29500	3010				A-133	A-149	A-165	G	G	G
1.74	1970	201	1.07	22100	2250	05	- 6165DA	- 1003	A-133	A-149	A-165	G	G	G
			1.28	29500	3010				A-133	A-149	A-165	G	G	G
			1.60	29500	3010				A-133	A-149	A-165	G	G	G
1.40	2450	250	1.29	29500	3010	05	- 6175DA	- 1247	A-133	A-149	A-165	G	G	G
1.18	2910	296	1.08	29500	3010	05	- 6175DA	- 1479	A-133	A-149	A-165	G	G	G
0.690	4980	508	1.00	41600	4240	05	- 6185DA	- 2537	A-133	A-149	A-165	G	G	G

0.55 kW 60 Hz	Motor Speed n ₁
	4 P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	17.1	1.74	1.08	1800	183	08	- 6080	- 6	A-124	A-140	A-156	MF	MF	MF
			1.41	1800	183				A-124	A-140	A-156	MF	MF	MF
			2.09	2690	274				A-124	A-140	A-156	MF	MF	MF
219	22.8	2.33	1.08	1950	198	08	- 6080	- 8	A-124	A-140	A-156	MF	MF	MF
			1.41	1950	198				A-124	A-140	A-156	MF	MF	MF
			2.09	2990	305				A-124	A-140	A-156	MF	MF	MF
159	31.4	3.20	1.08	2150	219	08	- 6080	- 11	A-124	A-140	A-156	MF	MF	MF
			1.41	2150	219				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
135	37.1	3.78	1.08	2310	235	08	- 6080	- 13	A-124	A-140	A-156	MF	MF	MF
			1.41	2310	235				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
117	42.8	4.36	1.08	2380	242	08	- 6080	- 15	A-124	A-140	A-156	MF	MF	MF
			1.41	2380	242				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
103	48.5	4.94	1.08	2490	254	08	- 6080	- 17	A-124	A-140	A-156	MF	MF	MF
			1.41	2490	254				A-124	A-140	A-156	MF	MF	MF
			2.09	3340	340				A-124	A-140	A-156	MF	MF	MF
83.3	59.9	6.10	1.00	2430	247	08	- 6085	- 21	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.76	3340	340				A-124	A-140	A-156	MF	MF	MF
70.0	71.3	7.27	0.86	2490	254	08	- 6085	- 25	A-124	A-140	A-156	MF	MF	MF
			1.22	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.57	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.31	5400	550				A-124	A-141	A-157	MF	MF	MF
60.3	82.7	8.43	0.85	2480	253	08	- 6085	- 29	A-124	A-140	A-156	MF	MF	MF
			1.14	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.43	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.20	5400	550				A-124	A-141	A-157	MF	MF	MF
50.0	99.8	10.2	1.11	3340	340	08	- 6090	- 35	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340				A-124	A-140	A-156	MF	MF	MF
			1.77	5400	550				A-124	A-141	A-157	MF	MF	MF
40.7	123	12.5	1.10	3340	340	08	- 6095	- 43	A-124	A-140	A-156	MF	MF	MF
			1.42	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.96	5400	550				A-124	A-141	A-157	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CFHM	CNVM CVVM	CNHM CHHM	CNFM CFHM	CNVM CVVM
28.4	176	17.9	1.02	5400	550	08	- 6100	- 51	A-124	A-141	A-157	MF	MF	MF
			1.41	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.72	7610	776				A-125	A-141	A-157	MF	MF	MF
			2.02	7610	776				A-125	A-141	A-157	MF	MF	MF
24.6	203	20.7	1.24	5400	550	08	- 6105	- 59	A-124	A-141	A-157	MF	MF	MF
			1.56	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.84	7610	776				A-125	A-141	A-157	MF	MF	MF
20.4	244	24.9	0.92	5380	549	08	- 6105	- 71	A-124	A-141	A-157	MF	MF	MF
			1.22	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.38	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.74	9810	1000				A-125	A-141	A-157	MF	MF	MF
			2.07	9810	1000				A-125	A-141	A-157	MF	MF	MF
16.7	299	30.5	0.92	4800	489	08	- 6105	- 87	A-124	A-141	A-157	MF	MF	MF
			1.20	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.38	7610	776				A-125	A-141	A-157	MF	MF	MF
			1.72	9810	1000				A-125	A-141	A-157	MF	MF	MF
			1.87	9810	1000				A-125	A-141	A-157	MF	MF	MF
13.9	339	34.6	1.55	9810	1000	08	- 6120DB	- 104	A-131	A-147	A-163	MF	MF	MF
			1.86	9810	1000				A-131	A-147	A-163	MF	MF	MF
12.0	394	40.2	1.58	9810	1000	08	- 6125DB	- 121	A-131	A-147	A-163	MF	MF	MF
			1.98	14700	1500				A-132	A-148	A-164	G	G	G
10.1	466	47.5	1.13	9810	1000	08	- 6120DB	- 143	A-131	A-147	A-163	MF	MF	MF
			1.35	9810	1000				A-131	A-147	A-163	MF	MF	MF
			1.67	14700	1500				A-132	A-148	A-164	G	G	G
			2.02	14700	1500				A-132	A-148	A-164	G	G	G
8.79	538	54.8	1.17	9810	1000	08	- 6125DB	- 165	A-131	A-147	A-163	MF	MF	MF
			1.45	14700	1500				A-132	A-148	A-164	G	G	G
			1.75	14700	1500				A-132	A-148	A-164	G	G	G
7.44	636	64.8	0.98	9810	1000	08	- 6125DB	- 195	A-131	A-147	A-163	MF	MF	MF
			1.23	14700	1500				A-132	A-148	A-164	G	G	G
			1.48	14700	1500				A-132	A-148	A-164	G	G	G
			1.93	16000	1630				A-132	A-148	A-164	G	G	G
6.28	753	76.8	0.84	9810	1000	08	- 6125DB	- 231	A-131	A-147	A-163	MF	MF	MF
			1.25	14700	1500				A-132	A-148	A-164	G	G	G
			1.63	16000	1630				A-132	A-148	A-164	G	G	G
			1.78	16000	1630				A-132	A-148	A-164	G	G	G
5.31	890	90.7	1.06	14700	1500	08	- 6135DB	- 273	A-132	A-148	A-164	G	G	G
			1.50	16000	1630				A-132	A-148	A-164	G	G	G
			1.97	22100	2250				A-133	A-149	A-165	G	G	G
4.55	1040	106	0.90	14700	1500	08	- 6135DB	- 319	A-132	A-148	A-164	G	G	G
			1.18	16000	1630				A-132	A-148	A-164	G	G	G
			1.32	16000	1630				A-132	A-148	A-164	G	G	G
			1.69	22100	2250				A-133	A-149	A-165	G	G	G
			2.02	22100	2250				A-133	A-149	A-165	G	G	G
3.85	1230	125	1.11	16000	1630	08	- 6145DB	- 377	A-132	A-148	A-164	G	G	G
			1.43	22100	2250				A-133	A-149	A-165	G	G	G
			1.71	22100	2250				A-133	A-149	A-165	G	G	G
			2.06	29500	3010				A-133	A-149	A-165	G	G	G
3.07	1540	157	0.89	14800	1510	08	- 6145DB	- 473	A-132	A-148	A-164	G	G	G
			1.13	22100	2250				A-133	A-149	A-165	G	G	G
			1.36	22100	2250				A-133	A-149	A-165	G	G	G
			1.64	29500	3010				A-133	A-149	A-165	G	G	G
			2.04	29500	3010				A-133	A-149	A-165	G	G	G
2.59	1820	186	1.15	22100	2250	08	- 6165DA	- 559	A-133	A-149	A-165	G	G	G
			1.39	29500	3010				A-133	A-149	A-165	G	G	G
			1.73	29500	3010				A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
34.3	145	14.8	1.02	5400	550	08	6100	51	A-124	A-141	A-157	MF	MF	MF
			1.41	5400	550	08	6105	51	A-124	A-141	A-157	MF	MF	MF
			1.72	7610	776	08	6110	51	A-125	A-141	A-157	MF	MF	MF
			2.02	7610	776	08	6115	51	A-125	A-141	A-157	MF	MF	MF
29.7	168	17.1	1.29	5400	550	08	6105	59	A-124	A-141	A-157	MF	MF	MF
			1.56	7610	776	08	6110	59	A-125	A-141	A-157	MF	MF	MF
			1.84	7610	776	08	6115	59	A-125	A-141	A-157	MF	MF	MF
24.6	202	20.6	1.02	5400	550	08	6105	71	A-124	A-141	A-157	MF	MF	MF
			1.22	7610	776	08	6110	71	A-125	A-141	A-157	MF	MF	MF
			1.38	7610	776	08	6115	71	A-125	A-141	A-157	MF	MF	MF
			1.74	9810	1000	08	6120	71	A-125	A-141	A-157	MF	MF	MF
			2.18	9810	1000	08	6125	71	A-125	A-141	A-157	MF	MF	MF
20.1	248	25.3	1.03	5400	550	08	6105	87	A-124	A-141	A-157	MF	MF	MF
			1.20	7610	776	08	6110	87	A-125	A-141	A-157	MF	MF	MF
			1.38	7610	776	08	6115	87	A-125	A-141	A-157	MF	MF	MF
			1.72	9810	1000	08	6120	87	A-125	A-141	A-157	MF	MF	MF
			2.05	9810	1000	08	6125	87	A-125	A-141	A-157	MF	MF	MF
16.8	281	28.6	1.87	9810	1000	08	6120DB	104	A-131	A-147	A-163	MF	MF	MF
			2.24	9810	1000	08	6125DB	104	A-131	A-147	A-163	MF	MF	MF
14.5	327	33.3	1.90	9810	1000	08	6125DB	121	A-131	A-147	A-163	MF	MF	MF
			2.39	14700	1500	08	6130DB	121	A-132	A-148	A-164	G	G	G
12.2	386	39.4	1.36	9810	1000	08	6120DB	143	A-131	A-147	A-163	MF	MF	MF
			1.63	9810	1000	08	6125DB	143	A-131	A-147	A-163	MF	MF	MF
			2.02	14700	1500	08	6130DB	143	A-132	A-148	A-164	G	G	G
			2.43	14700	1500	08	6135DB	143	A-132	A-148	A-164	G	G	G
10.6	446	45.4	1.41	9810	1000	08	6125DB	165	A-131	A-147	A-163	MF	MF	MF
			1.75	14700	1500	08	6130DB	165	A-132	A-148	A-164	G	G	G
			2.11	14700	1500	08	6135DB	165	A-132	A-148	A-164	G	G	G
8.97	527	53.7	1.20	9810	1000	08	6125DB	195	A-131	A-147	A-163	MF	MF	MF
			1.48	14700	1500	08	6130DB	195	A-132	A-148	A-164	G	G	G
			1.78	14700	1500	08	6135DB	195	A-132	A-148	A-164	G	G	G
			2.33	16000	1630	08	6140DB	195	A-132	A-148	A-164	G	G	G
7.58	624	63.6	1.01	9810	1000	08	6125DB	231	A-131	A-147	A-163	MF	MF	MF
			1.51	14700	1500	08	6135DB	231	A-132	A-148	A-164	G	G	G
			1.96	16000	1630	08	6140DB	231	A-132	A-148	A-164	G	G	G
			2.14	16000	1630	08	6145DB	231	A-132	A-148	A-164	G	G	G
6.41	737	75.2	1.27	14700	1500	08	6135DB	273	A-132	A-148	A-164	G	G	G
			1.81	16000	1630	08	6145DB	273	A-132	A-148	A-164	G	G	G
			2.38	22100	2250	08	6160DA	273	A-133	A-149	A-165	G	G	G
5.49	862	87.8	1.09	14700	1500	08	6135DB	319	A-132	A-148	A-164	G	G	G
			1.42	16000	1630	08	6140DB	319	A-132	A-148	A-164	G	G	G
			1.59	16000	1630	08	6145DB	319	A-132	A-148	A-164	G	G	G
			2.04	22100	2250	08	6160DA	319	A-133	A-149	A-165	G	G	G
			2.44	22100	2250	08	6165DA	319	A-133	A-149	A-165	G	G	G
4.64	1020	104	1.35	16000	1630	08	6145DB	377	A-132	A-148	A-164	G	G	G
			1.72	22100	2250	08	6160DA	377	A-133	A-149	A-165	G	G	G
			2.06	22100	2250	08	6165DA	377	A-133	A-149	A-165	G	G	G
			2.48	29500	3010	08	6170DA	377	A-133	A-149	A-165	G	G	G
3.70	1280	130	1.07	16000	1630	08	6145DB	473	A-132	A-148	A-164	G	G	G
			1.36	22100	2250	08	6160DA	473	A-133	A-149	A-165	G	G	G
			1.64	22100	2250	08	6165DA	473	A-133	A-149	A-165	G	G	G
			1.98	29500	3010	08	6170DA	473	A-133	A-149	A-165	G	G	G
			2.47	29500	3010	08	6175DA	473	A-133	A-149	A-165	G	G	G
3.13	1510	154	1.39	22100	2250	08	6165DA	559	A-133	A-149	A-165	G	G	G
			1.68	29500	3010	08	6170DA	559	A-133	A-149	A-165	G	G	G
			2.09	29500	3010	08	6175DA	559	A-133	A-149	A-165	G	G	G

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.23	2120	216	0.98	22100	2250	08	- 6165DA	- 649	A-133	A-149	A-165	G	G	G
			1.20	29500	3010				A-133	A-149	A-165	G	G	G
			1.49	29500	3010				A-133	A-149	A-165	G	G	G
1.98	2380	243	0.88	22100	2250	08	- 6165DA	- 731	A-133	A-149	A-165	G	G	G
			1.06	29500	3010				A-133	A-149	A-165	G	G	G
			1.32	29500	3010				A-133	A-149	A-165	G	G	G
1.72	2740	279	1.15	29500	3010	08	- 6175DA	- 841	A-133	A-149	A-165	G	G	G
1.45	3270	333	0.96	29500	3010	08	- 6175DA	- 1003	A-133	A-149	A-165	G	G	G

<h1>0.75 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1
	4P
	1450r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	28.2	2.87	1.04	1900	193	1	- 6085	- 6	A-124	A-140	A-156	MF	MF	MF
			1.53	2840	290				A-124	A-140	A-156	MF	MF	MF
			2.03	2840	290				A-124	A-140	A-156	MF	MF	MF
181	37.5	3.83	1.04	2050	209	1	- 6085	- 8	A-124	A-140	A-156	MF	MF	MF
			1.53	3160	322				A-124	A-140	A-156	MF	MF	MF
			2.03	3160	322				A-124	A-140	A-156	MF	MF	MF
132	51.6	5.26	1.04	2250	230	1	- 6085	- 11	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340				A-124	A-140	A-156	MF	MF	MF
112	61.0	6.22	1.04	2410	246	1	- 6085	- 13	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340				A-124	A-140	A-156	MF	MF	MF
96.7	70.4	7.18	1.04	2490	253	1	- 6085	- 15	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340				A-124	A-140	A-156	MF	MF	MF
85.3	79.8	8.13	1.04	2560	261	1	- 6085	- 17	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340				A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340				A-124	A-140	A-156	MF	MF	MF
69.0	98.5	10.0	1.01	3340	340	1	- 6090	- 21	A-124	A-140	A-156	MF	MF	MF
			2.01	3340	340				A-124	A-140	A-156	MF	MF	MF
58.0	117	12.0	1.15	3340	340	1	- 6095	- 25	A-124	A-140	A-156	MF	MF	MF
			1.69	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.23	5400	550				A-124	A-141	A-157	MF	MF	MF
50.0	136	13.9	1.05	3320	338	1	- 6095	- 29	A-124	A-140	A-156	MF	MF	MF
			1.61	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.12	5400	550				A-124	A-141	A-157	MF	MF	MF
41.4	164	16.7	1.01	3270	334	1	- 6095	- 35	A-124	A-140	A-156	MF	MF	MF
			1.30	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.60	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.00	7470	761				A-125	A-141	A-157	MF	MF	MF
33.7	202	20.6	0.80	3210	328	1	- 6095	- 43	A-124	A-140	A-156	MF	MF	MF
			1.04	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.44	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.73	7610	776				A-125	A-141	A-157	MF	MF	MF
			2.03	7610	776				A-125	A-141	A-157	MF	MF	MF
28.4	239	24.4	1.03	5400	550	1	- 6105	- 51	A-124	A-141	A-157	MF	MF	MF
			1.48	7610	776				A-125	A-141	A-157	MF	MF	MF
			2.17	9810	1000				A-125	A-141	A-157	MF	MF	MF

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.70	1750	179	1.20	22100	2250	08	6165DA	649	A-133	A-149	A-165	G	G	G
			1.44	29500	3010	08	6170DA	649	A-133	A-149	A-165	G	G	G
			1.80	29500	3010	08	6175DA	649	A-133	A-149	A-165	G	G	G
2.39	1970	201	1.06	22100	2250	08	6165DA	731	A-133	A-149	A-165	G	G	G
			1.28	29500	3010	08	6170DA	731	A-133	A-149	A-165	G	G	G
			1.60	29500	3010	08	6175DA	731	A-133	A-149	A-165	G	G	G
2.08	2270	232	1.39	29500	3010	08	6175DA	841	A-133	A-149	A-165	G	G	G
1.74	2710	276	1.16	29500	3010	08	6175DA	1003	A-133	A-149	A-165	G	G	G

<h1>0.75 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	23.3	2.38	1.04	1790	182	1	6085	6	A-124	A-140	A-156	MF	MF	MF
			1.53	2670	273	1	6090	6	A-124	A-140	A-156	MF	MF	MF
			2.03	2670	273	1	6095	6	A-124	A-140	A-156	MF	MF	MF
219	31.1	3.17	1.04	1930	197	1	6085	8	A-124	A-140	A-156	MF	MF	MF
			1.53	2980	304	1	6090	8	A-124	A-140	A-156	MF	MF	MF
			2.03	2980	304	1	6095	8	A-124	A-140	A-156	MF	MF	MF
159	42.8	4.36	1.04	2130	217	1	6085	11	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340	1	6090	11	A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340	1	6095	11	A-124	A-140	A-156	MF	MF	MF
135	50.5	5.15	1.04	2280	233	1	6085	13	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340	1	6090	13	A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340	1	6095	13	A-124	A-140	A-156	MF	MF	MF
117	58.3	5.95	1.04	2350	240	1	6085	15	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340	1	6090	15	A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340	1	6095	15	A-124	A-140	A-156	MF	MF	MF
103	66.1	6.74	1.04	2460	251	1	6085	17	A-124	A-140	A-156	MF	MF	MF
			1.53	3340	340	1	6090	17	A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340	1	6095	17	A-124	A-140	A-156	MF	MF	MF
83.3	81.7	8.32	1.01	3340	340	1	6090	21	A-124	A-140	A-156	MF	MF	MF
			2.03	3340	340	1	6095	21	A-124	A-140	A-156	MF	MF	MF
70.0	97.2	9.91	1.15	3340	340	1	6095	25	A-124	A-140	A-156	MF	MF	MF
			1.69	5400	550	1	6100	25	A-124	A-141	A-157	MF	MF	MF
			2.23	5400	550	1	6105	25	A-124	A-141	A-157	MF	MF	MF
60.3	113	11.5	1.05	3340	340	1	6095	29	A-124	A-140	A-156	MF	MF	MF
			1.61	5400	550	1	6100	29	A-124	A-141	A-157	MF	MF	MF
			2.12	5400	550	1	6105	29	A-124	A-141	A-157	MF	MF	MF
50.0	136	13.9	1.01	3330	339	1	6095	35	A-124	A-140	A-156	MF	MF	MF
			1.30	5400	550	1	6100	35	A-124	A-141	A-157	MF	MF	MF
			1.60	5400	550	1	6105	35	A-124	A-141	A-157	MF	MF	MF
			2.00	7490	764	1	6110	35	A-125	A-141	A-157	MF	MF	MF
40.7	167	17.0	0.80	3280	334	1	6095	43	A-124	A-140	A-156	MF	MF	MF
			1.04	5400	550	1	6100	43	A-124	A-141	A-157	MF	MF	MF
			1.44	5400	550	1	6105	43	A-124	A-141	A-157	MF	MF	MF
			1.73	7610	776	1	6110	43	A-125	A-141	A-157	MF	MF	MF
			2.03	7610	776	1	6115	43	A-125	A-141	A-157	MF	MF	MF
34.3	198	20.2	1.03	5390	549	1	6105	51	A-124	A-141	A-157	MF	MF	MF
			1.48	7610	776	1	6115	51	A-125	A-141	A-157	MF	MF	MF
			2.29	9810	1000	1	6120	51	A-125	A-141	A-157	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CFHM	CNVM CVVM	CNHM CHHM	CNFM CFHM	CNVM CVVM
24.6	277	28.2	0.91	5400	550	1	6105	59	A-124	A-141	A-157	MF	MF	MF
			1.15	7610	776	1	6110	59	A-125	A-141	A-157	MF	MF	MF
			1.35	7610	776	1	6115	59	A-125	A-141	A-157	MF	MF	MF
			1.73	9810	1000	1	6120	59	A-125	A-141	A-157	MF	MF	MF
			2.16	9810	1000	1	6125	59	A-125	A-141	A-157	MF	MF	MF
20.4	333	34.0	1.01	7610	775	1	6115	71	A-125	A-141	A-157	MF	MF	MF
			1.52	9810	1000	1	6125	71	A-125	A-141	A-157	MF	MF	MF
			2.35	14000	1420	1	6130	71	A-126	A-142	A-158	PB	PB	PB
16.7	408	41.6	1.01	7550	770	1	6115	87	A-125	A-141	A-157	MF	MF	MF
			1.37	9810	1000	1	6125	87	A-125	A-141	A-157	MF	MF	MF
			1.89	14700	1500	1	6130	87	A-126	A-142	A-158	PB	PB	PB
13.9	462	47.1	1.14	9810	1000	1	6120DB	104	A-131	A-147	A-163	MF	MF	MF
			1.36	9810	1000	1	6125DB	104	A-131	A-147	A-163	MF	MF	MF
			1.69	14700	1500	1	6130DB	104	A-132	A-148	A-164	G	G	G
			2.03	14700	1500	1	6135DB	104	A-132	A-148	A-164	G	G	G
12.0	538	54.8	1.16	9810	1000	1	6125DB	121	A-131	A-147	A-163	MF	MF	MF
			1.45	14700	1500	1	6130DB	121	A-132	A-148	A-164	G	G	G
			1.75	14700	1500	1	6135DB	121	A-132	A-148	A-164	G	G	G
10.1	636	64.8	0.98	9810	1000	1	6125DB	143	A-131	A-147	A-163	MF	MF	MF
			1.23	14700	1500	1	6130DB	143	A-132	A-148	A-164	G	G	G
			1.48	14700	1500	1	6135DB	143	A-132	A-148	A-164	G	G	G
			1.93	16000	1630	1	6140DB	143	A-132	A-148	A-164	G	G	G
8.79	734	74.8	0.86	9810	1000	1	6125DB	165	A-131	A-147	A-163	MF	MF	MF
			1.28	14700	1500	1	6135DB	165	A-132	A-148	A-164	G	G	G
			1.67	16000	1630	1	6140DB	165	A-132	A-148	A-164	G	G	G
			1.85	16000	1630	1	6145DB	165	A-132	A-148	A-164	G	G	G
7.44	867	88.4	1.08	14700	1500	1	6135DB	195	A-132	A-148	A-164	G	G	G
			1.57	16000	1630	1	6145DB	195	A-132	A-148	A-164	G	G	G
			2.02	22100	2250	1	6160DA	195	A-133	A-149	A-165	G	G	G
6.28	1030	105	0.92	14700	1500	1	6135DB	231	A-132	A-148	A-164	G	G	G
			1.19	16000	1630	1	6140DB	231	A-132	A-148	A-164	G	G	G
			1.30	16000	1630	1	6145DB	231	A-132	A-148	A-164	G	G	G
			1.71	22100	2250	1	6160DA	231	A-133	A-149	A-165	G	G	G
			2.04	22100	2250	1	6165DA	231	A-133	A-149	A-165	G	G	G
5.31	1210	124	1.10	16000	1630	1	6145DB	273	A-132	A-148	A-164	G	G	G
			1.45	22100	2250	1	6160DA	273	A-133	A-149	A-165	G	G	G
			1.73	22100	2250	1	6165DA	273	A-133	A-149	A-165	G	G	G
			2.08	29500	3010	1	6170DA	273	A-133	A-149	A-165	G	G	G
4.55	1420	145	0.97	15500	1580	1	6145DB	319	A-132	A-148	A-164	G	G	G
			1.24	22100	2250	1	6160DA	319	A-133	A-149	A-165	G	G	G
			1.48	22100	2250	1	6165DA	319	A-133	A-149	A-165	G	G	G
			1.78	29500	3010	1	6170DA	319	A-133	A-149	A-165	G	G	G
3.85	1680	171	0.82	14100	1440	1	6145DB	377	A-132	A-148	A-164	G	G	G
			1.25	22100	2250	1	6165DA	377	A-133	A-149	A-165	G	G	G
			1.51	29500	3010	1	6170DA	377	A-133	A-149	A-165	G	G	G
			1.88	29500	3010	1	6175DA	377	A-133	A-149	A-165	G	G	G
3.07	2100	214	1.00	22100	2250	1	6165DA	473	A-133	A-149	A-165	G	G	G
			1.50	29500	3010	1	6175DA	473	A-133	A-149	A-165	G	G	G
			1.93	41700	4250	1	6180DA	473	A-133	A-149	A-165	G	G	G
2.59	2490	253	0.85	22100	2250	1	6165DA	559	A-133	A-149	A-165	G	G	G
			1.27	29500	3010	1	6175DA	559	A-133	A-149	A-165	G	G	G
			1.63	41700	4250	1	6180DA	559	A-133	A-149	A-165	G	G	G
			2.01	41700	4250	1	6185DA	559	A-133	A-149	A-165	G	G	G
2.23	2890	294	1.09	29500	3010	1	6175DA	649	A-133	A-149	A-165	G	G	G
			1.40	41700	4250	1	6180DA	649	A-133	A-149	A-165	G	G	G
			1.73	41700	4250	1	6185DA	649	A-133	A-149	A-165	G	G	G
			2.21	59000	6010	1	6190DA	649	A-134	A-150	A-166	PB	PB	P

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
29.7	229	23.4	0.94	5370	548	1	6105	59	A-124	A-141	A-157	MF	MF	MF
			1.15	7610	776	1	6110	59	A-125	A-141	A-157	MF	MF	MF
			1.35	7610	776	1	6115	59	A-125	A-141	A-157	MF	MF	MF
			1.73	9810	1000	1	6120	59	A-125	A-141	A-157	MF	MF	MF
			2.16	9810	1000	1	6125	59	A-125	A-141	A-157	MF	MF	MF
24.6	276	28.1	1.01	7610	776	1	6115	71	A-125	A-141	A-157	MF	MF	MF
			1.60	9810	1000	1	6125	71	A-125	A-141	A-157	MF	MF	MF
			2.44	13100	1340	1	6130	71	A-126	A-142	A-158	PB	PB	PB
20.1	338	34.5	1.01	7610	776	1	6115	87	A-125	A-141	A-157	MF	MF	MF
			1.51	9810	1000	1	6125	87	A-125	A-141	A-157	MF	MF	MF
			1.89	14200	1440	1	6130	87	A-126	A-142	A-158	PB	PB	PB
16.8	383	39.1	1.37	9810	1000	1	6120DB	104	A-131	A-147	A-163	MF	MF	MF
			1.64	9810	1000	1	6125DB	104	A-131	A-147	A-163	MF	MF	MF
			2.04	14700	1500	1	6130DB	104	A-132	A-148	A-164	G	G	G
			2.13	14700	1500	1	6135DB	104	A-132	A-148	A-164	G	G	G
14.5	446	45.4	1.40	9810	1000	1	6125DB	121	A-131	A-147	A-163	MF	MF	MF
			1.75	14700	1500	1	6130DB	121	A-132	A-148	A-164	G	G	G
			2.11	14700	1500	1	6135DB	121	A-132	A-148	A-164	G	G	G
12.2	527	53.7	1.20	9810	1000	1	6125DB	143	A-131	A-147	A-163	MF	MF	MF
			1.48	14700	1500	1	6130DB	143	A-132	A-148	A-164	G	G	G
			1.78	14700	1500	1	6135DB	143	A-132	A-148	A-164	G	G	G
			2.13	16000	1630	1	6140DB	143	A-132	A-148	A-164	G	G	G
10.6	608	62.0	1.04	9810	1000	1	6125DB	165	A-131	A-147	A-163	MF	MF	MF
			1.55	14700	1500	1	6135DB	165	A-132	A-148	A-164	G	G	G
			2.02	16000	1630	1	6140DB	165	A-132	A-148	A-164	G	G	G
			2.13	16000	1630	1	6145DB	165	A-132	A-148	A-164	G	G	G
8.97	718	73.2	1.31	14700	1500	1	6135DB	195	A-132	A-148	A-164	G	G	G
			1.89	16000	1630	1	6145DB	195	A-132	A-148	A-164	G	G	G
			2.13	22100	2250	1	6160DA	195	A-133	A-149	A-165	G	G	G
7.58	851	86.7	1.10	14700	1500	1	6135DB	231	A-132	A-148	A-164	G	G	G
			1.44	16000	1630	1	6140DB	231	A-132	A-148	A-164	G	G	G
			1.57	16000	1630	1	6145DB	231	A-132	A-148	A-164	G	G	G
			2.06	22100	2250	1	6160DA	231	A-133	A-149	A-165	G	G	G
			2.13	22100	2250	1	6165DA	231	A-133	A-149	A-165	G	G	G
6.41	1010	103	1.33	16000	1630	1	6145DB	273	A-132	A-148	A-164	G	G	G
			1.75	22100	2250	1	6160DA	273	A-133	A-149	A-165	G	G	G
			2.09	22100	2250	1	6165DA	273	A-133	A-149	A-165	G	G	G
			2.13	29500	3010	1	6170DA	273	A-133	A-149	A-165	G	G	G
5.49	1180	120	1.17	16000	1630	1	6145DB	319	A-132	A-148	A-164	G	G	G
			1.49	22100	2250	1	6160DA	319	A-133	A-149	A-165	G	G	G
			1.79	22100	2250	1	6165DA	319	A-133	A-149	A-165	G	G	G
			2.13	29500	3010	1	6170DA	319	A-133	A-149	A-165	G	G	G
4.64	1390	142	0.98	15700	1600	1	6145DB	377	A-132	A-148	A-164	G	G	G
			1.51	22100	2250	1	6165DA	377	A-133	A-149	A-165	G	G	G
			1.82	29500	3010	1	6170DA	377	A-133	A-149	A-165	G	G	G
			2.13	29500	3010	1	6175DA	377	A-133	A-149	A-165	G	G	G
3.70	1740	178	1.21	22100	2250	1	6165DA	473	A-133	A-149	A-165	G	G	G
			1.81	29500	3010	1	6175DA	473	A-133	A-149	A-165	G	G	G
			2.33	41700	4250	1	6180DA	473	A-133	A-149	A-165	G	G	G
3.13	2060	210	1.02	22100	2250	1	6165DA	559	A-133	A-149	A-165	G	G	G
			1.53	29500	3010	1	6175DA	559	A-133	A-149	A-165	G	G	G
			1.97	41700	4250	1	6180DA	559	A-133	A-149	A-165	G	G	G
			2.43	41700	4250	1	6185DA	559	A-133	A-149	A-165	G	G	G
2.70	2390	244	1.32	29500	3010	1	6175DA	649	A-133	A-149	A-165	G	G	G
			1.69	41700	4250	1	6180DA	649	A-133	A-149	A-165	G	G	G
			2.09	41700	4250	1	6185DA	649	A-133	A-149	A-165	G	G	G
			2.67	59000	6010	1	6190DA	649	A-134	A-150	A-166	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol - Frame size - Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf		CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
1.98	3250	331	0.97	29500	3010	1 - 6175DA - 731	A-133	A-149	A-165	G	G	G
			1.25	41700	4250	1 - 6180DA - 731	A-133	A-149	A-165	G	G	G
			1.54	41700	4250	1 - 6185DA - 731	A-133	A-149	A-165	G	G	G
			1.96	59000	6010	1 - 6190DA - 731	A-134	A-150	A-166	PB	PB	P
1.72	3740	381	0.84	29500	3010	1 - 6175DA - 841	A-133	A-149	A-165	G	G	G
			1.08	41700	4250	1 - 6180DA - 841	A-133	A-149	A-165	G	G	G
			1.34	41700	4250	1 - 6185DA - 841	A-133	A-149	A-165	G	G	G
			1.71	59000	6010	1 - 6190DA - 841	A-134	A-150	A-166	PB	PB	P
			2.13	59000	6010	1 - 6195DA - 841	A-134	A-150	A-166	PB	PB	P
1.45	4460	455	1.12	41700	4250	1 - 6185DA - 1003	A-133	A-149	A-165	G	G	G
			1.43	59000	6010	1 - 6190DA - 1003	A-134	A-150	A-166	PB	PB	P
			1.79	59000	6010	1 - 6195DA - 1003	A-134	A-150	A-166	PB	PB	P
1.16	5540	565	0.90	41700	4250	1 - 6185DA - 1247	A-133	A-149	A-165	G	G	G
			1.15	59000	6010	1 - 6190DA - 1247	A-134	A-150	A-166	PB	PB	P
			1.44	59000	6010	1 - 6195DA - 1247	A-134	A-150	A-166	PB	PB	P
0.980	6580	670	1.21	58800	5990	1 - 6195DA - 1479	A-134	A-150	A-166	PB	PB	P
0.784	8220	838	0.97	58900	6000	1 - 6195DA - 1849	A-134	A-150	A-166	PB	PB	P
0.702	9180	936	0.87	57800	5890	1 - 6195DA - 2065	A-134	A-150	A-166	PB	PB	P
0.572	11300	1150	0.82	84100	8570	1 - 6205DA - 2537	A-135	A-151	A-167	PB	PB	G

<h1>1.1 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1
	4 P
	1450 r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol - Frame size - Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf		CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	41.3	4.21	1.05	2820	287	1H - 6090 - 6	A-124	A-140	A-156	MF	MF	MF
			1.38	2820	287	1H - 6095 - 6	A-124	A-140	A-156	MF	MF	MF
			2.14	4140	422	1H - 6100 - 6	A-124	A-141	A-157	MF	MF	MF
181	55.1	5.61	1.05	3130	319	1H - 6090 - 8	A-124	A-140	A-156	MF	MF	MF
			1.38	3130	319	1H - 6095 - 8	A-124	A-140	A-156	MF	MF	MF
			2.14	4620	471	1H - 6100 - 8	A-124	A-141	A-157	MF	MF	MF
132	75.7	7.72	1.05	3340	340	1H - 6090 - 11	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H - 6095 - 11	A-124	A-140	A-156	MF	MF	MF
			2.14	5250	536	1H - 6100 - 11	A-124	A-141	A-157	MF	MF	MF
112	89.5	9.12	1.05	3340	340	1H - 6090 - 13	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H - 6095 - 13	A-124	A-140	A-156	MF	MF	MF
			2.14	5400	550	1H - 6100 - 13	A-124	A-141	A-157	MF	MF	MF
96.7	103	10.5	1.05	3340	340	1H - 6090 - 15	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H - 6095 - 15	A-124	A-140	A-156	MF	MF	MF
			2.14	5400	550	1H - 6100 - 15	A-124	A-141	A-157	MF	MF	MF
85.3	117	11.9	1.05	3340	340	1H - 6090 - 17	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H - 6095 - 17	A-124	A-140	A-156	MF	MF	MF
			1.81	5400	550	1H - 6100 - 17	A-124	A-141	A-157	MF	MF	MF
69.0	145	14.7	1.37	3340	340	1H - 6095 - 21	A-124	A-140	A-156	MF	MF	MF
			1.73	5400	550	1H - 6100 - 21	A-124	A-141	A-157	MF	MF	MF
			2.07	5400	550	1H - 6105 - 21	A-124	A-141	A-157	MF	MF	MF
58.0	172	17.5	1.15	5400	550	1H - 6100 - 25	A-124	A-141	A-157	MF	MF	MF
			1.52	5400	550	1H - 6105 - 25	A-124	A-141	A-157	MF	MF	MF
			1.74	7180	732	1H - 6110 - 25	A-125	A-141	A-157	MF	MF	MF
			2.02	7180	732	1H - 6115 - 25	A-125	A-141	A-157	MF	MF	MF
50.0	200	20.3	1.10	5400	550	1H - 6100 - 29	A-124	A-141	A-157	MF	MF	MF
			1.45	5400	550	1H - 6105 - 29	A-124	A-141	A-157	MF	MF	MF
			1.73	7350	750	1H - 6110 - 29	A-125	A-141	A-157	MF	MF	MF
			2.02	7350	750	1H - 6115 - 29	A-125	A-141	A-157	MF	MF	MF

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.39	2690	274	1.17	29500	3010	1	6175DA	731	A-133	A-149	A-165	G	G	G
			1.51	41700	4250	1	6180DA	731	A-133	A-149	A-165	G	G	G
			1.86	41700	4250	1	6185DA	731	A-133	A-149	A-165	G	G	G
			2.37	59000	6010	1	6190DA	731	A-134	A-150	A-166	PB	PB	P
2.08	3100	316	1.02	29500	3010	1	6175DA	841	A-133	A-149	A-165	G	G	G
			1.31	41700	4250	1	6180DA	841	A-133	A-149	A-165	G	G	G
			1.61	41700	4250	1	6185DA	841	A-133	A-149	A-165	G	G	G
			2.06	59000	6010	1	6190DA	841	A-134	A-150	A-166	PB	PB	P
			2.57	59000	6010	1	6195DA	841	A-134	A-150	A-166	PB	PB	P
1.74	3690	377	1.35	41700	4250	1	6185DA	1003	A-133	A-149	A-165	G	G	G
			1.73	59000	6010	1	6190DA	1003	A-134	A-150	A-166	PB	PB	P
			2.15	59000	6010	1	6195DA	1003	A-134	A-150	A-166	PB	PB	P
1.40	4590	468	1.09	41700	4250	1	6185DA	1247	A-133	A-149	A-165	G	G	G
			1.39	59000	6010	1	6190DA	1247	A-134	A-150	A-166	PB	PB	P
			1.73	59000	6010	1	6195DA	1247	A-134	A-150	A-166	PB	PB	P
1.18	5450	555	1.46	59000	6010	1	6195DA	1479	A-134	A-150	A-166	PB	PB	P
0.946	6810	694	1.17	59000	6010	1	6195DA	1849	A-134	A-150	A-166	PB	PB	P
0.847	7610	775	1.05	58200	5940	1	6195DA	2065	A-134	A-150	A-166	PB	PB	P
0.690	9350	953	1.00	84100	8570	1	6205DA	2537	A-135	A-151	A-167	PB	PB	G

<h1>1.1 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4 P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	34.2	3.49	1.05	2650	270	1H	6090	6	A-124	A-140	A-156	MF	MF	MF
			1.38	2650	270	1H	6095	6	A-124	A-140	A-156	MF	MF	MF
			2.14	3900	397	1H	6100	6	A-124	A-141	A-157	MF	MF	MF
219	45.6	4.65	1.05	2950	301	1H	6090	8	A-124	A-140	A-156	MF	MF	MF
			1.38	2950	301	1H	6095	8	A-124	A-140	A-156	MF	MF	MF
			2.14	4350	443	1H	6100	8	A-124	A-141	A-157	MF	MF	MF
159	62.7	6.39	1.05	3340	340	1H	6090	11	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H	6095	11	A-124	A-140	A-156	MF	MF	MF
			2.14	4950	504	1H	6100	11	A-124	A-141	A-157	MF	MF	MF
135	74.1	7.56	1.05	3340	340	1H	6090	13	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H	6095	13	A-124	A-140	A-156	MF	MF	MF
			2.14	5140	524	1H	6100	13	A-124	A-141	A-157	MF	MF	MF
117	85.5	8.72	1.05	3340	340	1H	6090	15	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H	6095	15	A-124	A-140	A-156	MF	MF	MF
			2.14	5400	550	1H	6100	15	A-124	A-141	A-157	MF	MF	MF
103	96.9	9.88	1.05	3340	340	1H	6090	17	A-124	A-140	A-156	MF	MF	MF
			1.38	3340	340	1H	6095	17	A-124	A-140	A-156	MF	MF	MF
			1.81	5400	550	1H	6100	17	A-124	A-141	A-157	MF	MF	MF
83.3	120	12.2	1.38	3340	340	1H	6095	21	A-124	A-140	A-156	MF	MF	MF
			1.75	5400	550	1H	6100	21	A-124	A-141	A-157	MF	MF	MF
			2.13	5400	550	1H	6105	21	A-124	A-141	A-157	MF	MF	MF
70.0	143	14.5	1.15	5400	550	1H	6100	25	A-124	A-141	A-157	MF	MF	MF
			1.52	5400	550	1H	6105	25	A-124	A-141	A-157	MF	MF	MF
			1.74	6770	690	1H	6110	25	A-125	A-141	A-157	MF	MF	MF
			2.02	6770	690	1H	6115	25	A-125	A-141	A-157	MF	MF	MF
60.3	165	16.9	1.10	5400	550	1H	6100	29	A-124	A-141	A-157	MF	MF	MF
			1.45	5400	550	1H	6105	29	A-124	A-141	A-157	MF	MF	MF
			1.73	6960	709	1H	6110	29	A-125	A-141	A-157	MF	MF	MF
			2.02	6960	709	1H	6115	29	A-125	A-141	A-157	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load P_{ro}		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
41.4	241	24.6	1.09	5400	550	1H	6105	35	A-124	A-141	A-157	MF	MF	MF
			1.36	7400	754	1H	6110	35	A-125	A-141	A-157	MF	MF	MF
			1.65	7400	754	1H	6115	35	A-125	A-141	A-157	MF	MF	MF
			2.15	9560	975	1H	6120	35	A-125	A-141	A-157	MF	MF	MF
33.7	296	30.2	0.98	5400	550	1H	6105	43	A-124	A-141	A-157	MF	MF	MF
			1.18	7610	776	1H	6110	43	A-125	A-141	A-157	MF	MF	MF
			1.38	7610	776	1H	6115	43	A-125	A-141	A-157	MF	MF	MF
			1.74	9810	1000	1H	6120	43	A-125	A-141	A-157	MF	MF	MF
			2.13	9810	1000	1H	6125	43	A-125	A-141	A-157	MF	MF	MF
28.4	351	35.8	1.01	7600	775	1H	6115	51	A-125	A-141	A-157	MF	MF	MF
			1.48	9810	1000	1H	6120	51	A-125	A-141	A-157	MF	MF	MF
			1.79	9810	1000	1H	6125	51	A-125	A-141	A-157	MF	MF	MF
24.6	406	41.4	0.92	7570	772	1H	6115	59	A-125	A-141	A-157	MF	MF	MF
			1.18	9810	1000	1H	6120	59	A-125	A-141	A-157	MF	MF	MF
			1.47	9810	1000	1H	6125	59	A-125	A-141	A-157	MF	MF	MF
			1.92	13100	1340	1H	6130	59	A-126	A-142	A-158	PB	PB	PB
20.4	489	49.8	1.04	9810	1000	1H	6125	71	A-125	A-141	A-157	MF	MF	MF
			1.60	13900	1410	1H	6130	71	A-126	A-142	A-158	PB	PB	PB
			1.85	13900	1410	1H	6135	71	A-126	A-142	A-158	PB	PB	PB
16.7	599	61.0	0.94	9620	981	1H	6125	87	A-125	A-141	A-157	MF	MF	MF
			1.29	14700	1500	1H	6130	87	A-126	A-142	A-158	PB	PB	PB
			1.50	14700	1500	1H	6135	87	A-126	A-142	A-158	PB	PB	PB
			1.80	16000	1630	1H	6140	87	A-126	A-142	A-158	PB	PB	PB
13.9	678	69.1	0.93	9810	1000	1H	6125DB	104	A-131	A-147	A-163	G	G	G
			1.15	14700	1500	1H	6130DB	104	A-132	A-148	A-164	G	G	G
			1.39	14700	1500	1H	6135DB	104	A-132	A-148	A-164	G	G	G
			1.81	16000	1630	1H	6140DC	104	A-132	A-148	A-164	G	G	G
12.0	789	80.4	1.19	14700	1500	1H	6135DB	121	A-132	A-148	A-164	G	G	G
			1.45	16000	1630	1H	6140DB	121	A-132	A-148	A-164	G	G	G
			1.64	16000	1630	1H	6145DC	121	A-132	A-148	A-164	G	G	G
			2.22	22100	2250	1H	6160DB	121	A-133	A-149	A-165	G	G	G
10.1	932	95.0	1.01	14700	1500	1H	6135DB	143	A-132	A-148	A-164	G	G	G
			1.31	16000	1630	1H	6140DB	143	A-132	A-148	A-164	G	G	G
			1.88	22100	2250	1H	6160DB	143	A-133	A-149	A-165	G	G	G
8.79	1080	110	0.87	14700	1500	1H	6135DB	165	A-132	A-148	A-164	G	G	G
			1.26	16000	1630	1H	6145DB	165	A-132	A-148	A-164	G	G	G
			1.63	22100	2250	1H	6160DB	165	A-133	A-149	A-165	G	G	G
			1.95	22100	2250	1H	6165DB	165	A-133	A-149	A-165	G	G	G
7.44	1270	130	1.07	16000	1630	1H	6145DB	195	A-132	A-148	A-164	G	G	G
			1.38	22100	2250	1H	6160DA	195	A-133	A-149	A-165	G	G	G
			1.65	22100	2250	1H	6165DB	195	A-133	A-149	A-165	G	G	G
			1.99	29500	3010	1H	6170DB	195	A-133	A-149	A-165	G	G	G
6.28	1510	154	0.89	15500	1580	1H	6145DB	231	A-132	A-148	A-164	G	G	G
			1.17	22100	2250	1H	6160DA	231	A-133	A-149	A-165	G	G	G
			1.39	22100	2250	1H	6165DA	231	A-133	A-149	A-165	G	G	G
			1.68	29500	3010	1H	6170DB	231	A-133	A-149	A-165	G	G	G
			2.09	29500	3010	1H	6175DB	231	A-133	A-149	A-165	G	G	G
5.31	1780	181	1.18	22100	2250	1H	6165DA	273	A-133	A-149	A-165	G	G	G
			1.42	29500	3010	1H	6170DA	273	A-133	A-149	A-165	G	G	G
			1.77	29500	3010	1H	6175DB	273	A-133	A-149	A-165	G	G	G
4.55	2080	212	1.01	22100	2250	1H	6165DA	319	A-133	A-149	A-165	G	G	G
			1.51	29500	3010	1H	6175DB	319	A-133	A-149	A-165	G	G	G
			1.95	41700	4250	1H	6180DA	319	A-133	A-149	A-165	G	G	G
3.85	2460	251	0.85	22100	2250	1H	6165DA	377	A-133	A-149	A-165	G	G	G
			1.28	29500	3010	1H	6175DA	377	A-133	A-149	A-165	G	G	G
			1.65	41700	4250	1H	6180DA	377	A-133	A-149	A-165	G	G	G
			2.03	41700	4250	1H	6185DA	377	A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load P_{ro} is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	200	20.3	1.09	5400	550	1H	6105	35	A-124	A-141	A-157	MF	MF	MF
			1.36	7430	758	1H	6110	35	A-125	A-141	A-157	MF	MF	MF
			1.65	7430	758	1H	6115	35	A-125	A-141	A-157	MF	MF	MF
			2.26	9000	918	1H	6120	35	A-125	A-141	A-157	MF	MF	MF
40.7	245	25.0	0.98	5380	548	1H	6105	43	A-124	A-141	A-157	MF	MF	MF
			1.18	7610	776	1H	6110	43	A-125	A-141	A-157	MF	MF	MF
			1.38	7610	776	1H	6115	43	A-125	A-141	A-157	MF	MF	MF
			1.74	9580	976	1H	6120	43	A-125	A-141	A-157	MF	MF	MF
			2.16	9580	976	1H	6125	43	A-125	A-141	A-157	MF	MF	MF
34.3	291	29.6	1.01	7610	776	1H	6115	51	A-125	A-141	A-157	MF	MF	MF
			1.56	9810	1000	1H	6120	51	A-125	A-141	A-157	MF	MF	MF
			2.07	9810	1000	1H	6125	51	A-125	A-141	A-157	MF	MF	MF
29.7	336	34.3	0.92	7610	776	1H	6115	59	A-125	A-141	A-157	MF	MF	MF
			1.18	9810	1000	1H	6120	59	A-125	A-141	A-157	MF	MF	MF
			1.47	9810	1000	1H	6125	59	A-125	A-141	A-157	MF	MF	MF
			1.99	12300	1260	1H	6130	59	A-126	A-142	A-158	PB	PB	PB
24.6	405	41.3	1.09	9810	1000	1H	6125	71	A-125	A-141	A-157	MF	MF	MF
			1.66	13100	1330	1H	6130	71	A-126	A-142	A-158	PB	PB	PB
			1.97	13100	1330	1H	6135	71	A-126	A-142	A-158	PB	PB	PB
20.1	496	50.6	1.03	9810	1000	1H	6125	87	A-125	A-141	A-157	MF	MF	MF
			1.29	14100	1430	1H	6130	87	A-126	A-142	A-158	PB	PB	PB
			1.74	14100	1430	1H	6135	87	A-126	A-142	A-158	PB	PB	PB
			1.80	16000	1630	1H	6140	87	A-126	A-142	A-158	PB	PB	PB
16.8	562	57.3	1.12	9810	1000	1H	6125DB	104	A-131	A-147	A-163	G	G	G
			1.39	14700	1500	1H	6130DB	104	A-132	A-148	A-164	G	G	G
			1.45	14700	1500	1H	6135DB	104	A-132	A-148	A-164	G	G	G
			2.18	16000	1630	1H	6140DC	104	A-132	A-148	A-164	G	G	G
14.5	654	66.6	1.44	14700	1500	1H	6135DB	121	A-132	A-148	A-164	G	G	G
			1.45	16000	1630	1H	6140DB	121	A-132	A-148	A-164	G	G	G
			1.98	16000	1630	1H	6145DC	121	A-132	A-148	A-164	G	G	G
			2.68	22100	2250	1H	6160DB	121	A-133	A-149	A-165	G	G	G
12.2	773	78.8	1.22	14700	1500	1H	6135DB	143	A-132	A-148	A-164	G	G	G
			1.45	16000	1630	1H	6140DB	143	A-132	A-148	A-164	G	G	G
			2.27	22100	2250	1H	6160DB	143	A-133	A-149	A-165	G	G	G
10.6	891	90.9	1.05	14700	1500	1H	6135DB	165	A-132	A-148	A-164	G	G	G
			1.45	16000	1630	1H	6145DB	165	A-132	A-148	A-164	G	G	G
			1.97	22100	2250	1H	6160DB	165	A-133	A-149	A-165	G	G	G
			2.36	22100	2250	1H	6165DB	165	A-133	A-149	A-165	G	G	G
8.97	1050	107	1.29	16000	1630	1H	6145DB	195	A-132	A-148	A-164	G	G	G
			1.45	22100	2250	1H	6160DA	195	A-133	A-149	A-165	G	G	G
			1.99	22100	2250	1H	6165DB	195	A-133	A-149	A-165	G	G	G
			2.40	29500	3010	1H	6170DB	195	A-133	A-149	A-165	G	G	G
7.58	1250	127	1.07	16000	1630	1H	6145DB	231	A-132	A-148	A-164	G	G	G
			1.41	22100	2250	1H	6160DA	231	A-133	A-149	A-165	G	G	G
			1.45	22100	2250	1H	6165DA	231	A-133	A-149	A-165	G	G	G
			2.03	29500	3010	1H	6170DB	231	A-133	A-149	A-165	G	G	G
			2.52	29500	3010	1H	6175DB	231	A-133	A-149	A-165	G	G	G
6.41	1470	150	1.42	22100	2250	1H	6165DA	273	A-133	A-149	A-165	G	G	G
			1.45	29500	3010	1H	6170DA	273	A-133	A-149	A-165	G	G	G
			2.14	29500	3010	1H	6175DB	273	A-133	A-149	A-165	G	G	G
5.49	1720	176	1.22	22100	2250	1H	6165DA	319	A-133	A-149	A-165	G	G	G
			1.83	29500	3010	1H	6175DB	319	A-133	A-149	A-165	G	G	G
			2.35	41700	4250	1H	6180DA	319	A-133	A-149	A-165	G	G	G
4.64	2040	208	1.03	22100	2250	1H	6165DA	377	A-133	A-149	A-165	G	G	G
			1.45	29500	3010	1H	6175DA	377	A-133	A-149	A-165	G	G	G
			1.99	41700	4250	1H	6180DA	377	A-133	A-149	A-165	G	G	G
			2.45	41700	4250	1H	6185DA	377	A-133	A-149	A-165	G	G	G

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.07	3080	314	1.02	29500	3010	1H	- 6175DA	- 473	A-133	A-149	A-165	G	G	G
			1.32	41700	4250				A-133	A-149	A-165	G	G	G
			1.62	41700	4250				A-133	A-149	A-165	G	G	G
			2.07	59000	6010				A-134	A-150	A-166	PB	PB	P
2.59	3640	372	0.86	29500	3010	1H	- 6175DA	- 559	A-133	A-149	A-165	G	G	G
			1.11	41700	4250				A-133	A-149	A-165	G	G	G
			1.37	41700	4250				A-133	A-149	A-165	G	G	G
			1.75	59000	6010				A-134	A-150	A-166	PB	PB	P
2.23	4230	431	1.18	41700	4250	1H	- 6185DA	- 649	A-133	A-149	A-165	G	G	G
			1.51	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.88	59000	6010				A-134	A-150	A-166	PB	PB	P
1.98	4770	486	1.05	41700	4250	1H	- 6185DA	- 731	A-133	A-149	A-165	G	G	G
			1.34	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.67	59000	6010				A-134	A-150	A-166	PB	PB	P
1.72	5480	559	0.91	41700	4250	1H	- 6185DA	- 841	A-133	A-149	A-165	G	G	G
			1.16	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.45	59000	6010				A-134	A-150	A-166	PB	PB	P
1.45	6540	667	1.22	58500	5970	1H	- 6195DA	- 1003	A-134	A-150	A-166	PB	PB	P
1.16	8130	829	0.98	58900	6010	1H	- 6195DA	- 1247	A-134	A-150	A-166	PB	PB	P
0.980	9640	983	0.83	57800	5900	1H	- 6195DA	- 1479	A-134	A-150	A-166	PB	PB	P

<h1>1.5 kW</h1> <h1>50 Hz</h1>	Motor Speed n ₁
	4 P
	1450r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	56.3	5.74	1.01	2790	284	2	- 6095	- 6	A-124	A-140	A-156	MF	MF	MF
			1.57	4130	421				A-124	A-141	A-157	MF	MF	MF
			2.12	4130	421				A-124	A-141	A-157	MF	MF	MF
181	75.1	7.65	1.01	3090	315	2	- 6095	- 8	A-124	A-140	A-156	MF	MF	MF
			1.57	4600	469				A-124	A-141	A-157	MF	MF	MF
			2.12	4600	469				A-124	A-141	A-157	MF	MF	MF
132	103	10.5	1.01	3340	340	2	- 6095	- 11	A-124	A-140	A-156	MF	MF	MF
			1.57	5220	532				A-124	A-141	A-157	MF	MF	MF
			2.12	5220	532				A-124	A-141	A-157	MF	MF	MF
112	122	12.4	1.01	3340	340	2	- 6095	- 13	A-124	A-140	A-156	MF	MF	MF
			1.57	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.12	5400	550				A-124	A-141	A-157	MF	MF	MF
96.7	141	14.4	1.01	3340	340	2	- 6095	- 15	A-124	A-140	A-156	MF	MF	MF
			1.57	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.12	5400	550				A-124	A-141	A-157	MF	MF	MF
85.3	160	16.3	1.01	3340	340	2	- 6095	- 17	A-124	A-140	A-156	MF	MF	MF
			1.33	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.64	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.12	6620	675				A-125	A-141	A-157	MF	MF	MF
69.0	197	20.1	1.01	3340	340	2	- 6095	- 21	A-124	A-140	A-156	MF	MF	MF
			1.52	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.81	7020	716				A-125	A-141	A-157	MF	MF	MF
58.0	235	23.9	1.11	5400	550	2	- 6105	- 25	A-124	A-141	A-157	MF	MF	MF
			1.48	7120	726				A-125	A-141	A-157	MF	MF	MF
			2.06	8650	882				A-125	A-141	A-157	MF	MF	MF
50.0	272	27.7	1.06	5400	550	2	- 6105	- 29	A-124	A-141	A-157	MF	MF	MF
			1.48	7290	743				A-125	A-141	A-157	MF	MF	MF
			1.91	8990	916				A-125	A-141	A-157	MF	MF	MF

- Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.70	2560	260	1.23	29500	3010	1H	- 6175DA	- 473	A-133	A-149	A-165	G	G	G
			1.59	41700	4250				A-133	A-149	A-165	G	G	G
			1.96	41700	4250				A-133	A-149	A-165	G	G	G
			2.50	59000	6010				A-134	A-150	A-166	PB	PB	P
3.13	3020	308	1.04	29500	3010	1H	- 6175DA	- 559	A-133	A-149	A-165	G	G	G
			1.34	41700	4250				A-133	A-149	A-165	G	G	G
			1.66	41700	4250				A-133	A-149	A-165	G	G	G
			2.11	59000	6010				A-134	A-150	A-166	PB	PB	P
2.70	3510	357	1.43	41700	4250	1H	- 6185DA	- 649	A-133	A-149	A-165	G	G	G
			1.82	59000	6010				A-134	A-150	A-166	PB	PB	P
			2.27	59000	6010				A-134	A-150	A-166	PB	PB	P
2.39	3950	403	1.27	41700	4250	1H	- 6185DA	- 731	A-133	A-149	A-165	G	G	G
			1.62	59000	6010				A-134	A-150	A-166	PB	PB	P
			2.02	59000	6010				A-134	A-150	A-166	PB	PB	P
2.08	4540	463	1.10	41700	4250	1H	- 6185DA	- 841	A-133	A-149	A-165	G	G	G
			1.40	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.75	59000	6010				A-134	A-150	A-166	PB	PB	P
1.74	5420	552	1.47	58800	6000	1H	- 6195DA	- 1003	A-134	A-150	A-166	PB	PB	P
1.40	6740	687	1.18	59000	6010	1H	- 6195DA	- 1247	A-134	A-150	A-166	PB	PB	P
1.18	7990	815	1.00	58400	5950	1H	- 6195DA	- 1479	A-134	A-150	A-166	PB	PB	P

<h1>1.5 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4 P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	46.7	4.76	1.01	2630	268	2	- 6095	- 6	A-124	A-140	A-156	MF	MF	MF
			1.57	3880	396				A-124	A-141	A-157	MF	MF	MF
			2.12	3880	396				A-124	A-141	A-157	MF	MF	MF
219	62.2	6.34	1.01	2920	297	2	- 6095	- 8	A-124	A-140	A-156	MF	MF	MF
			1.57	4330	441				A-124	A-141	A-157	MF	MF	MF
			2.12	4330	441				A-124	A-141	A-157	MF	MF	MF
159	85.5	8.72	1.01	3300	336	2	- 6095	- 11	A-124	A-140	A-156	MF	MF	MF
			1.57	4920	501				A-124	A-141	A-157	MF	MF	MF
			2.12	4920	501				A-124	A-141	A-157	MF	MF	MF
135	101	10.3	1.01	3300	336	2	- 6095	- 13	A-124	A-140	A-156	MF	MF	MF
			1.57	5110	521				A-124	A-141	A-157	MF	MF	MF
			2.12	5110	521				A-124	A-141	A-157	MF	MF	MF
117	117	11.9	1.01	3280	335	2	- 6095	- 15	A-124	A-140	A-156	MF	MF	MF
			1.57	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.12	5400	550				A-124	A-141	A-157	MF	MF	MF
103	132	13.5	1.01	3290	336	2	- 6095	- 17	A-124	A-140	A-156	MF	MF	MF
			1.33	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.64	5400	550				A-124	A-141	A-157	MF	MF	MF
			2.12	6240	636				A-125	A-141	A-157	MF	MF	MF
83.3	163	16.6	1.01	3260	332	2	- 6095	- 21	A-124	A-140	A-156	MF	MF	MF
			1.56	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.81	6620	675				A-125	A-141	A-157	MF	MF	MF
70.0	194	19.8	1.11	5400	550	2	- 6105	- 25	A-124	A-141	A-157	MF	MF	MF
			1.48	6720	685				A-125	A-141	A-157	MF	MF	MF
			2.06	8150	831				A-125	A-141	A-157	MF	MF	MF
60.3	226	23.0	1.06	5400	550	2	- 6105	- 29	A-124	A-141	A-157	MF	MF	MF
			1.48	6900	703				A-125	A-141	A-157	MF	MF	MF
			1.99	8470	863				A-125	A-141	A-157	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CFHM	CNVM CVVM	CNHM CHHM	CNFM CFHM	CNVM CVVM
41.4	328	33.5	1.21	7310	745	2	6115	35	A-125	A-141	A-157	MF	MF	MF
			1.58	9490	967	2	6120	35	A-125	A-141	A-157	MF	MF	MF
			1.92	9490	967	2	6125	35	A-125	A-141	A-157	MF	MF	MF
33.7	404	41.1	1.01	7540	769	2	6115	43	A-125	A-141	A-157	MF	MF	MF
			1.56	9810	1000	2	6125	43	A-125	A-141	A-157	MF	MF	MF
			1.93	11900	1210	2	6130	43	A-126	A-142	A-158	PB	PB	PB
28.4	479	48.8	1.09	9810	1000	2	6120	51	A-125	A-141	A-157	MF	MF	MF
			1.31	9810	1000	2	6125	51	A-125	A-141	A-157	MF	MF	MF
			1.70	12400	1260	2	6135	51	A-126	A-142	A-158	PB	PB	PB
			2.29	16000	1630	2	6140	51	A-126	A-142	A-158	PB	PB	PB
24.6	554	56.4	1.08	9810	1000	2	6125	59	A-125	A-141	A-157	MF	MF	MF
			1.41	13000	1320	2	6130	59	A-126	A-142	A-158	PB	PB	PB
			1.63	13000	1320	2	6135	59	A-126	A-142	A-158	PB	PB	PB
			1.97	16000	1630	2	6140	59	A-126	A-142	A-158	PB	PB	PB
20.4	666	67.9	1.17	13700	1400	2	6130	71	A-126	A-142	A-158	PB	PB	PB
			1.35	13700	1400	2	6135	71	A-126	A-142	A-158	PB	PB	PB
			1.62	16000	1630	2	6140	71	A-126	A-142	A-158	PB	PB	PB
			1.75	16000	1630	2	6145	71	A-126	A-142	A-158	PB	PB	PB
16.7	817	83.2	1.10	14700	1500	2	6135	87	A-126	A-142	A-158	PB	PB	PB
			1.44	16000	1630	2	6145	87	A-126	A-142	A-158	PB	PB	PB
			2.15	22100	2250	2	6160	87	A-126	A-142	A-159	PB	PB	P
13.9	925	94.3	1.02	14700	1500	2	6135DB	104	A-132	A-148	A-164	G	G	G
			1.48	16000	1630	2	6145DC	104	A-132	A-148	A-164	G	G	G
			1.90	22100	2250	2	6160DB	104	A-133	A-149	A-165	G	G	G
12.0	1080	110	0.87	14700	1500	2	6135DB	121	A-132	A-148	A-164	G	G	G
			1.07	16000	1630	2	6140DB	121	A-132	A-148	A-164	G	G	G
			1.63	22100	2250	2	6160DB	121	A-133	A-149	A-165	G	G	G
			1.95	22100	2250	2	6165DB	121	A-133	A-149	A-165	G	G	G
10.1	1270	130	1.07	16000	1630	2	6145DB	143	A-132	A-148	A-164	G	G	G
			1.38	22100	2250	2	6160DB	143	A-133	A-149	A-165	G	G	G
			1.65	22100	2250	2	6165DB	143	A-133	A-149	A-165	G	G	G
			1.99	29500	3010	2	6170DB	143	A-133	A-149	A-165	G	G	G
8.79	1470	150	0.93	15500	1580	2	6145DB	165	A-132	A-148	A-164	G	G	G
			1.07	22100	2250	2	6160DA	165	A-133	A-149	A-165	G	G	G
			1.43	22100	2250	2	6165DB	165	A-133	A-149	A-165	G	G	G
			1.72	29500	3010	2	6170DB	165	A-133	A-149	A-165	G	G	G
			2.15	29500	3010	2	6175DB	165	A-133	A-149	A-165	G	G	G
7.44	1730	177	1.01	22100	2250	2	6160DA	195	A-133	A-149	A-165	G	G	G
			1.46	29500	3010	2	6170DB	195	A-133	A-149	A-165	G	G	G
			1.82	29500	3010	2	6175DB	195	A-133	A-149	A-165	G	G	G
6.28	2050	209	1.02	22100	2250	2	6165DA	231	A-133	A-149	A-165	G	G	G
			1.53	29500	3010	2	6175DB	231	A-133	A-149	A-165	G	G	G
			1.97	41700	4250	2	6180DA	231	A-133	A-149	A-165	G	G	G
5.31	2430	247	0.87	22100	2250	2	6165DA	273	A-133	A-149	A-165	G	G	G
			1.04	29500	3010	2	6170DA	273	A-133	A-149	A-165	G	G	G
			1.30	29500	3010	2	6175DB	273	A-133	A-149	A-165	G	G	G
			1.67	41700	4250	2	6180DA	273	A-133	A-149	A-165	G	G	G
			2.06	41700	4250	2	6185DA	273	A-133	A-149	A-165	G	G	G
4.55	2840	289	1.07	29500	3010	2	6175DA	319	A-133	A-149	A-165	G	G	G
			1.43	41700	4250	2	6180DA	319	A-133	A-149	A-165	G	G	G
			1.76	41700	4250	2	6185DA	319	A-133	A-149	A-165	G	G	G
3.85	3350	342	0.94	29500	3010	2	6175DA	377	A-133	A-149	A-165	G	G	G
			1.21	41700	4250	2	6180DA	377	A-133	A-149	A-165	G	G	G
			1.49	41700	4250	2	6185DA	377	A-133	A-149	A-165	G	G	G
			1.90	59000	6010	2	6190DA	377	A-134	A-150	A-166	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	272	27.7	1.21	7360	751	2	- 6115	- 35	A-125	A-141	A-157	MF	MF	MF
			1.66	8940	912	2	- 6120	- 35	A-125	A-141	A-157	MF	MF	MF
			2.12	8940	912	2	- 6125	- 35	A-125	A-141	A-157	MF	MF	MF
40.7	334	34.1	1.01	7610	776	2	- 6115	- 43	A-125	A-141	A-157	MF	MF	MF
			1.59	9510	969	2	- 6125	- 43	A-125	A-141	A-157	MF	MF	MF
			1.99	11200	1140	2	- 6130	- 43	A-126	A-142	A-158	PB	PB	PB
34.3	397	40.4	1.15	9810	1000	2	- 6120	- 51	A-125	A-141	A-157	MF	MF	MF
			1.52	9810	1000	2	- 6125	- 51	A-125	A-141	A-157	MF	MF	MF
			1.95	11700	1190	2	- 6135	- 51	A-126	A-142	A-158	PB	PB	PB
			2.29	16000	1630	2	- 6140	- 51	A-126	A-142	A-158	PB	PB	PB
29.7	459	46.8	1.08	9810	1000	2	- 6125	- 59	A-125	A-141	A-157	MF	MF	MF
			1.46	12200	1250	2	- 6130	- 59	A-126	A-142	A-158	PB	PB	PB
			1.68	12200	1250	2	- 6135	- 59	A-126	A-142	A-158	PB	PB	PB
			1.97	16000	1630	2	- 6140	- 59	A-126	A-142	A-158	PB	PB	PB
24.6	552	56.3	1.22	12900	1320	2	- 6130	- 71	A-126	A-142	A-158	PB	PB	PB
			1.45	12900	1320	2	- 6135	- 71	A-126	A-142	A-158	PB	PB	PB
			1.62	16000	1630	2	- 6140	- 71	A-126	A-142	A-158	PB	PB	PB
			2.02	16000	1630	2	- 6145	- 71	A-126	A-142	A-158	PB	PB	PB
20.1	677	69.0	1.27	13900	1420	2	- 6135	- 87	A-126	A-142	A-158	PB	PB	PB
			1.65	16000	1630	2	- 6145	- 87	A-126	A-142	A-158	PB	PB	PB
			2.31	22100	2250	2	- 6160	- 87	A-126	A-142	A-159	PB	PB	P
16.8	766	78.1	1.07	14700	1500	2	- 6135DB	- 104	A-132	A-148	A-164	G	G	G
			1.79	16000	1630	2	- 6145DC	- 104	A-132	A-148	A-164	G	G	G
			2.24	22100	2250	2	- 6160DB	- 104	A-133	A-149	A-165	G	G	G
14.5	891	90.9	1.05	14700	1500	2	- 6135DB	- 121	A-132	A-148	A-164	G	G	G
			1.07	16000	1630	2	- 6140DB	- 121	A-132	A-148	A-164	G	G	G
			1.97	22100	2250	2	- 6160DB	- 121	A-133	A-149	A-165	G	G	G
			2.24	22100	2250	2	- 6165DB	- 121	A-133	A-149	A-165	G	G	G
12.2	1050	107	1.07	16000	1630	2	- 6145DB	- 143	A-132	A-148	A-164	G	G	G
			1.67	22100	2250	2	- 6160DB	- 143	A-133	A-149	A-165	G	G	G
			1.99	22100	2250	2	- 6165DB	- 143	A-133	A-149	A-165	G	G	G
			2.24	29500	3010	2	- 6170DB	- 143	A-133	A-149	A-165	G	G	G
10.6	1220	124	1.07	16000	1630	2	- 6145DB	- 165	A-132	A-148	A-164	G	G	G
			1.07	22100	2250	2	- 6160DA	- 165	A-133	A-149	A-165	G	G	G
			1.73	22100	2250	2	- 6165DB	- 165	A-133	A-149	A-165	G	G	G
			2.08	29500	3010	2	- 6170DB	- 165	A-133	A-149	A-165	G	G	G
			2.24	29500	3010	2	- 6175DB	- 165	A-133	A-149	A-165	G	G	G
8.97	1440	146	1.07	22100	2250	2	- 6160DA	- 195	A-133	A-149	A-165	G	G	G
			1.76	29500	3010	2	- 6170DB	- 195	A-133	A-149	A-165	G	G	G
			2.19	29500	3010	2	- 6175DB	- 195	A-133	A-149	A-165	G	G	G
7.58	1700	173	1.07	22100	2250	2	- 6165DA	- 231	A-133	A-149	A-165	G	G	G
			1.85	29500	3010	2	- 6175DB	- 231	A-133	A-149	A-165	G	G	G
			2.24	41700	4250	2	- 6180DA	- 231	A-133	A-149	A-165	G	G	G
6.41	2010	205	1.04	22100	2250	2	- 6165DA	- 273	A-133	A-149	A-165	G	G	G
			1.07	29500	3010	2	- 6170DA	- 273	A-133	A-149	A-165	G	G	G
			1.57	29500	3010	2	- 6175DB	- 273	A-133	A-149	A-165	G	G	G
			2.01	41700	4250	2	- 6180DA	- 273	A-133	A-149	A-165	G	G	G
			2.24	41700	4250	2	- 6185DA	- 273	A-133	A-149	A-165	G	G	G
5.49	2350	240	1.07	29500	3010	2	- 6175DA	- 319	A-133	A-149	A-165	G	G	G
			1.72	41700	4250	2	- 6180DA	- 319	A-133	A-149	A-165	G	G	G
			2.13	41700	4250	2	- 6185DA	- 319	A-133	A-149	A-165	G	G	G
4.64	2780	283	1.07	29500	3010	2	- 6175DA	- 377	A-133	A-149	A-165	G	G	G
			1.46	41700	4250	2	- 6180DA	- 377	A-133	A-149	A-165	G	G	G
			1.80	41700	4250	2	- 6185DA	- 377	A-133	A-149	A-165	G	G	G
			2.30	59000	6010	2	- 6190DA	- 377	A-134	A-150	A-166	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.07	4210	429	1.19	41700	4250	2	- 6185DA	- 473	A-133	A-149	A-165	G	G	G
			1.52	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.89	59000	6010				A-134	A-150	A-166	PB	PB	P
2.59	4970	507	1.01	41700	4250	2	- 6185DA	- 559	A-133	A-149	A-165	G	G	G
			1.60	59000	6010				A-134	A-150	A-166	PB	PB	P
2.23	5770	588	0.87	41300	4210	2	- 6185DA	- 649	A-133	A-149	A-165	G	G	G
			1.11	58700	5990				A-134	A-150	A-166	PB	PB	P
			1.38	58700	5990				A-134	A-150	A-166	PB	PB	P
1.98	6500	663	1.22	59000	6010	2	- 6195DA	- 731	A-134	A-150	A-166	PB	PB	P
1.72	7480	762	1.06	59000	6010	2	- 6195DA	- 841	A-134	A-150	A-166	PB	PB	P
1.45	8920	909	0.89	57900	5900	2	- 6195DA	- 1003	A-134	A-150	A-166	PB	PB	P
0.980	13200	1340	0.86	104000	10600	2	- 6215DA	- 1479	A-135	A-151	A-167	PB	PB	P
0.784	16400	1680	0.97	145000	14800	2	- 6225DA	- 1849	A-136	A-152	A-168	PB	PB	P
0.702	18400	1870	0.86	145000	14800	2	- 6225DA	- 2065	A-136	A-152	A-168	PB	PB	P

<h1>2.2 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1
	4P
	1450r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	82.6	8.42	1.07	4090	417	3	- 6100	- 6	A-124	A-141	A-157	MF	MF	MF
			1.45	4090	417				A-124	A-141	A-157	MF	MF	MF
			1.61	4640	473				A-125	A-141	A-157	MF	MF	MF
			1.78	4640	473				A-125	A-141	A-157	MF	MF	MF
181	110	11.2	1.07	4560	465	3	- 6100	- 8	A-124	A-141	A-157	MF	MF	MF
			1.45	4560	465				A-124	A-141	A-157	MF	MF	MF
			1.61	5170	527				A-125	A-141	A-157	MF	MF	MF
			1.78	5170	527				A-125	A-141	A-157	MF	MF	MF
132	151	15.4	1.07	5170	527	3	- 6100	- 11	A-124	A-141	A-157	MF	MF	MF
			1.45	5170	527				A-124	A-141	A-157	MF	MF	MF
			1.61	5900	601				A-125	A-141	A-157	MF	MF	MF
			1.78	5900	601				A-125	A-141	A-157	MF	MF	MF
112	179	18.2	1.07	5360	547	3	- 6100	- 13	A-124	A-141	A-157	MF	MF	MF
			1.45	5360	547				A-124	A-141	A-157	MF	MF	MF
			1.61	6090	621				A-125	A-141	A-157	MF	MF	MF
			1.77	6090	621				A-125	A-141	A-157	MF	MF	MF
96.7	206	21.0	1.07	5400	550	3	- 6100	- 15	A-124	A-141	A-157	MF	MF	MF
			1.45	5400	550				A-124	A-141	A-157	MF	MF	MF
			1.61	6490	662				A-125	A-141	A-157	MF	MF	MF
			1.77	6490	662				A-125	A-141	A-157	MF	MF	MF
85.3	234	23.9	1.12	5400	550	3	- 6105	- 17	A-124	A-141	A-157	MF	MF	MF
			1.45	6550	668				A-125	A-141	A-157	MF	MF	MF
			1.77	6550	668				A-125	A-141	A-157	MF	MF	MF
69.0	289	29.5	1.04	5400	550	3	- 6105	- 21	A-124	A-141	A-157	MF	MF	MF
			1.41	6920	706				A-125	A-141	A-157	MF	MF	MF
			1.80	8180	834				A-125	A-141	A-157	MF	MF	MF
58.0	344	35.1	1.01	7010	715	3	- 6115	- 25	A-125	A-141	A-157	MF	MF	MF
			1.40	8560	873				A-125	A-141	A-157	MF	MF	MF
			1.80	8560	873				A-125	A-141	A-157	MF	MF	MF
50.0	399	40.7	1.01	7160	730	3	- 6115	- 29	A-125	A-141	A-157	MF	MF	MF
			1.58	8880	905				A-125	A-141	A-157	MF	MF	MF
			1.95	10500	1070				A-126	A-142	A-158	PB	PB	PB

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.70	3480	355	1.43	41700	4250	2	- 6185DA	- 473	A-133	A-149	A-165	G	G	G
			1.83	59000	6010				A-134	A-150	A-166	PB	PB	P
			2.28	59000	6010				A-134	A-150	A-166	PB	PB	P
3.13	4120	420	1.21	41700	4250	2	- 6185DA	- 559	A-133	A-149	A-165	G	G	G
			1.93	59000	6010				A-134	A-150	A-166	PB	PB	P
2.70	4780	487	1.05	41700	4250	2	- 6185DA	- 649	A-133	A-149	A-165	G	G	G
			1.33	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.66	59000	6010				A-134	A-150	A-166	PB	PB	P
2.39	5390	549	1.48	59000	6010	2	- 6195DA	- 731	A-134	A-150	A-166	PB	PB	P
2.08	6200	632	1.28	59000	6010	2	- 6195DA	- 841	A-134	A-150	A-166	PB	PB	P
1.74	7390	753	1.08	58300	5940	2	- 6195DA	- 1003	A-134	A-150	A-166	PB	PB	P
1.18	10900	1110	1.03	104000	10600	2	- 6215DA	- 1479	A-135	A-151	A-167	PB	PB	P
0.946	13600	1390	1.17	145000	14800	2	- 6225DA	- 1849	A-136	A-152	A-168	PB	PB	P
0.847	15200	1550	1.04	145000	14800	2	- 6225DA	- 2065	A-136	A-152	A-168	PB	PB	P

<h1>2.2 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4P
	1750r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	68.4	6.98	1.07	3860	393	3	- 6100	- 6	A-124	A-141	A-157	MF	MF	MF
			1.45	3860	393				A-124	A-141	A-157	MF	MF	MF
			1.61	4370	445				A-125	A-141	A-157	MF	MF	MF
			1.78	4370	445				A-125	A-141	A-157	MF	MF	MF
219	91.2	9.30	1.07	4300	438	3	- 6100	- 8	A-124	A-141	A-157	MF	MF	MF
			1.45	4300	438				A-124	A-141	A-157	MF	MF	MF
			1.61	4870	496				A-125	A-141	A-157	MF	MF	MF
			1.78	4870	496				A-125	A-141	A-157	MF	MF	MF
159	125	12.8	1.07	4870	497	3	- 6100	- 11	A-124	A-141	A-157	MF	MF	MF
			1.45	4870	497				A-124	A-141	A-157	MF	MF	MF
			1.61	5560	567				A-125	A-141	A-157	MF	MF	MF
			1.78	5560	567				A-125	A-141	A-157	MF	MF	MF
135	148	15.1	1.07	5060	516	3	- 6100	- 13	A-124	A-141	A-157	MF	MF	MF
			1.45	5060	516				A-124	A-141	A-157	MF	MF	MF
			1.61	5740	586				A-125	A-141	A-157	MF	MF	MF
			1.77	5740	586				A-125	A-141	A-157	MF	MF	MF
117	171	17.4	1.07	5340	544	3	- 6100	- 15	A-124	A-141	A-157	MF	MF	MF
			1.45	5340	544				A-124	A-141	A-157	MF	MF	MF
			1.61	6120	624				A-125	A-141	A-157	MF	MF	MF
			1.77	6120	624				A-125	A-141	A-157	MF	MF	MF
103	194	19.8	1.12	5400	550	3	- 6105	- 17	A-124	A-141	A-157	MF	MF	MF
			1.45	6180	630				A-125	A-141	A-157	MF	MF	MF
			1.77	6180	630				A-125	A-141	A-157	MF	MF	MF
83.3	240	24.4	1.06	5400	550	3	- 6105	- 21	A-124	A-141	A-157	MF	MF	MF
			1.41	6540	667				A-125	A-141	A-157	MF	MF	MF
			1.80	7710	786				A-125	A-141	A-157	MF	MF	MF
70.0	285	29.1	1.01	6620	675	3	- 6115	- 25	A-125	A-141	A-157	MF	MF	MF
			1.40	8070	823				A-125	A-141	A-157	MF	MF	MF
			1.80	8070	823				A-125	A-141	A-157	MF	MF	MF
60.3	331	33.7	1.01	6800	693	3	- 6115	- 29	A-125	A-141	A-157	MF	MF	MF
			1.71	8380	854				A-125	A-141	A-157	MF	MF	MF
			2.04	9850	1000				A-126	A-142	A-158	PB	PB	PB

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
41.4	482	49.1	0.82	4960	506	3	6115	35	A-125	A-141	A-157	MF	MF	MF
			1.08	9350	954	3	6120	35	A-125	A-141	A-157	MF	MF	MF
			1.31	9350	954	3	6125	35	A-125	A-141	A-157	MF	MF	MF
			1.62	11000	1120	3	6130	35	A-126	A-142	A-158	PB	PB	PB
			1.87	11000	1120	3	6135	35	A-126	A-142	A-158	PB	PB	PB
33.7	592	60.3	1.06	9810	1000	3	6125	43	A-125	A-141	A-157	MF	MF	MF
			1.52	11800	1200	3	6135	43	A-126	A-142	A-158	PB	PB	PB
			1.79	16000	1630	3	6140	43	A-126	A-142	A-158	PB	PB	PB
28.4	702	71.6	0.90	9810	1000	3	6125	51	A-125	A-141	A-157	MF	MF	MF
			1.16	12200	1250	3	6135	51	A-126	A-142	A-158	PB	PB	PB
			1.56	16000	1630	3	6140	51	A-126	A-142	A-158	PB	PB	PB
			1.68	16000	1630	3	6145	51	A-126	A-142	A-158	PB	PB	PB
			2.50	21300	2180	3	6160	51	A-126	A-142	A-159	PB	PB	P
24.6	812	82.8	1.11	12800	1300	3	6135	59	A-126	A-142	A-158	PB	PB	PB
			1.45	16000	1630	3	6145	59	A-126	A-142	A-158	PB	PB	PB
			2.01	22100	2250	3	6160	59	A-126	A-142	A-159	PB	PB	P
20.4	977	99.6	0.92	13500	1380	3	6135	71	A-126	A-142	A-158	PB	PB	PB
			1.19	16000	1630	3	6145	71	A-126	A-142	A-158	PB	PB	PB
			1.58	22100	2250	3	6160	71	A-126	A-142	A-159	PB	PB	P
			2.15	22100	2250	3	6165	71	A-126	A-142	A-159	PB	PB	P
16.7	1200	122	0.98	16000	1630	3	6145	87	A-126	A-142	A-158	PB	PB	PB
			1.46	22100	2250	3	6160	87	A-126	A-142	A-159	PB	PB	P
			1.71	22100	2250	3	6165	87	A-126	A-142	A-159	PB	PB	P
			2.08	28800	2940	3	6170	87	-	-	-	PB	PB	P
13.9	1360	138	1.01	16000	1630	3	6145DC	104	A-132	A-148	A-164	G	G	G
			1.55	22100	2250	3	6165DC	104	A-134	A-150	A-166	PB	PB	P
			1.86	29500	3010	3	6170DC	104	A-134	A-150	A-166	PB	PB	P
12.0	1580	161	0.82	15300	1560	3	6145DC	121	A-132	A-148	A-164	G	G	G
			1.11	22100	2250	3	6160DB	121	A-133	A-149	A-165	G	G	G
			1.33	22100	2250	3	6165DB	121	A-133	A-149	A-165	G	G	G
			1.60	29500	3010	3	6170DC	121	A-134	A-150	A-166	PB	PB	P
			2.00	29500	3010	3	6175DC	121	A-134	A-150	A-166	PB	PB	P
10.1	1860	190	1.13	22100	2250	3	6165DB	143	A-133	A-149	A-165	G	G	G
			1.35	29500	3010	3	6170DB	143	A-133	A-149	A-165	G	G	G
			1.69	29500	3010	3	6175DC	143	A-134	A-150	A-166	PB	PB	P
			2.18	41700	4250	3	6180DB	143	A-134	A-150	A-166	PB	PB	P
8.79	2150	219	0.98	22100	2250	3	6165DB	165	A-133	A-149	A-165	G	G	G
			1.18	29500	3010	3	6170DB	165	A-133	A-149	A-165	G	G	G
			1.46	29500	3010	3	6175DB	165	A-133	A-149	A-165	G	G	G
			1.89	41700	4250	3	6180DB	165	A-134	A-150	A-166	PB	PB	P
7.44	2540	259	0.83	22100	2250	3	6165DB	195	A-133	A-149	A-165	G	G	G
			1.24	29500	3010	3	6175DB	195	A-133	A-149	A-165	G	G	G
			1.53	41700	4250	3	6180DA	195	A-133	A-149	A-165	G	G	G
			1.60	41700	4250	3	6180DB	195	A-134	A-150	A-166	PB	PB	P
			1.94	41700	4250	3	6185DB	195	A-134	A-150	A-166	PB	PB	P
6.28	3010	307	1.05	29500	3010	3	6175DB	231	A-133	A-149	A-165	G	G	G
			1.34	41700	4250	3	6180DA	231	A-133	A-149	A-165	G	G	G
			1.66	41700	4250	3	6185DB	231	A-134	A-150	A-166	PB	PB	P
			2.12	59000	6010	3	6190DA	231	A-134	A-150	A-166	PB	PB	P
5.31	3560	363	0.88	29500	3010	3	6175DB	273	A-133	A-149	A-165	G	G	G
			1.14	41700	4250	3	6180DA	273	A-133	A-149	A-165	G	G	G
			1.40	41700	4250	3	6185DA	273	A-133	A-149	A-165	G	G	G
			1.79	59000	6010	3	6190DA	273	A-134	A-150	A-166	PB	PB	P
4.55	4160	424	1.20	41700	4250	3	6185DA	319	A-133	A-149	A-165	G	G	G
			1.53	59000	6010	3	6190DA	319	A-134	A-150	A-166	PB	PB	P
			1.91	59000	6010	3	6195DA	319	A-134	A-150	A-166	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	399	40.7	0.82	7230	737	3	- 6115	- 35	A-125	A-141	A-157	MF	MF	MF
			1.13	8830	900	3	- 6120	- 35	A-125	A-141	A-157	MF	MF	MF
			1.45	8830	900	3	- 6125	- 35	A-125	A-141	A-157	MF	MF	MF
			1.69	10300	1050	3	- 6130	- 35	A-126	A-142	A-158	PB	PB	PB
			1.93	10300	1050	3	- 6135	- 35	A-126	A-142	A-158	PB	PB	PB
40.7	490	50.0	1.08	9380	956	3	- 6125	- 43	A-125	A-141	A-157	MF	MF	MF
			1.71	11100	1130	3	- 6135	- 43	A-126	A-142	A-158	PB	PB	PB
			1.79	15900	1620	3	- 6140	- 43	A-126	A-142	A-158	PB	PB	PB
34.3	582	59.3	1.04	9760	995	3	- 6125	- 51	A-125	A-141	A-157	MF	MF	MF
			1.33	11500	1180	3	- 6135	- 51	A-126	A-142	A-158	PB	PB	PB
			1.56	16000	1630	3	- 6140	- 51	A-126	A-142	A-158	PB	PB	PB
			1.92	16000	1630	3	- 6145	- 51	A-126	A-142	A-158	PB	PB	PB
			2.61	20100	2050	3	- 6160	- 51	A-126	A-142	A-159	PB	PB	P
29.7	673	68.6	1.15	12100	1230	3	- 6135	- 59	A-126	A-142	A-158	PB	PB	PB
			1.66	16000	1630	3	- 6145	- 59	A-126	A-142	A-158	PB	PB	PB
			2.01	22100	2250	3	- 6160	- 59	A-126	A-142	A-159	PB	PB	P
24.6	810	82.5	0.98	12800	1300	3	- 6135	- 71	A-126	A-142	A-158	PB	PB	PB
			1.38	16000	1630	3	- 6145	- 71	A-126	A-142	A-158	PB	PB	PB
			1.58	22100	2250	3	- 6160	- 71	A-126	A-142	A-159	PB	PB	P
			2.57	22100	2250	3	- 6165	- 71	A-126	A-142	A-159	PB	PB	P
20.1	992	101	1.13	16000	1630	3	- 6145	- 87	A-126	A-142	A-158	PB	PB	PB
			1.58	22100	2250	3	- 6160	- 87	A-126	A-142	A-159	PB	PB	P
			1.77	22100	2250	3	- 6165	- 87	A-126	A-142	A-159	PB	PB	P
			2.19	27100	2760	3	- 6170	- 87	-	-	-	PB	PB	P
16.8	1120	115	1.22	16000	1630	3	- 6145DC	- 104	A-132	A-148	A-164	G	G	G
			1.87	22100	2250	3	- 6165DC	- 104	A-134	A-150	A-166	PB	PB	P
			2.25	29400	3000	3	- 6170DC	- 104	A-134	A-150	A-166	PB	PB	P
14.5	1310	133	0.98	16000	1630	3	- 6145DC	- 121	A-132	A-148	A-164	G	G	G
			1.34	22100	2250	3	- 6160DB	- 121	A-133	A-149	A-165	G	G	G
			1.53	22100	2250	3	- 6165DB	- 121	A-133	A-149	A-165	G	G	G
			1.94	29500	3010	3	- 6170DC	- 121	A-134	A-150	A-166	PB	PB	P
			2.41	29500	3010	3	- 6175DC	- 121	A-134	A-150	A-166	PB	PB	P
12.2	1550	158	1.36	22100	2250	3	- 6165DB	- 143	A-133	A-149	A-165	G	G	G
			1.53	29500	3010	3	- 6170DB	- 143	A-133	A-149	A-165	G	G	G
			2.04	29500	3010	3	- 6175DC	- 143	A-134	A-150	A-166	PB	PB	P
			2.63	41700	4250	3	- 6180DB	- 143	A-134	A-150	A-166	PB	PB	P
10.6	1780	182	1.18	22100	2250	3	- 6165DB	- 165	A-133	A-149	A-165	G	G	G
			1.42	29500	3010	3	- 6170DB	- 165	A-133	A-149	A-165	G	G	G
			1.53	29500	3010	3	- 6175DB	- 165	A-133	A-149	A-165	G	G	G
			2.28	41700	4250	3	- 6180DB	- 165	A-134	A-150	A-166	PB	PB	P
8.97	2110	215	1.00	22100	2250	3	- 6165DB	- 195	A-133	A-149	A-165	G	G	G
			1.50	29500	3010	3	- 6175DB	- 195	A-133	A-149	A-165	G	G	G
			1.53	41700	4250	3	- 6180DA	- 195	A-133	A-149	A-165	G	G	G
			1.93	41700	4250	3	- 6180DB	- 195	A-134	A-150	A-166	PB	PB	P
			2.34	41700	4250	3	- 6185DB	- 195	A-134	A-150	A-166	PB	PB	P
7.58	2500	254	1.26	29500	3010	3	- 6175DB	- 231	A-133	A-149	A-165	G	G	G
			1.53	41700	4250	3	- 6180DA	- 231	A-133	A-149	A-165	G	G	G
			2.00	41700	4250	3	- 6185DB	- 231	A-134	A-150	A-166	PB	PB	P
			2.56	59000	6010	3	- 6190DA	- 231	A-134	A-150	A-166	PB	PB	P
6.41	2950	301	1.07	29500	3010	3	- 6175DB	- 273	A-133	A-149	A-165	G	G	G
			1.37	41700	4250	3	- 6180DA	- 273	A-133	A-149	A-165	G	G	G
			1.53	41700	4250	3	- 6185DA	- 273	A-133	A-149	A-165	G	G	G
			2.16	59000	6010	3	- 6190DA	- 273	A-134	A-150	A-166	PB	PB	P
5.49	3450	351	1.45	41700	4250	3	- 6185DA	- 319	A-133	A-149	A-165	G	G	G
			1.85	59000	6010	3	- 6190DA	- 319	A-134	A-150	A-166	PB	PB	P
			2.31	59000	6010	3	- 6195DA	- 319	A-134	A-150	A-166	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.85	4920	501	1.02	41700	4250	3	- 6185DA	- 377	A-133	A-149	A-165	G	G	G
			1.30	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.62	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.88	84100	8570				A-135	A-151	A-167	PB	PB	P
3.07	6170	629	0.81	41700	4250	3	- 6185DA	- 473	A-133	A-149	A-165	G	G	G
			1.29	59000	6010				A-134	A-150	A-166	PB	PB	P
			1.51	84100	8570				A-135	A-151	A-167	PB	PB	P
			2.05	104000	10600				A-135	A-151	A-167	PB	PB	P
2.59	7290	743	1.09	59000	6010	3	- 6195DA	- 559	A-134	A-150	A-166	PB	PB	P
			1.74	104000	10600				A-135	A-151	A-167	PB	PB	P
			2.19	145000	14800				A-136	A-152	A-168	PB	PB	P
2.23	8460	863	0.94	58000	5910	3	- 6195DA	- 649	A-134	A-150	A-166	PB	PB	P
			1.10	84100	8570				A-135	A-151	A-167	PB	PB	P
			1.49	104000	10600				A-135	A-151	A-167	PB	PB	P
			1.88	145000	14800				A-136	A-152	A-168	PB	PB	P
1.98	9530	972	0.84	58500	5970	3	- 6195DA	- 731	A-134	A-150	A-166	PB	PB	P
			1.33	104000	10600				A-135	A-151	A-167	PB	PB	P
			1.68	145000	14800				A-136	A-152	A-168	PB	PB	P
			2.15	179000	18200				A-137	A-153	A-169	PB	PB	P
1.72	11000	1120	0.84	84100	8570	3	- 6205DA	- 841	A-135	A-151	A-167	PB	PB	P
			1.15	104000	10600				A-135	A-151	A-167	PB	PB	P
			1.37	145000	14800				A-136	A-152	A-168	PB	PB	P
			1.72	179000	18200				A-137	A-153	A-169	PB	PB	P
			2.35	208000	21200				A-137	A-153	A-169	PB	PB	P
1.45	13100	1330	0.97	104000	10600	3	- 6215DA	- 1003	A-135	A-151	A-167	PB	PB	P
			1.21	145000	14800				A-136	A-152	A-168	PB	PB	P
			1.57	179000	18200				A-137	A-153	A-169	PB	PB	P
			1.97	208000	21200				A-137	A-153	A-169	PB	PB	P
1.16	16300	1660	0.98	145000	14800	3	- 6225DA	- 1247	A-136	A-152	A-168	PB	PB	P
			1.26	179000	18200				A-137	A-153	A-169	PB	PB	P
			1.59	208000	21200				A-137	A-153	A-169	PB	PB	P
0.980	19300	1970	0.89	179000	18200	3	- 6235DA	- 1479	A-137	A-153	A-169	PB	PB	P
			1.17	208000	21200				A-137	A-153	A-169	PB	PB	P
0.784	24100	2460	0.85	179000	18200	3	- 6235DA	- 1849	A-137	A-153	A-169	PB	PB	P
			1.07	208000	21200				A-137	A-153	A-169	PB	PB	P
0.702	26900	2750	0.96	208000	21200	3	- 6245DA	- 2065	A-137	A-153	A-169	PB	PB	P

<h1>3.0 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1
	4P
	1450 r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	113	11.5	1.18	4610	470	4	- 6110	- 6	A-125	A-141	A-157	MF	MF	MF
			1.31	4610	470				A-125	A-141	A-157	MF	MF	MF
			1.69	5230	534				A-125	A-141	A-157	MF	MF	MF
			2.32	5230	534				A-125	A-141	A-157	MF	MF	MF
181	150	15.3	1.18	5130	523	4	- 6110	- 8	A-125	A-141	A-157	MF	MF	MF
			1.31	5130	523				A-125	A-141	A-157	MF	MF	MF
			1.69	5830	595				A-125	A-141	A-157	MF	MF	MF
			2.32	5830	595				A-125	A-141	A-157	MF	MF	MF
132	206	21.0	1.18	5840	595	4	- 6110	- 11	A-125	A-141	A-157	MF	MF	MF
			1.31	5840	595				A-125	A-141	A-157	MF	MF	MF
			1.69	6620	675				A-125	A-141	A-157	MF	MF	MF
			1.97	6620	675				A-125	A-141	A-157	MF	MF	MF

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
4.64	4070	415	1.23	41700	4250	3	- 6185DA	- 377	A-133	A-149	A-165	G	G	G
			1.57	59000	6010	3	- 6190DA	- 377	A-134	A-150	A-166	PB	PB	P
			1.95	59000	6010	3	- 6195DA	- 377	A-134	A-150	A-166	PB	PB	P
			2.27	84100	8570	3	- 6205DB	- 377	A-135	A-151	A-167	PB	PB	P
3.70	5110	521	0.98	41700	4250	3	- 6185DA	- 473	A-133	A-149	A-165	G	G	G
			1.56	59000	6010	3	- 6195DA	- 473	A-134	A-150	A-166	PB	PB	P
			1.82	84100	8570	3	- 6205DB	- 473	A-135	A-151	A-167	PB	PB	P
			2.48	104000	10600	3	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
3.13	6040	616	1.32	59000	6010	3	- 6195DA	- 559	A-134	A-150	A-166	PB	PB	P
			2.09	104000	10600	3	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
			2.65	145000	14800	3	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
2.70	7010	715	1.14	58400	5950	3	- 6195DA	- 649	A-134	A-150	A-166	PB	PB	P
			1.33	84100	8570	3	- 6205DB	- 649	A-135	A-151	A-167	PB	PB	P
			1.80	104000	10600	3	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
			2.26	145000	14800	3	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
2.39	7900	805	1.01	59000	6010	3	- 6195DA	- 731	A-134	A-150	A-166	PB	PB	P
			1.60	104000	10600	3	- 6215DA	- 731	A-135	A-151	A-167	PB	PB	P
			2.03	145000	14800	3	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
			2.60	179000	18200	3	- 6235DA	- 731	A-137	A-153	A-169	PB	PB	P
2.08	9090	926	1.02	84100	8570	3	- 6205DA	- 841	A-135	A-151	A-167	PB	PB	P
			1.39	104000	10600	3	- 6215DA	- 841	A-135	A-151	A-167	PB	PB	P
			1.65	145000	14800	3	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
			2.08	179000	18200	3	- 6235DA	- 841	A-137	A-153	A-169	PB	PB	P
			2.84	208000	21200	3	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
1.74	10800	1100	1.17	104000	10600	3	- 6215DA	- 1003	A-135	A-151	A-167	PB	PB	P
			1.46	145000	14800	3	- 6225DA	- 1003	A-136	A-152	A-168	PB	PB	P
			1.89	179000	18200	3	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
			2.38	208000	21200	3	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.40	13500	1370	1.19	145000	14800	3	- 6225DA	- 1247	A-136	A-152	A-168	PB	PB	P
			1.52	179000	18200	3	- 6235DA	- 1247	A-137	A-153	A-169	PB	PB	P
			1.91	208000	21200	3	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
1.18	16000	1630	1.07	179000	18200	3	- 6235DA	- 1479	A-137	A-153	A-169	PB	PB	P
			1.42	208000	21200	3	- 6245DA	- 1479	A-137	A-153	A-169	PB	PB	P
0.946	20000	2040	1.03	179000	18200	3	- 6235DA	- 1849	A-137	A-153	A-169	PB	PB	P
			1.29	208000	21200	3	- 6245DA	- 1849	A-137	A-153	A-169	PB	PB	P
0.847	22300	2270	1.16	208000	21200	3	- 6245DA	- 2065	A-137	A-153	A-169	PB	PB	P

<h1>3.0 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4 P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	93.3	9.51	1.18	4340	443	4	- 6110	- 6	A-125	A-141	A-157	MF	MF	MF
			1.31	4340	443	4	- 6115	- 6	A-125	A-141	A-157	MF	MF	MF
			1.69	4930	502	4	- 6120	- 6	A-125	A-141	A-157	MF	MF	MF
			1.94	4930	502	4	- 6125	- 6	A-125	A-141	A-157	MF	MF	MF
219	124	12.7	1.18	4830	493	4	- 6110	- 8	A-125	A-141	A-157	MF	MF	MF
			1.31	4830	493	4	- 6115	- 8	A-125	A-141	A-157	MF	MF	MF
			1.69	5490	560	4	- 6120	- 8	A-125	A-141	A-157	MF	MF	MF
			2.32	5490	560	4	- 6125	- 8	A-125	A-141	A-157	MF	MF	MF
159	171	17.4	1.18	5510	561	4	- 6110	- 11	A-125	A-141	A-157	MF	MF	MF
			1.31	5510	561	4	- 6115	- 11	A-125	A-141	A-157	MF	MF	MF
			1.69	6240	636	4	- 6120	- 11	A-125	A-141	A-157	MF	MF	MF
			1.97	6240	636	4	- 6125	- 11	A-125	A-141	A-157	MF	MF	MF

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
112	244	24.9	1.18	6020	614	4	6110	13	A-125	A-141	A-157	MF	MF	MF
			1.30	6020	614	4	6115	13	A-125	A-141	A-157	MF	MF	MF
			1.69	6830	696	4	6120	13	A-125	A-141	A-157	MF	MF	MF
			1.97	6830	696	4	6125	13	A-125	A-141	A-157	MF	MF	MF
96.7	282	28.7	1.18	6410	653	4	6110	15	A-125	A-141	A-157	MF	MF	MF
			1.30	6410	653	4	6115	15	A-125	A-141	A-157	MF	MF	MF
			1.69	7320	747	4	6120	15	A-125	A-141	A-157	MF	MF	MF
			1.97	7320	747	4	6125	15	A-125	A-141	A-157	MF	MF	MF
85.3	319	32.5	1.06	6460	659	4	6110	17	A-125	A-141	A-157	MF	MF	MF
			1.30	6460	659	4	6115	17	A-125	A-141	A-157	MF	MF	MF
			1.63	7390	753	4	6120	17	A-125	A-141	A-157	MF	MF	MF
			1.89	7390	753	4	6125	17	A-125	A-141	A-157	MF	MF	MF
69.0	394	40.2	1.04	6800	693	4	6115	21	A-125	A-141	A-157	MF	MF	MF
			1.32	8090	825	4	6120	21	A-125	A-141	A-157	MF	MF	MF
			1.60	8090	825	4	6125	21	A-125	A-141	A-157	MF	MF	MF
			1.98	9500	969	4	6130	21	A-126	A-142	A-158	PB	PB	PB
58.0	469	47.8	1.03	8450	861	4	6120	25	A-125	A-141	A-157	MF	MF	MF
			1.32	8450	861	4	6125	25	A-125	A-141	A-157	MF	MF	MF
			1.66	9860	1010	4	6130	25	A-126	A-142	A-158	PB	PB	PB
			1.92	9860	1010	4	6135	25	A-126	A-142	A-158	PB	PB	PB
50.0	544	55.5	1.16	8750	892	4	6125	29	A-125	A-141	A-157	MF	MF	MF
			1.43	10400	1060	4	6130	29	A-126	A-142	A-158	PB	PB	PB
			1.62	10400	1060	4	6135	29	A-126	A-142	A-158	PB	PB	PB
			1.98	15000	1530	4	6140	29	A-126	A-142	A-158	PB	PB	PB
41.4	657	67.0	0.96	9190	937	4	6125	35	A-125	A-141	A-157	MF	MF	MF
			1.19	10900	1110	4	6130	35	A-126	A-142	A-158	PB	PB	PB
			1.37	10900	1110	4	6135	35	A-126	A-142	A-158	PB	PB	PB
			1.74	16000	1630	4	6140	35	A-126	A-142	A-158	PB	PB	PB
			2.09	16000	1630	4	6145	35	A-126	A-142	A-158	PB	PB	PB
33.7	807	82.3	1.12	11600	1180	4	6135	43	A-126	A-142	A-158	PB	PB	PB
			1.56	16000	1630	4	6145	43	A-126	A-142	A-158	PB	PB	PB
			2.15	20400	2080	4	6160	43	A-126	A-142	A-159	PB	PB	P
28.4	957	97.6	0.85	12000	1220	4	6135	51	A-126	A-142	A-158	PB	PB	PB
			1.23	16000	1630	4	6145	51	A-126	A-142	A-158	PB	PB	PB
			1.83	21200	2160	4	6160	51	A-126	A-142	A-159	PB	PB	P
24.6	1110	113	0.81	12600	1280	4	6135	59	A-126	A-142	A-158	PB	PB	PB
			1.06	16000	1630	4	6145	59	A-126	A-142	A-158	PB	PB	PB
			1.47	22100	2250	4	6160	59	A-126	A-142	A-159	PB	PB	P
			1.90	22100	2250	4	6165	59	A-126	A-142	A-159	PB	PB	P
20.4	1330	136	0.87	16000	1630	4	6145	71	A-126	A-142	A-158	PB	PB	PB
			1.16	22100	2250	4	6160	71	A-126	A-142	A-159	PB	PB	P
			1.58	22100	2250	4	6165	71	A-126	A-142	A-159	PB	PB	P
			1.83	26700	2720	4	6170	71	A-127	A-143	A-159	PB	PB	P
16.7	1630	166	1.26	22100	2250	4	6165	87	A-126	A-142	A-159	PB	PB	P
			1.52	28600	2910	4	6170	87	A-127	A-143	A-159	PB	PB	P
			1.87	28600	2910	4	6175	87	A-127	A-143	A-159	PB	PB	P
13.9	1850	189	1.14	22100	2250	4	6165DC	104	A-134	A-150	A-166	PB	PB	P
			1.37	29500	3010	4	6170DC	104	A-134	A-150	A-166	PB	PB	P
			1.70	29500	3010	4	6175DC	104	A-134	A-150	A-166	PB	PB	P
			2.20	41100	4190	4	6180DB	104	A-134	A-150	A-166	PB	PB	P
12.0	2150	219	0.98	22100	2250	4	6165DC	121	A-134	A-150	A-166	PB	PB	P
			1.18	29500	3010	4	6170DC	121	A-134	A-150	A-166	PB	PB	P
			1.46	29500	3010	4	6175DC	121	A-134	A-150	A-166	PB	PB	P
			1.89	41700	4250	4	6180DB	121	A-134	A-150	A-166	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity - Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
135	202	20.6	1.18	5690	580	4	- 6110	- 13	A-125	A-141	A-157	MF	MF	MF
			1.30	5690	580	4	- 6115	- 13	A-125	A-141	A-157	MF	MF	MF
			1.69	6440	657	4	- 6120	- 13	A-125	A-141	A-157	MF	MF	MF
			1.97	6440	657	4	- 6125	- 13	A-125	A-141	A-157	MF	MF	MF
117	233	23.8	1.18	6050	617	4	- 6110	- 15	A-125	A-141	A-157	MF	MF	MF
			1.30	6050	617	4	- 6115	- 15	A-125	A-141	A-157	MF	MF	MF
			1.69	6910	704	4	- 6120	- 15	A-125	A-141	A-157	MF	MF	MF
			1.97	6910	704	4	- 6125	- 15	A-125	A-141	A-157	MF	MF	MF
103	264	27.0	1.06	6110	622	4	- 6110	- 17	A-125	A-141	A-157	MF	MF	MF
			1.30	6110	622	4	- 6115	- 17	A-125	A-141	A-157	MF	MF	MF
			1.69	6970	710	4	- 6120	- 17	A-125	A-141	A-157	MF	MF	MF
			1.89	6970	710	4	- 6125	- 17	A-125	A-141	A-157	MF	MF	MF
83.3	327	33.3	1.04	6440	657	4	- 6115	- 21	A-125	A-141	A-157	MF	MF	MF
			1.32	7640	779	4	- 6120	- 21	A-125	A-141	A-157	MF	MF	MF
			1.63	7640	779	4	- 6125	- 21	A-125	A-141	A-157	MF	MF	MF
			2.05	8960	913	4	- 6130	- 21	A-126	A-142	A-158	PB	PB	PB
70.0	389	39.6	1.03	7980	814	4	- 6120	- 25	A-125	A-141	A-157	MF	MF	MF
			1.32	7980	814	4	- 6125	- 25	A-125	A-141	A-157	MF	MF	MF
			1.72	9300	948	4	- 6130	- 25	A-126	A-142	A-158	PB	PB	PB
			1.98	9300	948	4	- 6135	- 25	A-126	A-142	A-158	PB	PB	PB
60.3	451	46.0	1.26	8280	844	4	- 6125	- 29	A-125	A-141	A-157	MF	MF	MF
			1.49	9770	996	4	- 6130	- 29	A-126	A-142	A-158	PB	PB	PB
			1.88	9770	996	4	- 6135	- 29	A-126	A-142	A-158	PB	PB	PB
			1.98	14200	1450	4	- 6140	- 29	A-126	A-142	A-158	PB	PB	PB
50.0	544	55.5	1.06	8700	887	4	- 6125	- 35	A-125	A-141	A-157	MF	MF	MF
			1.24	10300	1050	4	- 6130	- 35	A-126	A-142	A-158	PB	PB	PB
			1.42	10300	1050	4	- 6135	- 35	A-126	A-142	A-158	PB	PB	PB
			1.74	15200	1550	4	- 6140	- 35	A-126	A-142	A-158	PB	PB	PB
			2.51	15200	1550	4	- 6145	- 35	A-126	A-142	A-158	PB	PB	PB
40.7	669	68.2	1.26	11000	1120	4	- 6135	- 43	A-126	A-142	A-158	PB	PB	PB
			1.80	15800	1610	4	- 6145	- 43	A-126	A-142	A-158	PB	PB	PB
			2.48	19200	1960	4	- 6160	- 43	A-126	A-142	A-159	PB	PB	P
34.3	793	80.9	0.98	11400	1160	4	- 6135	- 51	A-126	A-142	A-158	PB	PB	PB
			1.41	16000	1630	4	- 6145	- 51	A-126	A-142	A-158	PB	PB	PB
			1.92	20000	2040	4	- 6160	- 51	A-126	A-142	A-159	PB	PB	P
29.7	918	93.5	0.84	11900	1210	4	- 6135	- 59	A-126	A-142	A-158	PB	PB	PB
			1.22	16000	1630	4	- 6145	- 59	A-126	A-142	A-158	PB	PB	PB
			1.47	22100	2250	4	- 6160	- 59	A-126	A-142	A-159	PB	PB	P
			1.92	22100	2250	4	- 6165	- 59	A-126	A-142	A-159	PB	PB	P
24.6	1100	113	1.01	16000	1630	4	- 6145	- 71	A-126	A-142	A-158	PB	PB	PB
			1.16	22100	2250	4	- 6160	- 71	A-126	A-142	A-159	PB	PB	P
			1.88	22100	2250	4	- 6165	- 71	A-126	A-142	A-159	PB	PB	P
			1.97	25100	2560	4	- 6170	- 71	A-127	A-143	A-159	PB	PB	P
20.1	1350	138	1.30	21900	2230	4	- 6165	- 87	A-126	A-142	A-159	PB	PB	P
			1.60	26900	2750	4	- 6170	- 87	A-127	A-143	A-159	PB	PB	P
			1.87	26900	2750	4	- 6175	- 87	A-127	A-143	A-159	PB	PB	P
16.8	1530	156	1.37	22100	2250	4	- 6165DC	- 104	A-134	A-150	A-166	PB	PB	P
			1.65	29200	2970	4	- 6170DC	- 104	A-134	A-150	A-166	PB	PB	P
			2.06	29200	2970	4	- 6175DC	- 104	A-134	A-150	A-166	PB	PB	P
			2.65	38700	3940	4	- 6180DB	- 104	A-134	A-150	A-166	PB	PB	P
14.5	1780	182	1.18	22100	2250	4	- 6165DC	- 121	A-134	A-150	A-166	PB	PB	P
			1.42	29500	3010	4	- 6170DC	- 121	A-134	A-150	A-166	PB	PB	P
			1.77	29500	3010	4	- 6175DC	- 121	A-134	A-150	A-166	PB	PB	P
			2.28	41200	4200	4	- 6180DB	- 121	A-134	A-150	A-166	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
10.1	2540	259	0.83	22100	2250	4	- 6165DC	- 143	A-134	A-150	A-166	PB	PB	P
			1.24	29500	3010	4	- 6175DC	- 143	A-134	A-150	A-166	PB	PB	P
			1.60	41700	4250	4	- 6180DB	- 143	A-134	A-150	A-166	PB	PB	P
			1.93	41700	4250	4	- 6185DB	- 143	A-134	A-150	A-166	PB	PB	P
8.79	2930	299	1.07	29500	3010	4	- 6175DC	- 165	A-134	A-150	A-166	PB	PB	P
			1.38	41700	4250	4	- 6180DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.68	41700	4250	4	- 6185DB	- 165	A-134	A-150	A-166	PB	PB	P
			2.08	59000	6010	4	- 6190DA	- 165	A-134	A-150	A-166	PB	PB	P
7.44	3470	353	0.91	29500	3010	4	- 6175DC	- 195	A-134	A-150	A-166	PB	PB	P
			1.17	41700	4250	4	- 6180DB	- 195	A-134	A-150	A-166	PB	PB	P
			1.42	41700	4250	4	- 6185DB	- 195	A-134	A-150	A-166	PB	PB	P
			1.84	59000	6010	4	- 6190DA	- 195	A-134	A-150	A-166	PB	PB	P
6.28	4110	419	1.22	41700	4250	4	- 6185DB	- 231	A-134	A-150	A-166	PB	PB	P
			1.55	59000	6010	4	- 6190DA	- 231	A-134	A-150	A-166	PB	PB	P
			1.94	59000	6010	4	- 6195DA	- 231	A-134	A-150	A-166	PB	PB	P
5.31	4850	495	1.03	41700	4250	4	- 6185DB	- 273	A-134	A-150	A-166	PB	PB	P
			1.31	59000	6010	4	- 6190DA	- 273	A-134	A-150	A-166	PB	PB	P
			1.64	59000	6010	4	- 6195DA	- 273	A-134	A-150	A-166	PB	PB	P
			1.91	84100	8570	4	- 6205DB	- 273	A-135	A-151	A-167	PB	PB	P
4.55	5670	578	0.88	41700	4250	4	- 6185DB	- 319	A-134	A-150	A-166	PB	PB	P
			1.12	59000	6010	4	- 6190DA	- 319	A-134	A-150	A-166	PB	PB	P
			1.40	59000	6010	4	- 6195DA	- 319	A-134	A-150	A-166	PB	PB	P
			1.63	84100	8570	4	- 6205DB	- 319	A-135	A-151	A-167	PB	PB	P
			2.23	104000	10600	4	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
3.85	6700	683	1.19	59000	6010	4	- 6195DA	- 377	A-134	A-150	A-166	PB	PB	P
			1.38	84100	8570	4	- 6205DB	- 377	A-135	A-151	A-167	PB	PB	P
			1.89	104000	10600	4	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
3.07	8410	857	0.95	58800	6000	4	- 6195DA	- 473	A-134	A-150	A-166	PB	PB	P
			1.11	84100	8570	4	- 6205DB	- 473	A-135	A-151	A-167	PB	PB	P
			1.50	104000	10600	4	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
			1.90	145000	14800	4	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
2.59	9940	1010	0.80	58400	5950	4	- 6195DA	- 559	A-134	A-150	A-166	PB	PB	P
			1.27	104000	10600	4	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
			1.61	145000	14800	4	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
			2.06	179000	18200	4	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
2.23	11500	1180	0.81	84100	8570	4	- 6205DB	- 649	A-135	A-151	A-167	PB	PB	P
			1.10	104000	10600	4	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
			1.38	145000	14800	4	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
			1.78	179000	18200	4	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
1.98	13000	1330	0.97	104000	10600	4	- 6215DA	- 731	A-135	A-151	A-167	PB	PB	P
			1.23	145000	14800	4	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
			1.58	179000	18200	4	- 6235DA	- 731	A-137	A-153	A-169	PB	PB	P
			1.98	208000	21200	4	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
1.72	15000	1520	0.85	104000	10600	4	- 6215DA	- 841	A-135	A-151	A-167	PB	PB	P
			1.01	145000	14800	4	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
			1.73	208000	21200	4	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
1.45	17800	1820	0.89	145000	14800	4	- 6225DA	- 1003	A-136	A-152	A-168	PB	PB	P
			1.15	179000	18200	4	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
			1.45	208000	21200	4	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.16	22200	2260	0.92	179000	18200	4	- 6235DA	- 1247	A-137	A-153	A-169	PB	PB	P
			1.16	208000	21200	4	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
0.980	26300	2680	0.86	208000	21200	4	- 6245DA	- 1479	A-137	A-153	A-169	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N• m	kgf• m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.2	2110	215	1.00	22100	2250	4	- 6165DC	- 143	A-134	A-150	A-166	PB	PB	P
			1.50	29500	3010	4	- 6175DC	- 143	A-134	A-150	A-166	PB	PB	P
			1.93	41700	4250	4	- 6180DB	- 143	A-134	A-150	A-166	PB	PB	P
			2.33	41700	4250	4	- 6185DB	- 143	A-134	A-150	A-166	PB	PB	P
10.6	2430	248	1.30	29500	3010	4	- 6175DC	- 165	A-134	A-150	A-166	PB	PB	P
			1.67	41700	4250	4	- 6180DB	- 165	A-134	A-150	A-166	PB	PB	P
			2.02	41700	4250	4	- 6185DB	- 165	A-134	A-150	A-166	PB	PB	P
			2.08	59000	6010	4	- 6190DA	- 165	A-134	A-150	A-166	PB	PB	P
8.97	2870	293	1.10	29500	3010	4	- 6175DC	- 195	A-134	A-150	A-166	PB	PB	P
			1.41	41700	4250	4	- 6180DB	- 195	A-134	A-150	A-166	PB	PB	P
			1.71	41700	4250	4	- 6185DB	- 195	A-134	A-150	A-166	PB	PB	P
			2.08	59000	6010	4	- 6190DA	- 195	A-134	A-150	A-166	PB	PB	P
7.58	3400	347	1.47	41700	4250	4	- 6185DB	- 231	A-134	A-150	A-166	PB	PB	P
			1.87	59000	6010	4	- 6190DA	- 231	A-134	A-150	A-166	PB	PB	P
			2.08	59000	6010	4	- 6195DA	- 231	A-134	A-150	A-166	PB	PB	P
			2.08	59000	6010	4	- 6195DA	- 231	A-134	A-150	A-166	PB	PB	P
6.41	4020	410	1.24	41700	4250	4	- 6185DB	- 273	A-134	A-150	A-166	PB	PB	P
			1.59	59000	6010	4	- 6190DA	- 273	A-134	A-150	A-166	PB	PB	P
			1.98	59000	6010	4	- 6195DA	- 273	A-134	A-150	A-166	PB	PB	P
			2.31	84100	8570	4	- 6205DB	- 273	A-135	A-151	A-167	PB	PB	P
5.49	4700	479	1.06	41700	4250	4	- 6185DB	- 319	A-134	A-150	A-166	PB	PB	P
			1.36	59000	6010	4	- 6190DA	- 319	A-134	A-150	A-166	PB	PB	P
			1.69	59000	6010	4	- 6195DA	- 319	A-134	A-150	A-166	PB	PB	P
			1.96	84100	8570	4	- 6205DB	- 319	A-135	A-151	A-167	PB	PB	P
			2.69	104000	10600	4	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
4.64	5550	566	1.43	59000	6010	4	- 6195DA	- 377	A-134	A-150	A-166	PB	PB	P
			1.66	84100	8570	4	- 6205DB	- 377	A-135	A-151	A-167	PB	PB	P
			2.28	104000	10600	4	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
3.70	6970	710	1.14	59000	6010	4	- 6195DA	- 473	A-134	A-150	A-166	PB	PB	P
			1.33	84100	8570	4	- 6205DB	- 473	A-135	A-151	A-167	PB	PB	P
			1.82	104000	10600	4	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
			2.30	145000	14800	4	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
3.13	8240	840	0.97	58900	6000	4	- 6195DA	- 559	A-134	A-150	A-166	PB	PB	P
			1.54	104000	10600	4	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
			1.94	145000	14800	4	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
			2.49	179000	18200	4	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
2.70	9560	975	0.97	84100	8570	4	- 6205DB	- 649	A-135	A-151	A-167	PB	PB	P
			1.32	104000	10600	4	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
			1.66	145000	14800	4	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
			2.14	179000	18200	4	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
2.39	10800	1100	1.17	104000	10600	4	- 6215DA	- 731	A-135	A-151	A-167	PB	PB	P
			1.49	145000	14800	4	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
			1.90	179000	18200	4	- 6235DA	- 731	A-137	A-153	A-169	PB	PB	P
			2.40	208000	21200	4	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
2.08	12400	1260	1.02	104000	10600	4	- 6215DA	- 841	A-135	A-151	A-167	PB	PB	P
			1.21	145000	14800	4	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
			2.08	208000	21200	4	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
1.74	14800	1510	1.07	145000	14800	4	- 6225DA	- 1003	A-136	A-152	A-168	PB	PB	P
			1.39	179000	18200	4	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
			1.75	208000	21200	4	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.40	18400	1870	1.12	179000	18200	4	- 6235DA	- 1247	A-137	A-153	A-169	PB	PB	P
			1.40	208000	21200	4	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
1.18	21800	2220	1.04	208000	21200	4	- 6245DA	- 1479	A-137	A-153	A-169	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

3.7 kW 50 Hz

Motor Speed n_1

4 P

1450r/min

Gearmotors

Selection Tables

Dimension Tables

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	139	14.2	1.06	4580	467	5	6115	6	A-125	A-141	A-157	MF	MF	MF
			1.37	5210	531				A-125	A-141	A-157	MF	MF	MF
			1.88	5210	531				A-125	A-141	A-157	MF	MF	MF
181	185	18.9	1.06	5090	519	5	6115	8	A-125	A-141	A-157	MF	MF	MF
			1.37	5800	591				A-125	A-141	A-157	MF	MF	MF
			1.88	5800	591				A-125	A-141	A-157	MF	MF	MF
132	255	26.0	1.06	5780	589	5	6115	11	A-125	A-141	A-157	MF	MF	MF
			1.37	6580	670				A-125	A-141	A-157	MF	MF	MF
			1.60	6580	670				A-125	A-141	A-157	MF	MF	MF
			2.54	7770	792				A-126	A-142	A-158	PB	PB	PB
112	301	30.7	1.05	5960	608	5	6115	13	A-125	A-141	A-157	MF	MF	MF
			1.37	6780	691				A-125	A-141	A-157	MF	MF	MF
			1.60	6780	691				A-125	A-141	A-157	MF	MF	MF
			2.54	8080	824				A-126	A-142	A-158	PB	PB	PB
96.7	347	35.4	1.05	6330	646	5	6115	15	A-125	A-141	A-157	MF	MF	MF
			1.37	7260	741				A-125	A-141	A-157	MF	MF	MF
			1.60	7260	741				A-125	A-141	A-157	MF	MF	MF
			2.10	8250	841				A-126	A-142	A-158	PB	PB	PB
85.3	394	40.1	1.05	6380	650	5	6115	17	A-125	A-141	A-157	MF	MF	MF
			1.53	7320	747				A-125	A-141	A-157	MF	MF	MF
			1.96	8850	902				A-126	A-142	A-158	PB	PB	PB
69.0	486	49.6	0.84	5010	511	5	6115	21	A-125	A-141	A-157	MF	MF	MF
			1.29	8010	816				A-125	A-141	A-157	MF	MF	MF
			1.61	9440	962				A-126	A-142	A-158	PB	PB	PB
			1.82	9440	962				A-126	A-142	A-158	PB	PB	PB
58.0	579	59.0	1.07	8350	851	5	6125	25	A-125	A-141	A-157	MF	MF	MF
			1.55	9790	998				A-126	A-142	A-158	PB	PB	PB
			1.86	14600	1490				A-126	A-142	A-158	PB	PB	PB
50.0	671	68.4	0.94	8640	880	5	6125	29	A-125	A-141	A-157	MF	MF	MF
			1.16	10300	1050				A-126	A-142	A-158	PB	PB	PB
			1.31	10300	1050				A-126	A-142	A-158	PB	PB	PB
			1.61	14900	1520				A-126	A-142	A-158	PB	PB	PB
			2.04	14900	1520				A-126	A-142	A-158	PB	PB	PB
41.4	810	82.6	1.11	10800	1100	5	6135	35	A-126	A-142	A-158	PB	PB	PB
			1.41	16000	1630				A-126	A-142	A-158	PB	PB	PB
			1.69	16000	1630				A-126	A-142	A-158	PB	PB	PB
			2.16	19100	1940				A-126	A-142	A-159	PB	PB	P
33.7	995	101	0.91	11500	1170	5	6135	43	A-126	A-142	A-158	PB	PB	PB
			1.26	16000	1630				A-126	A-142	A-158	PB	PB	PB
			1.74	20300	2070				A-126	A-142	A-159	PB	PB	P
			2.11	20300	2070				A-126	A-142	A-159	PB	PB	P
28.4	1180	120	1.00	16000	1630	5	6145	51	A-126	A-142	A-158	PB	PB	PB
			1.49	21100	2150				A-126	A-142	A-159	PB	PB	P
			1.78	21100	2150				A-126	A-142	A-159	PB	PB	P
24.6	1370	139	1.19	22100	2250	5	6160	59	A-126	A-142	A-159	PB	PB	P
			1.54	22100	2250				A-126	A-142	A-159	PB	PB	P
			1.79	25100	2560				A-127	A-143	A-159	PB	PB	P
20.4	1640	168	1.28	22100	2250	5	6165	71	A-126	A-142	A-159	PB	PB	P
			1.49	26500	2710				A-127	A-143	A-159	PB	PB	P
			1.89	26500	2710				A-127	A-143	A-159	PB	PB	P
16.7	2010	205	1.02	21800	2230	5	6165	87	A-126	A-142	A-159	PB	PB	P
			1.52	28400	2890				A-127	A-143	A-159	PB	PB	P
			1.93	38400	3920				A-127	A-143	A-160	PB	PB	P
13.9	2280	233	0.92	22100	2250	5	6165DC	104	A-134	A-150	A-166	PB	PB	P
			1.11	29500	3010				A-134	A-150	A-166	PB	PB	P
			1.38	29500	3010				A-134	A-150	A-166	PB	PB	P
			1.78	40900	4170				A-134	A-150	A-166	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

3.7 kW
60 Hz

Motor Speed n₁

4 P

1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	115	11.7	1.06	4320	440	5	6115	6	A-125	A-141	A-157	MF	MF	MF
			1.37	4910	500	5	6120	6	A-125	A-141	A-157	MF	MF	MF
			1.57	4910	500	5	6125	6	A-125	A-141	A-157	MF	MF	MF
219	153	15.6	1.06	4800	489	5	6115	8	A-125	A-141	A-157	MF	MF	MF
			1.37	5470	557	5	6120	8	A-125	A-141	A-157	MF	MF	MF
			1.88	5470	557	5	6125	8	A-125	A-141	A-157	MF	MF	MF
159	211	21.5	1.06	5460	557	5	6115	11	A-125	A-141	A-157	MF	MF	MF
			1.37	6200	632	5	6120	11	A-125	A-141	A-157	MF	MF	MF
			1.60	6200	632	5	6125	11	A-125	A-141	A-157	MF	MF	MF
			2.54	7320	746	5	6130	11	A-126	A-142	A-158	PB	PB	PB
135	249	25.4	1.05	5640	574	5	6115	13	A-125	A-141	A-157	MF	MF	MF
			1.37	6400	652	5	6120	13	A-125	A-141	A-157	MF	MF	MF
			1.60	6400	652	5	6125	13	A-125	A-141	A-157	MF	MF	MF
			2.54	7620	776	5	6130	13	A-126	A-142	A-158	PB	PB	PB
117	288	29.3	1.05	5990	611	5	6115	15	A-125	A-141	A-157	MF	MF	MF
			1.37	6860	699	5	6120	15	A-125	A-141	A-157	MF	MF	MF
			1.60	6860	699	5	6125	15	A-125	A-141	A-157	MF	MF	MF
			2.10	7770	792	5	6130	15	A-126	A-142	A-158	PB	PB	PB
103	326	33.2	1.05	6040	616	5	6115	17	A-125	A-141	A-157	MF	MF	MF
			1.53	6920	705	5	6125	17	A-125	A-141	A-157	MF	MF	MF
			1.96	8340	850	5	6130	17	A-126	A-142	A-158	PB	PB	PB
83.3	403	41.1	0.84	6350	647	5	6115	21	A-125	A-141	A-157	MF	MF	MF
			1.32	7570	772	5	6125	21	A-125	A-141	A-157	MF	MF	MF
			1.66	8900	908	5	6130	21	A-126	A-142	A-158	PB	PB	PB
			2.04	8900	908	5	6135	21	A-126	A-142	A-158	PB	PB	PB
70.0	480	48.9	1.07	7900	806	5	6125	25	A-125	A-141	A-157	MF	MF	MF
			1.61	9240	942	5	6135	25	A-126	A-142	A-158	PB	PB	PB
			1.86	13800	1410	5	6140	25	A-126	A-142	A-158	PB	PB	PB
60.3	556	56.7	1.02	8180	834	5	6125	29	A-125	A-141	A-157	MF	MF	MF
			1.21	9700	989	5	6130	29	A-126	A-142	A-158	PB	PB	PB
			1.53	9700	989	5	6135	29	A-126	A-142	A-158	PB	PB	PB
			1.61	14200	1440	5	6140	29	A-126	A-142	A-158	PB	PB	PB
			2.04	14200	1440	5	6145	29	A-126	A-142	A-158	PB	PB	PB
50.0	671	68.4	1.15	10200	1040	5	6135	35	A-126	A-142	A-158	PB	PB	PB
			1.41	15100	1540	5	6140	35	A-126	A-142	A-158	PB	PB	PB
			2.04	15100	1540	5	6145	35	A-126	A-142	A-158	PB	PB	PB
			2.61	17900	1830	5	6160	35	A-126	A-142	A-159	PB	PB	P
40.7	825	84.1	1.02	10900	1110	5	6135	43	A-126	A-142	A-158	PB	PB	PB
			1.46	15800	1610	5	6145	43	A-126	A-142	A-158	PB	PB	PB
			2.01	19200	1950	5	6160	43	A-126	A-142	A-159	PB	PB	P
			2.14	19200	1950	5	6165	43	A-126	A-142	A-159	PB	PB	P
34.3	978	99.7	1.14	16000	1630	5	6145	51	A-126	A-142	A-158	PB	PB	PB
			1.55	19900	2030	5	6160	51	A-126	A-142	A-159	PB	PB	P
			2.04	19900	2030	5	6165	51	A-126	A-142	A-159	PB	PB	P
29.7	1130	115	1.19	22100	2250	5	6160	59	A-126	A-142	A-159	PB	PB	P
			1.55	22100	2250	5	6165	59	A-126	A-142	A-159	PB	PB	P
			1.93	23700	2410	5	6170	59	A-127	A-143	A-159	PB	PB	P
24.6	1360	139	1.53	21900	2240	5	6165	71	A-126	A-142	A-159	PB	PB	P
			1.60	25000	2550	5	6170	71	A-127	A-143	A-159	PB	PB	P
			1.93	25000	2550	5	6175	71	A-127	A-143	A-159	PB	PB	P
20.1	1670	170	1.05	21800	2220	5	6165	87	A-126	A-142	A-159	PB	PB	P
			1.52	26800	2730	5	6175	87	A-127	A-143	A-159	PB	PB	P
			1.93	36200	3690	5	6180	87	A-127	A-143	A-160	PB	PB	P
16.8	1890	193	1.11	22100	2250	5	6165DC	104	A-134	A-150	A-166	PB	PB	P
			1.34	29000	2960	5	6170DC	104	A-134	A-150	A-166	PB	PB	P
			1.67	29000	2960	5	6175DC	104	A-134	A-150	A-166	PB	PB	P
			2.15	38500	3930	5	6180DB	104	A-134	A-150	A-166	PB	PB	P

3.7kW
50 • 60Hz

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.0	2650	271	1.19	29500	3010	5	- 6175DC	- 121	A-134	A-150	A-166	PB	PB	P
			1.53	41700	4250	5	- 6180DB	- 121	A-134	A-150	A-166	PB	PB	P
			1.81	41700	4250	5	- 6185DB	- 121	A-134	A-150	A-166	PB	PB	P
10.1	3140	320	1.00	29500	3010	5	- 6175DC	- 143	A-134	A-150	A-166	PB	PB	P
			1.56	41700	4250	5	- 6185DB	- 143	A-134	A-150	A-166	PB	PB	P
			2.03	59000	6010	5	- 6190DB	- 143	A-134	A-150	A-166	PB	PB	P
8.79	3620	369	0.87	29500	3010	5	- 6175DC	- 165	A-134	A-150	A-166	PB	PB	P
			1.12	41700	4250	5	- 6180DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.36	41700	4250	5	- 6185DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.69	59000	6010	5	- 6190DA	- 165	A-134	A-150	A-166	PB	PB	P
			1.76	59000	6010	5	- 6190DB	- 165	A-134	A-150	A-166	PB	PB	P
7.44	4280	436	1.15	41700	4250	5	- 6185DB	- 195	A-134	A-150	A-166	PB	PB	P
			1.49	59000	6010	5	- 6190DA	- 195	A-134	A-150	A-166	PB	PB	P
			1.85	59000	6010	5	- 6195DB	- 195	A-134	A-150	A-166	PB	PB	P
6.28	5070	516	0.98	41700	4250	5	- 6185DB	- 231	A-134	A-150	A-166	PB	PB	P
			1.26	59000	6010	5	- 6190DA	- 231	A-134	A-150	A-166	PB	PB	P
			1.57	59000	6010	5	- 6195DA	- 231	A-134	A-150	A-166	PB	PB	P
			1.83	84100	8570	5	- 6205DB	- 231	A-135	A-151	A-167	PB	PB	P
5.31	5990	610	0.84	41700	4250	5	- 6185DB	- 273	A-134	A-150	A-166	PB	PB	P
			1.07	59000	6010	5	- 6190DA	- 273	A-134	A-150	A-166	PB	PB	P
			1.33	59000	6010	5	- 6195DA	- 273	A-134	A-150	A-166	PB	PB	P
			2.09	104000	10600	5	- 6215DA	- 273	A-135	A-151	A-167	PB	PB	P
4.55	7000	713	1.14	59000	6010	5	- 6195DA	- 319	A-134	A-150	A-166	PB	PB	P
			1.32	84100	8570	5	- 6205DB	- 319	A-135	A-151	A-167	PB	PB	P
			1.81	104000	10600	5	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
3.85	8270	843	0.96	58900	6010	5	- 6195DA	- 377	A-134	A-150	A-166	PB	PB	P
			1.03	84100	8570	5	- 6205DA	- 377	A-135	A-151	A-167	PB	PB	P
			1.53	104000	10600	5	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
			1.82	145000	14800	5	- 6225DA	- 377	A-136	A-152	A-168	PB	PB	P
3.07	10400	1060	0.80	84100	8570	5	- 6205DA	- 473	A-135	A-151	A-167	PB	PB	P
			1.22	104000	10600	5	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
			1.54	145000	14800	5	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
			1.98	179000	18200	5	- 6235DA	- 473	A-137	A-153	A-169	PB	PB	P
2.59	12300	1250	1.03	104000	10600	5	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
			1.31	145000	14800	5	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
			1.67	179000	18200	5	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
			2.10	208000	21200	5	- 6245DA	- 559	A-137	A-153	A-169	PB	PB	P
2.23	14200	1450	0.89	104000	10600	5	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
			1.12	145000	14800	5	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
			1.44	179000	18200	5	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
			1.81	208000	21200	5	- 6245DA	- 649	A-137	A-153	A-169	PB	PB	P
1.98	16000	1630	1.00	145000	14800	5	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
			1.61	208000	21200	5	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
			2.15	258000	26300	5	- 6255DA	- 731	A-137	A-154	A-170	PB	PB	P
1.72	18400	1880	0.82	145000	14800	5	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
			1.02	179000	18200	5	- 6235DA	- 841	A-137	A-153	A-169	PB	PB	P
			1.40	208000	21200	5	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
			1.76	258000	26300	5	- 6255DA	- 841	A-137	A-154	A-170	PB	PB	P
1.45	22000	2240	0.93	179000	18200	5	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
			1.17	208000	21200	5	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
			1.57	258000	26300	5	- 6255DA	- 1003	A-137	A-154	A-170	PB	PB	P
1.16	27300	2790	0.94	208000	21200	5	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
			1.26	258000	26300	5	- 6255DA	- 1247	A-137	A-154	A-170	PB	PB	P
0.980	32400	3310	0.96	258000	26300	5	- 6255DA	- 1479	A-137	A-154	A-170	PB	PB	P
0.784	40600	4130	0.85	258000	26300	5	- 6255DA	- 1849	A-137	A-154	A-170	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	2200	224	1.43	29500	3010	5	- 6175DC	- 121	A-134	A-150	A-166	PB	PB	P
			1.85	41000	4180	5	- 6180DB	- 121	A-134	A-150	A-166	PB	PB	P
			2.19	41000	4180	5	- 6185DB	- 121	A-134	A-150	A-166	PB	PB	P
12.2	2600	265	1.21	29500	3010	5	- 6175DC	- 143	A-134	A-150	A-166	PB	PB	P
			1.89	41700	4250	5	- 6185DB	- 143	A-134	A-150	A-166	PB	PB	P
			2.46	59000	6010	5	- 6190DB	- 143	A-134	A-150	A-166	PB	PB	P
10.6	3000	306	1.05	29500	3010	5	- 6175DC	- 165	A-134	A-150	A-166	PB	PB	P
			1.35	41700	4250	5	- 6180DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.64	41700	4250	5	- 6185DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.69	59000	6010	5	- 6190DA	- 165	A-134	A-150	A-166	PB	PB	P
			2.13	59000	6010	5	- 6190DB	- 165	A-134	A-150	A-166	PB	PB	P
8.97	3540	361	1.39	41700	4250	5	- 6185DB	- 195	A-134	A-150	A-166	PB	PB	P
			1.69	59000	6010	5	- 6190DA	- 195	A-134	A-150	A-166	PB	PB	P
			2.23	59000	6010	5	- 6195DB	- 195	A-134	A-150	A-166	PB	PB	P
7.58	4200	428	1.19	41700	4250	5	- 6185DB	- 231	A-134	A-150	A-166	PB	PB	P
			1.52	59000	6010	5	- 6190DA	- 231	A-134	A-150	A-166	PB	PB	P
			1.69	59000	6010	5	- 6195DA	- 231	A-134	A-150	A-166	PB	PB	P
			2.21	84100	8570	5	- 6205DB	- 231	A-135	A-151	A-167	PB	PB	P
6.41	4960	506	1.01	41700	4250	5	- 6185DB	- 273	A-134	A-150	A-166	PB	PB	P
			1.29	59000	6010	5	- 6190DA	- 273	A-134	A-150	A-166	PB	PB	P
			1.60	59000	6010	5	- 6195DA	- 273	A-134	A-150	A-166	PB	PB	P
			2.52	104000	10600	5	- 6215DA	- 273	A-135	A-151	A-167	PB	PB	P
5.49	5800	591	1.37	59000	6010	5	- 6195DA	- 319	A-134	A-150	A-166	PB	PB	P
			1.59	84100	8570	5	- 6205DB	- 319	A-135	A-151	A-167	PB	PB	P
			2.18	104000	10600	5	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
4.64	6850	698	1.16	59000	6010	5	- 6195DA	- 377	A-134	A-150	A-166	PB	PB	P
			1.17	84100	8570	5	- 6205DA	- 377	A-135	A-151	A-167	PB	PB	P
			1.85	104000	10600	5	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
			2.20	145000	14800	5	- 6225DA	- 377	A-136	A-152	A-168	PB	PB	P
3.70	8600	876	0.90	84100	8570	5	- 6205DA	- 473	A-135	A-151	A-167	PB	PB	P
			1.47	104000	10600	5	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
			1.86	145000	14800	5	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
			2.38	179000	18200	5	- 6235DA	- 473	A-137	A-153	A-169	PB	PB	P
3.13	10200	1040	1.25	104000	10600	5	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
			1.58	145000	14800	5	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
			2.02	179000	18200	5	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
			2.54	208000	21200	5	- 6245DA	- 559	A-137	A-153	A-169	PB	PB	P
2.70	11800	1200	1.07	104000	10600	5	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
			1.35	145000	14800	5	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
			1.74	179000	18200	5	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
			2.19	208000	21200	5	- 6245DA	- 649	A-137	A-153	A-169	PB	PB	P
2.39	13300	1350	1.20	145000	14800	5	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
			1.94	208000	21200	5	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
			2.60	258000	26300	5	- 6255DA	- 731	A-137	A-154	A-170	PB	PB	P
2.08	15300	1560	0.98	145000	14800	5	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
			1.24	179000	18200	5	- 6235DA	- 841	A-137	A-153	A-169	PB	PB	P
			1.69	208000	21200	5	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
			2.13	258000	26300	5	- 6255DA	- 841	A-137	A-154	A-170	PB	PB	P
1.74	18200	1860	1.12	179000	18200	5	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
			1.42	208000	21200	5	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
			1.89	258000	26300	5	- 6255DA	- 1003	A-137	A-154	A-170	PB	PB	P
1.40	22700	2310	1.14	208000	21200	5	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
			1.52	258000	26300	5	- 6255DA	- 1247	A-137	A-154	A-170	PB	PB	P
1.18	26900	2740	1.15	258000	26300	5	- 6255DA	- 1479	A-137	A-154	A-170	PB	PB	P
0.946	33600	3430	1.03	258000	26300	5	- 6255DA	- 1849	A-137	A-154	A-170	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

5.5 kW

50 Hz

Motor Speed n_1

4 P

1450r/min

Gearmotors

Selection Tables

Dimension Tables

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	206	21.0	1.27	5140	524	8	- 6125	- 6	A-125	A-141	A-157	MF	MF	MF
			1.71	6060	617				A-126	A-142	A-158	PB	PB	PB
			2.05	6060	617				A-126	A-142	A-158	PB	PB	PB
181	275	28.1	1.26	5710	582	8	- 6125	- 8	A-125	A-141	A-157	MF	MF	MF
			1.71	6740	687				A-126	A-142	A-158	PB	PB	PB
			2.05	6740	687				A-126	A-142	A-158	PB	PB	PB
132	379	38.6	1.08	6450	658	8	- 6125	- 11	A-125	A-141	A-157	MF	MF	MF
			1.71	7680	783				A-126	A-142	A-158	PB	PB	PB
			2.05	7680	783				A-126	A-142	A-158	PB	PB	PB
112	447	45.6	1.08	6630	676	8	- 6125	- 13	A-125	A-141	A-157	MF	MF	MF
			1.71	7980	814				A-126	A-142	A-158	PB	PB	PB
			1.85	7980	814				A-126	A-142	A-158	PB	PB	PB
96.7	516	52.6	1.08	7100	724	8	- 6125	- 15	A-125	A-141	A-157	MF	MF	MF
			1.41	8130	829				A-126	A-142	A-158	PB	PB	PB
			1.63	8130	829				A-126	A-142	A-158	PB	PB	PB
			2.18	12400	1270				A-126	A-142	A-158	PB	PB	PB
85.3	585	59.6	1.03	7150	729	8	- 6125	- 17	A-125	A-141	A-157	MF	MF	MF
			1.51	8710	888				A-126	A-142	A-158	PB	PB	PB
			1.84	13000	1320				A-126	A-142	A-158	PB	PB	PB
69.0	723	73.7	0.87	7780	793	8	- 6125	- 21	A-125	A-141	A-157	MF	MF	MF
			1.22	9260	944				A-126	A-142	A-158	PB	PB	PB
			1.57	13900	1410				A-126	A-142	A-158	PB	PB	PB
			1.73	13900	1410				A-126	A-142	A-158	PB	PB	PB
			2.35	16400	1670				A-126	A-142	A-159	PB	PB	P
58.0	860	87.7	1.05	9580	977	8	- 6135	- 25	A-126	A-142	A-158	PB	PB	PB
			1.44	14500	1480				A-126	A-142	A-158	PB	PB	PB
			1.79	17100	1740				A-126	A-142	A-159	PB	PB	P
50.0	998	102	0.88	10000	1020	8	- 6135	- 29	A-126	A-142	A-158	PB	PB	PB
			1.08	14800	1510				A-126	A-142	A-158	PB	PB	PB
			1.37	14800	1510				A-126	A-142	A-158	PB	PB	PB
			1.74	17800	1810				A-126	A-142	A-159	PB	PB	P
			2.07	17800	1810				A-126	A-142	A-159	PB	PB	P
41.4	1200	123	1.14	15900	1620	8	- 6145	- 35	A-126	A-142	A-158	PB	PB	PB
			1.46	18800	1920				A-126	A-142	A-159	PB	PB	P
			1.74	18800	1920				A-126	A-142	A-159	PB	PB	P
			2.04	21400	2180				A-127	A-143	A-159	PB	PB	P
33.7	1480	151	0.85	15100	1540	8	- 6145	- 43	A-126	A-142	A-158	PB	PB	PB
			1.17	20000	2040				A-126	A-142	A-159	PB	PB	P
			1.42	20000	2040				A-126	A-142	A-159	PB	PB	P
			1.65	22800	2320				A-127	A-143	A-159	PB	PB	P
			2.05	22800	2320				A-127	A-143	A-159	PB	PB	P
28.4	1760	179	1.20	20800	2120	8	- 6165	- 51	A-126	A-142	A-159	PB	PB	P
			1.39	23700	2420				A-127	A-143	A-159	PB	PB	P
			1.79	23700	2420				A-127	A-143	A-159	PB	PB	P
24.6	2030	207	1.03	22100	2250	8	- 6165	- 59	A-126	A-142	A-159	PB	PB	P
			1.51	24800	2530				A-127	A-143	A-159	PB	PB	P
			1.77	33400	3400				A-127	A-143	A-160	PB	PB	P
20.4	2440	249	0.86	22100	2250	8	- 6165	- 71	A-126	A-142	A-159	PB	PB	P
			1.27	26200	2670				A-127	A-143	A-159	PB	PB	P
			1.60	35500	3620				A-127	A-143	A-160	PB	PB	P
			1.78	35500	3620				A-127	A-143	A-160	PB	PB	P
16.7	2990	305	1.02	27900	2840	8	- 6175	- 87	A-127	A-143	A-159	PB	PB	P
			1.56	38100	3880				A-127	A-143	A-160	PB	PB	P
			2.13	53600	5470				A-127	A-143	A-160	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

5.5 kW
60 Hz

Motor Speed n₁

4P

1750r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	171	17.4	1.06	4850	494	8	- 6125	- 6	A-125	A-141	A-157	MF	MF	MF
			1.71	5710	582	8	- 6130	- 6	A-126	A-142	A-158	PB	PB	PB
			2.05	5710	582	8	- 6135	- 6	A-126	A-142	A-158	PB	PB	PB
219	228	23.3	1.26	5400	550	8	- 6125	- 8	A-125	A-141	A-157	MF	MF	MF
			1.71	6360	648	8	- 6130	- 8	A-126	A-142	A-158	PB	PB	PB
			2.05	6360	648	8	- 6135	- 8	A-126	A-142	A-158	PB	PB	PB
159	314	32.0	1.08	6100	622	8	- 6125	- 11	A-125	A-141	A-157	MF	MF	MF
			1.71	7240	739	8	- 6130	- 11	A-126	A-142	A-158	PB	PB	PB
			2.05	7240	739	8	- 6135	- 11	A-126	A-142	A-158	PB	PB	PB
135	371	37.8	1.08	6280	640	8	- 6125	- 13	A-125	A-141	A-157	MF	MF	MF
			1.71	7530	768	8	- 6130	- 13	A-126	A-142	A-158	PB	PB	PB
			2.05	7530	768	8	- 6135	- 13	A-126	A-142	A-158	PB	PB	PB
117	428	43.6	1.08	6730	686	8	- 6125	- 15	A-125	A-141	A-157	MF	MF	MF
			1.41	7680	783	8	- 6130	- 15	A-126	A-142	A-158	PB	PB	PB
			1.63	7680	783	8	- 6135	- 15	A-126	A-142	A-158	PB	PB	PB
			2.18	11800	1200	8	- 6140	- 15	A-126	A-142	A-158	PB	PB	PB
103	485	49.4	1.03	6780	691	8	- 6125	- 17	A-125	A-141	A-157	MF	MF	MF
			1.51	8230	839	8	- 6135	- 17	A-126	A-142	A-158	PB	PB	PB
			1.84	12300	1250	8	- 6140	- 17	A-126	A-142	A-158	PB	PB	PB
83.3	599	61.0	0.89	7390	753	8	- 6125	- 21	A-125	A-141	A-157	MF	MF	MF
			1.37	8760	893	8	- 6135	- 21	A-126	A-142	A-158	PB	PB	PB
			1.57	13100	1340	8	- 6140	- 21	A-126	A-142	A-158	PB	PB	PB
			2.00	13100	1340	8	- 6145	- 21	A-126	A-142	A-158	PB	PB	PB
			2.35	15400	1570	8	- 6160	- 21	A-126	A-142	A-159	PB	PB	P
70.0	713	72.7	1.08	9070	925	8	- 6135	- 25	A-126	A-142	A-158	PB	PB	PB
			1.44	13800	1400	8	- 6145	- 25	A-126	A-142	A-158	PB	PB	PB
			1.79	16100	1640	8	- 6160	- 25	A-126	A-142	A-159	PB	PB	P
60.3	827	84.3	1.03	9500	968	8	- 6135	- 29	A-126	A-142	A-158	PB	PB	PB
			1.08	14100	1430	8	- 6140	- 29	A-126	A-142	A-158	PB	PB	PB
			1.37	14100	1430	8	- 6145	- 29	A-126	A-142	A-158	PB	PB	PB
			1.91	16800	1710	8	- 6160	- 29	A-126	A-142	A-159	PB	PB	P
			2.07	16800	1710	8	- 6165	- 29	A-126	A-142	A-159	PB	PB	P
50.0	998	102	1.37	15000	1530	8	- 6145	- 35	A-126	A-142	A-158	PB	PB	PB
			1.76	17800	1810	8	- 6160	- 35	A-126	A-142	A-159	PB	PB	P
			2.07	17800	1810	8	- 6165	- 35	A-126	A-142	A-159	PB	PB	P
			2.18	20200	2060	8	- 6170	- 35	A-127	A-143	A-159	PB	PB	P
40.7	1230	125	0.98	15600	1590	8	- 6145	- 43	A-126	A-142	A-158	PB	PB	PB
			1.35	18900	1930	8	- 6160	- 43	A-126	A-142	A-159	PB	PB	P
			1.44	18900	1930	8	- 6165	- 43	A-126	A-142	A-159	PB	PB	P
			1.77	21500	2190	8	- 6170	- 43	A-127	A-143	A-159	PB	PB	P
			2.05	21500	2190	8	- 6175	- 43	A-127	A-143	A-159	PB	PB	P
34.3	1450	148	1.37	19600	2000	8	- 6165	- 51	A-126	A-142	A-159	PB	PB	P
			1.53	22400	2280	8	- 6170	- 51	A-127	A-143	A-159	PB	PB	P
			2.05	22400	2280	8	- 6175	- 51	A-127	A-143	A-159	PB	PB	P
29.7	1680	171	1.05	21700	2220	8	- 6165	- 59	A-126	A-142	A-159	PB	PB	P
			1.51	23400	2390	8	- 6175	- 59	A-127	A-143	A-159	PB	PB	P
			1.77	31400	3200	8	- 6180	- 59	A-127	A-143	A-160	PB	PB	P
24.6	2020	206	1.03	21600	2200	8	- 6165	- 71	A-126	A-142	A-159	PB	PB	P
			1.30	24700	2520	8	- 6175	- 71	A-127	A-143	A-159	PB	PB	P
			1.60	33400	3410	8	- 6180	- 71	A-127	A-143	A-160	PB	PB	P
			1.78	33400	3410	8	- 6185	- 71	A-127	A-143	A-160	PB	PB	P
20.1	2480	253	1.02	26400	2690	8	- 6175	- 87	A-127	A-143	A-159	PB	PB	P
			1.56	35900	3660	8	- 6185	- 87	A-127	A-143	A-160	PB	PB	P
			2.15	50500	5140	8	- 6190	- 87	A-127	A-143	A-160	PB	PB	P

5.5kW
50 • 60Hz

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method				
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM		
13.9	3390	346	0.93	29500	3010	8	-	6175DC	-	104	A-134	A-150	A-166	PB	PB	P
			1.20	40500	4130						A-134	A-150	A-166	PB	PB	P
			1.45	40500	4130						A-134	A-150	A-166	PB	PB	P
			1.88	56800	5790						A-134	A-150	A-166	PB	PB	P
12.0	3940	402	0.80	29500	3010	8	-	6175DC	-	121	A-134	A-150	A-166	PB	PB	P
			1.22	41700	4250						A-134	A-150	A-166	PB	PB	P
			1.62	59000	6010						A-134	A-150	A-166	PB	PB	P
			1.92	59000	6010						A-134	A-150	A-166	PB	PB	P
10.1	4660	475	1.05	41700	4250	8	-	6185DB	-	143	A-134	A-150	A-166	PB	PB	P
			1.37	59000	6010						A-134	A-150	A-166	PB	PB	P
			1.64	59000	6010						A-134	A-150	A-166	PB	PB	P
8.79	5380	548	0.92	41700	4250	8	-	6185DB	-	165	A-134	A-150	A-166	PB	PB	P
			1.14	59000	6010						A-134	A-150	A-166	PB	PB	P
			1.47	59000	6010						A-134	A-150	A-166	PB	PB	P
			1.72	84100	8570						A-135	A-151	A-167	PB	PB	P
			2.17	104000	10600						A-135	A-151	A-167	PB	PB	P
7.44	6360	648	1.00	58900	6000	8	-	6190DA	-	195	A-134	A-150	A-166	PB	PB	P
			1.46	84100	8570						A-135	A-151	A-167	PB	PB	P
			1.91	104000	10600						A-135	A-151	A-167	PB	PB	P
6.28	7530	768	1.06	59000	6010	8	-	6195DA	-	231	A-134	A-150	A-166	PB	PB	P
			1.66	104000	10600						A-135	A-151	A-167	PB	PB	P
			1.97	139000	14200						A-136	A-152	A-168	PB	PB	P
5.31	8900	907	0.89	59000	6010	8	-	6195DA	-	273	A-134	A-150	A-166	PB	PB	P
			1.04	84100	8570						A-135	A-151	A-167	PB	PB	P
			1.40	104000	10600						A-135	A-151	A-167	PB	PB	P
			1.66	145000	14700						A-136	A-152	A-168	PB	PB	P
			2.12	179000	18200						A-137	A-153	A-169	PB	PB	P
4.55	10400	1060	0.89	84100	8570	8	-	6205DB	-	319	A-135	A-151	A-167	PB	PB	P
			1.22	104000	10600						A-135	A-151	A-167	PB	PB	P
			1.45	145000	14800						A-136	A-152	A-168	PB	PB	P
			1.82	179000	18200						A-137	A-153	A-169	PB	PB	P
3.85	12300	1250	1.03	104000	10600	8	-	6215DA	-	377	A-135	A-151	A-167	PB	PB	P
			1.54	179000	18200						A-137	A-153	A-169	PB	PB	P
			2.10	208000	21200						A-137	A-153	A-169	PB	PB	P
3.07	15400	1570	0.82	104000	10600	8	-	6215DA	-	473	A-135	A-151	A-167	PB	PB	P
			1.04	145000	14800						A-136	A-152	A-168	PB	PB	P
			1.33	179000	18200						A-137	A-153	A-169	PB	PB	P
			1.67	208000	21200						A-137	A-153	A-169	PB	PB	P
			2.24	258000	26300						A-137	A-154	A-170	PB	PB	P
2.59	18200	1860	0.88	145000	14800	8	-	6225DA	-	559	A-136	A-152	A-168	PB	PB	P
			1.12	179000	18200						A-137	A-153	A-169	PB	PB	P
			1.42	208000	21200						A-137	A-153	A-169	PB	PB	P
			1.89	258000	26300						A-137	A-154	A-170	PB	PB	P
2.23	21200	2160	0.97	179000	18200	8	-	6235DA	-	649	A-137	A-153	A-169	PB	PB	P
			1.22	208000	21200						A-137	A-153	A-169	PB	PB	P
			1.63	258000	26300						A-137	A-154	A-170	PB	PB	P
			2.17	276000	28100						A-138	A-154	A-170	PB	PB	P
1.98	23800	2430	0.86	179000	18200	8	-	6235DA	-	731	A-137	A-153	A-169	PB	PB	P
			1.08	208000	21200						A-137	A-153	A-169	PB	PB	P
			1.45	258000	26300						A-137	A-154	A-170	PB	PB	P
			1.93	276000	28100						A-138	A-154	A-170	PB	PB	P
1.72	27400	2790	0.94	208000	21200	8	-	6245DA	-	841	A-137	A-153	A-169	PB	PB	P
			1.18	258000	26300						A-137	A-154	A-170	PB	PB	P
			1.68	276000	28100						A-138	A-154	A-170	PB	PB	P
1.45	32700	3330	1.06	258000	26300	8	-	6255DA	-	1003	A-137	A-154	A-170	PB	PB	P
			1.41	276000	28100						A-138	A-154	A-170	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	2810	286	1.12	28500	2900	8	- 6175DC	- 104	A-134	A-150	A-166	PB	PB	P
			1.45	38200	3890	8	- 6180DB	- 104	A-134	A-150	A-166	PB	PB	P
			1.74	38200	3890	8	- 6185DB	- 104	A-134	A-150	A-166	PB	PB	P
			2.17	53500	5460	8	- 6190DB	- 104	A-134	A-150	A-166	PB	PB	P
14.5	3270	333	0.96	29500	3010	8	- 6175DC	- 121	A-134	A-150	A-166	PB	PB	P
			1.47	40600	4140	8	- 6185DB	- 121	A-134	A-150	A-166	PB	PB	P
			1.95	57000	5810	8	- 6190DB	- 121	A-134	A-150	A-166	PB	PB	P
			2.17	57000	5810	8	- 6195DB	- 121	A-134	A-150	A-166	PB	PB	P
12.2	3860	394	1.27	41700	4250	8	- 6185DB	- 143	A-134	A-150	A-166	PB	PB	P
			1.65	59000	6010	8	- 6190DB	- 143	A-134	A-150	A-166	PB	PB	P
			1.97	59000	6010	8	- 6195DB	- 143	A-134	A-150	A-166	PB	PB	P
10.6	4460	454	1.10	41700	4250	8	- 6185DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.14	59000	6010	8	- 6190DA	- 165	A-134	A-150	A-166	PB	PB	P
			1.77	59000	6010	8	- 6195DB	- 165	A-134	A-150	A-166	PB	PB	P
			2.08	84100	8570	8	- 6205DB	- 165	A-135	A-151	A-167	PB	PB	P
			2.17	104000	10600	8	- 6215DA	- 165	A-135	A-151	A-167	PB	PB	P
8.97	5270	537	1.14	59000	6010	8	- 6190DA	- 195	A-134	A-150	A-166	PB	PB	P
			1.76	84100	8570	8	- 6205DB	- 195	A-135	A-151	A-167	PB	PB	P
			2.17	104000	10600	8	- 6215DA	- 195	A-135	A-151	A-167	PB	PB	P
7.58	6240	636	1.14	59000	6010	8	- 6195DA	- 231	A-134	A-150	A-166	PB	PB	P
			2.00	104000	10600	8	- 6215DA	- 231	A-135	A-151	A-167	PB	PB	P
			2.17	132000	13400	8	- 6225DA	- 231	A-136	A-152	A-168	PB	PB	P
6.41	7370	752	1.08	59000	6010	8	- 6195DA	- 273	A-134	A-150	A-166	PB	PB	P
			1.26	84100	8570	8	- 6205DB	- 273	A-135	A-151	A-167	PB	PB	P
			1.70	104000	10600	8	- 6215DA	- 273	A-135	A-151	A-167	PB	PB	P
			2.01	138000	14100	8	- 6225DA	- 273	A-136	A-152	A-168	PB	PB	P
			2.56	172000	17600	8	- 6235DA	- 273	A-137	A-153	A-169	PB	PB	P
5.49	8620	878	1.07	84100	8570	8	- 6205DB	- 319	A-135	A-151	A-167	PB	PB	P
			1.47	104000	10600	8	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
			1.75	143000	14600	8	- 6225DA	- 319	A-136	A-152	A-168	PB	PB	P
			2.19	179000	18200	8	- 6235DA	- 319	A-137	A-153	A-169	PB	PB	P
4.64	10200	1040	1.24	104000	10600	8	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
			1.86	179000	18200	8	- 6235DA	- 377	A-137	A-153	A-169	PB	PB	P
			2.53	208000	21200	8	- 6245DA	- 377	A-137	A-153	A-169	PB	PB	P
3.70	12800	1300	0.98	104000	10600	8	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
			1.25	145000	14800	8	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
			1.60	179000	18200	8	- 6235DA	- 473	A-137	A-153	A-169	PB	PB	P
			2.02	208000	21200	8	- 6245DA	- 473	A-137	A-153	A-169	PB	PB	P
			2.70	258000	26300	8	- 6255DA	- 473	A-137	A-154	A-170	PB	PB	P
3.13	15100	1540	1.06	145000	14800	8	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
			1.36	179000	18200	8	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
			1.71	208000	21200	8	- 6245DA	- 559	A-137	A-153	A-169	PB	PB	P
			2.28	258000	26300	8	- 6255DA	- 559	A-137	A-154	A-170	PB	PB	P
2.70	17500	1790	1.17	179000	18200	8	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
			1.47	208000	21200	8	- 6245DA	- 649	A-137	A-153	A-169	PB	PB	P
			1.97	258000	26300	8	- 6255DA	- 649	A-137	A-154	A-170	PB	PB	P
			2.62	276000	28100	8	- 6265DA	- 649	A-138	A-154	A-170	PB	PB	P
2.39	19700	2010	1.04	179000	18200	8	- 6235DA	- 731	A-137	A-153	A-169	PB	PB	P
			1.31	208000	21200	8	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
			1.75	258000	26300	8	- 6255DA	- 731	A-137	A-154	A-170	PB	PB	P
			2.33	276000	28100	8	- 6265DA	- 731	A-138	A-154	A-170	PB	PB	P
2.08	22700	2320	1.14	208000	21200	8	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
			1.43	258000	26300	8	- 6255DA	- 841	A-137	A-154	A-170	PB	PB	P
			2.02	276000	28100	8	- 6265DA	- 841	A-138	A-154	A-170	PB	PB	P
1.74	27100	2760	1.27	258000	26300	8	- 6255DA	- 1003	A-137	A-154	A-170	PB	PB	P
			1.70	276000	28100	8	- 6265DA	- 1003	A-138	A-154	A-170	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
1.16	40700	4140	0.85	258000	26300	8	- 6255DA	- 1247	A-137	A-154	A-170	PB	PB	P
			1.13	276000	28100				A-138	A-154	A-170	PB	PB	P
0.980	48200	4920	0.91	276000	28100	8	- 6265DA	- 1479	A-138	A-154	A-170	PB	PB	P

<h1>7.5 kW</h1> <h1>50 Hz</h1>	Motor Speed n ₁
	4 P
	1450r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	282	28.7	1.25	5980	610	10	- 6130	- 6	A-126	A-142	A-158	PB	PB	PB
			1.51	5980	610				A-126	A-142	A-158	PB	PB	PB
			1.73	9330	951				A-126	A-142	A-158	PB	PB	PB
			2.01	9330	951				A-126	A-142	A-158	PB	PB	PB
181	375	38.3	1.25	6650	678	10	- 6130	- 8	A-126	A-142	A-158	PB	PB	PB
			1.51	6650	678				A-126	A-142	A-158	PB	PB	PB
			1.73	10300	1050				A-126	A-142	A-158	PB	PB	PB
			2.01	10300	1050				A-126	A-142	A-158	PB	PB	PB
132	516	52.6	1.25	7570	771	10	- 6130	- 11	A-126	A-142	A-158	PB	PB	PB
			1.51	7570	771				A-126	A-142	A-158	PB	PB	PB
			1.73	11600	1180				A-126	A-142	A-158	PB	PB	PB
			2.01	11600	1180				A-126	A-142	A-158	PB	PB	PB
112	610	62.2	1.25	7860	801	10	- 6130	- 13	A-126	A-142	A-158	PB	PB	PB
			1.36	7860	801				A-126	A-142	A-158	PB	PB	PB
			1.73	11800	1210				A-126	A-142	A-158	PB	PB	PB
			2.01	11800	1210				A-126	A-142	A-158	PB	PB	PB
96.7	704	71.8	1.20	8000	815	10	- 6135	- 15	A-126	A-142	A-158	PB	PB	PB
			1.60	12400	1260				A-126	A-142	A-158	PB	PB	PB
			1.93	12400	1260				A-126	A-142	A-158	PB	PB	PB
85.3	798	81.3	1.11	8550	872	10	- 6135	- 17	A-126	A-142	A-158	PB	PB	PB
			1.35	12900	1320				A-126	A-142	A-158	PB	PB	PB
			1.60	12900	1320				A-126	A-142	A-158	PB	PB	PB
			1.75	15100	1540				A-126	A-142	A-159	PB	PB	P
69.0	985	100	0.90	9050	923	10	- 6135	- 21	A-126	A-142	A-158	PB	PB	PB
			1.27	13800	1410				A-126	A-142	A-158	PB	PB	PB
			1.72	16200	1650				A-126	A-142	A-159	PB	PB	P
			2.13	16200	1650				A-126	A-142	A-159	PB	PB	P
58.0	1170	120	1.05	14400	1470	10	- 6145	- 25	A-126	A-142	A-158	PB	PB	PB
			1.31	16900	1720				A-126	A-142	A-159	PB	PB	P
			1.79	16900	1720				A-126	A-142	A-159	PB	PB	P
50.0	1360	139	1.00	14700	1500	10	- 6145	- 29	A-126	A-142	A-158	PB	PB	PB
			1.52	17600	1790				A-126	A-142	A-159	PB	PB	P
			1.80	20100	2050				A-127	A-143	A-159	PB	PB	P
41.4	1640	167	0.84	14500	1480	10	- 6145	- 35	A-126	A-142	A-158	PB	PB	PB
			1.28	18600	1890				A-126	A-142	A-159	PB	PB	P
			1.49	21200	2160				A-127	A-143	A-159	PB	PB	P
			1.92	21200	2160				A-127	A-143	A-159	PB	PB	P
33.7	2020	206	1.04	19700	2010	10	- 6165	- 43	A-126	A-142	A-159	PB	PB	P
			1.51	22500	2300				A-127	A-143	A-159	PB	PB	P
			2.01	30700	3130				A-127	A-143	A-160	PB	PB	P
28.4	2390	244	0.88	20400	2080	10	- 6165	- 51	A-126	A-142	A-159	PB	PB	P
			1.02	23400	2390				A-127	A-143	A-159	PB	PB	P
			1.32	23400	2390				A-127	A-143	A-159	PB	PB	P
			1.60	31700	3230				A-127	A-143	A-160	PB	PB	P
			2.01	31700	3230				A-127	A-143	A-160	PB	PB	P

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
1.40	33700	3430	1.02	258000	26300	8	6255DA	1247	A-137	A-154	A-170	PB	PB	P
			1.37	276000	28100				A-138	A-154	A-170	PB	PB	P
1.18	40000	4070	1.10	276000	28100	8	6265DA	1479	A-138	A-154	A-170	PB	PB	P

<h1>7.5 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4P
	1750r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	233	23.8	1.25	5650	576	10	6130	6	A-126	A-142	A-158	PB	PB	PB
			1.51	5650	576				A-126	A-142	A-158	PB	PB	PB
			1.73	8830	901				A-126	A-142	A-158	PB	PB	PB
			2.01	8830	901				A-126	A-142	A-158	PB	PB	PB
219	311	31.7	1.25	6290	641	10	6130	8	A-126	A-142	A-158	PB	PB	PB
			1.51	6290	641				A-126	A-142	A-158	PB	PB	PB
			1.73	9790	998				A-126	A-142	A-158	PB	PB	PB
			2.01	9790	998				A-126	A-142	A-158	PB	PB	PB
159	428	43.6	1.25	7150	729	10	6130	11	A-126	A-142	A-158	PB	PB	PB
			1.51	7150	729				A-126	A-142	A-158	PB	PB	PB
			1.73	11000	1120				A-126	A-142	A-158	PB	PB	PB
			2.01	11000	1120				A-126	A-142	A-158	PB	PB	PB
135	505	51.5	1.25	7430	758	10	6130	13	A-126	A-142	A-158	PB	PB	PB
			1.51	7430	758				A-126	A-142	A-158	PB	PB	PB
			1.73	11200	1140				A-126	A-142	A-158	PB	PB	PB
			2.01	11200	1140				A-126	A-142	A-158	PB	PB	PB
117	583	59.5	1.20	7570	771	10	6135	15	A-126	A-142	A-158	PB	PB	PB
			1.60	11700	1200				A-126	A-142	A-158	PB	PB	PB
			2.01	11700	1200				A-126	A-142	A-158	PB	PB	PB
103	661	67.4	1.11	8100	826	10	6135	17	A-126	A-142	A-158	PB	PB	PB
			1.35	12200	1250				A-126	A-142	A-158	PB	PB	PB
			1.60	12200	1250				A-126	A-142	A-158	PB	PB	PB
			1.75	14300	1450				A-126	A-142	A-159	PB	PB	P
83.3	817	83.2	1.00	8590	876	10	6135	21	A-126	A-142	A-158	PB	PB	PB
			1.47	13100	1330				A-126	A-142	A-158	PB	PB	PB
			1.72	15300	1560				A-126	A-142	A-159	PB	PB	P
			2.15	15300	1560				A-126	A-142	A-159	PB	PB	P
70.0	972	99.1	1.05	13700	1390	10	6145	25	A-126	A-142	A-158	PB	PB	PB
			1.31	15900	1630				A-126	A-142	A-159	PB	PB	P
			2.01	15900	1630				A-126	A-142	A-159	PB	PB	P
60.3	1130	115	1.00	14000	1420	10	6145	29	A-126	A-142	A-158	PB	PB	PB
			1.52	16600	1690				A-126	A-142	A-159	PB	PB	P
			1.91	18900	1930				A-127	A-143	A-159	PB	PB	P
50.0	1360	139	1.00	14900	1520	10	6145	35	A-126	A-142	A-158	PB	PB	PB
			1.52	17500	1790				A-126	A-142	A-159	PB	PB	P
			1.60	20000	2040				A-127	A-143	A-159	PB	PB	P
			2.01	20000	2040				A-127	A-143	A-159	PB	PB	P
40.7	1670	170	1.05	18600	1900	10	6165	43	A-126	A-142	A-159	PB	PB	P
			1.51	21300	2170				A-127	A-143	A-159	PB	PB	P
			2.01	28900	2950				A-127	A-143	A-160	PB	PB	P
34.3	1980	202	1.00	19300	1970	10	6165	51	A-126	A-142	A-159	PB	PB	P
			1.12	22100	2250				A-127	A-143	A-159	PB	PB	P
			1.51	22100	2250				A-127	A-143	A-159	PB	PB	P
			1.60	29900	3050				A-127	A-143	A-160	PB	PB	P
			2.01	29900	3050				A-127	A-143	A-160	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load P_{ro}		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
24.6	2770	282	1.11	24400	2490	10	6175	59	A-127	A-143	A-159	PB	PB	P
			1.30	33100	3380	10	6180	59	A-127	A-143	A-160	PB	PB	P
			1.60	33100	3380	10	6185	59	A-127	A-143	A-160	PB	PB	P
			2.04	46800	4770	10	6190	59	A-127	A-143	A-160	PB	PB	P
20.4	3330	340	0.93	25700	2620	10	6175	71	A-127	A-143	A-159	PB	PB	P
			1.17	35100	3580	10	6180	71	A-127	A-143	A-160	PB	PB	P
			1.31	35100	3580	10	6185	71	A-127	A-143	A-160	PB	PB	P
			1.80	49600	5050	10	6190	71	A-127	A-143	A-160	PB	PB	P
16.7	4080	416	1.15	37700	3840	10	6185	87	A-127	A-143	A-160	PB	PB	P
			1.56	53300	5430	10	6190	87	A-127	A-143	A-160	PB	PB	P
			1.81	53300	5430	10	6195	87	A-127	A-143	A-160	PB	PB	P
13.9	4620	471	1.06	40000	4080	10	6185DB	104	A-134	A-150	A-166	PB	PB	P
			1.59	56400	5750	10	6195DB	104	A-134	A-150	A-166	PB	PB	P
12.0	5380	548	0.89	41700	4250	10	6185DB	121	A-134	A-150	A-166	PB	PB	P
			1.19	59000	6010	10	6190DB	121	A-134	A-150	A-166	PB	PB	P
			1.41	59000	6010	10	6195DB	121	A-134	A-150	A-166	PB	PB	P
			2.12	104000	10600	10	6215DB	121	A-135	A-152	A-168	PB	PB	P
10.1	6360	648	1.20	58700	5980	10	6195DB	143	A-134	A-150	A-166	PB	PB	P
8.79	7340	748	1.08	58500	5960	10	6195DB	165	A-134	A-150	A-166	PB	PB	P
			1.59	104000	10600	10	6215DA	165	A-135	A-151	A-167	PB	PB	P
			1.66	104000	10600	10	6215DB	165	A-135	A-152	A-168	PB	PB	P
			1.97	124000	12600	10	6225DB	165	A-136	A-152	A-168	PB	PB	P
7.44	8670	884	0.91	58000	5910	10	6195DB	195	A-134	A-150	A-166	PB	PB	P
			1.07	84100	8570	10	6205DB	195	A-135	A-151	A-167	PB	PB	P
			1.40	104000	10600	10	6215DA	195	A-135	A-151	A-167	PB	PB	P
			1.67	130000	13300	10	6225DB	195	A-136	A-152	A-168	PB	PB	P
			2.26	162000	16500	10	6235DA	195	A-137	A-153	A-169	PB	PB	P
6.28	10300	1050	0.90	84100	8570	10	6205DB	231	A-135	A-151	A-167	PB	PB	P
			1.22	104000	10600	10	6215DA	231	A-135	A-151	A-167	PB	PB	P
			1.44	138000	14100	10	6225DA	231	A-136	A-152	A-168	PB	PB	P
			1.84	173000	17600	10	6235DA	231	A-137	A-153	A-169	PB	PB	P
5.31	12100	1240	1.03	104000	10600	10	6215DA	273	A-135	A-151	A-167	PB	PB	P
			1.56	179000	18200	10	6235DA	273	A-137	A-153	A-169	PB	PB	P
			2.13	202000	20600	10	6245DA	273	A-137	A-153	A-169	PB	PB	P
4.55	14200	1450	0.89	104000	10600	10	6215DA	319	A-135	A-151	A-167	PB	PB	P
			1.06	145000	14800	10	6225DA	319	A-136	A-152	A-168	PB	PB	P
			1.33	179000	18200	10	6235DA	319	A-137	A-153	A-169	PB	PB	P
			1.82	208000	21200	10	6245DA	319	A-137	A-153	A-169	PB	PB	P
3.85	16800	1710	0.90	145000	14800	10	6225DA	377	A-136	A-152	A-168	PB	PB	P
			1.13	179000	18200	10	6235DA	377	A-137	A-153	A-169	PB	PB	P
			1.54	208000	21200	10	6245DA	377	A-137	A-153	A-169	PB	PB	P
			1.94	258000	26300	10	6255DA	377	A-137	A-154	A-170	PB	PB	P
3.07	21000	2140	0.97	179000	18200	10	6235DA	473	A-137	A-153	A-169	PB	PB	P
			1.23	208000	21200	10	6245DA	473	A-137	A-153	A-169	PB	PB	P
			1.64	258000	26300	10	6255DA	473	A-137	A-154	A-170	PB	PB	P
			2.19	276000	28100	10	6265DA	473	A-138	A-154	A-170	PB	PB	P
2.59	24900	2530	0.82	179000	18200	10	6235DA	559	A-137	A-153	A-169	PB	PB	P
			1.04	208000	21200	10	6245DA	559	A-137	A-153	A-169	PB	PB	P
			1.39	258000	26300	10	6255DA	559	A-137	A-154	A-170	PB	PB	P
			1.85	276000	28100	10	6265DA	559	A-138	A-154	A-170	PB	PB	P
2.23	28900	2940	0.89	208000	21200	10	6245DA	649	A-137	A-153	A-169	PB	PB	P
			1.20	258000	26300	10	6255DA	649	A-137	A-154	A-170	PB	PB	P
			1.59	276000	28100	10	6265DA	649	A-138	A-154	A-170	PB	PB	P
			2.36	248000	25300	10	6275DA	649	A-138	-	A-170	PB	PB	TP
1.98	32500	3310	1.06	258000	26300	10	6255DA	731	A-137	A-154	A-170	PB	PB	P
			1.42	276000	28100	10	6265DA	731	A-138	A-154	A-170	PB	PB	P
			2.10	248000	25300	10	6275DA	731	A-138	-	A-170	PB	PB	TP

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load P_{ro} is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
29.7	2290	234	1.11	23100	2360	10	- 6175	- 59	A-127	A-143	A-159	PB	PB	P
			1.30	31200	3180	10	- 6180	- 59	A-127	A-143	A-160	PB	PB	P
			1.60	31200	3180	10	- 6185	- 59	A-127	A-143	A-160	PB	PB	P
			2.04	44000	4490	10	- 6190	- 59	A-127	A-143	A-160	PB	PB	P
24.6	2760	281	0.95	24300	2480	10	- 6175	- 71	A-127	A-143	A-159	PB	PB	P
			1.17	33100	3380	10	- 6180	- 71	A-127	A-143	A-160	PB	PB	P
			1.31	33100	3380	10	- 6185	- 71	A-127	A-143	A-160	PB	PB	P
			1.80	46700	4760	10	- 6190	- 71	A-127	A-143	A-160	PB	PB	P
20.1	3380	345	1.15	35600	3620	10	- 6185	- 87	A-127	A-143	A-160	PB	PB	P
			1.57	50200	5120	10	- 6190	- 87	A-127	A-143	A-160	PB	PB	P
			1.81	50200	5120	10	- 6195	- 87	A-127	A-143	A-160	PB	PB	P
16.8	3830	391	1.28	37800	3850	10	- 6185DB	- 104	A-134	A-150	A-166	PB	PB	P
			1.59	53200	5420	10	- 6195DB	- 104	A-134	A-150	A-166	PB	PB	P
14.5	4460	454	1.08	40100	4090	10	- 6185DB	- 121	A-134	A-150	A-166	PB	PB	P
			1.43	56600	5770	10	- 6190DB	- 121	A-134	A-150	A-166	PB	PB	P
			1.59	56600	5770	10	- 6195DB	- 121	A-134	A-150	A-166	PB	PB	P
			2.55	102000	10400	10	- 6215DB	- 121	A-135	A-152	A-168	PB	PB	P
12.2	5270	537	1.45	58800	5990	10	- 6195DB	- 143	A-134	A-150	A-166	PB	PB	P
10.6	6080	620	1.30	59000	6010	10	- 6195DB	- 165	A-134	A-150	A-166	PB	PB	P
			1.59	104000	10600	10	- 6215DA	- 165	A-135	A-151	A-167	PB	PB	P
			2.00	104000	10600	10	- 6215DB	- 165	A-135	A-152	A-168	PB	PB	P
			2.38	117000	12000	10	- 6225DB	- 165	A-136	A-152	A-168	PB	PB	P
8.97	7180	732	1.10	58600	5970	10	- 6195DB	- 195	A-134	A-150	A-166	PB	PB	P
			1.29	84100	8570	10	- 6205DB	- 195	A-135	A-151	A-167	PB	PB	P
			1.59	104000	10600	10	- 6215DA	- 195	A-135	A-151	A-167	PB	PB	P
			2.02	123000	12600	10	- 6225DB	- 195	A-136	A-152	A-168	PB	PB	P
			2.73	153000	15600	10	- 6235DA	- 195	A-137	A-153	A-169	PB	PB	P
7.58	8510	867	1.09	84100	8570	10	- 6205DB	- 231	A-135	A-151	A-167	PB	PB	P
			1.47	104000	10600	10	- 6215DA	- 231	A-135	A-151	A-167	PB	PB	P
			1.59	131000	13400	10	- 6225DA	- 231	A-136	A-152	A-168	PB	PB	P
			2.22	164000	16700	10	- 6235DA	- 231	A-137	A-153	A-169	PB	PB	P
6.41	10100	1030	1.24	104000	10600	10	- 6215DA	- 273	A-135	A-151	A-167	PB	PB	P
			1.88	172000	17500	10	- 6235DA	- 273	A-137	A-153	A-169	PB	PB	P
			2.57	191000	19500	10	- 6245DA	- 273	A-137	A-153	A-169	PB	PB	P
5.49	11800	1200	1.08	104000	10600	10	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
			1.28	143000	14600	10	- 6225DA	- 319	A-136	A-152	A-168	PB	PB	P
			1.61	179000	18200	10	- 6235DA	- 319	A-137	A-153	A-169	PB	PB	P
			2.20	199000	20300	10	- 6245DA	- 319	A-137	A-153	A-169	PB	PB	P
4.64	13900	1420	1.08	145000	14800	10	- 6225DA	- 377	A-136	A-152	A-168	PB	PB	P
			1.36	179000	18200	10	- 6235DA	- 377	A-137	A-153	A-169	PB	PB	P
			1.86	208000	21200	10	- 6245DA	- 377	A-137	A-153	A-169	PB	PB	P
			2.34	257000	26200	10	- 6255DA	- 377	A-137	A-154	A-170	PB	PB	P
3.70	17400	1780	1.18	179000	18200	10	- 6235DA	- 473	A-137	A-153	A-169	PB	PB	P
			1.48	208000	21200	10	- 6245DA	- 473	A-137	A-153	A-169	PB	PB	P
			1.98	258000	26300	10	- 6255DA	- 473	A-137	A-154	A-170	PB	PB	P
			2.64	276000	28100	10	- 6265DA	- 473	A-138	A-154	A-170	PB	PB	P
3.13	20600	2100	1.00	179000	18200	10	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
			1.25	208000	21200	10	- 6245DA	- 559	A-137	A-153	A-169	PB	PB	P
			1.68	258000	26300	10	- 6255DA	- 559	A-137	A-154	A-170	PB	PB	P
			2.23	276000	28100	10	- 6265DA	- 559	A-138	A-154	A-170	PB	PB	P
2.70	23900	2440	1.08	208000	21200	10	- 6245DA	- 649	A-137	A-153	A-169	PB	PB	P
			1.44	258000	26300	10	- 6255DA	- 649	A-137	A-154	A-170	PB	PB	P
			1.92	276000	28100	10	- 6265DA	- 649	A-138	A-154	A-170	PB	PB	P
			2.85	248000	25300	10	- 6275DA	- 649	A-138	-	A-170	PB	PB	TP
2.39	26900	2740	1.28	258000	26300	10	- 6255DA	- 731	A-137	A-154	A-170	PB	PB	P
			1.71	276000	28100	10	- 6265DA	- 731	A-138	A-154	A-170	PB	PB	P
			2.53	248000	25300	10	- 6275DA	- 731	A-138	-	A-170	PB	PB	TP

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
TP: Positive displacement pump lubrication

5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
1.72	37400	3810	0.87	258000	26300	10	- 6255DA	- 841	A-137	A-154	A-170	PB	PB	P
			1.23	276000	28100				A-138	A-154	A-170	PB	PB	P
			1.82	248000	25300				A-138	-	A-170	PB	-	TP
1.45	44600	4550	1.03	276000	28100	10	- 6265DA	- 1003	A-138	A-154	A-170	PB	PB	P
			1.53	248000	25300				A-138	-	A-170	PB	-	TP
1.16	55400	5650	0.83	276000	28100	10	- 6265DA	- 1247	A-138	A-154	A-170	PB	PB	P
			1.23	248000	25300				A-138	-	A-170	PB	-	TP
0.980	65800	6700	1.04	247000	25200	10	- 6275DA	- 1479	A-138	-	A-170	PB	-	TP
0.784	82200	8380	0.83	248000	25300	10	- 6275DA	- 1849	A-138	-	A-170	PB	-	TP

11 kW
50 Hz

Motor Speed n_1

4 P

1450 r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	413	42.1	1.03	5840	595	15	- 6135	- 6	A-126	A-142	A-158	PB	PB	PB
			1.37	9270	945				A-126	A-142	A-158	PB	PB	PB
			1.85	10400	1060				A-126	A-142	A-159	PB	PB	P
181	551	56.1	1.03	6480	661	15	- 6135	- 8	A-126	A-142	A-158	PB	PB	PB
			1.37	10300	1050				A-126	A-142	A-158	PB	PB	PB
			1.79	11600	1180				A-126	A-142	A-159	PB	PB	P
132	757	77.2	1.03	7360	750	15	- 6135	- 11	A-126	A-142	A-158	PB	PB	PB
			1.37	11500	1170				A-126	A-142	A-158	PB	PB	PB
			1.79	13100	1330				A-126	A-142	A-159	PB	PB	P
112	895	91.2	0.93	7630	778	15	- 6135	- 13	A-126	A-142	A-158	PB	PB	PB
			1.18	11700	1200				A-126	A-142	A-158	PB	PB	PB
			1.37	11700	1200				A-126	A-142	A-158	PB	PB	PB
			1.79	13700	1390				A-126	A-142	A-159	PB	PB	P
96.7	1030	105	0.82	7740	789	15	- 6135	- 15	A-126	A-142	A-158	PB	PB	PB
			1.09	12300	1250				A-126	A-142	A-158	PB	PB	PB
			1.32	12300	1250				A-126	A-142	A-158	PB	PB	PB
			1.70	14500	1470				A-126	A-142	A-159	PB	PB	P
			2.04	14500	1470				A-126	A-142	A-159	PB	PB	P
85.3	1170	119	1.09	12800	1300	15	- 6145	- 17	A-126	A-142	A-158	PB	PB	PB
			1.71	14900	1520				A-126	A-142	A-159	PB	PB	P
			1.79	16900	1720				A-127	A-143	A-159	PB	PB	P
69.0	1450	147	0.86	13600	1390	15	- 6145	- 21	A-126	A-142	A-158	PB	PB	PB
			1.17	15900	1620				A-126	A-142	A-159	PB	PB	P
			1.45	15900	1620				A-126	A-142	A-159	PB	PB	P
			1.69	18200	1860				A-127	A-143	A-159	PB	PB	P
			2.15	18200	1860				A-127	A-143	A-159	PB	PB	P
58.0	1720	175	1.22	16600	1690	15	- 6165	- 25	A-126	A-142	A-159	PB	PB	P
			1.42	18800	1920				A-127	A-143	A-159	PB	PB	P
			1.77	18800	1920				A-127	A-143	A-159	PB	PB	P
50.0	2000	203	1.04	17200	1750	15	- 6165	- 29	A-126	A-142	A-159	PB	PB	P
			1.58	19800	2010				A-127	A-143	A-159	PB	PB	P
			1.77	26600	2710				A-127	A-143	A-160	PB	PB	P
41.4	2410	246	0.87	18100	1840	15	- 6165	- 35	A-126	A-142	A-159	PB	PB	P
			1.02	20900	2130				A-127	A-143	A-159	PB	PB	P
			1.31	20900	2130				A-127	A-143	A-159	PB	PB	P
			1.68	28400	2890				A-127	A-143	A-160	PB	PB	P
			2.05	28400	2890				A-127	A-143	A-160	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.08	31000	3160	1.05	258000	26300	10	- 6255DA	- 841	A-137	A-154	A-170	PB	PB	P
			1.48	276000	28100	10	- 6265DA	- 841	A-138	A-154	A-170	PB	PB	P
			2.20	248000	25300	10	- 6275DA	- 841	A-138	-	A-170	PB	-	TP
1.74	36900	3770	1.25	276000	28100	10	- 6265DA	- 1003	A-138	A-154	A-170	PB	PB	P
			1.85	248000	25300	10	- 6275DA	- 1003	A-138	-	A-170	PB	-	TP
1.40	45900	4680	1.00	276000	28100	10	- 6265DA	- 1247	A-138	A-154	A-170	PB	PB	P
			1.48	248000	25300	10	- 6275DA	- 1247	A-138	-	A-170	PB	-	TP
1.18	54500	5550	1.25	248000	25300	10	- 6275DA	- 1479	A-138	-	A-170	PB	-	TP
0.946	68100	6940	1.00	248000	25300	10	- 6275DA	- 1849	A-138	-	A-170	PB	-	TP

<h1>11 kW</h1> <h1>60 Hz</h1>	Motor Speed n ₁
	4 P
	1750 r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	342	34.9	1.03	5540	564	15	- 6135	- 6	A-126	A-142	A-158	PB	PB	PB
			1.37	8780	895	15	- 6145	- 6	A-126	A-142	A-158	PB	PB	PB
			1.85	9760	995	15	- 6160	- 6	A-126	A-142	A-159	PB	PB	P
219	456	46.5	1.03	6150	627	15	- 6135	- 8	A-126	A-142	A-158	PB	PB	PB
			1.37	9730	992	15	- 6145	- 8	A-126	A-142	A-158	PB	PB	PB
			1.79	10900	1110	15	- 6160	- 8	A-126	A-142	A-159	PB	PB	P
159	627	63.9	1.03	6980	712	15	- 6135	- 11	A-126	A-142	A-158	PB	PB	PB
			1.37	10900	1110	15	- 6145	- 11	A-126	A-142	A-158	PB	PB	PB
			1.79	12300	1260	15	- 6160	- 11	A-126	A-142	A-159	PB	PB	P
135	741	75.6	1.03	7250	739	15	- 6135	- 13	A-126	A-142	A-158	PB	PB	PB
			1.18	11100	1140	15	- 6140	- 13	A-126	A-142	A-158	PB	PB	PB
			1.37	11100	1140	15	- 6145	- 13	A-126	A-142	A-158	PB	PB	PB
			1.79	12900	1320	15	- 6160	- 13	A-126	A-142	A-159	PB	PB	P
117	855	87.2	0.82	7360	750	15	- 6135	- 15	A-126	A-142	A-158	PB	PB	PB
			1.09	11600	1190	15	- 6140	- 15	A-126	A-142	A-158	PB	PB	PB
			1.37	11600	1190	15	- 6145	- 15	A-126	A-142	A-158	PB	PB	PB
			1.70	13600	1390	15	- 6160	- 15	A-126	A-142	A-159	PB	PB	P
			2.05	13600	1390	15	- 6165	- 15	A-126	A-142	A-159	PB	PB	P
103	969	98.8	1.09	12100	1240	15	- 6145	- 17	A-126	A-142	A-158	PB	PB	PB
			1.71	14100	1430	15	- 6165	- 17	A-126	A-142	A-159	PB	PB	P
			1.79	16000	1630	15	- 6170	- 17	A-127	A-143	A-159	PB	PB	P
83.3	1200	122	1.00	12900	1320	15	- 6145	- 21	A-126	A-142	A-158	PB	PB	PB
			1.17	15000	1530	15	- 6160	- 21	A-126	A-142	A-159	PB	PB	P
			1.46	15000	1530	15	- 6165	- 21	A-126	A-142	A-159	PB	PB	P
			1.77	17200	1750	15	- 6170	- 21	A-127	A-143	A-159	PB	PB	P
			2.19	17200	1750	15	- 6175	- 21	A-127	A-143	A-159	PB	PB	P
70.0	1430	145	1.37	15700	1600	15	- 6165	- 25	A-126	A-142	A-159	PB	PB	P
			1.44	17800	1810	15	- 6170	- 25	A-127	A-143	A-159	PB	PB	P
			1.77	17800	1810	15	- 6175	- 25	A-127	A-143	A-159	PB	PB	P
60.3	1650	169	1.04	16300	1660	15	- 6165	- 29	A-126	A-142	A-159	PB	PB	P
			1.71	18700	1900	15	- 6175	- 29	A-127	A-143	A-159	PB	PB	P
			1.77	25100	2560	15	- 6180	- 29	A-127	A-143	A-160	PB	PB	P
50.0	2000	203	1.04	17100	1750	15	- 6165	- 35	A-126	A-142	A-159	PB	PB	P
			1.09	19700	2010	15	- 6170	- 35	A-127	A-143	A-159	PB	PB	P
			1.37	19700	2010	15	- 6175	- 35	A-127	A-143	A-159	PB	PB	P
			1.71	26700	2730	15	- 6180	- 35	A-127	A-143	A-160	PB	PB	P
			2.05	26700	2730	15	- 6185	- 35	A-127	A-143	A-160	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CFHM	CNVM CVVM	CNHM CHHM	CNFM CFHM	CNVM CVVM
33.7	2960	302	1.03	22100	2250	15	6175	43	A-127	A-143	A-159	PB	PB	P
			1.37	30300	3090	15	6180	43	A-127	A-143	A-160	PB	PB	P
			1.69	30300	3090	15	6185	43	A-127	A-143	A-160	PB	PB	P
			1.90	42600	4340	15	6190	43	A-127	A-143	A-160	PB	PB	P
28.4	3510	358	0.90	22900	2330	15	6175	51	A-127	A-143	A-159	PB	PB	P
			1.09	31300	3200	15	6180	51	A-127	A-143	A-160	PB	PB	P
			1.37	31300	3200	15	6185	51	A-127	A-143	A-160	PB	PB	P
			1.65	44400	4530	15	6190	51	A-127	A-143	A-160	PB	PB	P
24.6	4060	414	1.09	32700	3330	15	6185	59	A-127	A-143	A-160	PB	PB	P
			1.39	46400	4730	15	6190	59	A-127	A-143	A-160	PB	PB	P
			1.71	46400	4730	15	6195	59	A-127	A-143	A-160	PB	PB	P
			2.05	84100	8570	15	6205	59	A-128	A-144	A-161	PB	PB	P
20.4	4890	498	0.89	34500	3520	15	6185	71	A-127	A-143	A-160	PB	PB	P
			1.23	49100	5010	15	6190	71	A-127	A-143	A-160	PB	PB	P
			1.42	49100	5010	15	6195	71	A-127	A-143	A-160	PB	PB	P
16.7	5990	610	1.24	52700	5380	15	6195	87	A-127	A-143	A-160	PB	PB	P
			1.45	84100	8570	15	6205	87	A-128	A-144	A-161	PB	PB	P
			1.79	96600	9850	15	6215	87	A-128	A-144	A-161	PB	PB	P
13.9	6780	691	1.08	55600	5670	15	6195DB	104	A-134	A-150	A-166	PB	PB	P
12.0	7890	804	0.96	59000	6010	15	6195DB	121	A-134	A-150	A-166	PB	PB	P
			1.08	84100	8570	15	6205DB	121	A-135	A-151	A-167	PB	PB	P
			1.44	104000	10600	15	6215DB	121	A-135	A-152	A-168	PB	PB	P
			1.71	114000	11600	15	6225DB	121	A-136	A-152	A-168	PB	PB	P
			2.31	143000	14600	15	6235DA	121	A-137	A-153	A-169	PB	PB	P
10.1	9320	950	0.82	57600	5870	15	6195DB	143	A-134	A-150	A-166	PB	PB	P
8.79	10800	1100	0.86	84100	8570	15	6205DB	165	A-135	A-151	A-167	PB	PB	P
			1.08	104000	10600	15	6215DA	165	A-135	A-151	A-167	PB	PB	P
			1.35	123000	12600	15	6225DB	165	A-136	A-152	A-168	PB	PB	P
			1.82	153000	15600	15	6235DA	165	A-137	A-153	A-169	PB	PB	P
7.44	12700	1300	0.96	104000	10600	15	6215DA	195	A-135	A-151	A-167	PB	PB	P
			1.14	129000	13200	15	6225DB	195	A-136	A-152	A-168	PB	PB	P
			1.54	161000	16400	15	6235DA	195	A-137	A-153	A-169	PB	PB	P
			2.06	180000	18300	15	6245DA	195	A-137	A-153	A-169	PB	PB	P
6.28	15100	1540	0.83	104000	10600	15	6215DA	231	A-135	A-151	A-167	PB	PB	P
			1.25	172000	17500	15	6235DA	231	A-137	A-153	A-169	PB	PB	P
			1.71	191000	19500	15	6245DA	231	A-137	A-153	A-169	PB	PB	P
			2.06	233000	23800	15	6255DA	231	A-137	A-154	A-170	PB	PB	P
5.31	17800	1810	0.83	144000	14700	15	6225DA	273	A-136	A-152	A-168	PB	PB	P
			1.06	179000	18200	15	6235DA	273	A-137	A-153	A-169	PB	PB	P
			1.45	201000	20500	15	6245DA	273	A-137	A-153	A-169	PB	PB	P
			1.74	245000	25000	15	6255DA	273	A-137	A-154	A-170	PB	PB	P
			2.58	276000	28100	15	6265DA	273	A-138	A-154	A-170	PB	PB	P
4.55	20800	2120	0.91	179000	18200	15	6235DA	319	A-137	A-153	A-169	PB	PB	P
			1.24	208000	21200	15	6245DA	319	A-137	A-153	A-169	PB	PB	P
			1.56	258000	26300	15	6255DA	319	A-137	A-154	A-170	PB	PB	P
			2.21	276000	28100	15	6265DA	319	A-138	A-154	A-170	PB	PB	P
3.85	24600	2510	1.05	208000	21200	15	6245DA	377	A-137	A-153	A-169	PB	PB	P
			1.32	258000	26300	15	6255DA	377	A-137	A-154	A-170	PB	PB	P
			1.87	276000	28100	15	6265DA	377	A-138	A-154	A-170	PB	PB	P
3.07	30800	3140	0.84	208000	21200	15	6245DA	473	A-137	A-153	A-169	PB	PB	P
			1.12	258000	26300	15	6255DA	473	A-137	A-154	A-170	PB	PB	P
			1.49	276000	28100	15	6265DA	473	A-138	A-154	A-170	PB	PB	P
			2.21	248000	25300	15	6275DA	473	A-138	-	A-170	PB	-	TP
2.59	36400	3720	0.95	258000	26300	15	6255DA	559	A-137	A-154	A-170	PB	PB	P
			1.26	276000	28100	15	6265DA	559	A-138	A-154	A-170	PB	PB	P
			1.87	248000	25300	15	6275DA	559	A-138	-	A-170	PB	-	TP

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
40.7	2450	250	1.03	20900	2130	15	6175	43	A-127	A-143	A-159	PB	PB	P
			1.37	28600	2920	15	6180	43	A-127	A-143	A-160	PB	PB	P
			1.71	28600	2920	15	6185	43	A-127	A-143	A-160	PB	PB	P
			1.90	40100	4090	15	6190	43	A-127	A-143	A-160	PB	PB	P
34.3	2910	296	1.03	21700	2210	15	6175	51	A-127	A-143	A-159	PB	PB	P
			1.09	29600	3010	15	6180	51	A-127	A-143	A-160	PB	PB	P
			1.37	29600	3010	15	6185	51	A-127	A-143	A-160	PB	PB	P
			1.65	41900	4270	15	6190	51	A-127	A-143	A-160	PB	PB	P
			1.90	41900	4270	15	6195	51	A-127	A-143	A-160	PB	PB	P
29.7	3360	343	1.09	30900	3150	15	6185	59	A-127	A-143	A-160	PB	PB	P
			1.39	43700	4460	15	6190	59	A-127	A-143	A-160	PB	PB	P
			1.71	43700	4460	15	6195	59	A-127	A-143	A-160	PB	PB	P
			2.05	79900	8150	15	6205	59	A-128	A-144	A-161	PB	PB	P
24.6	4050	413	0.89	32700	3330	15	6185	71	A-127	A-143	A-160	PB	PB	P
			1.23	46300	4720	15	6190	71	A-127	A-143	A-160	PB	PB	P
			1.42	46300	4720	15	6195	71	A-127	A-143	A-160	PB	PB	P
20.1	4960	506	1.24	49700	5070	15	6195	87	A-127	A-143	A-160	PB	PB	P
			1.45	84100	8570	15	6205	87	A-128	A-144	A-161	PB	PB	P
			1.95	91500	9320	15	6215	87	A-128	A-144	A-161	PB	PB	P
16.8	5620	573	1.08	52500	5360	15	6195DB	104	A-134	A-150	A-166	PB	PB	P
14.5	6540	666	1.08	55900	5700	15	6195DB	121	A-134	A-150	A-166	PB	PB	P
			1.08	84100	8570	15	6205DB	121	A-135	A-151	A-167	PB	PB	P
			1.74	102000	10400	15	6215DB	121	A-135	A-152	A-168	PB	PB	P
			2.06	108000	11000	15	6225DB	121	A-136	A-152	A-168	PB	PB	P
			2.31	135000	13800	15	6235DA	121	A-137	A-153	A-169	PB	PB	P
12.2	7730	788	0.98	57900	5900	15	6195DB	143	A-134	A-150	A-166	PB	PB	P
10.6	8910	909	1.04	84100	8570	15	6205DB	165	A-135	A-151	A-167	PB	PB	P
			1.08	104000	10600	15	6215DA	165	A-135	A-151	A-167	PB	PB	P
			1.62	117000	11900	15	6225DB	165	A-136	A-152	A-168	PB	PB	P
			2.20	145000	14800	15	6235DA	165	A-137	A-153	A-169	PB	PB	P
8.97	10500	1070	1.08	104000	10600	15	6215DA	195	A-135	A-151	A-167	PB	PB	P
			1.37	122000	12500	15	6225DB	195	A-136	A-152	A-168	PB	PB	P
			1.86	152000	15500	15	6235DA	195	A-137	A-153	A-169	PB	PB	P
			2.17	170000	17300	15	6245DA	195	A-137	A-153	A-169	PB	PB	P
7.58	12500	1270	1.00	104000	10600	15	6215DA	231	A-135	A-151	A-167	PB	PB	P
			1.51	163000	16600	15	6235DA	231	A-137	A-153	A-169	PB	PB	P
			2.07	181000	18500	15	6245DA	231	A-137	A-153	A-169	PB	PB	P
			2.48	221000	22500	15	6255DA	231	A-137	A-154	A-170	PB	PB	P
6.41	14700	1500	1.00	137000	13900	15	6225DA	273	A-136	A-152	A-168	PB	PB	P
			1.28	171000	17400	15	6235DA	273	A-137	A-153	A-169	PB	PB	P
			1.75	190000	19400	15	6245DA	273	A-137	A-153	A-169	PB	PB	P
			2.10	232000	23600	15	6255DA	273	A-137	A-154	A-170	PB	PB	P
			3.12	276000	28100	15	6265DA	273	A-138	A-154	A-170	PB	PB	P
5.49	17200	1760	1.10	177000	18100	15	6235DA	319	A-137	A-153	A-169	PB	PB	P
			1.50	198000	20200	15	6245DA	319	A-137	A-153	A-169	PB	PB	P
			1.88	244000	24900	15	6255DA	319	A-137	A-154	A-170	PB	PB	P
			2.67	276000	28100	15	6265DA	319	A-138	A-154	A-170	PB	PB	P
4.64	20400	2080	1.27	208000	21200	15	6245DA	377	A-137	A-153	A-169	PB	PB	P
			1.59	256000	26100	15	6255DA	377	A-137	A-154	A-170	PB	PB	P
			2.26	276000	28100	15	6265DA	377	A-138	A-154	A-170	PB	PB	P
3.70	25600	2600	1.01	208000	21200	15	6245DA	473	A-137	A-153	A-169	PB	PB	P
			1.35	258000	26300	15	6255DA	473	A-137	A-154	A-170	PB	PB	P
			1.80	276000	28100	15	6265DA	473	A-138	A-154	A-170	PB	PB	P
			2.67	248000	25300	15	6275DA	473	A-138	-	A-170	PB	-	TP
3.13	30200	3080	1.14	258000	26300	15	6255DA	559	A-137	A-154	A-170	PB	PB	P
			1.52	276000	28100	15	6265DA	559	A-138	A-154	A-170	PB	PB	P
			2.26	248000	25300	15	6275DA	559	A-138	-	A-170	PB	-	TP

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVW CVWM	CNHM CHHM	CNFM CHFM	CNVW CVWM
2.23	42300	4310	0.82	258000	26300	15	- 6255DA	- 649	A-137	A-154	A-170	PB	PB	P
			1.09	276000	28100				A-138	A-154	A-170	PB	PB	P
			1.61	248000	25300				A-138	-	A-170	PB	-	TP
1.98	47700	4860	0.97	276000	28100	15	- 6265DA	- 731	A-138	A-154	A-170	PB	PB	P
			1.43	248000	25300				A-138	-	A-170	PB	-	TP
1.72	54800	5590	0.84	276000	28100	15	- 6265DA	- 841	A-138	A-154	A-170	PB	PB	P
			1.24	248000	25300				A-138	-	A-170	PB	-	TP
1.45	65400	6670	1.04	248000	25300	15	- 6275DA	- 1003	A-138	-	A-170	PB	-	TP
1.16	81300	8290	0.84	248000	25300	15	- 6275DA	- 1247	A-138	-	A-170	PB	-	TP

<h1>15 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1	
	4P	6P
	1450r/min	980r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVW CVWM	CNHM CHHM	CNFM CHFM	CNVW CVWM
242	563	57.4	1.01	9200	938	20	- 6145	- 6	A-126	A-142	A-158	PB	PB	PB
			1.35	10200	1040				A-126	A-142	A-159	PB	PB	P
			1.61	10200	1040				A-126	A-142	A-159	PB	PB	P
			1.84	11600	1180				A-127	A-143	A-159	PB	PB	P
181	751	76.5	1.01	10200	1040	20	- 6145	- 8	A-126	A-142	A-158	PB	PB	PB
			1.31	11400	1170				A-126	A-142	A-159	PB	PB	P
			1.61	11400	1170				A-126	A-142	A-159	PB	PB	P
			1.84	12800	1310				A-127	A-143	A-159	PB	PB	P
132	1030	105	1.01	11400	1160	20	- 6145	- 11	A-126	A-142	A-158	PB	PB	PB
			1.31	12900	1320				A-126	A-142	A-159	PB	PB	P
			1.61	12900	1320				A-126	A-142	A-159	PB	PB	P
			1.84	14700	1500				A-127	A-143	A-159	PB	PB	P
112	1220	124	1.01	11600	1190	20	- 6145	- 13	A-126	A-142	A-158	PB	PB	PB
			1.51	13500	1370				A-126	A-142	A-159	PB	PB	P
			1.82	15300	1560				A-127	A-143	A-159	PB	PB	P
96.7	1410	144	0.97	12100	1240	20	- 6145	- 15	A-126	A-142	A-158	PB	PB	PB
			1.25	14200	1450				A-126	A-142	A-159	PB	PB	P
			1.49	14200	1450				A-126	A-142	A-159	PB	PB	P
			1.70	16100	1640				A-127	A-143	A-159	PB	PB	P
			2.01	16100	1640				A-127	A-143	A-159	PB	PB	P
85.3	1600	163	0.80	12600	1290	20	- 6145	- 17	A-126	A-142	A-158	PB	PB	PB
			1.25	14600	1490				A-126	A-142	A-159	PB	PB	P
			1.31	16700	1700				A-127	A-143	A-159	PB	PB	P
			1.61	16700	1700				A-127	A-143	A-159	PB	PB	P
			2.04	22700	2320				A-127	A-143	A-160	PB	PB	P
69.0	1970	201	1.07	15600	1590	20	- 6165	- 21	A-126	A-142	A-159	PB	PB	P
			1.57	17900	1830				A-127	A-143	A-159	PB	PB	P
			2.00	24300	2480				A-127	A-143	A-160	PB	PB	P
58.0	2350	239	0.89	16200	1650	20	- 6165	- 25	A-126	A-142	A-159	PB	PB	P
			1.04	18500	1890				A-127	A-143	A-159	PB	PB	P
			1.30	18500	1890				A-127	A-143	A-159	PB	PB	P
			1.61	25300	2580				A-127	A-143	A-160	PB	PB	P
			2.01	25300	2580				A-127	A-143	A-160	PB	PB	P
50.0	2720	277	1.16	19400	1980	20	- 6175	- 29	A-127	A-143	A-159	PB	PB	P
			1.30	26400	2690				A-127	A-143	A-160	PB	PB	P
			1.61	26400	2690				A-127	A-143	A-160	PB	PB	P
			2.05	37400	3810				A-127	A-143	A-160	PB	PB	P

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.70	35100	3570	0.98	258000	26300	15	6255DA	649	A-137	A-154	A-170	PB	PB	P
			1.31	276000	28100	15	6265DA	649	A-138	A-154	A-170	PB	PB	P
			1.95	248000	25300	15	6275DA	649	A-138	-	A-170	PB	-	TP
2.39	39500	4030	1.16	276000	28100	15	6265DA	731	A-138	A-154	A-170	PB	PB	P
			1.73	248000	25300	15	6275DA	731	A-138	-	A-170	PB	-	TP
2.08	45400	4630	1.01	276000	28100	15	6265DA	841	A-138	A-154	A-170	PB	PB	P
			1.50	248000	25300	15	6275DA	841	A-138	-	A-170	PB	-	TP
1.74	54200	5520	1.26	248000	25300	15	6275DA	1003	A-138	-	A-170	PB	-	TP
1.40	67400	6870	1.01	248000	25300	15	6275DA	1247	A-138	-	A-170	PB	-	TP

15 kW 60 Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	467	47.6	1.01	8730	889	20	6145	6	A-126	A-142	A-158	PB	PB	PB
			1.35	9670	986	20	6160	6	A-126	A-142	A-159	PB	PB	P
			1.61	9670	986	20	6165	6	A-126	A-142	A-159	PB	PB	P
			1.84	10900	1110	20	6170	6	A-127	A-143	A-159	PB	PB	P
219	622	63.4	1.01	9660	984	20	6145	8	A-126	A-142	A-158	PB	PB	PB
			1.31	10800	1100	20	6160	8	A-126	A-142	A-159	PB	PB	P
			1.61	10800	1100	20	6165	8	A-126	A-142	A-159	PB	PB	P
			1.84	12100	1230	20	6170	8	A-127	A-143	A-159	PB	PB	P
159	855	87.2	1.01	10800	1100	20	6145	11	A-126	A-142	A-158	PB	PB	PB
			1.31	12200	1240	20	6160	11	A-126	A-142	A-159	PB	PB	P
			1.61	12200	1240	20	6165	11	A-126	A-142	A-159	PB	PB	P
			1.84	13900	1420	20	6170	11	A-127	A-143	A-159	PB	PB	P
135	1010	103	1.01	11000	1130	20	6145	13	A-126	A-142	A-158	PB	PB	PB
			1.51	12700	1300	20	6165	13	A-126	A-142	A-159	PB	PB	P
			1.82	14500	1470	20	6170	13	A-127	A-143	A-159	PB	PB	P
117	1170	119	1.01	11500	1170	20	6145	15	A-126	A-142	A-158	PB	PB	PB
			1.25	13500	1370	20	6160	15	A-126	A-142	A-159	PB	PB	P
			1.51	13500	1370	20	6165	15	A-126	A-142	A-159	PB	PB	P
			1.70	15200	1550	20	6170	15	A-127	A-143	A-159	PB	PB	P
			2.01	15200	1550	20	6175	15	A-127	A-143	A-159	PB	PB	P
103	1320	135	0.80	12000	1220	20	6145	17	A-126	A-142	A-158	PB	PB	PB
			1.25	13900	1410	20	6165	17	A-126	A-142	A-159	PB	PB	P
			1.31	15800	1610	20	6170	17	A-127	A-143	A-159	PB	PB	P
			1.61	15800	1610	20	6175	17	A-127	A-143	A-159	PB	PB	P
			2.04	21400	2180	20	6180	17	A-127	A-143	A-160	PB	PB	P
83.3	1630	166	1.07	14800	1510	20	6165	21	A-126	A-142	A-159	PB	PB	P
			1.61	17000	1730	20	6175	21	A-127	A-143	A-159	PB	PB	P
			2.00	22900	2340	20	6180	21	A-127	A-143	A-160	PB	PB	P
70.0	1940	198	1.01	15400	1570	20	6165	25	A-126	A-142	A-159	PB	PB	P
			1.05	17500	1780	20	6170	25	A-127	A-143	A-159	PB	PB	P
			1.30	17500	1780	20	6175	25	A-127	A-143	A-159	PB	PB	P
			1.61	23800	2430	20	6180	25	A-127	A-143	A-160	PB	PB	P
			2.01	23800	2430	20	6185	25	A-127	A-143	A-160	PB	PB	P
60.3	2260	230	1.25	18400	1870	20	6175	29	A-127	A-143	A-159	PB	PB	P
			1.30	24900	2540	20	6180	29	A-127	A-143	A-160	PB	PB	P
			1.61	24900	2540	20	6185	29	A-127	A-143	A-160	PB	PB	P
			2.05	35200	3580	20	6190	29	A-127	A-143	A-160	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
41.4	3280	335	0.96	20400	2080	20	- 6175	- 35	A-127	A-143	A-159	PB	PB	P
			1.23	28100	2860	20	- 6180	- 35	A-127	A-143	A-160	PB	PB	P
			1.51	28100	2860	20	- 6185	- 35	A-127	A-143	A-160	PB	PB	P
			1.62	39400	4020	20	- 6190	- 35	A-127	A-143	A-160	PB	PB	P
			2.01	39400	4020	20	- 6195	- 35	A-127	A-143	A-160	PB	PB	P
33.7	4040	411	1.24	29900	3050	20	- 6185	- 43	A-127	A-143	A-160	PB	PB	P
			1.39	42300	4310	20	- 6190	- 43	A-127	A-143	A-160	PB	PB	P
			1.81	42300	4310	20	- 6195	- 43	A-127	A-143	A-160	PB	PB	P
28.4	4790	488	1.01	30900	3150	20	- 6185	- 51	A-127	A-143	A-160	PB	PB	P
			1.39	44100	4490	20	- 6195	- 51	A-127	A-143	A-160	PB	PB	P
24.6	5540	564	0.80	32100	3270	20	- 6185	- 59	A-127	A-143	A-160	PB	PB	P
			1.25	46000	4690	20	- 6195	- 59	A-127	A-143	A-160	PB	PB	P
			1.51	84100	8570	20	- 6205	- 59	A-128	A-144	A-161	PB	PB	P
			2.26	85900	8760	20	- 6215	- 59	A-128	A-144	A-161	PB	PB	P
20.4	6660	679	1.04	48600	4960	20	- 6195	- 71	A-127	A-143	A-160	PB	PB	P
16.7	8170	832	0.91	52100	5310	20	- 6195	- 87	A-127	A-143	A-160	PB	PB	P
			1.06	84100	8570	20	- 6205	- 87	A-128	A-144	A-161	PB	PB	P
			1.31	96100	9790	20	- 6215	- 87	A-128	A-144	A-161	PB	PB	P
			1.78	102000	10400	20	- 6225	- 87	-	-	-	PB	PB	P
16.6	8190	835	1.13	84100	8570	206	- 6205	- 59	A-128	A-144	A-161	PB	PB	P
			1.55	96200	9800	206	- 6215	- 59	A-128	A-144	A-161	PB	PB	P
			1.94	102000	10400	206	- 6225	- 59	A-129	A-145	A-162	PB	PB	P
13.9	9250	943	0.80	54700	5580	20	- 6195DB	- 104	A-134	A-150	A-166	PB	PB	P
12.0	10800	1100	0.80	84100	8570	20	- 6205DB	- 121	A-135	A-151	A-167	PB	PB	P
			1.06	104000	10600	20	- 6215DB	- 121	A-135	A-152	A-168	PB	PB	P
			1.69	142000	14500	20	- 6235DA	- 121	A-137	A-153	A-169	PB	PB	P
			1.91	159000	16200	20	- 6245DB	- 121	A-137	A-153	A-169	PB	PB	P
11.3	12100	1230	1.25	114000	11600	206	- 6225	- 87	A-129	A-145	A-162	PB	PB	P
			1.42	142000	14500	206	- 6235	- 87	A-129	A-145	A-162	PB	PB	P
			1.87	159000	16200	206	- 6245	- 87	A-130	A-145	A-162	PB	PB	P
8.79	14700	1500	0.80	104000	10600	20	- 6215DA	- 165	A-135	A-151	A-167	PB	PB	P
			1.34	152000	15500	20	- 6235DA	- 165	A-137	A-153	A-169	PB	PB	P
			1.69	170000	17400	20	- 6245DA	- 165	A-137	A-153	A-169	PB	PB	P
			1.79	170000	17400	20	- 6245DB	- 165	A-137	A-153	A-169	PB	PB	P
7.44	17300	1770	0.84	128000	13100	20	- 6225DB	- 195	A-136	A-152	A-168	PB	PB	P
			1.13	160000	16300	20	- 6235DA	- 195	A-137	A-153	A-169	PB	PB	P
			1.51	179000	18200	20	- 6245DA	- 195	A-137	A-153	A-169	PB	PB	P
			1.80	219000	22300	20	- 6255DA	- 195	A-137	A-154	A-170	PB	PB	P
6.28	20500	2090	0.92	171000	17400	20	- 6235DA	- 231	A-137	A-153	A-169	PB	PB	P
			1.26	190000	19400	20	- 6245DA	- 231	A-137	A-153	A-169	PB	PB	P
			1.51	232000	23700	20	- 6255DA	- 231	A-137	A-154	A-170	PB	PB	P
			2.24	276000	28100	20	- 6265DA	- 231	A-138	A-154	A-170	PB	PB	P
5.31	24300	2470	1.06	200000	20300	20	- 6245DA	- 273	A-137	A-153	A-169	PB	PB	P
			1.90	276000	28100	20	- 6265DA	- 273	A-138	A-154	A-170	PB	PB	P
4.55	28400	2890	0.91	208000	21200	20	- 6245DA	- 319	A-137	A-153	A-169	PB	PB	P
			1.14	256000	26100	20	- 6255DA	- 319	A-137	A-154	A-170	PB	PB	P
			1.62	276000	28100	20	- 6265DA	- 319	A-138	A-154	A-170	PB	PB	P
			2.40	248000	25300	20	- 6275DA	- 319	A-138	-	A-170	PB	-	TP
3.85	33500	3420	0.97	258000	26300	20	- 6255DA	- 377	A-137	A-154	A-170	PB	PB	P
			1.37	276000	28100	20	- 6265DA	- 377	A-138	A-154	A-170	PB	PB	P
			2.03	248000	25300	20	- 6275DA	- 377	A-138	-	A-170	PB	-	TP
3.07	42100	4290	0.82	258000	26300	20	- 6255DA	- 473	A-137	A-154	A-170	PB	PB	P
			1.09	276000	28100	20	- 6265DA	- 473	A-138	A-154	A-170	PB	PB	P
			1.62	248000	25300	20	- 6275DA	- 473	A-138	-	A-170	PB	-	TP
2.59	49700	5070	0.93	276000	28100	20	- 6265DA	- 559	A-138	A-154	A-170	PB	PB	P
			1.37	248000	25300	20	- 6275DA	- 559	A-138	-	A-170	PB	-	TP

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	2720	277	1.01	19400	1970	20	6175	35	A-127	A-143	A-159	PB	PB	P
			1.25	26500	2700	20	6180	35	A-127	A-143	A-160	PB	PB	P
			1.51	26500	2700	20	6185	35	A-127	A-143	A-160	PB	PB	P
			1.62	37100	3780	20	6190	35	A-127	A-143	A-160	PB	PB	P
			2.01	37100	3780	20	6195	35	A-127	A-143	A-160	PB	PB	P
40.7	3340	341	1.25	28300	2880	20	6185	43	A-127	A-143	A-160	PB	PB	P
			1.39	39900	4060	20	6190	43	A-127	A-143	A-160	PB	PB	P
			2.01	39900	4060	20	6195	43	A-127	A-143	A-160	PB	PB	P
34.3	3970	404	1.01	29200	2980	20	6185	51	A-127	A-143	A-160	PB	PB	P
			1.39	41500	4230	20	6195	51	A-127	A-143	A-160	PB	PB	P
29.7	4590	468	0.80	30400	3100	20	6185	59	A-127	A-143	A-160	PB	PB	P
			1.25	43400	4430	20	6195	59	A-127	A-143	A-160	PB	PB	P
			1.51	79700	8120	20	6205	59	A-128	A-144	A-161	PB	PB	P
			2.51	81300	8290	20	6215	59	A-128	A-144	A-161	PB	PB	P
24.6	5520	563	1.04	45900	4680	20	6195	71	A-127	A-143	A-160	PB	PB	P
20.1	6770	690	0.91	49200	5010	20	6195	87	A-127	A-143	A-160	PB	PB	P
			1.06	84100	8570	20	6205	87	A-128	A-144	A-161	PB	PB	P
			1.43	91000	9280	20	6215	87	A-128	A-144	A-161	PB	PB	P
			1.78	96400	9830	20	6225	87	-	-	-	PB	PB	P
19.7	6890	703	1.30	84100	8570	206	6205	59	A-128	A-144	A-161	PB	PB	P
			1.83	91500	9330	206	6215	59	A-128	A-144	A-161	PB	PB	P
			2.22	97000	9890	206	6225	59	A-129	A-145	A-162	PB	PB	P
16.8	7660	781	0.80	51800	5280	20	6195DB	104	A-134	A-150	A-166	PB	PB	P
14.5	8910	909	0.80	84100	8570	20	6205DB	121	A-135	A-151	A-167	PB	PB	P
			1.28	101000	10300	20	6215DB	121	A-135	A-152	A-168	PB	PB	P
			1.69	135000	13800	20	6235DA	121	A-137	A-153	A-169	PB	PB	P
			2.30	150000	15300	20	6245DB	121	A-137	A-153	A-169	PB	PB	P
13.4	10200	1040	1.48	108000	11000	206	6225	87	A-129	A-145	A-162	PB	PB	P
			1.60	135000	13800	206	6235	87	A-129	A-145	A-162	PB	PB	P
			2.14	151000	15400	206	6245	87	A-130	A-145	A-162	PB	PB	P
10.6	12200	1240	0.80	104000	10600	20	6215DA	165	A-135	A-151	A-167	PB	PB	P
			1.61	144000	14700	20	6235DA	165	A-137	A-153	A-169	PB	PB	P
			1.69	161000	16400	20	6245DA	165	A-137	A-153	A-169	PB	PB	P
			2.16	161000	16400	20	6245DB	165	A-137	A-153	A-169	PB	PB	P
8.97	14400	1460	1.01	122000	12400	20	6225DB	195	A-136	A-152	A-168	PB	PB	P
			1.37	151000	15400	20	6235DA	195	A-137	A-153	A-169	PB	PB	P
			1.59	169000	17200	20	6245DA	195	A-137	A-153	A-169	PB	PB	P
			2.12	207000	21100	20	6255DA	195	A-137	A-154	A-170	PB	PB	P
7.58	17000	1730	1.11	162000	16500	20	6235DA	231	A-137	A-153	A-169	PB	PB	P
			1.52	180000	18400	20	6245DA	231	A-137	A-153	A-169	PB	PB	P
			1.82	220000	22400	20	6255DA	231	A-137	A-154	A-170	PB	PB	P
			2.70	269000	27400	20	6265DA	231	A-138	A-154	A-170	PB	PB	P
6.41	20100	2050	1.28	189000	19300	20	6245DA	273	A-137	A-153	A-169	PB	PB	P
			2.29	276000	28100	20	6265DA	273	A-138	A-154	A-170	PB	PB	P
5.49	23500	2400	1.10	197000	20100	20	6245DA	319	A-137	A-153	A-169	PB	PB	P
			1.38	243000	24800	20	6255DA	319	A-137	A-154	A-170	PB	PB	P
			1.96	276000	28100	20	6265DA	319	A-138	A-154	A-170	PB	PB	P
			2.90	248000	25300	20	6275DA	319	A-138	-	A-170	PB	-	TP
4.64	27800	2830	1.17	255000	26000	20	6255DA	377	A-137	A-154	A-170	PB	PB	P
			1.66	276000	28100	20	6265DA	377	A-138	A-154	A-170	PB	PB	P
			2.46	248000	25300	20	6275DA	377	A-138	-	A-170	PB	-	TP
3.70	34800	3550	0.98	258000	26300	20	6255DA	473	A-137	A-154	A-170	PB	PB	P
			1.32	276000	28100	20	6265DA	473	A-138	A-154	A-170	PB	PB	P
			1.96	248000	25300	20	6275DA	473	A-138	-	A-170	PB	-	TP
3.13	41200	4200	1.12	276000	28100	20	6265DA	559	A-138	A-154	A-170	PB	PB	P
			1.66	248000	25300	20	6275DA	559	A-138	-	A-170	PB	-	TP

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.23	57700	5880	0.80	276000	28100	20	- 6265DA	- 649	A-138	A-154	A-170	PB	PB	P
			1.18	248000	25300				A-138	-	A-170	PB	-	TP
1.98	65000	6630	1.05	248000	25300	20	- 6275DA	- 731	A-138	-	A-170	PB	-	TP
1.72	74800	7620	0.91	248000	25300	20	- 6275DA	- 841	A-138	-	A-170	PB	-	TP

18.5 kW 50 Hz	Motor Speed n ₁	
	4P	6P
	1450r/min	980r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	695	70.8	1.10	10200	1030	25	- 6160	- 6	A-126	A-142	A-159	PB	PB	P
			1.30	10200	1030				A-126	A-142	A-159	PB	PB	P
			1.63	11500	1180				A-127	A-143	A-159	PB	PB	P
181	926	94.4	1.06	11300	1150	25	- 6160	- 8	A-126	A-142	A-159	PB	PB	P
			1.30	11300	1150				A-126	A-142	A-159	PB	PB	P
			1.63	12700	1300				A-127	A-143	A-159	PB	PB	P
132	1270	130	1.06	12700	1300	25	- 6160	- 11	A-126	A-142	A-159	PB	PB	P
			1.30	12700	1300				A-126	A-142	A-159	PB	PB	P
			1.63	14600	1490				A-127	A-143	A-159	PB	PB	P
			1.90	19500	1990				A-127	A-143	A-160	PB	PB	P
112	1500	153	1.22	13300	1350	25	- 6165	- 13	A-126	A-142	A-159	PB	PB	P
			1.48	15200	1550				A-127	A-143	A-159	PB	PB	P
			1.63	15200	1550				A-127	A-143	A-159	PB	PB	P
			1.90	20300	2070				A-127	A-143	A-160	PB	PB	P
96.7	1740	177	1.21	14000	1430	25	- 6165	- 15	A-126	A-142	A-159	PB	PB	P
			1.38	15800	1620				A-127	A-143	A-159	PB	PB	P
			1.63	15800	1620				A-127	A-143	A-159	PB	PB	P
			1.75	21400	2180				A-127	A-143	A-160	PB	PB	P
85.3	1970	201	1.02	14400	1460	25	- 6165	- 17	A-126	A-142	A-159	PB	PB	P
			1.30	16500	1680				A-127	A-143	A-159	PB	PB	P
			1.65	22600	2300				A-127	A-143	A-160	PB	PB	P
			2.06	22600	2300				A-127	A-143	A-160	PB	PB	P
69.0	2430	248	1.28	17700	1800	25	- 6175	- 21	A-127	A-143	A-159	PB	PB	P
			1.62	24200	2470				A-127	A-143	A-160	PB	PB	P
			2.06	24200	2470				A-127	A-143	A-160	PB	PB	P
58.0	2890	295	1.05	18200	1860	25	- 6175	- 25	A-127	A-143	A-159	PB	PB	P
			1.30	25100	2560				A-127	A-143	A-160	PB	PB	P
			1.63	25100	2560				A-127	A-143	A-160	PB	PB	P
			1.90	35400	3610				A-127	A-143	A-160	PB	PB	P
50.0	3360	342	0.94	19000	1940	25	- 6175	- 29	A-127	A-143	A-159	PB	PB	P
			1.05	26100	2660				A-127	A-143	A-160	PB	PB	P
			1.30	26100	2660				A-127	A-143	A-160	PB	PB	P
			1.66	37200	3790				A-127	A-143	A-160	PB	PB	P
			2.04	37200	3790				A-127	A-143	A-160	PB	PB	P
41.4	4050	413	1.22	27800	2830	25	- 6185	- 35	A-127	A-143	A-160	PB	PB	P
			1.31	39200	3990				A-127	A-143	A-160	PB	PB	P
			1.63	39200	3990				A-127	A-143	A-160	PB	PB	P
33.7	4980	507	1.01	29500	3010	25	- 6185	- 43	A-127	A-143	A-160	PB	PB	P
			1.46	42000	4290				A-127	A-143	A-160	PB	PB	P
			1.72	77300	7880				A-128	A-144	A-161	PB	PB	P
			2.44	78900	8050				A-128	A-144	A-161	PB	PB	P
28.4	5900	602	0.82	30400	3100	25	- 6185	- 51	A-127	A-143	A-160	PB	PB	P
			1.13	43700	4460				A-127	A-143	A-160	PB	PB	P

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.70	47800	4870	0.96	276000	28100	20	- 6265DA	- 649	A-138	A-154	A-170	PB	PB	P
			1.43	248000	25300				A-138	-	A-170	PB	-	TP
2.39	53900	5490	1.27	248000	25300	20	- 6275DA	- 731	A-138	-	A-170	PB	-	TP
2.08	62000	6320	1.10	248000	25300	20	- 6275DA	- 841	A-138	-	A-170	PB	-	TP

18.5 kW 60 Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	575	58.7	1.10	9590	978	25	- 6160	- 6	A-126	A-142	A-159	PB	PB	P
			1.30	9590	978				A-126	A-142	A-159	PB	PB	P
			1.63	10900	1110				A-127	A-143	A-159	PB	PB	P
219	767	78.2	1.06	10700	1090	25	- 6160	- 8	A-126	A-142	A-159	PB	PB	P
			1.30	10700	1090				A-126	A-142	A-159	PB	PB	P
			1.63	12000	1220				A-127	A-143	A-159	PB	PB	P
159	1060	108	1.06	12100	1230	25	- 6160	- 11	A-126	A-142	A-159	PB	PB	P
			1.30	12100	1230				A-126	A-142	A-159	PB	PB	P
			1.63	13800	1410				A-127	A-143	A-159	PB	PB	P
			1.90	18400	1880				A-127	A-143	A-160	PB	PB	P
135	1250	127	1.22	12600	1280	25	- 6165	- 13	A-126	A-142	A-159	PB	PB	P
			1.48	14300	1460				A-127	A-143	A-159	PB	PB	P
			1.63	14300	1460				A-127	A-143	A-159	PB	PB	P
			1.90	19100	1950				A-127	A-143	A-160	PB	PB	P
117	1440	147	1.22	13300	1350	25	- 6165	- 15	A-126	A-142	A-159	PB	PB	P
			1.38	15000	1530				A-127	A-143	A-159	PB	PB	P
			1.63	15000	1530				A-127	A-143	A-159	PB	PB	P
			1.75	20200	2060				A-127	A-143	A-160	PB	PB	P
103	1630	166	1.02	13600	1390	25	- 6165	- 17	A-126	A-142	A-159	PB	PB	P
			1.30	15600	1590				A-127	A-143	A-159	PB	PB	P
			1.65	21300	2170				A-127	A-143	A-160	PB	PB	P
			2.11	21300	2170				A-127	A-143	A-160	PB	PB	P
83.3	2010	205	1.30	16800	1710	25	- 6175	- 21	A-127	A-143	A-159	PB	PB	P
			1.62	22800	2330				A-127	A-143	A-160	PB	PB	P
			2.11	22800	2330				A-127	A-143	A-160	PB	PB	P
70.0	2400	244	1.05	17300	1760	25	- 6175	- 25	A-127	A-143	A-159	PB	PB	P
			1.30	23700	2410				A-127	A-143	A-160	PB	PB	P
			1.63	23700	2410				A-127	A-143	A-160	PB	PB	P
			1.90	33300	3400				A-127	A-143	A-160	PB	PB	P
60.3	2780	284	1.02	18100	1840	25	- 6175	- 29	A-127	A-143	A-159	PB	PB	P
			1.05	24700	2520				A-127	A-143	A-160	PB	PB	P
			1.30	24700	2520				A-127	A-143	A-160	PB	PB	P
			1.66	35000	3570				A-127	A-143	A-160	PB	PB	P
			2.04	35000	3570				A-127	A-143	A-160	PB	PB	P
50.0	3360	342	1.22	26300	2680	25	- 6185	- 35	A-127	A-143	A-160	PB	PB	P
			1.31	36900	3760				A-127	A-143	A-160	PB	PB	P
			1.63	36900	3760				A-127	A-143	A-160	PB	PB	P
40.7	4120	420	1.02	28000	2850	25	- 6185	- 43	A-127	A-143	A-160	PB	PB	P
			1.63	39600	4040				A-127	A-143	A-160	PB	PB	P
			1.72	73200	7460				A-128	A-144	A-161	PB	PB	P
			2.44	74700	7620				A-128	A-144	A-161	PB	PB	P
34.3	4890	499	0.82	28900	2940	25	- 6185	- 51	A-127	A-143	A-160	PB	PB	P
			1.13	41300	4210				A-127	A-143	A-160	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method					
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM			
24.6	6830	696	1.02	45700	4660	25	- 6195	- 59	A-127	A-143	A-160	PB	PB	P			
			1.83	85600	8730				A-128	A-144	A-161	PB	PB	P			
22.8	7360	751	1.08	47400	4830	256	- 6195	- 43	A-127	A-143	A-160	PB	PB	P			
			1.72	88400	9010				A-128	A-144	A-161	PB	PB	P			
			2.17	93700	9550				A-129	A-145	A-162	PB	PB	P			
20.4	8220	838	0.84	48100	4910	25	- 6195	- 71	A-127	A-143	A-160	PB	PB	P			
16.7	10100	1030	1.06	95600	9740				A-128	A-144	A-161	PB	PB	P			
16.6	10100	1030	1.44	101000	10300	25	- 6225	- 87	A-129	A-145	A-162	PB	PB	P			
			1.25	95700	9760				A-128	A-144	A-161	PB	PB	P			
12.0	13300	1350	1.57	102000	10300	256	- 6225	- 59	A-129	A-145	A-162	PB	PB	P			
			1.87	127000	12900				A-129	A-145	A-162	PB	PB	P			
			0.86	104000	10600				25	- 6215DB	- 121	A-135	A-152	A-168	PB	PB	P
11.3	14900	1520	1.01	113000	11500	256	- 6225	- 87	A-136	A-152	A-168	PB	PB	P			
			1.52	159000	16200				A-137	A-153	A-169	PB	PB	P			
			2.07	194000	19800				A-137	A-153	A-169	PB	PB	P			
			0.86	113000	11500				25	- 6235DA	- 121	A-137	A-153	A-169	PB	PB	P
8.79	18100	1840	1.01	113000	11500	256	- 6255DB	- 121	A-138	A-154	A-170	PB	PB	P			
			1.52	159000	16200				25	- 6225DB	- 121	A-136	A-152	A-168	PB	PB	P
			2.08	195000	19900				25	- 6245DA	- 165	A-137	A-153	A-169	PB	PB	P
			0.80	121000	12400				25	- 6235DA	- 165	A-137	A-153	A-169	PB	PB	P
			1.08	151000	15400				25	- 6245DA	- 165	A-137	A-153	A-169	PB	PB	P
7.44	21400	2180	1.37	170000	17300	25	- 6255DB	- 165	A-138	A-154	A-170	PB	PB	P			
			1.72	208000	21200				A-138	A-154	A-170	PB	PB	P			
			2.42	254000	25900				25	- 6265DA	- 165	A-138	A-154	A-170	PB	PB	P
			0.92	159000	16200				25	- 6235DA	- 195	A-137	A-153	A-169	PB	PB	P
6.28	25300	2580	1.23	178000	18100	25	- 6245DA	- 195	A-137	A-153	A-169	PB	PB	P			
			1.46	218000	22200				A-137	A-153	A-169	PB	PB	P			
			2.05	267000	27200				25	- 6255DA	- 195	A-137	A-153	A-169	PB	PB	P
			0.92	159000	16200				25	- 6265DA	- 195	A-138	A-154	A-170	PB	PB	P
5.31	29900	3050	1.02	189000	19300	25	- 6245DA	- 231	A-137	A-153	A-169	PB	PB	P			
			1.82	276000	28100				A-138	A-154	A-170	PB	PB	P			
4.55	35000	3570	0.86	198000	20200	25	- 6245DA	- 273	A-137	A-153	A-169	PB	PB	P			
			1.04	243000	24700				A-137	A-153	A-169	PB	PB	P			
			1.54	276000	28100				A-138	A-154	A-170	PB	PB	P			
3.85	41300	4210	0.93	255000	26000	25	- 6255DA	- 319	A-137	A-154	A-170	PB	PB	P			
			1.31	276000	28100				A-138	A-154	A-170	PB	PB	P			
			1.95	248000	25300				A-138	-	A-170	PB	-	TP			
3.07	51900	5290	1.11	276000	28100	25	- 6265DA	- 377	A-138	A-154	A-170	PB	PB	P			
			1.65	248000	25300				A-138	-	A-170	PB	-	TP			
2.59	61300	6250	0.89	276000	28100	25	- 6275DA	- 473	A-138	A-154	A-170	PB	PB	P			
2.23	71200	7250	1.31	248000	25300				A-138	-	A-170	PB	-	TP			
1.98	80200	8170	0.85	248000	25300	25	- 6275DA	- 731	A-138	-	A-170	PB	-	TP			

<h1>22kW</h1> <h1>50Hz</h1>	Motor Speed n ₁	
	4P	6P
	1450r/min	980r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	826	84.2	1.10	10100	1020	30	- 6165	- 6	A-126	A-142	A-159	PB	PB	P
			1.37	11500	1170				A-127	A-143	A-159	PB	PB	P
181	1100	112	1.10	11200	1140	30	- 6165	- 8	A-126	A-142	A-159	PB	PB	P
			1.37	12600	1290				A-127	A-143	A-159	PB	PB	P

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
29.7	5660	577	1.02	43100	4400	25	6195	59	A-127	A-143	A-160	PB	PB	P
			2.04	81100	8270	25	6215	59	A-128	A-144	A-161	PB	PB	P
27.1	6190	631	1.24	45000	4580	256	6195	43	A-127	A-143	A-160	PB	PB	P
			2.04	84100	8570	256	6215	43	A-128	A-144	A-161	PB	PB	P
			2.58	89100	9090	256	6225	43	A-129	A-145	A-162	PB	PB	P
24.6	6810	694	0.84	45500	4640	25	6195	71	A-127	A-143	A-160	PB	PB	P
20.1	8340	851	1.16	90600	9240	25	6215	87	A-128	A-144	A-161	PB	PB	P
			1.44	96100	9790	25	6225	87	A-129	A-145	A-162	PB	PB	P
19.7	8500	866	1.49	91100	9290	256	6215	59	A-128	A-144	A-161	PB	PB	P
			1.80	96700	9850	256	6225	59	A-129	A-145	A-162	PB	PB	P
			2.04	120000	12300	256	6235	59	A-129	A-145	A-162	PB	PB	P
14.5	11000	1120	1.03	101000	10300	25	6215DB	121	A-135	A-152	A-168	PB	PB	P
			1.22	107000	10900	25	6225DB	121	A-136	A-152	A-168	PB	PB	P
			1.37	134000	13700	25	6235DA	121	A-137	A-153	A-169	PB	PB	P
			2.50	184000	18700	25	6255DB	121	A-138	A-154	A-170	PB	PB	P
13.4	12500	1280	1.20	108000	11000	256	6225	87	A-129	A-145	A-162	PB	PB	P
			1.74	151000	15400	256	6245	87	A-130	A-145	A-162	PB	PB	P
			2.32	186000	18900	256	6255	87	A-130	A-146	A-162	PB	PB	P
10.6	15000	1530	0.97	115000	11800	25	6225DB	165	A-136	A-154	A-168	PB	PB	P
			1.31	144000	14600	25	6235DA	165	A-137	A-153	A-169	PB	PB	P
			1.37	161000	16400	25	6245DA	165	A-137	A-153	A-169	PB	PB	P
			2.08	197000	20100	25	6255DB	165	A-138	A-154	A-170	PB	PB	P
			2.74	240000	24500	25	6265DA	165	A-138	A-154	A-170	PB	PB	P
8.97	17700	1810	1.11	151000	15400	25	6235DA	195	A-137	A-153	A-169	PB	PB	P
			1.29	169000	17200	25	6245DA	195	A-137	A-153	A-169	PB	PB	P
			1.72	207000	21100	25	6255DA	195	A-137	A-154	A-170	PB	PB	P
			2.47	252000	25700	25	6265DA	195	A-138	A-154	A-170	PB	PB	P
7.58	21000	2140	1.23	180000	18300	25	6245DA	231	A-137	A-153	A-169	PB	PB	P
			2.19	269000	27400	25	6265DA	231	A-138	A-154	A-170	PB	PB	P
6.41	24800	2530	1.04	188000	19200	25	6245DA	273	A-137	A-153	A-169	PB	PB	P
			1.25	230000	23500	25	6255DA	273	A-137	A-154	A-170	PB	PB	P
			1.85	276000	28100	25	6265DA	273	A-138	A-154	A-170	PB	PB	P
5.49	29000	2950	1.12	242000	24600	25	6255DA	319	A-137	A-154	A-170	PB	PB	P
			1.59	276000	28100	25	6265DA	319	A-138	A-154	A-170	PB	PB	P
			2.35	248000	25300	25	6275DA	319	A-138	-	A-170	PB	-	TP
4.64	34300	3490	1.34	276000	28100	25	6265DA	377	A-138	A-154	A-170	PB	PB	P
			1.99	248000	25300	25	6275DA	377	A-138	-	A-170	PB	-	TP
3.70	43000	4380	1.07	276000	28100	25	6265DA	473	A-138	A-154	A-170	PB	PB	P
			1.59	248000	25300	25	6275DA	473	A-138	-	A-170	PB	-	TP
3.13	50800	5180	1.34	248000	25300	25	6275DA	559	A-138	-	A-170	PB	-	TP
2.70	59000	6010	1.16	248000	25300	25	6275DA	649	A-138	-	A-170	PB	-	TP
2.39	66400	6770	1.03	248000	25300	25	6275DA	731	A-138	-	A-170	PB	-	TP

22kW 60Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	684	69.8	1.10	9510	969	30	6165	6	A-126	A-142	A-159	PB	PB	P
			1.37	10800	1100	30	6175	6	A-127	A-143	A-159	PB	PB	P
219	912	93.0	1.10	10600	1080	30	6165	8	A-126	A-142	A-159	PB	PB	P
			1.37	11900	1220	30	6175	8	A-127	A-143	A-159	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
132	1510	154	1.10	12600	1280	30	- 6165	- 11	A-126	A-142	A-159	PB	PB	P
			1.37	14500	1470				A-127	A-143	A-159	PB	PB	P
			1.60	19500	1980				A-127	A-143	A-160	PB	PB	P
			1.77	19500	1980				A-127	A-143	A-160	PB	PB	P
112	1790	182	1.03	13100	1330	30	- 6165	- 13	A-126	A-142	A-159	PB	PB	P
			1.37	15000	1530				A-127	A-143	A-159	PB	PB	P
			1.60	20200	2060				A-127	A-143	A-160	PB	PB	P
			1.77	20200	2060				A-127	A-143	A-160	PB	PB	P
96.7	2060	210	1.02	13800	1400	30	- 6165	- 15	A-126	A-142	A-159	PB	PB	P
			1.37	15600	1590				A-127	A-143	A-159	PB	PB	P
			1.77	21300	2170				A-127	A-143	A-160	PB	PB	P
85.3	2340	239	0.86	14100	1440	30	- 6165	- 17	A-126	A-142	A-159	PB	PB	P
			1.10	16200	1650				A-127	A-143	A-159	PB	PB	P
			1.39	22400	2280				A-127	A-143	A-160	PB	PB	P
			1.74	22400	2280				A-127	A-143	A-160	PB	PB	P
			1.86	31400	3200				A-127	A-143	A-160	PB	PB	P
69.0	2890	295	1.07	17500	1780	30	- 6175	- 21	A-127	A-143	A-159	PB	PB	P
			1.36	24000	2450				A-127	A-143	A-160	PB	PB	P
			1.73	24000	2450				A-127	A-143	A-160	PB	PB	P
			1.86	33700	3440				A-127	A-143	A-160	PB	PB	P
58.0	3440	351	0.89	17900	1830	30	- 6175	- 25	A-127	A-143	A-159	PB	PB	P
			1.10	24900	2530				A-127	A-143	A-160	PB	PB	P
			1.37	24900	2530				A-127	A-143	A-160	PB	PB	P
			1.60	35300	3590				A-127	A-143	A-160	PB	PB	P
			1.84	35300	3590				A-127	A-143	A-160	PB	PB	P
50.0	3990	407	1.10	25900	2640	30	- 6185	- 29	A-127	A-143	A-160	PB	PB	P
			1.40	37000	3770				A-127	A-143	A-160	PB	PB	P
			1.72	37000	3770				A-127	A-143	A-160	PB	PB	P
			2.08	68500	6990				A-128	A-144	A-161	PB	PB	P
41.4	4820	491	1.03	27500	2810	30	- 6185	- 35	A-127	A-143	A-160	PB	PB	P
			1.37	39000	3970				A-127	A-143	A-160	PB	PB	P
33.7	5920	603	0.85	29100	2970	30	- 6185	- 43	A-127	A-143	A-160	PB	PB	P
			1.23	41800	4260				A-127	A-143	A-160	PB	PB	P
			1.45	77100	7860				A-128	A-144	A-161	PB	PB	P
			2.05	78700	8020				A-128	A-144	A-161	PB	PB	P
28.4	7020	716	0.95	43400	4420	30	- 6195	- 51	A-127	A-143	A-160	PB	PB	P
24.6	8120	828	0.86	45300	4620	30	- 6195	- 59	A-127	A-143	A-160	PB	PB	P
			1.03	83600	8520				A-128	A-144	A-161	PB	PB	P
			1.54	85300	8690				A-128	A-144	A-161	PB	PB	P
			1.79	90500	9220				A-129	A-145	A-162	PB	PB	P
22.8	8760	893	1.06	84100	8570	306	- 6205	- 43	A-128	A-144	A-161	PB	PB	P
			1.45	88000	8970				A-128	A-144	A-161	PB	PB	P
			1.83	93400	9520				A-129	A-145	A-162	PB	PB	P
16.7	12000	1220	1.21	101000	10300	30	- 6225	- 87	A-129	A-145	A-162	PB	PB	P
16.6	12000	1220	1.05	95200	9710	306	- 6215	- 59	A-128	A-144	A-161	PB	PB	P
			1.32	101000	10300				A-129	A-145	A-162	PB	PB	P
			2.15	141000	14400				A-130	A-145	A-162	PB	PB	P
12.0	15800	1610	0.85	113000	11500	30	- 6225DB	- 121	A-136	A-152	A-168	PB	PB	P
			1.15	141000	14300				A-137	A-153	A-169	PB	PB	P
			1.30	157000	16000				A-137	A-153	A-169	PB	PB	P
			1.74	193000	19700				A-138	A-154	A-170	PB	PB	P
			1.99	237000	24100				A-138	A-154	A-170	PB	PB	P
11.3	17700	1810	1.28	158000	16100	306	- 6245	- 87	A-130	A-145	A-162	PB	PB	P
			1.75	195000	19800				A-130	A-146	A-162	PB	PB	P
			2.43	237000	24200				-	-	-	PB	PB	P

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
159	1250	128	1.10	11900	1220	30	- 6165	- 11	A-126	A-142	A-159	PB	PB	P
			1.37	13700	1390	30	- 6175	- 11	A-127	A-143	A-159	PB	PB	P
			1.60	18300	1870	30	- 6180	- 11	A-127	A-143	A-160	PB	PB	P
			1.77	18300	1870	30	- 6185	- 11	A-127	A-143	A-160	PB	PB	P
135	1480	151	1.03	12400	1270	30	- 6165	- 13	A-126	A-142	A-159	PB	PB	P
			1.37	14200	1450	30	- 6175	- 13	A-127	A-143	A-159	PB	PB	P
			1.60	19100	1940	30	- 6180	- 13	A-127	A-143	A-160	PB	PB	P
			1.77	19100	1940	30	- 6185	- 13	A-127	A-143	A-160	PB	PB	P
117	1710	174	1.03	13100	1340	30	- 6165	- 15	A-126	A-142	A-159	PB	PB	P
			1.37	14800	1510	30	- 6175	- 15	A-127	A-143	A-159	PB	PB	P
			1.77	20100	2050	30	- 6185	- 15	A-127	A-143	A-160	PB	PB	P
103	1940	198	0.86	13400	1370	30	- 6165	- 17	A-126	A-142	A-159	PB	PB	P
			1.10	15400	1570	30	- 6175	- 17	A-127	A-143	A-159	PB	PB	P
			1.39	21200	2160	30	- 6180	- 17	A-127	A-143	A-160	PB	PB	P
			1.77	21200	2160	30	- 6185	- 17	A-127	A-143	A-160	PB	PB	P
			1.86	29600	3010	30	- 6190	- 17	A-127	A-143	A-160	PB	PB	P
83.3	2400	244	1.10	16600	1690	30	- 6175	- 21	A-127	A-143	A-159	PB	PB	P
			1.36	22700	2310	30	- 6180	- 21	A-127	A-143	A-160	PB	PB	P
			1.77	22700	2310	30	- 6185	- 21	A-127	A-143	A-160	PB	PB	P
			1.86	31800	3240	30	- 6190	- 21	A-127	A-143	A-160	PB	PB	P
70.0	2850	291	0.89	17000	1740	30	- 6175	- 25	A-127	A-143	A-159	PB	PB	P
			1.10	23500	2400	30	- 6180	- 25	A-127	A-143	A-160	PB	PB	P
			1.37	23500	2400	30	- 6185	- 25	A-127	A-143	A-160	PB	PB	P
			1.60	33200	3390	30	- 6190	- 25	A-127	A-143	A-160	PB	PB	P
			1.84	33200	3390	30	- 6195	- 25	A-127	A-143	A-160	PB	PB	P
60.3	3310	337	1.10	24500	2500	30	- 6185	- 29	A-127	A-143	A-160	PB	PB	P
			1.40	34900	3560	30	- 6190	- 29	A-127	A-143	A-160	PB	PB	P
			1.72	34900	3560	30	- 6195	- 29	A-127	A-143	A-160	PB	PB	P
			2.08	64900	6610	30	- 6205	- 29	A-128	A-144	A-161	PB	PB	P
50.0	3990	407	1.03	26000	2650	30	- 6185	- 35	A-127	A-143	A-160	PB	PB	P
			1.37	36700	3750	30	- 6195	- 35	A-127	A-143	A-160	PB	PB	P
40.7	4900	500	0.86	27600	2820	30	- 6185	- 43	A-127	A-143	A-160	PB	PB	P
			1.37	39400	4020	30	- 6195	- 43	A-127	A-143	A-160	PB	PB	P
			1.45	73000	7440	30	- 6205	- 43	A-128	A-144	A-161	PB	PB	P
			2.05	74600	7600	30	- 6215	- 43	A-128	A-144	A-161	PB	PB	P
34.3	5820	593	0.95	41000	4180	30	- 6195	- 51	A-127	A-143	A-160	PB	PB	P
29.7	6730	686	0.86	42800	4360	30	- 6195	- 59	A-127	A-143	A-160	PB	PB	P
			1.03	79200	8070	30	- 6205	- 59	A-128	A-144	A-161	PB	PB	P
			1.71	80800	8240	30	- 6215	- 59	A-128	A-144	A-161	PB	PB	P
			2.05	85700	8740	30	- 6225	- 59	A-129	A-145	A-162	PB	PB	P
27.1	7370	751	1.26	82100	8370	306	- 6205	- 43	A-128	A-144	A-161	PB	PB	P
			1.72	83800	8540	306	- 6215	- 43	A-128	A-144	A-161	PB	PB	P
			2.17	88900	9060	306	- 6225	- 43	A-129	A-145	A-162	PB	PB	P
20.1	9920	1010	1.21	95700	9760	30	- 6225	- 87	A-129	A-145	A-162	PB	PB	P
19.7	10100	1030	1.25	90700	9250	306	- 6215	- 59	A-128	A-144	A-161	PB	PB	P
			1.51	96300	9810	306	- 6225	- 59	A-129	A-145	A-162	PB	PB	P
			2.55	134000	13700	306	- 6245	- 59	A-130	A-145	A-162	PB	PB	P
14.5	13100	1330	1.03	106000	10900	30	- 6225DB	- 121	A-136	A-152	A-168	PB	PB	P
			1.15	134000	13700	30	- 6235DA	- 121	A-137	A-153	A-169	PB	PB	P
			1.57	149000	15200	30	- 6245DB	- 121	A-137	A-153	A-169	PB	PB	P
			2.10	183000	18700	30	- 6255DB	- 121	A-138	A-154	A-170	PB	PB	P
			2.31	224000	22800	30	- 6265DA	- 121	A-138	A-154	A-170	PB	PB	P
13.4	14900	1520	1.46	150000	15300	306	- 6245	- 87	A-130	A-145	A-162	PB	PB	P
			1.95	185000	18900	306	- 6255	- 87	A-130	A-146	A-162	PB	PB	P
			2.43	226000	23000	306	- 6265	- 87	-	-	-	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
8.79	21500	2190	0.91	151000	15400	30	- 6235DA	- 165	A-137	A-153	A-169	PB	PB	P
			1.15	169000	17200				A-137	A-153	A-169	PB	PB	P
			1.45	207000	21100				A-138	A-154	A-170	PB	PB	P
			2.03	253000	25800				A-138	A-154	A-170	PB	PB	P
7.44	25400	2590	1.03	177000	18000	30	- 6245DA	- 195	A-137	A-153	A-169	PB	PB	P
			1.72	266000	27100				A-138	A-154	A-170	PB	PB	P
6.28	30100	3070	0.86	188000	19200	30	- 6245DA	- 231	A-137	A-153	A-169	PB	PB	P
			1.03	231000	23500				A-137	A-154	A-170	PB	PB	P
			1.53	276000	28100				A-138	A-154	A-170	PB	PB	P
5.31	35600	3630	0.87	242000	24700	30	- 6255DA	- 273	A-137	A-154	A-170	PB	PB	P
			1.29	276000	28100				A-138	A-154	A-170	PB	PB	P
4.55	41600	4240	1.11	276000	28100	30	- 6265DA	- 319	A-138	A-154	A-170	PB	PB	P
			1.64	248000	25300				A-138	-	A-170	PB	-	TP
3.85	49200	5010	0.94	276000	28100	30	- 6265DA	- 377	A-138	A-154	A-170	PB	PB	P
			1.39	248000	25300				A-138	-	A-170	PB	-	TP
3.07	61700	6290	1.11	248000	25300	30	- 6275DA	- 473	A-138	-	A-170	PB	-	TP
2.59	72900	7430	0.94	248000	25300	30	- 6275DA	- 559	A-138	-	A-170	PB	-	TP
2.23	84600	8630	0.81	248000	25300	30	- 6275DA	- 649	A-138	-	A-170	PB	-	TP

<h1>30 kW</h1> <h1>50 Hz</h1>	Motor Speed n ₁	
	4P	6P
	1450r/min	980r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
242	1130	115	1.00	11300	1150	40	- 6175	- 6	A-127	A-143	A-159	PB	PB	P
181	1500	153	1.00	12400	1260	40	- 6175	- 8	A-127	A-143	A-159	PB	PB	P
132	2060	210	1.00	14100	1440	40	- 6175	- 11	A-127	A-143	A-159	PB	PB	P
			1.30	19200	1960				A-127	A-143	A-160	PB	PB	P
			1.60	27100	2760				A-127	A-143	A-160	PB	PB	P
			1.99	52200	5320				A-128	A-144	A-161	PB	PB	P
112	2440	249	1.00	14600	1490	40	- 6175	- 13	A-127	A-143	A-159	PB	PB	P
			1.30	19900	2030				A-127	A-143	A-160	PB	PB	P
			1.60	28200	2870				A-127	A-143	A-160	PB	PB	P
96.7	2820	287	1.00	15100	1540	40	- 6175	- 15	A-127	A-143	A-159	PB	PB	P
			1.30	20900	2130				A-127	A-143	A-160	PB	PB	P
			1.60	29500	3010				A-127	A-143	A-160	PB	PB	P
			1.99	56000	5710				A-128	A-144	A-161	PB	PB	P
85.3	3190	325	0.80	15700	1600	40	- 6175	- 17	A-127	A-143	A-159	PB	PB	P
			1.27	22000	2240				A-127	A-143	A-160	PB	PB	P
			1.60	31100	3170				A-127	A-143	A-160	PB	PB	P
69.0	3940	402	1.27	23600	2410	40	- 6185	- 21	A-127	A-143	A-160	PB	PB	P
			1.37	33500	3410				A-127	A-143	A-160	PB	PB	P
			1.60	33500	3410				A-127	A-143	A-160	PB	PB	P
			1.97	62700	6390				A-128	A-144	A-161	PB	PB	P
58.0	4690	478	1.00	24400	2490	40	- 6185	- 25	A-127	A-143	A-160	PB	PB	P
			1.35	34900	3560				A-127	A-143	A-160	PB	PB	P
50.0	5440	555	0.80	25300	2580	40	- 6185	- 29	A-127	A-143	A-160	PB	PB	P
			1.26	36600	3730				A-127	A-143	A-160	PB	PB	P
			1.52	68200	6950				A-128	A-144	A-161	PB	PB	P
			1.95	69600	7090				A-128	A-144	A-161	PB	PB	P
46.7	5830	595	1.09	37700	3850	406	- 6190	- 21	A-127	A-143	A-160	PB	PB	P
			1.36	37700	3850				A-127	A-143	A-160	PB	PB	P
			2.14	71700	7310				A-128	A-144	A-161	PB	PB	P
41.4	6570	670	1.00	38400	3920	40	- 6195	- 35	A-127	A-143	A-160	PB	PB	P

- Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
10.6	17800	1820	1.10	143000	14600	30	- 6235DA	- 165	A-137	A-153	A-169	PB	PB	P
			1.15	160000	16300	30	- 6245DA	- 165	A-137	A-153	A-169	PB	PB	P
			1.75	196000	20000	30	- 6255DB	- 165	A-138	A-154	A-170	PB	PB	P
			2.31	240000	24400	30	- 6265DA	- 165	A-138	A-154	A-170	PB	PB	P
8.97	21100	2150	1.08	168000	17100	30	- 6245DA	- 195	A-137	A-153	A-169	PB	PB	P
			2.08	252000	25700	30	- 6265DA	- 195	A-138	A-154	A-170	PB	PB	P
7.58	25000	2540	1.03	179000	18200	30	- 6245DA	- 231	A-137	A-153	A-169	PB	PB	P
			1.24	219000	22300	30	- 6255DA	- 231	A-137	A-154	A-170	PB	PB	P
			1.84	268000	27300	30	- 6265DA	- 231	A-138	A-154	A-170	PB	PB	P
6.41	29500	3010	1.05	229000	23400	30	- 6255DA	- 273	A-137	A-154	A-170	PB	PB	P
			1.56	276000	28100	30	- 6265DA	- 273	A-138	A-154	A-170	PB	PB	P
5.49	34500	3510	1.33	276000	28100	30	- 6265DA	- 319	A-138	A-154	A-170	PB	PB	P
			1.98	248000	25300	30	- 6275DA	- 319	A-138	-	A-170	PB	-	TP
4.64	40700	4150	1.13	276000	28100	30	- 6265DA	- 377	A-138	A-154	A-170	PB	PB	P
			1.67	248000	25300	30	- 6275DA	- 377	A-138	-	A-170	PB	-	TP
3.70	51100	5210	1.33	248000	25300	30	- 6275DA	- 473	A-138	-	A-170	PB	-	TP
3.13	60400	6160	1.13	248000	25300	30	- 6275DA	- 559	A-138	-	A-170	PB	-	TP
2.70	70100	7150	0.97	248000	25300	30	- 6275DA	- 649	A-138	-	A-170	PB	-	TP

30kW 60Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
292	933	95.1	1.00	10700	1090	40	- 6175	- 6	A-127	A-143	A-159	PB	PB	P
219	1240	127	1.00	11700	1200	40	- 6175	- 8	A-127	A-143	A-159	PB	PB	P
159	1710	174	1.00	13400	1370	40	- 6175	- 11	A-127	A-143	A-159	PB	PB	P
			1.30	18200	1850	40	- 6185	- 11	A-127	A-143	A-160	PB	PB	P
			1.60	25500	2600	40	- 6195	- 11	A-127	A-143	A-160	PB	PB	P
			1.99	49400	5030	40	- 6205	- 11	A-128	A-144	A-161	PB	PB	P
135	2020	206	1.00	13900	1420	40	- 6175	- 13	A-127	A-143	A-159	PB	PB	P
			1.30	18800	1920	40	- 6185	- 13	A-127	A-143	A-160	PB	PB	P
			1.60	26500	2710	40	- 6195	- 13	A-127	A-143	A-160	PB	PB	P
117	2330	238	1.00	14400	1470	40	- 6175	- 15	A-127	A-143	A-159	PB	PB	P
			1.30	19800	2020	40	- 6185	- 15	A-127	A-143	A-160	PB	PB	P
			1.60	27800	2840	40	- 6195	- 15	A-127	A-143	A-160	PB	PB	P
			1.99	53000	5410	40	- 6205	- 15	A-128	A-144	A-161	PB	PB	P
103	2640	270	0.80	14900	1520	40	- 6175	- 17	A-127	A-143	A-159	PB	PB	P
			1.30	20800	2120	40	- 6185	- 17	A-127	A-143	A-160	PB	PB	P
			1.60	29300	2990	40	- 6195	- 17	A-127	A-143	A-160	PB	PB	P
83.3	3270	333	1.30	22400	2280	40	- 6185	- 21	A-127	A-143	A-160	PB	PB	P
			1.37	31500	3220	40	- 6190	- 21	A-127	A-143	A-160	PB	PB	P
			1.60	31500	3220	40	- 6195	- 21	A-127	A-143	A-160	PB	PB	P
			1.97	59300	6050	40	- 6205	- 21	A-128	A-144	A-161	PB	PB	P
70.0	3890	396	1.00	23100	2360	40	- 6185	- 25	A-127	A-143	A-160	PB	PB	P
			1.35	32900	3360	40	- 6195	- 25	A-127	A-143	A-160	PB	PB	P
60.3	4510	460	0.80	24000	2450	40	- 6185	- 29	A-127	A-143	A-160	PB	PB	P
			1.26	34500	3520	40	- 6195	- 29	A-127	A-143	A-160	PB	PB	P
			1.52	64600	6590	40	- 6205	- 29	A-128	A-144	A-161	PB	PB	P
			1.95	65900	6720	40	- 6215	- 29	A-128	A-144	A-161	PB	PB	P
55.5	4910	500	1.30	35800	3650	406	- 6190	- 21	A-127	A-143	A-160	PB	PB	P
			1.60	35800	3650	406	- 6195	- 21	A-127	A-143	A-160	PB	PB	P
			2.51	68200	6960	406	- 6215	- 21	A-128	A-144	A-161	PB	PB	P
50.0	5440	555	1.00	36300	3700	40	- 6195	- 35	A-127	A-143	A-160	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
33.8	8050	821	1.15	76300	7770	406	- 6205	- 29	A-128	A-144	A-161	PB	PB	P
			1.57	77800	7930				A-128	A-144	A-161	PB	PB	P
			1.87	82500	8410				A-129	A-145	A-162	PB	PB	P
33.7	8070	823	0.90	41100	4190	40	- 6195	- 43	A-127	A-143	A-160	PB	PB	P
			1.06	76600	7810				A-128	A-144	A-161	PB	PB	P
			1.51	78200	7970				A-128	A-144	A-161	PB	PB	P
			1.88	83000	8460				A-129	A-145	A-162	PB	PB	P
24.6	11100	1130	1.13	84600	8620	40	- 6215	- 59	A-128	A-144	A-161	PB	PB	P
			1.31	89800	9150				A-129	A-145	A-162	PB	PB	P
22.8	11900	1220	1.06	87200	8890	406	- 6215	- 43	A-128	A-144	A-161	PB	PB	P
			1.34	92600	9440				A-129	A-145	A-162	PB	PB	P
			2.16	129000	13200				A-130	A-145	A-162	PB	PB	P
16.6	16400	1670	1.15	125000	12800	406	- 6235	- 59	A-129	A-145	A-162	PB	PB	P
			1.57	140000	14300				A-130	A-145	A-162	PB	PB	P
			1.89	173000	17600				A-130	A-146	A-162	PB	PB	P
12.0	21500	2190	0.87	140000	14300	40	- 6235DB	- 121	A-137	A-153	A-169	PB	PB	P
			1.06	192000	19600				A-137	A-154	A-170	PB	PB	P
			1.46	236000	24000				A-138	A-154	A-170	PB	PB	P
11.3	24200	2460	1.28	193000	19700	406	- 6255	- 87	A-130	A-146	A-162	PB	PB	P
			1.78	236000	24100				A-130	A-146	A-162	PB	PB	P
8.79	29300	2990	0.89	167000	17000	40	- 6245DB	- 165	A-137	A-153	A-169	PB	PB	P
			1.06	206000	21000				A-138	A-154	A-170	PB	PB	P
			1.49	252000	25700				A-138	A-154	A-170	PB	PB	P
7.44	34700	3530	0.90	216000	22000	40	- 6255DA	- 195	A-137	A-154	A-170	PB	PB	P
			1.26	265000	27000				A-138	A-154	A-170	PB	PB	P
6.28	41100	4190	1.12	276000	28100	40	- 6265DA	- 231	A-138	A-154	A-170	PB	PB	P
5.31	48500	4950	0.95	276000	28100	40	- 6265DA	- 273	A-138	A-154	A-170	PB	PB	P
4.55	56700	5780	0.81	276000	28100	40	- 6265DA	- 319	A-138	A-154	A-170	PB	PB	P
			1.20	248000	25300				A-138	-	A-170	PB	-	TP
3.85	67000	6830	1.02	248000	25300	40	- 6275DA	- 377	A-138	-	A-170	PB	-	TP
3.07	84100	8570	0.81	248000	25300	40	- 6275DA	- 473	A-138	-	A-170	PB	-	TP

<h1>37 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1	
	4P	6P
	1450r/min	980r/min

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
132	2550	260	1.05	19000	1940	50	- 6185	- 11	A-127	A-143	A-160	PB	PB	P
			1.30	27000	2750				A-127	A-143	A-160	PB	PB	P
			1.61	52000	5310				A-128	A-144	A-161	PB	PB	P
			2.04	52700	5380				A-128	A-144	A-161	PB	PB	P
112	3010	307	1.05	19700	2010	50	- 6185	- 13	A-127	A-143	A-160	PB	PB	P
			1.30	28000	2850				A-127	A-143	A-160	PB	PB	P
96.7	3470	354	1.05	20600	2100	50	- 6185	- 15	A-127	A-143	A-160	PB	PB	P
			1.30	29300	2990				A-127	A-143	A-160	PB	PB	P
			1.61	55900	5700				A-128	A-144	A-161	PB	PB	P
			2.04	56600	5770				A-128	A-144	A-161	PB	PB	P
85.3	3940	401	1.03	21600	2210	50	- 6185	- 17	A-127	A-143	A-160	PB	PB	P
			1.30	30900	3150				A-127	A-143	A-160	PB	PB	P
69.0	4860	496	1.03	23300	2370	50	- 6185	- 21	A-127	A-143	A-160	PB	PB	P
			1.30	33200	3380				A-127	A-143	A-160	PB	PB	P
			1.60	62500	6370				A-128	A-144	A-161	PB	PB	P
			2.04	63800	6510				A-128	A-144	A-161	PB	PB	P

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
40.2	6780	691	1.32	72600	7400	406	6205	29	A-128	A-144	A-161	PB	PB	P
			1.87	74100	7550	406	6215	29	A-128	A-144	A-161	PB	PB	P
			2.22	78500	8000	406	6225	29	A-129	A-145	A-162	PB	PB	P
40.7	6690	682	1.00	38900	3970	40	6195	43	A-127	A-143	A-160	PB	PB	P
			1.06	72600	7400	40	6205	43	A-128	A-144	A-161	PB	PB	P
			1.51	74100	7560	40	6215	43	A-128	A-144	A-161	PB	PB	P
			1.88	78600	8010	40	6225	43	A-129	A-145	A-162	PB	PB	P
29.7	9180	935	1.26	80300	8180	40	6215	59	A-128	A-144	A-161	PB	PB	P
			1.51	85200	8680	40	6225	59	A-129	A-145	A-162	PB	PB	P
27.1	10000	1020	1.26	83100	8480	406	6215	43	A-128	A-144	A-161	PB	PB	P
			1.59	88300	9000	406	6225	43	A-129	A-145	A-162	PB	PB	P
			2.51	123000	12500	406	6245	43	A-130	A-145	A-162	PB	PB	P
19.7	13800	1410	1.26	119000	12200	406	6235	59	A-129	A-145	A-162	PB	PB	P
			1.87	134000	13600	406	6245	59	A-130	A-145	A-162	PB	PB	P
			2.16	164000	16800	406	6255	59	A-130	A-146	A-162	PB	PB	P
14.5	17800	1820	1.05	133000	13500	40	6235DB	121	A-137	A-153	A-169	PB	PB	P
			1.06	182000	18600	40	6255DA	121	A-137	A-154	A-170	PB	PB	P
			1.69	223000	22700	40	6265DA	121	A-138	A-154	A-170	PB	PB	P
13.4	20300	2070	1.43	184000	18800	406	6255	87	A-130	A-146	A-162	PB	PB	P
			1.78	225000	22900	406	6265	87	A-130	A-146	A-162	PB	PB	P
10.6	24300	2480	1.08	159000	16200	40	6245DB	165	A-137	A-153	A-169	PB	PB	P
			1.28	195000	19900	40	6255DB	165	A-138	A-154	A-170	PB	PB	P
			1.69	239000	24300	40	6265DA	165	A-138	A-154	A-170	PB	PB	P
8.97	28700	2930	1.06	205000	20900	40	6255DA	195	A-137	A-154	A-170	PB	PB	P
			1.52	251000	25600	40	6265DA	195	A-138	A-154	A-170	PB	PB	P
7.58	34000	3470	1.35	267000	27200	40	6265DA	231	A-138	A-154	A-170	PB	PB	P
6.41	40200	4100	1.14	276000	28100	40	6265DA	273	A-138	A-154	A-170	PB	PB	P
5.49	47000	4790	0.98	276000	28100	40	6265DA	319	A-138	A-154	A-170	PB	PB	P
			1.45	248000	25300	40	6275DA	319	A-138	-	A-170	PB	-	TP
4.64	55500	5660	1.23	248000	25300	40	6275DA	377	A-138	-	A-170	PB	-	TP
3.70	69700	7100	0.98	248000	25300	40	6275DA	473	A-138	-	A-170	PB	-	TP

37 kW 60 Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
159	2110	215	1.05	18000	1830	50	6185	11	A-127	A-143	A-160	PB	PB	P
			1.30	25400	2590	50	6195	11	A-127	A-143	A-160	PB	PB	P
			1.61	49300	5020	50	6205	11	A-128	A-144	A-161	PB	PB	P
			2.04	49900	5090	50	6215	11	A-128	A-144	A-161	PB	PB	P
135	2490	254	1.05	18600	1900	50	6185	13	A-127	A-143	A-160	PB	PB	P
			1.30	26400	2690	50	6195	13	A-127	A-143	A-160	PB	PB	P
117	2880	293	1.05	19500	1990	50	6185	15	A-127	A-143	A-160	PB	PB	P
			1.30	27700	2820	50	6195	15	A-127	A-143	A-160	PB	PB	P
			1.61	52900	5390	50	6205	15	A-128	A-144	A-161	PB	PB	P
			2.04	53600	5470	50	6215	15	A-128	A-144	A-161	PB	PB	P
103	3260	332	1.05	20500	2090	50	6185	17	A-127	A-143	A-160	PB	PB	P
			1.30	29100	2970	50	6195	17	A-127	A-143	A-160	PB	PB	P
83.3	4030	411	1.05	22100	2250	50	6185	21	A-127	A-143	A-160	PB	PB	P
			1.30	31300	3190	50	6195	21	A-127	A-143	A-160	PB	PB	P
			1.60	59200	6030	50	6205	21	A-128	A-144	A-161	PB	PB	P
			2.04	60500	6170	50	6215	21	A-128	A-144	A-161	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
65.3	5140	524	1.11	32900	3360	506	- 6190	- 15	A-127	A-143	A-160	PB	PB	P
			1.30	32900	3360				A-127	A-143	A-160	PB	PB	P
			1.61	62600	6380				A-128	A-144	A-161	PB	PB	P
			2.04	63400	6460				A-128	A-144	A-161	PB	PB	P
58.0	5790	590	0.81	23900	2440	50	- 6185	- 25	A-127	A-143	A-160	PB	PB	P
			1.09	34600	3530				A-127	A-143	A-160	PB	PB	P
50.0	6710	684	1.02	36200	3690	50	- 6195	- 29	A-127	A-143	A-160	PB	PB	P
			1.58	69300	7060				A-128	A-144	A-161	PB	PB	P
			2.04	73400	7490				A-129	A-145	A-162	PB	PB	P
46.7	7190	733	1.11	37300	3800	506	- 6195	- 21	A-127	A-143	A-160	PB	PB	P
			1.74	71400	7280				A-128	A-144	A-161	PB	PB	P
			2.06	75500	7690				A-129	A-145	A-162	PB	PB	P
41.4	8100	826	0.81	38000	3870	50	- 6195	- 35	A-127	A-143	A-160	PB	PB	P
33.8	9930	1010	1.27	77300	7880	506	- 6215	- 29	A-128	A-144	A-161	PB	PB	P
			1.51	82000	8360				A-129	A-145	A-162	PB	PB	P
			1.90	103000	10500				A-129	A-145	A-162	PB	PB	P
33.7	9950	1010	1.22	77700	7920	50	- 6215	- 43	A-128	A-144	A-161	PB	PB	P
			1.53	82500	8410				A-129	A-145	A-162	PB	PB	P
24.6	13700	1390	1.06	89200	9090	50	- 6225	- 59	A-129	A-145	A-162	PB	PB	P
22.8	14700	1500	1.09	92000	9380	506	- 6225	- 43	A-129	A-145	A-162	PB	PB	P
			1.75	129000	13100				A-130	A-145	A-162	PB	PB	P
16.6	20200	2060	1.28	140000	14200	506	- 6245	- 59	A-130	A-145	A-162	PB	PB	P
			1.54	172000	17600				A-130	A-146	A-162	PB	PB	P
			2.28	211000	21500				A-130	A-146	A-162	PB	PB	P
12.0	26500	2710	1.04	191000	19500	50	- 6255DB	- 121	A-138	A-154	A-170	PB	PB	P
11.3	29800	3040	1.04	192000	19600	506	- 6255	- 87	A-130	A-146	A-162	PB	PB	P
			1.44	236000	24000				A-130	A-146	A-162	PB	PB	P
8.79	36200	3690	0.86	205000	20900	50	- 6255DB	- 165	A-138	A-154	A-170	PB	PB	P
			1.21	251000	25600				A-138	A-154	A-170	PB	PB	P
7.44	42800	4360	1.02	263000	26800	50	- 6265DA	- 195	A-138	A-154	A-170	PB	PB	P
6.28	50700	5160	0.91	276000	28100	50	- 6265DA	- 231	A-138	A-154	A-170	PB	PB	P
4.55	70000	7130	0.97	248000	25300	50	- 6275DA	- 319	A-138	-	A-170	PB	-	TP
3.85	82700	8430	0.82	248000	25300	50	- 6275DA	- 377	A-138	-	A-170	PB	-	TP

<h1>45 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1	
	4P	6P
	1450r/min	980r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
132	3100	316	1.07	26800	2730	60	- 6195	- 11	A-127	A-143	A-160	PB	PB	P
			1.33	51900	5290				A-128	A-144	A-161	PB	PB	P
			1.67	52600	5360				A-128	A-144	A-161	PB	PB	P
			2.21	55800	5690				A-129	A-145	A-162	PB	PB	P
112	3660	373	1.07	27700	2830	60	- 6195	- 13	A-127	A-143	A-160	PB	PB	P
96.7	4220	431	1.07	29000	2960	60	- 6195	- 15	A-127	A-143	A-160	PB	PB	P
			1.33	55700	5680				A-128	A-144	A-161	PB	PB	P
			1.67	56500	5750				A-128	A-144	A-161	PB	PB	P
			2.21	60200	6140				A-129	A-145	A-162	PB	PB	P
85.3	4790	488	0.85	21200	2160	60	- 6185	- 17	A-127	A-143	A-160	PB	PB	P
			1.07	30600	3120				A-127	A-143	A-160	PB	PB	P

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
77.7	4320	441	1.11	31300	3190	506	6190	15	A-127	A-143	A-160	PB	PB	P
			1.30	31300	3190	506	6195	15	A-127	A-143	A-160	PB	PB	P
			1.61	59500	6070	506	6205	15	A-128	A-144	A-161	PB	PB	P
			2.04	60300	6150	506	6215	15	A-128	A-144	A-161	PB	PB	P
70.0	4800	489	0.81	22700	2320	50	6185	25	A-127	A-143	A-160	PB	PB	P
			1.09	32700	3330	50	6195	25	A-127	A-143	A-160	PB	PB	P
60.3	5560	567	1.02	34200	3490	50	6195	29	A-127	A-143	A-160	PB	PB	P
			1.58	65700	6700	50	6215	29	A-128	A-144	A-161	PB	PB	P
			2.04	69600	7090	50	6225	29	A-129	A-145	A-162	PB	PB	P
55.5	6050	617	1.30	35500	3610	506	6195	21	A-127	A-143	A-160	PB	PB	P
			2.04	68000	6930	506	6215	21	A-128	A-144	A-161	PB	PB	P
			2.45	71800	7320	506	6225	21	A-129	A-145	A-162	PB	PB	P
50.0	6710	684	0.81	35900	3660	50	6195	35	A-127	A-143	A-160	PB	PB	P
40.2	8360	852	1.51	73700	7510	506	6215	29	A-128	A-144	A-161	PB	PB	P
			1.80	78100	7970	506	6225	29	A-129	A-145	A-162	PB	PB	P
			2.04	97900	9980	506	6235	29	A-129	A-145	A-162	PB	PB	P
40.7	8250	841	1.22	73800	7520	50	6215	43	A-128	A-144	A-161	PB	PB	P
			1.53	78300	7980	50	6225	43	A-129	A-145	A-162	PB	PB	P
29.7	11300	1150	1.22	84700	8630	50	6225	59	A-129	A-145	A-162	PB	PB	P
27.1	12400	1260	1.29	87700	8940	506	6225	43	A-129	A-145	A-162	PB	PB	P
			2.04	122000	12500	506	6245	43	A-130	A-145	A-162	PB	PB	P
19.7	17000	1730	1.52	133000	13500	506	6245	59	A-130	A-145	A-162	PB	PB	P
			1.75	164000	16700	506	6255	59	A-130	A-146	A-162	PB	PB	P
			2.55	201000	20500	506	6265	59	A-130	A-146	A-162	PB	PB	P
14.5	22000	2240	1.25	181000	18500	50	6255DB	121	A-138	A-154	A-170	PB	PB	P
13.4	25100	2560	1.16	183000	18700	506	6255	87	A-130	A-146	A-162	PB	PB	P
			1.44	224000	22900	506	6265	87	A-130	A-146	A-162	PB	PB	P
10.6	30000	3060	1.04	194000	19800	50	6255DB	165	A-138	A-154	A-170	PB	PB	P
			1.37	238000	24300	50	6265DA	165	A-138	A-154	A-170	PB	PB	P
8.97	35400	3610	1.23	250000	25400	50	6265DA	195	A-138	A-154	A-170	PB	PB	P
7.58	42000	4280	1.10	266000	27100	50	6265DA	231	A-138	A-154	A-170	PB	PB	P
5.49	58000	5910	1.18	248000	25300	50	6275DA	319	A-138	-	A-170	PB	-	TP
4.64	68500	6980	1.00	248000	25300	50	6275DA	377	A-138	-	A-170	PB	-	TP

45 kW 60 Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
159	2570	262	1.07	25300	2570	60	6195	11	A-127	A-143	A-160	PB	PB	P
			1.33	49200	5010	60	6205	11	A-128	A-144	A-161	PB	PB	P
			1.67	49800	5080	60	6215	11	A-128	A-144	A-161	PB	PB	P
			2.21	52800	5390	60	6225	11	A-129	A-145	A-162	PB	PB	P
135	3030	309	1.07	26200	2670	60	6195	13	A-127	A-143	A-160	PB	PB	P
117	3500	357	1.07	27400	2800	60	6195	15	A-127	A-143	A-160	PB	PB	P
			1.33	52800	5380	60	6205	15	A-128	A-144	A-161	PB	PB	P
			1.67	53500	5450	60	6215	15	A-128	A-144	A-161	PB	PB	P
			2.21	57000	5820	60	6225	15	A-129	A-145	A-162	PB	PB	P
103	3970	404	0.87	20200	2060	60	6185	17	A-127	A-143	A-160	PB	PB	P
			1.07	28900	2950	60	6195	17	A-127	A-143	A-160	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n ₂ r/min	Output Torque T _{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
69.0	5910	603	0.85	22800	2330	60	- 6185	- 21	A-127	A-143	A-160	PB	PB	P
			1.07	32900	3350				A-127	A-143	A-160	PB	PB	P
			1.32	62200	6340				A-128	A-144	A-161	PB	PB	P
			1.67	63600	6480				A-128	A-144	A-161	PB	PB	P
			2.09	67200	6850				A-129	A-145	A-162	PB	PB	P
65.3	6250	637	1.33	62300	6350	606	- 6205	- 15	A-128	A-144	A-161	PB	PB	P
			1.67	63100	6430				A-128	A-144	A-161	PB	PB	P
			2.21	67400	6870				A-129	A-145	A-162	PB	PB	P
58.0	7040	718	0.90	34200	3490	60	- 6195	- 25	A-127	A-143	A-160	PB	PB	P
50.0	8170	832	0.84	35700	3640	60	- 6195	- 29	A-127	A-143	A-160	PB	PB	P
			1.02	67600	6890				A-128	A-144	A-161	PB	PB	P
			1.30	68900	7030				A-128	A-144	A-161	PB	PB	P
			1.67	73100	7450				A-129	A-145	A-162	PB	PB	P
46.7	8750	892	1.06	69500	7080	606	- 6205	- 21	A-128	A-144	A-161	PB	PB	P
			1.43	71000	7240				A-128	A-144	A-161	PB	PB	P
			1.69	75100	7660				A-129	A-145	A-162	PB	PB	P
			2.16	94100	9590				A-129	A-145	A-162	PB	PB	P
33.8	12100	1230	1.05	76800	7830	606	- 6215	- 29	A-128	A-144	A-161	PB	PB	P
			1.56	102000	10400				A-129	A-145	A-162	PB	PB	P
			2.09	114000	11700				A-130	A-145	A-162	PB	PB	P
33.7	12100	1230	1.00	77200	7870	60	- 6215	- 43	A-128	A-144	A-161	PB	PB	P
22.8	17900	1830	1.06	114000	11600	606	- 6235	- 43	A-129	A-145	A-162	PB	PB	P
			1.44	128000	13100				A-130	A-145	A-162	PB	PB	P
			1.73	157000	16000				A-130	A-146	A-162	PB	PB	P
			2.51	193000	19700				A-130	A-146	A-162	PB	PB	P
16.6	24600	2510	1.05	139000	14100	606	- 6245	- 59	A-130	A-145	A-162	PB	PB	P
			1.87	210000	21400				A-130	A-146	A-162	PB	PB	P
12.0	32300	3290	0.85	190000	19400	60	- 6255DB	- 121	A-138	A-154	A-170	PB	PB	P
11.3	36200	3690	1.19	235000	23900	606	- 6265	- 87	A-130	A-146	A-162	PB	PB	P
8.79	44000	4490	0.98	250000	25500	60	- 6265DA	- 165	A-138	A-154	A-170	PB	PB	P
7.44	52000	5300	0.84	262000	26700	60	- 6265DA	- 195	A-138	A-154	A-170	PB	PB	P
4.55	85100	8670	0.80	248000	25300	60	- 6275DA	- 319	A-138	-	A-170	PB	-	TP

<h1>55 kW</h1> <h1>50 Hz</h1>	Motor Speed n ₁	
	4P	6P
	1450r/min	980r/min

Output Speed n ₂ r/min	Output Torque T _{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
132	3790	386	1.09	51700	5270	75	- 6205	- 11	A-128	A-144	A-161	PB	PB	P
			1.37	52400	5340				A-128	A-144	A-161	PB	PB	P
			1.81	55600	5670				A-129	A-145	A-162	PB	PB	P
96.7	5160	526	1.09	55500	5660	75	- 6205	- 15	A-128	A-144	A-161	PB	PB	P
			1.37	56200	5730				A-128	A-144	A-161	PB	PB	P
			1.81	60000	6120				A-129	A-145	A-162	PB	PB	P
89.1	5600	571	1.09	57800	5900	756	- 6205	- 11	-	-	-	PB	PB	P
			1.37	58600	5970				-	-	-	PB	PB	P
			1.81	62200	6340				-	-	-	PB	PB	P
69.0	7230	737	1.08	61900	6310	75	- 6205	- 21	A-128	A-144	A-161	PB	PB	P
			1.37	63300	6450				A-128	A-144	A-161	PB	PB	P
			1.71	66900	6820				A-129	A-145	A-162	PB	PB	P
65.3	7640	779	1.09	62000	6320	756	- 6205	- 15	-	-	-	PB	PB	P
			1.37	62800	6400				-	-	-	PB	PB	P
			1.81	67100	6840				-	-	-	PB	PB	P

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
83.3	4900	499	0.87	21700	2210	60	- 6185	- 21	A-127	A-143	A-160	PB	PB	P
			1.07	31100	3170	60	- 6195	- 21	A-127	A-143	A-160	PB	PB	P
			1.32	59000	6010	60	- 6205	- 21	A-128	A-144	A-161	PB	PB	P
			1.67	60300	6140	60	- 6215	- 21	A-128	A-144	A-161	PB	PB	P
			2.09	63700	6490	60	- 6225	- 21	A-129	A-145	A-162	PB	PB	P
77.7	5260	536	1.33	59300	6050	606	- 6205	- 15	A-128	A-144	A-161	PB	PB	P
			1.67	60100	6130	606	- 6215	- 15	A-128	A-144	A-161	PB	PB	P
			2.21	64200	6540	606	- 6225	- 15	A-129	A-145	A-162	PB	PB	P
70.0	5830	595	0.90	32400	3300	60	- 6195	- 25	A-127	A-143	A-160	PB	PB	P
60.3	6770	690	0.84	33900	3450	60	- 6195	- 29	A-127	A-143	A-160	PB	PB	P
			1.02	64100	6530	60	- 6205	- 29	A-128	A-144	A-161	PB	PB	P
			1.30	65400	6660	60	- 6215	- 29	A-128	A-144	A-161	PB	PB	P
			1.67	69300	7070	60	- 6225	- 29	A-129	A-145	A-162	PB	PB	P
55.5	7360	750	1.22	66200	6750	606	- 6205	- 21	A-128	A-144	A-161	PB	PB	P
			1.67	67700	6900	606	- 6215	- 21	A-128	A-144	A-161	PB	PB	P
			2.01	71500	7290	606	- 6225	- 21	A-129	A-145	A-162	PB	PB	P
			2.17	89500	9130	606	- 6235	- 21	A-129	A-145	A-162	PB	PB	P
40.2	10200	1040	1.24	73200	7460	606	- 6215	- 29	A-128	A-144	A-161	PB	PB	P
			1.67	97500	9940	606	- 6235	- 29	A-129	A-145	A-162	PB	PB	P
			2.09	109000	11100	606	- 6245	- 29	A-130	A-145	A-162	PB	PB	P
40.7	10000	1020	1.00	73300	7470	60	- 6215	- 43	A-128	A-144	A-161	PB	PB	P
27.1	15100	1540	1.21	108000	11100	606	- 6235	- 43	A-129	A-145	A-162	PB	PB	P
			1.67	122000	12400	606	- 6245	- 43	A-130	A-145	A-162	PB	PB	P
			1.98	150000	15300	606	- 6255	- 43	A-130	A-146	A-162	PB	PB	P
			2.51	184000	18700	606	- 6265	- 43	A-130	A-146	A-162	PB	PB	P
19.7	20700	2110	1.25	132000	13500	606	- 6245	- 59	A-130	A-145	A-162	PB	PB	P
			2.09	200000	20400	606	- 6265	- 59	A-130	A-146	A-162	PB	PB	P
14.5	26700	2730	1.03	180000	18400	60	- 6255DB	- 121	A-138	A-154	A-170	PB	PB	P
13.4	30500	3110	1.19	223000	22800	606	- 6265	- 87	A-130	A-146	A-162	PB	PB	P
10.6	36500	3720	1.13	237000	24200	60	- 6265DA	- 165	A-138	A-154	A-170	PB	PB	P
8.97	43100	4390	1.01	248000	25300	60	- 6265DA	- 195	A-138	A-154	A-170	PB	PB	P
5.49	70500	7190	0.97	248000	25300	60	- 6275DA	- 319	A-138	-	A-170	PB	-	TP

55 kW 60 Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
159	3140	320	1.09	49000	5000	75	- 6205	- 11	A-128	A-144	A-161	PB	PB	P
			1.37	49700	5060	75	- 6215	- 11	A-128	A-144	A-161	PB	PB	P
			1.81	52700	5370	75	- 6225	- 11	A-129	A-145	A-162	PB	PB	P
117	4280	436	1.09	52600	5360	75	- 6205	- 15	A-128	A-144	A-161	PB	PB	P
			1.37	53300	5430	75	- 6215	- 15	A-128	A-144	A-161	PB	PB	P
			1.81	56900	5800	75	- 6225	- 15	A-129	A-145	A-162	PB	PB	P
106	4710	480	1.09	55100	5610	756	- 6205	- 11	-	-	-	PB	PB	P
			1.37	55800	5690	756	- 6215	- 11	-	-	-	PB	PB	P
			1.81	59300	6040	756	- 6225	- 11	-	-	-	PB	PB	P
83.3	5990	610	1.08	58700	5980	75	- 6205	- 21	A-128	A-144	A-161	PB	PB	P
			1.37	60000	6120	75	- 6215	- 21	A-128	A-144	A-161	PB	PB	P
			1.71	63400	6470	75	- 6225	- 21	A-129	A-145	A-162	PB	PB	P
77.7	6420	655	1.09	59000	6020	756	- 6205	- 15	-	-	-	PB	PB	P
			1.37	59800	6100	756	- 6215	- 15	-	-	-	PB	PB	P
			1.81	63900	6510	756	- 6225	- 15	-	-	-	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
50.0	9980	1020	1.06	68500	6980	75	- 6215	- 29	A-128	A-144	A-161	PB	PB	P
			1.37	72700	7410				A-129	A-145	A-162	PB	PB	P
46.7	10700	1090	1.17	70500	7190	756	- 6215	- 21	-	-	-	PB	PB	P
			1.38	74700	7610				-	-	-	PB	PB	P
			1.77	93700	9550				A-129	A-145	A-162	PB	PB	P
33.8	14800	1510	1.02	80900	8240	756	- 6225	- 29	-	-	-	PB	PB	P
			1.71	114000	11600				A-130	A-145	A-162	PB	PB	P
			2.15	141000	14300				A-130	A-146	A-162	PB	PB	P
33.7	14800	1510	1.03	81400	8290	75	- 6225	- 43	A-129	A-145	A-162	PB	PB	P
22.8	21900	2230	1.18	127000	13000	756	- 6245	- 43	A-130	A-145	A-162	PB	PB	P
			1.42	157000	16000				A-130	A-146	A-162	PB	PB	P
			2.05	192000	19600				-	-	-	PB	PB	P
16.6	30000	3060	1.03	170000	17400	756	- 6255	- 59	A-130	A-146	A-162	PB	PB	P
			1.53	209000	21400				-	-	-	PB	PB	P
			2.27	248000	25300				-	-	-	PB	PB	TP

<h1>75 kW</h1> <h1>50 Hz</h1>	Motor Speed n_1	
	4P	6P
	1450r/min	980r/min

Output Speed n_2 r/min	Output Torque T_{out}		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
132	5160	526	1.33	55300	5640	100	- 6225	- 11	-	-	-	PB	PB	P
96.7	7040	718	1.33	59600	6070	100	- 6225	- 15	-	-	-	PB	PB	P
89.1	7640	779	1.51	77600	7910	1006	- 6235	- 11	-	-	-	PB	PB	P
			1.76	86500	8810				-	-	-	PB	PB	P
69.0	9850	1000	1.26	66300	6760	100	- 6225	- 21	-	-	-	PB	PB	P
65.3	10400	1060	1.51	82900	8450	1006	- 6235	- 15	-	-	-	PB	PB	P
			1.76	92800	9460				-	-	-	PB	PB	P
50.0	13600	1390	1.00	71800	7320	100	- 6225	- 29	-	-	-	PB	PB	P
46.7	14600	1490	1.30	92800	9460	1006	- 6235	- 21	-	-	-	PB	PB	P
			1.60	104000	10600				-	-	-	PB	PB	P
			2.01	127000	12900				-	-	-	PB	PB	P
33.8	20100	2050	1.26	113000	11500	1006	- 6245	- 29	-	-	-	PB	PB	P
			1.57	139000	14200				-	-	-	PB	PB	P
			2.12	172000	17500				-	-	-	PB	PB	P
22.8	29900	3040	1.04	155000	15800	1006	- 6255	- 43	-	-	-	PB	PB	P
			1.51	191000	19500				-	-	-	PB	PB	P
			2.01	248000	25300				-	-	-	PB	PB	TP
16.6	41000	4180	1.12	208000	21200	1006	- 6265	- 59	-	-	-	PB	PB	P
			1.67	248000	25300				-	-	-	PB	PB	TP

- Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.
 3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
60.3	8270	843	1.06	65000	6630	75	6215	29	A-128	A-144	A-161	PB	PB	P
			1.37	69000	7030	75	6225	29	A-129	A-145	A-162	PB	PB	P
55.5	8990	917	1.37	67200	6860	756	6215	21	-	-	-	PB	PB	P
			1.65	71200	7250	756	6225	21	-	-	-	PB	PB	P
			1.77	89200	9090	756	6235	21	A-129	A-145	A-162	PB	PB	P
40.2	12400	1270	1.21	77200	7870	756	6225	29	-	-	-	PB	PB	P
			1.71	108000	11100	756	6245	29	A-130	A-145	A-162	PB	PB	P
			2.15	134000	13600	756	6255	29	A-130	A-146	A-162	PB	PB	P
40.7	12300	1250	1.03	77300	7880	75	6225	43	A-129	A-145	A-162	PB	PB	P
27.1	18400	1880	1.37	121000	12400	756	6245	43	A-130	A-145	A-162	PB	PB	P
			1.62	149000	15200	756	6255	43	A-130	A-146	A-162	PB	PB	P
			2.05	183000	18700	756	6265	43	-	-	-	PB	PB	P
19.7	25300	2580	1.18	162000	16500	756	6255	59	A-130	A-146	A-162	PB	PB	P
			1.71	199000	20300	756	6265	59	-	-	-	PB	PB	P
			2.40	248000	25300	756	6275	59	-	-	-	PB	PB	TP

75 kW 60 Hz	Motor Speed n ₁	
	4P	6P
	1750r/min	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
159	4280	436	1.33	52400	5340	100	6225	11	-	-	-	PB	PB	P
117	5830	595	1.33	56500	5760	100	6225	15	-	-	-	PB	PB	P
106	6420	655	1.51	73900	7530	1006	6235	11	-	-	-	PB	PB	P
			1.76	82300	8390	1006	6245	11	-	-	-	PB	PB	P
83.3	8170	832	1.26	62900	6420	100	6225	21	-	-	-	PB	PB	P
77.7	8760	893	1.51	78900	8050	1006	6235	15	-	-	-	PB	PB	P
			1.76	88300	9000	1006	6245	15	-	-	-	PB	PB	P
60.3	11300	1150	1.00	68200	6960	100	6225	29	-	-	-	PB	PB	P
55.5	12300	1250	1.30	88500	9020	1006	6235	21	-	-	-	PB	PB	P
			1.60	98700	10100	1006	6245	21	-	-	-	PB	PB	P
			2.01	121000	12300	1006	6255	21	-	-	-	PB	PB	P
40.2	16900	1730	1.26	108000	11000	1006	6245	29	-	-	-	PB	PB	P
			1.57	133000	13500	1006	6255	29	-	-	-	PB	PB	P
			2.12	163000	16600	1006	6265	29	-	-	-	PB	PB	P
27.1	25100	2560	1.19	148000	15100	1006	6255	43	-	-	-	PB	PB	P
			1.51	182000	18600	1006	6265	43	-	-	-	PB	PB	P
			2.01	248000	25300	1006	6275	43	-	-	-	PB	PB	TP
19.7	34500	3510	1.26	198000	20200	1006	6265	59	-	-	-	PB	PB	P
			1.76	248000	25300	1006	6275	59	-	-	-	PB	PB	TP

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

90kW 50Hz

Motor Speed n_1

6P

980r/min

Gearmotors

Selection Tables

Dimension Tables

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
89.1	9170	934	1.26	77300	7880	1256 - 6235	- 11	-	-	-	PB	PB	P	
			1.47	86100	8780			-	-	-	PB	PB	P	
			1.68	106000	10800			-	-	-	PB	PB	P	
			1.94	130000	13200			-	-	-	PB	PB	P	
65.3	12500	1270	1.26	82400	8400	1256 - 6235	- 15	-	-	-	PB	PB	P	
			1.47	92300	9410			-	-	-	PB	PB	P	
			1.68	113000	11600			-	-	-	PB	PB	P	
			1.94	139000	14100			-	-	-	PB	PB	P	
46.7	17500	1780	1.08	92200	9400	1256 - 6235	- 21	-	-	-	PB	PB	P	
			1.33	103000	10500			-	-	-	PB	PB	P	
			1.68	126000	12900			-	-	-	PB	PB	P	
			1.91	155000	15800			-	-	-	PB	PB	P	
33.8	24200	2460	1.05	112000	11400	1256 - 6245	- 29	-	-	-	PB	PB	P	
			1.31	139000	14100			-	-	-	PB	PB	P	
			1.77	171000	17400			-	-	-	PB	PB	P	
22.8	35800	3650	1.26	190000	19400	1256 - 6265	- 43	-	-	-	PB	PB	P	
			1.68	248000	25300			-	-	-	PB	PB	TP	
16.6	49200	5010	1.39	248000	25300	1256 - 6275	- 59	-	-	-	PB	PB	TP	

110kW 50Hz

Motor Speed n_1

6P

980r/min

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of dimension sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
89.1	11200	1140	1.20	85700	8730	1506 - 6245	- 11	-	-	-	PB	PB	P	
			1.37	105000	10700			-	-	-	PB	PB	P	
65.3	15300	1560	1.20	91700	9350	1506 - 6245	- 15	-	-	-	PB	PB	P	
			1.37	113000	11500			-	-	-	PB	PB	P	
46.7	21400	2180	1.09	102000	10400	1506 - 6245	- 21	-	-	-	PB	PB	P	
			1.37	126000	12800			-	-	-	PB	PB	P	
33.8	29500	3010	1.07	138000	14000	1506 - 6255	- 29	-	-	-	PB	PB	P	
			1.45	170000	17300			-	-	-	PB	PB	P	
22.8	43800	4460	1.03	189000	19300	1506 - 6265	- 43	-	-	-	PB	PB	P	

132kW 50Hz

Motor Speed n_1

6P

980r/min

Output Speed n_2 r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
89.1	13400	1370	1.14	105000	10700	1756 - 6255	- 11	-	-	-	PB	PB	P	
			1.33	129000	13100			-	-	-	PB	PB	P	
65.3	18300	1870	1.14	112000	11500	1756 - 6255	- 15	-	-	-	PB	PB	P	
			1.33	138000	14000			-	-	-	PB	PB	P	
46.7	25700	2620	1.14	125000	12700	1756 - 6255	- 21	-	-	-	PB	PB	P	
			1.30	154000	15700			-	-	-	PB	PB	P	
33.8	35400	3610	1.20	169000	17200	1756 - 6265	- 29	-	-	-	PB	PB	P	

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked Models are manufactured with the Cyclo® Reducer and motor separately mounted on a common baseplate (Horizontal shaft direction) or with adaptor (Vertical shaft direction).

90kW 60Hz	Motor Speed n ₁
	6P
	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method			
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM	
106	7710	786	1.26	73600	7500	1256 -	6235	- 11	-	-	-	PB	PB	P	
			1.47	82000	8360	1256 -	6245	- 11	-	-	-	-	PB	PB	P
			1.68	101000	10300	1256 -	6255	- 11	-	-	-	-	PB	PB	P
			1.94	123000	12600	1256 -	6265	- 11	-	-	-	-	PB	PB	P
77.7	10500	1070	1.26	78500	8010	1256 -	6235	- 15	-	-	-	PB	PB	P	
			1.47	87900	8960	1256 -	6245	- 15	-	-	-	-	PB	PB	P
			1.68	108000	11000	1256 -	6255	- 15	-	-	-	-	PB	PB	P
			1.94	132000	13400	1256 -	6265	- 15	-	-	-	-	PB	PB	P
55.5	14700	1500	1.08	88000	8970	1256 -	6235	- 21	-	-	-	PB	PB	P	
			1.33	98200	10000	1256 -	6245	- 21	-	-	-	-	PB	PB	P
			1.68	120000	12300	1256 -	6255	- 21	-	-	-	-	PB	PB	P
			1.91	147000	15000	1256 -	6265	- 21	-	-	-	-	PB	PB	P
40.2	20300	2070	1.05	107000	10900	1256 -	6245	- 29	-	-	-	PB	PB	P	
			1.31	132000	13500	1256 -	6255	- 29	-	-	-	-	PB	PB	P
			1.77	163000	16600	1256 -	6265	- 29	-	-	-	-	PB	PB	P
27.1	30100	3070	1.26	181000	18500	1256 -	6265	- 43	-	-	-	PB	PB	P	
			1.68	248000	25300	1256 -	6275	- 43	-	-	-	-	PB	PB	TP
19.7	41400	4220	1.47	248000	25300	1256 -	6275	- 59	-	-	-	PB	PB	TP	

110kW 60Hz	Motor Speed n ₁
	6P
	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
106	9420	961	1.20	81600	8320	1506 -	6245	- 11	-	-	-	PB	PB	P
			1.37	100000	10200	1506 -	6255	- 11	-	-	-	-	PB	PB
77.7	12800	1310	1.20	87500	8910	1506 -	6245	- 15	-	-	-	PB	PB	P
			1.37	108000	11000	1506 -	6255	- 15	-	-	-	-	PB	PB
55.5	18000	1830	1.09	97500	9940	1506 -	6245	- 21	-	-	-	PB	PB	P
			1.37	120000	12200	1506 -	6255	- 21	-	-	-	-	PB	PB
40.2	24800	2530	1.07	131000	13400	1506 -	6255	- 29	-	-	-	PB	PB	P
			1.45	162000	16500	1506 -	6265	- 29	-	-	-	-	PB	PB
27.1	36800	3750	1.03	180000	18400	1506 -	6265	- 43	-	-	-	PB	PB	P

132kW 60Hz	Motor Speed n ₁
	6P
	1165r/min

Output Speed n ₂ r/min	Output Torque Tout		SF	Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m		N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
106	11300	1150	1.14	99900	10200	1756 -	6255	- 11	-	-	-	PB	PB	P
			1.33	123000	12500	1756 -	6265	- 11	-	-	-	-	PB	PB
77.7	15400	1570	1.14	107000	10900	1756 -	6255	- 15	-	-	-	PB	PB	P
			1.33	131000	13400	1756 -	6265	- 15	-	-	-	-	PB	PB
55.5	21600	2200	1.14	119000	12100	1756 -	6255	- 21	-	-	-	PB	PB	P
			1.30	146000	14900	1756 -	6265	- 21	-	-	-	-	PB	PB
40.2	29800	3040	1.20	161000	16400	1756 -	6265	- 29	-	-	-	PB	PB	P

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 5. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 6. Motor slippage may affect n₁ and n₂.

TORQUE RATED
CYCLO[®] GEARMOTORS

50 Hz	Output Torque T_{out}		Motor Speed n_1	
	24.0	N·m	4P	
	2.45	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	24.0	2.45	1180	120	01	6060DA	104	A-131	A-147	A-163	MF	MF	MF
12.0	24.0	2.45	1180	120	01	6060DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	24.0	2.45	1180	120	01	6060DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	24.0	2.45	1180	120	01	6060DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	24.0	2.45	1180	120	01	6060DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	24.0	2.45	1180	120	01	6060DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	24.0	2.45	1180	120	01	6060DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	24.0	2.45	1180	120	01	6060DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	24.0	2.45	1180	120	01	6060DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	24.0	2.45	1180	120	01	6060DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	24.0	2.45	1180	120	01	6060DA	559	A-131	A-147	A-163	MF	MF	MF
1.98	24.0	2.45	1180	120	01	6060DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	24.0	2.45	1180	120	01	6060DA	841	A-131	A-147	A-163	MF	MF	MF
1.16	24.0	2.45	1180	120	01	6060DA	1247	A-131	A-147	A-163	MF	MF	MF
0.784	24.0	2.45	1180	120	01	6060DA	1849	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque T_{out}		Motor Speed n_1	
	30.0	N·m	4P	
	3.06	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	30.0	3.06	1180	120	01	6065DA	104	A-131	A-147	A-163	MF	MF	MF
12.0	30.0	3.06	1140	116	01	6065DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	30.0	3.06	1180	120	01	6065DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	30.0	3.06	1180	120	01	6065DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	30.0	3.06	1180	120	01	6065DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	30.0	3.06	1180	120	01	6065DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	30.0	3.06	1180	120	01	6065DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	30.0	3.06	1180	120	01	6065DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	30.0	3.06	1180	120	01	6065DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	30.0	3.06	1180	120	01	6065DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	30.0	3.06	1180	120	01	6065DA	559	A-131	A-147	A-163	MF	MF	MF
1.98	30.0	3.06	1180	120	01	6065DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	30.0	3.06	1180	120	01	6065DA	841	A-131	A-147	A-163	MF	MF	MF
1.16	30.0	3.06	1180	120	01	6065DA	1247	A-131	A-147	A-163	MF	MF	MF
0.784	30.0	3.06	1180	120	01	6065DA	1849	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque T_{out}		Motor Speed n_1	
	45.0	N·m	4P	
	4.59	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	45.0	4.59	1770	180	01	6070DA	104	A-131	A-147	A-163	MF	MF	MF
12.0	45.0	4.59	1770	180	01	6070DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	45.0	4.59	1770	180	01	6070DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	45.0	4.59	1770	180	01	6070DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	45.0	4.59	1770	180	01	6070DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	45.0	4.59	1770	180	01	6070DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	45.0	4.59	1770	180	01	6070DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	45.0	4.59	1770	180	01	6070DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	45.0	4.59	1770	180	01	6070DA	377	A-131	A-147	A-163	MF	MF	MF

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60Hz	Output Torque Tout		Motor Speed n ₁	
	24.0	N·m	4P	
	2.45	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	24.0	2.45	1180	120	01	6060DA	104	A-131	A-147	A-163	MF	MF	MF
14.5	24.0	2.45	1180	120	01	6060DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	24.0	2.45	1180	120	01	6060DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	24.0	2.45	1180	120	01	6060DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	24.0	2.45	1180	120	01	6060DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	24.0	2.45	1180	120	01	6060DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	24.0	2.45	1180	120	01	6060DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	24.0	2.45	1180	120	01	6060DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	24.0	2.45	1180	120	01	6060DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	24.0	2.45	1180	120	01	6060DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	24.0	2.45	1180	120	01	6060DA	559	A-131	A-147	A-163	MF	MF	MF
2.39	24.0	2.45	1180	120	01	6060DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	24.0	2.45	1180	120	01	6060DA	841	A-131	A-147	A-163	MF	MF	MF
1.40	24.0	2.45	1180	120	01	6060DA	1247	A-131	A-147	A-163	MF	MF	MF
0.946	24.0	2.45	1180	120	01	6060DA	1849	A-131	A-147	A-163	MF	MF	MF

TORQUE RATED
CYCLO® GEARMOTORS

60Hz	Output Torque Tout		Motor Speed n ₁	
	30.0	N·m	4P	
	3.06	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	30.0	3.06	1180	120	01	6065DA	104	A-131	A-147	A-163	MF	MF	MF
14.5	30.0	3.06	1140	116	01	6065DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	30.0	3.06	1180	120	01	6065DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	30.0	3.06	1180	120	01	6065DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	30.0	3.06	1180	120	01	6065DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	30.0	3.06	1180	120	01	6065DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	30.0	3.06	1180	120	01	6065DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	30.0	3.06	1180	120	01	6065DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	30.0	3.06	1180	120	01	6065DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	30.0	3.06	1180	120	01	6065DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	30.0	3.06	1180	120	01	6065DA	559	A-131	A-147	A-163	MF	MF	MF
2.39	30.0	3.06	1180	120	01	6065DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	30.0	3.06	1180	120	01	6065DA	841	A-131	A-147	A-163	MF	MF	MF
1.40	30.0	3.06	1180	120	01	6065DA	1247	A-131	A-147	A-163	MF	MF	MF
0.946	30.0	3.06	1180	120	01	6065DA	1849	A-131	A-147	A-163	MF	MF	MF

60Hz	Output Torque Tout		Motor Speed n ₁	
	45.0	N·m	4P	
	4.59	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	45.0	4.59	1770	180	01	6070DA	104	A-131	A-147	A-163	MF	MF	MF
14.5	45.0	4.59	1770	180	01	6070DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	45.0	4.59	1770	180	01	6070DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	45.0	4.59	1770	180	01	6070DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	45.0	4.59	1770	180	01	6070DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	45.0	4.59	1770	180	01	6070DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	45.0	4.59	1770	180	01	6070DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	45.0	4.59	1770	180	01	6070DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	45.0	4.59	1770	180	01	6070DA	377	A-131	A-147	A-163	MF	MF	MF

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	45.0	N·m	50 Hz
Torque	4.59	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.07	45.0	4.59	1770	180	01	6070DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	45.0	4.59	1770	180	01	6070DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	45.0	4.59	1770	180	01	6070DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	45.0	4.59	1770	180	01	6070DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	45.0	4.59	1770	180	01	6070DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	45.0	4.59	1770	180	01	6070DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	45.0	4.59	1770	180	01	6070DA	1247	A-131	A-147	A-163	MF	MF	MF
0.784	45.0	4.59	1770	180	01	6070DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	45.0	4.59	1770	180	01	6070DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	45.0	4.59	1770	180	01	6070DA	2537	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁
	60.0	N·m	4P
	6.12	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	60.0	6.12	1770	180	02	6075DA	104	A-131	A-147	A-163	MF	MF	MF
12.0	50.8	5.18	1770	180	01	6075DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	60.0	6.12	1770	180	01	6075DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	60.0	6.12	1770	180	01	6075DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	60.0	6.12	1770	180	01	6075DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	60.0	6.12	1770	180	01	6075DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	60.0	6.12	1770	180	01	6075DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	60.0	6.12	1770	180	01	6075DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	60.0	6.12	1770	180	01	6075DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	60.0	6.12	1660	169	01	6075DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	60.0	6.12	1660	169	01	6075DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	57.4	5.85	1580	161	01	6075DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	60.0	6.12	1660	169	01	6075DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	60.0	6.12	1770	180	01	6075DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	57.4	5.85	1580	161	01	6075DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	60.0	6.12	1660	169	01	6075DA	1247	A-131	A-147	A-163	MF	MF	MF
0.784	60.0	6.12	1660	169	01	6075DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	57.4	5.85	1580	161	01	6075DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	57.4	5.85	1580	161	01	6075DA	2537	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁
	150	N·m	4P
	15.3	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	150	15.3	3340	340	05	6090DA	104	A-131	A-147	A-163	MF	MF	MF
12.0	150	15.3	3340	340	05	6090DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	150	15.3	3340	340	03	6090DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	150	15.3	3340	340	02	6090DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	150	15.3	3340	340	02	6090DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	150	15.3	3340	340	02	6090DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	150	15.3	3340	340	02	6090DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	150	15.3	3290	336	01	6090DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	150	15.3	3290	336	01	6090DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	150	15.3	3310	338	01	6090DA	473	A-131	A-147	A-163	MF	MF	MF

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	45.0	N·m	60 Hz
Torque	4.59	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.70	45.0	4.59	1770	180	01	6070DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	45.0	4.59	1770	180	01	6070DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	45.0	4.59	1770	180	01	6070DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	45.0	4.59	1770	180	01	6070DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	45.0	4.59	1770	180	01	6070DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	45.0	4.59	1770	180	01	6070DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	45.0	4.59	1770	180	01	6070DA	1247	A-131	A-147	A-163	MF	MF	MF
0.946	45.0	4.59	1770	180	01	6070DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	45.0	4.59	1770	180	01	6070DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	45.0	4.59	1770	180	01	6070DA	2537	A-131	A-147	A-163	MF	MF	MF

60 Hz	Output Torque Tout		Motor Speed n ₁	
	60.0	N·m	4P	
	6.12	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	60.0	6.12	1770	180	02	6075DA	104	A-131	A-147	A-163	MF	MF	MF
14.5	50.8	5.18	1770	180	01	6075DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	60.0	6.12	1770	180	01	6075DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	60.0	6.12	1770	180	01	6075DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	60.0	6.12	1770	180	01	6075DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	60.0	6.12	1770	180	01	6075DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	60.0	6.12	1770	180	01	6075DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	60.0	6.12	1770	180	01	6075DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	60.0	6.12	1770	180	01	6075DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	60.0	6.12	1660	169	01	6075DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	60.0	6.12	1660	169	01	6075DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	57.4	5.85	1580	161	01	6075DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	60.0	6.12	1660	169	01	6075DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	60.0	6.12	1770	180	01	6075DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	57.4	5.85	1580	161	01	6075DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	60.0	6.12	1660	169	01	6075DA	1247	A-131	A-147	A-163	MF	MF	MF
0.946	60.0	6.12	1660	169	01	6075DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	57.4	5.85	1580	161	01	6075DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	57.4	5.85	1580	161	01	6075DA	2537	A-131	A-147	A-163	MF	MF	MF

60 Hz	Output Torque Tout		Motor Speed n ₁	
	150	N·m	4P	
	15.3	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	150	15.3	3340	340	05	6090DA	104	A-131	A-147	A-163	MF	MF	MF
14.5	150	15.3	3340	340	05	6090DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	150	15.3	3340	340	03	6090DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	150	15.3	3340	340	02	6090DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	150	15.3	3340	340	02	6090DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	150	15.3	3340	340	02	6090DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	150	15.3	3340	340	02	6090DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	150	15.3	3290	336	01	6090DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	150	15.3	3290	336	01	6090DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	150	15.3	3310	338	01	6090DA	473	A-131	A-147	A-163	MF	MF	MF

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	150	N·m	50 Hz
Torque	15.3	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVN CVVM	CNHM CHHM	CNFM CHFM	CNVN CVVM
2.59	150	15.3	3310	338	01	6090DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	146	14.9	3300	336	01	6090DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	150	15.3	3310	338	01	6090DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	150	15.3	3290	336	01	6090DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	146	14.9	3300	336	01	6090DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	150	15.3	3310	338	01	6090DA	1247	A-131	A-147	A-163	MF	MF	MF
0.980	150	15.3	3310	338	01	6090DA	1479	A-131	A-147	A-163	MF	MF	MF
0.784	150	15.3	3310	338	01	6090DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	146	14.9	3300	336	01	6090DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	146	14.9	3300	336	01	6090DA	2537	A-131	A-147	A-163	MF	MF	MF
0.476	150	15.3	3310	338	01	6090DA	3045	A-131	A-147	A-163	MF	MF	MF
0.417	146	14.9	3300	336	01	6090DA	3481	A-131	A-147	A-163	MF	MF	MF
0.327	150	15.3	3310	338	01	6090DA	4437	A-131	A-147	A-163	MF	MF	MF
0.282	150	15.3	3310	338	01	6090DA	5133	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁	
	200	N·m	4P	
	20.4	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVN CVVM	CNHM CHHM	CNFM CHFM	CNVN CVVM
13.9	181	18.4	3340	340	05	6095DA	104	A-131	A-147	A-163	MF	MF	MF
12.0	160	16.4	3340	340	05	6095DA	121	A-131	A-147	A-163	MF	MF	MF
10.1	183	18.7	3340	340	05	6095DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	200	20.4	3340	340	03	6095DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	200	20.4	3340	340	03	6095DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	200	20.4	3340	340	02	6095DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	200	20.4	3340	340	02	6095DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	200	20.4	3200	326	02	6095DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	200	20.4	3200	326	02	6095DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	200	20.4	3220	328	01	6095DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	200	20.4	3220	328	01	6095DA	559	A-131	A-147	A-163	MF	MF	MF
1.98	200	20.4	3220	328	01	6095DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	200	20.4	3200	326	01	6095DA	841	A-131	A-147	A-163	MF	MF	MF
1.16	200	20.4	3220	328	01	6095DA	1247	A-131	A-147	A-163	MF	MF	MF
0.980	193	19.6	3240	330	01	6095DA	1479	A-131	A-147	A-163	MF	MF	MF
0.784	200	20.4	3220	328	01	6095DA	1849	A-131	A-147	A-163	MF	MF	MF
0.476	192	19.6	3240	330	01	6095DA	3045	A-131	A-147	A-163	MF	MF	MF
0.327	192	19.6	3240	330	01	6095DA	4437	A-131	A-147	A-163	MF	MF	MF
0.282	192	19.6	3240	330	01	6095DA	5133	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁	
	250	N·m	4P	
	25.5	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVN CVVM	CNHM CHHM	CNFM CHFM	CNVN CVVM
10.1	250	25.5	5400	550	05	6100DA	143	A-131	A-147	A-163	MF	MF	MF
8.79	250	25.5	5400	550	05	6100DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	250	25.5	5400	550	05	6100DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	250	25.5	5400	550	03	6100DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	250	25.5	5400	550	02	6100DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	250	25.5	5400	550	02	6100DA	319	A-131	A-147	A-163	MF	MF	MF

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output Torque	150	N·m	60 Hz
	15.3	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.13	150	15.3	3310	338	01	6090DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	146	14.9	3300	336	01	6090DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	150	15.3	3310	338	01	6090DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	150	15.3	3290	336	01	6090DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	146	14.9	3300	336	01	6090DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	150	15.3	3310	338	01	6090DA	1247	A-131	A-147	A-163	MF	MF	MF
1.18	150	15.3	3310	338	01	6090DA	1479	A-131	A-147	A-163	MF	MF	MF
0.946	150	15.3	3310	338	01	6090DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	146	14.9	3300	336	01	6090DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	146	14.9	3300	336	01	6090DA	2537	A-131	A-147	A-163	MF	MF	MF
0.575	150	15.3	3310	338	01	6090DA	3045	A-131	A-147	A-163	MF	MF	MF
0.503	146	14.9	3300	336	01	6090DA	3481	A-131	A-147	A-163	MF	MF	MF
0.394	150	15.3	3310	338	01	6090DA	4437	A-131	A-147	A-163	MF	MF	MF
0.341	150	15.3	3310	338	01	6090DA	5133	A-131	A-147	A-163	MF	MF	MF

60 Hz	Output Torque Tout		Motor Speed n ₁
	200	N·m	4P
	20.4	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	181	18.4	3340	340	05	6095DA	104	A-131	A-147	A-163	MF	MF	MF
14.5	160	16.4	3340	340	05	6095DA	121	A-131	A-147	A-163	MF	MF	MF
12.2	183	18.7	3340	340	05	6095DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	200	20.4	3340	340	03	6095DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	200	20.4	3340	340	03	6095DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	200	20.4	3340	340	02	6095DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	200	20.4	3340	340	02	6095DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	200	20.4	3200	326	02	6095DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	200	20.4	3200	326	02	6095DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	200	20.4	3220	328	01	6095DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	200	20.4	3220	328	01	6095DA	559	A-131	A-147	A-163	MF	MF	MF
2.39	200	20.4	3220	328	01	6095DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	200	20.4	3200	326	01	6095DA	841	A-131	A-147	A-163	MF	MF	MF
1.40	200	20.4	3220	328	01	6095DA	1247	A-131	A-147	A-163	MF	MF	MF
1.18	193	19.6	3240	330	01	6095DA	1479	A-131	A-147	A-163	MF	MF	MF
0.946	200	20.4	3220	328	01	6095DA	1849	A-131	A-147	A-163	MF	MF	MF
0.575	192	19.6	3240	330	01	6095DA	3045	A-131	A-147	A-163	MF	MF	MF
0.394	192	19.6	3240	330	01	6095DA	4437	A-131	A-147	A-163	MF	MF	MF
0.341	192	19.6	3240	330	01	6095DA	5133	A-131	A-147	A-163	MF	MF	MF

60 Hz	Output Torque Tout		Motor Speed n ₁
	250	N·m	4P
	25.5	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.2	250	25.5	5400	550	05	6100DA	143	A-131	A-147	A-163	MF	MF	MF
10.6	250	25.5	5400	550	05	6100DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	250	25.5	5400	550	05	6100DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	250	25.5	5400	550	03	6100DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	250	25.5	5400	550	02	6100DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	250	25.5	5400	550	02	6100DA	319	A-131	A-147	A-163	MF	MF	MF

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output Torque	250	N·m	50 Hz
	25.5	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.85	250	25.5	5400	550	02	6100DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	250	25.5	5400	550	02	6100DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	250	25.5	5400	550	01	6100DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	250	25.5	5400	550	01	6100DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	250	25.5	5400	550	01	6100DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	250	25.5	5400	550	01	6100DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	250	25.5	5400	550	01	6100DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	250	25.5	5400	550	01	6100DA	1247	A-131	A-147	A-163	MF	MF	MF
0.980	250	25.5	5400	550	01	6100DA	1479	A-131	A-147	A-163	MF	MF	MF
0.784	250	25.5	5400	550	01	6100DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	250	25.5	5400	550	01	6100DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	250	25.5	5400	550	01	6100DA	2537	A-131	A-147	A-163	MF	MF	MF
0.476	250	25.5	5400	550	01	6100DA	3045	A-131	A-147	A-163	MF	MF	MF
0.417	250	25.5	5400	550	01	6100DA	3481	A-131	A-147	A-163	MF	MF	MF
0.327	250	25.5	5400	550	01	6100DA	4437	A-131	A-147	A-163	MF	MF	MF
0.282	250	25.5	5400	550	01	6100DA	5133	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁
	300	N·m	4P
	30.6	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
8.79	300	30.6	5400	550	05	6105DA	165	A-131	A-147	A-163	MF	MF	MF
7.44	300	30.6	5400	550	05	6105DA	195	A-131	A-147	A-163	MF	MF	MF
6.28	300	30.6	5400	550	05	6105DA	231	A-131	A-147	A-163	MF	MF	MF
5.31	300	30.6	5400	550	03	6105DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	300	30.6	5400	550	02	6105DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	300	30.6	5400	550	02	6105DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	300	30.6	5400	550	02	6105DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	300	30.6	5400	550	02	6105DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	296	30.2	5090	519	01	6105DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	300	30.6	5400	550	01	6105DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	300	30.6	5400	550	01	6105DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	296	30.2	5090	519	01	6105DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	300	30.6	5400	550	01	6105DA	1247	A-131	A-147	A-163	MF	MF	MF
0.980	300	30.6	4780	488	01	6105DA	1479	A-131	A-147	A-163	MF	MF	MF
0.784	300	30.6	5400	550	01	6105DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	296	30.2	5090	519	01	6105DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	296	30.2	5090	519	01	6105DA	2537	A-131	A-147	A-163	MF	MF	MF
0.476	300	30.6	4780	488	01	6105DA	3045	A-131	A-147	A-163	MF	MF	MF
0.417	296	30.2	5090	519	01	6105DA	3481	A-131	A-147	A-163	MF	MF	MF
0.327	300	30.6	4780	488	01	6105DA	4437	A-131	A-147	A-163	MF	MF	MF
0.282	300	30.6	4780	488	01	6105DA	5133	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁
	525	N·m	4P
	53.5	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	525	53.5	9810	1000	1H	6120DB	104	A-131	A-147	A-163	MF	MF	MF
12.0	525	53.5	9810	1000	1H	6120DB	121	A-131	A-147	A-163	MF	MF	MF

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output Torque	250	N·m	60 Hz
	25.5	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
4.64	250	25.5	5400	550	02	6100DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	250	25.5	5400	550	02	6100DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	250	25.5	5400	550	01	6100DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	250	25.5	5400	550	01	6100DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	250	25.5	5400	550	01	6100DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	250	25.5	5400	550	01	6100DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	250	25.5	5400	550	01	6100DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	250	25.5	5400	550	01	6100DA	1247	A-131	A-147	A-163	MF	MF	MF
1.18	250	25.5	5400	550	01	6100DA	1479	A-131	A-147	A-163	MF	MF	MF
0.946	250	25.5	5400	550	01	6100DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	250	25.5	5400	550	01	6100DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	250	25.5	5400	550	01	6100DA	2537	A-131	A-147	A-163	MF	MF	MF
0.575	250	25.5	5400	550	01	6100DA	3045	A-131	A-147	A-163	MF	MF	MF
0.503	250	25.5	5400	550	01	6100DA	3481	A-131	A-147	A-163	MF	MF	MF
0.394	250	25.5	5400	550	01	6100DA	4437	A-131	A-147	A-163	MF	MF	MF
0.341	250	25.5	5400	550	01	6100DA	5133	A-131	A-147	A-163	MF	MF	MF

60 Hz	Output Torque Tout		Motor Speed n ₁
	300	N·m	4P
	30.6	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
10.6	300	30.6	5400	550	05	6105DA	165	A-131	A-147	A-163	MF	MF	MF
8.97	300	30.6	5400	550	05	6105DA	195	A-131	A-147	A-163	MF	MF	MF
7.58	300	30.6	5400	550	05	6105DA	231	A-131	A-147	A-163	MF	MF	MF
6.41	300	30.6	5400	550	03	6105DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	300	30.6	5400	550	02	6105DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	300	30.6	5400	550	02	6105DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	300	30.6	5400	550	02	6105DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	300	30.6	5400	550	02	6105DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	296	30.2	5090	519	01	6105DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	300	30.6	5400	550	01	6105DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	300	30.6	5400	550	01	6105DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	296	30.2	5090	519	01	6105DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	300	30.6	5400	550	01	6105DA	1247	A-131	A-147	A-163	MF	MF	MF
1.18	300	30.6	4780	488	01	6105DA	1479	A-131	A-147	A-163	MF	MF	MF
0.946	300	30.6	5400	550	01	6105DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	296	30.2	5090	519	01	6105DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	296	30.2	5090	519	01	6105DA	2537	A-131	A-147	A-163	MF	MF	MF
0.575	300	30.6	4780	488	01	6105DA	3045	A-131	A-147	A-163	MF	MF	MF
0.503	296	30.2	5090	519	01	6105DA	3481	A-131	A-147	A-163	MF	MF	MF
0.394	300	30.6	4780	488	01	6105DA	4437	A-131	A-147	A-163	MF	MF	MF
0.341	300	30.6	4780	488	01	6105DA	5133	A-131	A-147	A-163	MF	MF	MF

60 Hz	Output Torque Tout		Motor Speed n ₁
	525	N·m	4P
	53.5	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	525	53.5	9810	1000	1H	6120DB	104	A-131	A-147	A-163	MF	MF	MF
14.5	525	53.5	9810	1000	1H	6120DB	121	A-131	A-147	A-163	MF	MF	MF

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	5 2.5	N·m	50 Hz
Torque	5 3.5	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
10.1	525	53.5	9810	1000	1	6120DB	143	A-131	A-147	A-163	MF	MF	MF
8.79	525	53.5	9810	1000	1	6120DB	165	A-131	A-147	A-163	MF	MF	MF
7.44	525	53.5	9810	1000	08	6120DB	195	A-131	A-147	A-163	MF	MF	MF
6.28	522	53.2	9810	1000	08	6120DB	231	A-131	A-147	A-163	MF	MF	MF
5.31	522	53.2	9810	1000	05	6120DA	273	A-131	A-147	A-163	MF	MF	MF
4.55	520	53.0	9810	1000	05	6120DA	319	A-131	A-147	A-163	MF	MF	MF
3.85	520	53.0	9810	1000	05	6120DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	525	53.5	9810	1000	03	6120DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	525	53.5	9810	1000	02	6120DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	525	53.5	9810	1000	02	6120DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	525	53.5	9810	1000	02	6120DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	520	53.0	9810	1000	02	6120DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	525	53.5	9810	1000	02	6120DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	525	53.5	9810	1000	01	6120DA	1247	A-131	A-147	A-163	MF	MF	MF
0.980	525	53.5	9780	997	01	6120DA	1479	A-131	A-147	A-163	MF	MF	MF
0.784	525	53.5	9810	1000	01	6120DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	525	53.5	9810	1000	01	6120DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	525	53.5	9810	1000	01	6120DA	2537	A-131	A-147	A-163	MF	MF	MF
0.476	525	53.5	9780	997	01	6120DA	3045	A-131	A-147	A-163	MF	MF	MF
0.417	525	53.5	9810	1000	01	6120DA	3481	A-131	A-147	A-163	MF	MF	MF
0.327	525	53.5	9780	997	01	6120DA	4437	A-131	A-147	A-163	MF	MF	MF
0.282	525	53.5	9780	997	01	6120DA	5133	A-131	A-147	A-163	MF	MF	MF
0.235	525	53.5	9780	997	01	6120DB	6177	A-131	A-147	A-163	MF	MF	MF
0.192	525	53.5	9780	997	01	6120DB	7569	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque Tout		Motor Speed n ₁	
	6 3 0	N·m	4P	
	6 4.2	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	630	64.2	9810	1000	2	6125DB	104	A-131	A-147	A-163	MF	MF	MF
12.0	622	63.4	9810	1000	1H	6125DB	121	A-131	A-147	A-163	MF	MF	MF
10.1	630	64.2	9810	1000	1H	6125DB	143	A-131	A-147	A-163	MF	MF	MF
8.79	630	64.2	9810	1000	1H	6125DB	165	A-131	A-147	A-163	MF	MF	MF
7.44	630	64.2	9810	1000	1	6125DB	195	A-131	A-147	A-163	MF	MF	MF
6.28	630	64.2	9810	1000	1	6125DB	231	A-131	A-147	A-163	MF	MF	MF
5.31	630	64.2	9810	1000	08	6125DB	273	A-131	A-147	A-163	MF	MF	MF
4.55	630	64.2	9810	1000	08	6125DB	319	A-131	A-147	A-163	MF	MF	MF
3.85	630	64.2	9810	1000	05	6125DA	377	A-131	A-147	A-163	MF	MF	MF
3.07	630	64.2	9810	1000	05	6125DA	473	A-131	A-147	A-163	MF	MF	MF
2.59	630	64.2	9810	1000	03	6125DA	559	A-131	A-147	A-163	MF	MF	MF
2.23	630	64.2	9810	1000	02	6125DA	649	A-131	A-147	A-163	MF	MF	MF
1.98	630	64.2	9810	1000	02	6125DA	731	A-131	A-147	A-163	MF	MF	MF
1.72	630	64.2	9810	1000	02	6125DA	841	A-131	A-147	A-163	MF	MF	MF
1.45	630	64.2	9810	1000	02	6125DA	1003	A-131	A-147	A-163	MF	MF	MF
1.16	630	64.2	9810	1000	02	6125DA	1247	A-131	A-147	A-163	MF	MF	MF
0.980	630	64.2	9560	974	01	6125DA	1479	A-131	A-147	A-163	MF	MF	MF
0.784	630	64.2	9810	1000	01	6125DA	1849	A-131	A-147	A-163	MF	MF	MF
0.702	630	64.2	9810	1000	01	6125DA	2065	A-131	A-147	A-163	MF	MF	MF
0.572	630	64.2	9810	1000	01	6125DA	2537	A-131	A-147	A-163	MF	MF	MF
0.476	630	64.2	9560	974	01	6125DA	3045	A-131	A-147	A-163	MF	MF	MF
0.417	630	64.2	9810	1000	01	6125DA	3481	A-131	A-147	A-163	MF	MF	MF
0.327	630	64.2	9560	974	01	6125DA	4437	A-131	A-147	A-163	MF	MF	MF
0.282	630	64.2	9560	974	01	6125DA	5133	A-131	A-147	A-163	MF	MF	MF

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	525	N·m	60 Hz
Torque	53.5	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.2	525	53.5	9810	1000	1	6120DB	143	A-131	A-147	A-163	MF	MF	MF
10.6	525	53.5	9810	1000	1	6120DB	165	A-131	A-147	A-163	MF	MF	MF
8.97	525	53.5	9810	1000	08	6120DB	195	A-131	A-147	A-163	MF	MF	MF
7.58	522	53.2	9810	1000	08	6120DB	231	A-131	A-147	A-163	MF	MF	MF
6.41	522	53.2	9810	1000	05	6120DA	273	A-131	A-147	A-163	MF	MF	MF
5.49	520	53.0	9810	1000	05	6120DA	319	A-131	A-147	A-163	MF	MF	MF
4.64	520	53.0	9810	1000	05	6120DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	525	53.5	9810	1000	03	6120DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	525	53.5	9810	1000	02	6120DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	525	53.5	9810	1000	02	6120DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	525	53.5	9810	1000	02	6120DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	520	53.0	9810	1000	02	6120DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	525	53.5	9810	1000	02	6120DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	525	53.5	9810	1000	01	6120DA	1247	A-131	A-147	A-163	MF	MF	MF
1.18	525	53.5	9780	997	01	6120DA	1479	A-131	A-147	A-163	MF	MF	MF
0.946	525	53.5	9810	1000	01	6120DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	525	53.5	9810	1000	01	6120DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	525	53.5	9810	1000	01	6120DA	2537	A-131	A-147	A-163	MF	MF	MF
0.575	525	53.5	9780	997	01	6120DA	3045	A-131	A-147	A-163	MF	MF	MF
0.503	525	53.5	9810	1000	01	6120DA	3481	A-131	A-147	A-163	MF	MF	MF
0.394	525	53.5	9780	997	01	6120DA	4437	A-131	A-147	A-163	MF	MF	MF
0.341	525	53.5	9780	997	01	6120DA	5133	A-131	A-147	A-163	MF	MF	MF
0.283	525	53.5	9780	997	01	6120DB	6177	A-131	A-147	A-163	MF	MF	MF
0.231	525	53.5	9780	997	01	6120DB	7569	A-131	A-147	A-163	MF	MF	MF

TORQUE RATED
CYCLO® GEARMOTORS

60 Hz	Output Torque Tout		Motor Speed n ₁
	630	N·m	4P
	64.2	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	630	64.2	9810	1000	2	6125DB	104	A-131	A-147	A-163	MF	MF	MF
14.5	622	63.4	9810	1000	1H	6125DB	121	A-131	A-147	A-163	MF	MF	MF
12.2	630	64.2	9810	1000	1H	6125DB	143	A-131	A-147	A-163	MF	MF	MF
10.6	630	64.2	9810	1000	1H	6125DB	165	A-131	A-147	A-163	MF	MF	MF
8.97	630	64.2	9810	1000	1	6125DB	195	A-131	A-147	A-163	MF	MF	MF
7.58	630	64.2	9810	1000	1	6125DB	231	A-131	A-147	A-163	MF	MF	MF
6.41	630	64.2	9810	1000	08	6125DB	273	A-131	A-147	A-163	MF	MF	MF
5.49	630	64.2	9810	1000	08	6125DB	319	A-131	A-147	A-163	MF	MF	MF
4.64	630	64.2	9810	1000	05	6125DA	377	A-131	A-147	A-163	MF	MF	MF
3.70	630	64.2	9810	1000	05	6125DA	473	A-131	A-147	A-163	MF	MF	MF
3.13	630	64.2	9810	1000	03	6125DA	559	A-131	A-147	A-163	MF	MF	MF
2.70	630	64.2	9810	1000	02	6125DA	649	A-131	A-147	A-163	MF	MF	MF
2.39	630	64.2	9810	1000	02	6125DA	731	A-131	A-147	A-163	MF	MF	MF
2.08	630	64.2	9810	1000	02	6125DA	841	A-131	A-147	A-163	MF	MF	MF
1.74	630	64.2	9810	1000	02	6125DA	1003	A-131	A-147	A-163	MF	MF	MF
1.40	630	64.2	9810	1000	02	6125DA	1247	A-131	A-147	A-163	MF	MF	MF
1.18	630	64.2	9560	974	01	6125DA	1479	A-131	A-147	A-163	MF	MF	MF
0.946	630	64.2	9810	1000	01	6125DA	1849	A-131	A-147	A-163	MF	MF	MF
0.847	630	64.2	9810	1000	01	6125DA	2065	A-131	A-147	A-163	MF	MF	MF
0.690	630	64.2	9810	1000	01	6125DA	2537	A-131	A-147	A-163	MF	MF	MF
0.575	630	64.2	9560	974	01	6125DA	3045	A-131	A-147	A-163	MF	MF	MF
0.503	630	64.2	9810	1000	01	6125DA	3481	A-131	A-147	A-163	MF	MF	MF
0.394	630	64.2	9560	974	01	6125DA	4437	A-131	A-147	A-163	MF	MF	MF
0.341	630	64.2	9560	974	01	6125DA	5133	A-131	A-147	A-163	MF	MF	MF

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	630	N·m	50 Hz
Torque	64.2	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
0.235	630	64.2	9560	974	01	6125DB	6177	A-131	A-147	A-163	MF	MF	MF
0.192	630	64.2	9560	974	01	6125DB	7569	A-131	A-147	A-163	MF	MF	MF

50 Hz	Output Torque T_{out}		Motor Speed n_1
	912	N·m	4P
	93.0	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	780	79.5	14700	1500	3	6130DC	104	A-132	A-148	A-164	G	G	G
12.0	780	79.5	14700	1500	2	6130DB	121	A-132	A-148	A-164	G	G	G
10.1	780	79.5	14700	1500	2	6130DB	143	A-132	A-148	A-164	G	G	G
8.79	780	79.5	14700	1500	1H	6130DB	165	A-132	A-148	A-164	G	G	G
7.44	780	79.5	14700	1500	1H	6130DB	195	A-132	A-148	A-164	G	G	G
6.28	780	79.5	14700	1500	1	6130DB	231	A-132	A-148	A-164	G	G	G
5.31	780	79.5	14700	1500	1	6130DB	273	A-132	A-148	A-164	G	G	G
4.55	780	79.5	14700	1500	08	6130DB	319	A-132	A-148	A-164	G	G	G
3.85	780	79.5	14700	1500	08	6130DB	377	A-132	A-148	A-164	G	G	G
3.07	780	79.5	14700	1500	05	6130DA	473	A-132	A-148	A-164	G	G	G
2.59	780	79.5	14700	1500	05	6130DA	559	A-132	A-148	A-164	G	G	G
2.23	912	93.0	14700	1500	05	6130DA	649	A-132	A-148	A-164	G	G	G
1.98	780	79.5	14700	1500	03	6130DA	731	A-132	A-148	A-164	G	G	G
1.72	780	79.5	14700	1500	02	6130DA	841	A-132	A-148	A-164	G	G	G
1.45	912	93.0	14700	1500	02	6130DA	1003	A-132	A-148	A-164	G	G	G
1.16	780	79.5	14700	1500	02	6130DA	1247	A-132	A-148	A-164	G	G	G
0.980	848	86.5	14700	1500	02	6130DA	1479	A-132	A-148	A-164	G	G	G
0.784	780	79.5	14700	1500	02	6130DA	1849	A-132	A-148	A-164	G	G	G
0.702	912	93.0	14700	1500	02	6130DA	2065	A-132	A-148	A-164	G	G	G
0.572	912	93.0	14700	1500	02	6130DA	2537	A-132	A-148	A-164	G	G	G
0.476	848	86.5	14700	1500	02	6130DA	3045	A-132	A-148	A-164	G	G	G
0.417	912	93.0	14700	1500	02	6130DA	3481	A-132	A-148	A-164	G	G	G
0.327	848	86.5	14700	1500	02	6130DA	4437	A-132	A-148	A-164	G	G	G
0.282	848	86.5	14700	1500	02	6130DA	5133	A-132	A-148	A-164	G	G	G
0.235	848	86.5	14700	1500	02	6130DB	6177	A-132	A-148	A-164	G	G	G
0.192	848	86.5	14700	1500	02	6130DB	7569	A-132	A-148	A-164	G	G	G

50 Hz	Output Torque T_{out}		Motor Speed n_1
	1050	N·m	4P
	107	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	940	95.8	14700	1500	3	6135DC	104	A-132	A-148	A-164	G	G	G
12.0	940	95.8	14700	1500	3	6135DC	121	A-132	A-148	A-164	G	G	G
10.1	940	95.8	14700	1500	2	6135DB	143	A-132	A-148	A-164	G	G	G
8.79	940	95.8	14700	1500	2	6135DB	165	A-132	A-148	A-164	G	G	G
7.44	940	95.8	14700	1500	1H	6135DB	195	A-132	A-148	A-164	G	G	G
6.28	940	95.8	14700	1500	1H	6135DB	231	A-132	A-148	A-164	G	G	G
5.31	940	95.8	14700	1500	1	6135DB	273	A-132	A-148	A-164	G	G	G
4.55	940	95.8	14700	1500	1	6135DB	319	A-132	A-148	A-164	G	G	G
3.85	940	95.8	14700	1500	08	6135DB	377	A-132	A-148	A-164	G	G	G
3.07	940	95.8	14700	1500	08	6135DB	473	A-132	A-148	A-164	G	G	G
2.59	940	95.8	14700	1500	05	6135DA	559	A-132	A-148	A-164	G	G	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	630	N·m	60Hz
Torque	64.2	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
0.283	630	64.2	9560	974	01	6125DB	6177	A-131	A-147	A-163	MF	MF	MF
0.231	630	64.2	9560	974	01	6125DB	7569	A-131	A-147	A-163	MF	MF	MF

60Hz	Output Torque Tout		Motor Speed n ₁
	912	N·m	4P
	93.0	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	780	79.5	14700	1500	3	6130DC	104	A-132	A-148	A-164	G	G	G
14.5	780	79.5	14700	1500	2	6130DB	121	A-132	A-148	A-164	G	G	G
12.2	780	79.5	14700	1500	2	6130DB	143	A-132	A-148	A-164	G	G	G
10.6	780	79.5	14700	1500	1H	6130DB	165	A-132	A-148	A-164	G	G	G
8.97	780	79.5	14700	1500	1H	6130DB	195	A-132	A-148	A-164	G	G	G
7.58	780	79.5	14700	1500	1	6130DB	231	A-132	A-148	A-164	G	G	G
6.41	780	79.5	14700	1500	1	6130DB	273	A-132	A-148	A-164	G	G	G
5.49	780	79.5	14700	1500	08	6130DB	319	A-132	A-148	A-164	G	G	G
4.64	780	79.5	14700	1500	08	6130DB	377	A-132	A-148	A-164	G	G	G
3.70	780	79.5	14700	1500	05	6130DA	473	A-132	A-148	A-164	G	G	G
3.13	780	79.5	14700	1500	05	6130DA	559	A-132	A-148	A-164	G	G	G
2.70	912	93.0	14700	1500	05	6130DA	649	A-132	A-148	A-164	G	G	G
2.39	780	79.5	14700	1500	03	6130DA	731	A-132	A-148	A-164	G	G	G
2.08	780	79.5	14700	1500	02	6130DA	841	A-132	A-148	A-164	G	G	G
1.74	912	93.0	14700	1500	02	6130DA	1003	A-132	A-148	A-164	G	G	G
1.40	780	79.5	14700	1500	02	6130DA	1247	A-132	A-148	A-164	G	G	G
1.18	848	86.5	14700	1500	02	6130DA	1479	A-132	A-148	A-164	G	G	G
0.946	780	79.5	14700	1500	02	6130DA	1849	A-132	A-148	A-164	G	G	G
0.847	912	93.0	14700	1500	02	6130DA	2065	A-132	A-148	A-164	G	G	G
0.690	912	93.0	14700	1500	02	6130DA	2537	A-132	A-148	A-164	G	G	G
0.575	848	86.5	14700	1500	02	6130DA	3045	A-132	A-148	A-164	G	G	G
0.503	912	93.0	14700	1500	02	6130DA	3481	A-132	A-148	A-164	G	G	G
0.394	848	86.5	14700	1500	02	6130DA	4437	A-132	A-148	A-164	G	G	G
0.341	848	86.5	14700	1500	02	6130DA	5133	A-132	A-148	A-164	G	G	G
0.283	848	86.5	14700	1500	02	6130DB	6177	A-132	A-148	A-164	G	G	G
0.231	848	86.5	14700	1500	02	6130DB	7569	A-132	A-148	A-164	G	G	G

60Hz	Output Torque Tout		Motor Speed n ₁
	1050	N·m	4P
	107	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	940	95.8	14700	1500	3	6135DC	104	A-132	A-148	A-164	G	G	G
14.5	940	95.8	14700	1500	3	6135DC	121	A-132	A-148	A-164	G	G	G
12.2	940	95.8	14700	1500	2	6135DB	143	A-132	A-148	A-164	G	G	G
10.6	940	95.8	14700	1500	2	6135DB	165	A-132	A-148	A-164	G	G	G
8.97	940	95.8	14700	1500	1H	6135DB	195	A-132	A-148	A-164	G	G	G
7.58	940	95.8	14700	1500	1H	6135DB	231	A-132	A-148	A-164	G	G	G
6.41	940	95.8	14700	1500	1	6135DB	273	A-132	A-148	A-164	G	G	G
5.49	940	95.8	14700	1500	1	6135DB	319	A-132	A-148	A-164	G	G	G
4.64	940	95.8	14700	1500	08	6135DB	377	A-132	A-148	A-164	G	G	G
3.70	940	95.8	14700	1500	08	6135DB	473	A-132	A-148	A-164	G	G	G
3.13	940	95.8	14700	1500	05	6135DA	559	A-132	A-148	A-164	G	G	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	1050	N·m	50 Hz
Torque	107	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.23	1050	107	14700	1500	05	6135DA	649	A-132	A-148	A-164	G	G	G
1.98	940	95.8	14700	1500	05	6135DA	731	A-132	A-148	A-164	G	G	G
1.72	940	95.8	14700	1500	03	6135DA	841	A-132	A-148	A-164	G	G	G
1.45	1050	107	14700	1500	03	6135DA	1003	A-132	A-148	A-164	G	G	G
1.16	940	95.8	14700	1500	02	6135DA	1247	A-132	A-148	A-164	G	G	G
0.980	979	99.8	14700	1500	02	6135DA	1479	A-132	A-148	A-164	G	G	G
0.784	940	95.8	14700	1500	02	6135DA	1849	A-132	A-148	A-164	G	G	G
0.702	1050	107	14700	1500	02	6135DA	2065	A-132	A-148	A-164	G	G	G
0.572	1050	107	14700	1500	02	6135DA	2537	A-132	A-148	A-164	G	G	G
0.476	979	99.8	14700	1500	02	6135DA	3045	A-132	A-148	A-164	G	G	G
0.417	1050	107	14700	1500	02	6135DA	3481	A-132	A-148	A-164	G	G	G
0.327	979	99.8	14700	1500	02	6135DA	4437	A-132	A-148	A-164	G	G	G
0.282	979	99.8	14700	1500	02	6135DA	5133	A-132	A-148	A-164	G	G	G
0.235	979	99.8	14700	1500	02	6135DB	6177	A-132	A-148	A-164	G	G	G
0.192	979	99.8	14700	1500	02	6135DB	7569	A-132	A-148	A-164	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	1 2 3 0	N·m	4P
	1 2 5	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.0	1230	125	16000	1630	3	6140DC	121	A-132	A-148	A-164	G	G	G
10.1	1230	125	16000	1630	3	6140DC	143	A-132	A-148	A-164	G	G	G
8.79	1230	125	16000	1630	3	6140DC	165	A-132	A-148	A-164	G	G	G
7.44	1230	125	16000	1630	2	6140DB	195	A-132	A-148	A-164	G	G	G
6.28	1230	125	16000	1630	1H	6140DB	231	A-132	A-148	A-164	G	G	G
5.31	1230	125	16000	1630	1H	6140DB	273	A-132	A-148	A-164	G	G	G
4.55	1230	125	16000	1630	1H	6140DB	319	A-132	A-148	A-164	G	G	G
3.85	1230	125	16000	1630	1	6140DB	377	A-132	A-148	A-164	G	G	G
3.07	1230	125	16000	1630	08	6140DB	473	A-132	A-148	A-164	G	G	G
2.59	1230	125	16000	1630	08	6140DB	559	A-132	A-148	A-164	G	G	G
2.23	1230	125	16000	1630	05	6140DA	649	A-132	A-148	A-164	G	G	G
1.98	1230	125	16000	1630	05	6140DA	731	A-132	A-148	A-164	G	G	G
1.72	1230	125	16000	1630	05	6140DA	841	A-132	A-148	A-164	G	G	G
1.45	1230	125	16000	1630	03	6140DA	1003	A-132	A-148	A-164	G	G	G
1.16	1230	125	16000	1630	02	6140DA	1247	A-132	A-148	A-164	G	G	G
0.980	1230	125	16000	1630	02	6140DA	1479	A-132	A-148	A-164	G	G	G
0.784	1230	125	16000	1630	02	6140DA	1849	A-132	A-148	A-164	G	G	G
0.702	1230	125	16000	1630	02	6140DA	2065	A-132	A-148	A-164	G	G	G
0.572	1230	125	16000	1630	02	6140DA	2537	A-132	A-148	A-164	G	G	G
0.476	1230	125	16000	1630	02	6140DA	3045	A-132	A-148	A-164	G	G	G
0.417	1230	125	16000	1630	02	6140DA	3481	A-132	A-148	A-164	G	G	G
0.327	1230	125	16000	1630	02	6140DA	4437	A-132	A-148	A-164	G	G	G
0.282	1230	125	16000	1630	02	6140DA	5133	A-132	A-148	A-164	G	G	G
0.235	1230	125	16000	1630	02	6140DB	6177	A-132	A-148	A-164	G	G	G
0.192	1230	125	16000	1630	02	6140DB	7569	A-132	A-148	A-164	G	G	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	1 0 5 0	N•m	6 0 Hz
Torque	1 0 7	kgf•m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.70	1050	107	14700	1500	05	6135DA	649	A-132	A-148	A-164	G	G	G
2.39	940	95.8	14700	1500	05	6135DA	731	A-132	A-148	A-164	G	G	G
2.08	940	95.8	14700	1500	03	6135DA	841	A-132	A-148	A-164	G	G	G
1.74	1050	107	14700	1500	03	6135DA	1003	A-132	A-148	A-164	G	G	G
1.40	940	95.8	14700	1500	02	6135DA	1247	A-132	A-148	A-164	G	G	G
1.18	979	99.8	14700	1500	02	6135DA	1479	A-132	A-148	A-164	G	G	G
0.946	940	95.8	14700	1500	02	6135DA	1849	A-132	A-148	A-164	G	G	G
0.847	1050	107	14700	1500	02	6135DA	2065	A-132	A-148	A-164	G	G	G
0.690	1050	107	14700	1500	02	6135DA	2537	A-132	A-148	A-164	G	G	G
0.575	979	99.8	14700	1500	02	6135DA	3045	A-132	A-148	A-164	G	G	G
0.503	1050	107	14700	1500	02	6135DA	3481	A-132	A-148	A-164	G	G	G
0.394	979	99.8	14700	1500	02	6135DA	4437	A-132	A-148	A-164	G	G	G
0.341	979	99.8	14700	1500	02	6135DA	5133	A-132	A-148	A-164	G	G	G
0.283	979	99.8	14700	1500	02	6135DB	6177	A-132	A-148	A-164	G	G	G
0.231	979	99.8	14700	1500	02	6135DB	7569	A-132	A-148	A-164	G	G	G

6 0 Hz	Output Torque Tout		Motor Speed n ₁
	1 2 3 0	N•m	4P
	1 2 5	kgf•m	1 7 5 0 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	1230	125	16000	1630	3	6140DC	121	A-132	A-148	A-164	G	G	G
12.2	1230	125	16000	1630	3	6140DC	143	A-132	A-148	A-164	G	G	G
10.6	1230	125	16000	1630	3	6140DC	165	A-132	A-148	A-164	G	G	G
8.97	1230	125	16000	1630	2	6140DB	195	A-132	A-148	A-164	G	G	G
7.58	1230	125	16000	1630	1H	6140DB	231	A-132	A-148	A-164	G	G	G
6.41	1230	125	16000	1630	1H	6140DB	273	A-132	A-148	A-164	G	G	G
5.49	1230	125	16000	1630	1H	6140DB	319	A-132	A-148	A-164	G	G	G
4.64	1230	125	16000	1630	1	6140DB	377	A-132	A-148	A-164	G	G	G
3.70	1230	125	16000	1630	08	6140DB	473	A-132	A-148	A-164	G	G	G
3.13	1230	125	16000	1630	08	6140DB	559	A-132	A-148	A-164	G	G	G
2.70	1230	125	16000	1630	05	6140DA	649	A-132	A-148	A-164	G	G	G
2.39	1230	125	16000	1630	05	6140DA	731	A-132	A-148	A-164	G	G	G
2.08	1230	125	16000	1630	05	6140DA	841	A-132	A-148	A-164	G	G	G
1.74	1230	125	16000	1630	03	6140DA	1003	A-132	A-148	A-164	G	G	G
1.40	1230	125	16000	1630	02	6140DA	1247	A-132	A-148	A-164	G	G	G
1.18	1230	125	16000	1630	02	6140DA	1479	A-132	A-148	A-164	G	G	G
0.946	1230	125	16000	1630	02	6140DA	1849	A-132	A-148	A-164	G	G	G
0.847	1230	125	16000	1630	02	6140DA	2065	A-132	A-148	A-164	G	G	G
0.690	1230	125	16000	1630	02	6140DA	2537	A-132	A-148	A-164	G	G	G
0.575	1230	125	16000	1630	02	6140DA	3045	A-132	A-148	A-164	G	G	G
0.503	1230	125	16000	1630	02	6140DA	3481	A-132	A-148	A-164	G	G	G
0.394	1230	125	16000	1630	02	6140DA	4437	A-132	A-148	A-164	G	G	G
0.341	1230	125	16000	1630	02	6140DA	5133	A-132	A-148	A-164	G	G	G
0.283	1230	125	16000	1630	02	6140DB	6177	A-132	A-148	A-164	G	G	G
0.231	1230	125	16000	1630	02	6140DB	7569	A-132	A-148	A-164	G	G	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

50 Hz	Output Torque Tout		Motor Speed n ₁	
	1 3 7 0	N•m	4P	
	1 4 0	kgf•m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m	N	kgf				CNHH CHHM	CNFM CHFM	CNVV CVVM	CNHH CHHM	CNFM CHFM	CNVV CVVM
12.0	1290	132	16000	1630	3	6145DC	121	A-132	A-148	A-164	G	G	G
10.1	1370	140	15900	1620	3	6145DC	143	A-132	A-148	A-164	G	G	G
8.79	1360	138	16000	1630	3	6145DC	165	A-132	A-148	A-164	G	G	G
7.44	1360	138	16000	1630	2	6145DB	195	A-132	A-148	A-164	G	G	G
6.28	1340	136	16000	1630	2	6145DB	231	A-132	A-148	A-164	G	G	G
5.31	1340	136	16000	1630	1H	6145DB	273	A-132	A-148	A-164	G	G	G
4.55	1370	140	15800	1610	1H	6145DB	319	A-132	A-148	A-164	G	G	G
3.85	1370	140	15800	1610	1	6145DB	377	A-132	A-148	A-164	G	G	G
3.07	1370	140	15700	1600	1	6145DB	473	A-132	A-148	A-164	G	G	G
2.59	1370	140	15700	1600	08	6145DB	559	A-132	A-148	A-164	G	G	G
2.23	1370	140	16000	1630	08	6145DB	649	A-132	A-148	A-164	G	G	G
1.98	1370	140	15700	1600	05	6145DA	731	A-132	A-148	A-164	G	G	G
1.72	1370	140	15800	1610	05	6145DA	841	A-132	A-148	A-164	G	G	G
1.45	1370	140	16000	1630	05	6145DA	1003	A-132	A-148	A-164	G	G	G
1.16	1370	140	15700	1600	03	6145DA	1247	A-132	A-148	A-164	G	G	G
0.980	1250	127	16000	1630	02	6145DA	1479	A-132	A-148	A-164	G	G	G
0.784	1370	140	15700	1600	02	6145DA	1849	A-132	A-148	A-164	G	G	G
0.702	1370	140	16000	1630	02	6145DA	2065	A-132	A-148	A-164	G	G	G
0.572	1370	140	16000	1630	02	6145DA	2537	A-132	A-148	A-164	G	G	G
0.476	1250	127	16000	1630	02	6145DA	3045	A-132	A-148	A-164	G	G	G
0.417	1370	140	16000	1630	02	6145DA	3481	A-132	A-148	A-164	G	G	G
0.327	1250	127	16000	1630	02	6145DA	4437	A-132	A-148	A-164	G	G	G
0.282	1250	127	16000	1630	02	6145DA	5133	A-132	A-148	A-164	G	G	G
0.235	1250	127	16000	1630	02	6145DB	6177	A-132	A-148	A-164	G	G	G
0.192	1250	127	16000	1630	02	6145DB	7569	A-132	A-148	A-164	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁	
	1 7 6 0	N•m	4P	
	1 7 9	kgf•m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m	N	kgf				CNHH CHHM	CNFM CHFM	CNVV CVVM	CNHH CHHM	CNFM CHFM	CNVV CVVM
13.9	1760	179	22100	2250	5	6160DC	104	A-134	A-150	A-166	PB	PB	P
12.0	1760	179	22100	2250	4	6160DC	121	A-134	A-150	A-166	PB	PB	P
10.1	1760	179	22100	2250	4	6160DC	143	A-134	A-150	A-166	PB	PB	P
8.79	1760	179	22100	2250	3	6160DB	165	A-133	A-149	A-165	G	G	G
7.44	1760	179	22100	2250	3	6160DB	195	A-133	A-149	A-165	G	G	G
6.28	1760	179	22100	2250	3	6160DB	231	A-133	A-149	A-165	G	G	G
5.31	1760	179	22100	2250	2	6160DA	273	A-133	A-149	A-165	G	G	G
4.55	1760	179	22100	2250	2	6160DA	319	A-133	A-149	A-165	G	G	G
3.85	1760	179	22100	2250	1H	6160DA	377	A-133	A-149	A-165	G	G	G
3.07	1740	177	22100	2250	1	6160DA	473	A-133	A-149	A-165	G	G	G
2.59	1740	177	22100	2250	1	6160DA	559	A-133	A-149	A-165	G	G	G
2.23	1760	179	22100	2250	08	6160DA	649	A-133	A-149	A-165	G	G	G
1.98	1740	177	22100	2250	08	6160DA	731	A-133	A-149	A-165	G	G	G
1.72	1760	179	22100	2250	08	6160DA	841	A-133	A-149	A-165	G	G	G
1.45	1760	179	22100	2250	05	6160DA	1003	A-133	A-149	A-165	G	G	G
1.16	1740	177	22100	2250	05	6160DA	1247	A-133	A-149	A-165	G	G	G
0.980	1760	179	22100	2250	05	6160DA	1479	A-133	A-149	A-165	G	G	G
0.784	1740	177	22100	2250	02	6160DA	1849	A-133	A-149	A-165	G	G	G
0.702	1760	179	22100	2250	02	6160DA	2065	A-133	A-149	A-165	G	G	G
0.572	1760	179	22100	2250	02	6160DA	2537	A-133	A-149	A-165	G	G	G
0.476	1760	179	22100	2250	02	6160DA	3045	A-133	A-149	A-165	G	G	G
0.417	1760	179	22100	2250	02	6160DA	3481	A-133	A-149	A-165	G	G	G
0.327	1760	179	22100	2250	02	6160DA	4437	A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60 Hz	Output Torque Tout		Motor Speed n ₁	
	1370	N·m	4P	
	140	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	1290	132	16000	1630	3	6145DC	121	A-132	A-148	A-164	G	G	G
12.2	1370	140	15900	1620	3	6145DC	143	A-132	A-148	A-164	G	G	G
10.6	1360	138	16000	1630	3	6145DC	165	A-132	A-148	A-164	G	G	G
8.97	1360	138	16000	1630	2	6145DB	195	A-132	A-148	A-164	G	G	G
7.58	1340	136	16000	1630	2	6145DB	231	A-132	A-148	A-164	G	G	G
6.41	1340	136	16000	1630	1H	6145DB	273	A-132	A-148	A-164	G	G	G
5.49	1370	140	15800	1610	1H	6145DB	319	A-132	A-148	A-164	G	G	G
4.64	1370	140	15800	1610	1	6145DB	377	A-132	A-148	A-164	G	G	G
3.70	1370	140	15700	1600	1	6145DB	473	A-132	A-148	A-164	G	G	G
3.13	1370	140	15700	1600	08	6145DB	559	A-132	A-148	A-164	G	G	G
2.70	1370	140	16000	1630	08	6145DB	649	A-132	A-148	A-164	G	G	G
2.39	1370	140	15700	1600	05	6145DA	731	A-132	A-148	A-164	G	G	G
2.08	1250	127	16000	1630	05	6145DA	841	A-132	A-148	A-164	G	G	G
1.74	1370	140	16000	1630	05	6145DA	1003	A-132	A-148	A-164	G	G	G
1.40	1370	140	15700	1600	03	6145DA	1247	A-132	A-148	A-164	G	G	G
1.18	1250	127	16000	1630	02	6145DA	1479	A-132	A-148	A-164	G	G	G
0.946	1370	140	15700	1600	02	6145DA	1849	A-132	A-148	A-164	G	G	G
0.847	1370	140	16000	1630	02	6145DA	2065	A-132	A-148	A-164	G	G	G
0.690	1370	140	16000	1630	02	6145DA	2537	A-132	A-148	A-164	G	G	G
0.575	1250	127	16000	1630	02	6145DA	3045	A-132	A-148	A-164	G	G	G
0.503	1370	140	16000	1630	02	6145DA	3481	A-132	A-148	A-164	G	G	G
0.394	1250	127	16000	1630	02	6145DA	4437	A-132	A-148	A-164	G	G	G
0.341	1250	127	16000	1630	02	6145DA	5133	A-132	A-148	A-164	G	G	G
0.283	1250	127	16000	1630	02	6145DB	6177	A-132	A-148	A-164	G	G	G
0.231	1250	127	16000	1630	02	6145DB	7569	A-132	A-148	A-164	G	G	G

TORQUE RATED
CYCLO® GEARMOTORS

60 Hz	Output Torque Tout		Motor Speed n ₁	
	1760	N·m	4P	
	179	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	1760	179	22100	2250	5	6160DC	104	A-134	A-150	A-166	PB	PB	P
14.5	1760	179	22100	2250	4	6160DC	121	A-134	A-150	A-166	PB	PB	P
12.2	1760	179	22100	2250	4	6160DC	143	A-134	A-150	A-166	PB	PB	P
10.6	1760	179	22100	2250	3	6160DB	165	A-133	A-149	A-165	G	G	G
8.97	1760	179	22100	2250	3	6160DB	195	A-133	A-149	A-165	G	G	G
7.58	1760	179	22100	2250	3	6160DB	231	A-133	A-149	A-165	G	G	G
6.41	1760	179	22100	2250	2	6160DA	273	A-133	A-149	A-165	G	G	G
5.49	1760	179	22100	2250	2	6160DA	319	A-133	A-149	A-165	G	G	G
4.64	1760	179	22100	2250	1H	6160DA	377	A-133	A-149	A-165	G	G	G
3.70	1740	177	22100	2250	1	6160DA	473	A-133	A-149	A-165	G	G	G
3.13	1740	177	22100	2250	1	6160DA	559	A-133	A-149	A-165	G	G	G
2.70	1760	179	22100	2250	08	6160DA	649	A-133	A-149	A-165	G	G	G
2.39	1740	177	22100	2250	08	6160DA	731	A-133	A-149	A-165	G	G	G
2.08	1760	179	22100	2250	08	6160DA	841	A-133	A-149	A-165	G	G	G
1.74	1760	179	22100	2250	05	6160DA	1003	A-133	A-149	A-165	G	G	G
1.40	1740	177	22100	2250	05	6160DA	1247	A-133	A-149	A-165	G	G	G
1.18	1760	179	22100	2250	05	6160DA	1479	A-133	A-149	A-165	G	G	G
0.946	1740	177	22100	2250	02	6160DA	1849	A-133	A-149	A-165	G	G	G
0.847	1760	179	22100	2250	02	6160DA	2065	A-133	A-149	A-165	G	G	G
0.690	1760	179	22100	2250	02	6160DA	2537	A-133	A-149	A-165	G	G	G
0.575	1760	179	22100	2250	02	6160DA	3045	A-133	A-149	A-165	G	G	G
0.503	1760	179	22100	2250	02	6160DA	3481	A-133	A-149	A-165	G	G	G
0.394	1760	179	22100	2250	02	6160DA	4437	A-133	A-149	A-165	G	G	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

Output	1760	N·m	50 Hz
Torque	179	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
0.282	1760	179	22100	2250	02	6160DA	5133	A-133	A-149	A-165	G	G	G
0.235	1760	179	22100	2250	02	6160DA	6177	A-133	A-149	A-165	G	G	G
0.192	1760	179	22100	2250	02	6160DA	7569	A-133	A-149	A-165	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	2100	N·m	4P
	214	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	2100	214	22100	2250	8	6165DC	104	A-134	A-150	A-166	PB	PB	P
12.0	2100	214	22100	2250	5	6165DC	121	A-134	A-150	A-166	PB	PB	P
10.1	2100	214	22100	2250	4	6165DC	143	A-134	A-150	A-166	PB	PB	P
8.79	2100	214	22100	2250	4	6165DC	165	A-134	A-150	A-166	PB	PB	P
7.44	2100	214	22100	2250	3	6165DB	195	A-133	A-149	A-165	G	G	G
6.28	2100	214	22100	2250	3	6165DB	231	A-133	A-149	A-165	G	G	G
5.31	2100	214	22100	2250	3	6165DB	273	A-133	A-149	A-165	G	G	G
4.55	2100	214	22100	2250	2	6165DA	319	A-133	A-149	A-165	G	G	G
3.85	2100	214	22100	2250	2	6165DA	377	A-133	A-149	A-165	G	G	G
3.07	2100	214	22100	2250	1H	6165DA	473	A-133	A-149	A-165	G	G	G
2.59	2100	214	22100	2250	1H	6165DA	559	A-133	A-149	A-165	G	G	G
2.23	2100	214	22100	2250	1	6165DA	649	A-133	A-149	A-165	G	G	G
1.98	2100	214	22100	2250	1	6165DA	731	A-133	A-149	A-165	G	G	G
1.72	2100	214	22100	2250	08	6165DA	841	A-133	A-149	A-165	G	G	G
1.45	2100	214	22100	2250	08	6165DA	1003	A-133	A-149	A-165	G	G	G
1.16	2100	214	22100	2250	05	6165DA	1247	A-133	A-149	A-165	G	G	G
0.980	2050	209	21800	2220	05	6165DA	1479	A-133	A-149	A-165	G	G	G
0.784	2100	214	22100	2250	05	6165DA	1849	A-133	A-149	A-165	G	G	G
0.702	2100	214	22100	2250	03	6165DA	2065	A-133	A-149	A-165	G	G	G
0.572	2100	214	22100	2250	02	6165DA	2537	A-133	A-149	A-165	G	G	G
0.476	2050	209	21800	2220	02	6165DA	3045	A-133	A-149	A-165	G	G	G
0.417	2100	214	22100	2250	02	6165DA	3481	A-133	A-149	A-165	G	G	G
0.327	2050	209	21800	2220	02	6165DA	4437	A-133	A-149	A-165	G	G	G
0.282	2050	209	21800	2220	02	6165DA	5133	A-133	A-149	A-165	G	G	G
0.235	2050	209	21800	2220	02	6165DA	6177	A-133	A-149	A-165	G	G	G
0.192	2050	209	21800	2220	02	6165DA	7569	A-133	A-149	A-165	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	2530	N·m	4P
	258	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	2530	258	29500	3010	8	6170DC	104	A-134	A-150	A-166	PB	PB	P
12.0	2530	258	29500	3010	8	6170DC	121	A-134	A-150	A-166	PB	PB	P
10.1	2530	258	29500	3010	5	6170DC	143	A-134	A-150	A-166	PB	PB	P
8.79	2530	258	29500	3010	5	6170DC	165	A-134	A-150	A-166	PB	PB	P
7.44	2530	258	29500	3010	4	6170DC	195	A-134	A-150	A-166	PB	PB	P
6.28	2530	258	29500	3010	4	6170DC	231	A-134	A-150	A-166	PB	PB	P
5.31	2530	258	29500	3010	3	6170DB	273	A-133	A-149	A-165	G	G	G
4.55	2530	258	29500	3010	3	6170DB	319	A-133	A-149	A-165	G	G	G
3.85	2530	258	29500	3010	2	6170DA	377	A-133	A-149	A-165	G	G	G
3.07	2530	258	29500	3010	1H	6170DA	473	A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	1760	N·m	60Hz
Torque	179	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
0.341	1760	179	22100	2250	02	6160DA	5133	A-133	A-149	A-165	G	G	G
0.283	1760	179	22100	2250	02	6160DA	6177	A-133	A-149	A-165	G	G	G
0.231	1760	179	22100	2250	02	6160DA	7569	A-133	A-149	A-165	G	G	G

60Hz	Output Torque Tout		Motor Speed n ₁
	2100	N·m	4P
	214	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	2100	214	22100	2250	8	6165DC	104	A-134	A-150	A-166	PB	PB	P
14.5	2100	214	22100	2250	5	6165DC	121	A-134	A-150	A-166	PB	PB	P
12.2	2100	214	22100	2250	4	6165DC	143	A-134	A-150	A-166	PB	PB	P
10.6	2100	214	22100	2250	4	6165DC	165	A-134	A-150	A-166	PB	PB	P
8.97	2100	214	22100	2250	3	6165DB	195	A-133	A-149	A-165	G	G	G
7.58	2100	214	22100	2250	3	6165DB	231	A-133	A-149	A-165	G	G	G
6.41	2100	214	22100	2250	3	6165DB	273	A-133	A-149	A-165	G	G	G
5.49	2100	214	22100	2250	2	6165DA	319	A-133	A-149	A-165	G	G	G
4.64	2100	214	22100	2250	2	6165DA	377	A-133	A-149	A-165	G	G	G
3.70	2100	214	22100	2250	1H	6165DA	473	A-133	A-149	A-165	G	G	G
3.13	2100	214	22100	2250	1H	6165DA	559	A-133	A-149	A-165	G	G	G
2.70	2100	214	22100	2250	1	6165DA	649	A-133	A-149	A-165	G	G	G
2.39	2100	214	22100	2250	1	6165DA	731	A-133	A-149	A-165	G	G	G
2.08	2100	214	22100	2250	08	6165DA	841	A-133	A-149	A-165	G	G	G
1.74	2100	214	22100	2250	08	6165DA	1003	A-133	A-149	A-165	G	G	G
1.40	2100	214	22100	2250	05	6165DA	1247	A-133	A-149	A-165	G	G	G
1.18	2050	209	21800	2220	05	6165DA	1479	A-133	A-149	A-165	G	G	G
0.946	2100	214	22100	2250	05	6165DA	1849	A-133	A-149	A-165	G	G	G
0.847	2100	214	22100	2250	03	6165DA	2065	A-133	A-149	A-165	G	G	G
0.690	2100	214	22100	2250	02	6165DA	2537	A-133	A-149	A-165	G	G	G
0.575	2050	209	21800	2220	02	6165DA	3045	A-133	A-149	A-165	G	G	G
0.503	2100	214	22100	2250	02	6165DA	3481	A-133	A-149	A-165	G	G	G
0.394	2050	209	21800	2220	02	6165DA	4437	A-133	A-149	A-165	G	G	G
0.341	2050	209	21800	2220	02	6165DA	5133	A-133	A-149	A-165	G	G	G
0.283	2050	209	21800	2220	02	6165DA	6177	A-133	A-149	A-165	G	G	G
0.231	2050	209	21800	2220	02	6165DA	7569	A-133	A-149	A-165	G	G	G

60Hz	Output Torque Tout		Motor Speed n ₁
	2530	N·m	4P
	258	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	2530	258	28600	2920	8	6170DC	104	A-134	A-150	A-166	PB	PB	P
14.5	2530	258	29500	3010	8	6170DC	121	A-134	A-150	A-166	PB	PB	P
12.2	2530	258	29500	3010	5	6170DC	143	A-134	A-150	A-166	PB	PB	P
10.6	2530	258	29500	3010	5	6170DC	165	A-134	A-150	A-166	PB	PB	P
8.97	2530	258	29500	3010	4	6170DC	195	A-134	A-150	A-166	PB	PB	P
7.58	2530	258	29500	3010	4	6170DC	231	A-134	A-150	A-166	PB	PB	P
6.41	2530	258	29500	3010	3	6170DB	273	A-133	A-149	A-165	G	G	G
5.49	2530	258	29500	3010	3	6170DB	319	A-133	A-149	A-165	G	G	G
4.64	2530	258	29500	3010	2	6170DA	377	A-133	A-149	A-165	G	G	G
3.70	2530	258	29500	3010	1H	6170DA	473	A-133	A-149	A-165	G	G	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

Output Torque	2530	N·m	50 Hz
	258	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
2.59	2530	258	29500	3010	1H	6170DA	559	A-133	A-149	A-165	G	G	G
2.23	2530	258	29500	3010	1H	6170DA	649	A-133	A-149	A-165	G	G	G
1.98	2530	258	29500	3010	1	6170DA	731	A-133	A-149	A-165	G	G	G
1.72	2530	258	29500	3010	1	6170DA	841	A-133	A-149	A-165	G	G	G
1.45	2530	258	29500	3010	08	6170DA	1003	A-133	A-149	A-165	G	G	G
1.16	2530	258	29500	3010	08	6170DA	1247	A-133	A-149	A-165	G	G	G
0.980	2530	258	29500	3010	05	6170DA	1479	A-133	A-149	A-165	G	G	G
0.784	2530	258	29500	3010	05	6170DA	1849	A-133	A-149	A-165	G	G	G
0.702	2530	258	29500	3010	05	6170DA	2065	A-133	A-149	A-165	G	G	G
0.572	2530	258	29500	3010	03	6170DA	2537	A-133	A-149	A-165	G	G	G
0.476	2530	258	29500	3010	02	6170DA	3045	A-133	A-149	A-165	G	G	G
0.417	2530	258	29500	3010	02	6170DA	3481	A-133	A-149	A-165	G	G	G
0.327	2530	258	29500	3010	02	6170DA	4437	A-133	A-149	A-165	G	G	G
0.282	2530	258	29500	3010	02	6170DA	5133	A-133	A-149	A-165	G	G	G
0.235	2530	258	29500	3010	02	6170DA	6177	A-133	A-149	A-165	G	G	G
0.192	2530	258	29500	3010	02	6170DA	7569	A-133	A-149	A-165	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	3150	N·m	4P
	321	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.0	3150	321	29500	3010	8	6175DC	121	A-134	A-150	A-166	PB	PB	P
10.1	3150	321	29500	3010	8	6175DC	143	A-134	A-150	A-166	PB	PB	P
8.79	3150	321	29500	3010	8	6175DC	165	A-134	A-150	A-166	PB	PB	P
7.44	3150	321	29500	3010	5	6175DC	195	A-134	A-150	A-166	PB	PB	P
6.28	3150	321	29500	3010	4	6175DC	231	A-134	A-150	A-166	PB	PB	P
5.31	3150	321	29500	3010	4	6175DC	273	A-134	A-150	A-166	PB	PB	P
4.55	3150	321	29500	3010	3	6175DB	319	A-133	A-149	A-165	G	G	G
3.85	3150	321	29500	3010	3	6175DB	377	A-133	A-149	A-165	G	G	G
3.07	3150	321	29500	3010	2	6175DA	473	A-133	A-149	A-165	G	G	G
2.59	3150	321	29500	3010	2	6175DA	559	A-133	A-149	A-165	G	G	G
2.23	3150	321	29500	3010	1H	6175DA	649	A-133	A-149	A-165	G	G	G
1.98	3150	321	29500	3010	1H	6175DA	731	A-133	A-149	A-165	G	G	G
1.72	3150	321	29500	3010	1H	6175DA	841	A-133	A-149	A-165	G	G	G
1.45	3150	321	29500	3010	1	6175DA	1003	A-133	A-149	A-165	G	G	G
1.16	3150	321	29500	3010	08	6175DA	1247	A-133	A-149	A-165	G	G	G
0.980	3150	321	29500	3010	08	6175DA	1479	A-133	A-149	A-165	G	G	G
0.784	3150	321	29500	3010	05	6175DA	1849	A-133	A-149	A-165	G	G	G
0.702	3150	321	29500	3010	05	6175DA	2065	A-133	A-149	A-165	G	G	G
0.572	3150	321	29500	3010	05	6175DA	2537	A-133	A-149	A-165	G	G	G
0.476	3150	321	29500	3010	03	6175DA	3045	A-133	A-149	A-165	G	G	G
0.417	3150	321	29500	3010	02	6175DA	3481	A-133	A-149	A-165	G	G	G
0.327	3150	321	29500	3010	02	6175DA	4437	A-133	A-149	A-165	G	G	G
0.282	3150	321	29500	3010	02	6175DA	5133	A-133	A-149	A-165	G	G	G
0.235	3150	321	29500	3010	02	6175DA	6177	A-133	A-149	A-165	G	G	G
0.192	3150	321	29500	3010	02	6175DA	7569	A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	2530	N·m	60 Hz
Torque	258	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.13	2530	258	29500	3010	1H	6170DA	559	A-133	A-149	A-165	G	G	G
2.70	2530	258	29500	3010	1H	6170DA	649	A-133	A-149	A-165	G	G	G
2.39	2530	258	29500	3010	1	6170DA	731	A-133	A-149	A-165	G	G	G
2.08	2530	258	29500	3010	1	6170DA	841	A-133	A-149	A-165	G	G	G
1.74	2530	258	29500	3010	08	6170DA	1003	A-133	A-149	A-165	G	G	G
1.40	2530	258	29500	3010	08	6170DA	1247	A-133	A-149	A-165	G	G	G
1.18	2530	258	29500	3010	05	6170DA	1479	A-133	A-149	A-165	G	G	G
0.946	2530	258	29500	3010	05	6170DA	1849	A-133	A-149	A-165	G	G	G
0.847	2530	258	29500	3010	05	6170DA	2065	A-133	A-149	A-165	G	G	G
0.690	2530	258	29500	3010	03	6170DA	2537	A-133	A-149	A-165	G	G	G
0.575	2530	258	29500	3010	02	6170DA	3045	A-133	A-149	A-165	G	G	G
0.503	2530	258	29500	3010	02	6170DA	3481	A-133	A-149	A-165	G	G	G
0.394	2530	258	29500	3010	02	6170DA	4437	A-133	A-149	A-165	G	G	G
0.341	2530	258	29500	3010	02	6170DA	5133	A-133	A-149	A-165	G	G	G
0.283	2530	258	29500	3010	02	6170DA	6177	A-133	A-149	A-165	G	G	G
0.231	2530	258	29500	3010	02	6170DA	7569	A-133	A-149	A-165	G	G	G

60 Hz	Output Torque Tout		Motor Speed n ₁
	3150	N·m	4P
	321	kgf·m	1750r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	3150	321	29500	3010	8	6175DC	121	A-134	A-150	A-166	PB	PB	P
12.2	3150	321	29500	3010	8	6175DC	143	A-134	A-150	A-166	PB	PB	P
10.6	3150	321	29500	3010	8	6175DC	165	A-134	A-150	A-166	PB	PB	P
8.97	3150	321	29500	3010	5	6175DC	195	A-134	A-150	A-166	PB	PB	P
7.58	3150	321	29500	3010	4	6175DC	231	A-134	A-150	A-166	PB	PB	P
6.41	3150	321	29500	3010	4	6175DC	273	A-134	A-150	A-166	PB	PB	P
5.49	3150	321	29500	3010	3	6175DB	319	A-133	A-149	A-165	G	G	G
4.64	3150	321	29500	3010	3	6175DB	377	A-133	A-149	A-165	G	G	G
3.70	3150	321	29500	3010	2	6175DA	473	A-133	A-149	A-165	G	G	G
3.13	3150	321	29500	3010	2	6175DA	559	A-133	A-149	A-165	G	G	G
2.70	3150	321	29500	3010	1H	6175DA	649	A-133	A-149	A-165	G	G	G
2.39	3150	321	29500	3010	1H	6175DA	731	A-133	A-149	A-165	G	G	G
2.08	3150	321	29500	3010	1H	6175DA	841	A-133	A-149	A-165	G	G	G
1.74	3150	321	29500	3010	1	6175DA	1003	A-133	A-149	A-165	G	G	G
1.40	3150	321	29500	3010	08	6175DA	1247	A-133	A-149	A-165	G	G	G
1.18	3150	321	29500	3010	08	6175DA	1479	A-133	A-149	A-165	G	G	G
0.946	3150	321	29500	3010	05	6175DA	1849	A-133	A-149	A-165	G	G	G
0.847	3150	321	29500	3010	05	6175DA	2065	A-133	A-149	A-165	G	G	G
0.690	3150	321	29500	3010	05	6175DA	2537	A-133	A-149	A-165	G	G	G
0.575	3150	321	29500	3010	03	6175DA	3045	A-133	A-149	A-165	G	G	G
0.503	3150	321	29500	3010	02	6175DA	3481	A-133	A-149	A-165	G	G	G
0.394	3150	321	29500	3010	02	6175DA	4437	A-133	A-149	A-165	G	G	G
0.341	3150	321	29500	3010	02	6175DA	5133	A-133	A-149	A-165	G	G	G
0.283	3150	321	29500	3010	02	6175DA	6177	A-133	A-149	A-165	G	G	G
0.231	3150	321	29500	3010	02	6175DA	7569	A-133	A-149	A-165	G	G	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

50 Hz	Output Torque Tout		Motor Speed n ₁	
	4060	N·m	4P	
	414	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	4060	414	40200	4100	15	6180DB	104	A-134	A-150	A-166	PB	PB	P
12.0	4060	414	41700	4250	10	6180DB	121	A-134	A-150	A-166	PB	PB	P
10.1	4060	414	41700	4250	10	6180DB	143	A-134	A-150	A-166	PB	PB	P
8.79	4060	414	41700	4250	8	6180DB	165	A-134	A-150	A-166	PB	PB	P
7.44	4060	414	41700	4250	8	6180DB	195	A-134	A-150	A-166	PB	PB	P
6.28	4050	413	41700	4250	5	6180DB	231	A-134	A-150	A-166	PB	PB	P
5.31	4050	413	41700	4250	5	6180DB	273	A-134	A-150	A-166	PB	PB	P
4.55	4050	413	41700	4250	4	6180DB	319	A-134	A-150	A-166	PB	PB	P
3.85	4050	413	41700	4250	3	6180DA	377	A-133	A-149	A-165	G	G	G
3.07	4060	414	41700	4250	3	6180DA	473	A-133	A-149	A-165	G	G	G
2.59	4060	414	41700	4250	2	6180DA	559	A-133	A-149	A-165	G	G	G
2.23	4050	413	41700	4250	2	6180DA	649	A-133	A-149	A-165	G	G	G
1.98	4060	414	41700	4250	2	6180DA	731	A-133	A-149	A-165	G	G	G
1.72	4050	413	41700	4250	1H	6180DA	841	A-133	A-149	A-165	G	G	G
1.45	4050	413	41700	4250	1H	6180DA	1003	A-133	A-149	A-165	G	G	G
1.16	4060	414	41700	4250	1	6180DA	1247	A-133	A-149	A-165	G	G	G
0.980	4060	414	41700	4250	1	6180DA	1479	A-133	A-149	A-165	G	G	G
0.784	4060	414	41700	4250	08	6180DA	1849	A-133	A-149	A-165	G	G	G
0.702	4050	413	41700	4250	05	6180DA	2065	A-133	A-149	A-165	G	G	G
0.572	4050	413	41700	4250	05	6180DA	2537	A-133	A-149	A-165	G	G	G
0.476	4060	414	41700	4250	05	6180DA	3045	A-133	A-149	A-165	G	G	G
0.417	4050	413	41700	4250	05	6180DA	3481	A-133	A-149	A-165	G	G	G
0.327	4060	414	41700	4250	05	6180DA	4437	A-133	A-149	A-165	G	G	G
0.282	4060	414	41700	4250	05	6180DA	5133	A-133	A-149	A-165	G	G	G
0.235	4060	414	41700	4250	05	6180DA	6177	A-133	A-149	A-165	G	G	G
0.192	4060	414	41700	4250	05	6180DA	7569	A-133	A-149	A-165	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁	
	5000	N·m	4P	
	510	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	4900	500	39900	4060	15	6185DB	104	A-134	A-150	A-166	PB	PB	P
12.0	4810	490	41700	4250	15	6185DB	121	A-134	A-150	A-166	PB	PB	P
10.1	4900	500	41700	4250	10	6185DB	143	A-134	A-150	A-166	PB	PB	P
8.79	4920	502	41700	4250	10	6185DB	165	A-134	A-150	A-166	PB	PB	P
7.44	4920	502	41700	4250	8	6185DB	195	A-134	A-150	A-166	PB	PB	P
6.28	5000	510	41700	4250	8	6185DB	231	A-134	A-150	A-166	PB	PB	P
5.31	5000	510	41700	4250	8	6185DB	273	A-134	A-150	A-166	PB	PB	P
4.55	5000	510	41700	4250	5	6185DB	319	A-134	A-150	A-166	PB	PB	P
3.85	5000	510	41700	4250	4	6185DB	377	A-134	A-150	A-166	PB	PB	P
3.07	5000	510	41700	4250	3	6185DA	473	A-133	A-149	A-165	G	G	G
2.59	5000	510	41700	4250	3	6185DA	559	A-133	A-149	A-165	G	G	G
2.23	5000	510	41600	4240	3	6185DA	649	A-133	A-149	A-165	G	G	G
1.98	5000	510	41700	4250	2	6185DA	731	A-133	A-149	A-165	G	G	G
1.72	5000	510	41700	4250	2	6185DA	841	A-133	A-149	A-165	G	G	G
1.45	5000	510	41600	4240	1H	6185DA	1003	A-133	A-149	A-165	G	G	G
1.16	5000	510	41700	4250	1H	6185DA	1247	A-133	A-149	A-165	G	G	G
0.980	5000	510	41700	4250	1	6185DA	1479	A-133	A-149	A-165	G	G	G
0.784	5000	510	41700	4250	1	6185DA	1849	A-133	A-149	A-165	G	G	G
0.702	5000	510	41600	4240	1	6185DA	2065	A-133	A-149	A-165	G	G	G
0.572	5000	510	41600	4240	05	6185DA	2537	A-133	A-149	A-165	G	G	G
0.476	5000	510	41700	4250	05	6185DA	3045	A-133	A-149	A-165	G	G	G
0.417	5000	510	41600	4240	05	6185DA	3481	A-133	A-149	A-165	G	G	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60 Hz	Output Torque Tout		Motor Speed n ₁	
	4060	N·m	4P	
	414	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	4060	414	37700	3840	15	6180DB	104	A-134	A-150	A-166	PB	PB	P
14.5	4060	414	40300	4100	10	6180DB	121	A-134	A-150	A-166	PB	PB	P
12.2	4060	414	41700	4250	10	6180DB	143	A-134	A-150	A-166	PB	PB	P
10.6	4060	414	41700	4250	8	6180DB	165	A-134	A-150	A-166	PB	PB	P
8.97	4060	414	41700	4250	8	6180DB	195	A-134	A-150	A-166	PB	PB	P
7.58	4050	413	41700	4250	5	6180DB	231	A-134	A-150	A-166	PB	PB	P
6.41	4050	413	41700	4250	5	6180DB	273	A-134	A-150	A-166	PB	PB	P
5.49	4050	413	41700	4250	4	6180DB	319	A-134	A-150	A-166	PB	PB	P
4.64	4050	413	41700	4250	3	6180DA	377	A-133	A-149	A-165	G	G	G
3.70	4060	414	41700	4250	3	6180DA	473	A-133	A-149	A-165	G	G	G
3.13	4060	414	41700	4250	2	6180DA	559	A-133	A-149	A-165	G	G	G
2.70	4050	413	41700	4250	2	6180DA	649	A-133	A-149	A-165	G	G	G
2.39	4060	414	41700	4250	2	6180DA	731	A-133	A-149	A-165	G	G	G
2.08	4050	413	41700	4250	1H	6180DA	841	A-133	A-149	A-165	G	G	G
1.74	4050	413	41700	4250	1H	6180DA	1003	A-133	A-149	A-165	G	G	G
1.40	4060	414	41700	4250	1	6180DA	1247	A-133	A-149	A-165	G	G	G
1.18	4060	414	41700	4250	1	6180DA	1479	A-133	A-149	A-165	G	G	G
0.946	4060	414	41700	4250	08	6180DA	1849	A-133	A-149	A-165	G	G	G
0.847	4050	413	41700	4250	05	6180DA	2065	A-133	A-149	A-165	G	G	G
0.690	4050	413	41700	4250	05	6180DA	2537	A-133	A-149	A-165	G	G	G
0.575	4060	414	41700	4250	05	6180DA	3045	A-133	A-149	A-165	G	G	G
0.503	4050	413	41700	4250	05	6180DA	3481	A-133	A-149	A-165	G	G	G
0.394	4060	414	41700	4250	05	6180DA	4437	A-133	A-149	A-165	G	G	G
0.341	4060	414	41700	4250	05	6180DA	5133	A-133	A-149	A-165	G	G	G
0.283	4060	414	41700	4250	05	6180DA	6177	A-133	A-149	A-165	G	G	G
0.231	4060	414	41700	4250	05	6180DA	7569	A-133	A-149	A-165	G	G	G

TORQUE RATED
CYCLO® GEARMOTORS

60 Hz	Output Torque Tout		Motor Speed n ₁	
	5000	N·m	4P	
	510	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	4900	500	37300	3800	15	6185DB	104	A-134	A-150	A-166	PB	PB	P
14.5	4810	490	40000	4070	15	6185DB	121	A-134	A-150	A-166	PB	PB	P
12.2	4900	500	41700	4250	10	6185DB	143	A-134	A-150	A-166	PB	PB	P
10.6	4920	502	41700	4250	10	6185DB	165	A-134	A-150	A-166	PB	PB	P
8.97	4920	502	41700	4250	8	6185DB	195	A-134	A-150	A-166	PB	PB	P
7.58	5000	510	41700	4250	8	6185DB	231	A-134	A-150	A-166	PB	PB	P
6.41	5000	510	41700	4250	8	6185DB	273	A-134	A-150	A-166	PB	PB	P
5.49	5000	510	41700	4250	5	6185DB	319	A-134	A-150	A-166	PB	PB	P
4.64	5000	510	41700	4250	4	6185DB	377	A-134	A-150	A-166	PB	PB	P
3.70	5000	510	41700	4250	3	6185DA	473	A-133	A-149	A-165	G	G	G
3.13	5000	510	41700	4250	3	6185DA	559	A-133	A-149	A-165	G	G	G
2.70	5000	510	41600	4240	3	6185DA	649	A-133	A-149	A-165	G	G	G
2.39	5000	510	41700	4250	2	6185DA	731	A-133	A-149	A-165	G	G	G
2.08	5000	510	41700	4250	2	6185DA	841	A-133	A-149	A-165	G	G	G
1.74	5000	510	41600	4240	1H	6185DA	1003	A-133	A-149	A-165	G	G	G
1.40	5000	510	41700	4250	1H	6185DA	1247	A-133	A-149	A-165	G	G	G
1.18	5000	510	41700	4250	1	6185DA	1479	A-133	A-149	A-165	G	G	G
0.946	5000	510	41700	4250	1	6185DA	1849	A-133	A-149	A-165	G	G	G
0.847	5000	510	41600	4240	1	6185DA	2065	A-133	A-149	A-165	G	G	G
0.690	5000	510	41600	4240	05	6185DA	2537	A-133	A-149	A-165	G	G	G
0.575	5000	510	41700	4250	05	6185DA	3045	A-133	A-149	A-165	G	G	G
0.503	5000	510	41600	4240	05	6185DA	3481	A-133	A-149	A-165	G	G	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	5 000	N·m	50 Hz
Torque	5 10	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
0.327	5000	510	41700	4250	05	6185DA	4437	A-133	A-149	A-165	G	G	G
0.282	5000	510	41700	4250	05	6185DA	5133	A-133	A-149	A-165	G	G	G
0.235	5000	510	41700	4250	05	6185DA	6177	A-133	A-149	A-165	G	G	G
0.192	5000	510	41700	4250	05	6185DA	7569	A-133	A-149	A-165	G	G	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	6 380	N·m	4P
	6 50	kgf·m	1 450 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	6380	650	55800	5690	20	6190DB	104	A-134	A-150	A-166	PB	PB	P
12.0	6380	650	59000	6010	15	6190DB	121	A-134	A-150	A-166	PB	PB	P
10.1	6380	650	58700	5980	15	6190DB	143	A-134	A-150	A-166	PB	PB	P
8.79	6380	650	58900	6000	15	6190DB	165	A-134	A-150	A-166	PB	PB	P
7.44	6380	650	58900	6000	10	6190DB	195	A-134	A-150	A-166	PB	PB	P
6.28	6380	650	59000	6010	10	6190DB	231	A-134	A-150	A-166	PB	PB	P
5.31	6380	650	59000	6010	8	6190DA	273	A-134	A-150	A-166	PB	PB	P
4.55	6380	650	59000	6010	8	6190DA	319	A-134	A-150	A-166	PB	PB	P
3.85	6380	650	59000	6010	5	6190DA	377	A-134	A-150	A-166	PB	PB	P
3.07	6380	650	59000	6010	4	6190DA	473	A-134	A-150	A-166	PB	PB	P
2.59	6380	650	59000	6010	4	6190DA	559	A-134	A-150	A-166	PB	PB	P
2.23	6380	650	58600	5970	3	6190DA	649	A-134	A-150	A-166	PB	PB	P
1.98	6380	650	59000	6010	3	6190DA	731	A-134	A-150	A-166	PB	PB	P
1.72	6380	650	59000	6010	3	6190DA	841	A-134	A-150	A-166	PB	PB	P
1.45	6380	650	58600	5970	2	6190DA	1003	A-134	A-150	A-166	PB	PB	P
1.16	6380	650	59000	6010	1H	6190DA	1247	A-134	A-150	A-166	PB	PB	P
0.980	6380	650	58900	6000	1H	6190DA	1479	A-134	A-150	A-166	PB	PB	P
0.784	6380	650	59000	6010	1	6190DA	1849	A-134	A-150	A-166	PB	PB	P
0.702	6380	650	58600	5970	1	6190DA	2065	A-134	A-150	A-166	PB	PB	P
0.572	6380	650	58600	5970	1	6190DA	2537	A-134	A-150	A-166	PB	PB	G
0.476	6380	650	58900	6000	1	6190DA	3045	A-134	A-150	A-166	PB	PB	G
0.417	6380	650	58600	5970	1	6190DA	3481	A-134	A-150	A-166	PB	PB	G
0.327	6380	650	58900	6000	1	6190DA	4437	A-134	A-150	A-166	PB	PB	G
0.282	6380	650	58900	6000	1	6190DA	5133	A-134	A-150	A-166	PB	PB	G
0.235	6380	650	58900	6000	1	6190DA	6177	A-134	A-150	A-166	PB	PB	G
0.192	6380	650	58900	6000	1	6190DA	7569	A-134	A-150	A-166	PB	PB	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	7 960	N·m	4P
	8 11	kgf·m	1 450 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
13.9	7350	750	55400	5650	20	6195DB	104	A-134	A-150	A-166	PB	PB	P
12.0	7580	773	59000	6010	20	6195DB	121	A-134	A-150	A-166	PB	PB	P
10.1	7630	778	58300	5940	15	6195DB	143	A-134	A-150	A-166	PB	PB	P
8.79	7910	806	58300	5940	15	6195DB	165	A-134	A-150	A-166	PB	PB	P
7.44	7910	806	58300	5940	15	6195DB	195	A-134	A-150	A-166	PB	PB	P
6.28	7960	811	59000	6010	10	6195DB	231	A-134	A-150	A-166	PB	PB	P
5.31	7960	811	59000	6010	10	6195DB	273	A-134	A-150	A-166	PB	PB	P
4.55	7960	811	59000	6010	8	6195DA	319	A-134	A-150	A-166	PB	PB	P
3.85	7960	811	59000	6010	8	6195DA	377	A-134	A-150	A-166	PB	PB	P

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	5 0 0 0	N·m	6 0 Hz
Torque	5 1 0	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
0.394	5000	510	41700	4250	05	6185DA	4437	A-133	A-149	A-165	G	G	G
0.341	5000	510	41700	4250	05	6185DA	5133	A-133	A-149	A-165	G	G	G
0.283	5000	510	41700	4250	05	6185DA	6177	A-133	A-149	A-165	G	G	G
0.231	5000	510	41700	4250	05	6185DA	7569	A-133	A-149	A-165	G	G	G

6 0 Hz	Output Torque Tout		Motor Speed n ₁
	6 3 8 0	N·m	4P
	6 5 0	kgf·m	1 7 5 0 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	6090	621	52400	5340	20	6190DB	104	A-134	A-150	A-166	PB	PB	P
14.5	6380	650	55900	5700	15	6190DB	121	A-134	A-150	A-166	PB	PB	P
12.2	6380	650	58400	5950	15	6190DB	143	A-134	A-150	A-166	PB	PB	P
10.6	6380	650	58900	6000	15	6190DB	165	A-134	A-150	A-166	PB	PB	P
8.97	6380	650	58900	6000	10	6190DB	195	A-134	A-150	A-166	PB	PB	P
7.58	6380	650	59000	6010	10	6190DB	231	A-134	A-150	A-166	PB	PB	P
6.41	6380	650	59000	6010	8	6190DA	273	A-134	A-150	A-166	PB	PB	P
5.49	6380	650	59000	6010	8	6190DA	319	A-134	A-150	A-166	PB	PB	P
4.64	6380	650	59000	6010	5	6190DA	377	A-134	A-150	A-166	PB	PB	P
3.70	6380	650	59000	6010	4	6190DA	473	A-134	A-150	A-166	PB	PB	P
3.13	6380	650	59000	6010	4	6190DA	559	A-134	A-150	A-166	PB	PB	P
2.70	6380	650	58600	5970	3	6190DA	649	A-134	A-150	A-166	PB	PB	P
2.39	6380	650	59000	6010	3	6190DA	731	A-134	A-150	A-166	PB	PB	P
2.08	6380	650	59000	6010	3	6190DA	841	A-134	A-150	A-166	PB	PB	P
1.74	6380	650	58600	5970	2	6190DA	1003	A-134	A-150	A-166	PB	PB	P
1.40	6380	650	59000	6010	1H	6190DA	1247	A-134	A-150	A-166	PB	PB	P
1.18	6380	650	58900	6000	1H	6190DA	1479	A-134	A-150	A-166	PB	PB	P
0.946	6380	650	59000	6010	1	6190DA	1849	A-134	A-150	A-166	PB	PB	P
0.847	6380	650	58600	5970	1	6190DA	2065	A-134	A-150	A-166	PB	PB	P
0.690	6380	650	58600	5970	1	6190DA	2537	A-134	A-150	A-166	PB	PB	G
0.575	6380	650	58900	6000	1	6190DA	3045	A-134	A-150	A-166	PB	PB	G
0.503	6380	650	58600	5970	1	6190DA	3481	A-134	A-150	A-166	PB	PB	G
0.394	6380	650	58900	6000	1	6190DA	4437	A-134	A-150	A-166	PB	PB	G
0.341	6380	650	58900	6000	1	6190DA	5133	A-134	A-150	A-166	PB	PB	G
0.283	6380	650	58900	6000	1	6190DA	6177	A-134	A-150	A-166	PB	PB	G
0.231	6380	650	58900	6000	1	6190DA	7569	A-134	A-150	A-166	PB	PB	G

6 0 Hz	Output Torque Tout		Motor Speed n ₁
	7 9 6 0	N·m	4P
	8 1 1	kgf·m	1 7 5 0 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
16.8	6090	621	52400	5340	20	6195DB	104	A-134	A-150	A-166	PB	PB	P
14.5	7090	723	55700	5680	20	6195DB	121	A-134	A-150	A-166	PB	PB	P
12.2	7630	778	57900	5900	15	6195DB	143	A-134	A-150	A-166	PB	PB	P
10.6	7910	806	58300	5940	15	6195DB	165	A-134	A-150	A-166	PB	PB	P
8.97	7910	806	58300	5940	15	6195DB	195	A-134	A-150	A-166	PB	PB	P
7.58	7960	811	59000	6010	10	6195DB	231	A-134	A-150	A-166	PB	PB	P
6.41	7960	811	59000	6010	10	6195DB	273	A-134	A-150	A-166	PB	PB	P
5.49	7960	811	59000	6010	8	6195DA	319	A-134	A-150	A-166	PB	PB	P
4.64	7960	811	59000	6010	8	6195DA	377	A-134	A-150	A-166	PB	PB	P

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

Output	7 9 6 0	N·m	50 Hz
Torque	8 1 1	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.07	7960	811	59000	6010	5	6195DA	473	A-134	A-150	A-166	PB	PB	P
2.59	7960	811	59000	6010	4	6195DA	559	A-134	A-150	A-166	PB	PB	P
2.23	7960	811	58100	5930	4	6195DA	649	A-134	A-150	A-166	PB	PB	P
1.98	7960	811	59000	6010	4	6195DA	731	A-134	A-150	A-166	PB	PB	P
1.72	7960	811	59000	6010	3	6195DA	841	A-134	A-150	A-166	PB	PB	P
1.45	7960	811	58100	5930	3	6195DA	1003	A-134	A-150	A-166	PB	PB	P
1.16	7960	811	59000	6010	2	6195DA	1247	A-134	A-150	A-166	PB	PB	P
0.980	7960	811	58400	5950	1H	6195DA	1479	A-134	A-150	A-166	PB	PB	P
0.784	7960	811	59000	6010	1H	6195DA	1849	A-134	A-150	A-166	PB	PB	P
0.702	7960	811	58100	5930	1H	6195DA	2065	A-134	A-150	A-166	PB	PB	P
0.572	7960	811	58100	5930	1	6195DA	2537	A-134	A-150	A-166	PB	PB	G
0.476	7960	811	58400	5950	1	6195DA	3045	A-134	A-150	A-166	PB	PB	G
0.417	7960	811	58100	5930	1	6195DA	3481	A-134	A-150	A-166	PB	PB	G
0.327	7960	811	58400	5950	1	6195DA	4437	A-134	A-150	A-166	PB	PB	G
0.282	7960	811	58400	5950	1	6195DA	5133	A-134	A-150	A-166	PB	PB	G
0.235	7960	811	58400	5950	1	6195DA	6177	A-134	A-150	A-166	PB	PB	G
0.192	7960	811	58400	5950	1	6195DA	7569	A-134	A-150	A-166	PB	PB	G

50 Hz	Output Torque Tout		Motor Speed n ₁
	9 3 0 0	N·m	4 P
	9 4 8	kgf·m	1 4 5 0 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
12.0	8560	872	84100	8570	20	6205DB	121	A-135	A-151	A-167	PB	PB	P
8.79	9270	945	84100	8570	20	6205DB	165	A-135	A-151	A-167	PB	PB	P
7.44	9270	945	84100	8570	15	6205DB	195	A-135	A-151	A-167	PB	PB	P
6.28	9270	945	84100	8570	15	6205DB	231	A-135	A-151	A-167	PB	PB	P
5.31	9270	945	84100	8570	10	6205DB	273	A-135	A-151	A-167	PB	PB	P
4.55	8080	823	84100	8570	8	6205DA	319	A-135	A-151	A-167	PB	PB	P
3.85	8550	872	84100	8570	8	6205DA	377	A-135	A-151	A-167	PB	PB	P
3.07	8280	844	84100	8570	5	6205DA	473	A-135	A-151	A-167	PB	PB	P
2.59	8760	893	84100	8570	4	6205DA	559	A-135	A-151	A-167	PB	PB	P
2.23	8300	846	84100	8570	4	6205DA	649	A-135	A-151	A-167	PB	PB	P
1.98	9300	948	84100	8570	4	6205DA	731	A-135	A-151	A-167	PB	PB	P
1.72	9230	941	84100	8570	4	6205DA	841	A-135	A-151	A-167	PB	PB	P
1.45	9300	948	84100	8570	3	6205DA	1003	A-135	A-151	A-167	PB	PB	P
1.16	9300	948	84100	8570	3	6205DA	1247	A-135	A-151	A-167	PB	PB	P
0.980	8760	893	84100	8570	2	6205DA	1479	A-135	A-151	A-167	PB	PB	P
0.784	9300	948	84100	8570	2	6205DA	1849	A-135	A-151	A-167	PB	PB	P
0.702	9300	948	84100	8570	2	6205DA	2065	A-135	A-151	A-167	PB	PB	G
0.572	9300	948	84100	8570	1	6205DA	2537	A-135	A-151	A-167	PB	PB	G
0.476	8760	893	84100	8570	1	6205DA	3045	A-135	A-151	A-167	PB	PB	G
0.417	9300	948	84100	8570	1	6205DA	3481	A-135	A-151	A-167	PB	PB	G
0.327	8760	893	84100	8570	1	6205DA	4437	A-135	A-151	A-167	PB	PB	G
0.282	9300	948	84100	8570	1	6205DA	5133	A-135	A-151	A-167	PB	PB	G
0.235	8760	893	84100	8570	1	6205DA	6177	A-135	A-151	A-167	PB	PB	G
0.192	8760	893	84100	8570	1	6205DA	7569	A-135	A-151	A-167	PB	PB	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

Output	7 9 6 0	N·m	6 0 Hz
Torque	8 1 1	kgf·m	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
3.70	7960	811	59000	6010	5	6195DA	473	A-134	A-150	A-166	PB	PB	P
3.13	7960	811	59000	6010	4	6195DA	559	A-134	A-150	A-166	PB	PB	P
2.70	7960	811	58100	5930	4	6195DA	649	A-134	A-150	A-166	PB	PB	P
2.39	7960	811	59000	6010	4	6195DA	731	A-134	A-150	A-166	PB	PB	P
2.08	7960	811	59000	6010	3	6195DA	841	A-134	A-150	A-166	PB	PB	P
1.74	7960	811	58100	5930	3	6195DA	1003	A-134	A-150	A-166	PB	PB	P
1.40	7960	811	59000	6010	2	6195DA	1247	A-134	A-150	A-166	PB	PB	P
1.18	7960	811	58400	5950	1H	6195DA	1479	A-134	A-150	A-166	PB	PB	P
0.946	7960	811	59000	6010	1H	6195DA	1849	A-134	A-150	A-166	PB	PB	P
0.847	7960	811	58100	5930	1H	6195DA	2065	A-134	A-150	A-166	PB	PB	P
0.690	7960	811	58100	5930	1	6195DA	2537	A-134	A-150	A-166	PB	PB	G
0.575	7960	811	58400	5950	1	6195DA	3045	A-134	A-150	A-166	PB	PB	G
0.503	7960	811	58100	5930	1	6195DA	3481	A-134	A-150	A-166	PB	PB	G
0.394	7960	811	58400	5950	1	6195DA	4437	A-134	A-150	A-166	PB	PB	G
0.341	7960	811	58400	5950	1	6195DA	5133	A-134	A-150	A-166	PB	PB	G
0.283	7960	811	58400	5950	1	6195DA	6177	A-134	A-150	A-166	PB	PB	G
0.231	7960	811	58400	5950	1	6195DA	7569	A-134	A-150	A-166	PB	PB	G

TORQUE RATED
CYCLO® GEARMOTORS

6 0 Hz	Output Torque Tout		Motor Speed n ₁
	9 3 0 0	N·m	4P
	9 4 8	kgf·m	1 7 5 0 r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	7090	723	84100	8570	20	6205DB	121	A-135	A-151	A-167	PB	PB	P
10.6	9270	945	84100	8570	20	6205DB	165	A-135	A-151	A-167	PB	PB	P
8.97	9270	945	84100	8570	15	6205DB	195	A-135	A-151	A-167	PB	PB	P
7.58	9270	945	84100	8570	15	6205DB	231	A-135	A-151	A-167	PB	PB	P
6.41	9270	945	84100	8570	10	6205DB	273	A-135	A-151	A-167	PB	PB	P
5.49	7590	773	84100	8570	8	6205DA	319	A-135	A-151	A-167	PB	PB	P
4.64	8030	819	84100	8570	8	6205DA	377	A-135	A-151	A-167	PB	PB	P
3.70	7780	793	84100	8570	5	6205DA	473	A-135	A-151	A-167	PB	PB	P
3.13	8230	839	84100	8570	4	6205DA	559	A-135	A-151	A-167	PB	PB	P
2.70	7790	794	84100	8570	4	6205DA	649	A-135	A-151	A-167	PB	PB	P
2.39	9060	923	84100	8570	4	6205DA	731	A-135	A-151	A-167	PB	PB	P
2.08	9230	941	84100	8570	4	6205DA	841	A-135	A-151	A-167	PB	PB	P
1.74	9060	923	84100	8570	3	6205DA	1003	A-135	A-151	A-167	PB	PB	P
1.40	9300	948	84100	8570	3	6205DA	1247	A-135	A-151	A-167	PB	PB	P
1.18	8360	853	84100	8570	2	6205DA	1479	A-135	A-151	A-167	PB	PB	P
0.946	9300	948	84100	8570	2	6205DA	1849	A-135	A-151	A-167	PB	PB	P
0.847	9300	948	84100	8570	2	6205DA	2065	A-135	A-151	A-167	PB	PB	G
0.690	9300	948	84100	8570	1	6205DA	2537	A-135	A-151	A-167	PB	PB	G
0.575	8760	893	84100	8570	1	6205DA	3045	A-135	A-151	A-167	PB	PB	G
0.503	9300	948	84100	8570	1	6205DA	3481	A-135	A-151	A-167	PB	PB	G
0.394	8760	893	84100	8570	1	6205DA	4437	A-135	A-151	A-167	PB	PB	G
0.341	9300	948	84100	8570	1	6205DA	5133	A-135	A-151	A-167	PB	PB	G
0.283	8760	893	84100	8570	1	6205DA	6177	A-135	A-151	A-167	PB	PB	G
0.231	8760	893	84100	8570	1	6205DA	7569	A-135	A-151	A-167	PB	PB	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

50 Hz	Output Torque T_{out}		Motor Speed n_1
	12700	N·m	4P
	1290	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHN CHHM	CNFM CHFM	CNVM CVVM	CNHN CHHM	CNFM CHFM	CNVM CVVM
12.0	11400	1160	104000	10600	30	- 6215DB	- 121	A-135	A-152	A-168	PB	PB	P
8.79	11700	1190	104000	10600	20	- 6215DA	- 165	A-135	A-151	A-167	PB	PB	P
7.44	12200	1240	104000	10600	20	- 6215DA	- 195	A-135	A-151	A-167	PB	PB	P
6.28	12500	1270	104000	10600	15	- 6215DA	- 231	A-135	A-151	A-167	PB	PB	P
5.31	12500	1270	104000	10600	15	- 6215DA	- 273	A-135	A-151	A-167	PB	PB	P
4.55	12700	1290	104000	10600	15	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
3.85	12700	1290	104000	10600	10	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
3.07	12700	1290	104000	10600	8	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
2.59	12700	1290	104000	10600	8	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
2.23	12700	1290	104000	10600	8	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
1.98	12700	1290	104000	10600	5	- 6215DA	- 731	A-135	A-151	A-167	PB	PB	P
1.72	12700	1290	104000	10600	5	- 6215DA	- 841	A-135	A-151	A-167	PB	PB	P
1.45	12700	1290	104000	10600	4	- 6215DA	- 1003	A-135	A-151	A-167	PB	PB	P
1.16	12700	1290	104000	10600	3	- 6215DA	- 1247	A-135	A-151	A-167	PB	PB	P
0.980	11300	1150	104000	10600	3	- 6215DA	- 1479	A-135	A-151	A-167	PB	PB	P
0.784	12700	1290	104000	10600	2	- 6215DA	- 1849	A-135	A-151	A-167	PB	PB	P
0.702	12700	1290	104000	10600	2	- 6215DA	- 2065	A-135	A-151	A-167	PB	PB	P
0.572	12700	1290	104000	10600	2	- 6215DA	- 2537	A-135	A-151	A-167	PB	PB	P
0.476	11300	1150	104000	10600	2	- 6215DA	- 3045	A-135	A-151	A-167	PB	PB	G
0.417	12700	1290	104000	10600	2	- 6215DA	- 3481	A-135	A-151	A-167	PB	PB	G
0.327	11300	1150	104000	10600	2	- 6215DA	- 4437	A-135	A-151	A-167	PB	PB	G
0.282	12700	1290	104000	10600	2	- 6215DA	- 5133	A-135	A-151	A-167	PB	PB	G
0.235	11300	1150	104000	10600	2	- 6215DA	- 6177	A-135	A-151	A-167	PB	PB	G
0.192	11300	1150	104000	10600	2	- 6215DA	- 7569	A-135	A-151	A-167	PB	PB	G

50 Hz	Output Torque T_{out}		Motor Speed n_1
	16000	N·m	4P
	1630	kgf·m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHN CHHM	CNFM CHFM	CNVM CVVM	CNHN CHHM	CNFM CHFM	CNVM CVVM
12.0	13500	1370	113000	11500	40	- 6225DB	- 121	A-136	A-152	A-168	PB	PB	P
8.79	14500	1480	122000	12500	25	- 6225DB	- 165	A-136	A-152	A-168	PB	PB	P
7.44	12500	1270	129000	13200	20	- 6225DA	- 195	A-136	A-152	A-168	PB	PB	P
6.28	14800	1510	137000	14000	20	- 6225DA	- 231	A-136	A-152	A-168	PB	PB	P
5.31	14800	1510	145000	14700	15	- 6225DA	- 273	A-136	A-152	A-168	PB	PB	P
4.55	15000	1530	145000	14800	15	- 6225DA	- 319	A-136	A-152	A-168	PB	PB	P
3.85	15000	1530	145000	14800	15	- 6225DA	- 377	A-136	A-152	A-168	PB	PB	P
3.07	16000	1630	145000	14800	10	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
2.59	16000	1630	145000	14800	10	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
2.23	15900	1620	145000	14800	8	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
1.98	16000	1630	145000	14800	8	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
1.72	15000	1530	145000	14800	5	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
1.45	15900	1620	145000	14800	5	- 6225DA	- 1003	A-136	A-152	A-168	PB	PB	P
1.16	16000	1630	145000	14800	4	- 6225DA	- 1247	A-136	A-152	A-168	PB	PB	P
0.980	15100	1540	145000	14800	3	- 6225DA	- 1479	A-136	A-152	A-168	PB	PB	P
0.784	16000	1630	145000	14800	3	- 6225DA	- 1849	A-136	A-152	A-168	PB	PB	P
0.702	15900	1620	145000	14800	3	- 6225DA	- 2065	A-136	A-152	A-168	PB	PB	P
0.572	15900	1620	145000	14800	2	- 6225DA	- 2537	A-136	A-152	A-168	PB	PB	P
0.476	15100	1540	145000	14800	2	- 6225DA	- 3045	A-136	A-152	A-168	PB	PB	G
0.417	15900	1620	145000	14800	2	- 6225DA	- 3481	A-136	A-152	A-168	PB	PB	G
0.327	15100	1540	145000	14800	2	- 6225DA	- 4437	A-136	A-152	A-168	PB	PB	G
0.282	15900	1620	145000	14800	2	- 6225DA	- 5133	A-136	A-152	A-168	PB	PB	G
0.235	15100	1540	145000	14800	2	- 6225DA	- 6177	A-136	A-152	A-168	PB	PB	G
0.192	15100	1540	145000	14800	2	- 6225DA	- 7569	A-136	A-152	A-168	PB	PB	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60 Hz	Output Torque Tout		Motor Speed n ₁	
	1 2 7 0 0	N·m	4P	
	1 2 9 0	kgf·m	1 7 5 0 r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	11400	1160	101000	10300	30	- 6215DB	- 121	A-135	A-152	A-168	PB	PB	P
10.6	9670	985	104000	10600	20	- 6215DA	- 165	A-135	A-151	A-167	PB	PB	P
8.97	11400	1160	104000	10600	20	- 6215DA	- 195	A-135	A-151	A-167	PB	PB	P
7.58	12500	1270	104000	10600	15	- 6215DA	- 231	A-135	A-151	A-167	PB	PB	P
6.41	12500	1270	104000	10600	15	- 6215DA	- 273	A-135	A-151	A-167	PB	PB	P
5.49	12700	1290	104000	10600	15	- 6215DA	- 319	A-135	A-151	A-167	PB	PB	P
4.64	12700	1290	104000	10600	10	- 6215DA	- 377	A-135	A-151	A-167	PB	PB	P
3.70	12700	1290	104000	10600	8	- 6215DA	- 473	A-135	A-151	A-167	PB	PB	P
3.13	12700	1290	104000	10600	8	- 6215DA	- 559	A-135	A-151	A-167	PB	PB	P
2.70	12700	1290	104000	10600	8	- 6215DA	- 649	A-135	A-151	A-167	PB	PB	P
2.39	12700	1290	104000	10600	5	- 6215DA	- 731	A-135	A-151	A-167	PB	PB	P
2.08	12700	1290	104000	10600	5	- 6215DA	- 841	A-135	A-151	A-167	PB	PB	P
1.74	12700	1290	104000	10600	4	- 6215DA	- 1003	A-135	A-151	A-167	PB	PB	P
1.40	12700	1290	104000	10600	3	- 6215DA	- 1247	A-135	A-151	A-167	PB	PB	P
1.18	11300	1150	104000	10600	3	- 6215DA	- 1479	A-135	A-151	A-167	PB	PB	P
0.946	12700	1290	104000	10600	2	- 6215DA	- 1849	A-135	A-151	A-167	PB	PB	P
0.847	12700	1290	104000	10600	2	- 6215DA	- 2065	A-135	A-151	A-167	PB	PB	P
0.690	12700	1290	104000	10600	2	- 6215DA	- 2537	A-135	A-151	A-167	PB	PB	P
0.575	11300	1150	104000	10600	2	- 6215DA	- 3045	A-135	A-151	A-167	PB	PB	G
0.503	12700	1290	104000	10600	2	- 6215DA	- 3481	A-135	A-151	A-167	PB	PB	G
0.394	11300	1150	104000	10600	2	- 6215DA	- 4437	A-135	A-151	A-167	PB	PB	G
0.341	12700	1290	104000	10600	2	- 6215DA	- 5133	A-135	A-151	A-167	PB	PB	G
0.283	11300	1150	104000	10600	2	- 6215DA	- 6177	A-135	A-151	A-167	PB	PB	G
0.231	11300	1150	104000	10600	2	- 6215DA	- 7569	A-135	A-151	A-167	PB	PB	G

TORQUE RATED
CYCLO® GEARMOTORS

60 Hz	Output Torque Tout		Motor Speed n ₁	
	1 6 0 0 0	N·m	4P	
	1 6 3 0	kgf·m	1 7 5 0 r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	13500	1370	106000	10800	40	- 6225DB	- 121	A-136	A-152	A-168	PB	PB	P
10.6	14500	1480	115000	11800	25	- 6225DB	- 165	A-136	A-152	A-168	PB	PB	P
8.97	11400	1160	122000	12500	20	- 6225DA	- 195	A-136	A-152	A-168	PB	PB	P
7.58	13500	1380	130000	13200	20	- 6225DA	- 231	A-136	A-152	A-168	PB	PB	P
6.41	14800	1510	137000	13900	15	- 6225DA	- 273	A-136	A-152	A-168	PB	PB	P
5.49	15000	1530	142000	14500	15	- 6225DA	- 319	A-136	A-152	A-168	PB	PB	P
4.64	15000	1530	145000	14800	15	- 6225DA	- 377	A-136	A-152	A-168	PB	PB	P
3.70	16000	1630	145000	14800	10	- 6225DA	- 473	A-136	A-152	A-168	PB	PB	P
3.13	16000	1630	145000	14800	10	- 6225DA	- 559	A-136	A-152	A-168	PB	PB	P
2.70	15900	1620	145000	14800	8	- 6225DA	- 649	A-136	A-152	A-168	PB	PB	P
2.39	16000	1630	145000	14800	8	- 6225DA	- 731	A-136	A-152	A-168	PB	PB	P
2.08	15000	1530	145000	14800	5	- 6225DA	- 841	A-136	A-152	A-168	PB	PB	P
1.74	15900	1620	145000	14800	5	- 6225DA	- 1003	A-136	A-152	A-168	PB	PB	P
1.40	16000	1630	145000	14800	4	- 6225DA	- 1247	A-136	A-152	A-168	PB	PB	P
1.18	15100	1540	145000	14800	3	- 6225DA	- 1479	A-136	A-152	A-168	PB	PB	P
0.946	16000	1630	145000	14800	3	- 6225DA	- 1849	A-136	A-152	A-168	PB	PB	P
0.847	15900	1620	145000	14800	3	- 6225DA	- 2065	A-136	A-152	A-168	PB	PB	P
0.690	15900	1620	145000	14800	2	- 6225DA	- 2537	A-136	A-152	A-168	PB	PB	P
0.575	15100	1540	145000	14800	2	- 6225DA	- 3045	A-136	A-152	A-168	PB	PB	G
0.503	15900	1620	145000	14800	2	- 6225DA	- 3481	A-136	A-152	A-168	PB	PB	G
0.394	15100	1540	145000	14800	2	- 6225DA	- 4437	A-136	A-152	A-168	PB	PB	G
0.341	15900	1620	145000	14800	2	- 6225DA	- 5133	A-136	A-152	A-168	PB	PB	G
0.283	15100	1540	145000	14800	2	- 6225DA	- 6177	A-136	A-152	A-168	PB	PB	G
0.231	15100	1540	145000	14800	2	- 6225DA	- 7569	A-136	A-152	A-168	PB	PB	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
TP: Positive displacement pump lubrication

4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.

5. Motor slippage may affect n₁ and n₂.

50 Hz	Output Torque T_{out}		Motor Speed n_1	
	20500	N·m	4P	
	2090	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHN CHHM	CNFM CHFM	CNVM CVVM	CNHN CHHM	CNFM CHFM	CNVM CVVM
12.0	18700	1910	141000	14300	50	- 6235DB	- 121	A-137	A-153	A-169	PB	PB	P
8.79	19600	2000	151000	15400	40	- 6235DB	- 165	A-137	A-153	A-169	PB	PB	P
7.44	19600	2000	159000	16200	30	- 6235DA	- 195	A-137	A-153	A-169	PB	PB	P
6.28	18900	1930	171000	17400	25	- 6235DA	- 231	A-137	A-153	A-169	PB	PB	P
5.31	18900	1930	179000	18200	20	- 6235DA	- 273	A-137	A-153	A-169	PB	PB	P
4.55	18900	1930	179000	18200	20	- 6235DA	- 319	A-137	A-153	A-169	PB	PB	P
3.85	18900	1930	179000	18200	15	- 6235DA	- 377	A-137	A-153	A-169	PB	PB	P
3.07	20500	2090	179000	18200	15	- 6235DA	- 473	A-137	A-153	A-169	PB	PB	P
2.59	20500	2090	179000	18200	10	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
2.23	20500	2090	179000	18200	10	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
1.98	20500	2090	179000	18200	10	- 6235DA	- 731	A-137	A-153	A-169	PB	PB	P
1.72	18900	1930	179000	18200	8	- 6235DA	- 841	A-137	A-153	A-169	PB	PB	P
1.45	20500	2090	179000	18200	8	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.16	20500	2090	179000	18200	5	- 6235DA	- 1247	A-137	A-153	A-169	PB	PB	P
0.980	17200	1750	179000	18200	4	- 6235DA	- 1479	A-137	A-153	A-169	PB	PB	P
0.784	20500	2090	179000	18200	4	- 6235DA	- 1849	A-137	A-153	A-169	PB	PB	P
0.702	20500	2090	179000	18200	3	- 6235DA	- 2065	A-137	A-153	A-169	PB	PB	P
0.572	20500	2090	179000	18200	3	- 6235DA	- 2537	A-137	A-153	A-169	PB	PB	P
0.476	17200	1750	179000	18200	3	- 6235DA	- 3045	A-137	A-153	A-169	PB	PB	G
0.417	20500	2090	179000	18200	3	- 6235DA	- 3481	A-137	A-153	A-169	PB	PB	G
0.327	17200	1750	179000	18200	3	- 6235DA	- 4437	A-137	A-153	A-169	PB	PB	G
0.282	20500	2090	179000	18200	3	- 6235DA	- 5133	A-137	A-153	A-169	PB	PB	G
0.235	17200	1750	179000	18200	3	- 6235DA	- 6177	A-137	A-153	A-169	PB	PB	G
0.192	17200	1750	179000	18200	3	- 6235DA	- 7569	A-137	A-153	A-169	PB	PB	G

50 Hz	Output Torque T_{out}		Motor Speed n_1	
	26200	N·m	4P	
	2680	kgf·m	1450r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n_2 r/min	Output Torque T_{out}		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHN CHHM	CNFM CHFM	CNVM CVVM	CNHN CHHM	CNFM CHFM	CNVM CVVM
12.0	20500	2090	156000	15900	50	- 6245DB	- 121	A-137	A-153	A-169	PB	PB	P
8.79	26200	2680	168000	17100	50	- 6245DB	- 165	A-137	A-153	A-169	PB	PB	P
7.44	26200	2680	177000	18000	40	- 6245DB	- 195	A-137	A-153	A-169	PB	PB	P
6.28	25800	2630	189000	19300	40	- 6245DB	- 231	A-137	A-153	A-169	PB	PB	P
5.31	25800	2630	199000	20300	30	- 6245DA	- 273	A-137	A-153	A-169	PB	PB	P
4.55	25800	2630	208000	21200	25	- 6245DA	- 319	A-137	A-153	A-169	PB	PB	P
3.85	25800	2630	208000	21200	20	- 6245DA	- 377	A-137	A-153	A-169	PB	PB	P
3.07	25800	2630	208000	21200	20	- 6245DA	- 473	A-137	A-153	A-169	PB	PB	P
2.59	25800	2630	208000	21200	15	- 6245DA	- 559	A-137	A-153	A-169	PB	PB	P
2.23	25800	2630	208000	21200	15	- 6245DA	- 649	A-137	A-153	A-169	PB	PB	P
1.98	25800	2630	208000	21200	10	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
1.72	25800	2630	208000	21200	10	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
1.45	25800	2630	208000	21200	8	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.16	25800	2630	208000	21200	8	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
0.980	22600	2310	208000	21200	5	- 6245DA	- 1479	A-137	A-153	A-169	PB	PB	P
0.784	25800	2630	208000	21200	4	- 6245DA	- 1849	A-137	A-153	A-169	PB	PB	P
0.702	25800	2630	208000	21200	4	- 6245DA	- 2065	A-137	A-153	A-169	PB	PB	P
0.572	25800	2630	208000	21200	3	- 6245DA	- 2537	A-137	A-153	A-169	PB	PB	P
0.476	22600	2310	208000	21200	3	- 6245DA	- 3045	A-137	A-153	A-169	PB	PB	G
0.417	25800	2630	208000	21200	3	- 6245DA	- 3481	A-137	A-153	A-169	PB	PB	G
0.327	22600	2310	208000	21200	3	- 6245DA	- 4437	A-137	A-153	A-169	PB	PB	G
0.282	25800	2630	208000	21200	3	- 6245DA	- 5133	A-137	A-153	A-169	PB	PB	G
0.235	22600	2310	208000	21200	3	- 6245DA	- 6177	A-137	A-153	A-169	PB	PB	G
0.192	22600	2310	208000	21200	3	- 6245DA	- 7569	A-137	A-153	A-169	PB	PB	G

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60 Hz	Output Torque Tout		Motor Speed n ₁	
	20500	N·m	4P	
	2090	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	18700	1910	133000	13500	50	- 6235DB	- 121	A-137	A-153	A-169	PB	PB	P
10.6	19600	2000	143000	14500	40	- 6235DB	- 165	A-137	A-153	A-169	PB	PB	P
8.97	19600	2000	150000	15300	30	- 6235DA	- 195	A-137	A-153	A-169	PB	PB	P
7.58	18900	1930	162000	16500	25	- 6235DA	- 231	A-137	A-153	A-169	PB	PB	P
6.41	18900	1930	170000	17300	20	- 6235DA	- 273	A-137	A-153	A-169	PB	PB	P
5.49	18900	1930	177000	18100	20	- 6235DA	- 319	A-137	A-153	A-169	PB	PB	P
4.64	18900	1930	179000	18200	15	- 6235DA	- 377	A-137	A-153	A-169	PB	PB	P
3.70	20500	2090	179000	18200	15	- 6235DA	- 473	A-137	A-153	A-169	PB	PB	P
3.13	20500	2090	179000	18200	10	- 6235DA	- 559	A-137	A-153	A-169	PB	PB	P
2.70	20500	2090	179000	18200	10	- 6235DA	- 649	A-137	A-153	A-169	PB	PB	P
2.39	20500	2090	179000	18200	10	- 6235DA	- 731	A-137	A-153	A-169	PB	PB	P
2.08	18900	1930	179000	18200	8	- 6235DA	- 841	A-137	A-153	A-169	PB	PB	P
1.74	20500	2090	179000	18200	8	- 6235DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.40	20500	2090	179000	18200	5	- 6235DA	- 1247	A-137	A-153	A-169	PB	PB	P
1.18	17200	1750	179000	18200	4	- 6235DA	- 1479	A-137	A-153	A-169	PB	PB	P
0.946	20500	2090	179000	18200	4	- 6235DA	- 1849	A-137	A-153	A-169	PB	PB	P
0.847	20500	2090	179000	18200	3	- 6235DA	- 2065	A-137	A-153	A-169	PB	PB	P
0.690	20500	2090	179000	18200	3	- 6235DA	- 2537	A-137	A-153	A-169	PB	PB	P
0.575	17200	1750	179000	18200	3	- 6235DA	- 3045	A-137	A-153	A-169	PB	PB	G
0.503	20500	2090	179000	18200	3	- 6235DA	- 3481	A-137	A-153	A-169	PB	PB	G
0.394	17200	1750	179000	18200	3	- 6235DA	- 4437	A-137	A-153	A-169	PB	PB	G
0.341	20500	2090	179000	18200	3	- 6235DA	- 5133	A-137	A-153	A-169	PB	PB	G
0.283	17200	1750	179000	18200	3	- 6235DA	- 6177	A-137	A-153	A-169	PB	PB	G
0.231	17200	1750	179000	18200	3	- 6235DA	- 7569	A-137	A-153	A-169	PB	PB	G

TORQUE RATED
CYCLO® GEARMOTORS

60 Hz	Output Torque Tout		Motor Speed n ₁	
	26200	N·m	4P	
	2680	kgf·m	1750r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
14.5	20500	2090	148000	15000	50	- 6245DB	- 121	A-137	A-153	A-169	PB	PB	P
10.6	26200	2680	158000	16100	50	- 6245DB	- 165	A-137	A-153	A-169	PB	PB	P
8.97	26200	2680	167000	17000	40	- 6245DB	- 195	A-137	A-153	A-169	PB	PB	P
7.58	25800	2630	179000	18200	40	- 6245DB	- 231	A-137	A-153	A-169	PB	PB	P
6.41	25800	2630	188000	19200	30	- 6245DA	- 273	A-137	A-153	A-169	PB	PB	P
5.49	25800	2630	196000	20000	25	- 6245DA	- 319	A-137	A-153	A-169	PB	PB	P
4.64	25800	2630	207000	21100	20	- 6245DA	- 377	A-137	A-153	A-169	PB	PB	P
3.70	25800	2630	208000	21200	20	- 6245DA	- 473	A-137	A-153	A-169	PB	PB	P
3.13	25800	2630	208000	21200	15	- 6245DA	- 559	A-137	A-153	A-169	PB	PB	P
2.70	25800	2630	208000	21200	15	- 6245DA	- 649	A-137	A-153	A-169	PB	PB	P
2.39	25800	2630	208000	21200	10	- 6245DA	- 731	A-137	A-153	A-169	PB	PB	P
2.08	25800	2630	208000	21200	10	- 6245DA	- 841	A-137	A-153	A-169	PB	PB	P
1.74	25800	2630	208000	21200	8	- 6245DA	- 1003	A-137	A-153	A-169	PB	PB	P
1.40	25800	2630	208000	21200	8	- 6245DA	- 1247	A-137	A-153	A-169	PB	PB	P
1.18	22600	2310	208000	21200	5	- 6245DA	- 1479	A-137	A-153	A-169	PB	PB	P
0.946	25800	2630	208000	21200	4	- 6245DA	- 1849	A-137	A-153	A-169	PB	PB	P
0.847	25800	2630	208000	21200	4	- 6245DA	- 2065	A-137	A-153	A-169	PB	PB	P
0.690	25800	2630	208000	21200	3	- 6245DA	- 2537	A-137	A-153	A-169	PB	PB	P
0.575	22600	2310	208000	21200	3	- 6245DA	- 3045	A-137	A-153	A-169	PB	PB	G
0.503	25800	2630	208000	21200	3	- 6245DA	- 3481	A-137	A-153	A-169	PB	PB	G
0.394	22600	2310	208000	21200	3	- 6245DA	- 4437	A-137	A-153	A-169	PB	PB	G
0.341	25800	2630	208000	21200	3	- 6245DA	- 5133	A-137	A-153	A-169	PB	PB	G
0.283	22600	2310	208000	21200	3	- 6245DA	- 6177	A-137	A-153	A-169	PB	PB	G
0.231	22600	2310	208000	21200	3	- 6245DA	- 7569	A-137	A-153	A-169	PB	PB	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

50 Hz	Output Torque Tout		Motor Speed n ₁	
	3 4 5 0 0	N·m	4P	
	3 5 2 0	kgf·m	1 4 5 0 r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
7.44	31200	3180	216000	22100	50	- 6255DB	- 195	A-138	A-154	A-170	PB	PB	P
6.28	31000	3160	231000	23500	40	- 6255DA	- 231	A-137	A-154	A-170	PB	PB	P
5.31	31000	3160	243000	24700	40	- 6255DA	- 273	A-137	A-154	A-170	PB	PB	P
4.55	32500	3310	255000	26000	30	- 6255DA	- 319	A-137	A-154	A-170	PB	PB	P
3.85	32500	3310	258000	26300	25	- 6255DA	- 377	A-137	A-154	A-170	PB	PB	P
3.07	34500	3520	258000	26300	20	- 6255DA	- 473	A-137	A-154	A-170	PB	PB	P
2.59	34500	3520	258000	26300	20	- 6255DA	- 559	A-137	A-154	A-170	PB	PB	P
2.23	34500	3520	258000	26300	15	- 6255DA	- 649	A-137	A-154	A-170	PB	PB	P
1.98	34500	3520	258000	26300	15	- 6255DA	- 731	A-137	A-154	A-170	PB	PB	P
1.72	32500	3310	258000	26300	15	- 6255DA	- 841	A-137	A-154	A-170	PB	PB	P
1.45	34500	3520	258000	26300	10	- 6255DA	- 1003	A-137	A-154	A-170	PB	PB	P
1.16	34500	3520	258000	26300	10	- 6255DA	- 1247	A-137	A-154	A-170	PB	PB	P
0.980	31000	3160	258000	26300	8	- 6255DA	- 1479	A-137	A-154	A-170	PB	PB	P
0.784	34500	3520	258000	26300	8	- 6255DA	- 1849	A-137	A-154	A-170	PB	PB	P
0.702	34500	3520	258000	26300	5	- 6255DA	- 2065	A-137	A-154	A-170	PB	PB	P
0.572	34500	3520	258000	26300	5	- 6255DA	- 2537	A-137	A-154	A-170	PB	PB	P
0.476	31000	3160	258000	26300	5	- 6255DA	- 3045	A-137	A-154	A-170	PB	PB	G
0.417	34500	3520	258000	26300	5	- 6255DA	- 3481	A-137	A-154	A-170	PB	PB	G
0.327	31000	3160	258000	26300	5	- 6255DA	- 4437	A-137	A-154	A-170	PB	PB	G
0.282	34500	3520	258000	26300	5	- 6255DA	- 5133	A-137	A-154	A-170	PB	PB	G
0.235	31000	3160	258000	26300	5	- 6255DA	- 6177	A-137	A-154	A-170	PB	PB	G
0.192	31000	3160	258000	26300	5	- 6255DA	- 7569	A-137	A-154	A-170	PB	PB	G

50 Hz	Output Torque Tout		Motor Speed n ₁	
	4 6 0 0 0	N·m	4P	
	4 6 9 0	kgf·m	1 4 5 0 r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
6.28	46000	4690	276000	28100	60	- 6265DA	- 231	A-138	A-154	A-170	PB	PB	P
5.31	46000	4690	276000	28100	50	- 6265DA	- 273	A-138	A-154	A-170	PB	PB	P
4.55	46000	4690	276000	28100	40	- 6265DA	- 319	A-138	A-154	A-170	PB	PB	P
3.85	46000	4690	276000	28100	40	- 6265DA	- 377	A-138	A-154	A-170	PB	PB	P
3.07	46000	4690	276000	28100	30	- 6265DA	- 473	A-138	A-154	A-170	PB	PB	P
2.59	46000	4690	276000	28100	25	- 6265DA	- 559	A-138	A-154	A-170	PB	PB	P
2.23	46000	4690	276000	28100	20	- 6265DA	- 649	A-138	A-154	A-170	PB	PB	P
1.98	46000	4690	276000	28100	20	- 6265DA	- 731	A-138	A-154	A-170	PB	PB	P
1.72	46000	4690	276000	28100	20	- 6265DA	- 841	A-138	A-154	A-170	PB	PB	P
1.45	46000	4690	276000	28100	15	- 6265DA	- 1003	A-138	A-154	A-170	PB	PB	P
1.16	46000	4690	276000	28100	10	- 6265DA	- 1247	A-138	A-154	A-170	PB	PB	P
0.980	44000	4490	276000	28100	10	- 6265DA	- 1479	A-138	A-154	A-170	PB	PB	P
0.784	46000	4690	276000	28100	8	- 6265DA	- 1849	A-138	A-154	A-170	PB	PB	P
0.702	46000	4690	276000	28100	8	- 6265DA	- 2065	A-138	A-154	A-170	PB	PB	P
0.572	46000	4690	276000	28100	8	- 6265DA	- 2537	A-138	A-154	A-170	PB	PB	P
0.476	44000	4490	276000	28100	8	- 6265DA	- 3045	A-138	A-154	A-170	PB	PB	G
0.417	46000	4690	276000	28100	8	- 6265DA	- 3481	A-138	A-154	A-170	PB	PB	G
0.327	44000	4490	276000	28100	8	- 6265DA	- 4437	A-138	A-154	A-170	PB	PB	G
0.282	46000	4690	276000	28100	8	- 6265DA	- 5133	A-138	A-154	A-170	PB	PB	G
0.235	44000	4490	276000	28100	8	- 6265DA	- 6177	A-138	A-154	A-170	PB	PB	G
0.192	44000	4490	276000	28100	8	- 6265DA	- 7569	A-138	A-154	A-170	PB	PB	G

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60 Hz	Output Torque Tout		Motor Speed n ₁	
	3 4 5 0 0	N·m	4P	
	3 5 2 0	kgf·m	1 7 5 0 r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
8.97	31200	3180	204000	20800	50	6255DB	195	A-138	A-154	A-170	PB	PB	P
7.58	31000	3160	218000	22200	40	6255DA	231	A-137	A-154	A-170	PB	PB	P
6.41	31000	3160	229000	23400	40	6255DA	273	A-137	A-154	A-170	PB	PB	P
5.49	32500	3310	241000	24600	30	6255DA	319	A-137	A-154	A-170	PB	PB	P
4.64	32500	3310	254000	25900	25	6255DA	377	A-137	A-154	A-170	PB	PB	P
3.70	34500	3520	258000	26300	20	6255DA	473	A-137	A-154	A-170	PB	PB	P
3.13	34500	3520	258000	26300	20	6255DA	559	A-137	A-154	A-170	PB	PB	P
2.70	34500	3520	258000	26300	15	6255DA	649	A-137	A-154	A-170	PB	PB	P
2.39	34500	3520	258000	26300	15	6255DA	731	A-137	A-154	A-170	PB	PB	P
2.08	32500	3310	258000	26300	15	6255DA	841	A-137	A-154	A-170	PB	PB	P
1.74	34500	3520	258000	26300	10	6255DA	1003	A-137	A-154	A-170	PB	PB	P
1.40	34500	3520	258000	26300	10	6255DA	1247	A-137	A-154	A-170	PB	PB	P
1.18	31000	3160	258000	26300	8	6255DA	1479	A-137	A-154	A-170	PB	PB	P
0.946	34500	3520	258000	26300	8	6255DA	1849	A-137	A-154	A-170	PB	PB	P
0.847	34500	3520	258000	26300	5	6255DA	2065	A-137	A-154	A-170	PB	PB	P
0.690	34500	3520	258000	26300	5	6255DA	2537	A-137	A-154	A-170	PB	PB	P
0.575	31000	3160	258000	26300	5	6255DA	3045	A-137	A-154	A-170	PB	PB	G
0.503	34500	3520	258000	26300	5	6255DA	3481	A-137	A-154	A-170	PB	PB	G
0.394	31000	3160	258000	26300	5	6255DA	4437	A-137	A-154	A-170	PB	PB	G
0.341	34500	3520	258000	26300	5	6255DA	5133	A-137	A-154	A-170	PB	PB	G
0.283	31000	3160	258000	26300	5	6255DA	6177	A-137	A-154	A-170	PB	PB	G
0.231	31000	3160	258000	26300	5	6255DA	7569	A-137	A-154	A-170	PB	PB	G

TORQUE RATED
CYCLO® GEARMOTORS

60 Hz	Output Torque Tout		Motor Speed n ₁	
	4 6 0 0 0	N·m	4P	
	4 6 9 0	kgf·m	1 7 5 0 r/min	

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
7.58	46000	4690	265000	27000	60	6265DA	231	A-138	A-154	A-170	PB	PB	P
6.41	46000	4690	276000	28100	50	6265DA	273	A-138	A-154	A-170	PB	PB	P
5.49	46000	4690	276000	28100	40	6265DA	319	A-138	A-154	A-170	PB	PB	P
4.64	46000	4690	276000	28100	40	6265DA	377	A-138	A-154	A-170	PB	PB	P
3.70	46000	4690	276000	28100	30	6265DA	473	A-138	A-154	A-170	PB	PB	P
3.13	46000	4690	276000	28100	25	6265DA	559	A-138	A-154	A-170	PB	PB	P
2.70	46000	4690	276000	28100	20	6265DA	649	A-138	A-154	A-170	PB	PB	P
2.39	46000	4690	276000	28100	20	6265DA	731	A-138	A-154	A-170	PB	PB	P
2.08	46000	4690	276000	28100	20	6265DA	841	A-138	A-154	A-170	PB	PB	P
1.74	46000	4690	276000	28100	15	6265DA	1003	A-138	A-154	A-170	PB	PB	P
1.40	46000	4690	276000	28100	10	6265DA	1247	A-138	A-154	A-170	PB	PB	P
1.18	44000	4490	276000	28100	10	6265DA	1479	A-138	A-154	A-170	PB	PB	P
0.946	46000	4690	276000	28100	8	6265DA	1849	A-138	A-154	A-170	PB	PB	P
0.847	46000	4690	276000	28100	8	6265DA	2065	A-138	A-154	A-170	PB	PB	P
0.690	46000	4690	276000	28100	8	6265DA	2537	A-138	A-154	A-170	PB	PB	P
0.575	44000	4490	276000	28100	8	6265DA	3045	A-138	A-154	A-170	PB	PB	G
0.503	46000	4690	276000	28100	8	6265DA	3481	A-138	A-154	A-170	PB	PB	G
0.394	44000	4490	276000	28100	8	6265DA	4437	A-138	A-154	A-170	PB	PB	G
0.341	46000	4690	276000	28100	8	6265DA	5133	A-138	A-154	A-170	PB	PB	G
0.283	44000	4490	276000	28100	8	6265DA	6177	A-138	A-154	A-170	PB	PB	G
0.231	44000	4490	276000	28100	8	6265DA	7569	A-138	A-154	A-170	PB	PB	G

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

50 Hz	Output Torque Tout		Motor Speed n ₁
	6 8200	N•m	4P
	6 950	kgf•m	1450r/min

TORQUE RATED CYCLO® GEARMOTORS

Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N•m	kgf•m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
4.55	68200	6950	248000	25300	60	6275DA	319	A-138	-	A-170	PB	-	TP
3.85	68200	6950	248000	25300	50	6275DA	377	A-138	-	A-170	PB	-	TP
3.07	68200	6950	248000	25300	40	6275DA	473	A-138	-	A-170	PB	-	TP
2.59	68200	6950	248000	25300	40	6275DA	559	A-138	-	A-170	PB	-	TP
2.23	68200	6950	248000	25300	30	6275DA	649	A-138	-	A-170	PB	-	TP
1.98	68200	6950	248000	25300	30	6275DA	731	A-138	-	A-170	PB	-	TP
1.72	68200	6950	248000	25300	25	6275DA	841	A-138	-	A-170	PB	-	TP
1.45	68200	6950	248000	25300	20	6275DA	1003	A-138	-	A-170	PB	-	TP
1.16	68200	6950	248000	25300	20	6275DA	1247	A-138	-	A-170	PB	-	TP
0.980	68200	6950	245000	25000	15	6275DA	1479	A-138	-	A-170	PB	-	TP
0.784	68200	6950	248000	25300	10	6275DA	1849	A-138	-	A-170	PB	-	TP
0.702	68200	6950	248000	25300	10	6275DA	2065	A-138	-	A-170	PB	-	TP
0.572	68200	6950	248000	25300	10	6275DA	2537	A-138	-	A-170	PB	-	TP
0.476	68200	6950	245000	25000	10	6275DA	3045	A-138	-	A-170	PB	-	TP
0.417	68200	6950	248000	25300	10	6275DA	3481	A-138	-	A-170	PB	-	TP
0.327	68200	6950	245000	25000	10	6275DA	4437	A-138	-	A-170	PB	-	TP
0.282	68200	6950	245000	25000	10	6275DA	5133	A-138	-	A-170	PB	-	TP
0.235	68200	6950	245000	25000	10	6275DA	6177	A-138	-	A-170	PB	-	TP
0.192	68200	6950	245000	25000	10	6275DA	7569	A-138	-	A-170	PB	-	TP

Notes : 1. Output Speed n₂ = n₁ / Reduction Ratio.
 2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

60 Hz	Output Torque Tout		Motor Speed n ₁
	68200	N·m	4P
	6950	kgf·m	1750r/min

TORQUE RATED CYCLO® GERMOTORS

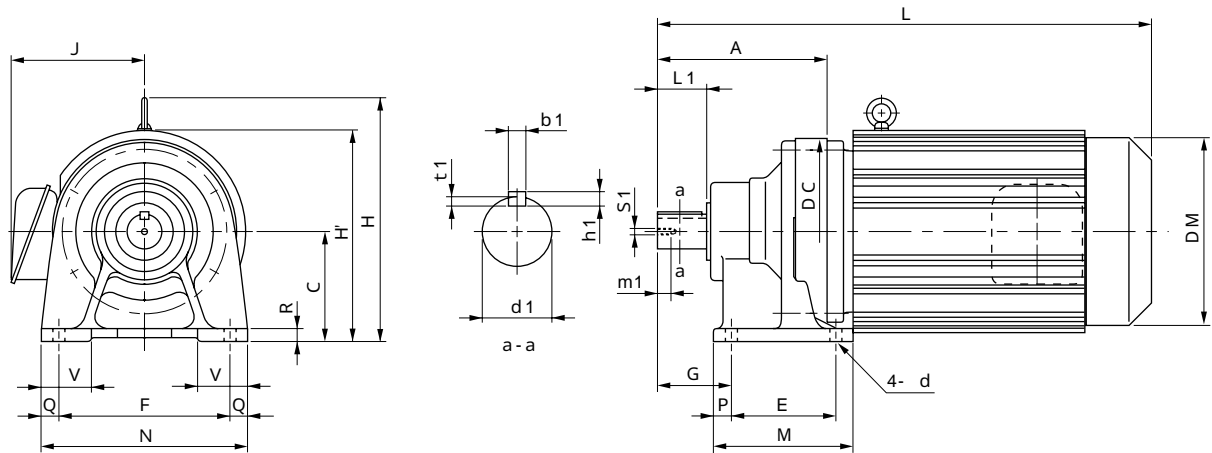
Output Speed n ₂ r/min	Output Torque Tout		Allowable Radial Load Pro		Input Capacity Symbol	Frame size	Reduction Ratio	Page of Dimension Sheet			Lubrication Method		
	N·m	kgf·m	N	kgf				CNHM CHHM	CNFM CHFM	CNVM CVVM	CNHM CHHM	CNFM CHFM	CNVM CVVM
5.49	68200	6950	248000	25300	60	6275DA	319	A-138	-	A-170	PB	-	TP
4.64	68200	6950	248000	25300	50	6275DA	377	A-138	-	A-170	PB	-	TP
3.70	68200	6950	248000	25300	40	6275DA	473	A-138	-	A-170	PB	-	TP
3.13	68200	6950	248000	25300	40	6275DA	559	A-138	-	A-170	PB	-	TP
2.70	68200	6950	248000	25300	30	6275DA	649	A-138	-	A-170	PB	-	TP
2.39	68200	6950	248000	25300	30	6275DA	731	A-138	-	A-170	PB	-	TP
2.08	68200	6950	248000	25300	25	6275DA	841	A-138	-	A-170	PB	-	TP
1.74	68200	6950	248000	25300	20	6275DA	1003	A-138	-	A-170	PB	-	TP
1.40	68200	6950	248000	25300	20	6275DA	1247	A-138	-	A-170	PB	-	TP
1.18	68200	6950	245000	25000	15	6275DA	1479	A-138	-	A-170	PB	-	TP
0.946	68200	6950	248000	25300	10	6275DA	1849	A-138	-	A-170	PB	-	TP
0.847	68200	6950	248000	25300	10	6275DA	2065	A-138	-	A-170	PB	-	TP
0.690	68200	6950	248000	25300	10	6275DA	2537	A-138	-	A-170	PB	-	TP
0.575	68200	6950	245000	25000	10	6275DA	3045	A-138	-	A-170	PB	-	TP
0.503	68200	6950	248000	25300	10	6275DA	3481	A-138	-	A-170	PB	-	TP
0.394	68200	6950	245000	25000	10	6275DA	4437	A-138	-	A-170	PB	-	TP
0.341	68200	6950	245000	25000	10	6275DA	5133	A-138	-	A-170	PB	-	TP
0.283	68200	6950	245000	25000	10	6275DA	6177	A-138	-	A-170	PB	-	TP
0.231	68200	6950	245000	25000	10	6275DA	7569	A-138	-	A-170	PB	-	TP

TORQUE RATED
CYCLO® GERMOTORS

Notes : 3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication
 TP: Positive displacement pump lubrication
 4. CNHM, CHHM, CNFM, CHFM, CNVM, CVVM are TYPE designations. Detail shown on page A-3.
 5. Motor slippage may affect n₁ and n₂.

DIMENSION TABLE

CNHM^{Note1}I - 606 ~ 610



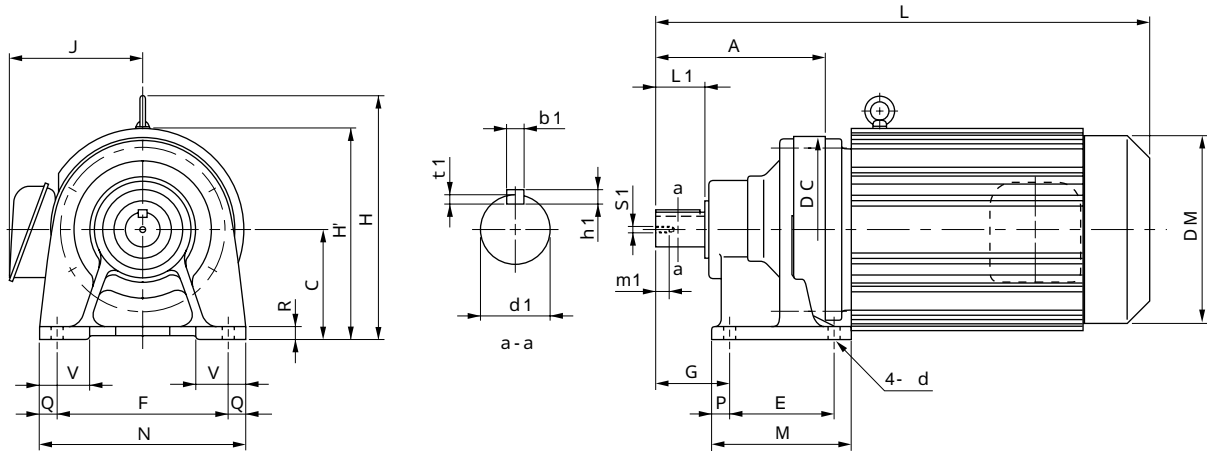
CNHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
606	92	80	110	60	120	41	84	144	12	12	10	35	9	14	25	5	5	3	M5	16
607	98	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
608	129	90	134	75	120	52	99	144	12	12	13	37	9	22	35	6	6	3.5	M6	16
609	142	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610	156	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20

Model	Motor		Standard								With Brake					
	kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)		
CNHM01 - 606 - (B) - Ratio	0.1	4	226	-	140	85	119	6	261	-	138	85	124	7		
CNHM02 - 606 - (B) - Ratio	0.2	4	268	-	138	85	124	7	300	-	138	85	124	8		
CNHM03 - 606 - (B) - Ratio	0.25	4	268	-	138	85	124	7	300	-	138	85	124	8		
CNHM01 - 607 - (B) - Ratio	0.1	4	232	-	140	85	119	6	267	-	138	85	124	7		
CNHM02 - 607 - (B) - Ratio	0.2	4	274	-	138	85	124	7	306	-	138	85	124	8		
CNHM03 - 607 - (B) - Ratio	0.25	4	274	-	138	85	124	7	306	-	138	85	124	8		
CNHM05 - 607 - (B) - Ratio	0.4	4	294	-	138	85	124	8	326	-	138	85	124	9		
CNHM01 - 608 - (B) - Ratio	0.1	4	258	-	157	85	119	9	293	-	157	85	124	10		
CNHM02 - 608 - (B) - Ratio	0.2	4	300	-	157	85	124	10	332	-	157	85	124	11		
CNHM03 - 608 - (B) - Ratio	0.25	4	300	-	157	85	124	10	332	-	157	85	124	11		
CNHM05 - 608 - (B) - Ratio	0.4	4	320	-	157	85	124	12	352	-	157	85	124	13		
CNHM08 - 608 - (B) - Ratio	0.55	4	361	203	-	114	148	16	404	203	-	114	148	17		
CNHM1 - 608 - (B) - Ratio	0.75	4	361	203	-	114	148	16	404	203	-	114	148	17		
CNHM01 - 609 - (B) - Ratio	0.1	4	276	-	175	85	119	11	311	-	175	85	124	13		
CNHM02 - 609 - (B) - Ratio	0.2	4	318	-	175	85	124	12	350	-	175	85	124	14		
CNHM03 - 609 - (B) - Ratio	0.25	4	318	-	175	85	124	12	350	-	175	85	124	14		
CNHM05 - 609 - (B) - Ratio	0.4	4	338	-	175	85	124	13	370	-	175	85	124	15		
CNHM08 - 609 - (B) - Ratio	0.55	4	379	213	-	114	148	17	422	213	-	114	148	20		
CNHM1 - 609 - (B) - Ratio	0.75	4	379	213	-	114	148	17	422	213	-	114	148	20		
CNHM1H - 609 - (B) - Ratio	1.1	4	412	220	-	119	160	20	474	220	-	119	160	25		
CNHM2 - 609 - (B) - Ratio	1.5	4	412	220	-	119	160	20	474	220	-	119	160	25		
CNHM02 - 610 - (B) - Ratio	0.2	4	332	207	-	85	124	17	364	207	-	85	124	19		
CNHM03 - 610 - (B) - Ratio	0.25	4	332	207	-	85	124	17	364	207	-	85	124	19		
CNHM05 - 610 - (B) - Ratio	0.4	4	352	207	-	85	124	18	384	207	-	85	124	20		
CNHM08 - 610 - (B) - Ratio	0.55	4	393	213	-	114	148	22	436	213	-	114	148	25		
CNHM1 - 610 - (B) - Ratio	0.75	4	393	213	-	114	148	22	436	213	-	114	148	25		
CNHM1H - 610 - (B) - Ratio	1.1	4	426	220	-	119	160	26	488	220	-	119	160	31		
CNHM2 - 610 - (B) - Ratio	1.5	4	426	220	-	119	160	26	488	220	-	119	160	31		
CNHM3 - 610 - (B) - Ratio	2.2	4	446	226	-	126	173	30	509	226	-	126	173	36		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CNHM^{Note1}I - 611 ~ 612



CNHM

CNHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
611	170	120	162	90	150	70	135	180	15	15	12	45	11	32	45	10	8	5	M8	20
612	186	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model	Motor		Standard									With Brake					
	kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)			
CNHM05 - 611 - (B) - Ratio	0.4	4	363	236	-	85	124	19	394	236	-	85	124	20			
CNHM08 - 611 - (B) - Ratio	0.55	4	403	236	-	114	148	22	452	236	-	114	148	25			
CNHM1 - 611 - (B) - Ratio	0.75	4	403	236	-	114	148	22	452	236	-	114	148	25			
CNHM1H - 611 - (B) - Ratio	1.1	4	436	240	-	119	160	25	493	240	-	119	160	30			
CNHM2 - 611 - (B) - Ratio	1.5	4	436	240	-	119	160	25	493	240	-	119	160	30			
CNHM3 - 611 - (B) - Ratio	2.2	4	456	246	-	126	173	29	519	246	-	126	173	35			
CNHM4 - 611 - (B) - Ratio	3	4	491	266	-	147	212	39	563	266	-	147	212	49			
CNHM5 - 611 - (B) - Ratio	3.7	4	491	266	-	147	212	39	563	266	-	147	212	49			
CNHM08 - 612 - (B) - Ratio	0.55	4	423	233	-	114	148	31	466	233	-	114	148	34			
CNHM1 - 612 - (B) - Ratio	0.75	4	423	233	-	114	148	31	466	233	-	114	148	34			
CNHM1H - 612 - (B) - Ratio	1.1	4	456	240	-	119	160	35	518	240	-	119	160	40			
CNHM2 - 612 - (B) - Ratio	1.5	4	456	240	-	119	160	35	518	240	-	119	160	40			
CNHM3 - 612 - (B) - Ratio	2.2	4	476	246	-	126	173	39	539	246	-	126	173	46			
CNHM4 - 612 - (B) - Ratio	3	4	499	266	-	147	212	49	571	266	-	147	212	59			
CNHM5 - 612 - (B) - Ratio	3.7	4	499	266	-	147	212	49	571	266	-	147	212	59			
CNHM8 - 612 - (B) - Ratio	5.5	4	543	266	-	147	212	56	615	266	-	147	212	66			

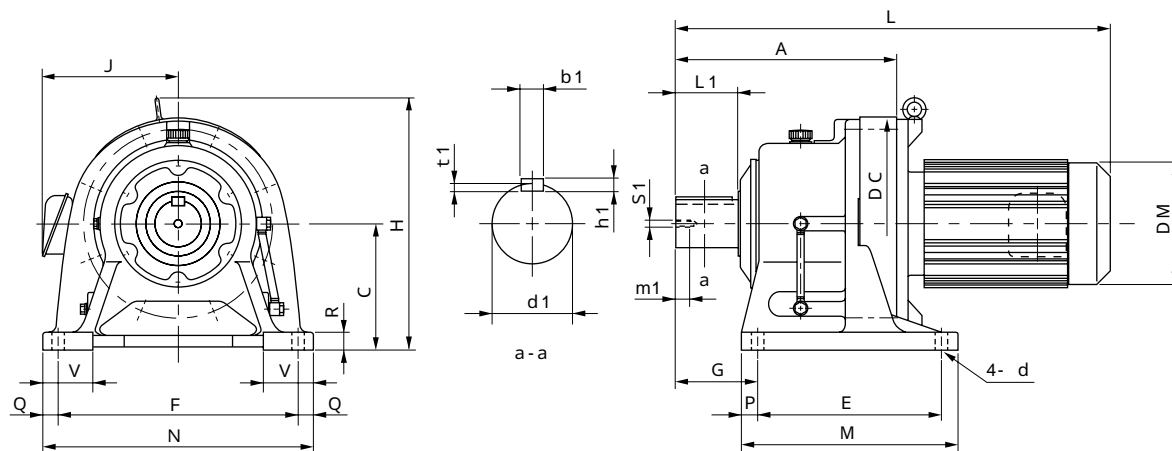
Notes : 4. The dimensions in these drawings are subject to change without notice.

5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

6. When equipped with brake, " B "is inserted following the frame size.

7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CHHM^{Note1} - 613 ~ 616



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Notes: 2, 3, 7						
														d1	L1	b1	h1	t1	S1	m1
613	240	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614	260	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
616	308	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18

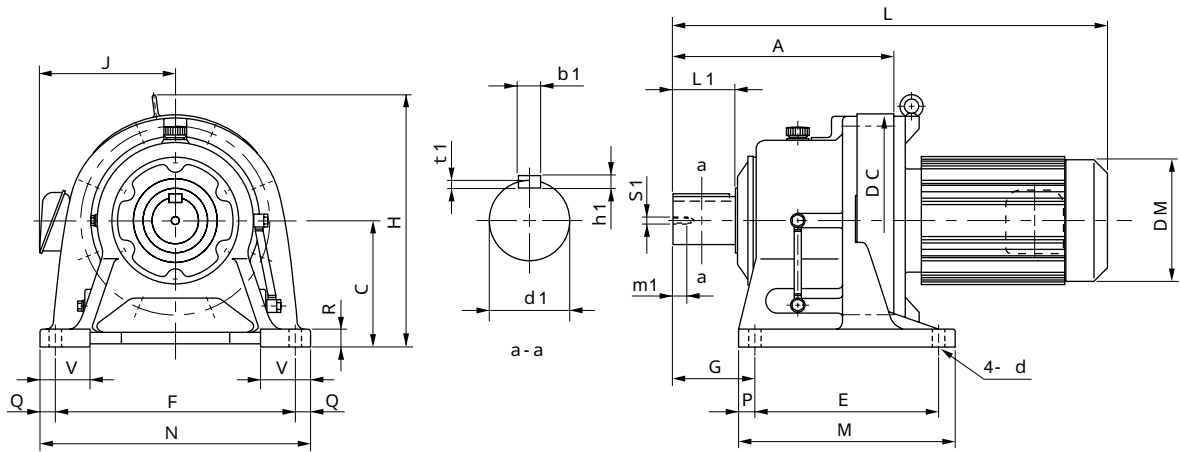
Model	Notes: 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM1 - 613	-(B) - Ratio	0.75	4	477	265	114	148	50	520	265	114	148	53	
CHHM1H - 613	-(B) - Ratio	1.1	4	510	268	119	160	54	572	268	119	160	59	
CHHM2 - 613	-(B) - Ratio	1.5	4	510	268	119	160	54	572	268	119	160	59	
CHHM3 - 613	-(B) - Ratio	2.2	4	530	274	126	173	57	593	274	126	173	64	
CHHM4 - 613	-(B) - Ratio	3	4	553	296	147	212	67	625	296	147	212	77	
CHHM5 - 613	-(B) - Ratio	3.7	4	553	296	147	212	67	625	296	147	212	77	
CHHM8 - 613	-(B) - Ratio	5.5	4	597	296	147	212	74	669	296	147	212	84	
CHHM10 - 613	-(B) - Ratio	7.5	4	620	323	188	251	89	715	323	188	251	107	
CHHM15 - 613	-(B) - Ratio	11	4	680	323	188	251	103	775	323	188	251	120	
CHHM1H - 614	-(B) - Ratio	1.1	4	530	268	119	160	55	592	268	119	160	60	
CHHM2 - 614	-(B) - Ratio	1.5	4	530	268	119	160	55	592	268	119	160	60	
CHHM3 - 614	-(B) - Ratio	2.2	4	550	274	126	173	58	613	274	126	173	65	
CHHM4 - 614	-(B) - Ratio	3	4	573	296	147	212	68	645	296	147	212	78	
CHHM5 - 614	-(B) - Ratio	3.7	4	573	296	147	212	68	645	296	147	212	78	
CHHM8 - 614	-(B) - Ratio	5.5	4	617	296	147	212	75	689	296	147	212	85	
CHHM10 - 614	-(B) - Ratio	7.5	4	640	323	188	251	90	735	323	188	251	108	
CHHM15 - 614	-(B) - Ratio	11	4	700	323	188	251	103	795	323	188	251	121	
CHHM20 - 614	-(B) - Ratio	15	4	790	358	232	324	155	895	321	259	324	189	
CHHM2 - 616	-(B) - Ratio	1.5	4	583	310	119	160	93	645	310	119	160	98	
CHHM3 - 616	-(B) - Ratio	2.2	4	598	310	126	173	96	661	310	126	173	102	
CHHM4 - 616	-(B) - Ratio	3	4	621	310	147	212	105	693	310	147	212	115	
CHHM5 - 616	-(B) - Ratio	3.7	4	621	310	147	212	105	693	310	147	212	115	
CHHM8 - 616	-(B) - Ratio	5.5	4	665	310	147	212	112	737	310	147	212	122	
CHHM10 - 616	-(B) - Ratio	7.5	4	693	333	188	251	128	788	333	188	251	145	
CHHM15 - 616	-(B) - Ratio	11	4	753	333	188	251	142	848	333	188	251	159	
CHHM20 - 616	-(B) - Ratio	15	4	838	368	232	324	195	943	368	259	324	229	
CHHM25 - 616	-(B) - Ratio	18.5	4	933	368	297	394	267	1098	368	297	394	318	
CHHM30 - 616	-(B) - Ratio	22	4	933	368	297	394	267	1098	368	297	394	318	

marked models motor bottom level is lower than reducer base. Center height option is prepared please refer page A-172, A-173.

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note1} - 617 ~ 619



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
617	352	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618	389	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619	465	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model	Notes: 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM4 - 617 - (B) - Ratio		3	4	680	403	147	212	146	752	403	147	212	156	
CHHM5 - 617 - (B) - Ratio		3.7	4	680	403	147	212	146	752	403	147	212	156	
CHHM8 - 617 - (B) - Ratio		5.5	4	724	403	147	212	153	796	403	147	212	163	
CHHM10 - 617 - (B) - Ratio		7.5	4	742	403	188	251	168	837	403	188	251	186	
CHHM15 - 617 - (B) - Ratio		11	4	802	403	188	251	182	897	403	188	251	200	
CHHM20 - 617 - (B) - Ratio		15	4	882	413	232	324	236	987	413	259	324	270	
CHHM25 - 617 - (B) - Ratio		18.5	4	977	428	297	394	304	1142	428	297	394	355	
CHHM30 - 617 - (B) - Ratio		22	4	977	428	297	394	304	1142	428	297	394	355	
CHHM40 - 617 - (B) - Ratio		30	4	977	428	297	394	321	1142	428	297	394	364	
CHHM5 - 618 - (B) - Ratio		3.7	4	717	438	147	212	183	789	438	147	212	193	
CHHM8 - 618 - (B) - Ratio		5.5	4	761	438	147	212	191	833	438	147	212	201	
CHHM10 - 618 - (B) - Ratio		7.5	4	779	438	188	251	206	874	438	188	251	224	
CHHM15 - 618 - (B) - Ratio		11	4	839	438	188	251	220	934	438	188	251	238	
CHHM20 - 618 - (B) - Ratio		15	4	919	438	232	324	280	1024	438	259	324	309	
CHHM25 - 618 - (B) - Ratio		18.5	4	1014	448	297	394	342	1179	448	297	394	393	
CHHM30 - 618 - (B) - Ratio		22	4	1014	448	297	394	342	1179	448	297	394	393	
CHHM40 - 618 - (B) - Ratio		30	4	1014	448	297	394	359	1179	448	297	394	402	
CHHM50 - 618 - (B) - Ratio		37	4	1129	481	297	394	407	1344	481	297	394	504	
CHHM60 - 618 - (B) - Ratio		45	4	1129	481	297	394	407	1344	481	297	394	504	
CHHM8 - 619 - (B) - Ratio		5.5	4	857	511	147	212	265	929	511	147	212	275	
CHHM10 - 619 - (B) - Ratio		7.5	4	870	511	188	251	278	965	511	188	251	296	
CHHM15 - 619 - (B) - Ratio		11	4	930	511	188	251	292	1025	511	188	251	310	
CHHM20 - 619 - (B) - Ratio		15	4	995	467	232	324	345	1100	467	259	324	380	
CHHM25 - 619 - (B) - Ratio		18.5	4	1090	511	297	394	417	1255	511	297	394	462	
CHHM256 - 619 - (B) - Ratio		18.5	6	1090	511	297	394	432	1255	511	297	394	475	
CHHM30 - 619 - (B) - Ratio		22	4	1090	511	297	394	417	1255	511	297	394	462	
CHHM40 - 619 - (B) - Ratio		30	4	1090	511	297	394	432	1255	511	297	394	475	
CHHM406 - 619 - (B) - Ratio		30	6	1205	511	297	394	470	1420	511	297	394	567	
CHHM50 - 619 - (B) - Ratio		37	4	1205	511	297	394	470	1420	511	297	394	567	
CHHM506 - 619 - (B) - Ratio		37	6	1205	511	297	394	470	1420	511	297	394	567	
CHHM60 - 619 - (B) - Ratio		45	4	1205	511	297	394	470	1420	511	297	394	567	

Notes : 4. The dimensions in these drawings are subject to change without notice.

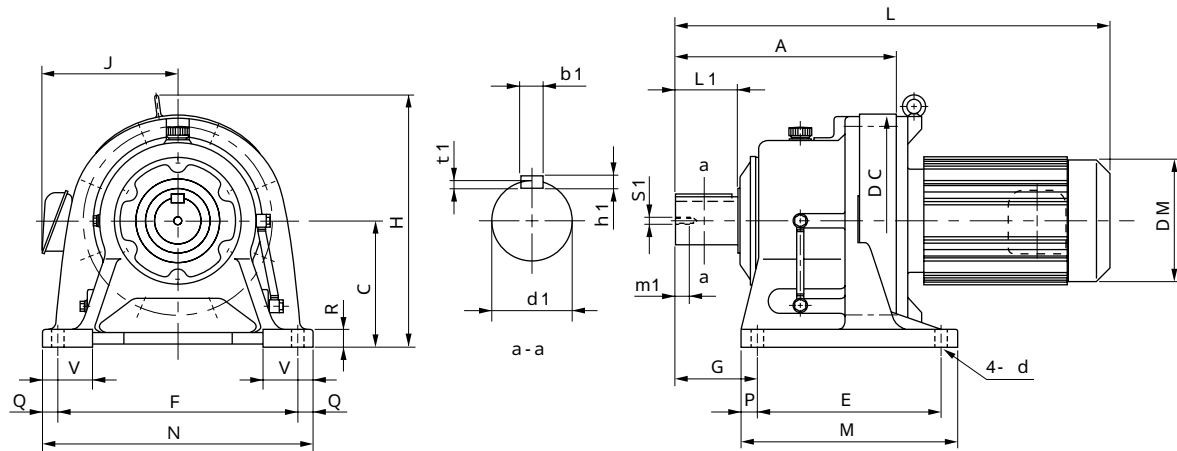
5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

6. When equipped with brake, " B "is inserted following the frame size.

7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CHHM^{Note1} - 6205 ~ 6215



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6205	502	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215	526	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34

Model	Notes: 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM15 - 6205 - (B) - Ratio		11	4	972	530	188	251	313	1067	530	188	251	331	
CHHM20 - 6205 - (B) - Ratio		15	4	1042	530	232	324	367	1147	530	259	324	403	
CHHM206 - 6205 - (B) - Ratio		15	6	1127	530	297	394	438	1292	530	297	394	483	
CHHM25 - 6205 - (B) - Ratio		18.5	4	1127	530	297	394	438	1292	530	297	394	483	
CHHM30 - 6205 - (B) - Ratio		22	4	1127	530	297	394	438	1292	530	297	394	483	
CHHM306 - 6205 - (B) - Ratio		22	6	1127	530	297	394	451	1292	530	297	394	496	
CHHM40 - 6205 - (B) - Ratio		30	4	1127	530	297	394	451	1292	530	297	394	496	
CHHM406 - 6205 - (B) - Ratio		30	6	1242	530	297	394	489	1457	530	297	394	583	
CHHM50 - 6205 - (B) - Ratio		37	4	1242	530	297	394	489	1457	530	297	394	583	
CHHM506 - 6205 - (B) - Ratio		37	6	1242	530	297	394	489	1457	530	297	394	583	
CHHM60 - 6205 - (B) - Ratio		45	4	1242	530	297	394	489	1457	530	297	394	583	
CHHM606 - 6205 - (B) - Ratio		45	6	1297	575	412	484	582	-	-	-	-	-	
CHHM75 - 6205 - (B) - Ratio		55	4	1297	575	412	484	582	-	-	-	-	-	
CHHM15 - 6215 - (B) - Ratio		11	4	996	575	188	251	395	1091	575	188	251	413	
CHHM20 - 6215 - (B) - Ratio		15	4	1066	575	232	324	450	1171	575	259	324	485	
CHHM206 - 6215 - (B) - Ratio		15	6	1151	575	297	394	515	1316	575	297	394	560	
CHHM25 - 6215 - (B) - Ratio		18.5	4	1151	575	297	394	515	1316	575	297	394	560	
CHHM256 - 6215 - (B) - Ratio		18.5	6	1151	575	297	394	528	1316	575	297	394	573	
CHHM30 - 6215 - (B) - Ratio		22	4	1151	575	297	394	515	1316	575	297	394	560	
CHHM306 - 6215 - (B) - Ratio		22	6	1151	575	297	394	528	1316	575	297	394	573	
CHHM40 - 6215 - (B) - Ratio		30	4	1151	575	297	394	528	1316	575	297	394	573	
CHHM406 - 6215 - (B) - Ratio		30	6	1266	575	297	394	566	1481	575	297	394	661	
CHHM50 - 6215 - (B) - Ratio		37	4	1266	575	297	394	566	1481	575	297	394	661	
CHHM506 - 6215 - (B) - Ratio		37	6	1266	575	297	394	566	1481	575	297	394	661	
CHHM60 - 6215 - (B) - Ratio		45	4	1266	575	297	394	566	1481	575	297	394	661	
CHHM606 - 6215 - (B) - Ratio		45	6	1321	575	412	484	676	-	-	-	-	-	
CHHM75 - 6215 - (B) - Ratio		55	4	1321	575	412	484	676	-	-	-	-	-	

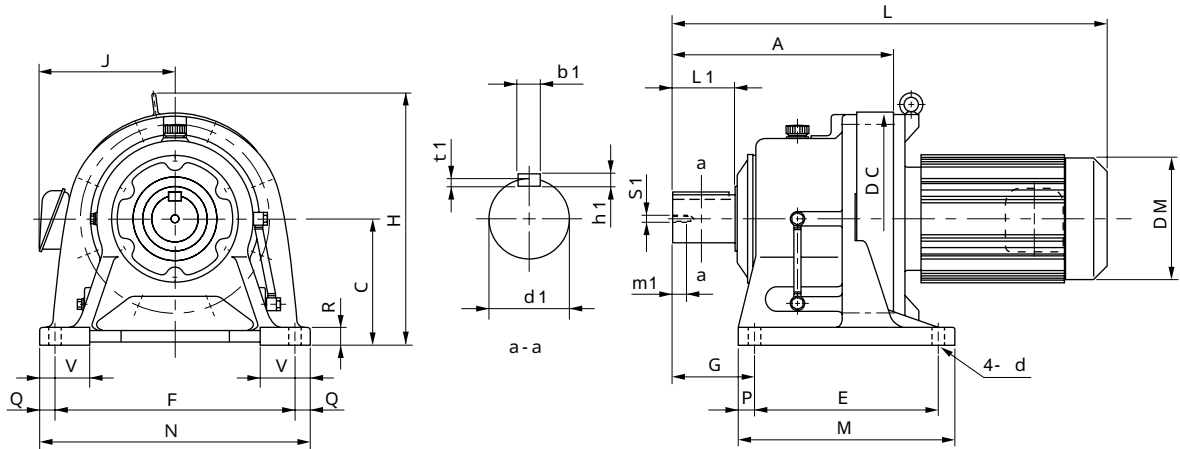
Notes : 1. Motor capacity symbol is inserted in [□].

2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".

3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note1} - 6225 ~ 6235



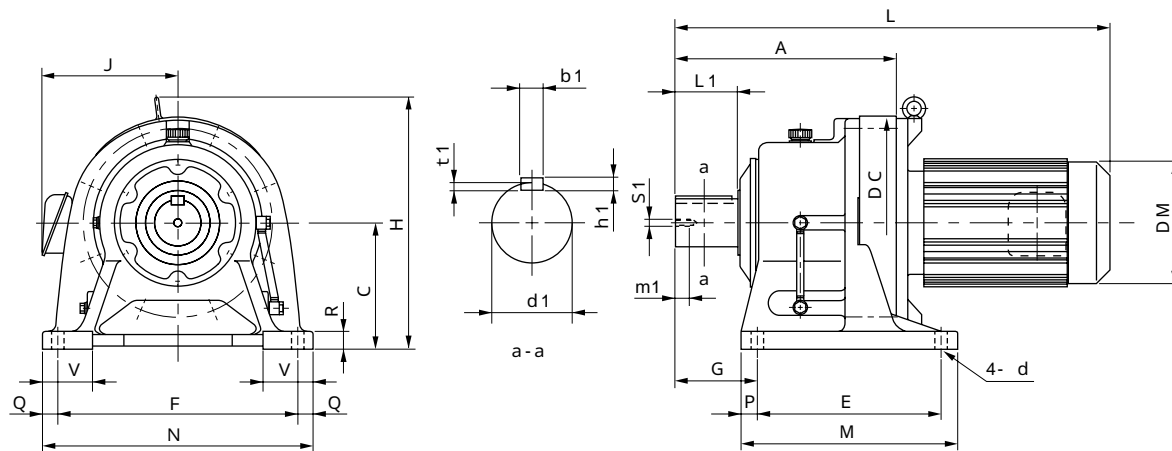
CHHM

CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6225	566	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6235	628	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41

Model	Notes: 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM206 - 6225 - (B) - Ratio		15	6	1191	610	297	394	600	1356	610	297	394	645	
CHHM25 - 6225 - (B) - Ratio		18.5	4	1191	610	297	394	600	1356	610	297	394	645	
CHHM256 - 6225 - (B) - Ratio		18.5	6	1191	610	297	394	613	1356	610	297	394	658	
CHHM30 - 6225 - (B) - Ratio		22	4	1191	610	297	394	600	1356	610	297	394	645	
CHHM306 - 6225 - (B) - Ratio		22	6	1191	610	297	394	613	1356	610	297	394	658	
CHHM40 - 6225 - (B) - Ratio		30	4	1191	610	297	394	613	1356	610	297	394	658	
CHHM406 - 6225 - (B) - Ratio		30	6	1306	610	297	394	651	1521	610	297	394	746	
CHHM50 - 6225 - (B) - Ratio		37	4	1306	610	297	394	651	1521	610	297	394	746	
CHHM506 - 6225 - (B) - Ratio		37	6	1306	610	297	394	651	1521	610	297	394	746	
CHHM60 - 6225 - (B) - Ratio		45	4	1306	610	297	394	651	1521	610	297	394	746	
CHHM606 - 6225 - (B) - Ratio		45	6	1361	610	412	484	750	-	-	-	-	-	
CHHM75 - 6225 - (B) - Ratio		55	4	1361	610	412	484	750	-	-	-	-	-	
CHHM206 - 6235 - (B) - Ratio		15	6	1253	667	297	394	698	1418	667	297	394	729	
CHHM256 - 6235 - (B) - Ratio		18.5	6	1253	667	297	394	698	1418	667	297	394	743	
CHHM306 - 6235 - (B) - Ratio		22	6	1253	667	297	394	698	1418	667	297	394	743	
CHHM406 - 6235 - (B) - Ratio		30	6	1368	667	297	394	744	1583	667	297	394	832	
CHHM506 - 6235 - (B) - Ratio		37	6	1368	667	297	394	744	1583	667	297	394	832	
CHHM606 - 6235 - (B) - Ratio		45	6	1423	667	412	484	833	-	-	-	-	-	
CHHM756 - 6235 - (B) - Ratio		55	6	1503	667	412	485	887	-	-	-	-	-	

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CHHM^{Note 1} - 6245 ~ 6265



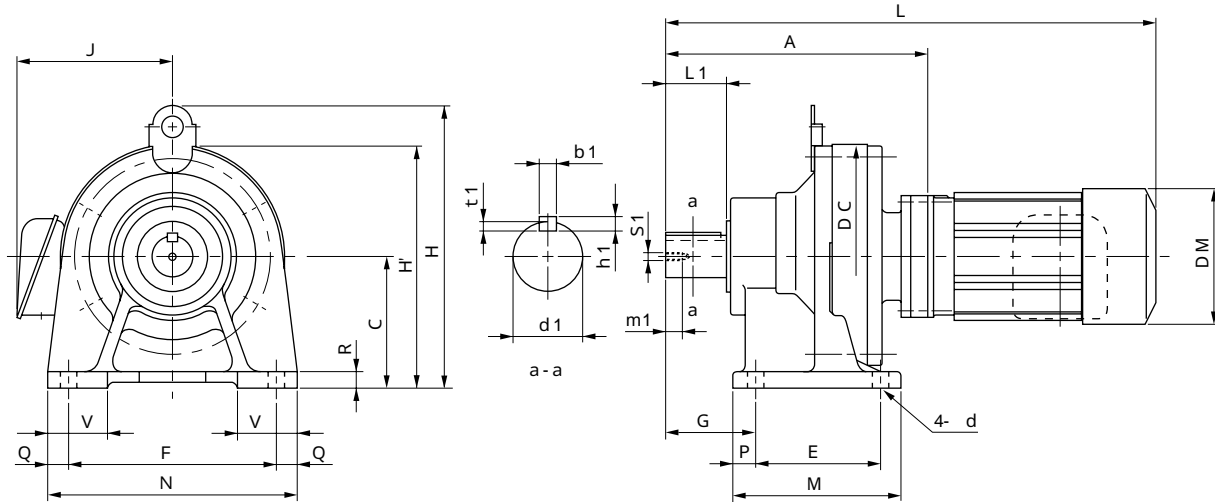
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Notes: 2, 3, 7						
														d1	L1	b1	h1	t1	S1	m1
6245	657	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255	775	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6265	892	400	736	590	770	390	700	880	55	55	55	160	45	170	300	40	22	13	M30	49

Model <small>Notes: 5, 6</small>	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHHM206 - 6245 - (B) - Ratio	15	6	1282	729	297	394	819	1447	729	297	394	852		
CHHM256 - 6245 - (B) - Ratio	18.5	6	1282	729	297	394	819	1447	729	297	394	866		
CHHM306 - 6245 - (B) - Ratio	22	6	1282	729	297	394	819	1447	729	297	394	866		
CHHM406 - 6245 - (B) - Ratio	30	6	1397	729	297	394	865	1612	729	297	394	953		
CHHM506 - 6245 - (B) - Ratio	37	6	1397	729	297	394	865	1612	729	297	394	953		
CHHM606 - 6245 - (B) - Ratio	45	6	1452	729	412	484	956	-	-	-	-	-		
CHHM756 - 6245 - (B) - Ratio	55	6	1532	729	412	485	1005	-	-	-	-	-		
CHHM256 - 6255 - (B) - Ratio	18.5	6	1400	815	297	394	1150	1565	815	297	394	1197		
CHHM306 - 6255 - (B) - Ratio	22	6	1400	815	297	394	1150	1565	815	297	394	1197		
CHHM406 - 6255 - (B) - Ratio	30	6	1515	815	297	394	1195	1730	815	297	394	1283		
CHHM506 - 6255 - (B) - Ratio	37	6	1515	815	297	394	1195	1730	815	297	394	1283		
CHHM606 - 6255 - (B) - Ratio	45	6	1570	815	412	484	1275	-	-	-	-	-		
CHHM756 - 6255 - (B) - Ratio	55	6	1650	815	412	485	1330	-	-	-	-	-		
CHHM406 - 6265 - (B) - Ratio	30	6	1632	874	297	394	1440	1847	874	297	394	1528		
CHHM506 - 6265 - (B) - Ratio	37	6	1632	874	297	394	1440	1847	874	297	394	1528		
CHHM606 - 6265 - (B) - Ratio	45	6	1687	874	412	484	1535	-	-	-	-	-		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CNHM^{Note1} - 606 DA ~ 612 DB



CHHM/CNHM

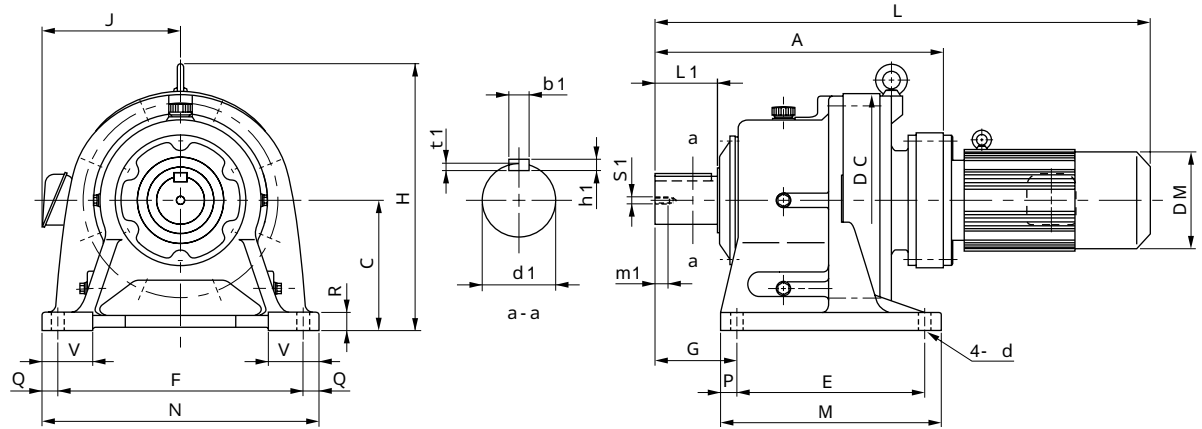
CNHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft <small>Notes: 2, 3, 7</small>						
														d1	L1	b1	h1	t1	S1	m1
606 DA	125	80	110	60	120	41	84	144	12	12	10	35	9	14	25	5	5	3	M5	16
607 DA	131	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
609 DA	190	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610 DA	204	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612 DA	240	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20
612 DB	252	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model <small>Notes: 5, 6</small>	Motor		Standard								With Brake					
	kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)		
CNHM01 - 606 DA - (B) - Ratio	0.1	4	259	-	140	85	119	8	294	-	138	85	124	9		
CNHM01 - 607 DA - (B) - Ratio	0.1	4	265	-	140	85	119	8	300	-	138	85	124	9		
CNHM02 - 607 DA - (B) - Ratio	0.2	4	307	-	140	85	124	9	339	-	138	85	124	10		
CNHM01 - 609 DA - (B) - Ratio	0.1	4	324	207	-	85	119	16	359	207	-	85	124	17		
CNHM02 - 609 DA - (B) - Ratio	0.2	4	366	207	-	85	124	17	398	207	-	85	124	18		
CNHM03 - 609 DA - (B) - Ratio	0.25	4	366	207	-	85	124	17	398	207	-	85	124	18		
CNHM05 - 609 DA - (B) - Ratio	0.4	4	386	207	-	85	124	18	418	207	-	85	124	19		
CNHM01 - 610 DA - (B) - Ratio	0.1	4	338	207	-	85	119	18	373	207	-	85	124	19		
CNHM02 - 610 DA - (B) - Ratio	0.2	4	380	207	-	85	124	19	412	207	-	85	124	20		
CNHM03 - 610 DA - (B) - Ratio	0.25	4	380	207	-	85	124	19	412	207	-	85	124	20		
CNHM05 - 610 DA - (B) - Ratio	0.4	4	400	207	-	85	124	20	432	207	-	85	124	21		
CNHM01 - 612 DA - (B) - Ratio	0.1	4	374	257	-	85	119	29	409	257	-	85	124	30		
CNHM02 - 612 DA - (B) - Ratio	0.2	4	416	257	-	85	124	30	448	257	-	85	124	31		
CNHM03 - 612 DA - (B) - Ratio	0.25	4	416	257	-	85	124	30	448	257	-	85	124	31		
CNHM05 - 612 DA - (B) - Ratio	0.4	4	436	257	-	85	124	31	468	257	-	85	124	32		
CNHM01 - 612 DB - (B) - Ratio	0.1	4	386	257	-	85	119	32	421	257	-	85	124	34		
CNHM03 - 612 DB - (B) - Ratio	0.25	4	428	257	-	85	124	33	473	257	-	85	124	35		
CNHM05 - 612 DB - (B) - Ratio	0.4	4	448	257	-	85	124	34	473	257	-	85	124	36		
CNHM08 - 612 DB - (B) - Ratio	0.55	4	489	257	-	114	148	38	532	257	-	114	148	41		
CNHM1 - 612 DB - (B) - Ratio	0.75	4	489	257	-	114	148	38	532	257	-	114	148	41		
CNHM1H - 612 DB - (B) - Ratio	1.1	4	516	257	-	119	160	41	578	257	-	119	160	46		
CNHM2 - 612 DB - (B) - Ratio	1.5	4	516	257	-	119	160	41	578	257	-	119	160	46		

Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

Note 1

DIMENSION TABLE CHHM^{Note 1}- 613 DA ~ 614 DC



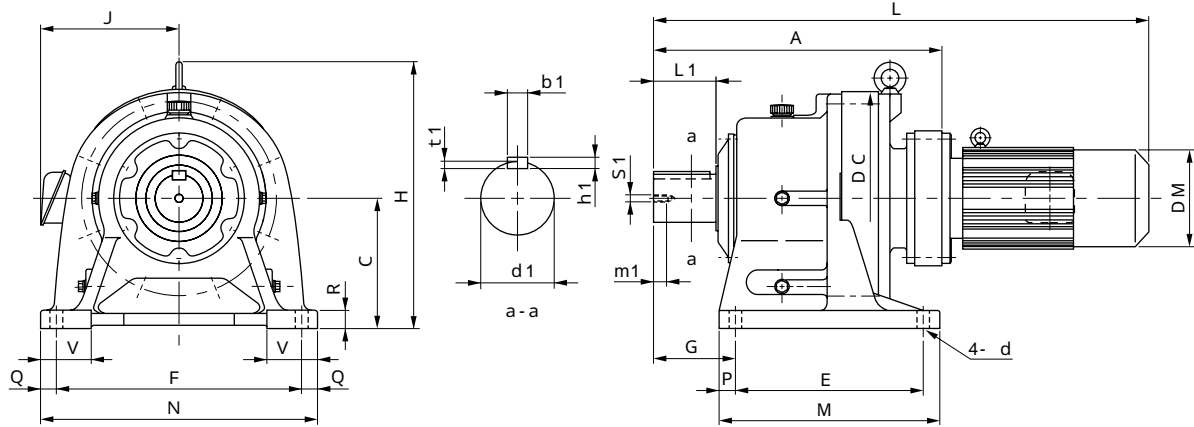
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
613 DA	294	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613 DB	303	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613 DC	317	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614 DA	314	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614 DB	323	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614 DC	337	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18

Model	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHHM02 - 613 DA - (B) - Ratio	0.2	4	470	300	85	124	46	502	300	85	124	46		
CHHM03 - 613 DA - (B) - Ratio	0.25	4	490	300	85	124	47	522	300	85	124	48		
CHHM05 - 613 DA - (B) - Ratio	0.4	4	490	300	85	124	47	522	300	85	124	48		
CHHM02 - 613 DB - (B) - Ratio	0.2	4	479	300	85	124	48	511	300	85	124	50		
CHHM03 - 613 DB - (B) - Ratio	0.25	4	479	300	85	124	48	511	300	85	124	50		
CHHM05 - 613 DB - (B) - Ratio	0.4	4	499	300	85	124	49	531	300	85	124	51		
CHHM08 - 613 DB - (B) - Ratio	0.55	4	540	263	114	148	53	583	263	114	148	56		
CHHM1 - 613 DB - (B) - Ratio	0.75	4	540	263	114	148	53	583	263	114	148	56		
CHHM1H - 613 DB - (B) - Ratio	1.1	4	573	270	119	160	56	635	270	119	160	61		
CHHM2 - 613 DB - (B) - Ratio	1.5	4	573	270	119	160	56	635	270	119	160	61		
CHHM3 - 613 DC - (B) - Ratio	2.2	4	607	276	126	173	63	670	276	126	173	69		
CHHM02 - 614 DA - (B) - Ratio	0.2	4	490	300	85	124	46	522	300	85	124	47		
CHHM03 - 614 DA - (B) - Ratio	0.25	4	490	300	85	124	46	522	300	85	124	47		
CHHM05 - 614 DA - (B) - Ratio	0.4	4	510	300	85	124	47	542	300	85	124	48		
CHHM02 - 614 DB - (B) - Ratio	0.2	4	499	300	85	124	48	531	300	85	124	50		
CHHM03 - 614 DB - (B) - Ratio	0.25	4	499	300	85	124	48	531	300	85	124	50		
CHHM05 - 614 DB - (B) - Ratio	0.4	4	519	300	85	124	49	551	300	85	124	51		
CHHM08 - 614 DB - (B) - Ratio	0.55	4	560	263	114	148	53	603	263	114	148	56		
CHHM1 - 614 DB - (B) - Ratio	0.75	4	560	263	114	148	53	603	263	114	148	56		
CHHM1H - 614 DB - (B) - Ratio	1.1	4	593	270	119	160	56	655	270	119	160	61		
CHHM2 - 614 DB - (B) - Ratio	1.5	4	593	270	119	160	56	655	270	119	160	61		
CHHM1H - 614 DC - (B) - Ratio	1.1	4	607	270	119	160	59	669	270	119	160	64		
CHHM2 - 614 DC - (B) - Ratio	1.5	4	607	270	119	160	59	669	270	119	160	64		
CHHM3 - 614 DC - (B) - Ratio	2.2	4	627	276	126	173	63	690	276	126	173	69		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note1} - 616 DA ~ 618 DA



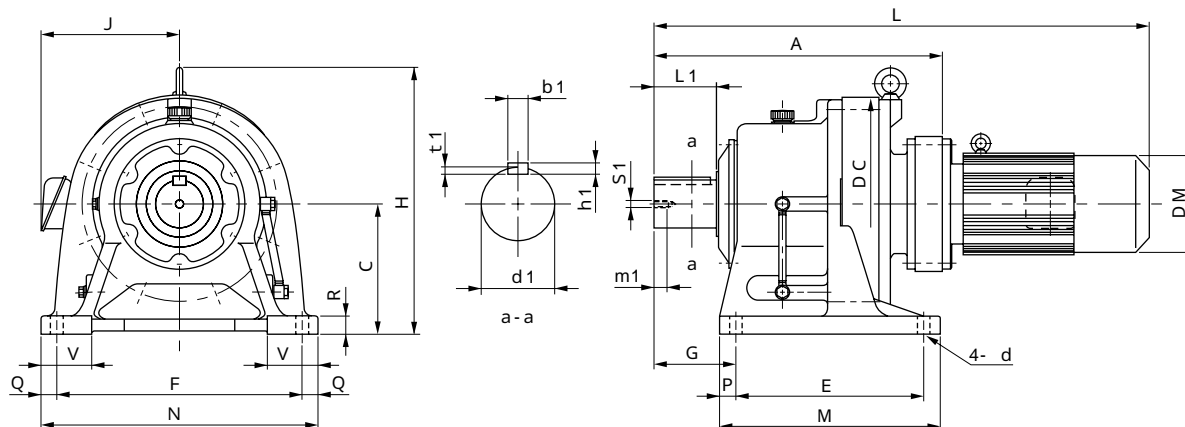
CHHM

CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
616 DA	373	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
616 DB	387	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617 DA	418	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
617 DB	432	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618 DA	474	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24

Model	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM02 - 616 DA - (B) - Ratio	0.2	4	549	349	85	124	89	581	349	85	124	91	
CHHM03 - 616 DA - (B) - Ratio	0.25	4	549	349	85	124	89	581	349	85	124	91	
CHHM05 - 616 DA - (B) - Ratio	0.4	4	569	349	85	124	90	601	349	85	124	92	
CHHM08 - 616 DA - (B) - Ratio	0.55	4	610	349	114	148	94	653	349	114	148	97	
CHHM1 - 616 DA - (B) - Ratio	0.75	4	610	349	114	148	94	653	349	114	148	97	
CHHM1H - 616 DA - (B) - Ratio	1.1	4	643	349	119	160	98	705	349	119	160	103	
CHHM2 - 616 DA - (B) - Ratio	1.5	4	643	349	119	160	98	705	349	119	160	103	
CHHM1H - 616 DB - (B) - Ratio	1.1	4	657	349	119	160	100	719	349	119	160	105	
CHHM2 - 616 DB - (B) - Ratio	1.5	4	657	349	119	160	100	719	349	119	160	105	
CHHM3 - 616 DB - (B) - Ratio	2.2	4	677	349	126	173	104	740	349	126	173	110	
CHHM02 - 617 DA - (B) - Ratio	0.2	4	594	416	85	124	119	626	416	85	124	126	
CHHM03 - 617 DA - (B) - Ratio	0.25	4	594	416	85	124	119	626	416	85	124	126	
CHHM05 - 617 DA - (B) - Ratio	0.4	4	614	416	85	124	125	646	416	85	124	127	
CHHM08 - 617 DA - (B) - Ratio	0.55	4	655	416	114	148	129	698	416	114	148	132	
CHHM1 - 617 DA - (B) - Ratio	0.75	4	655	416	114	148	129	698	416	114	148	132	
CHHM1H - 617 DA - (B) - Ratio	1.1	4	688	416	119	160	132	750	416	119	160	137	
CHHM2 - 617 DA - (B) - Ratio	1.5	4	688	416	119	160	132	750	416	119	160	137	
CHHM1H - 617 DB - (B) - Ratio	1.1	4	702	416	119	160	135	764	416	119	160	140	
CHHM2 - 617 DB - (B) - Ratio	1.5	4	702	416	119	160	135	764	416	119	160	140	
CHHM3 - 617 DB - (B) - Ratio	2.2	4	722	416	126	173	139	785	416	126	173	145	
CHHM05 - 618 DA - (B) - Ratio	0.4	4	670	451	85	124	170	702	451	85	124	172	
CHHM08 - 618 DA - (B) - Ratio	0.55	4	711	451	114	148	174	754	451	114	148	177	
CHHM1 - 618 DA - (B) - Ratio	0.75	4	711	451	114	148	174	754	451	114	148	177	
CHHM1H - 618 DA - (B) - Ratio	1.1	4	744	451	119	160	178	806	451	119	160	183	
CHHM2 - 618 DA - (B) - Ratio	1.5	4	744	451	119	160	178	806	451	119	160	183	
CHHM3 - 618 DA - (B) - Ratio	2.2	4	764	451	126	173	182	827	451	126	173	188	

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE Note 1 CHHM I - 616 DC ~ 619 DB



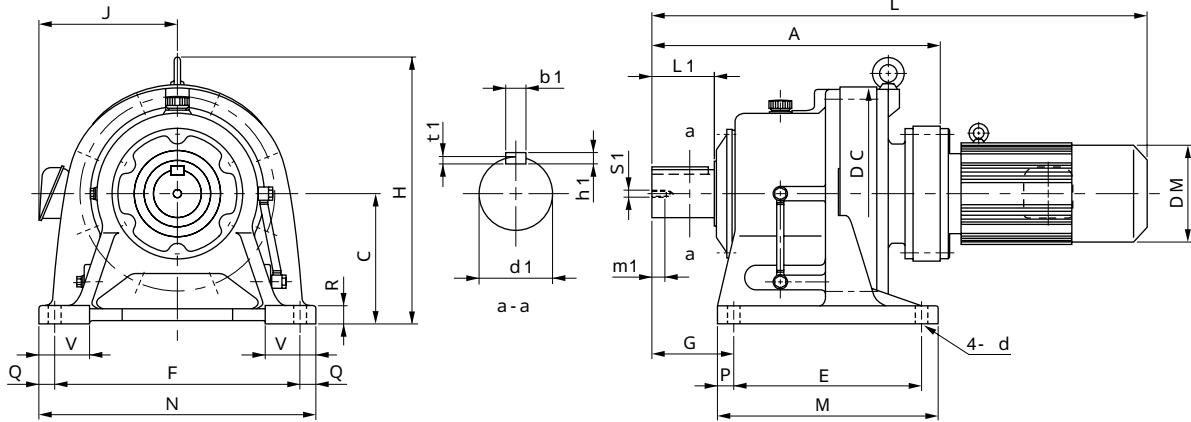
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
616 DC	389	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617 DC	436	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618 DB	496	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619 DA	556	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34
619 DB	572	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model	Motor		Standard							With Brake				
	Note: 5, 6	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM3 - 616 DC - (B) - Ratio		2.2	4	679	349	126	173	110	742	349	126	173	117	
CHHM4 - 616 DC - (B) - Ratio		3	4	702	349	147	212	120	774	349	147	212	130	
CHHM5 - 616 DC - (B) - Ratio		3.7	4	702	349	147	212	120	774	349	147	212	130	
CHHM8 - 616 DC - (B) - Ratio		5.5	4	746	349	147	212	127	818	349	147	212	137	
CHHM3 - 617 DC - (B) - Ratio		2.2	4	726	416	126	173	144	789	416	126	173	151	
CHHM4 - 617 DC - (B) - Ratio		3	4	749	416	147	212	154	821	416	147	212	164	
CHHM5 - 617 DC - (B) - Ratio		3.7	4	749	416	147	212	154	821	416	147	212	164	
CHHM8 - 617 DC - (B) - Ratio		5.5	4	793	416	147	212	161	865	416	147	212	171	
CHHM3 - 618 DB - (B) - Ratio		2.2	4	786	451	126	173	196	849	451	126	173	203	
CHHM4 - 618 DB - (B) - Ratio		3	4	809	451	147	212	206	881	451	147	212	216	
CHHM5 - 618 DB - (B) - Ratio		3.7	4	809	451	147	212	206	881	451	147	212	216	
CHHM8 - 618 DB - (B) - Ratio		5.5	4	853	451	147	212	213	925	451	147	212	223	
CHHM10 - 618 DB - (B) - Ratio		7.5	4	876	451	188	251	228	971	451	188	251	246	
CHHM15 - 618 DB - (B) - Ratio		11	4	936	451	188	251	242	1031	451	188	251	260	
CHHM1 - 619 DA - (B) - Ratio		0.75	4	793	531	114	148	249	836	531	114	148	252	
CHHM1H - 619 DA - (B) - Ratio		1.1	4	826	531	119	160	253	888	531	119	160	258	
CHHM2 - 619 DA - (B) - Ratio		1.5	4	826	531	119	160	253	888	531	119	160	258	
CHHM3 - 619 DA - (B) - Ratio		2.2	4	846	531	126	173	257	909	531	126	173	264	
CHHM4 - 619 DA - (B) - Ratio		3	4	869	531	147	212	267	941	531	147	212	277	
CHHM5 - 619 DA - (B) - Ratio		3.7	4	869	531	147	212	267	941	531	147	212	277	
CHHM8 - 619 DA - (B) - Ratio		5.5	4	913	531	147	212	274	985	531	147	212	284	
CHHM5 - 619 DB - (B) - Ratio		3.7	4	885	531	147	212	274	957	531	147	212	284	
CHHM8 - 619 DB - (B) - Ratio		5.5	4	929	531	147	212	281	1001	531	147	212	291	
CHHM10 - 619 DB - (B) - Ratio		7.5	4	952	531	188	251	296	1047	531	188	251	314	
CHHM15 - 619 DB - (B) - Ratio		11	4	1012	531	188	251	310	1107	531	188	251	328	
CHHM20 - 619 DB - (B) - Ratio		15	4	1102	531	232	324	362	1207	531	259	324	396	

Notes : 1. Motor capacity symbol is inserted in [I].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note1} - 6205DA ~ 6215DB



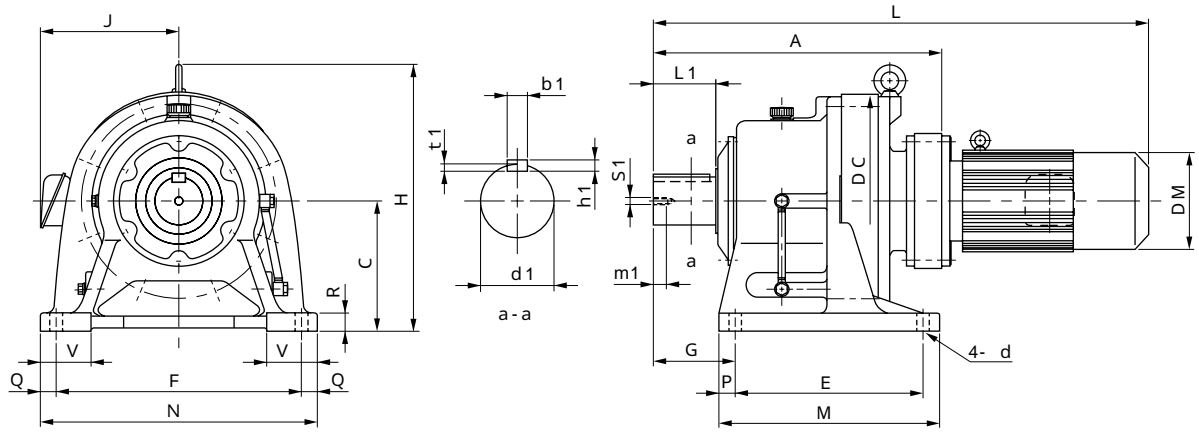
CHHM

CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6205DA	597	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6205DB	624	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215DA	650	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6215DB	675	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34

Model	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM1 - 6205DA - (B) - Ratio	0.75	4	834	530	114	148	268	877	530	114	148	271	
CHHM2 - 6205DA - (B) - Ratio	1.5	4	867	530	119	160	272	929	530	119	160	277	
CHHM3 - 6205DA - (B) - Ratio	2.2	4	887	530	126	173	276	949	530	126	173	283	
CHHM4 - 6205DA - (B) - Ratio	3	4	910	530	147	212	286	982	530	147	212	296	
CHHM5 - 6205DA - (B) - Ratio	3.7	4	910	530	147	212	286	982	530	147	212	296	
CHHM8 - 6205DA - (B) - Ratio	5.5	4	954	530	147	212	293	1026	530	147	212	303	
CHHM3 - 6205DB - (B) - Ratio	2.2	4	914	530	126	173	288	977	530	126	173	295	
CHHM4 - 6205DB - (B) - Ratio	3	4	937	530	147	212	298	1009	530	147	212	308	
CHHM5 - 6205DB - (B) - Ratio	3.7	4	937	530	147	212	298	1009	530	147	212	308	
CHHM8 - 6205DB - (B) - Ratio	5.5	4	981	530	147	212	305	1053	530	147	212	315	
CHHM10 - 6205DB - (B) - Ratio	7.5	4	1004	530	188	251	320	1099	530	188	251	338	
CHHM15 - 6205DB - (B) - Ratio	11	4	1064	530	188	251	333	1159	530	188	251	351	
CHHM20 - 6205DB - (B) - Ratio	15	4	1154	530	232	324	385	1249	530	259	324	418	
CHHM2 - 6215DA - (B) - Ratio	1.5	4	920	575	119	160	366	982	575	119	160	371	
CHHM3 - 6215DA - (B) - Ratio	2.2	4	940	575	126	173	369	1003	575	126	173	376	
CHHM4 - 6215DA - (B) - Ratio	3	4	963	575	147	212	379	1035	575	147	212	389	
CHHM5 - 6215DA - (B) - Ratio	3.7	4	963	575	147	212	379	1035	575	147	212	389	
CHHM8 - 6215DA - (B) - Ratio	5.5	4	1007	575	147	212	386	1079	575	147	212	396	
CHHM10 - 6215DA - (B) - Ratio	7.5	4	1030	575	188	251	401	1125	575	188	251	419	
CHHM15 - 6215DA - (B) - Ratio	11	4	1090	575	188	251	414	1185	575	188	251	432	
CHHM20 - 6215DA - (B) - Ratio	15	4	1180	575	232	324	466	1285	575	259	324	500	
CHHM10 - 6215DB - (B) - Ratio	7.5	4	1060	575	188	251	421	1155	575	188	251	438	
CHHM15 - 6215DB - (B) - Ratio	11	4	1120	575	188	251	435	1215	575	188	251	452	
CHHM20 - 6215DB - (B) - Ratio	15	4	1205	575	232	324	488	1310	575	259	324	522	
CHHM25 - 6215DB - (B) - Ratio	18.5	4	1300	575	297	394	559	1465	575	297	394	610	
CHHM30 - 6215DB - (B) - Ratio	22	4	1300	575	297	394	559	1465	575	297	394	610	

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE Note 1 CHHM - 6225DA ~ 6225DB



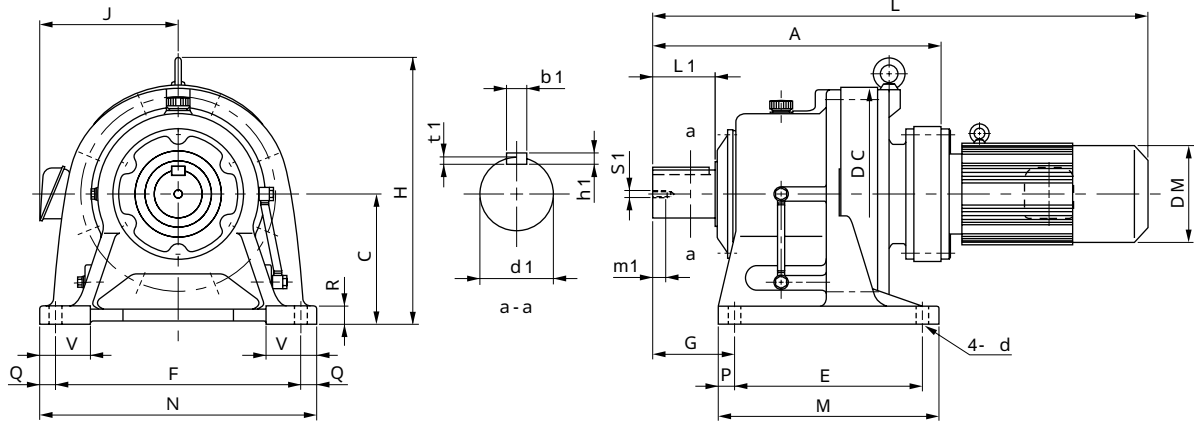
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6225DA	692	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6225DB	735	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34

Model	Notes: 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM2 - 6225DA - (B) - Ratio		1.5	4	962	610	119	160	440	1024	610	119	160	445	
CHHM3 - 6225DA - (B) - Ratio		2.2	4	982	610	126	173	443	1045	610	126	173	450	
CHHM4 - 6225DA - (B) - Ratio		3	4	1005	610	147	212	453	1077	610	147	212	463	
CHHM5 - 6225DA - (B) - Ratio		3.7	4	1005	610	147	212	453	1077	610	147	212	463	
CHHM8 - 6225DA - (B) - Ratio		5.5	4	1049	610	147	212	460	1121	610	147	212	470	
CHHM10 - 6225DA - (B) - Ratio		7.5	4	1072	610	188	251	475	1167	610	188	251	493	
CHHM15 - 6225DA - (B) - Ratio		11	4	1132	610	188	251	489	1227	610	188	251	507	
CHHM20 - 6225DA - (B) - Ratio		15	4	1222	610	232	324	541	1327	610	259	324	575	
CHHM10 - 6225DB - (B) - Ratio		7.5	4	1125	610	188	251	520	1220	610	188	251	538	
CHHM15 - 6225DB - (B) - Ratio		11	4	1185	610	188	251	534	1280	610	188	251	552	
CHHM20 - 6225DB - (B) - Ratio		15	4	1265	610	232	324	588	1370	610	259	324	622	
CHHM25 - 6225DB - (B) - Ratio		18.5	4	1360	610	297	394	656	1525	610	297	394	707	
CHHM30 - 6225DB - (B) - Ratio		22	4	1360	610	297	394	656	1525	610	297	394	707	
CHHM40 - 6225DB - (B) - Ratio		30	4	1360	610	297	394	673	1525	610	297	394	724	

Notes : 1. Motor capacity symbol is inserted in .
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note1} - 6235DA ~ 6255DA



CHHM

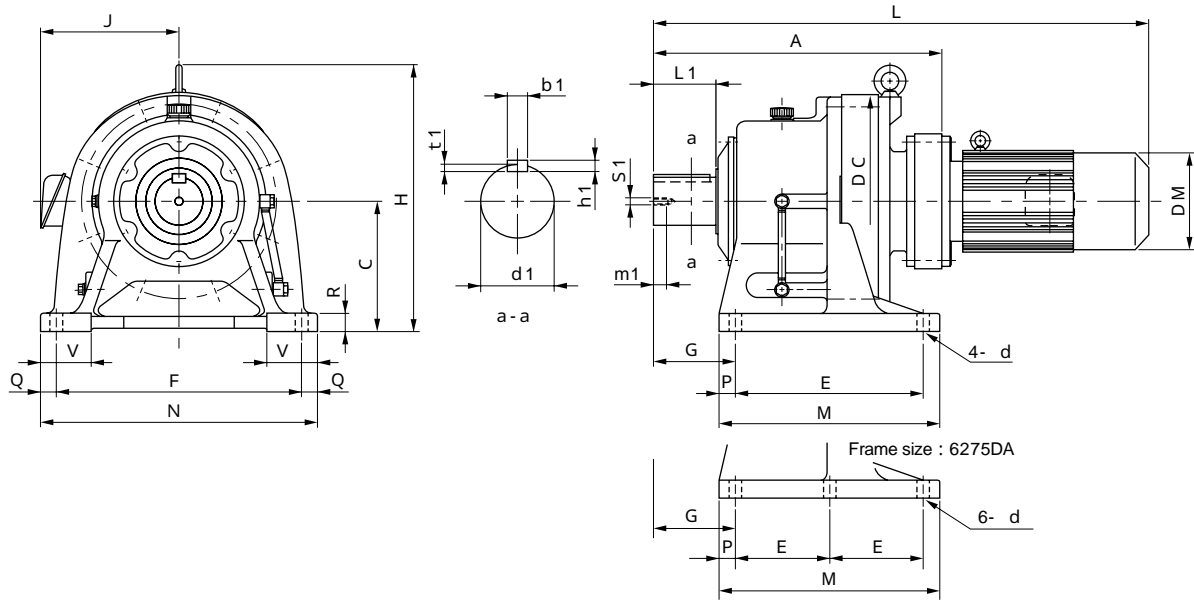
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6235DA	778	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6235DB	800	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6245DA	816	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6245DB	837	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255DA	956	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49

Model	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM3 - 6235DA - (B) - Ratio	2.2	4	1068	667	126	173	560	1131	667	126	173	566	
CHHM4 - 6235DA - (B) - Ratio	3	4	1091	667	147	212	569	1163	667	147	212	579	
CHHM5 - 6235DA - (B) - Ratio	3.7	4	1091	667	147	212	569	1163	667	147	212	579	
CHHM8 - 6235DA - (B) - Ratio	5.5	4	1135	667	147	212	576	1207	667	147	212	586	
CHHM10 - 6235DA - (B) - Ratio	7.5	4	1163	667	188	251	592	1258	667	188	251	609	
CHHM15 - 6235DA - (B) - Ratio	11	4	1223	667	188	251	606	1318	667	188	251	623	
CHHM20 - 6235DA - (B) - Ratio	15	4	1308	667	232	324	659	1413	667	259	324	693	
CHHM25 - 6235DA - (B) - Ratio	18.5	4	1403	667	297	394	732	1568	667	297	394	783	
CHHM30 - 6235DA - (B) - Ratio	22	4	1403	667	297	394	732	1568	667	297	394	783	
CHHM40 - 6235DB - (B) - Ratio	30	4	1425	667	297	394	777	1590	667	297	394	820	
CHHM50 - 6235DB - (B) - Ratio	37	4	1540	667	297	394	815	1755	667	297	394	912	
CHHM3 - 6245DA - (B) - Ratio	2.2	4	1106	729	126	173	669	1169	729	126	173	675	
CHHM4 - 6245DA - (B) - Ratio	3	4	1129	729	147	212	678	1201	729	147	212	688	
CHHM5 - 6245DA - (B) - Ratio	3.7	4	1129	729	147	212	678	1201	729	147	212	688	
CHHM8 - 6245DA - (B) - Ratio	5.5	4	1173	729	147	212	685	1245	729	147	212	695	
CHHM10 - 6245DA - (B) - Ratio	7.5	4	1201	729	188	251	701	1296	729	188	251	718	
CHHM15 - 6245DA - (B) - Ratio	11	4	1261	729	188	251	715	1356	729	188	251	732	
CHHM20 - 6245DA - (B) - Ratio	15	4	1346	729	232	324	768	1451	729	259	324	802	
CHHM25 - 6245DA - (B) - Ratio	18.5	4	1441	729	297	394	835	1606	729	297	394	886	
CHHM30 - 6245DA - (B) - Ratio	22	4	1441	729	297	394	835	1606	729	297	394	886	
CHHM20 - 6245DB - (B) - Ratio	15	4	1367	729	232	324	799	1472	729	259	324	828	
CHHM30 - 6245DB - (B) - Ratio	22	4	1462	729	297	394	861	1627	729	297	394	912	
CHHM40 - 6245DB - (B) - Ratio	30	4	1462	729	297	394	878	1627	729	297	394	921	
CHHM50 - 6245DB - (B) - Ratio	37	4	1577	729	297	394	930	1792	729	297	394	1027	
CHHM5 - 6255DA - (B) - Ratio	3.7	4	1284	815	147	212	1030	1356	815	147	212	1040	
CHHM8 - 6255DA - (B) - Ratio	5.5	4	1328	815	147	212	1040	1400	815	147	212	1050	
CHHM10 - 6255DA - (B) - Ratio	7.5	4	1346	815	188	251	1055	1441	815	188	251	1070	
CHHM15 - 6255DA - (B) - Ratio	11	4	1406	815	188	251	1070	1501	815	188	251	1085	
CHHM20 - 6255DA - (B) - Ratio	15	4	1486	815	232	324	1120	1591	815	259	324	1156	
CHHM25 - 6255DA - (B) - Ratio	18.5	4	1581	815	297	394	1190	1746	815	297	394	1241	
CHHM30 - 6255DA - (B) - Ratio	22	4	1581	815	297	394	1190	1746	815	297	394	1241	
CHHM40 - 6255DA - (B) - Ratio	30	4	1581	815	297	394	1210	1746	815	297	394	1253	

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CHHM^{Note 1} - 6255DB ~ 6275DA



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6255DB	978	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6265DA	1088	400	736	590	770	390	700	880	55	55	55	160	45	170	300	40	22	13	M30	49
6275DA	1349	540	950	420	1050	485	1040	1160	100	55	60	200	45	180	330	45	25	15	M30	52

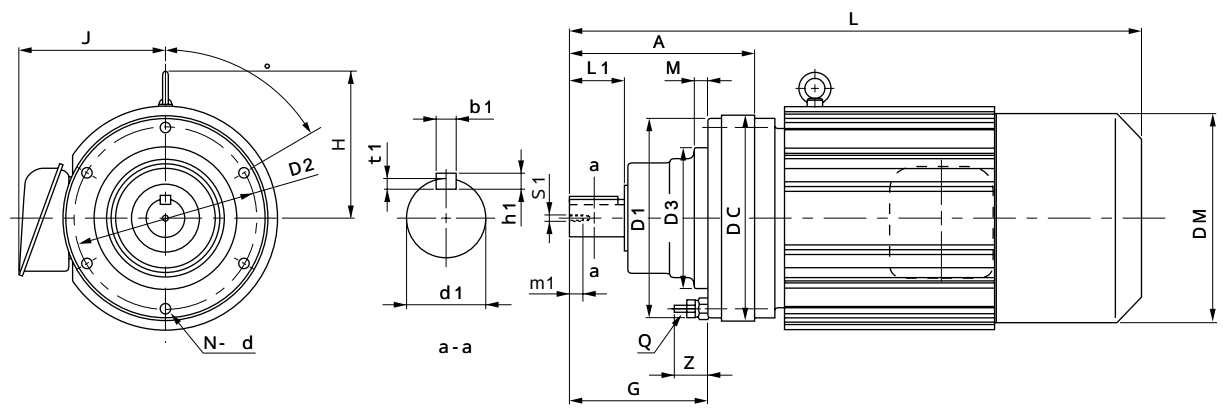
Model	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHHM25 - 6255DB - (B) - Ratio	18.5	4	1603	815	297	394	1265	1768	815	297	394	1316		
CHHM30 - 6255DB - (B) - Ratio	22	4	1603	815	297	394	1265	1768	815	297	394	1316		
CHHM40 - 6255DB - (B) - Ratio	30	4	1603	815	297	394	1280	1768	815	297	394	1323		
CHHM50 - 6255DB - (B) - Ratio	37	4	1718	815	297	394	1318	1928	815	297	394	1415		
CHHM60 - 6255DB - (B) - Ratio	45	4	1718	815	297	394	1318	1928	815	297	394	1415		
CHHM8 - 6265DA - (B) - Ratio	5.5	4	1480	874	147	212	1365	1552	874	147	212	1375		
CHHM10 - 6265DA - (B) - Ratio	7.5	4	1493	874	188	251	1380	1588	874	188	251	1400		
CHHM15 - 6265DA - (B) - Ratio	11	4	1553	874	188	251	1395	1648	874	188	251	1410		
CHHM20 - 6265DA - (B) - Ratio	15	4	1618	874	232	324	1445	1723	874	259	324	1481		
CHHM25 - 6265DA - (B) - Ratio	18.5	4	1713	874	297	394	1520	1878	874	297	394	1565		
CHHM30 - 6265DA - (B) - Ratio	22	4	1713	874	297	394	1520	1878	874	297	394	1565		
CHHM40 - 6265DA - (B) - Ratio	30	4	1713	874	297	394	1535	1878	874	297	394	1578		
CHHM50 - 6265DA - (B) - Ratio	37	4	1828	874	297	394	1570	2043	874	297	394	1667		
CHHM60 - 6265DA - (B) - Ratio	45	4	1828	874	297	394	1570	2043	874	297	394	1667		
CHHM10 - 6275DA - (B) - Ratio	7.5	4	1754	1161	188	251	2515	1849	1161	188	251	2535		
CHHM15 - 6275DA - (B) - Ratio	11	4	1814	1161	188	251	2530	1909	1161	188	251	2545		
CHHM20 - 6275DA - (B) - Ratio	15	4	1879	1161	232	324	2580	1984	1161	259	324	2616		
CHHM25 - 6275DA - (B) - Ratio	18.5	4	1974	1161	297	394	2655	2139	1161	297	394	2700		
CHHM30 - 6275DA - (B) - Ratio	22	4	1974	1161	297	394	2655	2139	1161	297	394	2700		
CHHM40 - 6275DA - (B) - Ratio	30	4	1974	1161	297	394	2670	2139	1161	297	394	2713		
CHHM50 - 6275DA - (B) - Ratio	37	4	2089	1161	297	394	2708	2304	1161	297	394	2805		
CHHM60 - 6275DA - (B) - Ratio	45	4	2089	1161	297	394	2708	2304	1161	297	394	2805		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in [] by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B " is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27, E-28 for details.

Note 1

DIMENSION TABLE CNFM□- 606 ~ 609



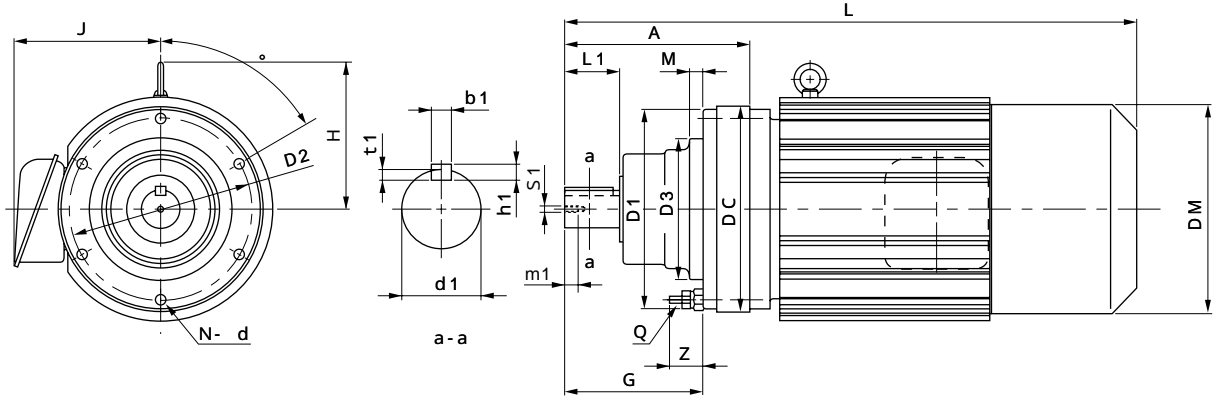
CNFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
													d1	L1	b1	h1	t1	S1	m1
606	92	69	110	98	80	110	M6	21	4	6	6.6	60	14	25	5	5	3	M5	16
607	98	74	110	98	80	110	M6	21	4	6	6.6	60	18	30	6	6	3.5	M6	16
608	129	91	134	118	95	134	M8	27	5	8	9	22.5	22	35	6	6	3.5	M6	16
609	142	114	150	134	105	150	M8	28	6	8	9	22.5	28	35	8	7	4	M8	20

Model <small>Notes: 6, 7</small>	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CNFM01 - 606 - (B) - Ratio	0.1	4	226	-	85	119	5.5	261	-	85	124	7		
CNFM02 - 606 - (B) - Ratio	0.2	4	268	-	85	124	6.5	300	-	85	124	8		
CNFM03 - 606 - (B) - Ratio	0.25	4	268	-	85	124	6.5	300	-	85	124	8		
CNFM01 - 607 - (B) - Ratio	0.1	4	232	-	85	119	6.5	267	-	85	124	7.5		
CNFM02 - 607 - (B) - Ratio	0.2	4	274	-	85	124	7.5	306	-	85	124	8.5		
CNFM03 - 607 - (B) - Ratio	0.25	4	274	-	85	124	7.5	306	-	85	124	8.5		
CNFM05 - 607 - (B) - Ratio	0.4	4	294	-	85	124	8.5	326	-	85	124	9.5		
CNFM01 - 608 - (B) - Ratio	0.1	4	258	-	85	119	9	293	-	85	124	10		
CNFM02 - 608 - (B) - Ratio	0.2	4	300	-	85	124	10	332	-	85	124	11		
CNFM03 - 608 - (B) - Ratio	0.25	4	300	-	85	124	10	332	-	85	124	11		
CNFM05 - 608 - (B) - Ratio	0.4	4	320	-	85	124	12	352	-	85	124	13		
CNFM08 - 608 - (B) - Ratio	0.55	4	361	113	114	148	16	404	113	114	148	17		
CNFM1 - 608 - (B) - Ratio	0.75	4	361	113	114	148	16	404	113	114	148	17		
CNFM01 - 609 - (B) - Ratio	0.1	4	276	-	85	119	10	311	-	85	124	12		
CNFM02 - 609 - (B) - Ratio	0.2	4	318	-	85	124	11	350	-	85	124	13		
CNFM03 - 609 - (B) - Ratio	0.25	4	318	-	85	124	11	350	-	85	124	13		
CNFM05 - 609 - (B) - Ratio	0.4	4	338	-	85	124	12	370	-	85	124	14		
CNFM08 - 609 - (B) - Ratio	0.55	4	379	113	114	148	16	422	113	114	148	18		
CNFM1 - 609 - (B) - Ratio	0.75	4	379	113	114	148	16	422	113	114	148	18		
CNFM1H - 609 - (B) - Ratio	1.1	4	412	120	119	160	20	474	120	119	160	24		
CNFM2 - 609 - (B) - Ratio	1.5	4	412	120	119	160	20	474	120	119	160	24		

Notes : 1. Motor capacity symbol is inserted in □. 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ". 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976. 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 ".

DIMENSION TABLE

CNFM^{Note 1} - 610 ~ 612



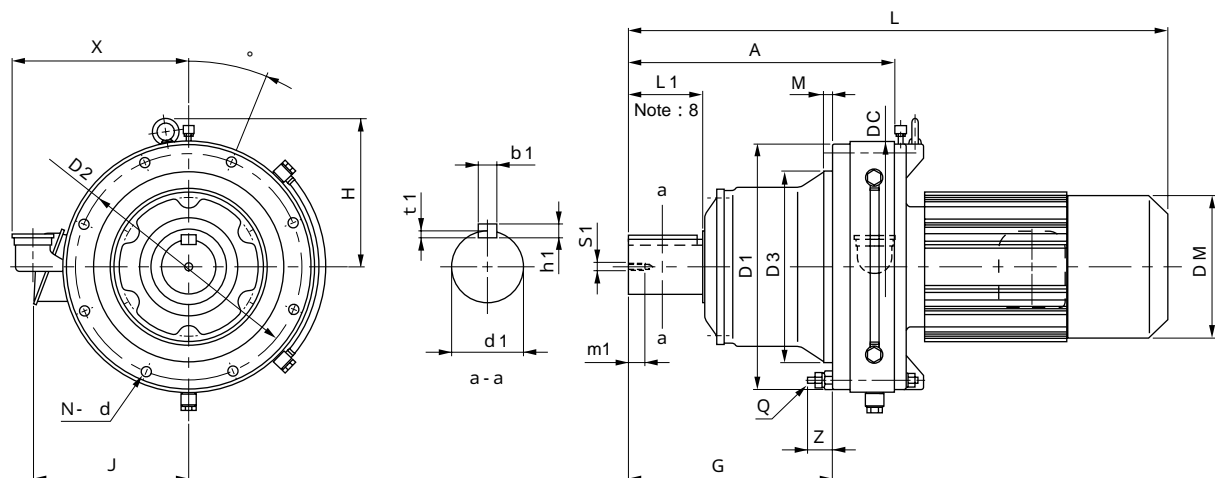
CNFM

CNFM	A	G	D1	D2	D3 Note: 4	DC	Q	Z	M	N	d	°	Output Shaft						
													d1	L1	b1	h1	t1	S1	m1
610	156	114	150	134	105	150	M8	28	6	8	9	22.5	28	35	8	7	4	M8	20
611	170	118	162	146	115	162	M8	28	6	8	9	22.5	32	45	10	8	5	M8	20
612	186	139	200	180	140	204	M10	33	14	6	11	60	38	55	10	8	5	M8	20

Model	Notes: 6, 7	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CNFM02 - 610	-(B)-Ratio	0.2	4	332	-	85	124	13	364	-	85	124	15	
CNFM03 - 610	-(B)-Ratio	0.25	4	332	-	85	124	13	364	-	85	124	15	
CNFM05 - 610	-(B)-Ratio	0.4	4	352	-	85	124	14	384	-	85	124	16	
CNFM08 - 610	-(B)-Ratio	0.55	4	393	113	114	148	18	436	113	114	148	21	
CNFM1 - 610	-(B)-Ratio	0.75	4	393	113	114	148	18	436	113	114	148	21	
CNFM1H - 610	-(B)-Ratio	1.1	4	426	120	119	160	22	488	120	119	160	27	
CNFM2 - 610	-(B)-Ratio	1.5	4	426	120	119	160	22	488	120	119	160	27	
CNFM3 - 610	-(B)-Ratio	2.2	4	446	126	126	173	26	509	126	126	173	32	
CNFM05 - 611	-(B)-Ratio	0.4	4	363	-	85	124	16	394	-	85	124	17	
CNFM08 - 611	-(B)-Ratio	0.55	4	403	113	114	148	18	452	113	114	148	22	
CNFM1 - 611	-(B)-Ratio	0.75	4	403	113	114	148	19	452	113	114	148	22	
CNFM1H - 611	-(B)-Ratio	1.1	4	436	120	119	160	22	493	120	119	160	27	
CNFM2 - 611	-(B)-Ratio	1.5	4	436	120	119	160	22	493	120	119	160	27	
CNFM3 - 611	-(B)-Ratio	2.2	4	456	126	126	173	26	519	126	126	173	32	
CNFM4 - 611	-(B)-Ratio	3	4	491	146	147	212	36	563	146	147	212	46	
CNFM5 - 611	-(B)-Ratio	3.7	4	491	146	147	212	36	563	146	147	212	46	
CNFM08 - 612	-(B)-Ratio	0.55	4	423	113	114	148	27	466	113	114	148	30	
CNFM1 - 612	-(B)-Ratio	0.75	4	423	113	114	148	27	466	113	114	148	30	
CNFM1H - 612	-(B)-Ratio	1.1	4	456	120	119	160	31	518	120	119	160	36	
CNFM2 - 612	-(B)-Ratio	1.5	4	456	120	119	160	31	518	120	119	160	36	
CNFM3 - 612	-(B)-Ratio	2.2	4	476	126	126	173	35	539	126	126	173	42	
CNFM4 - 612	-(B)-Ratio	3	4	499	146	147	212	45	571	146	147	212	55	
CNFM5 - 612	-(B)-Ratio	3.7	4	499	146	147	212	45	571	146	147	212	55	
CNFM8 - 612	-(B)-Ratio	5.5	4	543	146	147	212	52	615	146	147	212	62	

- Notes : 5. The dimensions in these drawings are subject to change without notice.
 6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 7. When equipped with brake, " B "is inserted following the frame size.
 8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CHFM^{Note 1} - 613 ~ 616



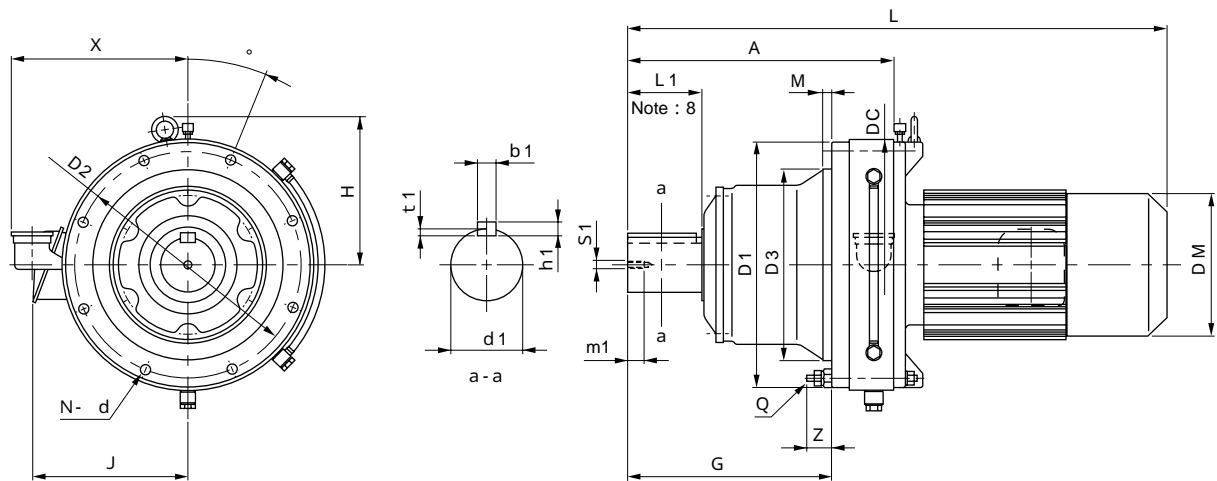
CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	X	Output Shaft <small>Notes: 2, 3, 8</small>						
														d1	L1	b1	h1	t1	S1	m1
613	240	178	226	205	165	230	M10	31	16	6	11	60	208	50	70	14	9	5.5	M10	18
614	260	198	226	205	165	230	M10	31	16	6	11	60	208	50	90	14	9	5.5	M10	18
616	308	222	296	270	200	300	M12	35	10	6	14	30	228	60	90	18	11	7	M10	18

Model	Motor		Standard							With Brake				
	<small>Notes: 6, 7</small>		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHFM1 - 613 - (B) - Ratio	0.75	4	477	111	114	148	43	520	111	114	148	48		
CHFM1H - 613 - (B) - Ratio	1.1	4	510	118	119	160	47	572	118	119	160	52		
CHFM2 - 613 - (B) - Ratio	1.5	4	510	118	119	160	47	572	118	119	160	52		
CHFM3 - 613 - (B) - Ratio	2.2	4	530	124	126	173	50	593	124	126	173	57		
CHFM4 - 613 - (B) - Ratio	3	4	553	146	147	212	60	625	146	147	212	70		
CHFM5 - 613 - (B) - Ratio	3.7	4	553	146	147	212	60	625	146	147	212	70		
CHFM8 - 613 - (B) - Ratio	5.5	4	597	146	147	212	67	669	146	147	212	77		
CHFM10 - 613 - (B) - Ratio	7.5	4	620	173	188	251	82	715	173	188	251	100		
CHFM15 - 613 - (B) - Ratio	11	4	680	173	188	251	96	775	173	188	251	114		
CHFM1H - 614 - (B) - Ratio	1.1	4	530	118	119	160	48	592	118	119	160	53		
CHFM2 - 614 - (B) - Ratio	1.5	4	530	118	119	160	48	592	118	119	160	53		
CHFM3 - 614 - (B) - Ratio	2.2	4	550	124	126	173	51	613	124	126	173	58		
CHFM4 - 614 - (B) - Ratio	3	4	573	146	147	212	61	645	146	147	212	71		
CHFM5 - 614 - (B) - Ratio	3.7	4	573	146	147	212	61	645	146	147	212	71		
CHFM8 - 614 - (B) - Ratio	5.5	4	617	146	147	212	68	689	146	147	212	78		
CHFM10 - 614 - (B) - Ratio	7.5	4	640	173	188	251	83	735	173	188	251	101		
CHFM15 - 614 - (B) - Ratio	11	4	700	173	188	251	97	795	173	188	251	115		
CHFM20 - 614 - (B) - Ratio	15	4	790	208	232	324	149	895	208	259	324	183		
CHFM2 - 616 - (B) - Ratio	1.5	4	583	118	119	160	75	645	118	119	160	80		
CHFM3 - 616 - (B) - Ratio	2.2	4	598	124	126	173	78	661	124	126	173	84		
CHFM4 - 616 - (B) - Ratio	3	4	621	146	147	212	87	693	146	147	212	97		
CHFM5 - 616 - (B) - Ratio	3.7	4	621	146	147	212	87	693	146	147	212	97		
CHFM8 - 616 - (B) - Ratio	5.5	4	665	146	147	212	94	737	146	147	212	104		
CHFM10 - 616 - (B) - Ratio	7.5	4	693	173	188	251	110	788	173	188	251	127		
CHFM15 - 616 - (B) - Ratio	11	4	753	173	188	251	124	848	173	188	251	141		
CHFM20 - 616 - (B) - Ratio	15	4	838	208	232	324	177	943	208	259	324	211		
CHFM25 - 616 - (B) - Ratio	18.5	4	933	208	297	394	249	1098	208	297	394	300		
CHFM30 - 616 - (B) - Ratio	22	4	933	208	297	394	249	1098	208	297	394	300		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 ".

DIMENSION TABLE

CHFMI^{Note 1}- 617 ~ 619



CHFMI

CHFMI	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	X	Output Shaft <small>Notes: 2, 3, 8</small>						
														d1	L1	b1	h1	t1	S1	m1
617	352	262	330	300	250	340	M12	41	12	8	14	22.5	243	70	90	20	12	7.5	M12	24
618	389	299	360	330	280	370	M12	38	12	8	14	22.5	258	80	110	22	14	9	M12	24
619	465	365	420	380	320	430	M12	41	10	12	14	15	285	95	135	25	14	9	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHFMI4 - 617 - (B) - Ratio	3	4	680	203	147	212	118	752	203	147	212	128		
CHFMI5 - 617 - (B) - Ratio	3.7	4	680	203	147	212	118	752	203	147	212	128		
CHFMI8 - 617 - (B) - Ratio	5.5	4	724	203	147	212	125	796	203	147	212	135		
CHFMI10 - 617 - (B) - Ratio	7.5	4	742	203	188	251	140	837	203	188	251	158		
CHFMI15 - 617 - (B) - Ratio	11	4	802	203	188	251	154	897	203	188	251	172		
CHFMI20 - 617 - (B) - Ratio	15	4	882	213	232	324	208	987	213	259	324	242		
CHFMI25 - 617 - (B) - Ratio	18.5	4	977	227	297	394	276	1142	227	297	394	327		
CHFMI30 - 617 - (B) - Ratio	22	4	977	227	297	394	276	1142	227	297	394	327		
CHFMI40 - 617 - (B) - Ratio	30	4	977	228	297	394	293	1142	228	297	394	336		
CHFMI5 - 618 - (B) - Ratio	3.7	4	717	218	147	212	148	789	218	147	212	158		
CHFMI8 - 618 - (B) - Ratio	5.5	4	761	218	147	212	156	833	218	147	212	166		
CHFMI10 - 618 - (B) - Ratio	7.5	4	779	218	188	251	171	874	218	188	251	189		
CHFMI15 - 618 - (B) - Ratio	11	4	839	218	188	251	185	934	218	188	251	203		
CHFMI20 - 618 - (B) - Ratio	15	4	919	217	232	324	245	1024	217	259	324	274		
CHFMI25 - 618 - (B) - Ratio	18.5	4	1014	227	297	394	307	1179	227	297	394	358		
CHFMI30 - 618 - (B) - Ratio	22	4	1014	227	297	394	307	1179	227	297	394	358		
CHFMI40 - 618 - (B) - Ratio	30	4	1014	228	297	394	324	1179	228	297	394	367		
CHFMI50 - 618 - (B) - Ratio	37	4	1129	228	297	394	372	1344	228	297	394	469		
CHFMI60 - 618 - (B) - Ratio	45	4	1129	228	297	394	372	1344	228	297	394	469		
CHFMI8 - 619 - (B) - Ratio	5.5	4	857	261	147	212	216	929	261	147	212	226		
CHFMI10 - 619 - (B) - Ratio	7.5	4	870	261	188	251	229	965	261	188	251	247		
CHFMI15 - 619 - (B) - Ratio	11	4	930	261	188	251	243	1025	261	188	251	261		
CHFMI20 - 619 - (B) - Ratio	15	4	995	217	232	324	296	1100	217	259	324	331		
CHFMI25 - 619 - (B) - Ratio	18.5	4	1090	227	297	394	368	1255	227	297	394	413		
CHFMI256 - 619 - (B) - Ratio	18.5	6	1090	227	297	394	383	1255	227	297	394	426		
CHFMI30 - 619 - (B) - Ratio	22	4	1090	227	297	394	368	1255	227	297	394	413		
CHFMI40 - 619 - (B) - Ratio	30	4	1090	261	297	394	383	1255	261	297	394	426		
CHFMI406 - 619 - (B) - Ratio	30	6	1205	261	297	394	421	1420	261	297	394	518		
CHFMI50 - 619 - (B) - Ratio	37	4	1205	261	297	394	421	1420	261	297	394	518		
CHFMI506 - 619 - (B) - Ratio	37	6	1205	261	297	394	421	1420	261	297	394	518		
CHFMI60 - 619 - (B) - Ratio	45	4	1205	261	297	394	421	1420	261	297	394	518		

Notes : 5. The dimensions in these drawings are subject to change without notice.

6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

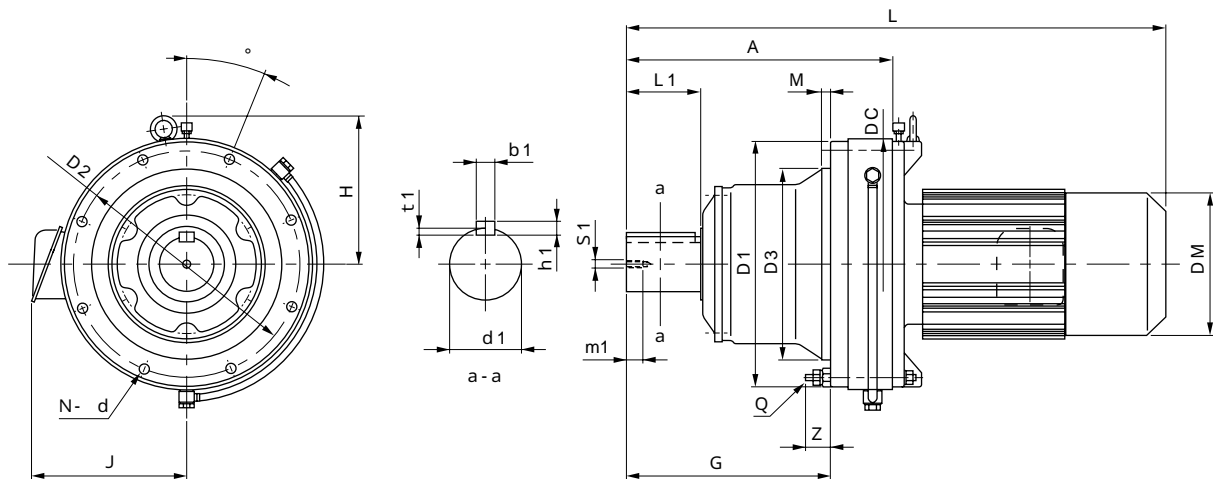
7. When equipped with brake, " B " is inserted following the frame size.

8. Output shaft length (L1) is shorter for vertical down (CVFM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CHFMI- 6205 ~ 6215

Note 1



CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
													d1	L1	b1	h1	t1	S1	m1
6205	502	410	443	405	360	448	M16	57	20	12	18	15	100	165	28	16	10	M20	34
6215	526	423	480	440	390	485	M18	57	20	12	20.5	15	110	165	28	16	10	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHFM15 - 6205 - (B) - Ratio	11	4	972	283	188	251	269	1067	283	188	251	287		
CHFM20 - 6205 - (B) - Ratio	15	4	1042	283	232	324	323	1147	283	259	324	359		
CHFM206 - 6205 - (B) - Ratio	15	6	1127	283	297	394	394	1292	283	297	394	439		
CHFM25 - 6205 - (B) - Ratio	18.5	4	1127	283	297	394	394	1292	283	297	394	439		
CHFM30 - 6205 - (B) - Ratio	22	4	1127	283	297	394	394	1292	283	297	394	439		
CHFM306 - 6205 - (B) - Ratio	22	6	1127	283	297	394	407	1292	283	297	394	452		
CHFM40 - 6205 - (B) - Ratio	30	4	1127	283	297	394	407	1292	283	297	394	452		
CHFM406 - 6205 - (B) - Ratio	30	6	1242	283	297	394	445	1457	283	297	394	539		
CHFM50 - 6205 - (B) - Ratio	37	4	1242	283	297	394	445	1457	283	297	394	539		
CHFM506 - 6205 - (B) - Ratio	37	6	1242	283	297	394	445	1457	283	297	394	539		
CHFM60 - 6205 - (B) - Ratio	45	4	1242	283	297	394	445	1457	283	297	394	539		
CHFM606 - 6205 - (B) - Ratio	45	6	1297	283	412	484	538	-	-	-	-	-		
CHFM75 - 6205 - (B) - Ratio	55	4	1297	283	412	484	538	-	-	-	-	-		
CHFM15 - 6215 - (B) - Ratio	11	4	996	312	188	251	349	1091	312	188	251	367		
CHFM20 - 6215 - (B) - Ratio	15	4	1066	312	232	324	404	1171	312	259	324	439		
CHFM206 - 6215 - (B) - Ratio	15	6	1151	312	297	394	469	1316	312	297	394	514		
CHFM25 - 6215 - (B) - Ratio	18.5	4	1151	312	297	394	469	1316	312	297	394	514		
CHFM256 - 6215 - (B) - Ratio	18.5	6	1151	312	297	394	482	1316	312	297	394	527		
CHFM30 - 6215 - (B) - Ratio	22	4	1151	312	297	394	469	1316	312	297	394	514		
CHFM306 - 6215 - (B) - Ratio	22	6	1151	312	297	394	482	1316	312	297	394	527		
CHFM40 - 6215 - (B) - Ratio	30	4	1151	312	297	394	482	1316	312	297	394	527		
CHFM406 - 6215 - (B) - Ratio	30	6	1266	312	297	394	520	1481	312	297	394	615		
CHFM50 - 6215 - (B) - Ratio	37	4	1266	312	297	394	520	1481	312	297	394	615		
CHFM506 - 6215 - (B) - Ratio	37	6	1266	312	297	394	520	1481	312	297	394	615		
CHFM60 - 6215 - (B) - Ratio	45	4	1266	312	297	394	520	1481	312	297	394	615		
CHFM606 - 6215 - (B) - Ratio	45	6	1321	312	412	484	630	-	-	-	-	-		
CHFM75 - 6215 - (B) - Ratio	55	4	1321	312	412	484	630	-	-	-	-	-		

Notes : 1. Motor capacity symbol is inserted in [] .

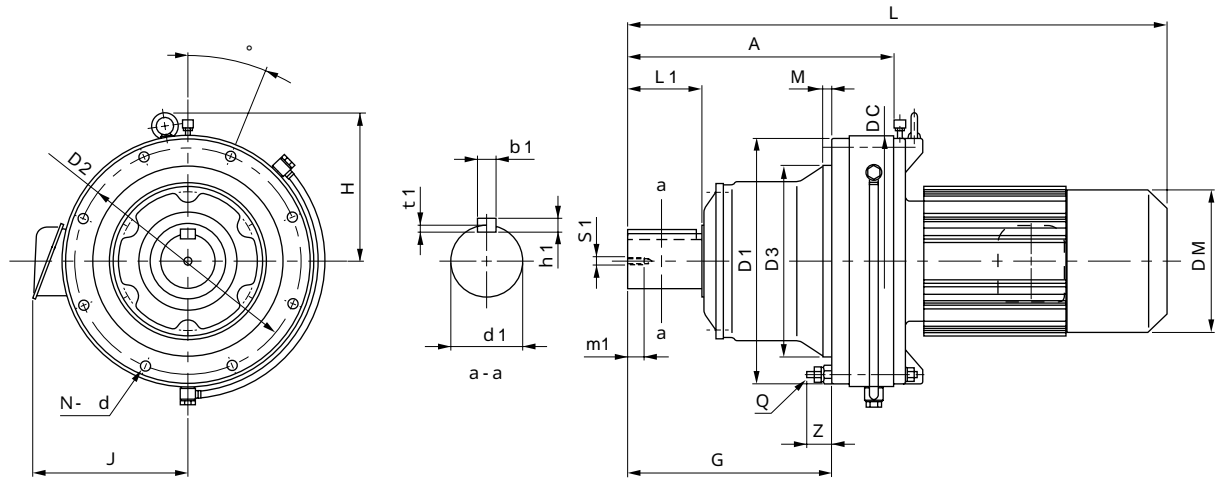
2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 " .

3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976 .

4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 " .

DIMENSION TABLE

CHFM^{Note 1} - 6225 ~ 6245



CHFM

CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
													d1	L1	b1	h1	t1	S1	m1
6225	566	454	521	475	420	526	M20	60	20	12	22	15	120	165	32	18	11	M20	34
6235	628	505	557	510	455	562	M20	63	20	12	22	15	130	200	32	18	11	M24	41
6245	657	529	615	560	500	614	M24	65	25	12	27	15	140	200	36	20	12	M24	41

Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHFM206 - 6225 - (B) - Ratio	15	6	1191	333	297	394	537	1356	333	297	394	582
CHFM25 - 6225 - (B) - Ratio	18.5	4	1191	333	297	394	537	1356	333	297	394	582
CHFM256 - 6225 - (B) - Ratio	18.5	6	1191	333	297	394	550	1356	333	297	394	595
CHFM30 - 6225 - (B) - Ratio	22	4	1191	333	297	394	537	1356	333	297	394	582
CHFM306 - 6225 - (B) - Ratio	22	6	1191	333	297	394	550	1356	333	297	394	595
CHFM40 - 6225 - (B) - Ratio	30	4	1191	333	297	394	550	1356	333	297	394	595
CHFM406 - 6225 - (B) - Ratio	30	6	1306	333	297	394	588	1521	333	297	394	683
CHFM50 - 6225 - (B) - Ratio	37	4	1306	333	297	394	588	1521	333	297	394	683
CHFM506 - 6225 - (B) - Ratio	37	6	1306	333	297	394	588	1521	333	297	394	683
CHFM60 - 6225 - (B) - Ratio	45	4	1306	333	297	394	588	1521	333	297	394	683
CHFM606 - 6225 - (B) - Ratio	45	6	1361	333	412	484	687	-	-	-	-	-
CHFM75 - 6225 - (B) - Ratio	55	4	1361	333	412	484	687	-	-	-	-	-
CHFM206 - 6235 - (B) - Ratio	15	6	1253	351	297	394	622	1418	351	297	394	653
CHFM256 - 6235 - (B) - Ratio	18.5	6	1253	351	297	394	622	1418	351	297	394	667
CHFM306 - 6235 - (B) - Ratio	22	6	1253	351	297	394	622	1418	351	297	394	667
CHFM406 - 6235 - (B) - Ratio	30	6	1368	351	297	394	668	1583	351	297	394	756
CHFM506 - 6235 - (B) - Ratio	37	6	1368	351	297	394	668	1583	351	297	394	756
CHFM606 - 6235 - (B) - Ratio	45	6	1423	351	412	484	757	-	-	-	-	-
CHFM756 - 6235 - (B) - Ratio	55	6	1503	351	412	485	811	-	-	-	-	-
CHFM206 - 6245 - (B) - Ratio	15	6	1282	359	297	394	742	1447	359	297	394	775
CHFM256 - 6245 - (B) - Ratio	18.5	6	1282	359	297	394	742	1447	359	297	394	789
CHFM306 - 6245 - (B) - Ratio	22	6	1282	359	297	394	742	1447	359	297	394	789
CHFM406 - 6245 - (B) - Ratio	30	6	1397	359	297	394	788	1612	359	297	394	876
CHFM506 - 6245 - (B) - Ratio	37	6	1397	359	297	394	788	1612	359	297	394	876
CHFM606 - 6245 - (B) - Ratio	45	6	1452	359	412	484	879	-	-	-	-	-
CHFM756 - 6245 - (B) - Ratio	55	6	1532	359	412	485	928	-	-	-	-	-

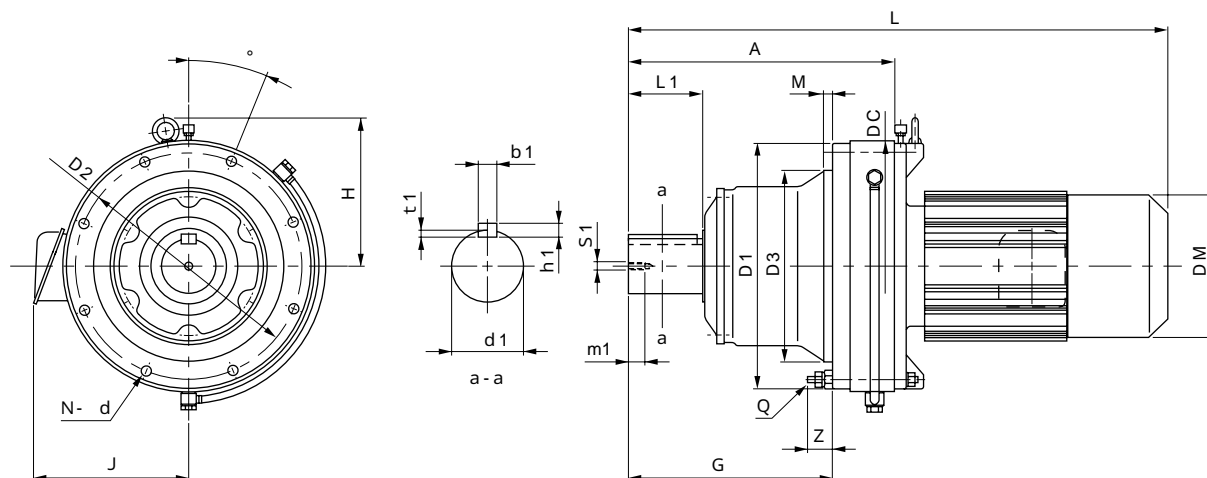
Notes : 5. The dimensions in these drawings are subject to change without notice.

6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B " is inserted following the frame size.

8. Output shaft length (L1) is shorter for vertical down (CVFM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CHFMI- 6255 ~ 6265



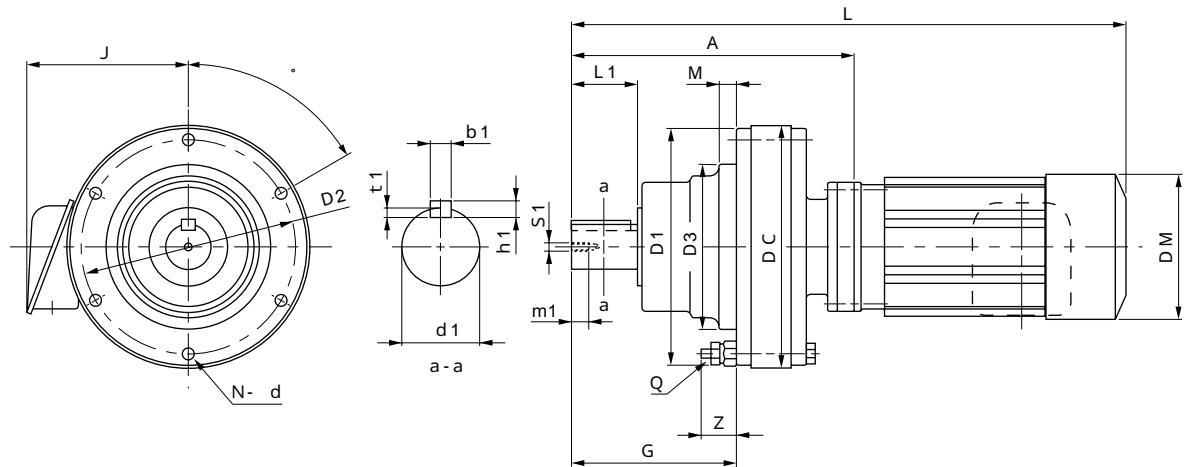
CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
													d1	L1	b1	h1	t1	S1	m1
6255	775	616	666	610	540	670	M24	86	30	12	27	15	160	240	40	22	13	M30	49
6265	892	712	730	660	570	736	M30	82	40	12	34	15	170	300	40	22	13	M30	49

Model <small>Notes: 6, 7</small>	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHFM256 - 6255 - (B) - Ratio	18.5	6	1400	386	297	394	987	1565	386	297	394	1034		
CHFM306 - 6255 - (B) - Ratio	22	6	1400	386	297	394	987	1565	386	297	394	1034		
CHFM406 - 6255 - (B) - Ratio	30	6	1515	386	297	394	1032	1730	386	297	394	1120		
CHFM506 - 6255 - (B) - Ratio	37	6	1515	386	297	394	1032	1730	386	297	394	1120		
CHFM606 - 6255 - (B) - Ratio	45	6	1570	386	412	484	1112	-	-	-	-	-		
CHFM756 - 6255 - (B) - Ratio	55	6	1650	386	412	485	1167	-	-	-	-	-		
CHFM406 - 6265 - (B) - Ratio	30	6	1632	453	297	394	1270	1847	453	297	394	1358		
CHFM506 - 6265 - (B) - Ratio	37	6	1632	453	297	394	1270	1847	453	297	394	1358		
CHFM606 - 6265 - (B) - Ratio	45	6	1687	453	412	484	1365	-	-	-	-	-		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 ".

DIMENSION TABLE

CNFM^{Note 1} - 606 DA ~ 612 DB



CHFM/CNFM

CNFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
													d1	L1	b1	h1	t1	S1	m1
606 DA	125	69	110	98	80	110	M6	23	4	6	6.6	60	14	25	5	5	3	M5	16
607 DA	131	74	110	98	80	110	M6	23	4	6	6.6	60	18	30	6	6	3.5	M6	16
609 DA	190	114	150	134	105	150	M8	28	6	8	9	22.5	28	35	8	7	4	M8	20
610 DA	204	114	150	134	105	150	M8	28	6	8	9	22.5	28	35	8	7	4	M8	20
612 DA	240	139	200	180	140	204	M10	33	14	6	11	60	38	55	10	8	5	M8	20
612 DB	252	139	200	180	140	204	M10	33	14	6	11	60	38	55	10	8	5	M8	20

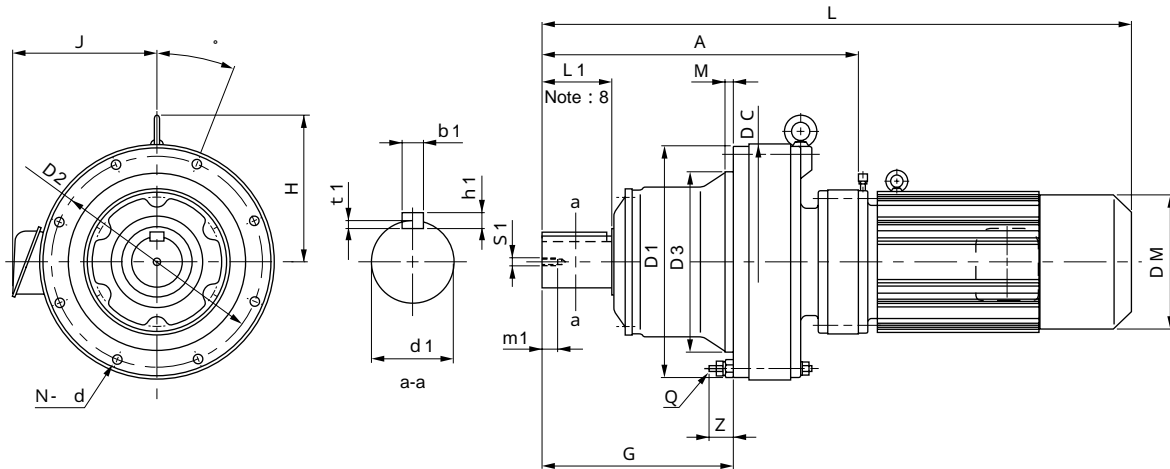
Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CNFM01 - 606 DA - (B) - Ratio	0.1	4	259	85	119	7	294	85	124	8.5	
CNFM01 - 607 DA - (B) - Ratio	0.1	4	265	85	119	8	300	85	124	9.5	
CNFM02 - 607 DA - (B) - Ratio	0.2	4	307	85	124	9	339	85	124	11	
CNFM01 - 609 DA - (B) - Ratio	0.1	4	324	85	119	13	359	85	124	14	
CNFM02 - 609 DA - (B) - Ratio	0.2	4	366	85	124	14	398	85	124	15	
CNFM03 - 609 DA - (B) - Ratio	0.25	4	366	85	124	14	398	85	124	15	
CNFM05 - 609 DA - (B) - Ratio	0.4	4	386	85	124	15	418	85	124	16	
CNFM01 - 610 DA - (B) - Ratio	0.1	4	338	85	119	14	373	85	124	15	
CNFM02 - 610 DA - (B) - Ratio	0.2	4	380	85	124	15	412	85	124	16	
CNFM03 - 610 DA - (B) - Ratio	0.25	4	380	85	124	15	412	85	124	16	
CNFM05 - 610 DA - (B) - Ratio	0.4	4	400	85	124	16	432	85	124	17	
CNFM01 - 612 DA - (B) - Ratio	0.1	4	374	85	119	25	409	85	124	26	
CNFM02 - 612 DA - (B) - Ratio	0.2	4	416	85	124	26	448	85	124	27	
CNFM03 - 612 DA - (B) - Ratio	0.25	4	416	85	124	26	448	85	124	27	
CNFM05 - 612 DA - (B) - Ratio	0.4	4	436	85	124	27	468	85	124	28	
CNFM01 - 612 DB - (B) - Ratio	0.1	4	386	85	119	28	421	85	124	30	
CNFM03 - 612 DB - (B) - Ratio	0.25	4	428	85	124	29	473	85	124	31	
CNFM05 - 612 DB - (B) - Ratio	0.4	4	448	85	124	30	473	85	124	32	
CNFM08 - 612 DB - (B) - Ratio	0.55	4	489	114	148	34	532	114	148	37	
CNFM1 - 612 DB - (B) - Ratio	0.75	4	489	114	148	34	532	114	148	37	
CNFM1H - 612 DB - (B) - Ratio	1.1	4	516	119	160	38	578	119	160	43	
CNFM2 - 612 DB - (B) - Ratio	1.5	4	516	119	160	38	578	119	160	43	

- Notes : 5. The dimensions in these drawings are subject to change without notice.
 6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 7. When equipped with brake, " B "is inserted following the frame size.
 8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CHFMI- 613 DA ~ 614 DC

Note 1



CHFM	A	G	D1	D2	D3 Note: 4	DC	H	Q	Z	M	N	d	°	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
613 DA	294	178	226	205	165	230	150	M10	31	16	6	11	60	50	70	14	9	5.5	M10	18
613 DB	303	178	226	205	165	230	150	M10	31	16	6	11	60	50	70	14	9	5.5	M10	18
613 DC	317	178	226	205	165	230	150	M10	31	16	6	11	60	50	70	14	9	5.5	M10	18
614 DA	314	198	226	205	165	230	150	M10	31	16	6	11	60	50	90	14	9	5.5	M10	18
614 DB	323	198	226	205	165	230	150	M10	31	16	6	11	60	50	90	14	9	5.5	M10	18
614 DC	337	198	226	205	165	230	150	M10	31	16	6	11	60	50	90	14	9	5.5	M10	18

Model	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHFMO2 - 613 DA - (B) - Ratio	0.2	4	470	300	85	124	39	502	300	85	124	40		
CHFMO3 - 613 DA - (B) - Ratio	0.25	4	490	300	85	124	39	522	300	85	124	40		
CHFMO5 - 613 DA - (B) - Ratio	0.4	4	490	300	85	124	40	522	300	85	124	41		
CHFMO2 - 613 DB - (B) - Ratio	0.2	4	479	300	85	124	41	511	300	85	124	43		
CHFMO3 - 613 DB - (B) - Ratio	0.25	4	479	300	85	124	41	511	300	85	124	43		
CHFMO5 - 613 DB - (B) - Ratio	0.4	4	499	300	85	124	42	531	300	85	124	44		
CHFMO8 - 613 DB - (B) - Ratio	0.55	4	540	263	114	148	46	583	263	114	148	49		
CHFMO1 - 613 DB - (B) - Ratio	0.75	4	540	263	114	148	46	583	263	114	148	49		
CHFMO1H - 613 DB - (B) - Ratio	1.1	4	573	270	119	160	50	635	270	119	160	55		
CHFMO2 - 613 DB - (B) - Ratio	1.5	4	573	270	119	160	50	635	270	119	160	55		
CHFMO3 - 613 DC - (B) - Ratio	2.2	4	607	276	126	173	56	670	276	126	173	62		
CHFMO2 - 614 DA - (B) - Ratio	0.2	4	490	300	85	124	39	522	300	85	124	40		
CHFMO3 - 614 DA - (B) - Ratio	0.25	4	490	300	85	124	39	522	300	85	124	40		
CHFMO5 - 614 DA - (B) - Ratio	0.4	4	510	300	85	124	40	542	300	85	124	41		
CHFMO2 - 614 DB - (B) - Ratio	0.2	4	499	300	85	124	41	531	300	85	124	43		
CHFMO3 - 614 DB - (B) - Ratio	0.25	4	499	300	85	124	41	531	300	85	124	43		
CHFMO5 - 614 DB - (B) - Ratio	0.4	4	519	300	85	124	42	551	300	85	124	46		
CHFMO8 - 614 DB - (B) - Ratio	0.55	4	560	263	114	148	46	603	263	114	148	49		
CHFMO1 - 614 DB - (B) - Ratio	0.75	4	560	263	114	148	46	603	263	114	148	49		
CHFMO1H - 614 DB - (B) - Ratio	1.1	4	593	270	119	160	50	655	270	119	160	53		
CHFMO2 - 614 DB - (B) - Ratio	1.5	4	593	270	119	160	50	655	270	119	160	53		
CHFMO1H - 614 DC - (B) - Ratio	1.1	4	607	270	119	160	52	669	270	119	160	57		
CHFMO2 - 614 DC - (B) - Ratio	1.5	4	607	270	119	160	52	669	270	119	160	57		
CHFMO3 - 614 DC - (B) - Ratio	2.2	4	627	276	126	173	56	690	276	126	173	62		

Notes : 1. Motor capacity symbol is inserted in [].

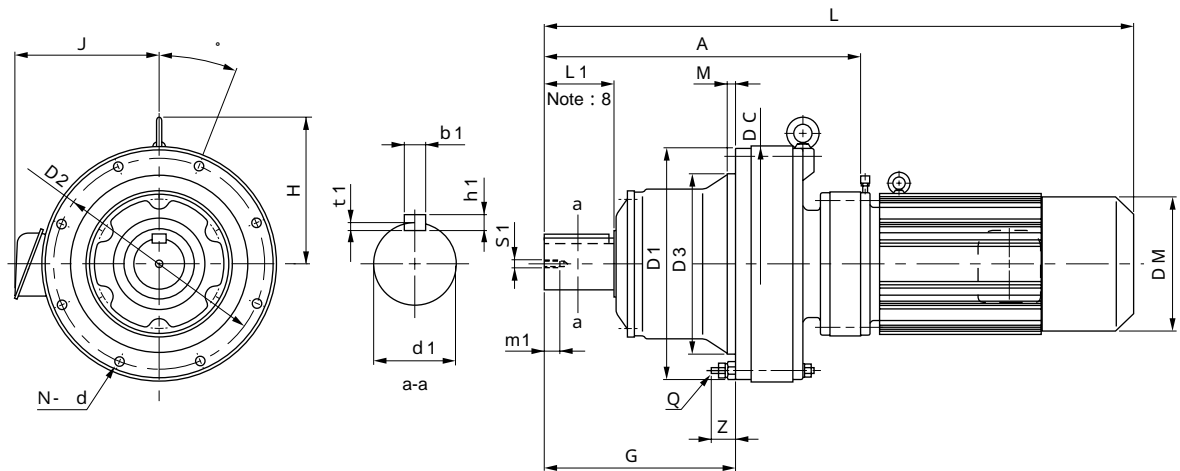
2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".

3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 ".

DIMENSION TABLE

CHFM^{Note 1} - 616 DA ~ 618 DA



CHFM

CHFM	A	G	D1	D2	D3 Note: 4	DC	H	Q	Z	M	N	d	°	Output Shaft Notes: 2, 3, 8						
														d1	L1	b1	h1	t1	S1	m1
616 DA	373	222	296	270	200	300	189	M12	35	10	6	14	30	60	90	18	11	7	M10	18
616 DB	387	222	296	270	200	300	189	M12	35	10	6	14	30	60	90	18	11	7	M10	18
617 DA	418	262	330	300	250	340	216	M12	41	12	8	14	22.5	70	90	20	12	7.5	M12	24
617 DB	432	262	330	300	250	340	216	M12	41	12	8	14	22.5	70	90	20	12	7.5	M12	24
618 DA	474	299	360	330	280	370	231	M12	38	12	8	14	22.5	80	110	22	14	9	M12	24

Model Notes: 6, 7	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHFM02 - 616 DA - (B) - Ratio	0.2	4	549	349	85	124	71	581	349	85	124	73	
CHFM03 - 616 DA - (B) - Ratio	0.25	4	549	349	85	124	71	581	349	85	124	73	
CHFM05 - 616 DA - (B) - Ratio	0.4	4	569	349	85	124	72	601	349	85	124	74	
CHFM08 - 616 DA - (B) - Ratio	0.55	4	610	349	114	148	76	653	349	114	148	79	
CHFM1 - 616 DA - (B) - Ratio	0.75	4	610	349	114	148	76	653	349	114	148	79	
CHFM1H - 616 DA - (B) - Ratio	1.1	4	643	349	119	160	80	705	349	119	160	85	
CHFM2 - 616 DA - (B) - Ratio	1.5	4	643	349	119	160	80	705	349	119	160	85	
CHFM1H - 616 DB - (B) - Ratio	1.1	4	657	349	119	160	82	719	349	119	160	87	
CHFM2 - 616 DB - (B) - Ratio	1.5	4	657	349	119	160	82	719	349	119	160	87	
CHFM3 - 616 DB - (B) - Ratio	2.2	4	677	349	126	173	86	740	349	126	173	92	
CHFM02 - 617 DA - (B) - Ratio	0.2	4	594	416	85	124	91	626	416	85	124	93	
CHFM03 - 617 DA - (B) - Ratio	0.25	4	594	416	85	124	91	626	416	85	124	93	
CHFM05 - 617 DA - (B) - Ratio	0.4	4	614	416	85	124	92	646	416	85	124	94	
CHFM08 - 617 DA - (B) - Ratio	0.55	4	655	416	114	148	96	698	416	114	148	99	
CHFM1 - 617 DA - (B) - Ratio	0.75	4	655	416	114	148	96	698	416	114	148	99	
CHFM1H - 617 DA - (B) - Ratio	1.1	4	688	416	119	160	100	750	416	119	160	105	
CHFM2 - 617 DA - (B) - Ratio	1.5	4	688	416	119	160	100	750	416	119	160	105	
CHFM1H - 617 DB - (B) - Ratio	1.1	4	702	416	119	160	101	764	416	119	160	106	
CHFM2 - 617 DB - (B) - Ratio	1.5	4	702	416	119	160	101	764	416	119	160	106	
CHFM3 - 617 DB - (B) - Ratio	2.2	4	722	416	126	173	105	785	416	126	173	111	
CHFM05 - 618 DA - (B) - Ratio	0.4	4	670	451	85	124	135	702	451	85	124	137	
CHFM08 - 618 DA - (B) - Ratio	0.55	4	711	451	114	148	139	754	451	114	148	142	
CHFM1 - 618 DA - (B) - Ratio	0.75	4	711	451	114	148	139	754	451	114	148	142	
CHFM1H - 618 DA - (B) - Ratio	1.1	4	744	451	119	160	143	806	451	119	160	148	
CHFM2 - 618 DA - (B) - Ratio	1.5	4	744	451	119	160	143	806	451	119	160	148	
CHFM3 - 618 DA - (B) - Ratio	2.2	4	764	451	126	173	147	827	451	126	173	153	

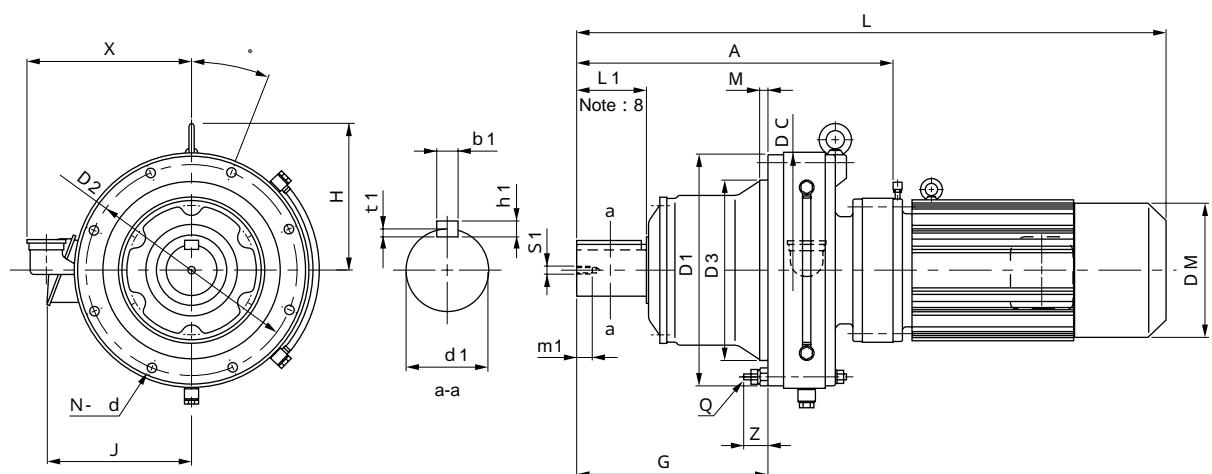
Notes : 5. The dimensions in these drawings are subject to change without notice.

6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B " is inserted following the frame size.

8. Output shaft length (L1) is shorter for vertical down (CVFM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE Note 1 CHFMI- 616 DC ~ 619 DB



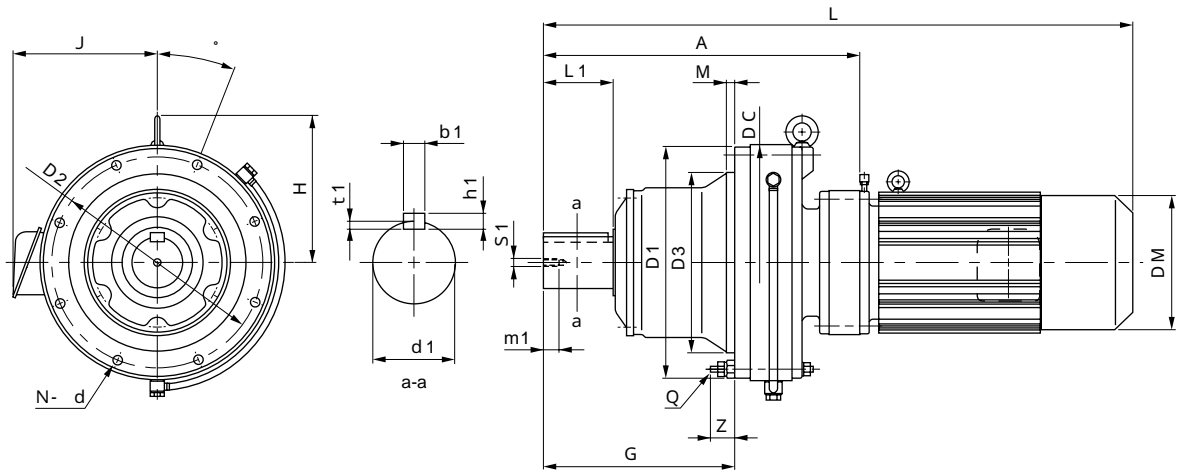
CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	H	Q	Z	M	N	d	°	x	Output Shaft <small>Notes: 2, 3, 8</small>						
															d1	L1	b1	h1	t1	S1	m1
616 DC	389	222	296	270	200	300	189	M12	35	10	6	14	30	228	60	90	18	11	7	M10	18
617 DC	436	262	330	300	250	340	216	M12	41	12	8	14	22.5	243	70	90	20	12	7.5	M12	24
618 DB	496	299	360	330	280	370	231	M12	38	12	8	14	22.5	258	80	110	22	14	9	M12	24
619 DA	556	365	420	380	320	430	281	M12	43	10	12	14	15	285	95	135	25	14	9	M20	34
619 DB	572	365	420	380	320	430	281	M12	43	10	12	14	15	285	95	135	25	14	9	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard							With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)		
CHFM3 - 616 DC - (B) - Ratio	2.2	4	679	349	126	173	92	742	349	126	173	99		
CHFM4 - 616 DC - (B) - Ratio	3	4	702	349	147	212	102	774	349	147	212	112		
CHFM5 - 616 DC - (B) - Ratio	3.7	4	702	349	147	212	102	774	349	147	212	112		
CHFM8 - 616 DC - (B) - Ratio	5.5	4	746	349	147	212	109	818	349	147	212	119		
CHFM3 - 617 DC - (B) - Ratio	2.2	4	726	416	126	173	116	789	416	126	173	123		
CHFM4 - 617 DC - (B) - Ratio	3	4	749	416	147	212	126	821	416	147	212	136		
CHFM5 - 617 DC - (B) - Ratio	3.7	4	749	416	147	212	126	821	416	147	212	136		
CHFM8 - 617 DC - (B) - Ratio	5.5	4	793	416	147	212	133	865	416	147	212	143		
CHFM3 - 618 DB - (B) - Ratio	2.2	4	786	451	126	173	161	849	451	126	173	168		
CHFM4 - 618 DB - (B) - Ratio	3	4	809	451	147	212	171	881	451	147	212	181		
CHFM5 - 618 DB - (B) - Ratio	3.7	4	809	451	147	212	171	881	451	147	212	181		
CHFM8 - 618 DB - (B) - Ratio	5.5	4	853	451	147	212	178	925	451	147	212	188		
CHFM10 - 618 DB - (B) - Ratio	7.5	4	876	451	188	251	193	971	451	188	251	211		
CHFM15 - 618 DB - (B) - Ratio	11	4	936	451	188	251	207	1031	451	188	251	225		
CHFM1 - 619 DA - (B) - Ratio	0.75	4	793	531	114	148	200	836	531	114	148	203		
CHFM1H - 619 DA - (B) - Ratio	1.1	4	826	531	119	160	204	888	531	119	160	209		
CHFM2 - 619 DA - (B) - Ratio	1.5	4	826	531	119	160	204	888	531	119	160	209		
CHFM3 - 619 DA - (B) - Ratio	2.2	4	846	531	126	173	208	909	531	126	173	215		
CHFM4 - 619 DA - (B) - Ratio	3	4	869	531	147	212	218	941	531	147	212	228		
CHFM5 - 619 DA - (B) - Ratio	3.7	4	869	531	147	212	218	941	531	147	212	228		
CHFM8 - 619 DA - (B) - Ratio	5.5	4	913	531	147	212	225	985	531	147	212	235		
CHFM5 - 619 DB - (B) - Ratio	3.7	4	885	531	147	212	225	957	531	147	212	235		
CHFM8 - 619 DB - (B) - Ratio	5.5	4	929	531	147	212	232	1001	531	147	212	242		
CHFM10 - 619 DB - (B) - Ratio	7.5	4	952	531	188	251	247	1047	531	188	251	265		
CHFM15 - 619 DB - (B) - Ratio	11	4	1012	531	188	251	261	1107	531	188	251	279		
CHFM20 - 619 DB - (B) - Ratio	15	4	1102	531	232	324	313	1207	531	259	324	347		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 ".

DIMENSION TABLE

CHFM^{Note 1} - 6205DA ~ 6215DA



CHFM

CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	H	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
														d1	L1	b1	h1	t1	S1	m1
6205DA	597	410	443	405	360	448	283	M16	57	20	12	18	15	100	165	28	16	10	M20	34
6205DB	624	410	443	405	360	448	283	M16	57	20	12	18	15	100	165	28	16	10	M20	34
6215DA	650	423	480	440	390	485	312	M18	57	20	12	20.5	15	110	165	28	16	10	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHFM1 - 6205DA - (B) - Ratio	0.75	4	834	530	114	148	224	877	530	114	148	227	
CHFM2 - 6205DA - (B) - Ratio	1.5	4	867	530	119	160	228	929	530	119	160	233	
CHFM3 - 6205DA - (B) - Ratio	2.2	4	887	530	126	173	232	949	530	126	173	239	
CHFM4 - 6205DA - (B) - Ratio	3	4	910	530	147	212	242	982	530	147	212	252	
CHFM5 - 6205DA - (B) - Ratio	3.7	4	910	530	147	212	242	982	530	147	212	252	
CHFM8 - 6205DA - (B) - Ratio	5.5	4	954	530	147	212	249	1026	530	147	212	259	
CHFM3 - 6205DB - (B) - Ratio	2.2	4	914	530	126	173	244	977	530	126	173	251	
CHFM4 - 6205DB - (B) - Ratio	3	4	937	530	147	212	254	1009	530	147	212	264	
CHFM5 - 6205DB - (B) - Ratio	3.7	4	937	530	147	212	254	1009	530	147	212	264	
CHFM8 - 6205DB - (B) - Ratio	5.5	4	981	530	147	212	261	1053	530	147	212	271	
CHFM10 - 6205DB - (B) - Ratio	7.5	4	1004	530	188	251	276	1099	530	188	251	294	
CHFM15 - 6205DB - (B) - Ratio	11	4	1064	530	188	251	289	1159	530	188	251	307	
CHFM20 - 6205DB - (B) - Ratio	15	4	1154	530	232	324	341	1249	530	259	324	374	
CHFM2 - 6215DA - (B) - Ratio	1.5	4	920	575	119	160	320	982	575	119	160	325	
CHFM3 - 6215DA - (B) - Ratio	2.2	4	940	575	126	173	323	1003	575	126	173	330	
CHFM4 - 6215DA - (B) - Ratio	3	4	963	575	147	212	333	1035	575	147	212	343	
CHFM5 - 6215DA - (B) - Ratio	3.7	4	963	575	147	212	333	1035	575	147	212	343	
CHFM8 - 6215DA - (B) - Ratio	5.5	4	1007	575	147	212	340	1079	575	147	212	350	
CHFM10 - 6215DA - (B) - Ratio	7.5	4	1030	575	188	251	355	1125	575	188	251	373	
CHFM15 - 6215DA - (B) - Ratio	11	4	1090	575	188	251	368	1185	575	188	251	386	
CHFM20 - 6215DA - (B) - Ratio	15	4	1180	575	232	324	420	1285	575	259	324	454	

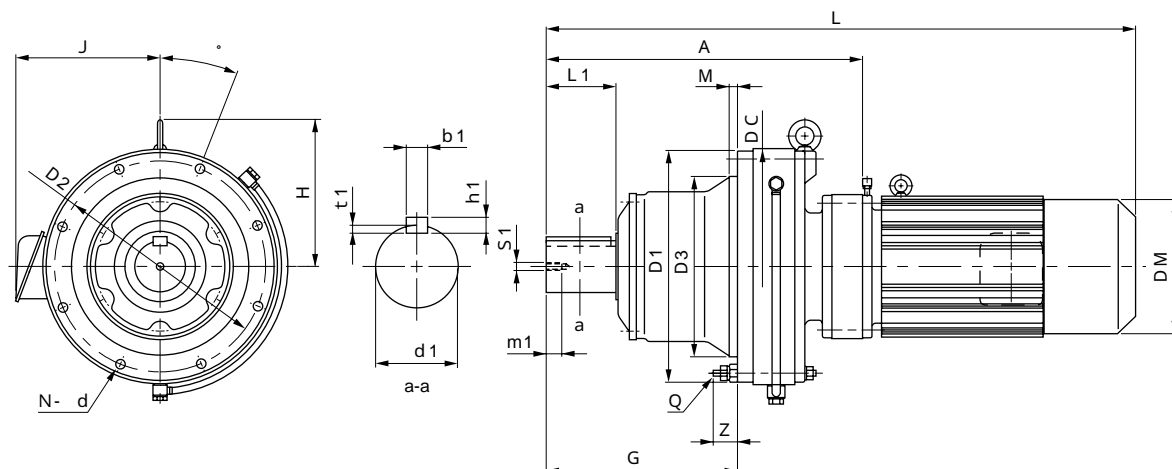
Notes : 5. The dimensions in these drawings are subject to change without notice.

6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B " is inserted following the frame size.

8. Output shaft length (L1) is shorter for vertical down (CVFM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE Note 1 CHFMI- 6215DB ~ 6225DB



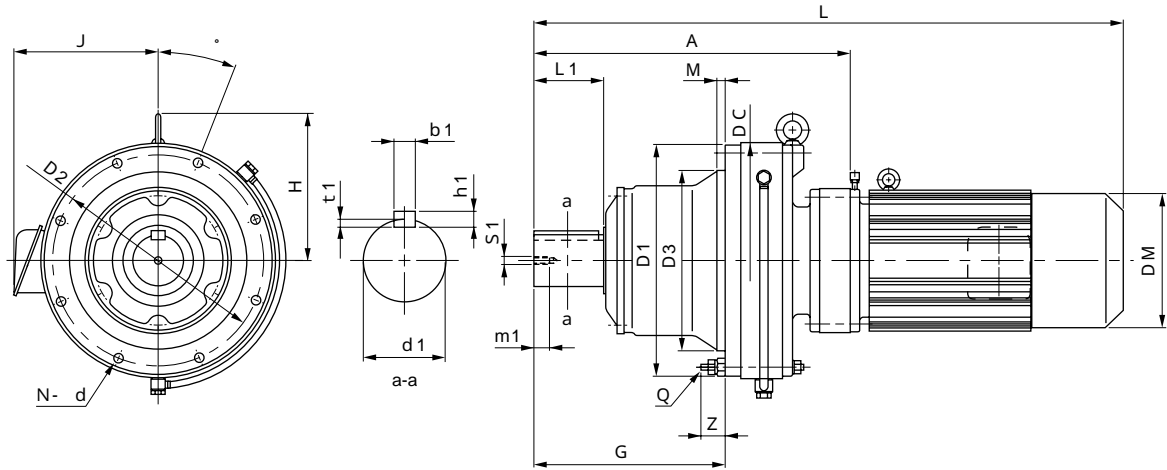
CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	H	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
														d1	L1	b1	h1	t1	S1	m1
6215DB	675	423	480	440	390	485	312	M18	57	20	12	20.5	15	110	165	28	16	10	M20	34
6225DA	692	454	521	475	420	526	333	M20	65	20	12	22	15	120	165	32	18	11	M20	34
6225DB	735	454	521	475	420	526	333	M20	65	20	12	22	15	120	165	32	18	11	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHFM10 - 6215DB - (B) - Ratio	7.5	4	1060	575	188	251	375	1155	575	188	251	392	
CHFM15 - 6215DB - (B) - Ratio	11	4	1120	575	188	251	389	1215	575	188	251	406	
CHFM20 - 6215DB - (B) - Ratio	15	4	1205	575	232	324	442	1310	575	259	324	476	
CHFM25 - 6215DB - (B) - Ratio	18.5	4	1300	575	297	394	513	1465	575	297	394	564	
CHFM30 - 6215DB - (B) - Ratio	22	4	1300	575	297	394	513	1465	575	297	394	564	
CHFM2 - 6225DA - (B) - Ratio	1.5	4	962	610	119	160	377	1024	610	119	160	382	
CHFM3 - 6225DA - (B) - Ratio	2.2	4	982	610	126	173	380	1045	610	126	173	387	
CHFM4 - 6225DA - (B) - Ratio	3	4	1005	610	147	212	390	1077	610	147	212	400	
CHFM5 - 6225DA - (B) - Ratio	3.7	4	1005	610	147	212	390	1077	610	147	212	400	
CHFM8 - 6225DA - (B) - Ratio	5.5	4	1049	610	147	212	397	1121	610	147	212	407	
CHFM10 - 6225DA - (B) - Ratio	7.5	4	1072	610	188	251	412	1167	610	188	251	430	
CHFM15 - 6225DA - (B) - Ratio	11	4	1132	610	188	251	426	1227	610	188	251	444	
CHFM20 - 6225DA - (B) - Ratio	15	4	1222	610	232	324	478	1327	610	259	324	512	
CHFM10 - 6225DB - (B) - Ratio	7.5	4	1125	610	188	251	457	1220	610	188	251	475	
CHFM15 - 6225DB - (B) - Ratio	11	4	1185	610	188	251	471	1280	610	188	251	489	
CHFM20 - 6225DB - (B) - Ratio	15	4	1265	610	232	324	525	1370	610	259	324	559	
CHFM25 - 6225DB - (B) - Ratio	18.5	4	1360	610	297	394	593	1525	610	297	394	644	
CHFM30 - 6225DB - (B) - Ratio	22	4	1360	610	297	394	593	1525	610	297	394	644	
CHFM40 - 6225DB - (B) - Ratio	30	4	1360	610	297	394	610	1525	610	297	394	661	

Notes : 1. Motor capacity symbol is inserted in [] .
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 " .
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976 .
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 " .

DIMENSION TABLE

CHFMI^{Note 1} - 6235DA ~ 6245DB



CHFM

CHFM	A	G	D1	D2	D3 <small>Note: 4</small>	DC	H	Q	Z	M	N	d	°	Output Shaft <small>Notes: 2, 3, 8</small>						
														d1	L1	b1	h1	t1	S1	m1
6235DA	778	505	557	510	455	562	351	M20	68	20	12	22	15	130	200	32	18	11	M24	41
6235DB	800	505	557	510	455	562	351	M20	68	20	12	22	15	130	200	32	18	11	M24	41
6245DA	816	529	615	560	500	614	395	M24	65	25	12	27	15	140	200	36	20	12	M24	41
6245DB	837	529	615	560	500	614	395	M24	65	25	12	27	15	140	200	36	20	12	M24	41

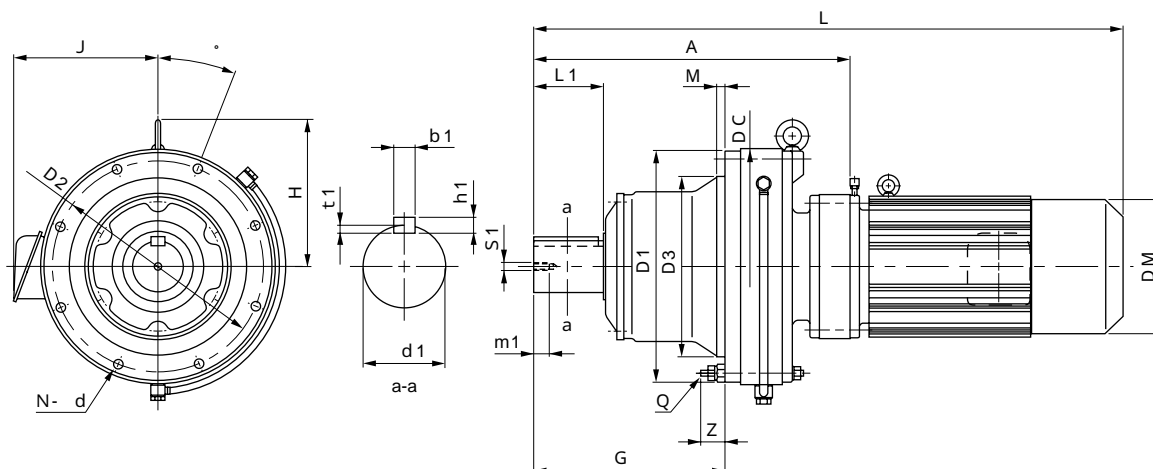
Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHFM3 - 6235DA - (B) - Ratio	2.2	4	1068	667	126	173	484	1131	667	126	173	490
CHFM4 - 6235DA - (B) - Ratio	3	4	1091	667	147	212	493	1163	667	147	212	503
CHFM5 - 6235DA - (B) - Ratio	3.7	4	1091	667	147	212	493	1163	667	147	212	503
CHFM8 - 6235DA - (B) - Ratio	5.5	4	1135	667	147	212	500	1207	667	147	212	510
CHFM10 - 6235DA - (B) - Ratio	7.5	4	1163	667	188	251	516	1258	667	188	251	533
CHFM15 - 6235DA - (B) - Ratio	11	4	1223	667	188	251	530	1318	667	188	251	547
CHFM20 - 6235DA - (B) - Ratio	15	4	1308	667	232	324	583	1413	667	259	324	617
CHFM25 - 6235DA - (B) - Ratio	18.5	4	1403	667	297	394	656	1568	667	297	394	707
CHFM30 - 6235DA - (B) - Ratio	22	4	1403	667	297	394	656	1568	667	297	394	707
CHFM40 - 6235DB - (B) - Ratio	30	4	1425	667	297	394	705	1590	667	297	394	748
CHFM50 - 6235DB - (B) - Ratio	37	4	1540	667	297	394	743	1755	667	297	394	840
CHFM3 - 6245DA - (B) - Ratio	2.2	4	1106	729	126	173	592	1169	729	126	173	598
CHFM4 - 6245DA - (B) - Ratio	3	4	1129	729	147	212	601	1201	729	147	212	611
CHFM5 - 6245DA - (B) - Ratio	3.7	4	1129	729	147	212	601	1201	729	147	212	611
CHFM8 - 6245DA - (B) - Ratio	5.5	4	1173	729	147	212	608	1245	729	147	212	618
CHFM10 - 6245DA - (B) - Ratio	7.5	4	1201	729	188	251	624	1296	729	188	251	641
CHFM15 - 6245DA - (B) - Ratio	11	4	1261	729	188	251	638	1356	729	188	251	655
CHFM20 - 6245DA - (B) - Ratio	15	4	1346	729	232	324	691	1451	729	259	324	725
CHFM25 - 6245DA - (B) - Ratio	18.5	4	1441	729	297	394	758	1606	729	297	394	809
CHFM30 - 6245DA - (B) - Ratio	22	4	1441	729	297	394	758	1606	729	297	394	809
CHFM20 - 6245DB - (B) - Ratio	15	4	1367	729	232	324	722	1472	729	259	324	751
CHFM30 - 6245DB - (B) - Ratio	22	4	1462	729	297	394	784	1627	729	297	394	835
CHFM40 - 6245DB - (B) - Ratio	30	4	1462	729	297	394	801	1627	729	297	394	844
CHFM50 - 6245DB - (B) - Ratio	37	4	1577	729	297	394	838	1792	729	297	394	935

Notes : 5. The dimensions in these drawings are subject to change without notice.
 6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 7. When equipped with brake, " B "is inserted following the frame size.
 8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CHFMI- 6255DA ~ 6265DA

Note 1

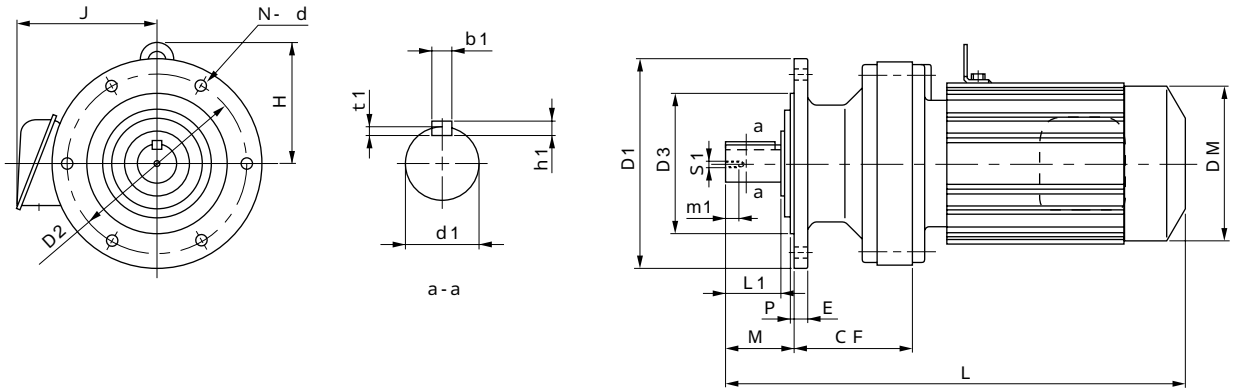


CHFM	A	G	D1	D2	D3 Note: 4	DC	H	Q	Z	M	N	d	°	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6255DA	956	616	666	610	540	670	386	M24	88	30	12	27	15	160	240	40	22	13	M30	49
6255DB	978	616	666	610	540	670	386	M24	88	30	12	27	15	160	240	40	22	13	M30	49
6265DA	1088	712	730	660	570	736	453	M30	82	40	12	34	15	170	300	40	22	13	M30	49

Model	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHFM5 - 6255DA - (B) - Ratio	3.7	4	1284	815	147	212	867	1356	815	147	212	877	
CHFM8 - 6255DA - (B) - Ratio	5.5	4	1328	815	147	212	877	1400	815	147	212	887	
CHFM10 - 6255DA - (B) - Ratio	7.5	4	1346	815	188	251	892	1441	815	188	251	907	
CHFM15 - 6255DA - (B) - Ratio	11	4	1406	815	188	251	907	1501	815	188	251	922	
CHFM20 - 6255DA - (B) - Ratio	15	4	1486	815	232	324	957	1591	815	259	324	993	
CHFM25 - 6255DA - (B) - Ratio	18.5	4	1581	815	297	394	1027	1746	815	297	394	1078	
CHFM30 - 6255DA - (B) - Ratio	22	4	1581	815	297	394	1027	1746	815	297	394	1078	
CHFM40 - 6255DA - (B) - Ratio	30	4	1581	815	297	394	1047	1746	815	297	394	1090	
CHFM25 - 6255DB - (B) - Ratio	18.5	4	1603	815	297	394	1102	1768	815	297	394	1153	
CHFM30 - 6255DB - (B) - Ratio	22	4	1603	815	297	394	1102	1768	815	297	394	1153	
CHFM40 - 6255DB - (B) - Ratio	30	4	1603	815	297	394	1117	1768	815	297	394	1160	
CHFM50 - 6255DB - (B) - Ratio	37	4	1718	815	297	394	1154	1928	815	297	394	1251	
CHFM60 - 6255DB - (B) - Ratio	45	4	1718	815	297	394	1154	1928	815	297	394	1251	
CHFM8 - 6265DA - (B) - Ratio	5.5	4	1480	874	147	212	1195	1552	874	147	212	1205	
CHFM10 - 6265DA - (B) - Ratio	7.5	4	1493	874	188	251	1210	1588	874	188	251	1230	
CHFM15 - 6265DA - (B) - Ratio	11	4	1553	874	188	251	1225	1648	874	188	251	1240	
CHFM20 - 6265DA - (B) - Ratio	15	4	1618	874	232	324	1275	1723	874	259	324	1311	
CHFM25 - 6265DA - (B) - Ratio	18.5	4	1713	874	297	394	1350	1878	874	297	394	1395	
CHFM30 - 6265DA - (B) - Ratio	22	4	1713	874	297	394	1350	1878	874	297	394	1395	
CHFM40 - 6265DA - (B) - Ratio	30	4	1713	874	297	394	1365	1878	874	297	394	1408	
CHFM50 - 6265DA - (B) - Ratio	37	4	1828	874	297	394	1400	2043	874	297	394	1497	
CHFM60 - 6265DA - (B) - Ratio	45	4	1828	874	297	394	1400	2043	874	297	394	1497	

- Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " g6 ".
 5. The dimensions in these drawings are subject to change without notice.
 6. 0 or 5 is inserted in [] by combination with reduction ratio. Refer to the selection list for details.
 7. When equipped with brake, " B " is inserted following the frame size.
 8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CNVM^{Note1} - 606 ~ 609



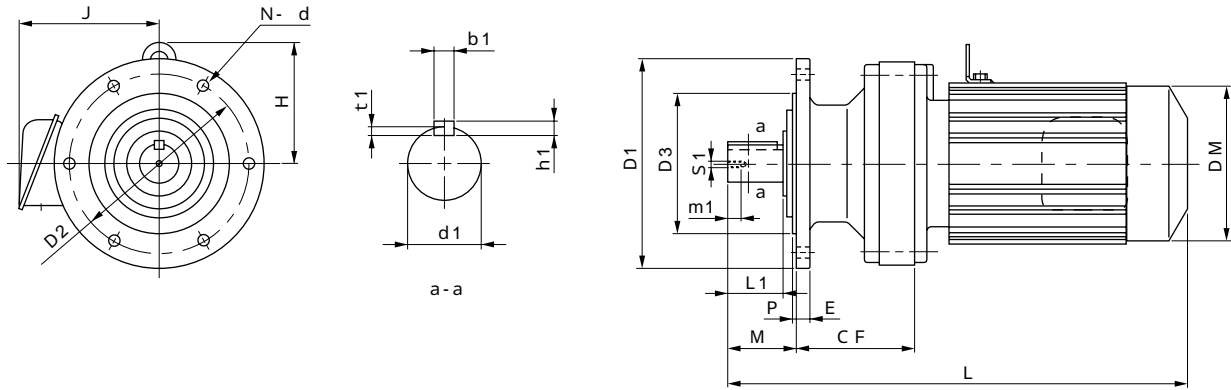
CNVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	H	Output Shaft <small>Notes: 2, 3, 8</small>						
											d1	L1	b1	h1	t1	S1	m1
606	58	120	102	80	34	8	3	6	9	-	14	25	5	5	3	M5	16
607	56	160	134	110	42	9	3	4	11	-	18	30	6	6	3.5	M6	16
608	81	160	134	110	48	9	3	4	11	-	22	35	6	6	3.5	M6	16
609	94	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20

Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CNVM01 - 606 - (B) - Ratio	0.1	4	226	85	119	6	261	85	124	8	
CNVM02 - 606 - (B) - Ratio	0.2	4	268	85	124	7	300	85	124	9	
CNVM03 - 606 - (B) - Ratio	0.25	4	268	85	124	8	300	85	124	9	
CNVM01 - 607 - (B) - Ratio	0.1	4	232	85	119	8	267	85	124	9	
CNVM02 - 607 - (B) - Ratio	0.2	4	274	85	124	9	306	85	124	10	
CNVM03 - 607 - (B) - Ratio	0.25	4	274	85	124	9	306	85	124	10	
CNVM05 - 607 - (B) - Ratio	0.4	4	294	85	124	10	326	85	124	11	
CNVM01 - 608 - (B) - Ratio	0.1	4	258	85	119	11	293	85	124	12	
CNVM02 - 608 - (B) - Ratio	0.2	4	300	85	124	12	332	85	124	13	
CNVM03 - 608 - (B) - Ratio	0.25	4	300	85	124	12	332	85	124	13	
CNVM05 - 608 - (B) - Ratio	0.4	4	320	85	124	14	352	85	124	15	
CNVM08 - 608 - (B) - Ratio	0.55	4	361	114	148	18	404	114	148	19	
CNVM1 - 608 - (B) - Ratio	0.75	4	361	114	148	18	404	114	148	19	
CNVM01 - 609 - (B) - Ratio	0.1	4	276	85	119	12	311	85	124	14	
CNVM02 - 609 - (B) - Ratio	0.2	4	318	85	124	13	350	85	124	15	
CNVM03 - 609 - (B) - Ratio	0.25	4	318	85	124	13	350	85	124	15	
CNVM05 - 609 - (B) - Ratio	0.4	4	338	85	124	14	370	85	124	16	
CNVM08 - 609 - (B) - Ratio	0.55	4	379	114	148	18	422	114	148	21	
CNVM1 - 609 - (B) - Ratio	0.75	4	379	114	148	18	422	114	148	21	
CNVM1H - 609 - (B) - Ratio	1.1	4	412	119	160	21	474	119	160	26	
CNVM2 - 609 - (B) - Ratio	1.5	4	412	119	160	21	474	119	160	26	

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

DIMENSION TABLE

CNVM^{Note 1}- 610 ~ 612



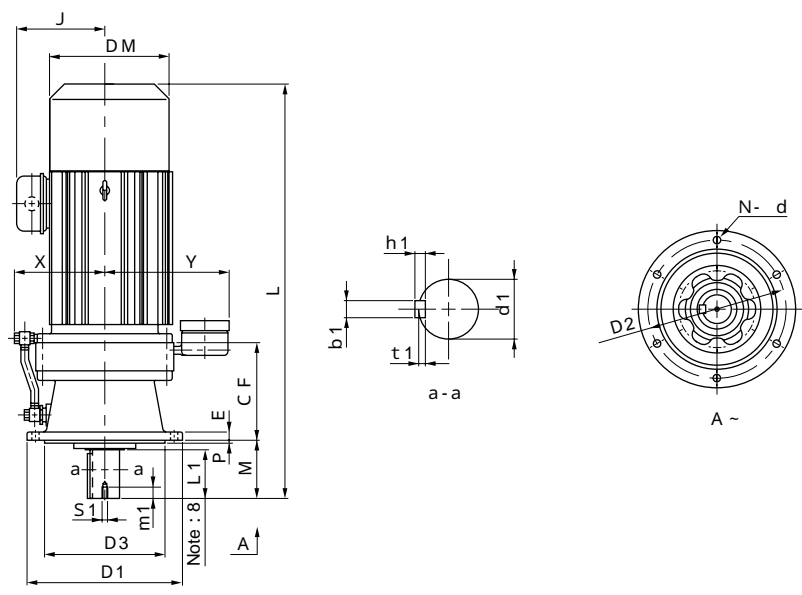
CNVM

CNVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	H	Output Shaft <small>Notes: 2, 3, 8</small>						
											d1	L1	b1	h1	t1	S1	m1
610	108	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20
611	112	210	180	140	58	11	4	6	11	116	32	45	10	8	5	M8	20
612	117	210	180	140	69	13	4	6	11	137	38	55	10	8	5	M8	20

Model <small>Notes: 6, 7</small>	Motor		Standard						With Brake			
	kW	P	L	J	DM	W (kg)	L	J	DM	W (kg)		
CNVM02 - 610 - (B) - Ratio	0.2	4	332	85	124	15	364	85	124	17		
CNVM03 - 610 - (B) - Ratio	0.25	4	332	85	124	15	364	85	124	17		
CNVM05 - 610 - (B) - Ratio	0.4	4	352	85	124	16	384	85	124	18		
CNVM08 - 610 - (B) - Ratio	0.55	4	393	114	148	20	436	114	148	23		
CNVM1 - 610 - (B) - Ratio	0.75	4	393	114	148	20	436	114	148	23		
CNVM1H - 610 - (B) - Ratio	1.1	4	426	119	160	24	488	119	160	29		
CNVM2 - 610 - (B) - Ratio	1.5	4	426	119	160	24	488	119	160	29		
CNVM3 - 610 - (B) - Ratio	2.2	4	446	126	173	28	509	126	173	34		
CNVM05 - 611 - (B) - Ratio	0.4	4	363	85	124	18	394	85	124	20		
CNVM08 - 611 - (B) - Ratio	0.55	4	403	114	148	21	452	114	148	24		
CNVM1 - 611 - (B) - Ratio	0.75	4	403	114	148	21	452	114	148	24		
CNVM1H - 611 - (B) - Ratio	1.1	4	436	119	160	24	493	119	160	29		
CNVM2 - 611 - (B) - Ratio	1.5	4	436	119	160	24	493	119	160	29		
CNVM3 - 611 - (B) - Ratio	2.2	4	456	126	173	28	519	126	173	34		
CNVM4 - 611 - (B) - Ratio	3	4	491	147	212	38	563	147	212	48		
CNVM5 - 611 - (B) - Ratio	3.7	4	491	147	212	38	563	147	212	48		
CNVM08 - 612 - (B) - Ratio	0.55	4	423	114	148	30	466	114	148	33		
CNVM1 - 612 - (B) - Ratio	0.75	4	423	114	148	30	466	114	148	33		
CNVM1H - 612 - (B) - Ratio	1.1	4	456	119	160	34	518	119	160	39		
CNVM2 - 612 - (B) - Ratio	1.5	4	456	119	160	34	518	119	160	39		
CNVM3 - 612 - (B) - Ratio	2.2	4	476	126	173	38	539	126	173	45		
CNVM4 - 612 - (B) - Ratio	3	4	499	147	212	48	571	147	212	58		
CNVM5 - 612 - (B) - Ratio	3.7	4	499	147	212	48	571	147	212	58		
CNVM8 - 612 - (B) - Ratio	5.5	4	543	147	212	55	615	147	212	65		

- Notes :
- The dimensions in these drawings are subject to change without notice.
 - 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 - When equipped with brake, " B "is inserted following the frame size.
 - Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CVVM^{Note 1} - 613 ~ 614



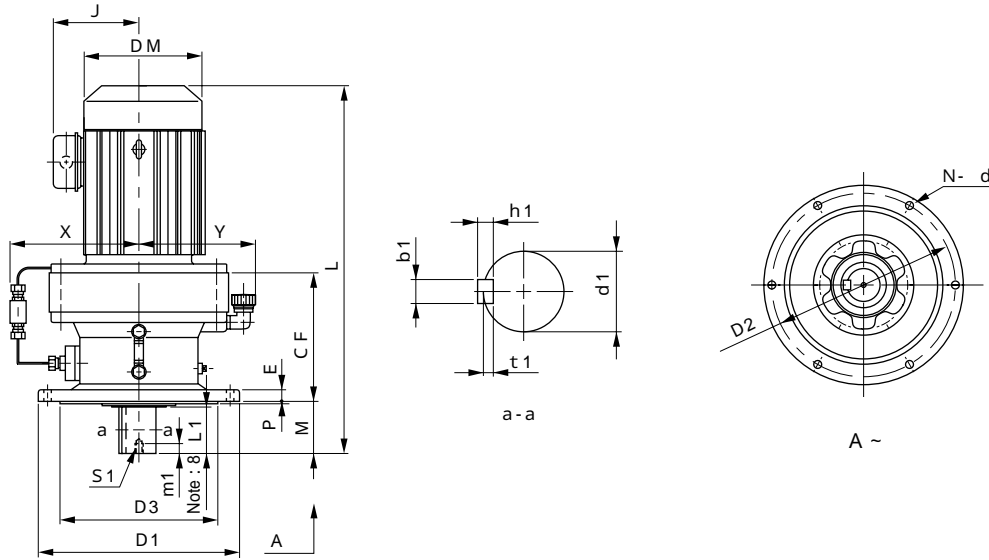
CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
613	164	260	230	200	76	15	4	6	11	152	233	50	61	14	9	5.5	M10	18
614	164	260	230	200	96	15	4	6	11	152	233	50	81	14	9	5.5	M10	18

Model	<small>Notes: 6, 7</small>	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM1 - 613	-(B) - Ratio	0.75	4	477	114	148	50	520	114	148	53
CVVM1H - 613	-(B) - Ratio	1.1	4	510	119	160	54	572	119	160	59
CVVM2 - 613	-(B) - Ratio	1.5	4	510	119	160	54	572	119	160	59
CVVM3 - 613	-(B) - Ratio	2.2	4	530	126	173	57	593	126	173	64
CVVM4 - 613	-(B) - Ratio	3	4	553	147	212	67	625	147	212	77
CVVM5 - 613	-(B) - Ratio	3.7	4	553	147	212	67	625	147	212	77
CVVM8 - 613	-(B) - Ratio	5.5	4	597	147	212	74	669	147	212	84
CVVM10 - 613	-(B) - Ratio	7.5	4	620	188	251	89	715	188	251	107
CVVM15 - 613	-(B) - Ratio	11	4	680	188	251	103	775	188	251	120
CVVM1H - 614	-(B) - Ratio	1.1	4	530	119	160	55	592	119	160	60
CVVM2 - 614	-(B) - Ratio	1.5	4	530	119	160	55	592	119	160	60
CVVM3 - 614	-(B) - Ratio	2.2	4	550	126	173	58	613	126	173	65
CVVM4 - 614	-(B) - Ratio	3	4	573	147	212	68	645	147	212	78
CVVM5 - 614	-(B) - Ratio	3.7	4	573	147	212	68	645	147	212	78
CVVM8 - 614	-(B) - Ratio	5.5	4	617	147	212	75	689	147	212	85
CVVM10 - 614	-(B) - Ratio	7.5	4	640	188	251	90	735	188	251	108
CVVM15 - 614	-(B) - Ratio	11	4	700	188	251	103	795	188	251	121
CVVM20 - 614	-(B) - Ratio	15	4	790	232	324	155	895	259	324	189

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

DIMENSION TABLE

CVVM^{Note1} - 616 ~ 617



CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
616	219	340	310	270	89	20	4	6	11	217	200	60	80	18	11	7	M10	18
617	258	400	360	316	94	22	5	8	14	222	225	70	84	20	12	7.5	M12	24

Model	Notes: 6, 7	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM2 - 616	(B) - Ratio	1.5	4	583	119	160	88	645	119	160	93
CVVM3 - 616	(B) - Ratio	2.2	4	598	126	173	91	661	126	173	97
CVVM4 - 616	(B) - Ratio	3	4	621	147	212	100	693	147	212	110
CVVM5 - 616	(B) - Ratio	3.7	4	621	147	212	100	693	147	212	110
CVVM8 - 616	(B) - Ratio	5.5	4	665	147	212	107	737	147	212	117
CVVM10 - 616	(B) - Ratio	7.5	4	693	188	251	123	788	188	251	140
CVVM15 - 616	(B) - Ratio	11	4	753	188	251	137	848	188	251	154
CVVM20 - 616	(B) - Ratio	15	4	838	232	324	190	943	259	324	224
CVVM25 - 616	(B) - Ratio	18.5	4	933	297	394	262	1098	297	394	313
CVVM30 - 616	(B) - Ratio	22	4	933	297	394	262	1098	297	394	313
CVVM4 - 617	(B) - Ratio	3	4	680	147	212	143	752	147	212	153
CVVM5 - 617	(B) - Ratio	3.7	4	680	147	212	143	752	147	212	153
CVVM8 - 617	(B) - Ratio	5.5	4	724	147	212	150	796	147	212	160
CVVM10 - 617	(B) - Ratio	7.5	4	742	188	251	165	837	188	251	183
CVVM15 - 617	(B) - Ratio	11	4	802	188	251	179	897	188	251	197
CVVM20 - 617	(B) - Ratio	15	4	882	232	324	233	987	259	324	267
CVVM25 - 617	(B) - Ratio	18.5	4	977	297	394	301	1142	232	324	352
CVVM30 - 617	(B) - Ratio	22	4	977	297	394	301	1142	232	324	352
CVVM40 - 617	(B) - Ratio	30	4	977	297	394	318	1142	232	324	361

Notes : 5. The dimensions in these drawings are subject to change without notice.

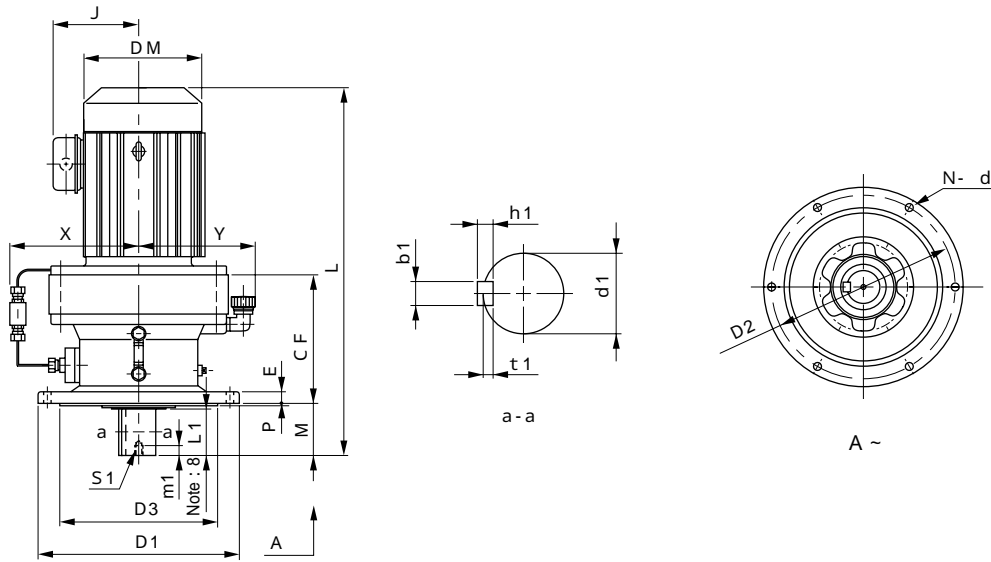
6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B "is inserted following the frame size.

8. Output shaft length (L1) is longer for horizontal (CHVM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CVVM^{Note 1} - 618 ~ 619



CVVM	CF	D1	D2	D3 Note: 4	M	E	P	N	d	X	Y	Output Shaft						
												d1	L1	b1	h1	t1	S1	m1
618	279	430	390	345	110	22	5	8	18	237	240	80	100	22	14	9	M12	24
619	320	490	450	400	145	30	6	12	18	265	270	95	125	25	14	9	M20	34

Model	Notes: 6, 7	Motor		Standard				With Brake			
		kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM5 - 618	-(B) - Ratio	3.7	4	717	147	212	169	789	147	212	179
CVVM8 - 618	-(B) - Ratio	5.5	4	761	147	212	177	833	147	212	187
CVVM10 - 618	-(B) - Ratio	7.5	4	779	188	251	192	874	188	251	210
CVVM15 - 618	-(B) - Ratio	11	4	839	188	251	206	934	188	251	224
CVVM20 - 618	-(B) - Ratio	15	4	919	232	324	266	1024	259	324	295
CVVM25 - 618	-(B) - Ratio	18.5	4	1014	297	394	328	1179	297	394	379
CVVM30 - 618	-(B) - Ratio	22	4	1014	297	394	328	1179	297	394	379
CVVM40 - 618	-(B) - Ratio	30	4	1014	297	394	345	1179	297	394	388
CVVM50 - 618	-(B) - Ratio	37	4	1129	297	394	393	1344	297	394	490
CVVM60 - 618	-(B) - Ratio	45	4	1129	297	394	393	1344	297	394	490
CVVM8 - 619	-(B) - Ratio	5.5	4	857	147	212	249	929	147	212	259
CVVM10 - 619	-(B) - Ratio	7.5	4	870	188	251	262	965	188	251	280
CVVM15 - 619	-(B) - Ratio	11	4	930	188	251	276	1025	188	251	294
CVVM20 - 619	-(B) - Ratio	15	4	995	232	324	329	1100	259	324	364
CVVM25 - 619	-(B) - Ratio	18.5	4	1090	297	394	401	1255	297	394	446
CVVM256 - 619	-(B) - Ratio	18.5	6	1090	297	394	401	1255	297	394	444
CVVM30 - 619	-(B) - Ratio	22	4	1090	297	394	401	1255	297	394	446
CVVM40 - 619	-(B) - Ratio	30	4	1090	297	394	416	1255	297	394	444
CVVM406 - 619	-(B) - Ratio	30	6	1205	297	394	454	1420	297	394	551
CVVM50 - 619	-(B) - Ratio	37	4	1205	297	394	454	1420	297	394	551
CVVM506 - 619	-(B) - Ratio	37	6	1205	297	394	454	1420	297	394	551
CVVM60 - 619	-(B) - Ratio	45	4	1205	297	394	454	1420	297	394	551

Notes : 1. Motor capacity symbol is inserted in [].

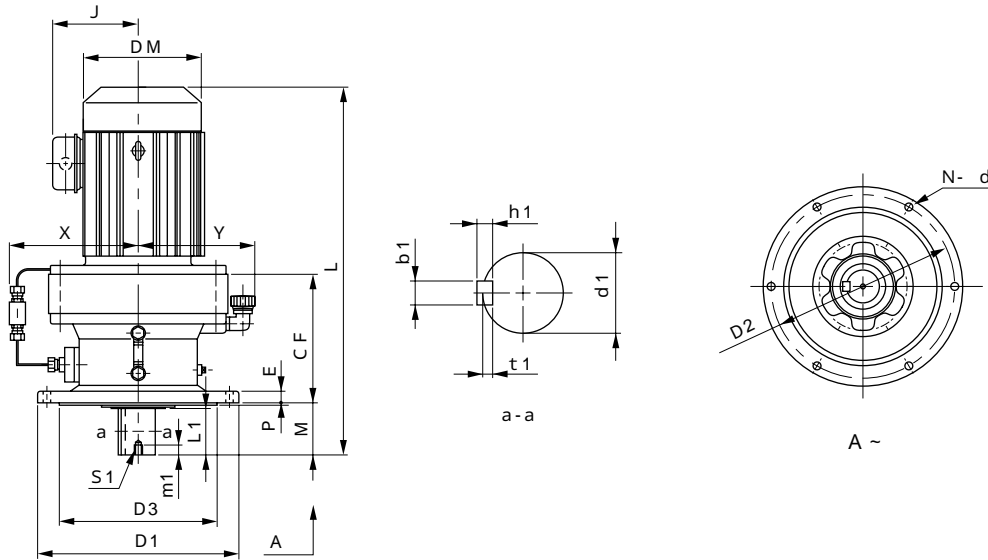
2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".

3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

DIMENSION TABLE

CVVM^{Note1} - 6205 ~ 6215



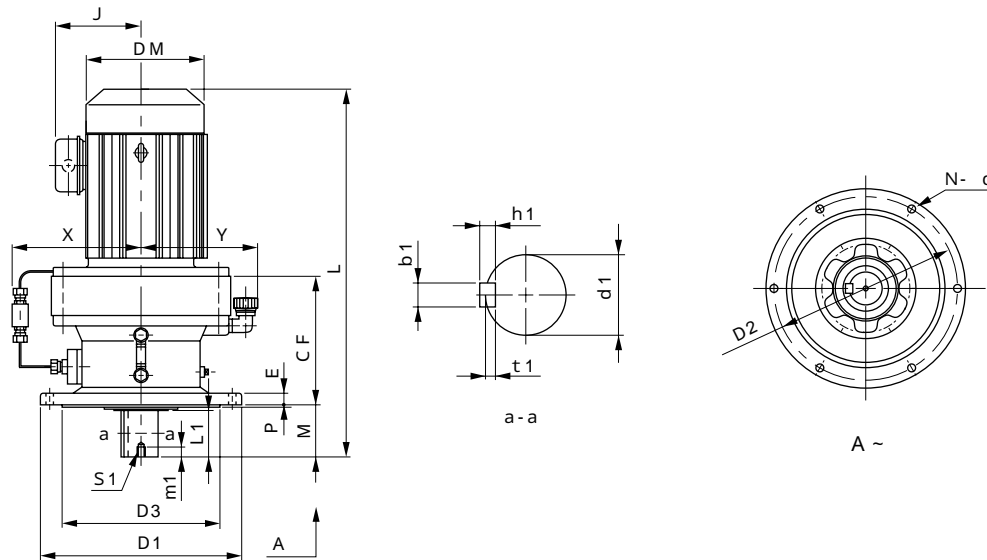
CVVM

CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
6205	298	455	405	355	204	30	5	8	22	341	287	100	165	28	16	10	M20	34
6215	323	490	440	390	203	35	7	8	24	348	306	110	165	28	16	10	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CVVM15 - 6205 - (B) - Ratio	11	4	972	188	251	298	1067	188	251	316	
CVVM20 - 6205 - (B) - Ratio	15	4	1042	232	324	352	1147	259	324	388	
CVVM206 - 6205 - (B) - Ratio	15	6	1127	297	394	423	1292	297	394	468	
CVVM25 - 6205 - (B) - Ratio	18.5	4	1127	297	394	423	1292	297	394	468	
CVVM30 - 6205 - (B) - Ratio	22	4	1127	297	394	423	1292	297	394	468	
CVVM306 - 6205 - (B) - Ratio	22	6	1127	297	394	436	1292	297	394	481	
CVVM40 - 6205 - (B) - Ratio	30	4	1127	297	394	436	1292	297	394	481	
CVVM406 - 6205 - (B) - Ratio	30	6	1242	297	394	474	1457	297	394	568	
CVVM50 - 6205 - (B) - Ratio	37	4	1242	297	394	474	1457	297	394	568	
CVVM506 - 6205 - (B) - Ratio	37	6	1242	297	394	474	1457	297	394	568	
CVVM60 - 6205 - (B) - Ratio	45	4	1242	297	394	474	1457	297	394	568	
CVVM606 - 6205 - (B) - Ratio	45	6	1297	412	484	567	-	-	-	-	
CVVM75 - 6205 - (B) - Ratio	55	4	1297	412	484	567	-	-	-	-	
CVVM15 - 6215 - (B) - Ratio	11	4	996	188	251	376	1091	188	251	394	
CVVM20 - 6215 - (B) - Ratio	15	4	1066	232	324	431	1171	259	324	466	
CVVM206 - 6215 - (B) - Ratio	15	6	1151	297	394	496	1316	297	394	541	
CVVM25 - 6215 - (B) - Ratio	18.5	4	1151	297	394	496	1316	297	394	541	
CVVM256 - 6215 - (B) - Ratio	18.5	6	1151	297	394	509	1316	297	394	554	
CVVM30 - 6215 - (B) - Ratio	22	4	1151	297	394	496	1316	297	394	541	
CVVM306 - 6215 - (B) - Ratio	22	6	1151	297	394	509	1316	297	394	554	
CVVM40 - 6215 - (B) - Ratio	30	4	1151	297	394	509	1316	297	394	554	
CVVM406 - 6215 - (B) - Ratio	30	6	1266	297	394	564	1481	297	394	659	
CVVM50 - 6215 - (B) - Ratio	37	4	1266	297	394	564	1481	297	394	659	
CVVM506 - 6215 - (B) - Ratio	37	6	1266	297	394	564	1481	297	394	659	
CVVM60 - 6215 - (B) - Ratio	45	4	1266	297	394	564	1481	297	394	659	
CVVM606 - 6215 - (B) - Ratio	45	6	1321	412	484	657	-	-	-	-	
CVVM75 - 6215 - (B) - Ratio	55	4	1321	412	484	657	-	-	-	-	

- Notes : 5. The dimensions in these drawings are subject to change without notice.
 6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 7. When equipped with brake, " B " is inserted following the frame size.
 8. Output shaft length (L1) is longer for horizontal (CHVM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CVVM^{Note 1} - 6225 ~ 6265



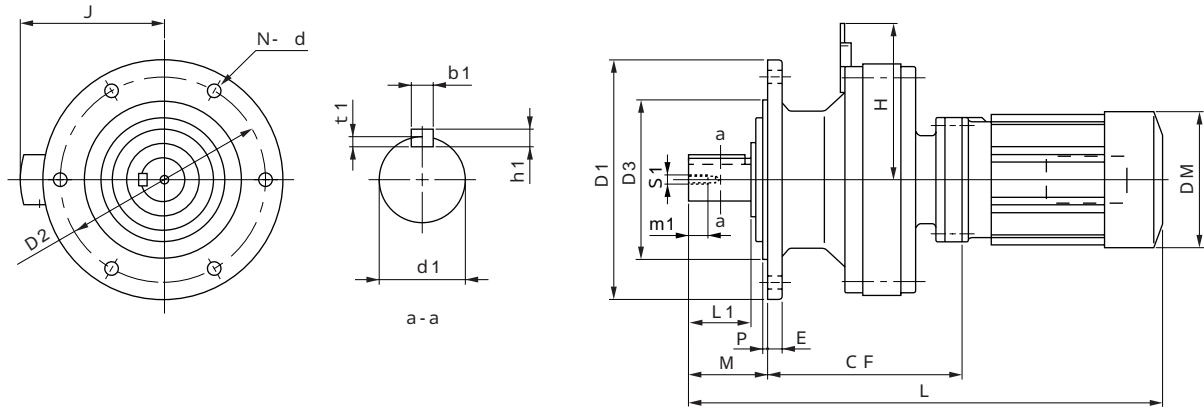
CVVM	CF	D1	D2	D3 Note: 4	M	E	P	N	d	X	Y	Output Shaft						Notes: 2, 3, 8	
												d1	L1	b1	h1	t1	S1	m1	
6225	356	535	475	415	210	35	10	8	27	352	326	120	165	32	18	11	M20	34	
6235	378	570	510	450	250	40	10	8	27	359	344	130	200	32	18	11	M24	41	
6245	407	635	560	485	250	40	10	8	33	370	371	140	200	36	20	12	M24	41	
6255	480	685	610	535	295	45	10	8	33	426	399	160	240	40	22	13	M30	49	
6265	532	750	660	570	360	50	10	8	39	460	431	170	300	40	22	13	M30	49	

Model	Motor		Standard				With Brake				
	Notes: 6, 7		kW	P	L	J	DM	W(kg)	L	J	DM
CVVM206 - 6225 - (B) - Ratio	15	6	1191	297	394	588	1356	297	394	633	
CVVM25 - 6225 - (B) - Ratio	18.5	4	1191	297	394	588	1356	297	394	633	
CVVM256 - 6225 - (B) - Ratio	18.5	6	1191	297	394	601	1356	297	394	646	
CVVM30 - 6225 - (B) - Ratio	22	4	1191	297	394	588	1356	297	394	633	
CVVM306 - 6225 - (B) - Ratio	22	6	1191	297	394	601	1356	297	394	646	
CVVM40 - 6225 - (B) - Ratio	30	4	1191	297	394	601	1356	297	394	646	
CVVM406 - 6225 - (B) - Ratio	30	6	1306	297	394	655	1521	297	394	750	
CVVM50 - 6225 - (B) - Ratio	37	4	1306	297	394	655	1521	297	394	750	
CVVM506 - 6225 - (B) - Ratio	37	6	1306	297	394	655	1521	297	394	750	
CVVM60 - 6225 - (B) - Ratio	45	4	1306	297	394	655	1521	297	394	750	
CVVM606 - 6225 - (B) - Ratio	45	6	1361	412	484	738	-	-	-	-	
CVVM75 - 6225 - (B) - Ratio	55	4	1361	412	484	738	-	-	-	-	
CVVM206 - 6235 - (B) - Ratio	15	6	1253	297	394	648	1418	297	394	679	
CVVM256 - 6235 - (B) - Ratio	18.5	6	1253	297	394	648	1418	297	394	693	
CVVM306 - 6235 - (B) - Ratio	22	6	1253	297	394	648	1418	297	394	693	
CVVM406 - 6235 - (B) - Ratio	30	6	1368	297	394	694	1583	297	394	782	
CVVM506 - 6235 - (B) - Ratio	37	6	1368	297	394	694	1583	297	394	782	
CVVM606 - 6235 - (B) - Ratio	45	6	1423	412	484	783	-	-	-	-	
CVVM756 - 6235 - (B) - Ratio	55	6	1503	412	485	837	-	-	-	-	
CVVM206 - 6245 - (B) - Ratio	15	6	1282	297	394	754	1447	297	394	787	
CVVM256 - 6245 - (B) - Ratio	18.5	6	1282	297	394	754	1447	297	394	801	
CVVM306 - 6245 - (B) - Ratio	22	6	1282	297	394	754	1447	297	394	801	
CVVM406 - 6245 - (B) - Ratio	30	6	1397	297	394	800	1612	297	394	888	
CVVM506 - 6245 - (B) - Ratio	37	6	1397	297	394	800	1612	297	394	888	
CVVM606 - 6245 - (B) - Ratio	45	6	1452	412	484	891	-	-	-	-	
CVVM756 - 6245 - (B) - Ratio	55	6	1532	412	485	940	-	-	-	-	
CVVM256 - 6255 - (B) - Ratio	18.5	6	1400	297	394	1040	1565	297	394	1132	
CVVM306 - 6255 - (B) - Ratio	22	6	1400	297	394	1040	1565	297	394	1132	
CVVM406 - 6255 - (B) - Ratio	30	6	1515	297	394	1085	1730	297	394	1173	
CVVM506 - 6255 - (B) - Ratio	37	6	1515	297	394	1085	1730	297	394	1173	
CVVM606 - 6255 - (B) - Ratio	45	6	1570	412	484	1165	-	-	-	-	
CVVM756 - 6255 - (B) - Ratio	55	6	1650	412	485	1220	-	-	-	-	
CVVM406 - 6265 - (B) - Ratio	30	6	1632	297	394	1390	1847	297	394	1478	
CVVM506 - 6265 - (B) - Ratio	37	6	1632	297	394	1390	1847	297	394	1478	
CVVM606 - 6265 - (B) - Ratio	45	6	1687	412	484	1485	-	-	-	-	

Notes : 1. Motor capacity symbol is inserted in [] .
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 " .
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 " .

DIMENSION TABLE

CNVM^{Note 1} - 606 DA ~ 612 DB



CNVM/CVVM

CNVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	H	Output Shaft <small>Notes: 2, 3, 8</small>						
											d1	L1	b1	h1	t1	S1	m1
606 DA	91	120	102	80	34	8	3	6	9	-	14	25	5	5	3	M5	16
607 DA	89	160	134	110	42	9	3	4	11	-	18	30	6	6	3.5	M6	16
609 DA	142	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20
610 DA	156	160	134	110	48	9	3	4	11	107	28	35	8	7	4	M8	20
612 DA	171	210	180	140	69	13	4	6	11	137	38	55	10	8	5	M8	20
612 DB	183	210	180	140	69	13	4	6	11	-	38	55	10	8	5	M8	20

Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CNVM01 - 606 DA - (B) - Ratio	0.1	4	259	85	119	8	294	85	124	11	
CNVM01 - 607 DA - (B) - Ratio	0.1	4	265	85	119	8	300	85	124	11	
CNVM02 - 607 DA - (B) - Ratio	0.2	4	307	85	124	9	339	85	124	12	
CNVM01 - 609 DA - (B) - Ratio	0.1	4	324	85	119	15	359	85	124	16	
CNVM02 - 609 DA - (B) - Ratio	0.2	4	366	85	124	16	398	85	124	17	
CNVM03 - 609 DA - (B) - Ratio	0.25	4	366	85	124	16	398	85	124	17	
CNVM05 - 609 DA - (B) - Ratio	0.4	4	386	85	124	17	418	85	124	18	
CNVM01 - 610 DA - (B) - Ratio	0.1	4	338	85	119	16	373	85	124	17	
CNVM02 - 610 DA - (B) - Ratio	0.2	4	380	85	124	17	412	85	124	18	
CNVM03 - 610 DA - (B) - Ratio	0.25	4	380	85	124	17	412	85	124	18	
CNVM05 - 610 DA - (B) - Ratio	0.4	4	400	85	124	18	432	85	124	19	
CNVM01 - 612 DA - (B) - Ratio	0.1	4	374	85	119	28	409	85	124	29	
CNVM02 - 612 DA - (B) - Ratio	0.2	4	416	85	124	29	448	85	124	30	
CNVM03 - 612 DA - (B) - Ratio	0.25	4	416	85	124	29	448	85	124	30	
CNVM05 - 612 DA - (B) - Ratio	0.4	4	436	85	124	30	468	85	124	31	
CNVM01 - 612 DB - (B) - Ratio	0.1	4	386	85	119	31	421	85	124	33	
CNVM03 - 612 DB - (B) - Ratio	0.25	4	428	85	124	32	473	85	124	34	
CNVM05 - 612 DB - (B) - Ratio	0.4	4	448	85	124	33	473	85	124	35	
CNVM08 - 612 DB - (B) - Ratio	0.55	4	489	114	148	37	532	114	148	40	
CNVM1 - 612 DB - (B) - Ratio	0.75	4	489	114	148	37	532	114	148	40	
CNVM1H - 612 DB - (B) - Ratio	1.1	4	516	119	160	41	578	119	160	46	
CNVM2 - 612 DB - (B) - Ratio	1.5	4	516	119	160	41	578	119	160	46	

Notes : 5. The dimensions in these drawings are subject to change without notice.

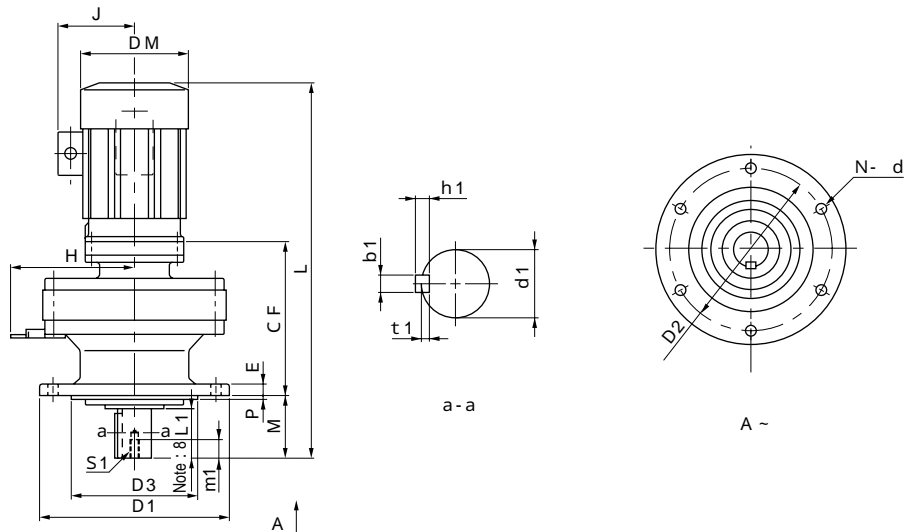
6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B "is inserted following the frame size.

8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CVVM^{Note 1} - 613 DA ~ 614 DC

Gearmotors
Selection Tables
Dimension Tables



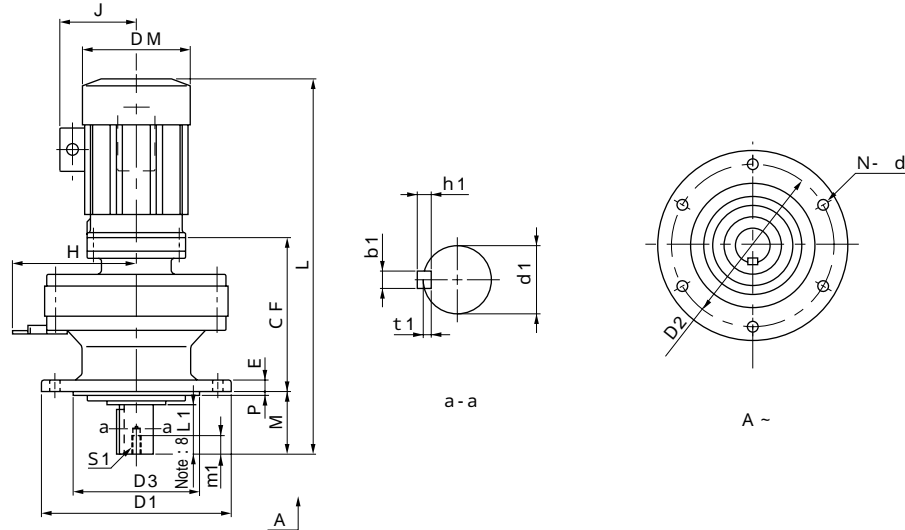
CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	H	Output Shaft <small>Notes: 2, 3, 8</small>						
											d1	L1	b1	h1	t1	S1	m1
613 DA	218	260	230	200	76	15	4	6	11	150	50	61	14	9	5.5	M10	18
613 DB	227	260	230	200	76	15	4	6	11	150	50	61	14	9	5.5	M10	18
613 DC	241	260	230	200	76	15	4	6	11	-	50	61	14	9	5.5	M10	18
614 DA	218	260	230	200	96	15	4	6	11	150	50	81	14	9	5.5	M10	18
614 DB	227	260	230	200	96	15	4	6	11	150	50	81	14	9	5.5	M10	18
614 DC	241	260	230	200	96	15	4	6	11	-	50	81	14	9	5.5	M10	18

Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CVVM02 - 613 DA - (B) - Ratio	0.2	4	470	85	124	44	502	85	124	44	
CVVM03 - 613 DA - (B) - Ratio	0.25	4	490	85	124	44	522	85	124	44	
CVVM05 - 613 DA - (B) - Ratio	0.4	4	490	85	124	47	522	85	124	48	
CVVM02 - 613 DB - (B) - Ratio	0.2	4	479	85	124	47	511	85	124	49	
CVVM03 - 613 DB - (B) - Ratio	0.25	4	479	85	124	47	511	85	124	49	
CVVM05 - 613 DB - (B) - Ratio	0.4	4	499	85	124	48	531	85	124	50	
CVVM08 - 613 DB - (B) - Ratio	0.55	4	540	114	148	52	583	114	148	55	
CVVM1 - 613 DB - (B) - Ratio	0.75	4	540	114	148	52	583	114	148	55	
CVVM1H - 613 DB - (B) - Ratio	1.1	4	573	119	160	56	635	119	160	61	
CVVM2 - 613 DB - (B) - Ratio	1.5	4	573	119	160	56	635	119	160	61	
CVVM3 - 613 DC - (B) - Ratio	2.2	4	607	126	173	63	670	126	173	69	
CVVM02 - 614 DA - (B) - Ratio	0.2	4	490	85	124	44	522	85	124	45	
CVVM03 - 614 DA - (B) - Ratio	0.25	4	490	85	124	44	522	85	124	45	
CVVM05 - 614 DA - (B) - Ratio	0.4	4	510	85	124	47	542	85	124	48	
CVVM02 - 614 DB - (B) - Ratio	0.2	4	499	85	124	47	531	85	124	49	
CVVM03 - 614 DB - (B) - Ratio	0.25	4	499	85	124	47	531	85	124	49	
CVVM05 - 614 DB - (B) - Ratio	0.4	4	519	85	124	48	551	85	124	50	
CVVM08 - 614 DB - (B) - Ratio	0.55	4	560	114	148	52	603	114	148	55	
CVVM1 - 614 DB - (B) - Ratio	0.75	4	560	114	148	52	603	114	148	55	
CVVM1H - 614 DB - (B) - Ratio	1.1	4	593	119	160	56	655	119	160	61	
CVVM2 - 614 DB - (B) - Ratio	1.5	4	593	119	160	56	655	119	160	61	
CVVM1H - 614 DC - (B) - Ratio	1.1	4	607	119	160	57	669	119	160	62	
CVVM2 - 614 DC - (B) - Ratio	1.5	4	607	119	160	57	669	119	160	62	
CVVM3 - 614 DC - (B) - Ratio	2.2	4	627	126	173	61	690	126	173	67	

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

DIMENSION TABLE

CVVM^{Note 1} - 616 DA ~ 618 DA



CVVM

CVVM	CF	D1	D2	D3 Note: 4	M	E	P	N	d	H	Output Shaft Notes: 2, 3, 8						
											d1	L1	b1	h1	t1	S1	m1
616 DA	285	340	310	270	89	20	4	6	11	-	60	80	18	11	7	M10	18
616 DB	299	340	310	270	89	20	4	6	11	-	60	80	18	11	7	M10	18
617 DA	324	400	360	316	94	22	5	8	14	-	70	84	20	12	7.5	M12	24
617 DB	338	400	360	316	94	22	5	8	14	-	70	84	20	12	7.5	M12	24
618 DA	364	430	390	345	110	22	5	8	18	-	80	100	22	14	9	M12	24

Model Notes: 6, 7	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CVVM02 - 616 DA - (B) - Ratio	0.2	4	550	85	124	83	581	85	124	85	
CVVM03 - 616 DA - (B) - Ratio	0.25	4	550	85	124	83	581	85	124	85	
CVVM05 - 616 DA - (B) - Ratio	0.4	4	570	85	124	84	601	85	124	86	
CVVM08 - 616 DA - (B) - Ratio	0.55	4	611	114	148	88	653	114	148	91	
CVVM1 - 616 DA - (B) - Ratio	0.75	4	611	114	148	88	653	114	148	91	
CVVM1H - 616 DA - (B) - Ratio	1.1	4	643	119	160	92	705	119	160	97	
CVVM2 - 616 DA - (B) - Ratio	1.5	4	643	119	160	92	705	119	160	97	
CVVM1H - 616 DB - (B) - Ratio	1.1	4	658	119	160	94	719	119	160	99	
CVVM2 - 616 DB - (B) - Ratio	1.5	4	658	119	160	94	719	119	160	99	
CVVM3 - 616 DB - (B) - Ratio	2.2	4	678	126	173	98	740	126	173	104	
CVVM02 - 617 DA - (B) - Ratio	0.2	4	594	85	124	119	626	85	124	121	
CVVM03 - 617 DA - (B) - Ratio	0.25	4	594	85	124	119	626	85	124	121	
CVVM05 - 617 DA - (B) - Ratio	0.4	4	614	85	124	120	646	85	124	122	
CVVM08 - 617 DA - (B) - Ratio	0.55	4	655	114	148	124	698	114	148	127	
CVVM1 - 617 DA - (B) - Ratio	0.75	4	655	114	148	124	698	114	148	127	
CVVM1H - 617 DA - (B) - Ratio	1.1	4	688	119	160	128	750	119	160	133	
CVVM2 - 617 DA - (B) - Ratio	1.5	4	688	119	160	128	750	119	160	133	
CVVM1H - 617 DB - (B) - Ratio	1.1	4	702	119	160	130	764	119	160	135	
CVVM2 - 617 DB - (B) - Ratio	1.5	4	702	119	160	130	764	119	160	135	
CVVM3 - 617 DB - (B) - Ratio	2.2	4	722	126	173	134	785	126	173	140	
CVVM05 - 618 DA - (B) - Ratio	0.4	4	670	85	124	153	702	85	124	155	
CVVM08 - 618 DA - (B) - Ratio	0.55	4	711	114	148	157	754	114	148	160	
CVVM1 - 618 DA - (B) - Ratio	0.75	4	711	114	148	157	754	114	148	160	
CVVM1H - 618 DA - (B) - Ratio	1.1	4	744	119	160	161	806	119	160	166	
CVVM2 - 618 DA - (B) - Ratio	1.5	4	744	119	160	161	806	119	160	166	
CVVM3 - 618 DA - (B) - Ratio	2.2	4	764	126	173	165	827	126	173	171	

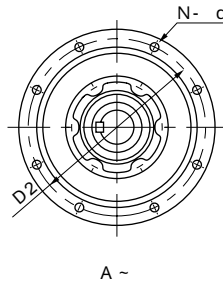
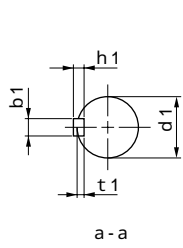
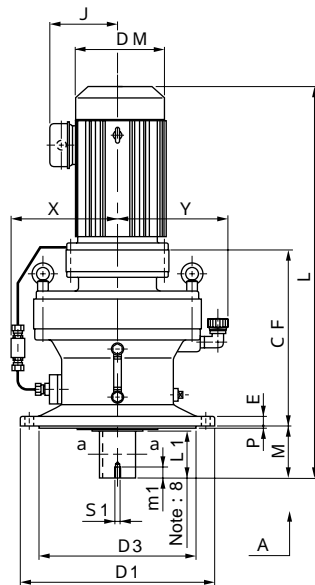
Notes : 5. The dimensions in these drawings are subject to change without notice.

6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B " is inserted following the frame size.

8. Output shaft length (L1) is longer for horizontal (CHVM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CVVM ^{Note 1} - 616 DC ~ 619 DB



[X, Y are dimensions for oil signal, oil inlet, at forced oil lubrication. Refer Page E-5]

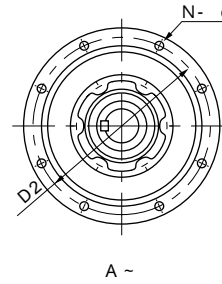
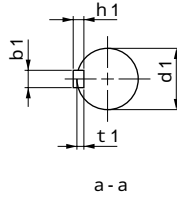
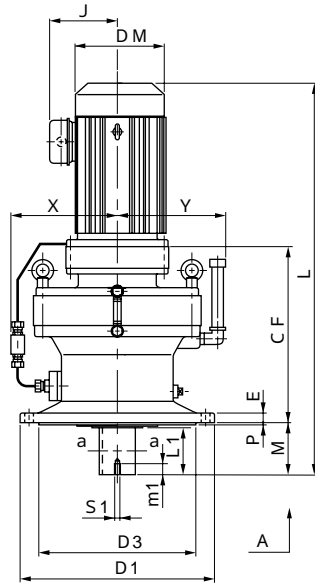
CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
616 DC	300	340	310	270	89	20	4	6	11	196	200	60	80	18	11	7	M10	18
617 DC	342	400	360	316	94	22	5	8	14	218	225	70	84	20	12	7.5	M12	24
618 DB	386	430	390	345	110	22	5	8	18	233	240	80	100	22	14	9	M12	24
619 DA	411	490	450	400	145	30	6	12	18	255	270	95	125	25	14	9	M20	34
619 DB	427	490	450	400	145	30	6	12	18	255	270	95	125	25	14	9	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM3 - 616 DC - (B) - Ratio	2.2	4	679	126	173	106	742	126	173	113
CVVM4 - 616 DC - (B) - Ratio	3	4	702	147	212	116	774	147	212	126
CVVM5 - 616 DC - (B) - Ratio	3.7	4	702	147	212	116	774	147	212	126
CVVM8 - 616 DC - (B) - Ratio	5.5	4	746	147	212	126	818	147	212	130
CVVM3 - 617 DC - (B) - Ratio	2.2	4	726	126	173	141	789	126	173	148
CVVM4 - 617 DC - (B) - Ratio	3	4	749	147	212	151	821	147	212	161
CVVM5 - 617 DC - (B) - Ratio	3.7	4	749	147	212	151	821	147	212	161
CVVM8 - 617 DC - (B) - Ratio	5.5	4	793	147	212	161	865	147	212	171
CVVM3 - 618 DB - (B) - Ratio	2.2	4	786	126	173	182	849	126	173	189
CVVM4 - 618 DB - (B) - Ratio	3	4	809	147	212	192	881	147	212	202
CVVM5 - 618 DB - (B) - Ratio	3.7	4	809	147	212	192	881	147	212	202
CVVM8 - 618 DB - (B) - Ratio	5.5	4	853	147	212	199	925	147	212	209
CVVM10 - 618 DB - (B) - Ratio	7.5	4	876	188	251	214	971	188	251	232
CVVM15 - 618 DB - (B) - Ratio	11	4	936	188	251	228	1031	188	251	246
CVVM1 - 619 DA - (B) - Ratio	0.75	4	793	114	148	237	836	114	148	240
CVVM1H - 619 DA - (B) - Ratio	1.1	4	826	119	160	241	888	119	160	246
CVVM2 - 619 DA - (B) - Ratio	1.5	4	826	119	160	241	888	119	160	246
CVVM3 - 619 DA - (B) - Ratio	2.2	4	846	126	173	245	909	126	173	252
CVVM4 - 619 DA - (B) - Ratio	3	4	869	147	212	255	941	147	212	265
CVVM5 - 619 DA - (B) - Ratio	3.7	4	869	147	212	255	941	147	212	265
CVVM8 - 619 DA - (B) - Ratio	5.5	4	913	147	212	262	985	147	212	272
CVVM5 - 619 DB - (B) - Ratio	3.7	4	885	147	212	262	957	147	212	272
CVVM8 - 619 DB - (B) - Ratio	5.5	4	929	147	212	269	1001	147	212	279
CVVM10 - 619 DB - (B) - Ratio	7.5	4	952	188	251	284	1047	188	251	302
CVVM15 - 619 DB - (B) - Ratio	11	4	1012	188	251	298	1107	188	251	316
CVVM20 - 619 DB - (B) - Ratio	15	4	1102	232	324	350	1207	259	324	384

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

DIMENSION TABLE

CVVM^{Note 1} - 6205DA ~ 6215DA



[X, Y are dimensions for oil signal, oil inlet, at forced oil lubrication. Refer Page E-5]

CVVM

CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
6205DA	393	455	405	355	204	30	5	8	22	341	287	100	165	28	16	10	M20	34
6205DB	420	455	405	355	204	30	5	8	22	341	287	100	165	28	16	10	M20	34
6215DA	447	490	440	390	203	35	7	8	24	348	306	110	165	28	16	10	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM1 - 6205DA - (B) - Ratio	0.75	4	834	114	148	253	877	114	148	256
CVVM2 - 6205DA - (B) - Ratio	1.5	4	867	119	160	257	929	119	160	262
CVVM3 - 6205DA - (B) - Ratio	2.2	4	887	126	173	261	949	126	173	268
CVVM4 - 6205DA - (B) - Ratio	3	4	910	147	212	271	982	147	212	281
CVVM5 - 6205DA - (B) - Ratio	3.7	4	910	147	212	271	982	147	212	281
CVVM8 - 6205DA - (B) - Ratio	5.5	4	954	147	212	278	1026	147	212	288
CVVM3 - 6205DB - (B) - Ratio	2.2	4	914	126	173	273	977	126	173	280
CVVM4 - 6205DB - (B) - Ratio	3	4	937	147	212	283	1009	147	212	293
CVVM5 - 6205DB - (B) - Ratio	3.7	4	937	147	212	283	1009	147	212	300
CVVM8 - 6205DB - (B) - Ratio	5.5	4	981	147	212	290	1053	147	212	323
CVVM10 - 6205DB - (B) - Ratio	7.5	4	1004	188	251	305	1099	188	251	346
CVVM15 - 6205DB - (B) - Ratio	11	4	1064	188	251	319	1159	188	251	360
CVVM20 - 6205DB - (B) - Ratio	15	4	1154	232	324	371	1249	259	324	428
CVVM2 - 6215DA - (B) - Ratio	1.5	4	920	119	160	330	982	119	160	335
CVVM3 - 6215DA - (B) - Ratio	2.2	4	940	126	173	333	1003	126	173	340
CVVM4 - 6215DA - (B) - Ratio	3	4	963	147	212	343	1035	147	212	353
CVVM5 - 6215DA - (B) - Ratio	3.7	4	963	147	212	343	1035	147	212	353
CVVM8 - 6215DA - (B) - Ratio	5.5	4	1007	147	212	350	1079	147	212	360
CVVM10 - 6215DA - (B) - Ratio	7.5	4	1030	188	251	365	1125	188	251	383
CVVM15 - 6215DA - (B) - Ratio	11	4	1090	188	251	379	1185	188	251	397
CVVM20 - 6215DA - (B) - Ratio	15	4	1180	232	324	431	1285	259	324	465

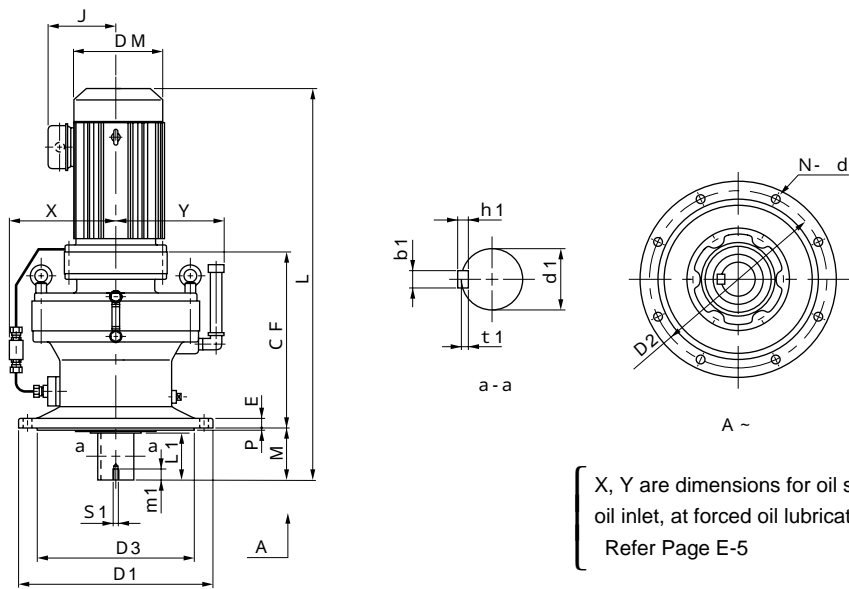
Notes : 5. The dimensions in these drawings are subject to change without notice.

6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B " is inserted following the frame size.

8. Output shaft length (L1) is longer for horizontal (CHVM) type. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE CVVM^{Note 1} - 6215DB ~ 6225DB



X, Y are dimensions for oil signal, oil inlet, at forced oil lubrication. Refer Page E-5

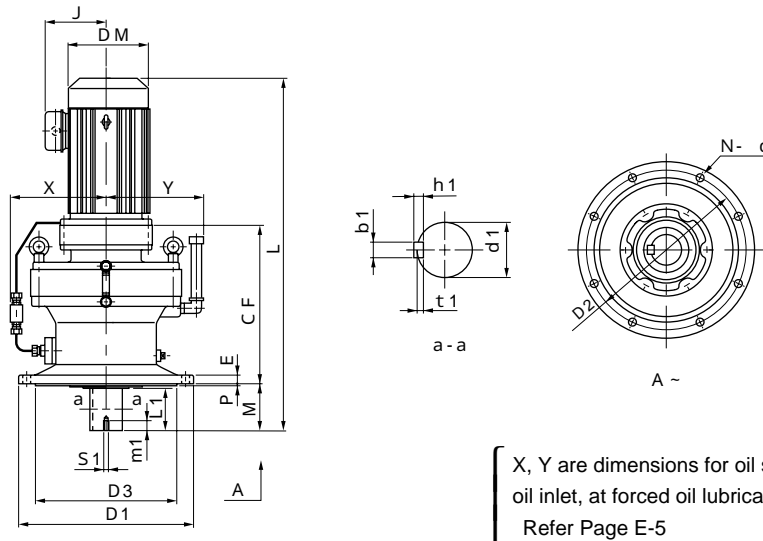
CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
6215DB	472	490	440	390	203	35	7	8	24	348	306	110	165	28	16	10	M20	34
6225DA	482	535	475	415	210	35	10	8	27	352	326	120	165	32	18	11	M20	34
6225DB	525	535	475	415	210	35	10	8	27	352	326	120	165	32	18	11	M20	34

Model <small>Notes: 6, 7</small>	Motor		Standard					With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)	
CVVM10 - 6215DB - (B) - Ratio	7.5	4	1060	188	251	399	1155	188	251	416	
CVVM15 - 6215DB - (B) - Ratio	11	4	1120	188	251	413	1215	188	251	430	
CVVM20 - 6215DB - (B) - Ratio	15	4	1205	232	324	466	1310	259	324	500	
CVVM25 - 6215DB - (B) - Ratio	18.5	4	1300	297	394	538	1465	297	394	582	
CVVM30 - 6215DB - (B) - Ratio	22	4	1300	297	394	538	1465	297	394	582	
CVVM2 - 6225DA - (B) - Ratio	1.5	4	962	119	160	419	1024	119	160	424	
CVVM3 - 6225DA - (B) - Ratio	2.2	4	982	126	173	422	1045	126	173	429	
CVVM4 - 6225DA - (B) - Ratio	3	4	1005	147	212	432	1077	147	212	442	
CVVM5 - 6225DA - (B) - Ratio	3.7	4	1005	147	212	432	1077	147	212	442	
CVVM8 - 6225DA - (B) - Ratio	5.5	4	1049	147	212	439	1121	147	212	449	
CVVM10 - 6225DA - (B) - Ratio	7.5	4	1072	188	251	454	1167	188	251	472	
CVVM15 - 6225DA - (B) - Ratio	11	4	1132	188	251	468	1227	188	251	485	
CVVM20 - 6225DA - (B) - Ratio	15	4	1222	232	324	520	1327	259	324	553	
CVVM10 - 6225DB - (B) - Ratio	7.5	4	1125	188	251	500	1220	188	251	518	
CVVM15 - 6225DB - (B) - Ratio	11	4	1185	188	251	514	1280	188	251	532	
CVVM20 - 6225DB - (B) - Ratio	15	4	1265	232	324	568	1370	259	324	602	
CVVM25 - 6225DB - (B) - Ratio	18.5	4	1360	297	394	656	1525	297	394	680	
CVVM30 - 6225DB - (B) - Ratio	22	4	1360	297	394	656	1525	297	394	680	
CVVM40 - 6225DB - (B) - Ratio	30	4	1360	297	394	673	1525	297	394	716	

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

DIMENSION TABLE

CVVM^{Note 1} - 6235DA ~ 6245DB



CVVM

CVVM	CF	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	Output Shaft <small>Notes: 2, 3, 8</small>						
												d1	L1	b1	h1	t1	S1	m1
6235DA	529	570	510	450	250	40	10	8	27	359	344	130	200	32	18	11	M24	41
6235DB	551	570	510	450	250	40	10	8	27	359	344	130	200	32	18	11	M24	41
6245DA	566	635	560	485	250	40	10	8	33	370	371	140	200	36	20	12	M24	41
6245DB	587	635	560	485	250	40	10	8	33	370	371	140	200	36	20	12	M24	41

Model <small>Notes: 6, 7</small>	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM3 - 6235DA - (B) - Ratio	2.2	4	1069	126	173	522	1131	126	173	528
CVVM4 - 6235DA - (B) - Ratio	3	4	1091	147	212	531	1163	147	212	541
CVVM5 - 6235DA - (B) - Ratio	3.7	4	1091	147	212	531	1163	147	212	541
CVVM8 - 6235DA - (B) - Ratio	5.5	4	1135	147	212	538	1207	147	212	548
CVVM10 - 6235DA - (B) - Ratio	7.5	4	1163	188	251	554	1258	188	251	571
CVVM15 - 6235DA - (B) - Ratio	11	4	1223	188	251	568	1318	188	251	585
CVVM20 - 6235DA - (B) - Ratio	15	4	1309	232	324	621	1413	259	324	655
CVVM25 - 6235DA - (B) - Ratio	18.5	4	1403	297	394	693	1568	297	394	737
CVVM30 - 6235DA - (B) - Ratio	22	4	1403	297	394	693	1568	297	394	737
CVVM40 - 6235DB - (B) - Ratio	30	4	1425	297	394	739	1590	297	394	782
CVVM50 - 6235DB - (B) - Ratio	37	4	1540	297	394	787	1755	297	394	884
CVVM3 - 6245DA - (B) - Ratio	2.2	4	1106	126	173	616	1169	126	173	622
CVVM4 - 6245DA - (B) - Ratio	3	4	1129	147	212	625	1201	147	212	635
CVVM5 - 6245DA - (B) - Ratio	3.7	4	1129	147	212	625	1201	147	212	635
CVVM8 - 6245DA - (B) - Ratio	5.5	4	1173	147	212	632	1245	147	212	642
CVVM10 - 6245DA - (B) - Ratio	7.5	4	1201	188	251	648	1296	188	251	665
CVVM15 - 6245DA - (B) - Ratio	11	4	1261	188	251	662	1356	188	251	679
CVVM20 - 6245DA - (B) - Ratio	15	4	1346	232	324	715	1451	259	324	749
CVVM25 - 6245DA - (B) - Ratio	18.5	4	1441	297	394	787	1606	297	394	840
CVVM30 - 6245DA - (B) - Ratio	22	4	1441	297	394	787	1606	297	394	840
CVVM20 - 6245DB - (B) - Ratio	15	4	1367	232	324	749	1472	259	324	778
CVVM30 - 6245DB - (B) - Ratio	22	4	1462	297	394	811	1627	297	394	862
CVVM40 - 6245DB - (B) - Ratio	30	4	1462	297	394	828	1627	297	394	871
CVVM50 - 6245DB - (B) - Ratio	37	4	1577	297	394	876	1792	297	394	973

Notes : 5. The dimensions in these drawings are subject to change without notice.

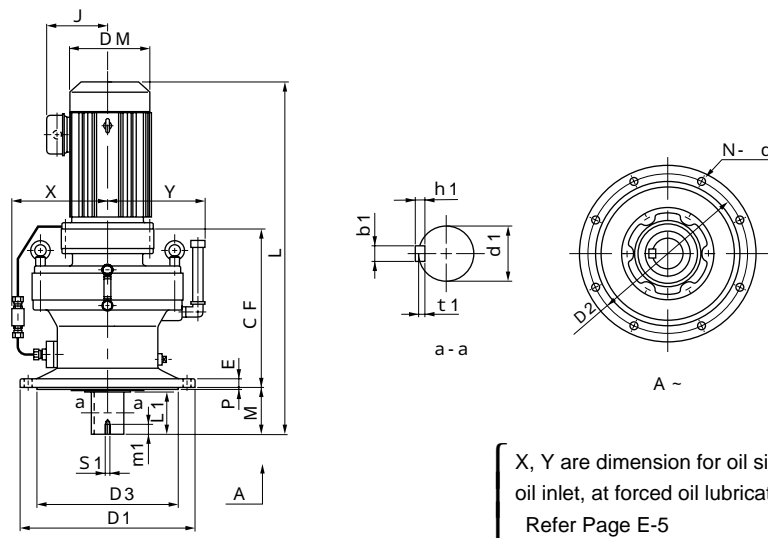
6. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

7. When equipped with brake, " B "is inserted following the frame size.

8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE

CVVM^{Note 1} - 6255DA ~ 6275DA



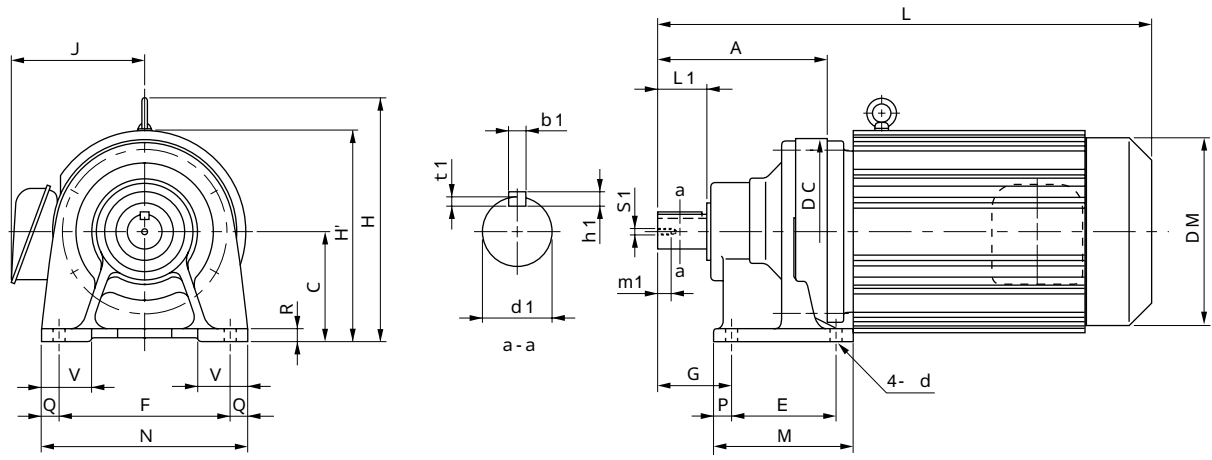
[X, Y are dimension for oil signal, oil inlet, at forced oil lubrication. Refer Page E-5]

CVVM	CF	D1	D2	D3 Note: 4	M	E	P	N	d	X	Y	Output Shaft						
												d1	L1	b1	h1	t1	S1	m1
6255DA	661	685	610	535	295	45	10	8	33	395	399	160	240	40	22	13	M30	49
6255DB	684	685	610	535	295	45	10	8	33	395	399	160	240	40	22	13	M30	49
6265DA	728	750	660	570	360	50	10	8	39	427	431	170	300	40	22	13	M30	49
6275DA	994	1160	1020	900	355	60	10	8	39	610	613	180	320	45	25	15	M30	52

Model	Motor		Standard				With Brake			
	kW	P	L	J	DM	W(kg)	L	J	DM	W(kg)
CVVM5 - 6255DA - (B) - Ratio	3.7	4	1284	147	212	946	1356	147	212	956
CVVM8 - 6255DA - (B) - Ratio	5.5	4	1328	147	212	953	1400	147	212	963
CVVM10 - 6255DA - (B) - Ratio	7.5	4	1346	188	251	968	1441	188	251	983
CVVM15 - 6255DA - (B) - Ratio	11	4	1406	188	251	982	1501	188	251	997
CVVM20 - 6255DA - (B) - Ratio	15	4	1486	232	324	1040	1591	259	324	1076
CVVM25 - 6255DA - (B) - Ratio	18.5	4	1581	297	394	1105	1746	297	394	1156
CVVM30 - 6255DA - (B) - Ratio	22	4	1581	297	394	1105	1746	297	394	1156
CVVM40 - 6255DA - (B) - Ratio	30	4	1581	297	394	1124	1746	297	394	1167
CVVM25 - 6255DB - (B) - Ratio	18.5	4	1603	297	394	1180	1768	297	394	1231
CVVM30 - 6255DB - (B) - Ratio	22	4	1603	297	394	1180	1768	297	394	1231
CVVM40 - 6255DB - (B) - Ratio	30	4	1603	297	394	1195	1768	297	394	1238
CVVM50 - 6255DB - (B) - Ratio	37	4	1718	297	394	1233	1928	297	394	1330
CVVM60 - 6255DB - (B) - Ratio	45	4	1718	297	394	1233	1928	297	394	1330
CVVM8 - 6265DA - (B) - Ratio	5.5	4	1480	147	212	1295	1552	147	212	1305
CVVM10 - 6265DA - (B) - Ratio	7.5	4	1493	188	251	1308	1588	188	251	1328
CVVM15 - 6265DA - (B) - Ratio	11	4	1553	188	251	1325	1648	188	251	1340
CVVM20 - 6265DA - (B) - Ratio	15	4	1618	232	324	1375	1723	259	324	1411
CVVM25 - 6265DA - (B) - Ratio	18.5	4	1713	297	394	1450	1878	297	394	1495
CVVM30 - 6265DA - (B) - Ratio	22	4	1713	297	394	1450	1878	297	394	1495
CVVM40 - 6265DA - (B) - Ratio	30	4	1713	297	394	1465	1878	297	394	1508
CVVM50 - 6265DA - (B) - Ratio	37	4	1828	297	394	1500	2043	297	394	1593
CVVM60 - 6265DA - (B) - Ratio	45	4	1828	297	394	1500	2043	297	394	1593
CVVM10 - 6275DA - (B) - Ratio	7.5	4	1754	188	251	2693	1849	188	251	2713
CVVM15 - 6275DA - (B) - Ratio	11	4	1814	188	251	2707	1909	188	251	2722
CVVM20 - 6275DA - (B) - Ratio	15	4	1879	232	324	2760	1984	259	324	2796
CVVM25 - 6275DA - (B) - Ratio	18.5	4	1974	297	394	2835	2139	297	394	2880
CVVM30 - 6275DA - (B) - Ratio	22	4	1974	297	394	2835	2139	297	394	2880
CVVM40 - 6275DA - (B) - Ratio	30	4	1974	297	394	2850	2139	297	394	2893
CVVM50 - 6275DA - (B) - Ratio	37	4	2089	297	394	2885	2304	297	394	2978
CVVM60 - 6275DA - (B) - Ratio	45	4	2089	297	394	2885	2304	297	394	2978

- Notes : 1. Motor capacity symbol is inserted in [].
- 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
- 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
- 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".
- 5. The dimensions in these drawings are subject to change without notice.
- 6. 0 or 5 is inserted in [] by combination with reduction ratio. Refer to the selection list for details.
- 7. When equipped with brake, " B " is inserted following the frame size.
- 8. Dimension of shaft end : Refer to the page E-27, E-28 for details.

DIMENSION TABLE Note 1 CNHMI- 610H, 612H Center Height Option



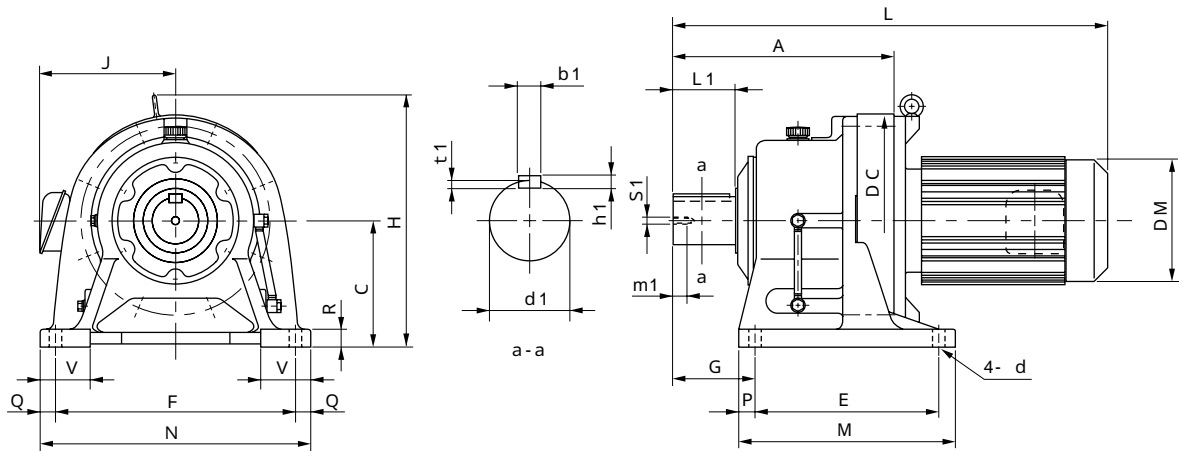
CNHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft Notes: 2, 3, 6						
														d1	L1	b1	h1	t1	S1	m1
610H	156	120	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612H	186	140	204	115	190	82	155	230	20	20	15	60	14	38	55	10	8	5	M8	20

Model	Note: 5	Motor		Standard								With Brake					
		kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)		
CNHM02 - 610H - (B) - Ratio		0.2	4	332	227	-	85	124	18	364	227	-	85	124	20		
CNHM03 - 610H - (B) - Ratio		0.25	4	332	227	-	85	124	18	364	227	-	85	124	20		
CNHM05 - 610H - (B) - Ratio		0.4	4	352	227	-	85	124	19	384	227	-	85	124	21		
CNHM08 - 610H - (B) - Ratio		0.55	4	393	233	-	114	148	23	436	233	-	114	148	26		
CNHM1 - 610H - (B) - Ratio		0.75	4	393	233	-	114	148	23	436	233	-	114	148	26		
CNHM1H - 610H - (B) - Ratio		1.1	4	426	240	-	119	160	27	488	240	-	119	160	32		
CNHM2 - 610H - (B) - Ratio		1.5	4	426	240	-	119	160	27	488	240	-	119	160	32		
CNHM3 - 610H - (B) - Ratio		2.2	4	446	246	-	126	173	31	509	246	-	126	173	37		
CNHM08 - 612H - (B) - Ratio		0.55	4	423	253	-	114	148	32	466	253	-	114	148	35		
CNHM1 - 612H - (B) - Ratio		0.75	4	423	253	-	114	148	32	466	253	-	114	148	35		
CNHM1H - 612H - (B) - Ratio		1.1	4	456	260	-	119	160	36	518	260	-	119	160	41		
CNHM2 - 612H - (B) - Ratio		1.5	4	456	260	-	119	160	36	518	260	-	119	160	41		
CNHM3 - 612H - (B) - Ratio		2.2	4	476	266	-	126	173	40	539	266	-	126	173	47		
CNHM4 - 612H - (B) - Ratio		3	4	499	286	-	147	212	50	571	286	-	147	212	60		
CNHM5 - 612H - (B) - Ratio		3.7	4	499	286	-	147	212	50	571	286	-	147	212	60		
CNHM8 - 612H - (B) - Ratio		5.5	4	543	286	-	147	212	57	615	286	-	147	212	67		

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note1} - 614H, 616H Center Height Option



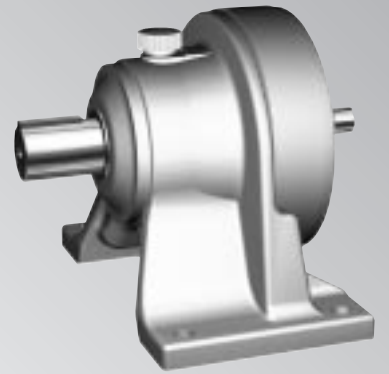
CNHM/CHHM

CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
614H	260	160	230	145	290	120	195	330	25	20	22	70	18	50	90	14	9	5.5	M10	18
616H	308	200	300	150	370	139	238	410	44	20	25	80	18	60	90	18	11	7	M10	18

Model	Note: 5	Motor		Standard					With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM1H - 614H - (B) - Ratio		1.1	4	530	278	119	160	57	592	278	119	160	62
CHHM2 - 614H - (B) - Ratio		1.5	4	530	278	119	160	57	592	278	119	160	62
CHHM3 - 614H - (B) - Ratio		2.2	4	550	284	126	173	60	613	284	126	173	67
CHHM4 - 614H - (B) - Ratio		3	4	573	306	147	212	70	645	306	147	212	80
CHHM5 - 614H - (B) - Ratio		3.7	4	573	306	147	212	70	645	306	147	212	80
CHHM8 - 614H - (B) - Ratio		5.5	4	617	306	147	212	77	689	306	147	212	87
CHHM10 - 614H - (B) - Ratio		7.5	4	640	333	188	251	92	735	333	188	251	110
CHHM15 - 614H - (B) - Ratio		11	4	700	333	188	251	106	795	333	188	251	124
CHHM20 - 614H - (B) - Ratio		15	4	790	368	232	324	158	895	368	259	324	192
CHHM2 - 616H - (B) - Ratio		1.5	4	583	350	119	160	98	645	350	119	160	103
CHHM3 - 616H - (B) - Ratio		2.2	4	598	350	126	173	101	661	350	126	173	107
CHHM4 - 616H - (B) - Ratio		3	4	621	350	147	212	110	693	350	147	212	120
CHHM5 - 616H - (B) - Ratio		3.7	4	621	350	147	212	110	693	350	147	212	120
CHHM8 - 616H - (B) - Ratio		5.5	4	665	350	147	212	117	737	350	147	212	127
CHHM10 - 616H - (B) - Ratio		7.5	4	693	373	188	251	133	788	373	188	251	150
CHHM15 - 616H - (B) - Ratio		11	4	753	373	188	251	147	848	373	188	251	164
CHHM20 - 616H - (B) - Ratio		15	4	838	408	232	324	200	943	408	259	324	234
CHHM25 - 616H - (B) - Ratio		18.5	4	933	408	297	394	272	1098	408	297	394	323
CHHM30 - 616H - (B) - Ratio		22	4	933	408	297	394	272	1098	408	297	394	323

marked model motor bottom level is lower than reducer base.

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. When equipped with brake, " B "is inserted following the frame size.
 6. Dimension of shaft end : Refer to the page E-27, E-28 for details.



CYCLO[®] SPEED REDUCERS

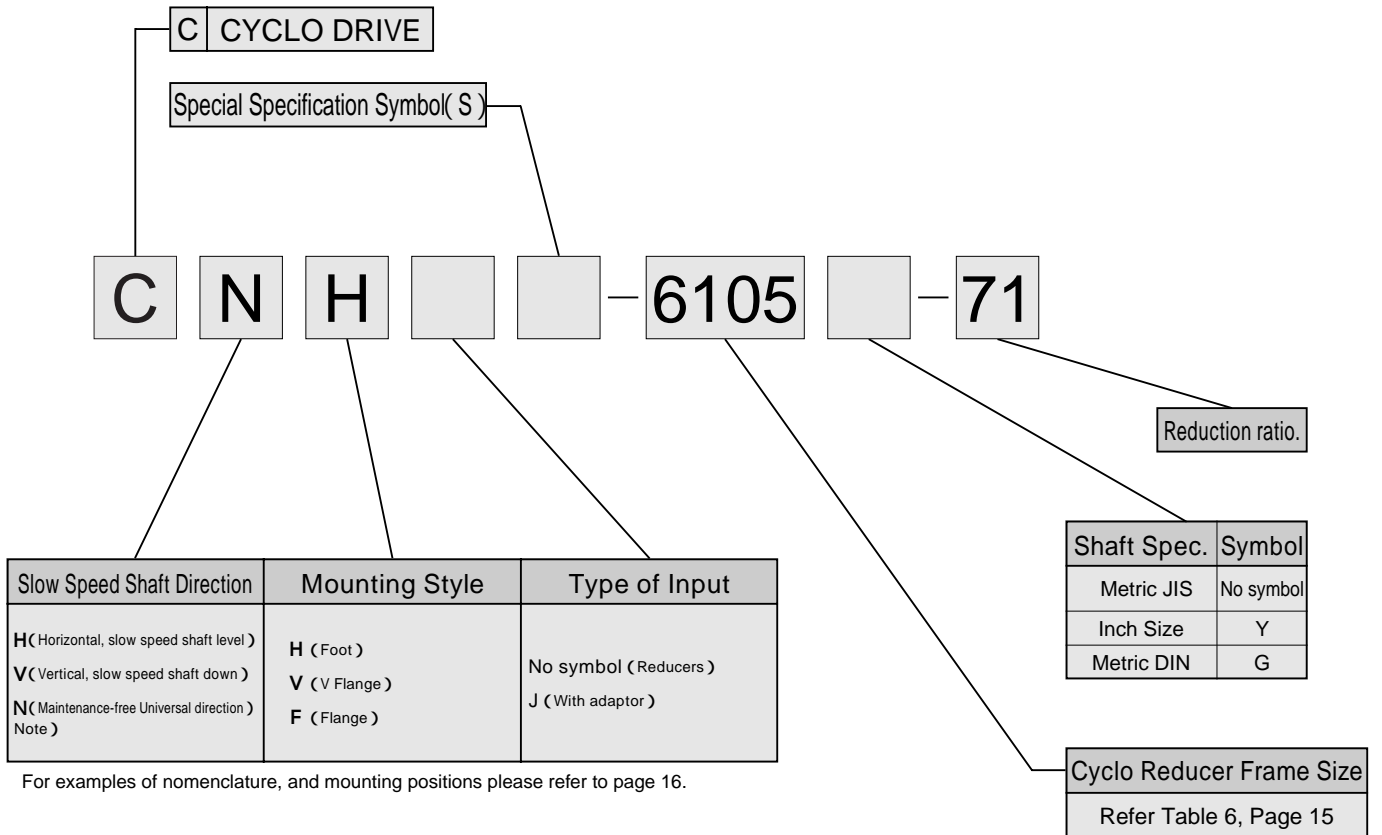


STANDARD SPECIFICATIONS

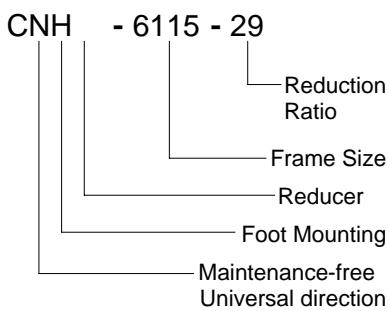
Speed Reducers

Item		Standard Specifications		
CYCLO Speed reducers	Lubrication Method	Grease lubricated and oil lubricated models available.		
	Speed Reduction Method	Internal planetary gear mechanism with trochoidal curved tooth profile.		
	Direction of Output Shaft Rotation	Single Reduction Type	Reverse rotation	In contrast to the direction of input rotation.
Double Reduction Type		Same rotation		
Ambient Conditions	Installation location	Indoors (Minimal)		
	Ambient Temperature	- 10 °~ 40		
	Ambient Humidity	Under 85%		
	Elevation	Under 1,000 meters		
	Atmosphere	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.		
Method of Mounting	CHH type-with slow speed shaft in horizontal direction and with legs. CVV type-with slow speed shaft down in vertical direction and with mount. (No restrictions in mounting position of maintenance-free grease lubricated models, and the 2nd digit of type symbol provides "N").			
Method of coupling with driven machine	Coupling, gears, chain sprocket or belt.			
Painting	Type : Acrylic modified phtalic Colour : Equivalent to mancel 6.5PB 3.6/8.2.			

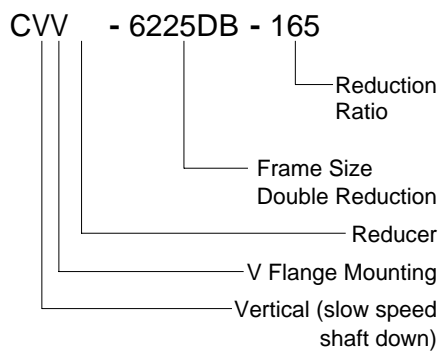
NOMENCLATURE & MOUNTING POSITIONS



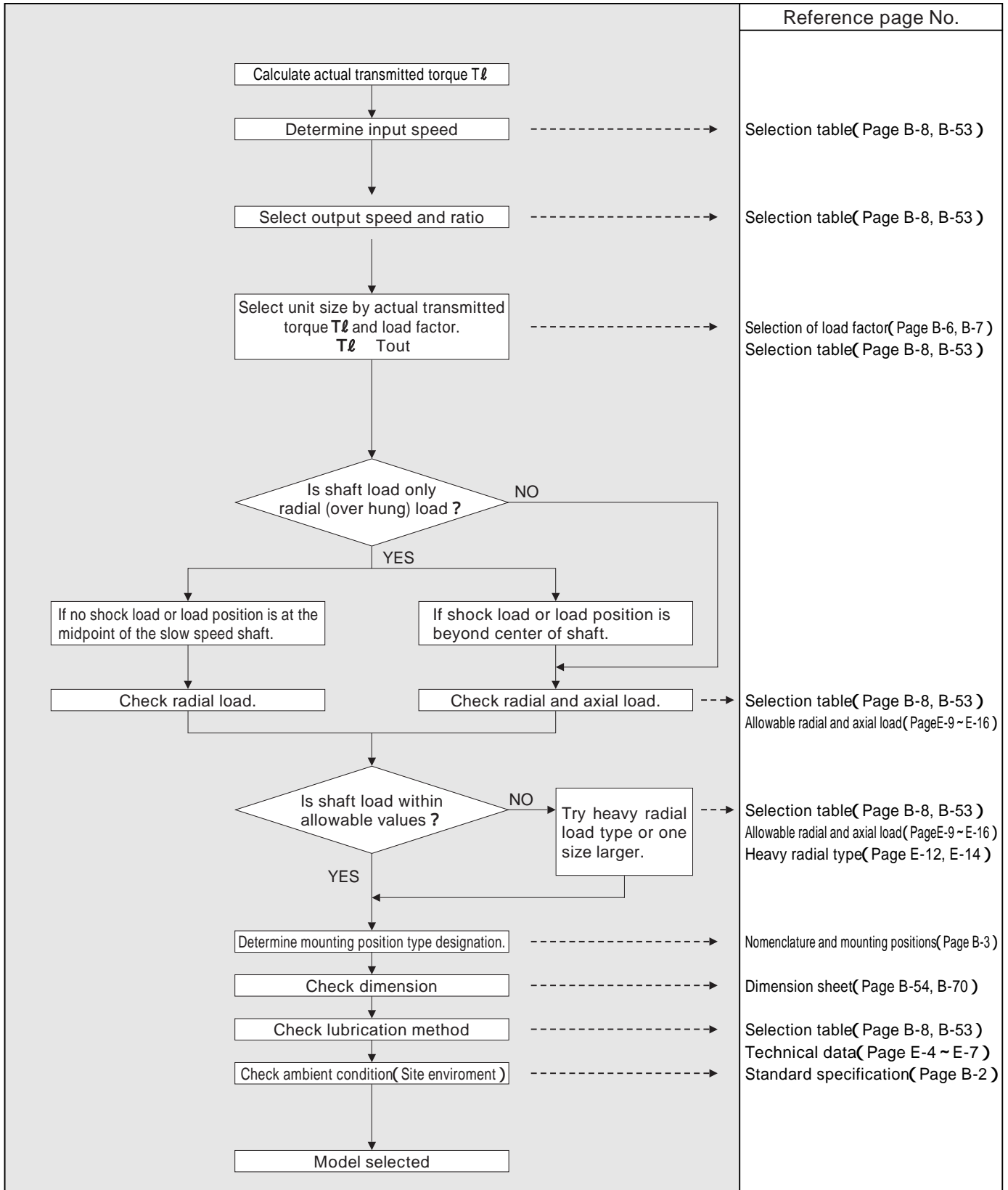
Example 1



Example 2



SPEED REDUCER MODEL SELECTION



T_{ℓ} : Actual transmitted torque at output shaft.[N·m, kgf·m]
 T_{out} : Output torque of gearmotor.[N·m, kgf·m]
 Pro : Allowable radial load of output shaft.[N, kgf]

SPEED REDUCER MODEL SELECTION EXAMPLE

Conditions, selection and result	: Conditions	: Selected item	Reference page No.
Actual transmitted torque $T\ell$: $T\ell = 178\text{N} \cdot \text{m}$		
Input speed	: 1450 r/min		
Output speed	: 33.7 r/min		
Ratio	$1450(\text{r/min})/33.7(\text{r/min}) = 43$	1/43	Selection table(Page B-27)
Type of application	: Chain conveyor(uniform load)		
Duty cycle	: 24Hour / day		
Load factor	$U = 1.2$		Selection of load factor table B-6 (Page B-1, B-2)
Checking load factor	$1.2(\text{Load factor}) \times 178 = 217\text{N} \cdot \text{m}$		Selection table(Page B-27)
	$217\text{N} \cdot \text{m}$	$292\text{N} \cdot \text{m}$	
Frame size-Ratio	6105-43		Selection table(Page B-27)
Coupling with driven machine	: Chain		
• Pitch circle diameter of sprocket R	: $R = 122.67/2000 = 0.061(\text{m})$		
• Radial load position	: Midpoint of the output shaft		
Check radial load	$Pr = T\ell/R$	Pro/Cf	Selection table(Page B-27)
	$178/0.061 = 2918\text{N}$	$5400/1 = 5400\text{N}$	Allowable radial and axial load (Page E-9 ~ E-11)
Select unit size	1-6105-43 is selected		
Shaft position	: Horizontal		
Mounting	: Foot mount		
Type designation	CNH		Nomenclature and mounting positions(Page B-3)
Checking dimension			Dimension sheet(Page B-54)
Checking lubrication method	MF : Maintenance-free, grease lubrication		Selection table(Page B-27)
			Technical data(Page B-4)
Ambient condition	: Indoor, ambient temp 20		
Checking ambient condition	OK		
			Standard specification(Page B-2)
Model selected	CNH-6105-43		

$T\ell$: Actual transmitted torque at output shaft.[N·m, kgf·m]
 T_{out} : Output torque of gearmotor.[N·m, kgf·m]
 Pr : Actual radial load at output shaft.[N, kgf]
 Pro : Allowable radial load of output shaft.[N, kgf]

SELECTION OF LOAD FACTOR

The Load Factor is rated for the characteristics of the driven machine.

The tabulated ratings are based on a running time of 10 hours per day with uniform load.

For your reference, please see method ① and ② shown below.

① Recommended Load Factor by the Driven Application.

U	: Uniform load
M	: Moderate shock
H	: Heavy shock

Table B-1. Reducer Load Factor.

Daily duty	~ 3 hours/day			~ 10 hours/day			24 hours/day		
	U	M	H	U	M	H	U	M	H
Load Factor	0.80	1.00	1.35	1.00	1.20	1.50	1.20	1.35	1.60

Table B-2. Recommended load classifications.

Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD	Type of APPLICATION	Type of LOAD
*Aerator		bucket - uniform load	U	small waste-conveyor-chain	M	washers & thickeners	M
Agitators.		bucket - heavy load	M	sorting table	M	winders	U
pure liquids	U	bucket - cont.	U	tipple hoist conveyor	M	*Printing Presses	
liquids & solids	M	centrifugal discharge	U	tipple hoist drive	M	Pullers	
liquids - variable density	M	escalators	U	transfer conveyors	M	barge haul	H
Blowers		freight	M	transfer rolls	M	Pumps	
centrifugal	U	gravity discharge	U	tray drive	M	centrifugal	U
lobe	M	*man lifts	M	trimmer feed	M	proportioning	M
vane	U	*passenger		waste conveyor	M	reciprocating single acting,	
Brewing & Distilling		**Extruders(Plastics)		Machine Tools		3 or more cylinders	M
bottling machinery	U	blow molders	M	bending roll	M	double acting,	
brew kettles, cont. duty	U	coating	U	punch press-gear driven	H	2 or more cylinders	M
cookers - cont. duty	U	film	U	*notching press-belt driven		*single acting, 1 or 2 cylinders	
mash tubs - cont. duty	U	pipe	U	plate planers	H	*double acting, single cylinder	
scale hopper, frequent starts	M	pre-plasticizers	M	tapping machine	H	rotary-gear type	U
Can Filling Machines	U	rods	U	other machine tools		rotary-lobe, vane	U
*Cane Knives	M	sheet	U	main drives	M	Rubber & Plastics Industries	
Car Dumpers	H	tubing	U	auxiliary drives	U	**crackers	H
Car Pullers	M	Fans		Metal Mills		laboratory equipment	M
Clarifiers	U	centrifugal	U	draw bench carriage &		**mixing mills	H
Classifiers	M	*cooling towers		main drive	M	**refiners	M
Clay Working Machinery		induced draft	U	forming machines	H	**rubber calendars	M
brick press	H	*forced draft		*pinch, dryer & scrubber rolls,		**rubber milK 2 on line)	M
briquette machine	H	induced draft	M	reversing		**rubber milK 3 on line)	U
clay working machinery	M	large(mine, etc.)	M	slitters	M	*sheeter	M
pug mill	M	large(industrial)	M	table conveyors-non-reversing		*tire building machines	
Compressors		light(small diameter)	U	group drives	M	*tire & tube press openers	
centrifugal	U	Feeders		individual drives	H	**tubers & strainers	M
lobe	M	apron	M	*table conveyors-reversing		**warming mills	M
reciprocating, multi-cylinder	M	belt	M	wire drawing & flattening		Sand Muller	M
reciprocating, single-cylinder	H	disc	U	machine	M	Screens	
Conveyors - Uniformly		reciprocating	H	wire winding machine	M	air washing	U
Loaded or Fed		screw	M	Mills, Rotary Type		rotary-stone or gravel	M
apron	U	Food Industry		**ball	M	traveling water intake	U
assembly	U	beet slicer	M	**cement kilns	M	Sewage Disposal Equipment	
belt	U	cereal cooker	U	**dryers & coolers	M	bar screens	U
bucket	U	dough mixer	M	kilns	M	chemical feeders	U
chain	U	meat grinders	M	**pebble	M	collectors, circuline or	
flight	U	Generators(not welding)	U	**rod, plain & wedge bar	M	straightline	U
oven	U	Hammer mills	H	tumbling barrels	H	dewatering screws	M
screw	U	Hoists		Mixers		grit collectors	U
Conveyors - Heavy Duty		heavy duty	H	concrete mixers, cont.	M	scum breakers	M
Not Uniformly Fed		medium duty	M	concrete mixers, intermittent	M	slow or rapid mixers	M
apron	M	skip hoist	M	constant density	U	sludge collectors	U
assembly	M	Laundry Washers		variable density	M	thickeners	M
belt	M	reversing	M	Oil Industry		vacuum filters	M
bucket	M	Laundry Tumblers	M	chillers	M	Slab Pushers	M
chain	M	Line Shaft		*oil well pumping		*Steering Gear	
flight	M	driving processing equipment	M	paraffin filter press	M	Stokers	U
*live roll	U	light	U	rotary kilns	M	Sugar Industry	
oven	M	other line shafts	U	Paper Mills		*cane knives	M
reciprocating	H	Lumber Industry		agitator(mixers)	M	*crushers	M
screw	M	barkers - hydraulic -		barker-auxiliaries-hydraulic	M	*mills	H
shaker	H	mechanical	H	barker-mechanical	M	Textile Industry	
Cranes(Except for Dry Dock		burner conveyor	M	barking drum	H	batchers	M
Cranes)		chain saw & drag saw	H	beater & pulper	M	calendars	M
main hoists		chain transfer	H	bleacher	U	cards	M
*bridge travel		craneway transfer	H	calendars	M	dry cans,	M
*trolley travel		de-barking drum	H	calendars-super	H	dryers	M
Crusher		edger feed	M	converting machine,		dyeing machinery	M
ore	H	gang feed	H	except cutters, platers	M	*knitting machines	
stone	H	green chain	M	conveyors	U	looms	M
*sugar	M	live rolls	H	couch	M	mangles	M
Dredges		log haul-locline	H	cutters-platers	H	nappers	M
cable reels	M	log haul-well type	H	cylinders	M	pads	M
conveyors	M	log turning device	H	dryers	M	*range drives	
cutter head drives	H	main log conveyor	H	Paper Mills		slashers	M
jig drives	H	off bearing rolls	M	felt stretcher	M	soapers	M
maneuvering winches	M	planer feed chains	M	felt whipper	H	spinners	M
pumps	M	planer floor chains	M	jordans	H	tenter frames	M
screen drive	H	planer tilting hoist	M	log haul	H	washers	M
stackers	M	re-saw merry-go-round conveyor	M	presses	U	winders	M
utility winches	M	roll cases	H	pulp machine reel	M	*Windlass	
*Dry Dock Cranes		slab conveyor	H	stock chests	M		
Elevators		small waste-conveyor-belt	U	suction roll	U		

For machines not listed above, please consult us.

Remarks: * - Refer to factory.

** - To be selected on basis of 24 hr. service only.

② Recommended Load Factor Modifications for Frequent operation.

Please see table B-3 and check the thermal rating of motor (refer to the motor manual)

Table B-3. Number of Starts-Stops and Load Factor.

Number of starts-stops (Times/hour)	~ 3 hours/day			~ 10 hours/day			24 hours/day		
	I	II	III	I	II	III	I	II	III
~ 10	0.80	1.00	1.20	1.00	1.10	1.35	1.20	1.25	1.50
~ 200	0.85	1.10	1.30	1.10	1.30	1.50	1.25	1.50	1.65
~ 500	0.90	1.20	1.40	1.15	1.45	1.60	1.30	1.60	1.75

$$\text{The ratio of Moment of Inertia (The ratio of } GD^2 \text{)} = \frac{\text{Total Moment of Inertia (} GD^2 \text{) as seen from the motor shaft}}{\text{Moment of Inertia (} GD^2 \text{) of motor}}$$

Load Factor	I : Allowable ratio of Moment of Inertia (GD^2)	0.3
	II : Allowable ratio of Moment of Inertia (GD^2)	3
	III : Allowable ratio of Moment of Inertia (GD^2)	10

Note : 1. The number of starts-stops includes brake, or clutch operation times.

Note : 2. Consult us when starting under loaded conditions.

$$n_1 = 50 \text{ (r/min)}$$

n_1 : Input speed [r/min] T_{out} : Allowable output torque [N·m & kgf·m]
 n_2 : Output speed [r/min] P_{ro} : Allowable output shaft radial load [N & kgf]
 P_1 : Allowable input power [kW] Consult us P_{ro} for CNF-CHF type

Frame size	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0						
	T_{out} [kgf·m]	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45						
	P_{ro} [N]	969	1010	1180	1180	1180	1180	1180	1180	1180	1180	1180						
6065	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	25.0	27.1	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0						
	T_{out} [kgf·m]	2.55	2.76	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06						
	P_{ro} [N]	958	974	1140	1180	1180	1180	1180	1180	1180	1180	1180						
6070	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	29.7	43.7	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0				
	T_{out} [kgf·m]	3.03	4.45	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59				
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1750	1770				
6075	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	29.7	43.7	50.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.9	57.4				
	T_{out} [kgf·m]	3.03	4.45	5.18	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	5.80	5.85				
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1580	1580				
6080	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	78.5	80.0	80.0	80.0	80.0	80.0	77.2	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0		
	T_{out} [kgf·m]	8.00	8.15	8.15	8.15	8.15	8.15	7.87	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15		
	P_{ro} [N]	2560	2560	2560	2560	2560	2560	2560	2560	2500	2560	2540	2480	2510	2460	2450		
6085	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	78.5	99.2	100	100	100	100	77.2	100	100	100	100	100	100	100	100		
	T_{out} [kgf·m]	8.00	10.1	10.2	10.2	10.2	10.2	7.87	10.2	10.2	10.2	10.2	10.2	10.2	10.2	10.2		
	P_{ro} [N]	2560	2560	2560	2560	2560	2560	2560	2360	2300	2420	2340	2290	2310	2260	2260		
6090	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	142	150	150	150	150	150	150	150	150	150	150	149	146	132	150	108	
	T_{out} [kgf·m]	14.5	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.2	14.9	13.5	15.3	11.0	
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3280	3290	3300	3310	3280	3300	3310	3310	3310	
6095	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	170	168	200	200	200	200	200	200	200	200	200	153	146	132	195	108	
	T_{out} [kgf·m]	17.3	17.1	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4	15.6	14.9	13.5	19.9	11.0	
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3180	3200	3200	3220	3280	3300	3310	3230	3310	
6100	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	171	250	250	250	250	250	250	250	250	250	250	250	250	250	250	250	
	T_{out} [kgf·m]	17.4	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5400	5360	
6105	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	171	276	308	300	300	300	300	300	300	300	300	297	296	264	300	258	
	T_{out} [kgf·m]	17.4	28.1	31.4	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.3	30.2	26.9	30.6	26.3	
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5310	5090	5370	4780	5350	
6110	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	193	360	360	360	360	360	360	360	360	360	360	360	360	360	360		
	T_{out} [kgf·m]	19.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7		
	P_{ro} [N]	7610	7610	7610	7610	7610	7610	7610	7340	7200	7280	7590	7590	7610	7580	7600		
6115	P_1 [kW]																	CNH B-54 CNF B-59 CNV B-64
	T_{out} [N·m]	193	406	420	420	420	420	420	420	420	420	420	420	420	420	420		
	T_{out} [kgf·m]	19.7	41.4	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		
	P_{ro} [N]	7610	7610	7610	7600	7610	7500	7460	7150	7010	7090	7370	7410	7430	7390	7410		

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$$n_1 = 50 \text{ (r/min)}$$

Frame size	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6120	Pi [kW]																	CNH B-54 CNF B-59 CNV B-64
	Tou [N·m]	366	525	525	525	525	520	522	525	520	525	525	525	525	525	525	525	
	Tou [kgf·m]	37.3	53.5	53.5	53.5	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5	53.5	
	Prø [N]	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9780	
	Prø [kgf]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	997	
6125	Pi [kW]																	CNH B-54 CNF B-59 CNV B-64
	Tou [N·m]	366	574	622	630	630	630	630	630	630	630	630	630	630	592	630		
	Tou [kgf·m]	37.3	58.5	63.4	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	60.3	64.2		
	Prø [N]	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9560		
	Prø [kgf]	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	975		
6130	Pi [kW]																	CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	555	744	780	780	780	780	780	780	780	780	780	928	912	902	848		
	Tou [kgf·m]	56.6	75.8	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	94.6	93.0	91.9	86.4		
	Prø [N]	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700		
	Prø [kgf]	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500		
6135	Pi [kW]																	CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	607	764	940	940	940	940	940	900	940	940	940	967	1050	1040	979		
	Tou [kgf·m]	61.9	77.9	95.8	95.8	95.8	95.8	95.8	91.7	95.8	95.8	95.8	98.6	107	106	99.8		
	Prø [N]	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700		
	Prø [kgf]	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500		
6140	Pi [kW]																	CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	717	1150	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230		
	Tou [kgf·m]	73.1	117	125	125	125	125	125	125	125	125	125	125	125	125	125		
	Prø [N]	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000		
	Prø [kgf]	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630		
6145	Pi [kW]																	CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	717	1150	1290	1370	1360	1370	1340	1370	1370	1370	1370	1370	1370	1320	1250		
	Tou [kgf·m]	73.1	117	131	140	139	140	137	140	140	140	140	140	140	135	127		
	Prø [N]	16000	16000	16000	15900	16000	16000	16000	16000	16000	15800	16000	15700	15700	16000	16000	16000	
	Prø [kgf]	1630	1630	1630	1620	1630	1630	1630	1630	1630	1610	1630	1600	1600	1630	1630	1630	
6160	Pi [kW]																	CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	1320	1760	1760	1760	1760	1760	1760	1760	1760	1760	1740	1760	1760	1760	1760		
	Tou [kgf·m]	135	179	179	179	179	179	179	179	179	179	177	179	179	179	179		
	Prø [N]	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100		
	Prø [kgf]	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250		
6165	Pi [kW]																	CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	1320	1870	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050		
	Tou [kgf·m]	135	191	214	214	214	214	214	214	214	214	214	214	214	214	209		
	Prø [N]	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	21800		
	Prø [kgf]	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2220		
6170	Pi [kW]																	CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	1860	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530		
	Tou [kgf·m]	190	258	258	258	258	258	258	258	258	258	258	258	258	258	258		
	Prø [N]	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500		
	Prø [kgf]	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010		
6175	Pi [kW]																	CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	1860	2600	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150		
	Tou [kgf·m]	190	265	321	321	321	321	321	321	321	321	321	321	321	321	321		
	Prø [N]	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500		
	Prø [kgf]	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010		
6180	Pi [kW]																	CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]			4060	4060	4060	4060	4050	4050	4050	4050	4060	4050	4050	4050	4060		
	Tou [kgf·m]			414	414	414	414	413	413	413	413	414	413	413	413	414		
	Prø [N]			41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700		
	Prø [kgf]			4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250		
6185	Pi [kW]																	CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]			4810	4900	4920	5000	5000	5000	5000	5000	5000	5000	5000	4510	5000		
	Tou [kgf·m]			490	499	502	510	510	510	510	510	510	510	510	460	510		
	Prø [N]			41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41600	41700		
	Prø [kgf]			4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4240	4250		

50r/min

$$n_1 = 50 \text{ (r/min)}$$

Frame size	n_2 [r/min]	8.33	6.25	4.55	3.85	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.704	0.575	0.420	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380		
	T_{out} [kgf•m]			650	650	650	650	650	650	650	650	650	650	650	650	650		
	P_{re} [N]			59000	58700	58900	59000	59000	59000	59000	59000	59000	58700	58600	58400	58900		
6195	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			7580	7630	7910	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960		
	T_{out} [kgf•m]			773	778	806	811	811	811	811	811	811	811	811	811	811		
	P_{re} [N]			59000	58200	58300	59000	59000	59000	59000	58600	59000	58200	58100	58000	58400		
6205	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			8620		9270		9270		9230		9300		9300		8760		
	T_{out} [kgf•m]			879		945		945		941		948		948		893		
	P_{re} [N]			84100		84100		84100		84100		84100		84100		84100		
6215	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			11400		12200		12500		12700		12700		12700		11300		
	T_{out} [kgf•m]			1160		1240		1270		1290		1290		1290		1150		
	P_{re} [N]			104000		104000		104000		104000		104000		104000		104000		
6225	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			13500		14500		14800		15000		16000		15900		15100		
	T_{out} [kgf•m]			1380		1480		1510		1530		1630		1620		1540		
	P_{re} [N]			145000		145000		145000		145000		145000		145000		145000		
6235	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			18700		19600		18900		18900		20500		20500		17200		
	T_{out} [kgf•m]			1910		2000		1930		1930		2090		2090		1750		
	P_{re} [N]			179000		179000		179000		179000		179000		179000		179000		
6245	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			20500		26200		25800		25800		25800		25800		22600		
	T_{out} [kgf•m]			2090		2670		2630		2630		2630		2630		2300		
	P_{re} [N]			208000		208000		208000		208000		208000		208000		208000		
6255	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			27500		31200		31000		32500		34500		34500		31000		
	T_{out} [kgf•m]			2800		3180		3160		3310		3520		3520		3160		
	P_{re} [N]			257000		258000		258000		258000		258000		258000		258000		
6265	P_i [kW]																	CHH B-55 CHF B-60 CVV B-66
	T_{out} [N•m]			31300		43700		46000		46000		46000		46000		44000		
	T_{out} [kgf•m]			3190		4450		4690		4690		4690		4690		4490		
	P_{re} [N]			276000		276000		276000		276000		276000		276000		276000		
6275	P_i [kW]																	CHH B-55 CHF - CVV B-66
	T_{out} [N•m]									68200		68200		68200		68200		
	T_{out} [kgf•m]									6950		6950		6950		6950		
	P_{re} [N]									248000		248000		248000		245000		
	P_{re} [kgf]									25300		25300		25300		25000		

- Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 580 \text{ (r/min)}$

n_1 : Input speed [r/min]

T_{out} : Allowable output torque [N·m & kgf·m]

n_2 : Output speed [r/min]

P_{ro} : Allowable output shaft radial load [N & kgf]

P_1 : Allowable input power [kW]

Consult us P_{ro} for CNF·CHF type

Frame size	n_2 [r/min]	96.7	72.5	52.7	44.6	38.7	34.1	27.6	23.2	20.0	16.6	13.5	11.4	9.83	8.17	6.67	4.87	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6060	P_i [kW]	0.200	0.192	0.139	0.118	0.102	0.090	0.073	0.061	0.053	0.044	0.036						CNH	
	T_{ou} [N·m]	18.8	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0						B-54	
	T_{ou} [kgf·m]	1.92	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45						CNF	
	P_{ro} [N]	1020	1010	1180	1180	1180	1180	1180	1180	1180	1180	1180						CNV	
	P_{ro} [kgf]	104	103	120	120	120	120	120	120	120	120	120						B-64	
6065	P_i [kW]	0.267	0.216	0.174	0.148	0.128	0.113	0.091	0.077	0.066	0.055	0.045							CNH
	T_{ou} [N·m]	25.0	27.1	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0						B-54	
	T_{ou} [kgf·m]	2.55	2.76	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06						CNF	
	P_{ro} [N]	958	974	1140	1180	1180	1180	1180	1180	1180	1180	1180						CNV	
	P_{ro} [kgf]	97.7	99.3	116	120	120	120	120	120	120	120	120						B-64	
6070	P_i [kW]	0.316	0.288	0.262	0.221	0.192	0.169	0.137	0.115	0.099	0.082	0.067	0.056	0.049					CNH
	T_{ou} [N·m]	29.7	36.1	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0				B-54	
	T_{ou} [kgf·m]	3.03	3.68	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59				CNF	
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1750	1770				CNV	
	P_{ro} [kgf]	180	180	180	180	180	180	180	180	180	180	180	178	180				B-64	
6075	P_i [kW]	0.316	0.288	0.291	0.273	0.256	0.226	0.183	0.153	0.132	0.110	0.089	0.071	0.062					CNH
	T_{ou} [N·m]	29.7	36.1	50.1	55.5	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.9	57.4				B-54	
	T_{ou} [kgf·m]	3.03	3.68	5.11	5.66	6.12	6.12	6.12	6.12	6.12	6.12	6.12	5.80	5.85				CNF	
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1580	1580			CNV	
	P_{ro} [kgf]	180	180	180	180	180	180	180	180	180	180	180	169	161	161			B-64	
6080	P_i [kW]	0.592	0.592	0.465	0.393	0.341	0.301	0.235	0.205	0.176	0.146	0.119	0.100	0.087	0.072	0.059			CNH
	T_{ou} [N·m]	55.6	74.1	80.0	80.0	80.0	80.0	77.2	80.0	80.0	80.0	80.0	80.0	80.0	80.0	80.0		B-54	
	T_{ou} [kgf·m]	5.67	7.55	8.15	8.15	8.15	8.15	7.87	8.15	8.15	8.15	8.15	8.15	8.15	8.15	8.15		CNF	
	P_{ro} [N]	2540	2560	2560	2560	2560	2560	2560	2560	2500	2560	2540	2480	2510	2460	2450		CNV	
	P_{ro} [kgf]	259	261	261	261	261	261	261	261	255	261	259	253	256	251	250		B-64	
6085	P_i [kW]	0.778	0.778	0.581	0.492	0.426	0.376	0.235	0.256	0.220	0.178	0.149	0.125	0.108	0.090	0.073			CNH
	T_{ou} [N·m]	73.0	97.3	100	100	100	100	77.2	100	100	97.2	100	100	100	99.5	100		B-54	
	T_{ou} [kgf·m]	7.44	9.92	10.2	10.2	10.2	10.2	7.87	10.2	10.2	9.91	10.2	10.2	10.2	10.1	10.2		CNF	
	P_{ro} [N]	2510	2560	2560	2560	2560	2560	2560	2360	2300	2460	2340	2290	2310	2270	2260		CNV	
	P_{ro} [kgf]	256	261	261	261	261	261	261	241	234	251	239	233	235	231	230		B-64	
6090	P_i [kW]	1.15	1.15	0.872	0.738	0.639	0.564	0.457	0.384	0.331	0.274	0.223	0.186	0.158	0.119	0.110	0.058		CNH
	T_{ou} [N·m]	108	143	150	150	150	150	150	150	150	150	150	149	146	132	150	108	B-54	
	T_{ou} [kgf·m]	11.0	14.6	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.2	14.9	13.5	15.3	11.0	CNF	
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3280	3290	3300	3310	3280	3300	3310	3310	3310	CNV	
	P_{ro} [kgf]	340	340	340	340	340	340	340	334	335	336	337	334	336	337	337	337	B-64	
6095	P_i [kW]	1.47	1.34	1.05	0.984	0.852	0.752	0.609	0.499	0.441	0.365	0.297	0.192	0.158	0.119	0.131	0.058		CNH
	T_{ou} [N·m]	138	168	181	200	200	200	200	195	200	200	200	153	146	132	178	108	B-54	
	T_{ou} [kgf·m]	14.1	17.1	18.5	20.4	20.4	20.4	20.4	19.9	20.4	20.4	20.4	15.6	14.9	13.5	18.1	11.0	CNF	
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3190	3200	3200	3220	3280	3300	3310	3270	3310	CNV	
	P_{ro} [kgf]	340	340	340	340	340	340	340	325	326	326	328	334	336	337	333	337	B-64	
6100	P_i [kW]	1.82	1.86	1.45	1.23	1.07	0.940	0.761	0.639	0.551	0.457	0.372	0.313	0.271	0.225	0.184	0.134		CNH
	T_{ou} [N·m]	171	233	250	250	250	250	250	250	250	250	250	250	250	250	250	250	B-54	
	T_{ou} [kgf·m]	17.4	23.8	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	CNF	
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5400	5360	CNV	
	P_{ro} [kgf]	550	550	550	550	550	550	550	550	550	550	550	550	550	548	550	546	B-64	
6105	P_i [kW]	1.82	1.86	1.79	1.48	1.28	1.13	0.913	0.767	0.661	0.548	0.446	0.372	0.321	0.238	0.220	0.139		CNH
	T_{ou} [N·m]	171	233	308	300	300	300	300	300	300	300	300	297	296	264	300	258	B-54	
	T_{ou} [kgf·m]	17.4	23.8	31.4	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.3	30.2	26.9	30.6	26.3	CNF	
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5310	5090	5370	4780	5350	CNV	
	P_{ro} [kgf]	550	550	550	550	550	550	550	550	550	550	550	541	519	547	487	545	B-64	
6110	P_i [kW]	2.06	2.88	2.09	1.77	1.53	1.35	1.10	0.921	0.794	0.658	0.535	0.451	0.390	0.324	0.265			CNH
	T_{ou} [N·m]	193	360	360	360	360	360	360	360	360	360	360	360	360	360	360		B-54	
	T_{ou} [kgf·m]	19.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7		CNF	
	P_{ro} [N]	6210	6780	7610	7610	7610	7610	7610	7340	7200	7280	7590	7590	7610	7580	7600		CNV	
	P_{ro} [kgf]	633	691	776	776	776	776	776	748	734	742	774	774	776	773	775		B-64	
6115	P_i [kW]	2.06	3.25	2.44	2.07	1.79	1.58	1.28	1.07	0.926	0.767	0.624	0.526	0.455	0.378	0.309			CNH
	T_{ou} [N·m]	193	406	420	420	420	420	420	420	420	420	420	420	420	420	420		B-54	
	T_{ou} [kgf·m]	19.7	41.4	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		CNF	
	P_{ro} [N]	6210	6720	7610	7600	7610	7500	7460	7150	7010	7090	7370	7410	7430	7390	7410		CNV	
	P_{ro} [kgf]	633	685	776	775	776	765	760	729	715	723	751	755	757	753	755		B-64	

580r/min

Frame size	n_2 [r/min]	96.7	72.5	52.7	44.6	38.7	34.1	27.6	23.2	20.0	16.6	13.5	11.4	9.83	8.17	6.67	4.87	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6120	Pi [kW]	3.90	4.00	3.05	2.58	2.24	1.96	1.59	1.34	1.15	0.959	0.781	0.658	0.569	0.473	0.386		CNH B-54	
	Tou [N•m]	366	501	525	525	525	520	522	525	520	525	525	525	525	525	525		CNF B-59	
	Tou [kgf•m]	37.3	51.1	53.5	53.5	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5		CNV B-64	
	Pro [N]	6880	7620	8740	9090	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9780		
Pro [kgf]	701	777	891	927	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	997			
6125	Pi [kW]	3.90	4.00	3.47	3.10	2.69	2.37	1.92	1.61	1.39	1.15	0.937	0.790	0.683	0.533	0.463		CNH B-54	
	Tou [N•m]	366	501	596	630	630	630	630	630	630	630	630	630	630	592	630		CNF B-59	
	Tou [kgf•m]	37.3	51.1	60.8	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	60.3	64.2		CNV B-64	
	Pro [N]	6880	7620	8670	8980	9710	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9560		
Pro [kgf]	701	777	884	915	990	1000	1000	1000	1000	1000	1000	1000	1000	1000	975				
6130	Pi [kW]	5.91	5.94	4.53	3.84	3.32	2.93	2.37	1.99	1.72	1.42	1.16	1.16	0.988	0.813	0.623		CHH B-55	
	Tou [N•m]	555	744	780	780	780	780	780	780	780	780	780	780	928	912	902	848		CHF B-60
	Tou [kgf•m]	56.6	75.8	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	94.6	93.0	91.9	86.4		CVV B-65
	Pro [N]	7930	8800	10200	10700	11000	11800	12700	13300	14000	14700	14700	14700	14700	14700	14700	14700		
Pro [kgf]	808	897	1040	1090	1120	1200	1290	1360	1430	1500	1500	1500	1500	1500	1500	1500			
6135	Pi [kW]	6.47	6.11	5.46	4.62	4.01	3.53	2.86	2.30	2.07	1.72	1.40	1.21	1.14	0.938	0.719		CHH B-55	
	Tou [N•m]	607	764	940	940	940	940	940	900	940	940	940	967	1050	1040	979		CHF B-60	
	Tou [kgf•m]	61.9	77.9	95.8	95.8	95.8	95.8	95.8	91.7	95.8	95.8	95.8	98.6	107	106	99.8		CVV B-65	
	Pro [N]	7870	8780	10100	10600	10900	11700	12600	13200	13900	14700	14700	14700	14700	14700	14700			
Pro [kgf]	802	895	1030	1080	1110	1190	1280	1350	1420	1500	1500	1500	1500	1500	1500				
6140	Pi [kW]	7.64	7.80	7.12	6.02	5.22	4.61	3.73	3.13	2.70	2.24	1.82	1.54	1.33	1.10	0.900		CHH B-55	
	Tou [N•m]	717	976	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230		CHF B-60	
	Tou [kgf•m]	73.1	99.5	125	125	125	125	125	125	125	125	125	125	125	125	125		CVV B-65	
	Pro [N]	12100	13400	15000	15500	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000			
Pro [kgf]	1230	1370	1530	1580	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630				
6145	Pi [kW]	7.64	7.80	7.51	6.74	5.79	5.15	4.07	3.50	3.02	2.50	2.04	1.72	1.48	1.19	0.917		CHH B-55	
	Tou [N•m]	717	976	1290	1370	1360	1370	1340	1370	1370	1370	1370	1370	1370	1370	1320	1250		CHF B-60
	Tou [kgf•m]	73.1	99.5	131	140	139	140	137	140	140	140	140	140	140	140	135	127		CVV B-65
	Pro [N]	12100	13400	15000	15400	16000	16000	16000	16000	15800	16000	15700	15700	16000	16000	16000			
Pro [kgf]	1230	1370	1530	1570	1630	1630	1630	1630	1610	1630	1600	1600	1630	1630	1630				
6160	Pi [kW]	14.1	14.0	10.2	8.63	7.48	6.60	5.34	4.49	3.87	3.21	2.58	2.20	1.90	1.58	1.29		CHH B-55	
	Tou [N•m]	1320	1760	1760	1760	1760	1760	1760	1760	1760	1760	1740	1760	1760	1760	1760		CHF B-60	
	Tou [kgf•m]	135	179	179	179	179	179	179	179	179	179	177	179	179	179	179		CVV B-66	
	Pro [N]	13500	15000	17300	18200	19400	20100	21700	22100	22100	22100	22100	22100	22100	22100	22100			
Pro [kgf]	1380	1530	1760	1860	1980	2050	2210	2250	2250	2250	2250	2250	2250	2250	2250				
6165	Pi [kW]	14.1	14.9	12.2	10.3	8.95	7.90	6.39	5.37	4.63	3.84	3.12	2.63	2.28	1.89	1.51		CHH B-55	
	Tou [N•m]	1320	1870	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050		CHF B-60	
	Tou [kgf•m]	135	191	214	214	214	214	214	214	214	214	214	214	214	214	209		CVV B-66	
	Pro [N]	13500	14900	17000	18000	19200	19900	21500	22100	22100	22100	22100	22100	22100	22100	21800			
Pro [kgf]	1380	1520	1730	1830	1960	2030	2190	2250	2250	2250	2250	2250	2250	2250	2220				
6170	Pi [kW]	19.8	20.2	14.7	12.4	10.8	9.51	7.70	6.47	5.58	4.62	3.76	3.17	2.74	2.28	1.86		CHH B-55	
	Tou [N•m]	1860	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530		CHF B-60	
	Tou [kgf•m]	190	258	258	258	258	258	258	258	258	258	258	258	258	258	258		CVV B-66	
	Pro [N]	15100	16500	19300	20300	21400	22400	24400	25400	26900	28700	29500	29500	29500	29500	29500			
Pro [kgf]	1540	1680	1970	2070	2180	2280	2490	2590	2740	2930	3010	3010	3010	3010	3010				
6175	Pi [kW]	19.8	20.8	18.3	15.5	13.4	11.8	9.59	8.06	6.94	5.75	4.68	3.95	3.41	2.84	2.31		CHH B-55	
	Tou [N•m]	1860	2600	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150		CHF B-60	
	Tou [kgf•m]	190	265	321	321	321	321	321	321	321	321	321	321	321	321	321		CVV B-66	
	Pro [N]	15100	16500	18900	19900	21000	22000	24100	25100	26600	28400	29500	29500	29500	29500	29500			
Pro [kgf]	1540	1680	1930	2030	2140	2240	2460	2560	2710	2900	3010	3010	3010	3010	3010				
6180	Pi [kW]			23.6	20.0	17.3	15.3	12.3	10.4	8.93	7.40	6.03	5.08	4.39	3.65	2.98		CHH B-55	
	Tou [N•m]			4060	4060	4060	4060	4050	4050	4050	4050	4060	4050	4050	4050	4060		CHF B-60	
	Tou [kgf•m]			414	414	414	414	413	413	413	413	414	413	413	413	414		CVV B-66	
	Pro [N]			25600	26700	28300	30000	32600	34000	35700	38200	41200	41700	41700	41700	41700			
Pro [kgf]			2610	2720	2880	3060	3320	3470	3640	3890	4200	4250	4250	4250	4250				
6185	Pi [kW]			27.9	24.1	19.9	18.8	15.2	12.8	11.0	9.13	7.43	6.27	5.42	4.06	3.67		CHH B-55	
	Tou [N•m]			4810	4900	4670	5000	5000	5000	5000	5000	5000	5000	5000	4510	5000		CHF B-60	
	Tou [kgf•m]			490	499	476	510	510	510	510	510	510	510	510	460	510		CVV B-66	
	Pro [N]			25200	26400	28000	29600	32200	33600	35300	37900	40800	41700	41600	41700	41700			
Pro [kgf]			2570	2690	2850	3020	3280	3430	3600	3860	4160	4250	4240	4250	4250				

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

Frame size	n_2 [r/min]	96.7	72.5	52.7	44.6	38.7	34.1	27.6	23.2	20.0	16.6	13.5	11.4	9.83	8.17	6.67	4.87	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	P _i [kW]			37.1	31.4	27.2	24.0	19.4	16.3	14.1	11.7	9.49	8.00	6.91	5.74	4.69		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380		
	T _{ou} [kgf·m]			650	650	650	650	650	650	650	650	650	650	650	650	650		
	P _{ro} [N]			35500	37100	39100	41500	45100	47400	49900	52900	57200	58700	58600	58400	58900		
	P _{ro} [kgf]			3620	3780	3990	4230	4600	4830	5090	5390	5830	5980	5970	5950	6000		
6195	P _i [kW]			44.0	36.1	33.2	29.9	24.2	20.4	17.5	14.5	11.8	9.98	8.63	7.17	5.85		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			7570	7350	7800	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960		
	T _{ou} [kgf·m]			772	749	795	811	811	811	811	811	811	811	811	811	811		
	P _{ro} [N]			35100	36700	38600	41000	44600	46900	49500	52500	56700	58200	58100	58000	58400		
	P _{ro} [kgf]			3580	3740	3930	4180	4550	4780	5050	5350	5780	5930	5920	5910	5950		
6205	P _i [kW]			46.8		39.5		28.2		20.3		13.8		10.1		6.43		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			8050		9270		9270		9230		9300		9300		8760		
	T _{ou} [kgf·m]			821		945		945		941		948		948		893		
	P _{ro} [N]			67300		72500		81600		84100		84100		84100		84100		
	P _{ro} [kgf]			6860		7390		8320		8570		8570		8570		8570		
6215	P _i [kW]			64.0		51.9		38.1		27.9		18.8		13.7		8.28		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			11000		12200		12500		12700		12700		12700		11300		
	T _{ou} [kgf·m]			1120		1240		1270		1290		1290		1290		1150		
	P _{ro} [N]			67300		72600		82500		90200		102000		104000		104000		
	P _{ro} [kgf]			6860		7400		8410		9190		10400		10600		10600		
6225	P _i [kW]			74.7		61.7		45.1		33.2		23.8		17.2		11.1		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			12900		14500		14800		15000		16000		15900		15100		
	T _{ou} [kgf·m]			1310		1480		1510		1530		1630		1620		1540		
	P _{ro} [N]			71100		77100		86900		95200		108000		118000		133000		
	P _{ro} [kgf]			7250		7860		8860		9700		11000		12000		13600		
6235	P _i [kW]			99.9		83.6		57.5		41.7		30.5		22.2		12.6		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			17200		19600		18900		18900		20500		20500		17200		
	T _{ou} [kgf·m]			1750		2000		1930		1930		2090		2090		1750		
	P _{ro} [N]			88800		95300		108000		119000		133000		146000		166000		
	P _{ro} [kgf]			9050		9710		11000		12100		13600		14900		16900		
6245	P _i [kW]			117		112		78.5		56.9		38.4		28.0		16.6		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			20200		26200		25800		25800		25800		25800		22600		
	T _{ou} [kgf·m]			2060		2670		2630		2630		2630		2630		2300		
	P _{ro} [N]			98600		106000		119000		131000		149000		163000		185000		
	P _{ro} [kgf]			10100		10800		12100		13400		15200		16600		18900		
6255	P _i [kW]			151		133		94.4		71.6		51.3		37.4		22.8		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			25900		31200		31000		32500		34500		34500		31000		
	T _{ou} [kgf·m]			2640		3180		3160		3310		3520		3520		3160		
	P _{ro} [N]			121000		130000		146000		161000		182000		200000		226000		
	P _{ro} [kgf]			12300		13300		14900		16400		18600		20400		23000		
6265	P _i [kW]			175		175		140		101		68.4		49.8		32.3		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			30100		41000		46000		46000		46000		46000		44000		
	T _{ou} [kgf·m]			3070		4180		4690		4690		4690		4690		4490		
	P _{ro} [N]			148000		158000		177000		197000		222000		243000		274000		
	P _{ro} [kgf]			15100		16100		18000		20100		22600		24800		27900		
6275	P _i [kW]									150		101		73.9		50.1		CHH B-55 CHF - CVW B-66
	T _{ou} [N·m]									68200		68200		68200		68200		
	T _{ou} [kgf·m]									6950		6950		6950		6950		
	P _{ro} [N]									228000		248000		248000		245000		
	P _{ro} [kgf]									23200		25300		25300		25000		

$n_1 = 720 (r/min)$

n_1 : Input speed [r/min] T_{out} : Allowable output torque [N·m & kgf·m]
 n_2 : Output speed [r/min] P_{ro} : Allowable output shaft radial load [N & kgf]
 P_1 : Allowable input power [kW] Consult us P_{ro} for CNF-CHF type

Frame size	n_2 [r/min]	120	90.0	65.5	55.4	48.0	42.4	34.3	28.8	24.8	20.6	16.7	14.1	12.2	10.1	8.28	6.05	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_i [kW]	0.200	0.200	0.173	0.147	0.127	0.112	0.091	0.076	0.066	0.054	0.044						CNH B-54
	T_{out} [N·m]	15.1	20.2	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0						CNF B-59
	T_{out} [kgf·m]	1.54	2.06	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45						CNV B-64
	P_{ro} [N]	999	1050	1180	1180	1180	1180	1180	1180	1180	1180	1180						
6065	P_i [kW]	0.286	0.259	0.216	0.183	0.159	0.140	0.113	0.095	0.082	0.068	0.055						CNH B-54
	T_{out} [N·m]	21.6	26.1	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0						CNF B-59
	T_{out} [kgf·m]	2.20	2.66	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06						CNV B-64
	P_{ro} [N]	987	985	1140	1180	1180	1180	1180	1180	1180	1180	1180						
6070	P_i [kW]	0.347	0.325	0.325	0.275	0.238	0.210	0.170	0.143	0.123	0.102	0.083	0.070	0.061				CNH B-54
	T_{out} [N·m]	26.2	32.8	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0				CNF B-59
	T_{out} [kgf·m]	2.67	3.34	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59				CNV B-64
	P_{ro} [N]	1710	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1750	1770				
6075	P_i [kW]	0.376	0.325	0.344	0.322	0.317	0.280	0.227	0.190	0.164	0.136	0.111	0.089	0.077				CNH B-54
	T_{out} [N·m]	28.4	32.8	47.7	52.7	60.0	60.0	60.0	60.0	60.0	60.0	60.0	56.9	57.4				CNF B-59
	T_{out} [kgf·m]	2.90	3.34	4.86	5.37	6.12	6.12	6.12	6.12	6.12	6.12	6.12	5.80	5.85				CNV B-64
	P_{ro} [N]	1700	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1580	1580				
6080	P_i [kW]	0.592	0.592	0.577	0.488	0.423	0.373	0.292	0.254	0.219	0.181	0.148	0.124	0.108	0.088	0.073		CNH B-54
	T_{out} [N·m]	44.8	59.7	80.0	80.0	80.0	80.0	77.2	80.0	80.0	80.0	80.0	80.0	80.0	78.5	80.0		CNF B-59
	T_{out} [kgf·m]	4.57	6.09	8.15	8.15	8.15	8.15	7.87	8.15	8.15	8.15	8.15	8.15	8.15	8.00	8.15		CNV B-64
	P_{ro} [N]	2380	2560	2560	2560	2560	2560	2560	2560	2500	2560	2540	2480	2510	2470	2450		
6085	P_i [kW]	0.778	0.778	0.683	0.610	0.529	0.467	0.292	0.317	0.274	0.205	0.185	0.156	0.135	0.104	0.091		CNH B-54
	T_{out} [N·m]	58.8	78.4	94.7	100	100	100	77.2	100	100	90.4	100	100	100	92.6	100		CNF B-59
	T_{out} [kgf·m]	5.99	7.99	9.65	10.2	10.2	10.2	7.87	10.2	10.2	9.22	10.2	10.2	10.2	9.44	10.2		CNV B-64
	P_{ro} [N]	2350	2530	2560	2560	2560	2560	2360	2300	2530	2340	2290	2310	2340	2260			
6090	P_i [kW]	1.15	1.15	1.08	0.916	0.794	0.700	0.567	0.476	0.410	0.340	0.277	0.231	0.196	0.148	0.137	0.072	CNH B-54
	T_{out} [N·m]	86.7	116	150	150	150	150	150	150	150	150	150	149	146	132	150	108	CNF B-59
	T_{out} [kgf·m]	8.84	11.8	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.2	14.9	13.5	15.3	11.0	CNV B-64
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3280	3290	3300	3310	3280	3300	3310	3310	3310	
6095	P_i [kW]	1.52	1.52	1.24	1.19	1.06	0.934	0.756	0.588	0.547	0.453	0.369	0.239	0.196	0.148	0.154	0.072	CNH B-54
	T_{out} [N·m]	115	153	172	196	200	200	185	200	200	200	200	153	146	132	169	108	CNF B-59
	T_{out} [kgf·m]	11.7	15.6	17.5	20.0	20.4	20.4	18.9	20.4	20.4	20.4	20.4	15.6	14.9	13.5	17.2	11.0	CNV B-64
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3210	3200	3200	3220	3280	3300	3310	3280	3310	
6100	P_i [kW]	2.26	2.20	1.80	1.53	1.32	1.17	0.945	0.794	0.684	0.567	0.461	0.389	0.336	0.279	0.228	0.167	CNH B-54
	T_{out} [N·m]	171	222	250	250	250	250	250	250	250	250	250	250	250	250	250	250	CNF B-59
	T_{out} [kgf·m]	17.4	22.6	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	CNV B-64
	P_{ro} [N]	5080	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5400	5360	
6105	P_i [kW]	2.26	2.20	2.22	1.83	1.59	1.40	1.13	0.952	0.821	0.680	0.554	0.462	0.398	0.295	0.274	0.172	CNH B-54
	T_{out} [N·m]	171	222	308	300	300	300	300	300	300	300	300	297	296	264	300	258	CNF B-59
	T_{out} [kgf·m]	17.4	22.6	31.4	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.3	30.2	26.9	30.6	26.3	CNV B-64
	P_{ro} [N]	5080	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5310	5090	5370	4780	5350	
6110	P_i [kW]	2.56	3.55	2.60	2.20	1.90	1.68	1.36	1.14	0.985	0.816	0.664	0.560	0.484	0.402	0.328		CNH B-54
	T_{out} [N·m]	193	358	360	360	360	360	360	360	360	360	360	360	360	360	360		CNF B-59
	T_{out} [kgf·m]	19.7	36.5	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7		CNV B-64
	P_{ro} [N]	5760	6280	7260	7550	7610	7610	7610	7340	7200	7280	7590	7590	7610	7580	7600		
6115	P_i [kW]	2.56	3.92	3.03	2.56	2.22	1.96	1.59	1.33	1.15	0.952	0.775	0.654	0.565	0.469	0.383		CNH B-54
	T_{out} [N·m]	193	395	420	420	420	420	420	420	420	420	420	420	420	420	420		CNF B-59
	T_{out} [kgf·m]	19.7	40.3	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		CNV B-64
	P_{ro} [N]	5760	6230	7180	7480	7610	7500	7460	7150	7010	7090	7370	7410	7430	7390	7410		

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$$n_1 = 720 \text{ (r/min)}$$

720r/min

Frame size	n_2 [r/min]	120	90.0	65.5	55.4	48.0	42.4	34.3	28.8	24.8	20.6	16.7	14.1	12.2	10.1	8.28	6.05	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6120	P _i [kW]	4.85	4.72	3.79	3.20	2.78	2.43	1.97	1.67	1.42	1.19	0.969	0.817	0.706	0.587	0.479		CNH	
	Tou [N·m]	366	476	525	525	525	520	522	525	520	525	525	525	525	525	525		B-54	
	Tou [kgf·m]	37.3	48.5	53.5	53.5	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5		CNF	
	P _{ro} [N]	6380	7080	8100	8420	9090	9230	9810	9810	9810	9810	9810	9810	9810	9810	9810	9780		B-59
	P _{ro} [kgf]	650	722	826	858	927	941	1000	1000	1000	1000	1000	1000	1000	1000	1000	997		CNV
6125	P _i [kW]	4.85	4.72	4.09	3.69	3.33	2.94	2.38	2.00	1.72	1.43	1.16	0.980	0.847	0.661	0.575			CNH
	Tou [N·m]	366	476	567	605	630	630	630	630	630	630	630	630	630	630	592	630		B-54
	Tou [kgf·m]	37.3	48.5	57.8	61.7	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	60.3	64.2		CNF
	P _{ro} [N]	6380	7080	8050	8340	8990	9130	9810	9810	9810	9810	9810	9810	9810	9810	9810	9560		B-59
	P _{ro} [kgf]	650	722	821	850	916	931	1000	1000	1000	1000	1000	1000	1000	1000	1000	975		CNV
6130	P _i [kW]	7.19	7.07	5.63	4.76	4.13	3.64	2.95	2.48	2.13	1.77	1.44	1.43	1.23	1.01	0.774			CHH
	Tou [N·m]	543	713	780	780	780	780	780	780	780	780	780	780	920	912	902	848		B-55
	Tou [kgf·m]	55.4	72.7	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	93.8	93.0	91.9	86.4		CHF
	P _{ro} [N]	7350	8170	9450	9920	10200	11000	11800	12300	13000	13800	14700	14700	14700	14700	14700	14700		B-60
	P _{ro} [kgf]	749	833	963	1010	1040	1120	1200	1250	1330	1410	1500	1500	1500	1500	1500	1500		CW
6135	P _i [kW]	7.87	7.27	6.78	5.74	4.97	4.39	3.55	2.86	2.57	2.13	1.73	1.49	1.41	1.16	0.893			CHH
	Tou [N·m]	595	733	940	940	940	940	940	900	940	940	940	940	959	1050	1040	979		B-55
	Tou [kgf·m]	60.7	74.7	95.8	95.8	95.8	95.8	95.8	91.7	95.8	95.8	95.8	95.8	97.8	107	106	99.8		CHF
	P _{ro} [N]	7290	8150	9300	9790	10100	10900	11700	12200	12900	13600	14700	14700	14700	14700	14700	14700		B-60
	P _{ro} [kgf]	743	831	948	998	1030	1110	1190	1240	1310	1390	1500	1500	1500	1500	1500	1500		CW
6140	P _i [kW]	9.48	9.20	8.84	7.48	6.48	5.72	4.63	3.89	3.35	2.78	2.26	1.91	1.65	1.37	1.12			CHH
	Tou [N·m]	717	928	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230		B-55
	Tou [kgf·m]	73.1	94.6	125	125	125	125	125	125	125	125	125	125	125	125	125	125		CHF
	P _{ro} [N]	11300	12600	14100	14500	15100	15900	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000		B-60
	P _{ro} [kgf]	1150	1280	1440	1480	1540	1620	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630		CW
6145	P _i [kW]	9.48	9.20	9.32	8.36	7.18	6.40	5.06	4.35	3.75	3.11	2.53	2.13	1.84	1.48	1.14			CHH
	Tou [N·m]	717	928	1290	1370	1360	1370	1340	1370	1370	1370	1370	1370	1370	1370	1320	1250		B-55
	Tou [kgf·m]	73.1	94.6	131	140	139	140	137	140	140	140	140	140	140	140	135	127		CHF
	P _{ro} [N]	11300	12600	14000	14400	15100	15800	16000	16000	15800	16000	15700	15700	16000	16000	16000	16000		B-60
	P _{ro} [kgf]	1150	1280	1430	1470	1540	1610	1630	1630	1610	1630	1600	1600	1630	1630	1630	1630		CW
6160	P _i [kW]	17.5	17.4	12.7	10.7	9.29	8.19	6.63	5.57	4.80	3.98	3.20	2.73	2.36	1.96	1.60			CHH
	Tou [N·m]	1320	1760	1760	1760	1760	1760	1760	1760	1760	1760	1740	1760	1760	1760	1760			B-55
	Tou [kgf·m]	135	179	179	179	179	179	179	179	179	179	177	179	179	179	179			CHF
	P _{ro} [N]	12500	13800	16000	16900	18000	18600	20100	21200	22100	22100	22100	22100	22100	22100	22100	22100		B-60
	P _{ro} [kgf]	1270	1410	1630	1720	1830	1900	2050	2160	2250	2250	2250	2250	2250	2250	2250	2250		CW
6165	P _i [kW]	17.5	17.8	15.2	12.8	11.1	9.80	7.94	6.67	5.75	4.76	3.88	3.27	2.82	2.35	1.87			CHH
	Tou [N·m]	1320	1790	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050		B-55
	Tou [kgf·m]	135	182	214	214	214	214	214	214	214	214	214	214	214	214	209			CHF
	P _{ro} [N]	12500	13800	15800	16600	17700	18400	19900	21000	22000	22100	22100	22100	22100	22100	22100	21800		B-60
	P _{ro} [kgf]	1270	1410	1610	1690	1800	1880	2030	2140	2240	2250	2250	2250	2250	2250	2250	2220		CW
6170	P _i [kW]	24.6	25.1	18.3	15.4	13.4	11.8	9.56	8.03	6.92	5.74	4.67	3.94	3.40	2.83	2.31			CHH
	Tou [N·m]	1860	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530			B-55
	Tou [kgf·m]	190	258	258	258	258	258	258	258	258	258	258	258	258	258	258			CHF
	P _{ro} [N]	13900	15200	17900	18800	19800	20700	22600	23600	25000	26600	28500	29500	29500	29500	29500			B-60
	P _{ro} [kgf]	1420	1550	1820	1920	2020	2110	2300	2410	2550	2710	2910	3010	3010	3010	3010			CW
6175	P _i [kW]	24.6	25.8	22.7	19.2	16.7	14.7	11.9	10.0	8.62	7.14	5.81	4.90	4.24	3.52	2.87			CHH
	Tou [N·m]	1860	2600	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150			B-55
	Tou [kgf·m]	190	265	321	321	321	321	321	321	321	321	321	321	321	321	321			CHF
	P _{ro} [N]	13900	15200	17500	18400	19400	20400	22300	23300	24600	26300	28200	29500	29500	29500	29500			B-60
	P _{ro} [kgf]	1420	1550	1780	1880	1980	2080	2270	2380	2510	2680	2870	3010	3010	3010	3010			CW
6180	P _i [kW]			29.3	24.8	21.5	19.0	15.3	12.9	11.1	9.19	7.49	6.30	5.45	4.53	3.70			CHH
	Tou [N·m]			4060	4060	4060	4060	4050	4050	4050	4050	4060	4050	4050	4050	4060			B-55
	Tou [kgf·m]			414	414	414	414	413	413	413	413	414	413	413	413	414			CHF
	P _{ro} [N]			23700	24800	26200	27800	30200	31500	33100	35500	38200	39700	41700	41700	41700			B-60
	P _{ro} [kgf]			2420	2530	2670	2830	3080	3210	3370	3620	3890	4050	4250	4250	4250			CW
6185	P _i [kW]			34.7	29.9	23.5	22.4	18.9	15.9	13.7	11.3	9.23	7.78	6.73	5.05	4.56			CHH
	Tou [N·m]			4810	4900	4440	4790	5000	5000	5000	5000	5000	5000	5000	5000	4510	5000		B-55
	Tou [kgf·m]			490	499	453	488	510	510	510	510	510	510	510	510	460	510		CHF
	P _{ro} [N]			23300	24400	26000	27400	29800	31200	32700	35100	37800	39400	41300	41700	41700			B-60
	P _{ro} [kgf]			2380	2490	2650	2790	3040	3180	3330	3580	3850	4020	4210	4250	4250			CW

$$n_1 = 720 (r/min)$$

Frame size	n_2 [r/min]	120	90.0	65.5	55.4	48.0	42.4	34.3	28.8	24.8	20.6	16.7	14.1	12.2	10.1	8.28	6.05	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	Pi [kW]			41.0	38.9	33.8	29.8	24.1	20.3	17.5	14.5	11.8	9.93	8.58	7.13	5.82		CHH B-55
	Tou [N•m]			5680	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380		CHF B-60
	Tou [kgf•m]			579	650	650	650	650	650	650	650	650	650	650	650	650		CVV B-66
	Pro [N]			33200	34300	36300	38500	41800	44000	46300	49100	53100	55500	58300	58400	58900		
	Pro [kgf]			3380	3500	3700	3920	4260	4490	4720	5010	5410	5660	5940	5950	6000		
6195	Pi [kW]			48.1	42.6	39.2	37.2	30.1	25.3	21.8	18.0	14.7	12.4	10.7	8.90	7.26		CHH B-55
	Tou [N•m]			6670	6980	7410	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960		CHF B-60
	Tou [kgf•m]			680	712	755	811	811	811	811	811	811	811	811	811	811		CVV B-66
	Pro [N]			32800	34100	35800	37900	41400	43500	45900	48700	52600	55000	57900	58000	58400		
	Pro [kgf]			3340	3480	3650	3860	4220	4430	4680	4960	5360	5610	5900	5910	5950		
6205	Pi [kW]			55.2		49.0		35.0		25.3		17.2		12.5		7.99		CHH B-55
	Tou [N•m]			7650		9270		9270		9230		9300		9300		8760		CHF B-60
	Tou [kgf•m]			780		945		945		941		948		948		893		CVV B-66
	Pro [N]			63000		67800		76300		83600		84100		84100		84100		
	Pro [kgf]			6420		6910		7780		8520		8570		8570		8570		
6215	Pi [kW]			75.3		64.4		47.2		34.6		23.3		17.0		10.3		CHH B-55
	Tou [N•m]			10400		12200		12500		12700		12700		12700		11300		CHF B-60
	Tou [kgf•m]			1060		1240		1270		1290		1290		1290		1150		CVV B-66
	Pro [N]			63000		67900		77200		84400		95800		104000		104000		
	Pro [kgf]			6420		6920		7870		8600		9770		10600		10600		
6225	Pi [kW]			88.1		76.6		55.9		41.2		29.5		21.4		13.7		CHH B-55
	Tou [N•m]			12200		14500		14800		15000		16000		15900		15100		CHF B-60
	Tou [kgf•m]			1240		1480		1510		1530		1630		1620		1540		CVV B-66
	Pro [N]			66600		72100		81200		89000		101000		110000		124000		
	Pro [kgf]			6790		7350		8280		9070		10300		11200		12600		
6235	Pi [kW]			113		104		71.4		51.7		37.6		27.3		15.7		CHH B-55
	Tou [N•m]			15700		19600		18900		18900		20400		20300		17200		CHF B-60
	Tou [kgf•m]			1600		2000		1930		1930		2080		2070		1750		CVV B-66
	Pro [N]			83400		89000		101000		111000		125000		137000		155000		
	Pro [kgf]			8500		9070		10300		11300		12700		14000		15800		
6245	Pi [kW]			132		132		97.5		70.6		47.6		34.7		20.7		CHH B-55
	Tou [N•m]			18300		24900		25800		25800		25800		25800		22600		CHF B-60
	Tou [kgf•m]			1870		2540		2630		2630		2630		2630		2300		CVV B-66
	Pro [N]			92600		98800		112000		123000		139000		152000		173000		
	Pro [kgf]			9440		10100		11400		12500		14200		15500		17600		
6255	Pi [kW]			151		151		117		88.9		61.5		44.9		28.3		CHH B-55
	Tou [N•m]			20900		28500		31000		32500		33300		33400		31000		CHF B-60
	Tou [kgf•m]			2130		2910		3160		3310		3390		3400		3160		CVV B-66
	Pro [N]			114000		122000		136000		151000		170000		187000		211000		
	Pro [kgf]			11600		12400		13900		15400		17300		19100		21500		
6265	Pi [kW]			175		175		172		126		84.9		61.9		40.2		CHH B-55
	Tou [N•m]			24200		33000		45400		46000		46000		46000		44000		CHF B-60
	Tou [kgf•m]			2470		3360		4630		4690		4690		4690		4490		CVV B-66
	Pro [N]			140000		149000		166000		184000		208000		228000		257000		
	Pro [kgf]			14300		15200		16900		18800		21200		23200		26200		
6275	Pi [kW]									159		126		91.7		53.4		CHH B-55
	Tou [N•m]									58100		68200		68200		58600		CHF -
	Tou [kgf•m]									5920		6950		6950		5970		CVV B-66
	Pro [N]									214000		248000		248000		240000		
	Pro [kgf]									21800		25300		25300		24500		

- Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 870 (r/min)$

n_1 : Input speed [r/min]

T_{out} : Allowable output torque [N·m & kgf·m]

n_2 : Output speed [r/min]

P_{r0} : Allowable output shaft radial load [N & kgf]

P_1 : Allowable input power [kW]

Consult us P_{r0} for CNF·CHF type

Frame size	n_2 [r/min]	145	109	79.1	66.9	58.0	51.2	41.4	34.8	30.0	24.9	20.2	17.1	14.7	12.3	10.0	7.31	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_i [kW]	0.200	0.200	0.200	0.177	0.153	0.135	0.110	0.092	0.079	0.066	0.054						CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	12.5	16.7	22.9	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0						
	T_{ou} [kgf·m]	1.27	1.70	2.33	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45						
	P_{r0} [N]	940	1070	1180	1180	1180	1180	1180	1180	1180	1180	1180						
	P_{r0} [kgf]	95.8	109	120	120	120	120	120	120	120	120	120						
6065	P_i [kW]	0.286	0.286	0.262	0.221	0.192	0.169	0.137	0.115	0.099	0.082	0.067						CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	17.9	23.9	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0						
	T_{ou} [kgf·m]	1.82	2.44	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06						
	P_{r0} [N]	931	1010	1140	1180	1180	1180	1180	1180	1180	1180	1180						
	P_{r0} [kgf]	94.9	103	116	120	120	120	120	120	120	120	120						
6070	P_i [kW]	0.347	0.347	0.347	0.332	0.288	0.254	0.205	0.173	0.149	0.123	0.100	0.085	0.073				CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	21.7	28.9	39.8	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0				
	T_{ou} [kgf·m]	2.21	2.95	4.06	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59				
	P_{r0} [N]	1610	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1750	1770				
	P_{r0} [kgf]	164	180	180	180	180	180	180	180	180	180	180	178	180				
6075	P_i [kW]	0.407	0.361	0.397	0.372	0.369	0.338	0.274	0.224	0.198	0.164	0.134	0.107	0.092				CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	25.5	30.1	45.6	50.4	57.7	60.0	60.0	58.4	60.0	60.0	60.0	56.9	56.7				
	T_{ou} [kgf·m]	2.60	3.07	4.65	5.14	5.88	6.12	6.12	5.95	6.12	6.12	6.12	5.80	5.78				
	P_{r0} [N]	1600	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1580	1600				
	P_{r0} [kgf]	163	180	180	180	180	180	180	180	180	180	169	161	163				
6080	P_i [kW]	0.592	0.592	0.592	0.590	0.511	0.451	0.353	0.307	0.265	0.206	0.178	0.150	0.130	0.100	0.088		CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	37.1	49.4	67.9	80.0	80.0	80.0	77.2	80.0	80.0	75.3	80.0	80.0	80.0	73.7	80.0		
	T_{ou} [kgf·m]	3.78	5.04	6.92	8.15	8.15	8.15	7.87	8.15	8.15	7.68	8.15	8.15	8.15	7.51	8.15		
	P_{r0} [N]	2240	2420	2560	2560	2560	2560	2560	2560	2560	2500	2560	2540	2480	2510	2510	2450	
	P_{r0} [kgf]	228	247	261	261	261	261	261	261	261	255	261	259	253	256	256	250	
6085	P_i [kW]	0.778	0.778	0.775	0.738	0.639	0.564	0.353	0.384	0.331	0.233	0.223	0.188	0.163	0.117	0.110		CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	48.7	64.9	88.9	100	100	100	77.2	100	100	84.9	100	100	100	87.0	100		
	T_{ou} [kgf·m]	4.96	6.62	9.06	10.2	10.2	10.2	7.87	10.2	10.2	8.65	10.2	10.2	10.2	8.87	10.2		
	P_{r0} [N]	2220	2390	2560	2560	2560	2560	2560	2360	2300	2580	2340	2290	2310	2400	2260		
	P_{r0} [kgf]	226	244	261	261	261	261	261	241	234	261	239	233	235	245	230		
6090	P_i [kW]	1.15	1.15	1.15	1.11	0.959	0.846	0.685	0.575	0.496	0.411	0.335	0.280	0.237	0.179	0.165	0.087	CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	71.7	95.6	131	150	150	150	150	150	150	150	150	149	146	132	150	108	
	T_{ou} [kgf·m]	7.31	9.75	13.4	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.2	14.9	13.5	15.3	11.0	
	P_{r0} [N]	3290	3340	3340	3340	3340	3340	3340	3280	3290	3300	3310	3280	3300	3310	3310	3310	
	P_{r0} [kgf]	335	340	340	340	340	340	340	334	335	336	337	334	336	337	337	337	
6095	P_i [kW]	1.52	1.52	1.43	1.38	1.28	1.13	0.913	0.680	0.637	0.548	0.430	0.288	0.237	0.179	0.178	0.087	CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	94.8	126	164	187	200	200	200	177	193	200	193	153	146	132	162	108	
	T_{ou} [kgf·m]	9.66	12.8	16.7	19.1	20.4	20.4	20.4	18.0	19.7	20.4	19.7	15.6	14.9	13.5	16.5	11.0	
	P_{r0} [N]	3240	3340	3340	3340	3340	3340	3340	3230	3210	3200	3230	3280	3300	3310	3290	3310	
	P_{r0} [kgf]	330	340	340	340	340	340	340	329	327	326	329	334	336	337	335	337	
6100	P_i [kW]	2.35	2.35	2.18	1.84	1.60	1.41	1.14	0.959	0.827	0.685	0.558	0.470	0.406	0.338	0.276	0.201	CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	147	196	250	250	250	250	250	250	250	250	250	250	250	250	250	250	
	T_{ou} [kgf·m]	15.0	20.0	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	
	P_{r0} [N]	4790	5320	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5400	5360	
	P_{r0} [kgf]	488	542	550	550	550	550	550	550	550	550	550	550	550	548	550	546	
6105	P_i [kW]	2.73	2.54	2.61	2.21	1.92	1.69	1.37	1.15	0.992	0.822	0.669	0.558	0.481	0.357	0.331	0.208	CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	171	212	300	300	300	300	300	300	300	300	300	297	296	264	300	258	
	T_{ou} [kgf·m]	17.4	21.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.3	30.2	26.9	30.6	26.3	
	P_{r0} [N]	4760	5300	5400	5400	5400	5400	5400	5400	5400	5400	5400	5310	5090	5370	4780	5350	
	P_{r0} [kgf]	485	540	550	550	550	550	550	550	550	550	550	541	519	547	487	545	
6110	P_i [kW]	3.09	3.55	3.14	2.66	2.30	2.03	1.64	1.38	1.19	0.986	0.803	0.677	0.585	0.486	0.397		CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	193	296	360	360	360	360	360	360	360	360	360	360	360	360	360		
	T_{ou} [kgf·m]	19.7	30.2	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7		
	P_{r0} [N]	5400	5940	6790	7060	7570	7610	7610	7340	7200	7280	7590	7590	7610	7580	7600		
	P_{r0} [kgf]	550	606	692	720	772	776	776	748	734	742	774	774	776	773	775		
6115	P_i [kW]	3.09	3.92	3.66	3.10	2.69	2.37	1.92	1.61	1.39	1.15	0.937	0.790	0.683	0.567	0.463		CNH B-54 CNF B-59 CNV B-64
	T_{ou} [N·m]	193	327	420	420	420	420	420	420	420	420	420	420	420	420	420		
	T_{ou} [kgf·m]	19.7	33.3	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		
	P_{r0} [N]	5400	5910	6710	6990	7500	7500	7460	7150	7010	7090	7370	7410	7430	7390	7410		
	P_{r0} [kgf]	550	602	684	713	765	765	760	729	715	723	751	755	757	753	755		

870r/min

Frame size	n_2 [r/min]	145	109	79.1	66.9	58.0	51.2	41.4	34.8	30.0	24.9	20.2	17.1	14.7	12.3	10.0	7.31	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6120	P _i [kW]	5.07	5.07	4.58	3.87	3.36	2.93	2.38	2.01	1.72	1.44	1.17	0.987	0.853	0.709	0.579		CNH B-54	
	Tou _i [N•m]	317	423	525	525	525	520	522	525	520	525	525	525	525	525	525		CNF B-59	
	Tou _i [kgf•m]	32.3	43.1	53.5	53.5	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5		CNV B-64	
	Pro [N]	6020	6680	7570	7870	8510	8640	9540	9810	9810	9810	9810	9810	9810	9810	9810	9780		
	Pro [kgf]	614	681	772	802	867	881	972	1000	1000	1000	1000	1000	1000	1000	997			
6125	P _i [kW]	5.84	5.45	4.73	4.27	4.03	3.55	2.88	2.42	2.08	1.73	1.40	1.18	1.02	0.770	0.694		CNH B-54	
	Tou _i [N•m]	366	455	542	579	630	630	630	630	630	630	630	630	630	570	630		CNF B-59	
	Tou _i [kgf•m]	37.3	46.4	55.2	59.0	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	58.1	64.2		CNV B-64	
	Pro [N]	5960	6640	7550	7820	8400	8540	9440	9810	9810	9810	9810	9810	9810	9810	9810	9560		
	Pro [kgf]	608	677	770	797	856	871	962	1000	1000	1000	1000	1000	1000	1000	975			
6130	P _i [kW]	8.31	8.17	6.80	5.75	4.99	4.40	3.56	2.99	2.58	2.14	1.74	1.65	1.43	1.19	0.935		CHH B-55	
	Tou _i [N•m]	520	682	780	780	780	780	780	780	780	780	780	880	880	880	848		CHF B-60	
	Tou _i [kgf•m]	53.0	69.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	89.7	89.7	89.7	86.4		CVV B-65	
	Pro [N]	6890	7660	8830	9270	9520	10300	11000	11500	12200	12900	13900	14500	14700	14700	14700			
	Pro [kgf]	702	781	900	945	970	1050	1120	1170	1240	1310	1420	1480	1500	1500	1500			
6135	P _i [kW]	9.10	8.40	8.19	6.92	6.01	5.30	4.29	3.45	3.11	2.58	2.10	1.72	1.65	1.37	1.08		CHH B-55	
	Tou _i [N•m]	569	701	940	938	940	940	940	900	940	940	940	917	1010	1010	979		CHF B-60	
	Tou _i [kgf•m]	58.0	71.5	95.8	95.6	95.8	95.8	95.8	91.7	95.8	95.8	95.8	93.5	103	103	99.8		CVV B-65	
	Pro [N]	6830	7640	8680	9150	9400	10100	10900	11500	12100	12800	13800	14400	14700	14700	14700			
	Pro [kgf]	696	779	885	933	958	1030	1110	1170	1230	1300	1410	1470	1500	1500	1500			
6140	P _i [kW]	11.2	10.6	10.7	9.04	7.83	6.91	5.59	4.70	4.05	3.36	2.73	2.30	1.99	1.65	1.35		CHH B-55	
	Tou _i [N•m]	698	887	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230		CHF B-60	
	Tou _i [kgf•m]	71.2	90.4	125	125	125	125	125	125	125	125	125	125	125	125	125		CVV B-65	
	Pro [N]	10700	11900	13300	13600	14300	15000	16000	16000	16000	16000	16000	16000	16000	16000	16000			
	Pro [kgf]	1090	1210	1360	1390	1460	1530	1630	1630	1630	1630	1630	1630	1630	1630	1630			
6145	P _i [kW]	11.2	10.6	11.0	10.1	8.68	7.73	6.11	5.26	4.53	3.75	3.06	2.50	2.15	1.77	1.38		CHH B-55	
	Tou _i [N•m]	698	887	1260	1370	1360	1370	1340	1370	1370	1370	1370	1330	1320	1310	1250		CHF B-60	
	Tou _i [kgf•m]	71.2	90.4	128	140	139	140	137	140	140	140	140	136	135	134	127		CVV B-65	
	Pro [N]	10700	11900	13300	13600	14200	14900	16000	16000	15800	16000	15700	15900	16000	16000	16000			
	Pro [kgf]	1090	1210	1360	1390	1450	1520	1630	1630	1610	1630	1600	1620	1630	1630	1630			
6160	P _i [kW]	20.3	19.7	15.3	12.9	11.2	9.90	8.01	6.73	5.80	4.81	3.87	3.30	2.85	2.37	1.93		CHH B-55	
	Tou _i [N•m]	1270	1640	1760	1760	1760	1760	1760	1760	1760	1760	1740	1760	1760	1760	1760		CHF B-60	
	Tou _i [kgf•m]	129	167	179	179	179	179	179	179	179	179	177	179	179	179	179		CVV B-66	
	Pro [N]	11700	13000	14900	15800	16800	17400	18800	19800	20800	22100	22100	22100	22100	22100	22100			
	Pro [kgf]	1190	1330	1520	1610	1710	1770	1920	2020	2120	2250	2250	2250	2250	2250	2250			
6165	P _i [kW]	21.2	20.6	18.3	15.5	13.4	11.8	9.59	8.06	6.94	5.75	4.68	3.95	3.41	2.84	2.26		CHH B-55	
	Tou _i [N•m]	1320	1720	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050		CHF B-60	
	Tou _i [kgf•m]	135	175	214	214	214	214	214	214	214	214	214	214	214	209		CVV B-66		
	Pro [N]	11600	12900	14700	15500	16600	17200	18600	19600	20500	21900	22100	22100	22100	22100	21800			
	Pro [kgf]	1180	1310	1500	1580	1690	1750	1900	2000	2090	2230	2250	2250	2250	2250	2220			
6170	P _i [kW]	27.6	27.6	22.1	18.6	16.2	14.3	11.6	9.70	8.37	6.93	5.64	4.76	4.11	3.42	2.79		CHH B-55	
	Tou _i [N•m]	1730	2300	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530		CHF B-60	
	Tou _i [kgf•m]	176	234	258	258	258	258	258	258	258	258	258	258	258	258	258		CVV B-66	
	Pro [N]	13100	14400	16700	17500	18500	19400	21200	22100	23400	24900	26600	27900	29400	29500	29500			
	Pro [kgf]	1340	1470	1700	1780	1890	1980	2160	2250	2390	2540	2710	2840	3000	3010	3010			
6175	P _i [kW]	29.7	30.1	27.5	23.2	20.1	17.8	14.4	12.1	10.4	8.63	7.02	5.92	5.12	4.25	3.47		CHH B-55	
	Tou _i [N•m]	1860	2510	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150		CHF B-60	
	Tou _i [kgf•m]	190	256	321	321	321	321	321	321	321	321	321	321	321	321	321		CVV B-66	
	Pro [N]	13000	14200	16300	17100	18000	19000	20800	21800	23000	24600	26300	27600	29100	29500	29500			
	Pro [kgf]	1330	1450	1660	1740	1830	1940	2120	2220	2340	2510	2680	2810	2970	3010	3010			
6180	P _i [kW]			35.2	29.9	26.0	22.9	18.5	15.5	13.4	11.1	9.05	7.62	6.58	5.47	4.48		CHH B-55	
	Tou _i [N•m]			4040	4060	4060	4060	4050	4050	4050	4050	4060	4050	4050	4050	4060		CHF B-60	
	Tou _i [kgf•m]			412	414	414	414	413	413	413	413	414	413	413	413	414		CVV B-66	
	Pro [N]			22100	23100	24500	26000	28200	29500	31000	33200	35800	37200	39000	41600	41700			
	Pro [kgf]			2250	2350	2500	2650	2870	3010	3160	3380	3650	3790	3980	4240	4250			
6185	P _i [kW]			39.0	36.2	27.2	25.8	22.8	19.2	16.5	13.7	11.2	9.40	8.13	6.10	5.51		CHH B-55	
	Tou _i [N•m]			4470	4900	4250	4580	5000	5000	5000	5000	5000	5000	5000	4510	5000		CHF B-60	
	Tou _i [kgf•m]			456	499	433	467	510	510	510	510	510	510	510	460	510		CVV B-66	
	Pro [N]			21900	22700	24400	25700	27900	29100	30600	32900	35400	36900	38700	41500	41700			
	Pro [kgf]			2230	2310	2490	2620	2840	2970	3120	3350	3610	3760	3940	4230	4250			

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

Frame size	n_2 [r/min]	145	109	79.1	66.9	58.0	51.2	41.4	34.8	30.0	24.9	20.2	17.1	14.7	12.3	10.0	7.31	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	P _i [kW]			41.0	41.0	40.8	36.0	29.1	24.5	21.1	17.5	14.2	12.0	10.4	8.62	7.03		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			4700	5560	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380		
	T _{ou} [kgf·m]			479	567	650	650	650	650	650	650	650	650	650	650	650		
	P _{ro} [N]			31400	32400	33900	36000	39200	41200	43400	46000	49700	52000	54600	58100	58900		
	P _{ro} [kgf]			3200	3300	3460	3670	4000	4200	4420	4690	5070	5300	5570	5920	6000		
6195	P _i [kW]			48.1	48.1	45.3	44.9	36.3	30.5	26.3	21.8	17.8	15.0	12.9	10.8	8.77		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			5520	6520	7090	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960		
	T _{ou} [kgf·m]			563	665	723	811	811	811	811	811	811	811	811	811	811		
	P _{ro} [N]			31100	32000	33600	35400	38700	40700	42900	45500	49200	51500	54200	57600	58400		
	P _{ro} [kgf]			3170	3260	3430	3610	3940	4150	4370	4640	5020	5250	5520	5870	5950		
6205	P _i [kW]			59.7		58.3		42.4		30.5		20.7		15.1		9.65		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			6850		9130		9270		9230		9300		9300		8760		
	T _{ou} [kgf·m]			698		931		945		941		948		948		893		
	P _{ro} [N]			59700		63900		72000		78800		84100		84100		84100		
	P _{ro} [kgf]			6090		6510		7340		8030		8570		8570		8570		
6215	P _i [kW]			75.3		75.3		57.1		41.8		28.2		20.6		12.4		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			8640		11800		12500		12700		12700		12700		11300		
	T _{ou} [kgf·m]			881		1200		1270		1290		1290		1290		1150		
	P _{ro} [N]			59900		64000		72700		79500		90300		98700		104000		
	P _{ro} [kgf]			6110		6520		7410		8100		9200		10100		10600		
6225	P _i [kW]			99.5		92.6		67.6		49.7		35.7		25.8		16.6		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			11400		14500		14800		15000		16000		15900		15100		
	T _{ou} [kgf·m]			1160		1480		1510		1530		1630		1620		1540		
	P _{ro} [N]			63000		67900		76500		83900		95100		104000		117000		
	P _{ro} [kgf]			6420		6920		7800		8550		9690		10600		11900		
6235	P _i [kW]			113		113		86.3		62.5		43.4		31.6		18.9		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			13000		17700		18900		18900		19500		19400		17200		
	T _{ou} [kgf·m]			1330		1800		1930		1930		1990		1980		1750		
	P _{ro} [N]			79200		84300		95400		105000		118000		129000		146000		
	P _{ro} [kgf]			8070		8590		9720		10700		12000		13100		14900		
6245	P _i [kW]			132		132		118		85.3		57.5		41.9		25.0		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			15100		20600		25800		25800		25800		25800		22600		
	T _{ou} [kgf·m]			1540		2100		2630		2630		2630		2630		2300		
	P _{ro} [N]			88000		94000		105000		116000		131000		144000		163000		
	P _{ro} [kgf]			8970		9580		10700		11800		13400		14700		16600		
6255	P _i [kW]			151		151		142		107		71.1		51.9		34.2		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			17300		23600		31000		32500		31900		31900		31000		
	T _{ou} [kgf·m]			1760		2410		3160		3310		3250		3250		3160		
	P _{ro} [N]			108000		116000		128000		142000		161000		176000		199000		
	P _{ro} [kgf]			11000		11800		13000		14500		16400		17900		20300		
6265	P _i [kW]			175		175		172		152		103		74.8		48.5		CHH B-55 CHF B-60 CVW B-66
	T _{ou} [N·m]			20100		27300		37600		46000		46000		46000		44000		
	T _{ou} [kgf·m]			2050		2780		3830		4690		4690		4690		4490		
	P _{ro} [N]			132000		141000		158000		174000		196000		215000		242000		
	P _{ro} [kgf]			13500		14400		16100		17700		20000		21900		24700		
6275	P _i [kW]									159		151		111		53.4		CHH B-55 CHF - CVW B-66
	T _{ou} [N·m]									48100		67600		68200		48500		
	T _{ou} [kgf·m]									4900		6890		6950		4940		
	P _{ro} [N]									203000		248000		248000		227000		
	P _{ro} [kgf]									20700		25300		25300		23100		

$n_1 = 980 \text{ (r/min)}$

n_1 : Input speed [r/min]

T_{out} : Allowable output torque [N·m & kgf·m]

n_2 : Output speed [r/min]

P_{ro} : Allowable output shaft radial load [N & kgf]

P_1 : Allowable input power [kW]

Consult us P_{ro} for CNF-CHF type

Frame size	n_2 [r/min]	163	123	89.1	75.4	65.3	57.6	46.7	39.2	33.8	28.0	22.8	19.2	16.6	13.8	11.3	8.24	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_i [kW]	0.200	0.200	0.200	0.199	0.173	0.152	0.123	0.104	0.089	0.074	0.060						CNH B-54
	T_{out} [N·m]	11.1	14.8	20.4	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0						CNF B-59
	T_{out} [kgf·m]	1.13	1.51	2.08	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45						CNV B-64
	P_{ro} [N]	905	1030	1180	1180	1180	1180	1180	1180	1180	1180	1180						
6065	P_i [kW]	0.286	0.286	0.286	0.249	0.216	0.191	0.154	0.130	0.112	0.093	0.075						CNH B-54
	T_{out} [N·m]	15.9	21.2	29.2	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0						CNF B-59
	T_{out} [kgf·m]	1.62	2.16	2.98	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06						CNV B-64
	P_{ro} [N]	897	1020	1160	1180	1180	1180	1180	1180	1180	1180	1180						
6070	P_i [kW]	0.347	0.347	0.347	0.347	0.324	0.286	0.231	0.194	0.168	0.139	0.113	0.095	0.082				CNH B-54
	T_{out} [N·m]	19.3	25.7	35.3	41.7	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0				CNF B-59
	T_{out} [kgf·m]	1.97	2.62	3.60	4.25	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59				CNV B-64
	P_{ro} [N]	1550	1710	1770	1770	1770	1770	1770	1770	1770	1770	1770	1750	1770				
6075	P_i [kW]	0.407	0.386	0.407	0.407	0.404	0.381	0.309	0.245	0.223	0.185	0.151	0.119	0.101				CNH B-54
	T_{out} [N·m]	22.6	28.6	41.4	49.0	56.1	60.0	60.0	56.8	60.0	60.0	60.0	56.4	55.1				CNF B-59
	T_{out} [kgf·m]	2.30	2.92	4.22	4.99	5.72	6.12	6.12	5.79	6.12	6.12	6.12	5.75	5.62				CNV B-64
	P_{ro} [N]	1540	1700	1770	1770	1770	1770	1770	1770	1770	1770	1660	1590	1620				
6080	P_i [kW]	0.592	0.592	0.592	0.592	0.576	0.508	0.397	0.340	0.298	0.223	0.201	0.169	0.146	0.108	0.090		CNH B-54
	T_{out} [N·m]	32.9	43.9	60.3	71.3	80.0	80.0	77.2	78.7	80.0	72.4	80.0	80.0	80.0	70.8	72.5		CNF B-59
	T_{out} [kgf·m]	3.35	4.48	6.15	7.27	8.15	8.15	7.87	8.02	8.15	7.38	8.15	8.15	8.15	7.22	7.39		CNV B-64
	P_{ro} [N]	2160	2330	2560	2560	2560	2560	2560	2560	2500	2560	2540	2480	2510	2530	2510		
6085	P_i [kW]	0.778	0.778	0.778	0.778	0.720	0.635	0.397	0.432	0.372	0.252	0.251	0.212	0.183	0.127	0.121		CNH B-54
	T_{out} [N·m]	43.2	57.6	79.2	93.6	100	100	77.2	100	100	81.6	100	100	100	83.6	97.6		CNF B-59
	T_{out} [kgf·m]	4.40	5.87	8.07	9.54	10.2	10.2	7.87	10.2	10.2	8.32	10.2	10.2	10.2	10.2	9.95		CNV B-64
	P_{ro} [N]	2140	2310	2530	2560	2560	2560	2560	2360	2300	2560	2340	2290	2310	2430	2280		
6090	P_i [kW]	1.15	1.15	1.15	1.15	1.08	0.953	0.758	0.648	0.559	0.463	0.377	0.315	0.267	0.201	0.186	0.098	CNH B-54
	T_{out} [N·m]	63.7	84.9	117	138	150	150	147	150	150	150	150	149	146	132	150	108	CNF B-59
	T_{out} [kgf·m]	6.49	8.65	11.9	14.1	15.3	15.3	15.0	15.3	15.3	15.3	15.3	15.2	14.9	13.5	15.3	11.0	CNV B-64
	P_{ro} [N]	3180	3340	3340	3340	3340	3340	3340	3280	3290	3300	3310	3280	3300	3310	3310	3310	
6095	P_i [kW]	1.52	1.52	1.52	1.51	1.44	1.27	1.03	0.745	0.698	0.610	0.471	0.325	0.267	0.201	0.195	0.098	CNH B-54
	T_{out} [N·m]	84.2	112	154	182	200	200	200	172	187	198	187	153	146	132	157	108	CNF B-59
	T_{out} [kgf·m]	8.58	11.4	15.7	18.6	20.4	20.4	20.4	17.5	19.1	20.2	19.1	15.6	14.9	13.5	16.0	11.0	CNV B-64
	P_{ro} [N]	3130	3340	3340	3340	3340	3340	3340	3240	3220	3210	3240	3280	3300	3310	3300	3310	
6100	P_i [kW]	2.35	2.35	2.35	2.08	1.80	1.59	1.29	1.08	0.931	0.772	0.628	0.530	0.458	0.380	0.310	0.210	CNH B-54
	T_{out} [N·m]	130	174	239	250	250	250	250	250	250	250	250	250	250	250	250	231	CNF B-59
	T_{out} [kgf·m]	13.3	17.7	24.4	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	23.5	CNV B-64
	P_{ro} [N]	4620	5130	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5400	5370	
6105	P_i [kW]	3.02	2.78	2.86	2.49	2.16	1.91	1.54	1.30	1.12	0.926	0.754	0.629	0.530	0.402	0.372	0.235	CNH B-54
	T_{out} [N·m]	168	206	291	300	300	300	300	300	300	300	300	297	290	264	300	258	CNF B-59
	T_{out} [kgf·m]	17.1	21.0	29.7	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.3	29.6	26.9	30.6	26.3	CNV B-64
	P_{ro} [N]	4570	5090	5400	5400	5400	5400	5400	5400	5400	5400	5400	5310	5260	5370	4780	5350	
6110	P_i [kW]	3.48	3.55	3.54	2.99	2.59	2.29	1.85	1.56	1.34	1.11	0.904	0.762	0.659	0.548	0.447		CNH B-54
	T_{out} [N·m]	193	263	360	360	360	360	360	360	360	360	360	360	360	360	360		CNF B-59
	T_{out} [kgf·m]	19.7	26.8	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7		CNV B-64
	P_{ro} [N]	5180	5740	6510	6770	7260	7370	7610	7340	7200	7280	7590	7590	7610	7580	7600		
6115	P_i [kW]	3.48	3.92	3.92	3.49	3.02	2.67	2.16	1.81	1.56	1.30	1.06	0.890	0.769	0.639	0.521		CNH B-54
	T_{out} [N·m]	193	290	399	420	420	420	420	420	420	420	420	420	420	420	420		CNF B-59
	T_{out} [kgf·m]	19.7	29.6	40.7	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8		CNV B-64
	P_{ro} [N]	5180	5700	6460	6700	7190	7300	7460	7150	7010	7090	7370	7410	7430	7390	7410		

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$$n_1 = 980 \text{ (r/min)}$$

980r/min

Frame size	n ₂ [r/min]	163	123	89.1	75.4	65.3	57.6	46.7	39.2	33.8	28.0	22.8	19.2	16.6	13.8	11.3	8.24	Page of Dimension Table	
		Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87		119
6120	P _i [kW]	5.07	5.07	5.07	4.36	3.78	3.30	2.68	2.27	1.94	1.62	1.32	1.11	0.961	0.799	0.652		CNH B-54 CNF B-59 CNV B-64	
	Tou [N·m]	282	375	516	525	525	520	522	525	520	525	525	525	525	525	525	525		
	Tou [kgf·m]	28.7	38.2	52.6	53.5	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5	53.5		
	P _{ro} [N]	5810	6450	7260	7540	8160	8280	9150	9640	9810	9810	9810	9810	9810	9810	9810	9780		
	P _{ro} [kgf]	592	657	740	769	832	844	933	983	1000	1000	1000	1000	1000	1000	1000	997		
6125	P _i [kW]	6.40	5.97	5.18	4.68	4.54	4.00	3.24	2.72	2.35	1.94	1.58	1.33	1.15	0.843	0.761		CNH B-54 CNF B-59 CNV B-64	
	Tou [N·m]	355	442	527	563	630	630	630	630	630	630	630	630	630	630	554	613		
	Tou [kgf·m]	36.2	45.1	53.7	57.4	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	56.5	62.5		
	P _{ro} [N]	5730	6380	7250	7510	8050	8180	9050	9540	9810	9810	9810	9810	9810	9810	9810	9590		
	P _{ro} [kgf]	584	650	739	766	821	834	923	972	1000	1000	1000	1000	1000	1000	1000	978		
6130	P _i [kW]	9.10	8.95	7.66	6.48	5.62	4.96	4.01	3.37	2.91	2.41	1.96	1.81	1.57	1.30	1.05		CHH B-55 CHF B-60 CVW B-65	
	Tou [N·m]	505	663	780	780	780	780	780	780	780	780	780	855	855	855	848			
	Tou [kgf·m]	51.5	67.6	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	87.2	87.2	87.2	86.4			
	P _{ro} [N]	6620	7350	8460	8890	9130	9840	10600	11100	11700	12400	13300	13900	14600	14700	14700			
	P _{ro} [kgf]	675	749	862	906	931	1000	1080	1130	1190	1260	1360	1420	1490	1500	1500			
6135	P _i [kW]	9.96	9.20	9.23	7.58	6.77	5.97	4.84	3.89	3.50	2.90	2.36	1.89	1.81	1.50	1.22		CHH B-55 CHF B-60 CVW B-65	
	Tou [N·m]	553	682	940	912	940	940	940	900	940	940	940	892	987	987	979			
	Tou [kgf·m]	56.4	69.5	95.8	93.0	95.8	95.8	95.8	91.7	95.8	95.8	95.8	90.9	101	101	99.8			
	P _{ro} [N]	6560	7330	8310	8780	9010	9720	10500	11000	11600	12200	13200	13900	14500	14700	14700			
	P _{ro} [kgf]	669	747	847	895	918	991	1070	1120	1180	1240	1350	1420	1480	1500	1500			
6140	P _i [kW]	12.2	11.6	12.0	10.2	8.82	7.78	6.30	5.29	4.56	3.78	3.08	2.59	2.24	1.86	1.52		CHH B-55 CHF B-60 CVW B-65	
	Tou [N·m]	678	863	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230		
	Tou [kgf·m]	69.1	88.0	125	125	125	125	125	125	125	125	125	125	125	125	125	125		
	P _{ro} [N]	10300	11400	12800	13100	13800	14400	15500	16000	16000	16000	16000	16000	16000	16000	16000	16000		
	P _{ro} [kgf]	1050	1160	1300	1340	1410	1470	1580	1630	1630	1630	1630	1630	1630	1630	1630	1630		
6145	P _i [kW]	12.2	11.6	12.1	11.4	9.78	8.71	6.88	5.92	5.10	4.23	3.44	2.74	2.36	1.94	1.55		CHH B-55 CHF B-60 CVW B-65	
	Tou [N·m]	678	863	1230	1370	1360	1370	1340	1370	1370	1370	1370	1370	1290	1290	1280	1250		
	Tou [kgf·m]	69.1	88.0	125	140	139	140	137	140	140	140	140	140	131	131	130	127		
	P _{ro} [N]	10300	11400	12800	13100	13700	14400	15400	16000	15800	16000	15700	15900	16000	16000	16000	16000		
	P _{ro} [kgf]	1050	1160	1300	1340	1400	1470	1570	1630	1610	1630	1600	1620	1630	1630	1630	1630		
6160	P _i [kW]	20.3	19.7	17.2	14.6	12.6	11.2	9.03	7.58	6.54	5.42	4.36	3.72	3.21	2.67	2.18		CHH B-55 CHF B-60 CVW B-66	
	Tou [N·m]	1130	1460	1760	1760	1760	1760	1760	1760	1760	1760	1740	1760	1760	1760	1760			
	Tou [kgf·m]	115	149	179	179	179	179	179	179	179	179	177	179	179	179	179			
	P _{ro} [N]	11300	12600	14300	15100	16100	16700	18100	19000	19900	21200	22100	22100	22100	22100	22100			
	P _{ro} [kgf]	1150	1280	1460	1540	1640	1700	1850	1940	2030	2160	2250	2250	2250	2250	2250			
6165	P _i [kW]	23.8	22.5	20.6	17.4	15.1	13.3	10.8	9.07	7.82	6.48	5.28	4.45	3.84	3.19	2.55		CHH B-55 CHF B-60 CVW B-66	
	Tou [N·m]	1320	1670	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050			
	Tou [kgf·m]	135	170	214	214	214	214	214	214	214	214	214	214	214	214	209			
	P _{ro} [N]	11100	12400	14100	14900	15900	16500	17800	18800	19700	21000	22100	22100	22100	22100	21800			
	P _{ro} [kgf]	1130	1260	1440	1520	1620	1680	1810	1920	2010	2140	2250	2250	2250	2250	2220			
6170	P _i [kW]	27.6	27.6	24.8	21.0	18.2	16.1	13.0	10.9	9.42	7.81	6.36	5.36	4.63	3.85	3.14		CHH B-55 CHF B-60 CVW B-66	
	Tou [N·m]	1530	2040	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530			
	Tou [kgf·m]	156	208	258	258	258	258	258	258	258	258	258	258	258	258	258			
	P _{ro} [N]	12700	13900	16000	16800	17700	18600	20300	21200	22400	23900	25600	26800	28200	29500	29500			
	P _{ro} [kgf]	1290	1420	1630	1710	1800	1900	2070	2160	2280	2440	2610	2730	2870	3010	3010			
6175	P _i [kW]	30.1	30.1	30.1	26.2	22.3	20.0	16.2	13.6	11.7	9.72	7.91	6.67	5.77	4.79	3.91		CHH B-55 CHF B-60 CVW B-66	
	Tou [N·m]	1670	2230	3070	3150	3100	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150			
	Tou [kgf·m]	170	227	313	321	316	321	321	321	321	321	321	321	321	321	321			
	P _{ro} [N]	12600	13800	15600	16400	17300	18200	20000	20800	22100	23600	25200	26500	27900	29500	29500			
	P _{ro} [kgf]	1280	1410	1590	1670	1760	1860	2040	2120	2250	2410	2570	2700	2840	3010	3010			
6180	P _i [kW]			35.2	33.7	29.2	25.8	20.8	17.5	15.1	12.5	10.2	8.58	7.42	6.16	5.04		CHH B-55 CHF B-60 CVW B-66	
	Tou [N·m]			3580	4060	4060	4060	4050	4050	4050	4050	4060	4050	4050	4050	4060			
	Tou [kgf·m]			365	414	414	414	413	413	413	413	414	413	413	413	414			
	P _{ro} [N]			21400	22200	23400	24900	27100	28300	29700	31900	34300	35700	37400	39900	41700			
	P _{ro} [kgf]			2180	2260	2390	2540	2760	2880	3030	3250	3500	3640	3810	4070	4250			
6185	P _i [kW]			39.0	39.0	29.8	28.3	25.7	21.6	18.6	15.4	12.6	10.6	9.15	6.87	6.21		CHH B-55 CHF B-60 CVW B-66	
	Tou [N·m]			3970	4690	4130	4450	5000	5000	5000	5000	5000	5000	5000	4510	5000			
	Tou [kgf·m]			405	478	421	454	510	510	510	510	510	510	510	460	510			
	P _{ro} [N]			21200	21900	23400	24700	26700	27900	29300	31500	33900	35400	37100	39800	41700			
	P _{ro} [kgf]			2160	2230	2390	2520	2720	2840	2990	3210	3460	3610	3780	4060	4250			

$$n_1 = 980 \text{ (r/min)}$$

Frame size	n_2 [r/min]	163	123	89.1	75.4	65.3	57.6	46.7	39.2	33.8	28.0	22.8	19.2	16.6	13.8	11.3	8.24	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	Pi [kW]			41.0	41.0	41.0	40.5	32.8	27.6	23.8	19.7	16.0	13.5	11.7	9.71	7.92		CHH B-55
	Tou [N•m]			4180	4930	5690	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380		CHF B-60
	Tou [kgf•m]			426	503	580	650	650	650	650	650	650	650	650	650	650		CVV B-66
	Pro [N]			30300	31300	32700	34500	37600	39500	41600	44100	47700	49900	52400	55800	58900		
	Pro [kgf]			3090	3190	3330	3520	3830	4030	4240	4500	4860	5090	5340	5690	6000		
6195	Pi [kW]			48.1	48.1	48.1	48.1	40.9	34.4	29.6	24.6	20.0	16.9	14.6	12.1	9.88		CHH B-55
	Tou [N•m]			4900	5790	6680	7570	7960	7960	7960	7960	7960	7960	7960	7960	7960		CHF B-60
	Tou [kgf•m]			499	590	681	772	811	811	811	811	811	811	811	811	811		CVV B-66
	Pro [N]			30000	31000	32300	34100	37100	39000	41200	43700	47200	49400	52000	55300	58400		
	Pro [kgf]			3060	3160	3290	3480	3780	3980	4200	4450	4810	5040	5300	5640	5950		
6205	Pi [kW]			59.7		59.7		47.7		34.4		23.4		17.0		10.9		CHH B-55
	Tou [N•m]			6080		8290		9270		9230		9300		9300		8760		CHF B-60
	Tou [kgf•m]			620		845		945		941		948		948		893		CVV B-66
	Pro [N]			57700		61800		69400		76000		84100		84100		84100		
	Pro [kgf]			5880		6300		7070		7750		8570		8570		8570		
6215	Pi [kW]			75.3		75.3		64.3		47.1		31.8		23.2		14.0		CHH B-55
	Tou [N•m]			7670		10500		12500		12700		12700		12700		11300		CHF B-60
	Tou [kgf•m]			782		1070		1270		1290		1290		1290		1150		CVV B-66
	Pro [N]			58000		62000		70100		76600		87100		95100		104000		
	Pro [kgf]			5910		6320		7150		7810		8880		9690		10600		
6225	Pi [kW]			99.5		99.5		76.1		56.0		40.2		29.1		18.7		CHH B-55
	Tou [N•m]			10100		13800		14800		15000		16000		15900		15100		CHF B-60
	Tou [kgf•m]			1030		1410		1510		1530		1630		1620		1540		CVV B-66
	Pro [N]			61000		65500		73700		80800		91700		100000		113000		
	Pro [kgf]			6220		6680		7510		8240		9350		10200		11500		
6235	Pi [kW]			113		113		97.2		70.4		47.6		34.6		21.3		CHH B-55
	Tou [N•m]			11500		15700		18900		18900		18900		18900		17200		CHF B-60
	Tou [kgf•m]			1170		1600		1930		1930		1930		1930		1750		CVV B-66
	Pro [N]			76700		81700		91900		101000		114000		125000		141000		
	Pro [kgf]			7820		8330		9370		10300		11600		12700		14400		
6245	Pi [kW]			132		132		120		94.2		64.8		47.2		28.1		CHH B-55
	Tou [N•m]			13400		18300		23300		25300		25800		25800		22600		CHF B-60
	Tou [kgf•m]			1370		1870		2380		2580		2630		2630		2300		CVV B-66
	Pro [N]			85200		91100		102000		112000		126000		138000		157000		
	Pro [kgf]			8690		9290		10400		11400		12800		14100		16000		
6255	Pi [kW]			151		151		151		118		77.9		56.8		38.5		CHH B-55
	Tou [N•m]			15300		20900		29300		31800		31000		31000		31000		CHF B-60
	Tou [kgf•m]			1560		2130		2990		3240		3160		3160		3160		CVV B-66
	Pro [N]			104000		112000		124000		137000		155000		170000		192000		
	Pro [kgf]			10600		11400		12600		14000		15800		17300		19600		
6265	Pi [kW]			175		175		172		159		113		84.2		53.4		CHH B-55
	Tou [N•m]			17800		24300		33400		42700		45000		46000		43000		CHF B-60
	Tou [kgf•m]			1810		2480		3400		4350		4590		4690		4380		CVV B-66
	Pro [N]			128000		137000		152000		168000		189000		207000		234000		
	Pro [kgf]			13000		14000		15500		17100		19300		21100		23900		
6275	Pi [kW]									159		151		125		53.4		CHH B-55
	Tou [N•m]									42700		60000		68200		43000		CHF -
	Tou [kgf•m]									4350		6120		6950		4380		CVV B-66
	Pro [N]									196000		248000		248000		219000		
	Pro [kgf]									20000		25300		25300		22300		

- Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 1165 \text{ (r/min)}$

n_1 : Input speed [r/min]

T_{out} : Allowable output torque [N·m & kgf·m]

n_2 : Output speed [r/min]

P_{r0} : Allowable output shaft radial load [N & kgf]

P_1 : Allowable input power [kW]

Consult us P_{r0} for CNF·CHF type

Frame size	n_2 [r/min]	194	146	106	89.6	77.7	68.5	55.5	46.6	40.2	33.3	27.1	22.8	19.7	16.4	13.4	9.79	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6060	P_i [kW]	0.200	0.200	0.200	0.200	0.200	0.181	0.147	0.110	0.106	0.088	0.072						CNH	
	T_{out} [N·m]	9.35	12.5	17.1	20.2	23.4	24.0	24.0	21.4	24.0	24.0	24.0						B-54	
	T_{out} [kgf·m]	0.953	1.27	1.74	2.06	2.39	2.45	2.45	2.18	2.45	2.45	2.45						CNF	
	P_{r0} [N]	857	978	1180	1180	1180	1180	1180	1180	1180	1180	1180							B-59
	P_{r0} [kgf]	87.4	100	120	120	120	120	120	120	120	120	120							CNV
6065	P_i [kW]	0.286	0.286	0.286	0.286	0.257	0.227	0.183	0.154	0.133	0.110	0.090							CNH
	T_{out} [N·m]	13.4	17.8	24.5	29.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0							B-54
	T_{out} [kgf·m]	1.37	1.81	2.50	2.96	3.06	3.06	3.06	3.06	3.06	3.06	3.06							CNF
	P_{r0} [N]	850	968	1180	1180	1180	1180	1180	1180	1180	1180	1180							B-59
	P_{r0} [kgf]	86.6	98.7	120	120	120	120	120	120	120	120	120							CNV
6070	P_i [kW]	0.347	0.347	0.347	0.347	0.347	0.340	0.275	0.230	0.199	0.165	0.134	0.100	0.098					CNH
	T_{out} [N·m]	16.2	21.6	29.7	35.1	40.5	45.0	45.0	44.7	45.0	45.0	45.0	39.7	45.0					B-54
	T_{out} [kgf·m]	1.65	2.20	3.03	3.58	4.13	4.59	4.59	4.56	4.59	4.59	4.59	4.05	4.59					CNF
	P_{r0} [N]	1470	1620	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770					B-59
	P_{r0} [kgf]	150	165	180	180	180	180	180	180	180	180	180	180	180					CNV
6075	P_i [kW]	0.407	0.407	0.407	0.407	0.407	0.407	0.367	0.280	0.264	0.220	0.179	0.136	0.115					CNH
	T_{out} [N·m]	19.0	25.3	34.9	41.2	47.5	53.9	60.0	54.6	59.6	60.0	60.0	54.2	52.9					B-54
	T_{out} [kgf·m]	1.94	2.58	3.56	4.20	4.84	5.49	6.12	5.57	6.08	6.12	6.12	5.52	5.39					CNF
	P_{r0} [N]	1470	1610	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1630	1660				B-59
	P_{r0} [kgf]	150	164	180	180	180	180	180	180	180	180	180	169	166	169				CNV
6080	P_i [kW]	0.592	0.592	0.592	0.592	0.592	0.592	0.472	0.340	0.340	0.251	0.239	0.192	0.174	0.120	0.090			CNH
	T_{out} [N·m]	27.7	36.9	50.7	60.0	69.2	78.4	77.2	66.2	76.8	68.3	80.0	76.3	80.0	66.3	61.0			B-54
	T_{out} [kgf·m]	2.82	3.76	5.17	6.12	7.05	7.99	7.87	6.75	7.83	6.96	8.15	7.78	8.15	6.76	6.22			CNF
	P_{r0} [N]	2050	2210	2430	2560	2560	2560	2560	2560	2530	2560	2540	2510	2510	2560	2560			B-59
	P_{r0} [kgf]	209	225	248	261	261	261	261	261	258	261	259	256	256	261	261			CNV
6085	P_i [kW]	0.778	0.778	0.778	0.778	0.778	0.755	0.472	0.475	0.443	0.283	0.294	0.241	0.218	0.143	0.121			CNH
	T_{out} [N·m]	36.3	48.5	66.6	78.7	90.8	100	77.2	92.4	100	77.0	98.4	95.8	100	78.9	82.1			B-54
	T_{out} [kgf·m]	3.70	4.94	6.79	8.02	9.26	10.2	7.87	9.42	10.2	7.85	10.0	9.77	10.2	8.04	8.37			CNF
	P_{r0} [N]	2030	2190	2400	2560	2560	2560	2560	2450	2300	2560	2360	2330	2310	2470	2430			B-59
	P_{r0} [kgf]	207	223	245	261	261	261	261	250	234	261	241	238	235	252	248			CNV
6090	P_i [kW]	1.15	1.15	1.15	1.15	1.15	1.13	0.758	0.671	0.625	0.550	0.435	0.332	0.298	0.239	0.211	0.117		CNH
	T_{out} [N·m]	53.6	71.4	98.2	116	134	150	124	131	141	150	146	132	137	132	143	108		B-54
	T_{out} [kgf·m]	5.46	7.28	10.0	11.8	13.7	15.3	12.6	13.4	14.4	15.3	14.9	13.5	14.0	13.5	14.6	11.0		CNF
	P_{r0} [N]	3010	3340	3340	3340	3340	3340	3340	3320	3310	3300	3320	3320	3320	3310	3330	3310		B-59
	P_{r0} [kgf]	307	340	340	340	340	340	340	338	337	336	338	338	338	337	339	337		CNV
6095	P_i [kW]	1.52	1.52	1.52	1.52	1.52	1.51	1.22	0.850	0.784	0.696	0.537	0.361	0.298	0.239	0.223	0.117		CNH
	T_{out} [N·m]	70.8	94.4	130	153	177	200	200	166	177	190	180	143	137	132	151	108		B-54
	T_{out} [kgf·m]	7.22	9.62	13.3	15.6	18.0	20.4	20.4	16.9	18.0	19.4	18.3	14.6	14.0	13.5	15.4	11.0		CNF
	P_{r0} [N]	2980	3290	3340	3340	3340	3340	3340	3250	3240	3220	3260	3290	3320	3310	3310	3310		B-59
	P_{r0} [kgf]	304	335	340	340	340	340	340	331	330	328	332	335	338	337	337	337		CNV
6100	P_i [kW]	2.35	2.35	2.35	2.35	2.14	1.89	1.53	1.27	1.11	0.917	0.747	0.560	0.516	0.436	0.369	0.210		CNH
	T_{out} [N·m]	110	146	201	238	250	250	250	247	250	250	250	222	237	241	250	195		B-54
	T_{out} [kgf·m]	11.2	14.9	20.5	24.3	25.5	25.5	25.5	25.2	25.5	25.5	25.5	22.6	24.2	24.6	25.5	19.9		CNF
	P_{r0} [N]	4380	4870	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5390	5400	5390		B-59
	P_{r0} [kgf]	446	496	550	550	550	550	550	550	550	550	550	550	550	549	550	549		CNV
6105	P_i [kW]	3.18	3.18	3.18	2.96	2.57	2.27	1.83	1.54	1.33	1.10	0.896	0.699	0.603	0.448	0.425	0.262		CNH
	T_{out} [N·m]	149	198	272	300	300	300	300	300	300	300	300	278	277	248	288	243		B-54
	T_{out} [kgf·m]	15.2	20.2	27.7	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	28.3	28.2	25.3	29.4	24.8		CNF
	P_{r0} [N]	4320	4800	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	5090	5360		B-59
	P_{r0} [kgf]	440	489	550	550	550	550	550	550	550	550	550	550	550	548	519	546		CNV
6110	P_i [kW]	3.55	3.55	3.55	3.55	3.08	2.72	2.20	1.85	1.59	1.32	1.08	0.906	0.784	0.651	0.531			CNH
	T_{out} [N·m]	166	221	304	359	360	360	360	360	360	360	360	360	360	360	360			B-54
	T_{out} [kgf·m]	16.9	22.5	31.0	36.6	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7	36.7			CNF
	P_{r0} [N]	4910	5450	6180	6370	6830	6930	7390	7340	7200	7280	7590	7590	7610	7580	7600			B-59
	P_{r0} [kgf]	501	556	630	649	696	706	753	748	734	742	774	774	776	773	775			CNV
6115	P_i [kW]	3.92	3.92	3.92	3.90	3.60	3.17	2.57	2.16	1.86	1.54	1.25	1.06	0.914	0.758	0.620			CNH
	T_{out} [N·m]	183	244	336	395	420	420	420	420	420	420	420	420	420	419	420			B-54
	T_{out} [kgf·m]	18.7	24.9	34.3	40.3	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.8	42.7	42.8			CNF
	P_{r0} [N]	4890	5420	6150	6330	6760	6870	7320	7150	7010	7090	7370	7410	7430	7420	7410			B-59
	P_{r0} [kgf]	498	552	627	645	689	700	746	729	715	723	751	755	757	756	755			CNV

1165r/min

Frame size	n ₂ [r/min]	194	146	106	89.6	77.7	68.5	55.5	46.6	40.2	33.3	27.1	22.8	19.7	16.4	13.4	9.79	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6120	P _i [kW]	5.07	5.07	5.07	5.07	4.49	3.93	3.19	2.70	2.30	1.93	1.57	1.32	1.14	0.950	0.775		CNH B-54	
	Tou _i [N•m]	237	316	434	513	525	520	522	525	520	525	525	525	525	525	525		CNF B-59	
	Tou _i [kgf•m]	24.2	32.2	44.2	52.3	53.5	53.0	53.2	53.5	53.0	53.5	53.5	53.5	53.5	53.5	53.5		CNV B-64	
	Pro [N]	5510	6130	6910	7100	7670	7790	8610	9070	9470	9810	9810	9810	9810	9810	9810	9780		
	Pro [kgf]	562	625	704	724	782	794	878	925	965	1000	1000	1000	1000	1000	997			
6125	P _i [kW]	6.96	6.82	5.91	5.34	5.39	4.76	3.85	3.24	2.79	2.31	1.88	1.59	1.37	0.963	0.868		CNH B-54	
	Tou _i [N•m]	325	425	506	540	630	630	630	630	630	630	630	630	630	532	588		CNF B-59	
	Tou _i [kgf•m]	33.1	43.3	51.6	55.0	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	54.2	59.9		CNV B-64	
	Pro [N]	5420	6010	6840	7080	7560	7690	8510	8980	9380	9810	9810	9810	9810	9810	9810	9650		
	Pro [kgf]	552	613	697	722	771	784	867	915	956	1000	1000	1000	1000	1000	984			
6130	P _i [kW]	9.39	9.39	9.11	7.70	6.68	5.89	4.77	4.01	3.45	2.86	2.33	2.07	1.79	1.49	1.21		CHH B-55	
	Tou _i [N•m]	439	585	780	780	780	780	780	780	780	780	780	821	821	821	821		CHF B-60	
	Tou _i [kgf•m]	44.8	59.6	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	83.7	83.7	83.7	83.7		CVV B-65	
	Pro [N]	6290	6980	7940	8360	8580	9260	9960	10400	11000	11600	12600	13100	13800	14700	14700			
	Pro [kgf]	641	712	809	852	875	944	1020	1060	1120	1180	1280	1340	1410	1500	1500			
6135	P _i [kW]	11.3	10.5	10.7	8.65	8.05	7.10	5.69	4.62	4.13	3.45	2.81	2.16	2.06	1.71	1.40		CHH B-55	
	Tou _i [N•m]	528	654	916	876	940	940	930	900	933	940	940	856	948	948	948		CHF B-60	
	Tou _i [kgf•m]	53.8	66.7	93.4	89.3	95.8	95.8	94.8	91.7	95.1	95.8	95.8	87.3	96.6	96.6	96.6		CVV B-65	
	Pro [N]	6190	6910	7820	8280	8460	9140	9840	10300	10900	11500	12400	13100	13700	14600	14700			
	Pro [kgf]	631	704	797	844	862	932	1000	1050	1110	1170	1260	1340	1400	1490	1500			
6140	P _i [kW]	13.0	13.0	13.0	12.1	10.5	9.25	7.49	6.29	5.42	4.49	3.66	3.08	2.67	2.22	1.81		CHH B-55	
	Tou _i [N•m]	609	811	1120	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230		CHF B-60	
	Tou _i [kgf•m]	62.1	82.7	114	125	125	125	125	125	125	125	125	125	125	125	125		CVV B-65	
	Pro [N]	9820	10900	12200	12400	13100	13700	14700	15400	15800	16000	16000	16000	16000	16000	16000			
	Pro [kgf]	1000	1110	1240	1260	1340	1400	1500	1570	1610	1630	1630	1630	1630	1630	1630			
6145	P _i [kW]	13.9	13.3	13.8	13.5	11.6	10.3	8.02	7.04	6.07	5.03	3.95	3.13	2.69	2.22	1.83		CHH B-55	
	Tou _i [N•m]	651	828	1180	1360	1360	1370	1310	1370	1370	1370	1370	1320	1240	1240	1230	1240		CHF B-60
	Tou _i [kgf•m]	66.4	84.4	120	139	139	140	134	140	140	140	135	126	126	125	126		CVV B-65	
	Pro [N]	9800	10900	12100	12400	13000	13600	14600	15400	15700	16000	15900	16000	16000	16000	16000			
	Pro [kgf]	999	1110	1230	1260	1330	1390	1490	1570	1600	1630	1620	1630	1630	1630	1630			
6160	P _i [kW]	20.3	19.7	19.7	17.3	15.0	13.1	10.7	9.01	7.77	6.44	5.18	4.42	3.82	3.17	2.59		CHH B-55	
	Tou _i [N•m]	948	1230	1690	1760	1760	1730	1760	1760	1760	1760	1740	1760	1760	1760	1760		CHF B-60	
	Tou _i [kgf•m]	96.6	125	172	179	179	176	179	179	179	179	177	179	179	179	179		CVV B-66	
	Pro [N]	10800	12000	13500	14200	15100	15700	17000	17900	18700	20000	21500	22100	22100	22100	22100			
	Pro [kgf]	1100	1220	1380	1450	1540	1600	1730	1820	1910	2040	2190	2250	2250	2250	2250			
6165	P _i [kW]	24.1	24.1	24.1	20.7	18.0	15.9	12.8	10.8	9.30	7.70	6.27	5.29	4.57	3.80	3.03		CHH B-55	
	Tou _i [N•m]	1120	1500	2060	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2100	2050		CHF B-60	
	Tou _i [kgf•m]	114	153	210	214	214	214	214	214	214	214	214	214	214	214	209		CVV B-66	
	Pro [N]	10600	11800	13200	14000	14900	15500	16800	17700	18500	19800	21200	22100	22100	22100	21800			
	Pro [kgf]	1080	1200	1350	1430	1520	1580	1710	1800	1890	2020	2160	2250	2250	2250	2220			
6170	P _i [kW]	27.6	27.6	27.6	25.0	21.7	19.1	15.5	13.0	11.2	9.28	7.56	6.37	5.51	4.58	3.73		CHH B-55	
	Tou _i [N•m]	1290	1720	2360	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530		CHF B-60	
	Tou _i [kgf•m]	131	175	241	258	258	258	258	258	258	258	258	258	258	258	258		CVV B-66	
	Pro [N]	12100	13300	15100	15800	16600	17400	19100	19900	21100	22500	24100	25200	26500	28200	29500			
	Pro [kgf]	1230	1360	1540	1610	1690	1770	1950	2030	2150	2290	2460	2570	2700	2870	3010			
6175	P _i [kW]	30.1	30.1	30.1	30.1	25.4	23.8	19.3	16.2	13.9	11.6	9.41	7.93	6.86	5.70	4.65		CHH B-55	
	Tou _i [N•m]	1410	1880	2580	3050	2970	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150		CHF B-60	
	Tou _i [kgf•m]	144	192	263	311	303	321	321	321	321	321	321	321	321	321	321		CVV B-66	
	Pro [N]	12000	13200	14900	15400	16300	17000	18700	19600	20700	22100	23700	24900	26200	27900	29500			
	Pro [kgf]	1220	1350	1520	1570	1660	1730	1910	2000	2110	2250	2420	2540	2670	2840	3010			
6180	P _i [kW]			35.2	35.2	32.4	30.6	24.8	20.8	17.9	14.9	12.1	10.2	8.82	7.33	5.99		CHH B-55	
	Tou _i [N•m]			3020	3560	3780	4050	4050	4050	4050	4050	4050	4060	4050	4050	4060		CHF B-60	
	Tou _i [kgf•m]			308	363	385	413	413	413	413	413	413	414	413	413	414		CVV B-66	
	Pro [N]			20300	21000	22100	23400	25500	26600	27900	30000	32300	33600	35300	37600	40600			
	Pro [kgf]			2070	2140	2250	2390	2600	2710	2840	3060	3290	3430	3600	3830	4140			
6185	P _i [kW]			39.0	39.0	34.0	32.3	30.6	25.7	22.1	18.3	14.9	12.6	10.9	8.16	7.38		CHH B-55	
	Tou _i [N•m]			3340	3950	3970	4280	5000	5000	5000	5000	5000	5000	5000	4510	5000		CHF B-60	
	Tou _i [kgf•m]			340	403	405	436	510	510	510	510	510	510	510	460	510		CVV B-66	
	Pro [N]			20200	20900	22000	23300	25100	26200	27600	29700	31900	33300	34900	37400	40300			
	Pro [kgf]			2060	2130	2240	2380	2560	2670	2810	3030	3250	3390	3560	3810	4110			

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 1165 (r/min)$

Frame size	$n_2 [r/min]$	194	146	106	89.6	77.7	68.5	55.5	46.6	40.2	33.3	27.1	22.8	19.7	16.4	13.4	9.79	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	$P_i [kW]$			41.0	41.0	41.0	41.0	39.0	32.8	28.3	23.4	18.8	16.1	13.9	11.5	9.42		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			3510	4150	4790	5430	6380	6380	6380	6380	6310	6380	6380	6380	6380		
	$T_{ou} [kgf \cdot m]$			358	423	488	554	650	650	650	650	643	650	650	650	650		
	$P_{ro} [N]$			28700	29700	31100	32800	35400	37200	39200	41600	44900	47000	49400	52500	56800		
	$P_{ro} [kgf]$			2930	3030	3170	3340	3610	3790	4000	4240	4580	4790	5040	5350	5790		
6195	$P_i [kW]$			48.1	48.1	48.1	48.1	48.1	40.5	35.2	29.2	23.0	20.0	17.3	14.4	11.7		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			4120	4870	5620	6370	7870	7880	7960	7960	7690	7960	7960	7960	7960		
	$T_{ou} [kgf \cdot m]$			420	496	573	649	802	803	811	811	784	811	811	811	811		
	$P_{ro} [N]$			28500	29500	30800	32400	34900	36700	38700	41100	44500	46500	49000	52100	56300		
	$P_{ro} [kgf]$			2910	3010	3140	3300	3560	3740	3940	4190	4540	4740	4990	5310	5740		
6205	$P_i [kW]$			59.7		59.7		54.7		39.6		27.8		19.5		12.9		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			5110		6970		8950		8950		9300		8950		8760		
	$T_{ou} [kgf \cdot m]$			521		710		912		912		948		912		893		
	$P_{ro} [N]$			55000		58900		65800		72100		81600		84100		84100		
	$P_{ro} [kgf]$			5610		6000		6710		7350		8320		8570		8570		
6215	$P_i [kW]$			75.3		75.3		75.3		56.0		37.8		27.5		16.6		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			6450		8800		12300		12700		12700		12700		11300		
	$T_{ou} [kgf \cdot m]$			657		897		1250		1290		1290		1290		1150		
	$P_{ro} [N]$			55300		59200		66400		72600		82500		90100		102000		
	$P_{ro} [kgf]$			5640		6030		6770		7400		8410		9180		10400		
6225	$P_i [kW]$			99.5		99.5		90.5		66.6		47.8		33.3		22.2		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			8520		11600		14800		15000		16000		15300		15100		
	$T_{ou} [kgf \cdot m]$			869		1180		1510		1530		1630		1560		1540		
	$P_{ro} [N]$			58200		62600		69800		76500		86800		95000		107000		
	$P_{ro} [kgf]$			5930		6380		7120		7800		8850		9680		10900		
6235	$P_i [kW]$			113		113		97.5		75.3		54.3		37.7		24.0		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			9680		13200		15900		17000		18200		17300		16200		
	$T_{ou} [kgf \cdot m]$			987		1350		1620		1730		1860		1760		1650		
	$P_{ro} [N]$			73100		77900		87700		96000		108000		119000		134000		
	$P_{ro} [kgf]$			7450		7940		8940		9790		11000		12100		13700		
6245	$P_i [kW]$			132		132		120		94.2		75.3		56.2		32.1		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			11300		15400		19600		21300		25200		25800		21700		
	$T_{ou} [kgf \cdot m]$			1150		1570		2000		2170		2570		2630		2210		
	$P_{ro} [N]$			81200		86900		97100		107000		120000		131000		149000		
	$P_{ro} [kgf]$			8280		8860		9900		10900		12200		13400		15200		
6255	$P_i [kW]$			151		151		151		118		88.9		64.8		42.9		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			12900		17600		24600		26700		29800		29800		29000		
	$T_{ou} [kgf \cdot m]$			1310		1790		2510		2720		3040		3040		2960		
	$P_{ro} [N]$			99600		107000		118000		131000		147000		161000		182000		
	$P_{ro} [kgf]$			10200		10900		12000		13400		15000		16400		18600		
6265	$P_i [kW]$			175		175		172		159		113		94.2		53.4		CHH B-55 CHF B-60 CW B-66
	$T_{ou} [N \cdot m]$			15000		20400		28100		35900		37800		43300		36200		
	$T_{ou} [kgf \cdot m]$			1530		2080		2860		3660		3850		4410		3690		
	$P_{ro} [N]$			122000		130000		145000		160000		180000		197000		222000		
	$P_{ro} [kgf]$			12400		13300		14800		16300		18300		20100		22600		
6275	$P_i [kW]$									159		151		132		53.4		CHH B-55 CHF - CW B-66
	$T_{ou} [N \cdot m]$									35900		50500		60600		36200		
	$T_{ou} [kgf \cdot m]$									3660		5150		6180		3690		
	$P_{ro} [N]$									186000		248000		247000		208000		
	$P_{ro} [kgf]$									19000		25300		25200		21200		

1165r/min

$n_1 = 1450 \text{ (r/min)}$

n_1 : Input speed [r/min]

n_2 : Output speed [r/min]

P_1 : Allowable input power [kW]

T_{out} : Allowable output torque [N·m & kgf·m]

P_{ro} : Allowable output shaft radial load [N & kgf]

Consult us P_{ro} for CNF-CHF type

Frame size	n_2 [r/min]	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_i [kW]	0.200	0.200	0.200	0.200	0.200	0.200	0.183	0.110	0.110	0.110	0.089						CNH B-54
	T_{out} [N·m]	7.51	10.0	13.8	16.3	18.8	21.3	24.0	17.2	20.0	24.0	24.0						CNF B-59
	T_{out} [kgf·m]	0.766	1.02	1.41	1.66	1.92	2.17	2.45	1.75	2.04	2.45	2.45						CNV B-64
	P_{ro} [N]	798	912	1180	1180	1180	1180	1180	1180	1180	1180	1180						
6065	P_i [kW]	0.286	0.286	0.286	0.286	0.286	0.282	0.228	0.166	0.165	0.137	0.112						CNH B-54
	T_{out} [N·m]	10.7	14.3	19.7	23.3	26.9	30.0	30.0	25.9	30.0	30.0	30.0						CNF B-59
	T_{out} [kgf·m]	1.09	1.46	2.01	2.38	2.74	3.06	3.06	2.64	3.06	3.06	3.06						CNV B-64
	P_{ro} [N]	793	904	1180	1180	1180	1180	1180	1180	1180	1180	1180						
6070	P_i [kW]	0.347	0.347	0.347	0.347	0.347	0.347	0.320	0.230	0.226	0.205	0.167	0.100	0.100				CNH B-54
	T_{out} [N·m]	13.0	17.3	23.9	28.2	32.5	36.9	42.1	35.9	41.0	45.0	45.0	31.9	36.9				CNF B-59
	T_{out} [kgf·m]	1.33	1.76	2.44	2.87	3.31	3.76	4.29	3.66	4.18	4.59	4.59	3.25	3.76				CNV B-64
	P_{ro} [N]	1380	1520	1690	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770				
6075	P_i [kW]	0.407	0.407	0.407	0.407	0.407	0.407	0.407	0.294	0.286	0.272	0.223	0.143	0.136				CNH B-54
	T_{out} [N·m]	15.3	20.4	28.0	33.1	38.2	43.3	53.5	46.0	52.0	59.6	60.0	45.7	50.1				CNF B-59
	T_{out} [kgf·m]	1.56	2.08	2.85	3.37	3.89	4.41	5.45	4.69	5.30	6.08	6.12	4.66	5.11				CNV B-64
	P_{ro} [N]	1370	1510	1680	1770	1770	1770	1770	1770	1770	1770	1660	1750	1700				
6080	P_i [kW]	0.592	0.592	0.592	0.592	0.592	0.592	0.478	0.340	0.340	0.290	0.250	0.192	0.185	0.120	0.090		CNH B-54
	T_{out} [N·m]	22.2	29.6	40.8	48.2	55.6	63.0	62.9	53.2	61.7	63.5	67.3	61.3	68.1	53.3	49.0		CNF B-59
	T_{out} [kgf·m]	2.26	3.02	4.16	4.91	5.67	6.42	6.41	5.42	6.29	6.47	6.86	6.25	6.94	5.43	4.99		CNV B-64
	P_{ro} [N]	1910	2060	2270	2440	2510	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	2560	
6085	P_i [kW]	0.778	0.778	0.778	0.778	0.778	0.778	0.550	0.475	0.467	0.327	0.294	0.241	0.234	0.165	0.121		CNH B-54
	T_{out} [N·m]	29.2	38.9	53.5	63.3	73.0	82.7	72.3	74.3	84.8	71.6	79.1	76.9	86.2	73.3	66.0		CNF B-59
	T_{out} [kgf·m]	2.98	3.97	5.45	6.45	7.44	8.43	7.37	7.57	8.64	7.30	8.06	7.84	8.79	7.47	6.73		CNV B-64
	P_{ro} [N]	1900	2050	2250	2410	2480	2560	2560	2560	2460	2560	2550	2510	2450	2510	2560		
6090	P_i [kW]	1.15	1.15	1.15	1.15	1.15	1.15	0.758	0.671	0.625	0.612	0.435	0.332	0.309	0.252	0.211	0.125	CNH B-54
	T_{out} [N·m]	43.0	57.4	78.9	93.2	108	122	99.5	105	113	134	117	106	114	112	115	93.1	CNF B-59
	T_{out} [kgf·m]	4.38	5.85	8.04	9.50	11.0	12.4	10.1	10.7	11.5	13.7	11.9	10.8	11.6	11.4	11.7	9.49	CNV B-64
	P_{ro} [N]	2810	3120	3340	3340	3340	3340	3340	3340	3340	3330	3340	3340	3340	3340	3340	3340	
6095	P_i [kW]	1.52	1.52	1.52	1.52	1.52	1.52	1.51	0.866	0.784	0.758	0.603	0.407	0.336	0.278	0.263	0.145	CNH B-54
	T_{out} [N·m]	56.9	75.8	104	123	142	161	198	136	142	166	162	130	124	124	143	108	CNF B-59
	T_{out} [kgf·m]	5.80	7.73	10.6	12.5	14.5	16.4	20.2	13.9	14.5	16.9	16.5	13.3	12.6	12.6	14.6	11.0	CNV B-64
	P_{ro} [N]	2780	3080	3340	3340	3340	3340	3340	3310	3310	3270	3290	3320	3340	3330	3330	3310	
6100	P_i [kW]	2.35	2.35	2.35	2.35	2.35	1.99	1.90	1.27	1.21	0.975	0.780	0.560	0.516	0.436	0.433	0.210	CNH B-54
	T_{out} [N·m]	88.1	117	162	191	220	211	250	199	220	214	210	179	190	194	236	156	CNF B-59
	T_{out} [kgf·m]	8.98	11.9	16.5	19.5	22.4	21.5	25.5	20.3	22.4	21.8	21.4	18.2	19.4	19.8	24.1	15.9	CNV B-64
	P_{ro} [N]	4090	4550	5150	5350	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	
6105	P_i [kW]	3.18	3.18	3.18	3.18	3.18	2.46	2.28	1.67	1.59	1.20	1.08	0.776	0.681	0.506	0.503	0.286	CNH B-54
	T_{out} [N·m]	119	159	219	259	298	261	300	262	288	262	292	248	251	225	274	213	CNF B-59
	T_{out} [kgf·m]	12.1	16.2	22.3	26.4	30.4	26.6	30.6	26.7	29.4	26.7	29.8	25.3	25.6	22.9	27.9	21.7	CNV B-64
	P_{ro} [N]	4050	4490	5080	5270	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5380	
6110	P_i [kW]	3.55	3.55	3.55	3.55	3.55	3.18	2.72	1.91	1.90	1.50	1.30	0.944	0.859	0.669	0.661		CNH B-54
	T_{out} [N·m]	133	178	244	289	333	338	358	299	346	329	350	301	317	297	360		CNF B-59
	T_{out} [kgf·m]	13.6	18.1	24.9	29.5	33.9	34.5	36.5	30.5	35.3	33.5	35.7	30.7	32.3	30.3	36.7		CNV B-64
	P_{ro} [N]	4590	5100	5790	5970	6350	6440	6850	7060	7210	7310	7600	7610	7610	7610	7600		
6115	P_i [kW]	3.92	3.92	3.92	3.90	3.90	3.90	3.11	2.22	2.22	1.81	1.52	1.11	1.01	0.758	0.758		CNH B-54
	T_{out} [N·m]	147	196	270	317	366	415	409	348	403	396	408	355	373	337	412		CNF B-59
	T_{out} [kgf·m]	15.0	20.0	27.5	32.3	37.3	42.3	41.7	35.5	41.1	40.4	41.6	36.2	38.0	34.4	42.0		CNV B-64
	P_{ro} [N]	4570	5070	5760	5940	6310	6360	6790	7010	7160	7240	7540	7600	7610	7600	7550		

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 1450 \text{ (r/min)}$

Frame size	n_2 [r/min]	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	Page of Dimension Table	
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119		
6120	P_i [kW]	5.07	5.07	5.07	5.07	5.07	4.89	3.96	3.09	2.87	2.37	1.91	1.63	1.30	0.957	0.944		CNH B-54 CNF B-59 CNV B-64	
	T_{ou} [N·m]	190	254	349	412	476	520	520	483	520	520	515	520	482	425	514			
	T_{ou} [kgf·m]	19.4	25.9	35.6	42.0	48.5	53.0	53.0	49.2	53.0	53.0	52.5	53.0	49.1	43.3	52.4			
	P_{ro} [N]	5160	5740	6480	6670	7140	7210	7980	8440	8780	9320	9810	9810	9810	9810	9810	9800		
	P_{ro} [kgf]	526	585	661	680	728	735	813	860	895	950	1000	1000	1000	1000	1000	999		
6125	P_i [kW]	6.96	6.95	5.92	5.92	5.92	5.66	4.79	3.96	3.47	2.88	2.34	1.97	1.62	1.14	1.03		CNH B-54 CNF B-59 CNV B-64	
	T_{ou} [N·m]	261	348	407	482	556	602	630	619	630	630	630	630	598	506	559			
	T_{ou} [kgf·m]	26.6	35.5	41.5	49.1	56.7	61.4	64.2	63.1	64.2	64.2	64.2	64.2	61.0	51.6	57.0			
	P_{ro} [N]	5080	5640	6420	6600	7060	7130	7870	8310	8680	9220	9810	9810	9810	9810	9710			
	P_{ro} [kgf]	518	575	654	673	720	727	802	847	885	940	1000	1000	1000	1000	990			
6130	P_i [kW]	9.39	9.39	9.39	9.39	7.78	7.27	5.94	4.99	4.30	3.56	2.90	2.44	2.11	1.76	1.42		CHH B-55 CHF B-60 CVW B-65	
	T_{ou} [N·m]	353	470	646	764	731	774	780	780	780	780	780	780	780	780	772			
	T_{ou} [kgf·m]	36.0	47.9	65.9	77.9	74.5	78.9	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	78.7			
	P_{ro} [N]	5910	6560	7460	7740	7980	8570	9220	9640	10200	10800	11600	12200	12800	13600	14700			
	P_{ro} [kgf]	602	669	760	789	813	874	940	983	1040	1100	1180	1240	1300	1390	1500			
6135	P_i [kW]	11.3	11.3	11.3	10.2	8.97	8.29	6.72	5.75	4.88	4.11	3.35	2.55	2.44	2.03	1.65		CHH B-55 CHF B-60 CVW B-65	
	T_{ou} [N·m]	424	566	778	832	842	882	883	900	886	900	900	813	900	900	900			
	T_{ou} [kgf·m]	43.2	57.7	79.3	84.8	85.8	89.9	90.0	91.7	90.3	91.7	91.7	82.9	91.7	91.7	91.7			
	P_{ro} [N]	5830	6470	7340	7680	7890	8490	9140	9550	10100	10700	11500	12100	12700	13600	14700			
	P_{ro} [kgf]	594	660	748	783	804	865	932	973	1030	1090	1170	1230	1290	1390	1500			
6140	P_i [kW]	13.0	13.0	13.0	13.0	12.0	10.1	8.66	6.89	5.95	5.21	3.94	3.43	2.96	2.43	1.98		CHH B-55 CHF B-60 CVW B-65	
	T_{ou} [N·m]	489	652	896	1060	1130	1070	1140	1080	1080	1140	1060	1090	1090	1080	1080			
	T_{ou} [kgf·m]	49.8	66.5	91.3	108	115	109	116	110	110	116	108	111	111	110	110			
	P_{ro} [N]	9230	10200	11400	11700	12200	12800	13700	14500	14800	15900	16000	16000	16000	16000	16000			
	P_{ro} [kgf]	941	1040	1160	1190	1240	1300	1400	1480	1510	1620	1630	1630	1630	1630	1630			
6145	P_i [kW]	15.1	15.1	15.1	15.1	14.5	12.0	9.49	7.91	7.53	6.26	4.67	3.70	3.18	2.62	2.16		CHH B-55 CHF B-60 CVW B-65	
	T_{ou} [N·m]	569	758	1040	1230	1360	1280	1250	1240	1370	1370	1260	1180	1170	1160	1170			
	T_{ou} [kgf·m]	58.0	77.3	106	125	139	130	127	126	140	140	128	120	119	118	119			
	P_{ro} [N]	9200	10200	11400	11600	12100	12800	13700	14400	14700	15800	16000	16000	16000	16000	16000			
	P_{ro} [kgf]	938	1040	1160	1180	1230	1300	1400	1470	1500	1610	1630	1630	1630	1630	1630			
6160	P_i [kW]	20.3	19.7	19.7	19.7	18.7	13.1	12.9	9.86	9.56	8.01	6.45	5.50	4.42	3.47	3.22		CHH B-55 CHF B-60 CVW B-66	
	T_{ou} [N·m]	762	986	1360	1600	1760	1390	1700	1540	1740	1760	1740	1760	1630	1540	1760			
	T_{ou} [kgf·m]	77.7	101	139	163	179	142	173	157	177	179	177	179	166	157	179			
	P_{ro} [N]	10100	11300	12700	13200	14000	14800	15800	16700	17300	18500	19900	20800	22100	22100	22100			
	P_{ro} [kgf]	1030	1150	1290	1350	1430	1510	1610	1700	1760	1890	2030	2120	2250	2250	2250			
6165	P_i [kW]	24.1	24.1	24.1	22.6	22.4	18.8	16.0	13.4	11.4	9.59	7.81	6.58	5.69	4.73	3.77		CHH B-55 CHF B-60 CVW B-66	
	T_{ou} [N·m]	903	1200	1660	1840	2100	2000	2100	2100	2070	2100	2100	2100	2100	2100	2050			
	T_{ou} [kgf·m]	92.0	122	169	188	214	204	214	214	214	214	214	214	214	214	209			
	P_{ro} [N]	9990	11100	12500	13100	13800	14300	15500	16300	17100	18300	19600	20600	22100	22100	21800			
	P_{ro} [kgf]	1020	1130	1270	1340	1410	1460	1580	1660	1740	1870	2000	2100	2250	2250	2220			
6170	P_i [kW]	27.6	27.6	27.6	27.3	25.5	19.7	18.6	15.6	13.5	11.2	9.08	7.66	6.62	5.50	4.57		CHH B-55 CHF B-60 CVW B-66	
	T_{ou} [N·m]	1040	1380	1900	2220	2390	2090	2440	2440	2440	2440	2440	2440	2440	2450	2490			
	T_{ou} [kgf·m]	106	141	194	226	244	213	249	249	249	249	249	249	249	250	254			
	P_{ro} [N]	11300	12500	14200	14700	15400	16400	17700	18500	19500	20800	22300	23400	24600	26200	28100			
	P_{ro} [kgf]	1150	1270	1450	1500	1570	1670	1800	1890	1990	2120	2270	2390	2510	2670	2860			
6175	P_i [kW]	30.1	30.1	30.1	30.1	30.1	24.1	23.6	19.5	17.4	14.4	11.3	9.87	8.29	6.98	5.62		CHH B-55 CHF B-60 CVW B-66	
	T_{ou} [N·m]	1130	1510	2070	2450	2820	2560	3100	3050	3150	3150	3040	3150	3060	3100	3060			
	T_{ou} [kgf·m]	115	154	211	250	287	261	316	311	321	321	310	321	312	316	312			
	P_{ro} [N]	11300	12400	14100	14600	15100	16100	17300	18100	19200	20500	22000	23000	24300	25800	27800			
	P_{ro} [kgf]	1150	1260	1440	1490	1540	1640	1760	1850	1960	2090	2240	2340	2480	2630	2830			
6180	P_i [kW]			35.2	35.2	32.4	30.6	30.0	24.1	19.5	18.5	15.1	12.0	9.75	8.80	7.15		CHH B-55 CHF B-60 CVW B-66	
	T_{ou} [N·m]			2420	2860	3040	3250	3940	3760	3540	4050	4050	3830	3600	3910	3890			
	T_{ou} [kgf·m]			247	292	310	331	402	383	361	413	413	390	367	399	397			
	P_{ro} [N]			19100	19800	20800	22000	23600	24700	26100	27800	29900	31200	32800	34900	37700			
	P_{ro} [kgf]			1950	2020	2120	2240	2410	2520	2660	2830	3050	3180	3340	3560	3840			
6185	P_i [kW]			39.0	39.0	39.0	38.2	38.1	30.1	24.1	22.6	18.6	15.1	12.0	9.79	8.59		CHH B-55 CHF B-60 CVW B-66	
	T_{ou} [N·m]			2680	3170	3660	4060	5000	4710	4360	4950	5000	4810	4430	4350	4680			
	T_{ou} [kgf·m]			273	323	373	414	510	480	444	505	510	490	452	443	477			
	P_{ro} [N]			19000	19600	20500	21600	23200	24400	25800	27500	29500	30900	32500	34800	37400			
	P_{ro} [kgf]			1940	2000	2090	2200	2360	2490	2630	2800	3010	3150	3310	3550	3810			

1450r/min

$$n_1 = 1450 \text{ (r/min)}$$

Frame size	n_2 [r/min]	242	181	132	112	96.7	85.3	69.0	58.0	50.0	41.4	33.7	28.4	24.6	20.4	16.7	12.2	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	P_i [kW]			41.0	41.0	41.0	41.0	41.0	35.2	30.7	24.3	20.9	18.2	15.3	13.5	11.7		CHH B-55
	T_{out} [N·m]			2820	3330	3850	4360	5390	5500	5570	5320	5640	5800	5640	6000	6380		CHF B-60
	T_{out} [kgf·m]			287	339	392	444	549	561	568	542	575	591	575	612	650		CVV B-66
	P_{re} [N]			26900	27800	29200	30700	33000	34700	36500	38800	41800	43700	46000	48800	52600		
6195	P_i [kW]			48.1	48.1	48.1	48.1	48.1	40.5	37.8	30.1	27.1	20.9	18.8	15.6	13.6		CHH B-55
	T_{out} [N·m]			3310	3910	4510	5120	6320	6330	6860	6600	7300	6680	6950	6930	7420		CHF B-60
	T_{out} [kgf·m]			337	399	460	522	644	645	699	673	744	681	708	706	756		CVV B-66
	P_{re} [N]			26700	27600	28900	30500	32700	34400	36200	38400	41400	43500	45700	48500	52300		
6205	P_i [kW]			59.7		59.7		59.2		45.7		31.8		22.6		15.9		CHH B-55
	T_{out} [N·m]			4110		5600		7780		8280		8550		8340		8650		CHF B-60
	T_{out} [kgf·m]			419		571		793		844		872		850		882		CVV B-66
	P_{re} [N]			51700		55400		61800		67500		76500		83500		84100		
6215	P_i [kW]			75.3		75.3		75.3		58.5		45.2		33.9		19.7		CHH B-55
	T_{out} [N·m]			5190		7070		9900		10600		12200		12500		10700		CHF B-60
	T_{out} [kgf·m]			529		721		1010		1080		1240		1270		1090		CVV B-66
	P_{re} [N]			52000		55700		62600		68300		77200		84200		95400		
6225	P_i [kW]			99.5		99.5		94.2		75.3		56.5		39.3		26.7		CHH B-55
	T_{out} [N·m]			6850		9330		12400		13700		15200		14500		14600		CHF B-60
	T_{out} [kgf·m]			698		951		1260		1400		1550		1480		1490		CVV B-66
	P_{re} [N]			54800		59000		65700		71800		81300		89000		100000		
6225	P_{re} [kgf]			5590		6010		6700		7320		8290		9070		10200		

- Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 1450 \text{ (r/min)}$

n_1 : Input speed [r/min]

n_2 : Output speed [r/min]

P_1 : Allowable input power [kW]

T_{out} : Allowable output torque [N·m & kgf·m]

P_{ro} : Allowable output shaft radial load [N & kgf]

Consult us P_{ro} for CNF·CHF type

Frame size	n_2 [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731
6060DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.100
	T_{out} [N·m]	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0		24.0
	T_{out} [kgf·m]	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45		2.45
	P_{ro} [N]	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180		1180
	P_{ro} [kgf]	120	120	120	120	120	120	120	120	120	120	120		120
6065DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.100
	T_{out} [N·m]	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0		30.0
	T_{out} [kgf·m]	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06		3.06
	P_{ro} [N]	1180	1140	1180	1180	1180	1180	1180	1180	1180	1180	1180		1180
	P_{ro} [kgf]	120	116	120	120	120	120	120	120	120	120	120		120
6070DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
	T_{out} [N·m]	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0
	T_{out} [kgf·m]	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770
	P_{ro} [kgf]	180	180	180	180	180	180	180	180	180	180	180	180	180
6075DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100
	T_{out} [N·m]	60.0	50.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.4	60.0
	T_{out} [kgf·m]	6.12	5.18	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	5.85	6.12
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1660	1660
	P_{ro} [kgf]	180	180	180	180	180	180	180	180	180	180	169	169	161
6090DA	P_i [kW]	0.243	0.209	0.177	0.153	0.130	0.110	0.100	0.100	0.100	0.100	0.100	0.100	0.100
	T_{out} [N·m]	150	150	150	150	150	150	150	150	150	150	150	146	150
	T_{out} [kgf·m]	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	14.9	15.3
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3290	3290	3310	3310	3300	3310
	P_{ro} [kgf]	340	340	340	340	340	340	340	336	336	338	338	336	338
6095DA	P_i [kW]	0.293	0.224	0.216	0.204	0.173	0.146	0.124	0.106	0.100	0.100	0.100		0.100
	T_{out} [N·m]	181	160	183	200	200	200	200	200	200	200	200		200
	T_{out} [kgf·m]	18.4	16.4	18.7	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4		20.4
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3200	3200	3220	3220		3220
	P_{ro} [kgf]	340	340	340	340	340	340	340	326	326	328	328		328
6100DA	P_i [kW]	0.406	0.349	0.295	0.256	0.216	0.183	0.154	0.132	0.112	0.100	0.100	0.100	0.100
	T_{out} [N·m]	250	250	250	250	250	250	250	250	250	250	250	250	250
	T_{out} [kgf·m]	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400
	P_{ro} [kgf]	550	550	550	550	550	550	550	550	550	550	550	550	550
6105DA	P_i [kW]	0.429	0.429	0.354	0.307	0.260	0.219	0.185	0.159	0.134	0.107	0.100	0.100	0.100
	T_{out} [N·m]	265	308	300	300	300	300	300	300	300	300	300	296	300
	T_{out} [kgf·m]	27.0	31.4	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.2	30.6
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5090	5400
	P_{ro} [kgf]	550	550	550	550	550	550	550	550	550	550	550	519	550
6120DA	P_i [kW]			0.429	0.429	0.429	0.381	0.322	0.275	0.233	0.187	0.158	0.136	0.121
	T_{out} [N·m]			364	420	496	522	522	520	520	525	525	525	525
	T_{out} [kgf·m]			37.1	42.8	50.6	53.2	53.2	53.0	53.0	53.5	53.5	53.5	53.5
	P_{ro} [N]			9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810
	P_{ro} [kgf]			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000
6120DB	P_i [kW]	0.852	0.732	0.619	0.537	0.454	0.381							
	T_{out} [N·m]	525	525	525	525	525	522							
	T_{out} [kgf·m]	53.5	53.5	53.5	53.5	53.5	53.2							
	P_{ro} [N]	9810	9810	9810	9810	9810	9810							
	P_{ro} [kgf]	1000	1000	1000	1000	1000	1000							
6125DA	P_i [kW]						0.429	0.389	0.333	0.282	0.225	0.190	0.164	0.145
	T_{out} [N·m]						588	630	630	630	630	630	630	630
	T_{out} [kgf·m]						59.9	64.2	64.2	64.2	64.2	64.2	64.2	64.2
	P_{ro} [N]						9810	9810	9810	9810	9810	9810	9810	9810
	P_{ro} [kgf]						1000	1000	1000	1000	1000	1000	1000	1000
6125DB	P_i [kW]	1.02	0.867	0.743	0.644	0.545	0.460	0.389	0.333					
	T_{out} [N·m]	630	622	630	630	630	630	630	630					
	T_{out} [kgf·m]	64.2	63.4	64.2	64.2	64.2	64.2	64.2	64.2					
	P_{ro} [N]	9810	9810	9810	9810	9810	9810	9810	9810					
	P_{ro} [kgf]	1000	1000	1000	1000	1000	1000	1000	1000					

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.

2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1450 \text{ (r/min)}$

1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.100		0.100		0.100									CNH	6060DA
24.0		24.0		24.0									B-56	
2.45		2.45		2.45									CNF	
1180		1180		1180									B-61	
120		120		120									CNV	
													B-67	
0.100		0.100		0.100									CNH	6065DA
30.0		30.0		30.0									B-56	
3.06		3.06		3.06									CNF	
1180		1180		1180									B-61	
120		120		120									CNV	
													B-67	
0.100	0.100	0.100		0.100	0.100	0.100							CNH	6070DA
45.0	45.0	45.0		45.0	45.0	45.0							B-56	
4.59	4.59	4.59		4.59	4.59	4.59							CNF	
1770	1770	1770		1770	1770	1770							B-61	
180	180	180		180	180	180							CNV	
													B-67	
0.100	0.100	0.100		0.100	0.100	0.100							CNH	6075DA
60.0	57.4	60.0		60.0	57.4	57.4							B-56	
6.12	5.85	6.12		6.12	5.85	5.85							CNF	
1770	1580	1660		1660	1580	1580							B-61	
180	161	169		169	161	161							CNV	
													B-67	
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6090DA
150	146	150	150	150	146	146	150	146	150	150			B-56	
15.3	14.9	15.3	15.3	15.3	14.9	14.9	15.3	14.9	15.3	15.3			CNF	
3290	3300	3310	3310	3310	3300	3300	3310	3300	3310	3310			B-61	
336	336	338	338	338	336	336	338	336	338	338			CNV	
													B-67	
0.100		0.100	0.100	0.100			0.100		0.100	0.100			CNH	6095DA
200		200	193	200			192		192	192			B-56	
20.4		20.4	19.6	20.4			19.6		19.6	19.6			CNF	
3200		3220	3240	3220			3240		3240	3240			B-61	
326		328	330	328			330		330	330			CNV	
													B-67	
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6100DA
250	250	250	250	250	250	250	250	250	250	250			B-56	
25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5			CNF	
5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400			B-61	
550	550	550	550	550	550	550	550	550	550	550			CNV	
													B-67	
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6105DA
300	296	300	300	300	296	296	300	296	300	300			B-56	
30.6	30.2	30.6	30.6	30.6	30.2	30.2	30.6	30.2	30.6	30.6			CNF	
5400	5090	5400	4780	5400	5090	5090	4780	5090	4780	4780			B-61	
550	519	550	488	550	519	519	488	519	488	488			CNV	
													B-67	
0.104	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6120DA
520	525	525	525	525	525	525	525	525	525	525			B-56	
53.0	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5			CNF	
9810	9810	9810	9780	9810	9810	9810	9780	9810	9780	9780			B-61	
1000	1000	1000	997	1000	1000	1000	997	1000	997	997			CNV	
													B-67	
											0.100	0.100	CNH	6120DB
											525	525	B-56	
											53.5	53.5	CNF	
											9780	9780	B-61	
											997	997	CNV	
													B-67	
0.126	0.106	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6125DA
630	630	630	630	630	630	630	630	630	630	630			B-56	
64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2			CNF	
9810	9810	9810	9560	9810	9810	9810	9560	9810	9560	9560			B-61	
1000	1000	1000	974	1000	1000	1000	974	1000	974	974			CNV	
													B-67	
											0.100	0.100	CNH	6125DB
											630	630	B-56	
											64.2	64.2	CNF	
											9560	9560	B-61	
											974	974	CNV	
													B-67	

1450r/min

Frame size	n ₂ [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731
6130DA	P _i [kW]							0.429	0.413	0.349	0.278	0.235	0.237	0.200
	T _{out} [N·m]							695	780	780	780	780	912	780
	T _{out} [kgf·m]							70.8	79.5	79.5	79.5	79.5	93.0	79.5
	P _{rc} [N]							14700	14700	14700	14700	14700	14700	14700
	P _{rc} [kgf]							1500	1500	1500	1500	1500	1500	1500
6130DB	P _i [kW]	1.27	1.09	0.920	0.798	0.675	0.570	0.482	0.413	0.349				
	T _{out} [N·m]	780	780	780	780	780	780	780	780	780				
	T _{out} [kgf·m]	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5				
	P _{rc} [N]	14700	14700	14700	14700	14700	14700	14700	14700	14700				
	P _{rc} [kgf]	1500	1500	1500	1500	1500	1500	1500	1500	1500				
6130DC	P _i [kW]	1.27												
	T _{out} [N·m]	780												
	T _{out} [kgf·m]	79.5												
	P _{rc} [N]	14700												
	P _{rc} [kgf]	1500												
6135DA	P _i [kW]								0.429	0.421	0.335	0.284	0.273	0.217
	T _{out} [N·m]								812	940	940	940	1050	940
	T _{out} [kgf·m]								82.8	95.8	95.8	95.8	107	95.8
	P _{rc} [N]								14700	14700	14700	14700	14700	14700
	P _{rc} [kgf]								1500	1500	1500	1500	1500	1500
6135DB	P _i [kW]	1.52	1.31	1.11	0.961	0.813	0.686	0.581	0.497	0.421	0.335			
	T _{out} [N·m]	940	940	940	940	940	940	940	940	940	940			
	T _{out} [kgf·m]	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8			
	P _{rc} [N]	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700			
	P _{rc} [kgf]	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			
6135DC	P _i [kW]	1.52	1.31											
	T _{out} [N·m]	940	940											
	T _{out} [kgf·m]	95.8	95.8											
	P _{rc} [N]	14700	14700											
	P _{rc} [kgf]	1500	1500											
6140DA	P _i [kW]									0.429	0.429	0.370	0.318	0.283
	T _{out} [N·m]									960	1200	1230	1230	1230
	T _{out} [kgf·m]									97.8	123	125	125	125
	P _{rc} [N]									16000	16000	16000	16000	16000
	P _{rc} [kgf]									1630	1630	1630	1630	1630
6140DB	P _i [kW]	1.60	1.60	1.45	1.25	1.06	0.895	0.757	0.648	0.548	0.437	0.370		
	T _{out} [N·m]	986	1150	1230	1230	1230	1230	1230	1230	1230	1230	1230		
	T _{out} [kgf·m]	100	117	125	125	125	125	125	125	125	125	125		
	P _{rc} [N]	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000		
	P _{rc} [kgf]	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630		
6140DC	P _i [kW]	1.99	1.71	1.45	1.25									
	T _{out} [N·m]	1230	1230	1230	1230									
	T _{out} [kgf·m]	125	125	125	125									
	P _{rc} [N]	16000	16000	16000	16000									
	P _{rc} [kgf]	1630	1630	1630	1630									
6145DA	P _i [kW]											0.413	0.356	0.316
	T _{out} [N·m]											1370	1370	1370
	T _{out} [kgf·m]											140	140	140
	P _{rc} [N]											15700	16000	15700
	P _{rc} [kgf]											1600	1630	1600
6145DB	P _i [kW]			1.60	1.39	1.17	0.977	0.827	0.725	0.613	0.489	0.413	0.356	
	T _{out} [N·m]			1360	1360	1360	1340	1340	1370	1370	1370	1370	1370	
	T _{out} [kgf·m]			138	138	138	136	136	140	140	140	140	140	
	P _{rc} [N]			16000	16000	16000	16000	16000	15800	15800	15700	15700	16000	
	P _{rc} [kgf]			1630	1630	1630	1630	1630	1610	1610	1600	1600	1630	
6145DC	P _i [kW]	2.22	1.80	1.62	1.39									
	T _{out} [N·m]	1370	1290	1370	1360									
	T _{out} [kgf·m]	140	132	140	138									
	P _{rc} [N]	15900	16000	15900	16000									
	P _{rc} [kgf]	1620	1630	1620	1630									

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1450 (r/min)$

1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6130DA
780	912	780	848	780	912	912	848	912	848	848			B-57	
79.5	93.0	79.5	86.5	79.5	93.0	93.0	86.5	93.0	86.5	86.5			CHF	
14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700			B-62	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			CW	B-68
											0.200	0.200	CHH	6130DB
											848	848	B-57	
											86.5	86.5	CHF	
											14700	14700	B-62	
											1500	1500	CW	B-68
													CHH	6130DC
													B-57	
													CHF	
													B-62	
													CW	B-68
0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6135DA
940	1050	940	979	940	1050	1050	979	1050	979	979			B-57	
95.8	107	95.8	99.8	95.8	107	107	99.8	107	99.8	99.8			CHF	
14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700			B-62	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			CW	B-68
											0.200	0.200	CHH	6135DB
											979	979	B-57	
											99.8	99.8	CHF	
											14700	14700	B-62	
											1500	1500	CW	B-68
													CHH	6135DC
													B-57	
													CHF	
													B-62	
													CW	B-68
0.246	0.206	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6140DA
1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230			B-57	
125	125	125	125	125	125	125	125	125	125	125			CHF	
16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000			B-62	
1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630			CW	B-68
											0.200	0.200	CHH	6140DB
											1230	1230	B-57	
											125	125	CHF	
											16000	16000	B-62	
											1630	1630	CW	B-68
													CHH	6140DC
													B-57	
													CHF	
													B-62	
													CW	B-68
0.275	0.230	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6145DA
1370	1370	1370	1250	1370	1370	1370	1250	1370	1250	1250			B-57	
140	140	140	127	140	140	140	127	140	127	127			CHF	
15800	16000	15700	16000	15700	16000	16000	16000	16000	16000	16000			B-62	
1610	1630	1600	1630	1600	1630	1630	1630	1630	1630	1630			CW	B-68
0.275											0.200	0.200	CHH	6145DB
1370											1250	1250	B-57	
140											127	127	CHF	
15800											16000	16000	B-62	
1610											1630	1630	CW	B-68
													CHH	6145DC
													B-57	
													CHF	
													B-62	
													CW	B-68

1450r/min

Frame size	n_2 [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98	
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	
6160DA	P _i [kW]				1.60	1.52	1.28	1.08	0.928	0.785	0.619	0.524	0.456	0.400	
	T _{out} [N•m]				1560	1760	1760	1760	1760	1760	1740	1740	1760	1740	
	T _{out} [kgf•m]				159	179	179	179	179	179	177	177	179	177	
	P _{ro} [N]				22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100
	P _{ro} [kgf]				2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
6160DB	P _i [kW]	2.85	2.45	2.07	1.79	1.52	1.28								
	T _{out} [N•m]	1760	1760	1760	1760	1760	1760								
	T _{out} [kgf•m]	179	179	179	179	179	179								
	P _{ro} [N]	22100	22100	22100	22100	22100	22100								
	P _{ro} [kgf]	2250	2250	2250	2250	2250	2250								
6160DC	P _i [kW]	2.85	2.45	2.07											
	T _{out} [N•m]	1760	1760	1760											
	T _{out} [kgf•m]	179	179	179											
	P _{ro} [N]	22100	22100	22100											
	P _{ro} [kgf]	2250	2250	2250											
6165DA	P _i [kW]					1.60	1.53	1.30	1.11	0.940	0.749	0.634	0.546	0.485	
	T _{out} [N•m]					1850	2100	2100	2100	2100	2100	2100	2100	2100	
	T _{out} [kgf•m]					188	214	214	214	214	214	214	214	214	
	P _{ro} [N]					22100	22100	22100	22100	22100	22100	22100	22100	22100	
	P _{ro} [kgf]					2250	2250	2250	2250	2250	2250	2250	2250	2250	
6165DB	P _i [kW]	3.36	2.93	2.48	2.15	1.82	1.53	1.30							
	T _{out} [N•m]	2070	2100	2100	2100	2100	2100	2100							
	T _{out} [kgf•m]	211	214	214	214	214	214	214							
	P _{ro} [N]	22100	22100	22100	22100	22100	22100	22100							
	P _{ro} [kgf]	2250	2250	2250	2250	2250	2250	2250							
6165DC	P _i [kW]	3.41	2.93	2.48	2.15										
	T _{out} [N•m]	2100	2100	2100	2100										
	T _{out} [kgf•m]	214	214	214	214										
	P _{ro} [N]	22100	22100	22100	22100										
	P _{ro} [kgf]	2250	2250	2250	2250										
6170DA	P _i [kW]						1.60	1.56	1.34	1.13	0.902	0.764	0.658	0.584	
	T _{out} [N•m]						2190	2530	2530	2530	2530	2530	2530	2530	
	T _{out} [kgf•m]						223	258	258	258	258	258	258	258	
	P _{ro} [N]						29500	29500	29500	29500	29500	29500	29500	29500	
	P _{ro} [kgf]						3010	3010	3010	3010	3010	3010	3010	3010	
6170DB	P _i [kW]		3.36	2.98	2.59	2.19	1.85	1.56	1.34						
	T _{out} [N•m]		2410	2530	2530	2530	2530	2530	2530						
	T _{out} [kgf•m]		245	258	258	258	258	258	258						
	P _{ro} [N]		29500	29500	29500	29500	29500	29500	29500	29500					
	P _{ro} [kgf]		3010	3010	3010	3010	3010	3010	3010	3010					
6170DC	P _i [kW]	4.10	3.53	2.98	2.59	2.19	1.85								
	T _{out} [N•m]	2530	2530	2530	2530	2530	2530								
	T _{out} [kgf•m]	258	258	258	258	258	258								
	P _{ro} [N]	29500	29500	29500	29500	29500	29500								
	P _{ro} [kgf]	3010	3010	3010	3010	3010	3010								
6175DA	P _i [kW]							1.60	1.60	1.41	1.12	0.951	0.819	0.727	
	T _{out} [N•m]							2590	3020	3150	3150	3150	3150	3150	
	T _{out} [kgf•m]							264	308	321	321	321	321	321	
	P _{ro} [N]							29500	29500	29500	29500	29500	29500	29500	
	P _{ro} [kgf]							3010	3010	3010	3010	3010	3010	3010	
6175DB	P _i [kW]			3.36	3.22	2.73	2.30	1.95	1.67	1.41					
	T _{out} [N•m]			2840	3150	3150	3150	3150	3150	3150					
	T _{out} [kgf•m]			290	321	321	321	321	321	321					
	P _{ro} [N]			29500	29500	29500	29500	29500	29500	29500					
	P _{ro} [kgf]			3010	3010	3010	3010	3010	3010	3010					
6175DC	P _i [kW]	5.11	4.39	3.72	3.22	2.73	2.30	1.95							
	T _{out} [N•m]	3150	3150	3150	3150	3150	3150	3150							
	T _{out} [kgf•m]	321	321	321	321	321	321	321							
	P _{ro} [N]	29500	29500	29500	29500	29500	29500	29500							
	P _{ro} [kgf]	3010	3010	3010	3010	3010	3010	3010							

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
 3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.400	0.400	0.400	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6160DA
1760	1760	1740	1760	1740	1760	1760	1760	1760	1760	1760	1760	1760	B-57	
179	179	177	179	177	179	179	179	179	179	179	179	179	CHF	
22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	B-62	
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	CW	B-68
													CHH	6160DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6160DC
													B-58	
													CHF	
													B-63	
													CW	B-69
0.421	0.400	0.400	0.400	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6165DA
2100	2100	2100	2050	2100	2100	2100	2050	2100	2050	2050	2050	2050	B-57	
214	214	214	209	214	214	214	209	214	209	209	209	209	CHF	
22100	22100	22100	21800	22100	22100	22100	21800	22100	21800	21800	21800	21800	B-62	
2250	2250	2250	2220	2250	2250	2250	2220	2250	2220	2220	2220	2220	CW	B-68
													CHH	6165DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6165DC
													B-58	
													CHF	
													B-63	
													CW	B-69
0.508	0.426	0.400	0.400	0.400	0.207	0.200	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6170DA
2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	B-57	
258	258	258	258	258	258	258	258	258	258	258	258	258	CHF	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	B-62	
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	CW	B-68
													CHH	6170DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6170DC
													B-58	
													CHF	
													B-63	
													CW	B-69
0.632	0.530	0.426	0.400	0.400	0.400	0.209	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6175DA
3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	B-57	
321	321	321	321	321	321	321	321	321	321	321	321	321	CHF	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	B-62	
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	CW	B-68
													CHH	6175DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6175DC
													B-58	
													CHF	
													B-63	
													CW	B-69

1450r/min

Frame size	n_2 [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98	
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	
6180DA	P_i [kW]				3.36	3.36	2.96	2.50	2.14	1.81	1.45	1.22	1.05	0.937	
	T_{out} [N·m]				3280	3880	4050	4050	4050	4050	4060	4060	4050	4060	
	T_{out} [kgf·m]				335	395	413	413	413	413	414	414	413	414	
	P_{rd} [N]				41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700
	P_{rd} [kgf]				4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250
6180DB	P_i [kW]	6.59	5.66	4.79	4.15	3.51	2.96	2.50	2.14						
	T_{out} [N·m]	4060	4060	4060	4060	4060	4050	4050	4050						
	T_{out} [kgf·m]	414	414	414	414	414	413	413	413						
	P_{rd} [N]	40200	41700	41700	41700	41700	41700	41700	41700						
	P_{rd} [kgf]	4100	4250	4250	4250	4250	4250	4250	4250						
6185DA	P_i [kW]						3.36	3.09	2.64	2.24	1.78	1.51	1.30	1.15	
	T_{out} [N·m]						4600	5000	5000	5000	5000	5000	5000	5000	
	T_{out} [kgf·m]						468	510	510	510	510	510	510	510	
	P_{rd} [N]						41700	41700	41700	41700	41700	41700	41600	41700	
	P_{rd} [kgf]						4250	4250	4250	4250	4250	4250	4240	4250	
6185DB	P_i [kW]	7.95	6.70	5.78	5.03	4.26	3.65	3.09	2.64	2.24					
	T_{out} [N·m]	4900	4810	4900	4920	4920	5000	5000	5000	5000					
	T_{out} [kgf·m]	500	490	500	502	502	510	510	510	510					
	P_{rd} [N]	39900	41700	41700	41700	41700	41700	41700	41700	41700					
	P_{rd} [kgf]	4060	4250	4250	4250	4250	4250	4250	4250	4250					
6190DA	P_i [kW]			6.25	6.25	5.52	4.66	3.94	3.37	2.85	2.28	1.93	1.66	1.47	
	T_{out} [N·m]			5300	6110	6380	6380	6380	6380	6380	6380	6380	6380	6380	
	T_{out} [kgf·m]			540	623	650	650	650	650	650	650	650	650	650	
	P_{rd} [N]			59000	59000	58900	59000	59000	59000	59000	59000	59000	58600	59000	
	P_{rd} [kgf]			6010	6010	6000	6010	6010	6010	6010	6010	6010	5970	6010	
6190DB	P_i [kW]	10.3	8.90	7.53	6.52	5.52	4.66								
	T_{out} [N·m]	6380	6380	6380	6380	6380	6380								
	T_{out} [kgf·m]	650	650	650	650	650	650								
	P_{rd} [N]	55800	59000	58700	58900	58900	59000								
	P_{rd} [kgf]	5690	6010	5980	6000	6000	6010								
6195DA	P_i [kW]					5.63	5.81	4.92	4.21	3.56	2.84	2.40	2.07	1.84	
	T_{out} [N·m]					6500	7960	7960	7960	7960	7960	7960	7960	7960	
	T_{out} [kgf·m]					663	811	811	811	811	811	811	811	811	
	P_{rd} [N]					58800	59000	59000	59000	59000	59000	59000	58100	59000	
	P_{rd} [kgf]					6000	6010	6010	6010	6010	6010	6010	5930	6010	
6195DB	P_i [kW]	11.9	10.6	9.00	8.09	6.84	5.81	4.92							
	T_{out} [N·m]	7350	7580	7630	7910	7910	7960	7960							
	T_{out} [kgf·m]	750	773	778	806	806	811	811							
	P_{rd} [N]	55400	59000	58200	58300	58300	59000	59000							
	P_{rd} [kgf]	5650	6010	5940	5940	5940	6010	6010							
6205DA	P_i [kW]							5.17	4.27	3.83	2.95	2.64	2.20	2.20	
	T_{out} [N·m]							8370	8080	8550	8280	8760	8300	9300	
	T_{out} [kgf·m]							853	823	872	844	893	846	948	
	P_{rd} [N]							84100	84100	84100	84100	84100	84100	84100	
	P_{rd} [kgf]							8570	8570	8570	8570	8570	8570	8570	
6205DB	P_i [kW]		11.9		9.48	8.02	6.77	5.73	4.88	4.13	3.32	2.81	2.42	2.20	
	T_{out} [N·m]		8560		9270	9270	9270	9270	9230	9230	9300	9300	9300	9300	
	T_{out} [kgf·m]		872		945	945	945	945	941	941	948	948	948	948	
	P_{rd} [N]		84100		84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	
	P_{rd} [kgf]		8570		8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	
6215DA	P_i [kW]				11.9	10.5	9.13	7.72	6.69	5.66	4.51	3.82	3.29	2.92	
	T_{out} [N·m]				11700	12200	12500	12500	12700	12700	12700	12700	12700	12700	
	T_{out} [kgf·m]				1190	1240	1270	1270	1290	1290	1290	1290	1290	1290	
	P_{rd} [N]				104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	
	P_{rd} [kgf]				10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	
6215DB	P_i [kW]		15.9		12.4	10.5									
	T_{out} [N·m]		11400		12200	12200									
	T_{out} [kgf·m]		1160		1240	1240									
	P_{rd} [N]		104000		104000	104000									
	P_{rd} [kgf]		10600		10600	10600									

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1450 \text{ (r/min)}$

1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.813	0.750	0.750	0.463	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	CHH	6180DA
4050	4050	4060	4060	4060	4050	4050	4060	4050	4060	4060	4060	4060	B-57	
413	413	414	414	414	413	413	414	413	414	414	414	414	CHF	
41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	B-62	
4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	CW	B-68
													CHH	6180DB
													B-58	
													CHF	
													B-63	
													CW	B-69
1.00	0.841	0.750	0.750	0.750	0.408	0.400	0.400	0.400	0.400	0.400	0.400	0.400	CHH	6185DA
5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	B-57	
510	510	510	510	510	510	510	510	510	510	510	510	510	CHF	
41700	41600	41700	41700	41700	41600	41600	41700	41600	41700	41700	41700	41700	B-62	
4250	4240	4250	4250	4250	4240	4240	4250	4240	4250	4250	4250	4250	CW	B-68
													CHH	6185DB
													B-58	
													CHF	
													B-63	
													CW	B-69
1.28	1.07	0.863	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	CHH	6190DA
6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	B-58	
650	650	650	650	650	650	650	650	650	650	650	650	650	CHF	
59000	58600	59000	58900	59000	58600	58600	58900	58600	58900	58900	58900	58900	B-63	
6010	5970	6010	6000	6010	5970	5970	6000	5970	6000	6000	6000	6000	CW	B-69
													CHH	6190DB
													B-58	
													CHF	
													B-63	
													CW	B-69
1.60	1.34	1.08	0.908	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	CHH	6195DA
7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	B-58	
811	811	811	811	811	811	811	811	811	811	811	811	811	CHF	
59000	58100	59000	58400	59000	58100	58100	58400	58100	58400	58400	58400	58400	B-63	
6010	5930	6010	5950	6010	5930	5930	5950	5930	5950	5950	5950	5950	CW	B-69
													CHH	6195DB
													B-58	
													CHF	
													B-63	
													CW	B-69
2.20	2.20	1.50	1.50	1.50	1.50	0.750	0.750	0.750	0.750	0.750	0.750	0.750	CHH	6205DA
9230	9300	9300	8760	9300	9300	9300	8760	9300	8760	9300	8760	8760	B-58	
941	948	948	893	948	948	948	893	948	893	948	893	893	CHF	
84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	B-63	
8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	CW	B-69
	2.20		1.50										CHH	6205DB
	9300		8760										B-58	
	948		893										CHF	
	84100		84100										B-63	
	8570		8570										CW	B-69
2.54	2.20	2.20	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	CHH	6215DA
12700	12700	12700	11300	12700	12700	12700	11300	12700	11300	12700	11300	11300	B-58	
1290	1290	1290	1150	1290	1290	1290	1150	1290	1150	1290	1150	1150	CHF	
104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	B-63	
10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	CW	B-69
													CHH	6215DB
													B-58	
													CHF	
													B-63	
													CW	B-69

1450r/min

Frame size	n_2 [r/min]	13.9	12.0	10.1	8.79	7.44	6.28	5.31	4.55	3.85	3.07	2.59	2.23	1.98
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731
6225DA	P _i [kW]					10.8	10.8	9.15	7.95	6.73	5.71	4.83	4.13	3.69
	T _{out} [N·m]					12500	14800	14800	15000	15000	16000	16000	15900	16000
	T _{out} [kgf·m]					1270	1510	1510	1530	1530	1630	1630	1620	1630
	P _{rc} [N]					129000	137000	145000	145000	145000	145000	145000	145000	145000
	P _{rc} [kgf]					13200	14000	14700	14800	14800	14800	14800	14800	14800
6225DB	P _i [kW]		18.8		14.8	12.5	10.8							
	T _{out} [N·m]		13500		14500	14500	14800							
	T _{out} [kgf·m]		1370		1480	1480	1510							
	P _{rc} [N]		113000		122000	129000	137000							
	P _{rc} [kgf]		11500		12500	13100	14000							
6235DA	P _i [kW]		25.4		20.0	17.0	13.8	11.7	10.0	8.46	7.31	6.19	5.33	4.73
	T _{out} [N·m]		18200		19600	19600	18900	18900	18900	18900	20500	20500	20500	20500
	T _{out} [kgf·m]		1860		2000	2000	1930	1930	1930	1930	2090	2090	2090	2090
	P _{rc} [N]		141000		151000	159000	171000	179000	179000	179000	179000	179000	179000	179000
	P _{rc} [kgf]		14300		15400	16200	17400	18200	18200	18200	18200	18200	18200	18200
6235DB	P _i [kW]		26.1		20.0									
	T _{out} [N·m]		18700		19600									
	T _{out} [kgf·m]		1910		2000									
	P _{rc} [N]		141000		151000									
	P _{rc} [kgf]		14300		15400									
6245DA	P _i [kW]				25.4	22.7	18.8	15.9	13.6	11.5	9.20	7.79	6.71	5.95
	T _{out} [N·m]				24800	26200	25800	25800	25800	25800	25800	25800	25800	25800
	T _{out} [kgf·m]				2530	2680	2630	2630	2630	2630	2630	2630	2630	2630
	P _{rc} [N]				168000	177000	189000	199000	208000	208000	208000	208000	208000	208000
	P _{rc} [kgf]				17100	18000	19300	20300	21200	21200	21200	21200	21200	21200
6245DB	P _i [kW]		28.6		26.8	22.7	18.8							
	T _{out} [N·m]		20500		26200	26200	25800							
	T _{out} [kgf·m]		2090		2680	2680	2630							
	P _{rc} [N]		156000		168000	177000	189000							
	P _{rc} [kgf]		15900		17100	18000	19300							
6255DA	P _i [kW]		31.8		31.8	27.0	22.6	19.2	17.2	14.5	12.3	10.4	8.97	7.96
	T _{out} [N·m]		22800		31100	31200	31000	31000	32500	32500	34500	34500	34500	34500
	T _{out} [kgf·m]		2330		3170	3180	3160	3160	3310	3310	3520	3520	3520	3520
	P _{rc} [N]		192000		206000	216000	231000	243000	255000	258000	258000	258000	258000	258000
	P _{rc} [kgf]		19600		21000	22100	23500	24700	26000	26300	26300	26300	26300	26300
6255DB	P _i [kW]		38.3		31.9	27.0								
	T _{out} [N·m]		27500		31200	31200								
	T _{out} [kgf·m]		2800		3180	3180								
	P _{rc} [N]		191000		206000	216000								
	P _{rc} [kgf]		19500		21000	22100								
6265DA	P _i [kW]		43.7		44.7	37.8	33.6	28.4	24.3	20.6	16.4	13.9	12.0	10.6
	T _{out} [N·m]		31300		43700	43700	46000	46000	46000	46000	46000	46000	46000	46000
	T _{out} [kgf·m]		3190		4460	4460	4690	4690	4690	4690	4690	4690	4690	4690
	P _{rc} [N]		234000		250000	263000	276000	276000	276000	276000	276000	276000	276000	276000
	P _{rc} [kgf]		23800		25500	26800	28100	28100	28100	28100	28100	28100	28100	28100
6275DA	P _i [kW]								36.1	30.5	24.3	20.6	17.7	15.7
	T _{out} [N·m]								68200	68200	68200	68200	68200	68200
	T _{out} [kgf·m]								6950	6950	6950	6950	6950	6950
	P _{rc} [N]								248000	248000	248000	248000	248000	248000
	P _{rc} [kgf]								25300	25300	25300	25300	25300	25300

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1450 \text{ (r/min)}$

1.72	1.45	1.16	0.980	0.784	0.702	0.572	0.476	0.417	0.327	0.282	0.235	0.192	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
3.02	2.67	2.20	2.20	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	CHH	6225DA
15000	15900	16000	15100	16000	15900	15900	15100	15900	15100	15900	15100	15100	B-58	
1530	1620	1630	1540	1630	1620	1620	1540	1620	1540	1620	1540	1540	CHF	
145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	CW	
14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	B-69	
													CHH	6225DB
													B-58	
													CHF	
													B-63	
													CW	B-69
3.79	3.45	2.77	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	CHH	6235DA
18900	20500	20500	17200	20500	20500	20500	17200	20500	17200	20500	17200	17200	B-58	
1930	2090	2090	1750	2090	2090	2090	1750	2090	1750	2090	1750	1750	CHF	
179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	CW	
18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	B-69	
													CHH	6235DB
													B-58	
													CHF	
													B-63	
													CW	B-69
5.18	4.34	3.49	2.58	2.35	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	CHH	6245DA
25800	25800	25800	22600	25800	25800	25800	22600	25800	22600	25800	22600	22600	B-58	
2630	2630	2630	2310	2630	2630	2630	2310	2630	2310	2630	2310	2310	CHF	
208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	CW	
21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	B-69	
													CHH	6245DB
													B-58	
													CHF	
													B-63	
													CW	B-69
6.51	5.80	4.67	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	CHH	6255DA
32500	34500	34500	31000	34500	34500	34500	31000	34500	31000	34500	31000	31000	B-58	
3310	3520	3520	3160	3520	3520	3520	3160	3520	3160	3520	3160	3160	CHF	
258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	CW	
26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	B-69	
													CHH	6255DB
													B-58	
													CHF	
													B-63	
													CW	B-69
9.23	7.74	6.22	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	CHH	6265DA
46000	46000	46000	44000	46000	46000	46000	44000	46000	44000	46000	44000	44000	B-58	
4690	4690	4690	4490	4690	4690	4690	4490	4690	4490	4690	4490	4490	CHF	
276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	CW	
28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	B-69	
13.7	11.5	9.23	7.78	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	CHH	6275DA
68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	B-58	
6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	CHF	
248000	248000	248000	245000	248000	248000	248000	245000	248000	245000	248000	245000	245000	CW	
25300	25300	25300	25000	25300	25300	25300	25000	25300	25000	25300	25000	25000	B-69	

1450r/min

$n_1 = 1750 \text{ (r/min)}$

n_1 : Input speed [r/min]

n_2 : Output speed [r/min]

P_1 : Allowable input power [kW]

T_{out} : Allowable output torque [N·m & kgf·m]

P_{ro} : Allowable output shaft radial load [N & kgf]

Consult us P_{ro} for CNF·CHF type

Frame size	n_2 [r/min]	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6060	P_i [kW]	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.110	0.110	0.110	0.090						CNH B-54
	T_{out} [N·m]	6.22	8.29	11.4	13.5	15.6	17.6	21.8	14.3	16.5	20.0	20.1						CNF B-59
	T_{out} [kgf·m]	0.634	0.845	1.16	1.38	1.59	1.79	2.22	1.46	1.68	2.04	2.05						CNV B-64
	P_{ro} [N]	751	859	1170	1180	1180	1180	1180	1180	1180	1180	1180						
6065	P_i [kW]	0.286	0.286	0.286	0.286	0.286	0.286	0.234	0.166	0.166	0.143	0.113						CNH B-54
	T_{out} [N·m]	8.91	11.9	16.3	19.3	22.3	25.2	25.4	21.5	24.9	26.0	25.2						CNF B-59
	T_{out} [kgf·m]	0.908	1.21	1.66	1.97	2.27	2.57	2.59	2.19	2.54	2.65	2.57						CNV B-64
	P_{ro} [N]	747	852	1150	1180	1180	1180	1180	1180	1180	1180	1180						
6070	P_i [kW]	0.347	0.347	0.347	0.347	0.347	0.347	0.320	0.230	0.226	0.211	0.170	0.100	0.100				CNH B-54
	T_{out} [N·m]	10.8	14.4	19.8	23.4	27.0	30.5	34.9	29.8	34.0	38.3	37.8	26.4	30.6				CNF B-59
	T_{out} [kgf·m]	1.10	1.47	2.02	2.39	2.75	3.11	3.56	3.04	3.47	3.90	3.85	2.69	3.12				CNV B-64
	P_{ro} [N]	1300	1430	1600	1690	1690	1770	1770	1770	1770	1770	1770	1770	1770				
6075	P_i [kW]	0.407	0.407	0.407	0.407	0.407	0.407	0.407	0.294	0.286	0.279	0.226	0.143	0.136				CNH B-54
	T_{out} [N·m]	12.7	16.9	23.2	27.4	31.6	35.9	44.3	38.1	43.0	50.6	50.4	37.9	41.5				CNF B-59
	T_{out} [kgf·m]	1.29	1.72	2.36	2.79	3.22	3.66	4.52	3.88	4.38	5.16	5.14	3.86	4.23				CNV B-64
	P_{ro} [N]	1290	1420	1590	1670	1680	1770	1770	1770	1770	1770	1770	1770	1770				
6080	P_i [kW]	0.592	0.592	0.592	0.592	0.592	0.592	0.478	0.340	0.340	0.329	0.250	0.192	0.185	0.120	0.090		CNH B-54
	T_{out} [N·m]	18.4	24.6	33.8	39.9	46.1	52.2	52.1	44.1	51.1	59.6	55.7	50.8	56.5	44.2	40.6		CNF B-59
	T_{out} [kgf·m]	1.88	2.51	3.45	4.07	4.70	5.32	5.31	4.50	5.21	6.08	5.68	5.18	5.76	4.51	4.14		CNV B-64
	P_{ro} [N]	1800	1940	2140	2300	2370	2480	2440	2530	2560	2560	2560	2560	2560	2560	2560	2560	
6085	P_i [kW]	0.778	0.778	0.778	0.778	0.778	0.778	0.550	0.475	0.467	0.371	0.294	0.241	0.234	0.167	0.121		CNH B-54
	T_{out} [N·m]	24.2	32.3	44.4	52.4	60.5	68.5	59.9	61.5	70.2	67.3	65.5	63.7	71.4	68.9	54.7		CNF B-59
	T_{out} [kgf·m]	2.47	3.29	4.53	5.34	6.17	6.98	6.11	6.27	7.16	6.86	6.68	6.49	7.28	7.02	5.58		CNV B-64
	P_{ro} [N]	1790	1930	2120	2280	2350	2450	2430	2500	2550	2560	2560	2560	2560	2540	2560		
6090	P_i [kW]	1.15	1.15	1.15	1.15	1.15	1.15	0.758	0.671	0.625	0.612	0.435	0.332	0.309	0.252	0.211	0.125	CNH B-54
	T_{out} [N·m]	35.7	47.5	65.4	77.3	89.1	101	82.5	86.9	94.0	111	97.0	87.7	94.5	92.6	95.3	77.1	CNF B-59
	T_{out} [kgf·m]	3.64	4.84	6.67	7.88	9.08	10.3	8.41	8.86	9.58	11.3	9.89	8.94	9.63	9.44	9.71	7.86	CNV B-64
	P_{ro} [N]	2650	2950	3340	3340	3340	3340	3340	3340	3340	3340	3340	3340	3340	3340	3340	3340	
6095	P_i [kW]	1.52	1.52	1.52	1.52	1.52	1.52	1.52	0.866	0.784	0.758	0.603	0.422	0.373	0.301	0.301	0.151	CNH B-54
	T_{out} [N·m]	47.1	62.8	86.4	102	118	134	165	112	118	137	134	112	114	111	136	93.0	CNF B-59
	T_{out} [kgf·m]	4.80	6.40	8.81	10.4	12.0	13.7	16.8	11.4	12.0	14.0	13.7	11.4	11.6	11.3	13.9	9.48	CNV B-64
	P_{ro} [N]	2630	2910	3300	3300	3280	3290	3260	3340	3340	3320	3340	3340	3340	3340	3340	3340	
6100	P_i [kW]	2.35	2.35	2.35	2.35	2.35	1.99	1.93	1.27	1.21	0.975	0.780	0.560	0.516	0.436	0.433	0.210	CNH B-54
	T_{out} [N·m]	73.0	97.4	134	158	183	175	210	165	182	177	174	148	158	160	195	130	CNF B-59
	T_{out} [kgf·m]	7.44	9.93	13.7	16.1	18.7	17.8	21.4	16.8	18.6	18.0	17.7	15.1	16.1	16.3	19.9	13.3	CNV B-64
	P_{ro} [N]	3850	4290	4860	5050	5330	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	
6105	P_i [kW]	3.18	3.18	3.18	3.18	3.18	2.46	2.34	1.67	1.59	1.20	1.08	0.776	0.708	0.561	0.565	0.286	CNH B-54
	T_{out} [N·m]	98.9	132	181	214	247	216	254	217	239	217	242	205	217	207	255	177	CNF B-59
	T_{out} [kgf·m]	10.1	13.5	18.5	21.8	25.2	22.0	25.9	22.1	24.4	22.1	24.7	20.9	22.1	21.1	26.0	18.0	CNV B-64
	P_{ro} [N]	3820	4240	4800	4980	5250	5380	5380	5380	5380	5380	5380	5380	5380	5400	5400	5400	
6110	P_i [kW]	3.55	3.55	3.55	3.55	3.55	3.18	2.72	1.91	1.90	1.50	1.30	0.944	0.859	0.669	0.661		CNH B-54
	T_{out} [N·m]	110	147	202	239	276	280	297	248	286	273	290	249	263	246	298		CNF B-59
	T_{out} [kgf·m]	11.2	15.0	20.6	24.4	28.1	28.5	30.3	25.3	29.2	27.8	29.6	25.4	26.8	25.1	30.4		CNV B-64
	P_{ro} [N]	4320	4810	5470	5650	6010	6090	6470	6660	6840	7360	7610	7610	7610	7610	7610		
6115	P_i [kW]	3.92	3.92	3.92	3.90	3.90	3.90	3.11	2.22	2.22	1.81	1.52	1.11	1.01	0.758	0.758		CNH B-54
	T_{out} [N·m]	122	163	223	263	303	344	339	288	334	328	338	294	309	279	342		CNF B-59
	T_{out} [kgf·m]	12.4	16.6	22.7	26.8	30.9	35.1	34.6	29.4	34.0	33.4	34.5	30.0	31.5	28.4	34.9		CNV B-64
	P_{ro} [N]	4310	4790	5450	5620	5970	6020	6430	6620	6800	7310	7610	7610	7610	7610	7610		

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 1750 \text{ (r/min)}$

Frame size	n_2 [r/min]	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6120	P _i [kW]	5.07	5.07	5.07	5.07	5.07	5.07	3.96	3.09	2.99	2.49	1.91	1.72	1.30	0.957	0.944		CNH B-54 CNF B-59 CNV B-64
	Tou [N·m]	158	210	289	342	394	447	431	400	450	453	427	454	399	352	426		
	Tou [kgf·m]	16.1	21.4	29.5	34.9	40.2	45.6	43.9	40.8	45.9	46.2	43.5	46.3	40.7	35.9	43.4		
	P _{ro} [N]	4860	5410	6130	6310	6760	6810	7540	7970	8280	8790	9430	9810	9810	9810	9810		
	P _{ro} [kgf]	495	551	625	643	689	694	769	812	844	896	961	1000	1000	1000	1000		
6125	P _i [kW]	5.81	6.95	5.92	5.92	5.92	5.66	4.88	3.96	3.77	3.18	2.38	2.28	1.62	1.20	1.13		CNH B-54 CNF B-59 CNV B-64
	Tou [N·m]	181	288	338	399	460	499	532	513	566	577	531	602	495	441	510		
	Tou [kgf·m]	18.5	29.4	34.5	40.7	46.9	50.9	54.2	52.3	57.7	58.8	54.1	61.4	50.5	45.0	52.0		
	P _{ro} [N]	4840	5340	6080	6250	6700	6760	7450	7870	8170	8670	9340	9740	9790	9790	9810		
	P _{ro} [kgf]	493	544	620	637	683	689	759	802	833	884	952	993	998	998	1000		
6130	P _i [kW]	9.39	9.39	9.39	9.39	7.78	7.27	6.14	5.16	4.48	3.71	2.99	2.54	2.19	1.83	1.42		CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	292	389	535	633	605	641	669	669	674	673	668	672	669	674	640		
	Tou [kgf·m]	29.8	39.7	54.5	64.5	61.7	65.3	68.2	68.2	68.7	68.6	68.1	68.5	68.2	68.7	65.2		
	P _{ro} [N]	5590	6210	7060	7330	7550	8120	8710	9100	9610	10200	11000	11500	12100	12900	13900		
	P _{ro} [kgf]	570	633	720	747	770	828	888	928	980	1040	1120	1170	1230	1310	1420		
6135	P _i [kW]	11.3	11.3	11.3	11.3	8.97	8.29	7.53	5.95	5.64	4.25	3.77	2.93	2.52	2.17	1.91		CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	352	469	645	762	697	730	820	771	848	771	840	775	772	799	861		
	Tou [kgf·m]	35.9	47.8	65.7	77.7	71.0	74.4	83.6	78.6	86.4	78.6	85.6	79.0	78.7	81.4	87.8		
	P _{ro} [N]	5520	6140	6970	7230	7480	8050	8590	9030	9480	10100	10800	11400	12000	12800	13800		
	P _{ro} [kgf]	563	626	710	737	762	821	876	920	966	1030	1100	1160	1220	1300	1410		
6140	P _i [kW]	13.0	13.0	13.0	13.0	12.0	10.1	8.66	6.89	5.95	5.21	3.94	3.43	2.96	2.43	1.98		CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	405	540	743	878	933	888	943	893	895	945	879	906	905	895	893		
	Tou [kgf·m]	41.3	55.0	75.7	89.5	95.1	90.5	96.1	91.0	91.2	96.3	89.6	92.4	92.3	91.2	91.0		
	P _{ro} [N]	8750	9690	10900	11100	11600	12200	13000	13700	14000	15100	15800	16000	16000	16000	16000		
	P _{ro} [kgf]	892	988	1110	1130	1180	1240	1330	1400	1430	1540	1610	1630	1630	1630	1630		
6145	P _i [kW]	15.1	15.1	15.1	15.1	15.1	12.0	11.0	7.91	7.53	7.53	5.39	4.22	3.65	3.03	2.48		CHH B-55 CHF B-60 CVW B-65
	Tou [N·m]	471	628	864	1020	1170	1060	1190	1030	1130	1370	1200	1120	1120	1110	1120		
	Tou [kgf·m]	48.0	64.0	88.1	104	119	108	121	105	115	140	122	114	114	113	114		
	P _{ro} [N]	8720	9650	10800	11000	11500	12100	12900	13700	14000	14900	15600	16000	16000	16000	16000		
	P _{ro} [kgf]	889	984	1100	1120	1170	1230	1310	1400	1430	1520	1590	1630	1630	1630	1630		
6160	P _i [kW]	20.3	19.7	19.7	19.7	18.7	13.1	12.9	9.86	10.5	9.67	7.45	5.75	4.42	3.47	3.47		CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	631	817	1120	1330	1460	1150	1400	1280	1580	1760	1660	1520	1350	1280	1570		
	Tou [kgf·m]	64.3	83.3	114	136	149	117	143	130	161	179	169	155	138	130	160		
	P _{ro} [N]	9550	10700	12000	12500	13300	14000	14900	15800	16300	17300	18700	19600	21900	22000	21800		
	P _{ro} [kgf]	973	1090	1220	1270	1360	1430	1520	1610	1660	1760	1910	2000	2230	2240	2220		
6165	P _i [kW]	24.1	24.1	24.1	22.6	22.6	18.8	16.1	15.1	11.4	11.4	7.91	7.53	5.75	5.65	3.90		CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	748	997	1370	1520	1760	1660	1750	1950	1720	2070	1760	1990	1760	2080	1760		
	Tou [kgf·m]	76.2	102	140	155	179	169	178	199	175	211	179	203	179	212	179		
	P _{ro} [N]	9460	10500	11900	12400	13100	13600	14700	15300	16200	17100	18600	19300	21700	21500	21700		
	P _{ro} [kgf]	964	1070	1210	1260	1340	1390	1500	1560	1650	1740	1900	1970	2210	2190	2210		
6170	P _i [kW]	27.6	27.6	27.6	27.3	25.5	19.7	19.5	15.8	14.3	12.0	9.75	8.39	7.15	5.92	4.81		CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	859	1140	1570	1840	1980	1730	2120	2050	2150	2180	2170	2220	2190	2180	2170		
	Tou [kgf·m]	87.6	116	160	188	202	176	216	209	219	222	221	226	223	222	221		
	P _{ro} [N]	10700	11800	13500	14000	14600	15500	16700	17500	18400	19600	21000	22000	23200	24600	26500		
	P _{ro} [kgf]	1090	1200	1380	1430	1490	1580	1700	1780	1880	2000	2140	2240	2360	2510	2700		
6175	P _i [kW]	30.1	30.1	30.1	30.1	30.1	24.1	24.1	19.5	18.8	15.1	11.3	11.3	8.29	7.15	5.62		CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]	937	1250	1720	2030	2340	2120	2620	2530	2830	2730	2520	2990	2540	2630	2540		
	Tou [kgf·m]	95.5	127	175	207	239	216	267	258	288	278	257	305	259	268	259		
	P _{ro} [N]	10700	11700	13400	13900	14400	15300	16400	17200	18100	19300	20900	21600	23000	24400	26300		
	P _{ro} [kgf]	1090	1190	1370	1420	1470	1560	1670	1750	1850	1970	2130	2200	2340	2490	2680		
6180	P _i [kW]			35.2	35.2	32.4	30.6	30.0	24.1	19.5	18.8	15.1	12.0	9.75	8.80	7.15		CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]			2010	2370	2520	2690	3270	3120	2930	3410	3360	3170	2980	3240	3220		
	Tou [kgf·m]			205	242	257	274	333	318	299	348	343	323	304	330	328		
	P _{ro} [N]			18000	18700	19700	20800	22400	23400	24600	26300	28300	29500	31000	33000	35600		
	P _{ro} [kgf]			1830	1910	2010	2120	2280	2390	2510	2680	2880	3010	3160	3360	3630		
6185	P _i [kW]			39.0	39.0	39.0	39.0	39.0	30.1	24.1	22.6	18.8	15.1	12.0	9.79	8.59		CHH B-55 CHF B-60 CVW B-66
	Tou [N·m]			2220	2630	3030	3440	4250	3910	3620	4100	4200	3980	3670	3610	3870		
	Tou [kgf·m]			226	268	309	351	433	399	369	418	428	406	374	368	394		
	P _{ro} [N]			17900	18600	19500	20500	22000	23100	24400	26000	27900	29200	30700	32800	35400		
	P _{ro} [kgf]			1820	1900	1990	2090	2240	2350	2490	2650	2840	2980	3130	3340	3610		

1750r/min

$$n_1 = 1750 \text{ (r/min)}$$

Frame size	n_2 [r/min]	292	219	159	135	117	103	83.3	70.0	60.3	50.0	40.7	34.3	29.7	24.6	20.1	14.7	Page of Dimension Table
	Ratio [Z]	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119	
6190	P_i [kW]			41.0	41.0	41.0	41.0	41.0	35.2	30.7	24.3	20.9	18.2	15.3	13.5	11.8		CHH
	T_{out} [N·m]			2340	2760	3190	3610	4460	4560	4620	4410	4670	4810	4670	4980	5320		B-55
	T_{out} [kgf·m]			239	281	325	368	455	465	471	450	476	490	476	508	542		CHF
	P_{re} [N]			25300	26300	27500	29000	31200	32800	34500	36600	39500	41300	43400	46000	49600		B-60
	P_{re} [kgf]			2580	2680	2800	2960	3180	3340	3520	3730	4030	4210	4420	4690	5060		CVV
6195	P_i [kW]			48.1	48.1	48.1	48.1	48.1	40.5	37.8	30.1	30.1	20.9	18.8	15.6	13.6		CHH
	T_{out} [N·m]			2740	3240	3740	4240	5240	5240	5680	5470	6720	5540	5760	5740	6150		B-55
	T_{out} [kgf·m]			279	330	381	432	534	534	579	558	685	565	587	585	627		CHF
	P_{re} [N]			25200	26100	27300	28800	31000	32600	34200	36300	38900	41100	43100	45800	49400		B-60
	P_{re} [kgf]			2570	2660	2780	2940	3160	3320	3490	3700	3970	4190	4390	4670	5040		CVV
6205	P_i [kW]			59.7		59.7		59.2		45.7		31.8		22.6		15.9		CHH
	T_{out} [N·m]			3400		4640		6450		6860		7090		6910		7170		B-55
	T_{out} [kgf·m]			347		473		657		699		723		704		731		CHF
	P_{re} [N]			48900		52500		58600		64100		72500		79200		84100		B-60
	P_{re} [kgf]			4980		5350		5970		6530		7390		8070		8570		CVV
6215	P_i [kW]			75.3		75.3		75.3		58.5		45.2		37.7		21.4		CHH
	T_{out} [N·m]			4300		5860		8200		8790		10100		11500		9650		B-55
	T_{out} [kgf·m]			438		597		836		896		1030		1170		984		CHF
	P_{re} [N]			49300		52900		59500		64900		73300		79700		90300		B-60
	P_{re} [kgf]			5030		5390		6070		6620		7470		8120		9200		CVV
6225	P_i [kW]			99.5		99.5		94.2		75.3		56.5		45.2		26.7		CHH
	T_{out} [N·m]			5670		7730		10300		11300		12600		13800		12100		B-55
	T_{out} [kgf·m]			578		788		1050		1150		1280		1410		1230		CHF
	P_{re} [N]			52100		56100		62500		68200		77200		84100		95200		B-60
	P_{re} [kgf]			5310		5720		6370		6950		7870		8570		9700		CVV

- Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.

$n_1 = 1750 \text{ (r/min)}$

n_1 : Input speed [r/min]

n_2 : Output speed [r/min]

P_1 : Allowable input power [kW]

T_{out} : Allowable output torque [N·m & kgf·m]

P_{ro} : Allowable output shaft radial load [N & kgf]

Consult us P_{ro} for CNF·CHF type

Frame size	n_2 [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	
6060DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.100	
	T_{out} [N·m]	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0	
	T_{out} [kgf·m]	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	2.45	
	P_{ro} [N]	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	
	P_{ro} [kgf]	120	120	120	120	120	120	120	120	120	120	120	120	120	
6065DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100		0.100	
	T_{out} [N·m]	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	
	T_{out} [kgf·m]	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	3.06	
	P_{ro} [N]	1180	1140	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	1180	
	P_{ro} [kgf]	120	116	120	120	120	120	120	120	120	120	120	120	120	
6070DA	P_i [kW]	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	
	T_{out} [N·m]	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	45.0	
	T_{out} [kgf·m]	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	4.59	
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	
	P_{ro} [kgf]	180	180	180	180	180	180	180	180	180	180	180	180	180	
6075DA	P_i [kW]	0.117	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	
	T_{out} [N·m]	60.0	50.8	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	60.0	57.4	60.0	
	T_{out} [kgf·m]	6.12	5.18	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	6.12	5.85	6.12	
	P_{ro} [N]	1770	1770	1770	1770	1770	1770	1770	1770	1770	1770	1660	1660	1580	1660
	P_{ro} [kgf]	180	180	180	180	180	180	180	180	180	180	169	169	161	169
6090DA	P_i [kW]	0.294	0.252	0.214	0.185	0.157	0.132	0.112	0.100	0.100	0.100	0.100	0.100	0.100	
	T_{out} [N·m]	150	150	150	150	150	150	150	150	150	150	150	146	150	
	T_{out} [kgf·m]	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	15.3	14.9	15.3	
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3290	3290	3310	3310	3300	3310	
	P_{ro} [kgf]	340	340	340	340	340	340	340	336	336	338	338	336	338	
6095DA	P_i [kW]	0.354	0.270	0.261	0.247	0.209	0.176	0.149	0.128	0.108	0.100	0.100		0.100	
	T_{out} [N·m]	181	160	183	200	200	200	200	200	200	200	200		200	
	T_{out} [kgf·m]	18.4	16.4	18.7	20.4	20.4	20.4	20.4	20.4	20.4	20.4	20.4		20.4	
	P_{ro} [N]	3340	3340	3340	3340	3340	3340	3340	3200	3200	3220	3220		3220	
	P_{ro} [kgf]	340	340	340	340	340	340	340	326	326	328	328		328	
6100DA	P_i [kW]	0.429	0.421	0.356	0.308	0.261	0.220	0.186	0.160	0.135	0.108	0.100	0.100	0.100	
	T_{out} [N·m]	219	250	250	250	250	250	250	250	250	250	250	250	250	
	T_{out} [kgf·m]	22.4	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	
	P_{ro} [kgf]	550	550	550	550	550	550	550	550	550	550	550	550	550	
6105DA	P_i [kW]	0.429	0.429	0.427	0.370	0.313	0.264	0.224	0.191	0.162	0.129	0.109	0.100	0.100	
	T_{out} [N·m]	219	255	300	300	300	300	300	300	300	300	300	296	300	
	T_{out} [kgf·m]	22.4	26.0	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.6	30.2	30.6	
	P_{ro} [N]	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5090	5400	
	P_{ro} [kgf]	550	550	550	550	550	550	550	550	550	550	550	519	550	
6120DA	P_i [kW]			0.429	0.429	0.429	0.429	0.389	0.332	0.281	0.226	0.191	0.165	0.146	
	T_{out} [N·m]			302	348	411	487	522	520	520	525	525	525	525	
	T_{out} [kgf·m]			30.7	35.5	41.9	49.7	53.2	53.0	53.0	53.5	53.5	53.5	53.5	
	P_{ro} [N]			9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	
	P_{ro} [kgf]			1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	
6120DB	P_i [kW]	1.03	0.883	0.748	0.648	0.548	0.460								
	T_{out} [N·m]	525	525	525	525	525	522								
	T_{out} [kgf·m]	53.5	53.5	53.5	53.5	53.5	53.2								
	P_{ro} [N]	9810	9810	9810	9810	9810	9810								
	P_{ro} [kgf]	1000	1000	1000	1000	1000	1000								
6125DA	P_i [kW]						0.429	0.429	0.402	0.340	0.271	0.229	0.198	0.175	
	T_{out} [N·m]						487	576	630	630	630	630	630	630	
	T_{out} [kgf·m]						49.7	58.7	64.2	64.2	64.2	64.2	64.2	64.2	
	P_{ro} [N]						9810	9810	9810	9810	9810	9810	9810	9810	
	P_{ro} [kgf]						1000	1000	1000	1000	1000	1000	1000	1000	
6125DB	P_i [kW]	1.23	1.05	0.897	0.777	0.658	0.555	0.470	0.402						
	T_{out} [N·m]	630	622	630	630	630	630	630	630						
	T_{out} [kgf·m]	64.2	63.4	64.2	64.2	64.2	64.2	64.2	64.2						
	P_{ro} [N]	9810	9810	9810	9810	9810	9810	9810	9810						
	P_{ro} [kgf]	1000	1000	1000	1000	1000	1000	1000	1000						

- Notes : 1. Allowable Radial Load P_{ro} is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
 2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
 3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1750 \text{ (r/min)}$

2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.100		0.100		0.100									CNH	6060DA
24.0		24.0		24.0									B-56	
2.45		2.45		2.45									CNF	
1180		1180		1180									B-61	
120		120		120									CNV	B-67
0.100		0.100		0.100									CNH	6065DA
30.0		30.0		30.0									B-56	
3.06		3.06		3.06									CNF	
1180		1180		1180									B-61	
120		120		120									CNV	B-67
0.100	0.100	0.100		0.100	0.100	0.100							CNH	6070DA
45.0	45.0	45.0		45.0	45.0	45.0							B-56	
4.59	4.59	4.59		4.59	4.59	4.59							CNF	
1770	1770	1770		1770	1770	1770							B-61	
180	180	180		180	180	180							CNV	B-67
0.100	0.100	0.100		0.100	0.100	0.100							CNH	6075DA
60.0	57.4	60.0		60.0	57.4	57.4							B-56	
6.12	5.85	6.12		6.12	5.85	5.85							CNF	
1770	1580	1660		1660	1580	1580							B-61	
180	161	169		169	161	161							CNV	B-67
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6090DA
150	146	150	150	150	146	146	150	146	150	150			B-56	
15.3	14.9	15.3	15.3	15.3	14.9	14.9	15.3	14.9	15.3	15.3			CNF	
3290	3300	3310	3310	3310	3300	3300	3310	3300	3310	3310			B-61	
336	336	338	338	338	336	336	338	336	338	338			CNV	B-67
0.100		0.100	0.100	0.100			0.100		0.100	0.100			CNH	6095DA
200		200	193	200			192		192	192			B-56	
20.4		20.4	19.6	20.4			19.6		19.6	19.6			CNF	
3200		3220	3240	3220			3240		3240	3240			B-61	
326		328	330	328			330		330	330			CNV	B-67
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6100DA
250	250	250	250	250	250	250	250	250	250	250			B-56	
25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5			CNF	
5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400			B-61	
550	550	550	550	550	550	550	550	550	550	550			CNV	B-67
0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6105DA
300	296	300	300	300	296	296	300	296	300	300			B-56	
30.6	30.2	30.6	30.6	30.6	30.2	30.2	30.6	30.2	30.6	30.6			CNF	
5400	5090	5400	4780	5400	5090	5090	4780	5090	4780	4780			B-61	
550	519	550	488	550	519	519	488	519	488	488			CNV	B-67
0.126	0.107	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6120DA
520	525	525	525	525	525	525	525	525	525	525			B-56	
53.0	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5	53.5			CNF	
9810	9810	9810	9780	9810	9810	9810	9780	9810	9780	9780			B-61	
1000	1000	1000	997	1000	1000	1000	997	1000	997	997			CNV	B-67
											0.100	0.100	CNH	6120DB
											525	525	B-56	
											53.5	53.5	CNF	
											9780	9780	B-61	
											997	997	CNV	B-67
0.153	0.128	0.103	0.100	0.100	0.100	0.100	0.100	0.100	0.100	0.100			CNH	6125DA
630	630	630	630	630	630	630	630	630	630	630			B-56	
64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2	64.2			CNF	
9810	9810	9810	9560	9810	9810	9810	9560	9810	9560	9560			B-61	
1000	1000	1000	974	1000	1000	1000	974	1000	974	974			CNV	B-67
											0.100	0.100	CNH	6125DB
											630	630	B-56	
											64.2	64.2	CNF	
											9560	9560	B-61	
											974	974	CNV	B-67

1750r/min

Frame size	n ₂ [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731
6130DA	P _i [kW]							0.429	0.429	0.421	0.336	0.284	0.286	0.217
	T _{ou} [N·m]							576	673	780	780	780	912	780
	T _{ou} [kgf·m]							58.7	68.6	79.5	79.5	79.5	93.0	79.5
	P _{ro} [N]							14700	14700	14700	14700	14700	14700	14700
	P _{ro} [kgf]							1500	1500	1500	1500	1500	1500	1500
6130DB	P _i [kW]	1.53	1.31	1.11	0.963	0.814	0.688	0.582	0.498	0.421				
	T _{ou} [N·m]	780	780	780	780	780	780	780	780	780				
	T _{ou} [kgf·m]	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5	79.5				
	P _{ro} [N]	14700	14700	14700	14700	14700	14700	14700	14700	14700				
	P _{ro} [kgf]	1500	1500	1500	1500	1500	1500	1500	1500	1500				
6130DC	P _i [kW]	1.53												
	T _{ou} [N·m]	780												
	T _{ou} [kgf·m]	79.5												
	P _{ro} [N]	14700												
	P _{ro} [kgf]	1500												
6135DA	P _i [kW]								0.429	0.429	0.405	0.342	0.329	0.262
	T _{ou} [N·m]								673	795	940	940	1050	940
	T _{ou} [kgf·m]								68.6	81.1	95.8	95.8	107	95.8
	P _{ro} [N]								14700	14700	14700	14700	14700	14700
	P _{ro} [kgf]								1500	1500	1500	1500	1500	1500
6135DB	P _i [kW]	1.60	1.58	1.34	1.16	0.981	0.829	0.701	0.600	0.508	0.405			
	T _{ou} [N·m]	817	940	940	940	940	940	940	940	940	940			
	T _{ou} [kgf·m]	83.3	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8	95.8			
	P _{ro} [N]	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700			
	P _{ro} [kgf]	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			
6135DC	P _i [kW]	1.84	1.58											
	T _{ou} [N·m]	940	940											
	T _{ou} [kgf·m]	95.8	95.8											
	P _{ro} [N]	14700	14700											
	P _{ro} [kgf]	1500	1500											
6140DA	P _i [kW]									0.429	0.429	0.429	0.384	0.341
	T _{ou} [N·m]									795	998	1180	1230	1230
	T _{ou} [kgf·m]									81.1	102	120	125	125
	P _{ro} [N]									16000	16000	16000	16000	16000
	P _{ro} [kgf]									1630	1630	1630	1630	1630
6140DB	P _i [kW]	1.60	1.60	1.60	1.51	1.28	1.08	0.914	0.782	0.662	0.527	0.446		
	T _{ou} [N·m]	817	950	1120	1230	1230	1230	1230	1230	1230	1230	1230		
	T _{ou} [kgf·m]	83.3	96.9	114	125	125	125	125	125	125	125	125		
	P _{ro} [N]	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000		
	P _{ro} [kgf]	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630		
6140DC	P _i [kW]	2.40	2.06	1.74	1.51									
	T _{ou} [N·m]	1230	1230	1230	1230									
	T _{ou} [kgf·m]	125	125	125	125									
	P _{ro} [N]	16000	16000	16000	16000									
	P _{ro} [kgf]	1630	1630	1630	1630									
6145DA	P _i [kW]											0.429	0.429	0.382
	T _{ou} [N·m]											1180	1370	1370
	T _{ou} [kgf·m]											120	140	140
	P _{ro} [N]											16000	16000	15700
	P _{ro} [kgf]											1630	1630	1600
6145DB	P _i [kW]			1.60	1.60	1.42	1.18	0.998	0.874	0.740	0.590	0.499	0.430	
	T _{ou} [N·m]			1120	1300	1360	1340	1340	1370	1370	1370	1370	1370	
	T _{ou} [kgf·m]			114	132	138	136	136	140	140	140	140	140	
	P _{ro} [N]			16000	16000	16000	16000	16000	16000	15800	15800	15700	15700	16000
	P _{ro} [kgf]			1630	1630	1630	1630	1630	1630	1610	1610	1600	1600	1630
6145DC	P _i [kW]	2.68	2.17	1.95	1.68									
	T _{ou} [N·m]	1370	1290	1370	1360									
	T _{ou} [kgf·m]	140	132	140	138									
	P _{ro} [N]	15900	16000	15900	16000									
	P _{ro} [kgf]	1620	1630	1620	1630									

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1750 (r/min)$

2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6130DA
780	912	780	848	780	912	912	848	912	848	848			B-57	
79.5	93.0	79.5	86.5	79.5	93.0	93.0	86.5	93.0	86.5	86.5			B-62	
14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700			CW	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			B-68	
											0.200	0.200	CHH	6130DB
											848	848	B-57	
											86.5	86.5	B-62	
											14700	14700	CW	
											1500	1500	B-68	
													CHH	6130DC
													B-57	
													B-62	
													CW	
													B-68	
0.228	0.213	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6135DA
940	1050	940	979	940	1050	1050	979	1050	979	979			B-57	
95.8	107	95.8	99.8	95.8	107	107	99.8	107	99.8	99.8			B-62	
14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700			CW	
1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500			B-68	
											0.200	0.200	CHH	6135DB
											979	979	B-57	
											99.8	99.8	B-62	
											14700	14700	CW	
											1500	1500	B-68	
													CHH	6135DC
													B-57	
													B-62	
													CW	
													B-68	
0.297	0.249	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6140DA
1230	1230	1230	1230	1230	1230	1230	1230	1230	1230	1230			B-57	
125	125	125	125	125	125	125	125	125	125	125			B-62	
16000	16000	16000	16000	16000	16000	16000	16000	16000	16000	16000			CW	
1630	1630	1630	1630	1630	1630	1630	1630	1630	1630	1630			B-68	
											0.200	0.200	CHH	6140DB
											1230	1230	B-57	
											125	125	B-62	
											16000	16000	CW	
											1630	1630	B-68	
													CHH	6140DC
													B-57	
													B-62	
													CW	
													B-68	
0.302	0.278	0.224	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200			CHH	6145DA
1250	1370	1370	1250	1370	1370	1370	1250	1370	1250	1250			B-57	
127	140	140	127	140	140	140	127	140	127	127			B-62	
16000	16000	15700	16000	15700	16000	16000	16000	16000	16000	16000			CW	
1630	1630	1600	1630	1600	1630	1630	1630	1630	1630	1630			B-68	
0.332											0.200	0.200	CHH	6145DB
1370											1250	1250	B-57	
140											127	127	B-62	
15800											16000	16000	CW	
1610											1630	1630	B-68	
													CHH	6145DC
													B-57	
													B-62	
													CW	
													B-68	

1750r/min

Frame size	n ₂ [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	
6160DA	P _i [kW]				1.60	1.60	1.55	1.31	1.12	0.948	0.747	0.632	0.551	0.483	
	T _{out} [N•m]				1300	1530	1760	1760	1760	1760	1740	1740	1760	1740	
	T _{out} [kgf•m]				132	156	179	179	179	179	177	177	179	177	
	P _{ro} [N]				22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100
	P _{ro} [kgf]				2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
6160DB	P _i [kW]	3.36	2.95	2.50	2.17	1.83	1.55								
	T _{out} [N•m]	1710	1760	1760	1760	1760	1760								
	T _{out} [kgf•m]	175	179	179	179	179	179								
	P _{ro} [N]	22100	22100	22100	22100	22100	22100								
	P _{ro} [kgf]	2250	2250	2250	2250	2250	2250								
6160DC	P _i [kW]	3.44	2.95	2.50											
	T _{out} [N•m]	1760	1760	1760											
	T _{out} [kgf•m]	179	179	179											
	P _{ro} [N]	22100	22100	22100											
	P _{ro} [kgf]	2250	2250	2250											
6165DA	P _i [kW]					1.60	1.60	1.57	1.34	1.13	0.904	0.765	0.659	0.585	
	T _{out} [N•m]					1530	1810	2100	2100	2100	2100	2100	2100	2100	
	T _{out} [kgf•m]					156	185	214	214	214	214	214	214	214	
	P _{ro} [N]					22100	22100	22100	22100	22100	22100	22100	22100	22100	22100
	P _{ro} [kgf]					2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
6165DB	P _i [kW]	3.36	3.36	2.99	2.59	2.19	1.85	1.57							
	T _{out} [N•m]	1710	1990	2100	2100	2100	2100	2100							
	T _{out} [kgf•m]	175	203	214	214	214	214	214							
	P _{ro} [N]	22100	22100	22100	22100	22100	22100	22100							
	P _{ro} [kgf]	2250	2250	2250	2250	2250	2250	2250							
6165DC	P _i [kW]	4.11	3.53	2.99	2.59										
	T _{out} [N•m]	2100	2100	2100	2100										
	T _{out} [kgf•m]	214	214	214	214										
	P _{ro} [N]	22100	22100	22100	22100										
	P _{ro} [kgf]	2250	2250	2250	2250										
6170DA	P _i [kW]						1.60	1.60	1.60	1.37	1.09	0.922	0.794	0.705	
	T _{out} [N•m]						1810	2140	2510	2530	2530	2530	2530	2530	
	T _{out} [kgf•m]						185	219	255	258	258	258	258	258	
	P _{ro} [N]						29500	29500	29500	29500	29500	29500	29500	29500	29500
	P _{ro} [kgf]						3010	3010	3010	3010	3010	3010	3010	3010	3010
6170DB	P _i [kW]		3.36	3.36	3.12	2.64	2.23	1.89	1.61						
	T _{out} [N•m]		1990	2360	2530	2530	2530	2530	2530						
	T _{out} [kgf•m]		203	240	258	258	258	258	258						
	P _{ro} [N]		29500	29500	29500	29500	29500	29500	29500	29500					
	P _{ro} [kgf]		3010	3010	3010	3010	3010	3010	3010	3010					
6170DC	P _i [kW]	4.95	4.26	3.60	3.12	2.64	2.23								
	T _{out} [N•m]	2530	2530	2530	2530	2530	2530								
	T _{out} [kgf•m]	258	258	258	258	258	258								
	P _{ro} [N]	28600	29500	29500	29500	29500	29500								
	P _{ro} [kgf]	2920	3010	3010	3010	3010	3010								
6175DA	P _i [kW]							1.60	1.60	1.60	1.36	1.15	0.988	0.877	
	T _{out} [N•m]							2140	2510	2960	3150	3150	3150	3150	
	T _{out} [kgf•m]							219	255	302	321	321	321	321	
	P _{ro} [N]							29500	29500	29500	29500	29500	29500	29500	29500
	P _{ro} [kgf]							3010	3010	3010	3010	3010	3010	3010	3010
6175DB	P _i [kW]			3.36	3.36	3.29	2.78	2.35	2.01	1.70					
	T _{out} [N•m]			2360	2720	3150	3150	3150	3150	3150					
	T _{out} [kgf•m]			240	277	321	321	321	321	321					
	P _{ro} [N]			29500	29500	29500	29500	29500	29500	29500					
	P _{ro} [kgf]			3010	3010	3010	3010	3010	3010	3010					
6175DC	P _i [kW]	6.17	5.30	4.49	3.89	3.29	2.78	2.35							
	T _{out} [N•m]	3150	3150	3150	3150	3150	3150	3150							
	T _{out} [kgf•m]	321	321	321	321	321	321	321							
	P _{ro} [N]	28300	29500	29500	29500	29500	29500	29500							
	P _{ro} [kgf]	2880	3010	3010	3010	3010	3010	3010							

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1750 (r/min)$

2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.425	0.400	0.400	0.400	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6160DA
1760	1760	1740	1760	1740	1760	1760	1760	1760	1760	1760	1760	1760	B-57	
179	179	177	179	177	179	179	179	179	179	179	179	179	CHF	
22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	B-62	
2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	CW	B-68
													CHH	6160DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6160DC
													B-58	
													CHF	
													B-63	
													CW	B-69
0.508	0.426	0.400	0.400	0.400	0.207	0.200	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6165DA
2100	2100	2100	2050	2100	2100	2100	2050	2100	2050	2050	2050	2050	B-57	
214	214	214	209	214	214	214	209	214	209	209	209	209	CHF	
22100	22100	22100	21800	22100	22100	22100	21800	22100	21800	21800	21800	21800	B-62	
2250	2250	2250	2220	2250	2250	2250	2220	2250	2220	2220	2220	2220	CW	B-68
													CHH	6165DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6165DC
													B-58	
													CHF	
													B-63	
													CW	B-69
0.613	0.514	0.413	0.400	0.400	0.400	0.203	0.200	0.200	0.200	0.200	0.200	0.200	CHH	6170DA
2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	2530	B-57	
258	258	258	258	258	258	258	258	258	258	258	258	258	CHF	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	B-62	
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	CW	B-68
													CHH	6170DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6170DC
													B-58	
													CHF	
													B-63	
													CW	B-69
0.763	0.639	0.514	0.434	0.400	0.400	0.400	0.211	0.200	0.200	0.200	0.200	0.200	CHH	6175DA
3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	3150	B-57	
321	321	321	321	321	321	321	321	321	321	321	321	321	CHF	
29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	B-62	
3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	CW	B-68
													CHH	6175DB
													B-57	
													CHF	
													B-62	
													CW	B-68
													CHH	6175DC
													B-58	
													CHF	
													B-63	
													CW	B-69

1750r/min

Frame size	n ₂ [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39	
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731	
6180DA	P _i [kW]				3.36	3.36	3.36	3.02	2.59	2.19	1.75	1.48	1.27	1.13	
	T _{ou} [N·m]				2720	3210	3810	4050	4050	4050	4060	4060	4050	4060	
	T _{ou} [kgf·m]				277	328	388	413	413	413	414	414	413	414	
	P _{ro} [N]				41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700
	P _{ro} [kgf]				4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250
6180DB	P _i [kW]	7.95	6.83	5.78	5.01	4.24	3.57	3.02	2.59						
	T _{ou} [N·m]	4060	4060	4060	4060	4060	4050	4050	4050						
	T _{ou} [kgf·m]	414	414	414	414	414	413	413	413						
	P _{ro} [N]	37700	40300	41700	41700	41700	41700	41700	41700						
	P _{ro} [kgf]	3840	4100	4250	4250	4250	4250	4250	4250						
6185DA	P _i [kW]						3.36	3.36	3.19	2.70	2.15	1.82	1.57	1.39	
	T _{ou} [N·m]						3810	4500	5000	5000	5000	5000	5000	5000	
	T _{ou} [kgf·m]						388	459	510	510	510	510	510	510	
	P _{ro} [N]						41700	41700	41700	41700	41700	41700	41600	41700	
	P _{ro} [kgf]						4250	4250	4250	4250	4250	4250	4240	4250	
6185DB	P _i [kW]	9.60	8.09	6.98	6.07	5.14	4.41	3.73	3.19	2.70					
	T _{ou} [N·m]	4900	4810	4900	4920	4920	5000	5000	5000	5000					
	T _{ou} [kgf·m]	500	490	500	502	502	510	510	510	510					
	P _{ro} [N]	37300	40000	41700	41700	41700	41700	41700	41700	41700					
	P _{ro} [kgf]	3800	4070	4250	4250	4250	4250	4250	4250	4250					
6190DA	P _i [kW]			6.25	6.25	6.25	5.62	4.76	4.07	3.45	2.75	2.32	2.00	1.78	
	T _{ou} [N·m]			4390	5060	5980	6380	6380	6380	6380	6380	6380	6380	6380	
	T _{ou} [kgf·m]			447	516	610	650	650	650	650	650	650	650	650	
	P _{ro} [N]			59000	59000	59000	59000	59000	59000	59000	59000	59000	58600	59000	
	P _{ro} [kgf]			6010	6010	6010	6010	6010	6010	6010	6010	6010	5970	6010	
6190DB	P _i [kW]	11.9	10.7	9.08	7.87	6.66	5.62								
	T _{ou} [N·m]	6090	6380	6380	6380	6380	6380								
	T _{ou} [kgf·m]	621	650	650	650	650	650								
	P _{ro} [N]	52400	55900	58400	58900	58900	59000								
	P _{ro} [kgf]	5340	5700	5950	6000	6000	6010								
6195DA	P _i [kW]					6.25	6.25	5.94	5.08	4.30	3.43	2.90	2.50	2.22	
	T _{ou} [N·m]					5980	7090	7960	7960	7960	7960	7960	7960	7960	
	T _{ou} [kgf·m]					610	723	811	811	811	811	811	811	811	
	P _{ro} [N]					59000	59000	59000	59000	59000	59000	59000	58100	59000	
	P _{ro} [kgf]					6010	6010	6010	6010	6010	6010	6010	5930	6010	
6195DB	P _i [kW]	11.9	11.9	10.9	9.76	8.26	7.02	5.94							
	T _{ou} [N·m]	6090	7090	7630	7910	7910	7960	7960							
	T _{ou} [kgf·m]	621	723	778	806	806	811	811							
	P _{ro} [N]	52400	55700	57900	58300	58300	59000	59000							
	P _{ro} [kgf]	5340	5680	5900	5940	5940	6010	6010							
6205DA	P _i [kW]							5.86	4.84	4.34	3.35	3.00	2.44	2.52	
	T _{ou} [N·m]							7860	7590	8030	7780	8230	7790	9060	
	T _{ou} [kgf·m]							801	773	819	793	839	794	923	
	P _{ro} [N]							84100	84100	84100	84100	84100	84100	84100	
	P _{ro} [kgf]							8570	8570	8570	8570	8570	8570	8570	
6205DB	P _i [kW]		11.9		11.4	9.68	8.17	6.92	5.89	4.99	4.00	3.39	2.92	2.59	
	T _{ou} [N·m]		7090		9270	9270	9270	9270	9230	9230	9300	9300	9300	9300	
	T _{ou} [kgf·m]		723		945	945	945	945	941	941	948	948	948	948	
	P _{ro} [N]		84100		84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	
	P _{ro} [kgf]		8570		8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	
6215DA	P _i [kW]				11.9	11.9	11.0	9.32	8.07	6.83	5.45	4.61	3.97	3.52	
	T _{ou} [N·m]				9670	11400	12500	12500	12700	12700	12700	12700	12700	12700	
	T _{ou} [kgf·m]				985	1160	1270	1270	1290	1290	1290	1290	1290	1290	
	P _{ro} [N]				104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	
	P _{ro} [kgf]				10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	
6215DB	P _i [kW]		19.1		15.0	12.7									
	T _{ou} [N·m]		11400		12200	12200									
	T _{ou} [kgf·m]		1160		1240	1240									
	P _{ro} [N]		101000		104000	104000									
	P _{ro} [kgf]		10300		10600	10600									

Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1750 \text{ (r/min)}$

2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
0.981	0.822	0.750	0.750	0.447	0.400	0.400	0.400	0.400	0.400	0.400	0.400	0.400	CHH B-57 CHF B-62 CVW B-68	6180DA
4050	4050	4060	4060	4060	4050	4050	4060	4050	4060	4060	4060	4060		
413	413	414	414	414	413	413	414	413	414	414	414	414		
41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700		
4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250		
													CHH B-58 CHF B-63 CVW B-69	6180DB
1.21	1.01	0.816	0.750	0.750	0.750	0.401	0.400	0.400	0.400	0.400	0.400	0.400	CHH B-57 CHF B-62 CVW B-68	6185DA
5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000	5000		
510	510	510	510	510	510	510	510	510	510	510	510	510		
41700	41600	41700	41700	41700	41600	41600	41700	41600	41700	41700	41700	41700		
4250	4240	4250	4250	4250	4240	4240	4250	4240	4250	4250	4250	4250		
													CHH B-58 CHF B-63 CVW B-69	6185DB
1.54	1.30	1.04	0.878	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	0.750	CHH B-58 CHF B-63 CVW B-69	6190DA
6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380	6380		
650	650	650	650	650	650	650	650	650	650	650	650	650		
59000	58600	59000	58900	59000	58600	58600	58900	58600	58900	58900	58900	58900		
6010	5970	6010	6000	6010	5970	5970	6000	5970	6000	6000	6000	6000		
													CHH B-58 CHF B-63 CVW B-69	6190DB
1.93	1.62	1.30	1.10	0.877	0.785	0.750	0.750	0.750	0.750	0.750	0.750	0.750	CHH B-58 CHF B-63 CVW B-69	6195DA
7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960	7960		
811	811	811	811	811	811	811	811	811	811	811	811	811		
59000	58100	59000	58400	59000	58100	58100	58400	58100	58400	58400	58400	58400		
6010	5930	6010	5950	6010	5930	5930	5950	5930	5950	5950	5950	5950		
													CHH B-58 CHF B-63 CVW B-69	6195DB
2.23	2.20	2.20	1.50	1.50	1.50	0.750	0.750	0.750	0.750	0.750	0.750	0.750	CHH B-58 CHF B-63 CVW B-69	6205DA
9230	9060	9300	8360	9300	9300	9300	8760	9300	8760	9300	8760	8760		
941	923	948	853	948	948	948	893	948	893	948	893	893		
84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100	84100		
8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570	8570		
	2.20		1.50										CHH B-58 CHF B-63 CVW B-69	6205DB
	9300		8760											
	948		893											
	84100		84100											
	8570		8570											
3.06	2.57	2.20	1.55	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	1.50	CHH B-58 CHF B-63 CVW B-69	6215DA
12700	12700	12700	11300	12700	12700	12700	11300	12700	11300	12700	11300	11300		
1290	1290	1290	1150	1290	1290	1290	1150	1290	1150	1290	1150	1150		
104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000	104000		
10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600	10600		
													CHH B-58 CHF B-63 CVW B-69	6215DB

1750r/min

Frame size	n ₂ [r/min]	16.8	14.5	12.2	10.6	8.97	7.58	6.41	5.49	4.64	3.70	3.13	2.70	2.39
	Ratio [Z]	104	121	143	165	195	231	273	319	377	473	559	649	731
6225DA	P _i [kW]					11.9	11.9	11.0	9.60	8.12	6.89	5.83	4.98	4.46
	T _{ou} [N·m]					11400	13500	14800	15000	15000	16000	16000	15900	16000
	T _{ou} [kgf·m]					1160	1380	1510	1530	1530	1630	1630	1620	1630
	P _{ro} [N]					122000	130000	137000	142000	145000	145000	145000	145000	145000
	P _{ro} [kgf]					12500	13200	13900	14500	14800	14800	14800	14800	14800
6225DB	P _i [kW]		22.6		17.9	15.1	13.0							
	T _{ou} [N·m]		13500		14500	14500	14800							
	T _{ou} [kgf·m]		1370		1480	1480	1510							
	P _{ro} [N]		106000		115000	122000	130000							
	P _{ro} [kgf]		10800		11800	12400	13200							
6235DA	P _i [kW]		25.4		24.2	20.5	16.7	14.1	12.1	10.2	8.82	7.47	6.43	5.71
	T _{ou} [N·m]		15100		19600	19600	18900	18900	18900	18900	20500	20500	20500	20500
	T _{ou} [kgf·m]		1540		2000	2000	1930	1930	1930	1930	2090	2090	2090	2090
	P _{ro} [N]		133000		143000	150000	162000	170000	177000	179000	179000	179000	179000	179000
	P _{ro} [kgf]		13600		14500	15300	16500	17300	18100	18200	18200	18200	18200	18200
6235DB	P _i [kW]		31.5		24.2									
	T _{ou} [N·m]		18700		19600									
	T _{ou} [kgf·m]		1910		2000									
	P _{ro} [N]		133000		143000									
	P _{ro} [kgf]		13500		14500									
6245DA	P _i [kW]				25.4	23.9	22.7	19.2	16.5	13.9	11.1	9.40	8.09	7.19
	T _{ou} [N·m]				20600	22900	25800	25800	25800	25800	25800	25800	25800	25800
	T _{ou} [kgf·m]				2100	2330	2630	2630	2630	2630	2630	2630	2630	2630
	P _{ro} [N]				160000	167000	179000	188000	196000	207000	208000	208000	208000	208000
	P _{ro} [kgf]				16300	17100	18200	19200	20000	21100	21200	21200	21200	21200
6245DB	P _i [kW]		34.6		32.4	27.4	22.7							
	T _{ou} [N·m]		20500		26200	26200	25800							
	T _{ou} [kgf·m]		2090		2680	2680	2630							
	P _{ro} [N]		148000		158000	167000	179000							
	P _{ro} [kgf]		15000		16100	17000	18200							
6255DA	P _i [kW]		31.8		31.8	31.8	27.3	23.1	20.7	17.5	14.9	12.6	10.8	9.61
	T _{ou} [N·m]		18900		25800	30500	31000	31000	32500	32500	34500	34500	34500	34500
	T _{ou} [kgf·m]		1930		2630	3110	3160	3160	3310	3310	3520	3520	3520	3520
	P _{ro} [N]		182000		195000	204000	218000	229000	241000	254000	258000	258000	258000	258000
	P _{ro} [kgf]		18500		19900	20800	22200	23400	24600	25900	26300	26300	26300	26300
6255DB	P _i [kW]		46.3		38.4	32.5								
	T _{ou} [N·m]		27500		31200	31200								
	T _{ou} [kgf·m]		2800		3180	3180								
	P _{ro} [N]		180000		194000	204000								
	P _{ro} [kgf]		18400		19800	20800								
6265DA	P _i [kW]		50.8		50.8	45.7	40.5	34.3	29.4	24.8	19.8	16.8	14.4	12.8
	T _{ou} [N·m]		30200		41100	43700	46000	46000	46000	46000	46000	46000	46000	46000
	T _{ou} [kgf·m]		3080		4190	4460	4690	4690	4690	4690	4690	4690	4690	4690
	P _{ro} [N]		221000		236000	248000	265000	276000	276000	276000	276000	276000	276000	276000
	P _{ro} [kgf]		22500		24100	25300	27000	28100	28100	28100	28100	28100	28100	28100
6275DA	P _i [kW]								43.5	36.8	29.4	24.8	21.4	19.0
	T _{ou} [N·m]								68200	68200	68200	68200	68200	68200
	T _{ou} [kgf·m]								6950	6950	6950	6950	6950	6950
	P _{ro} [N]								248000	248000	248000	248000	248000	248000
	P _{ro} [kgf]								25300	25300	25300	25300	25300	25300

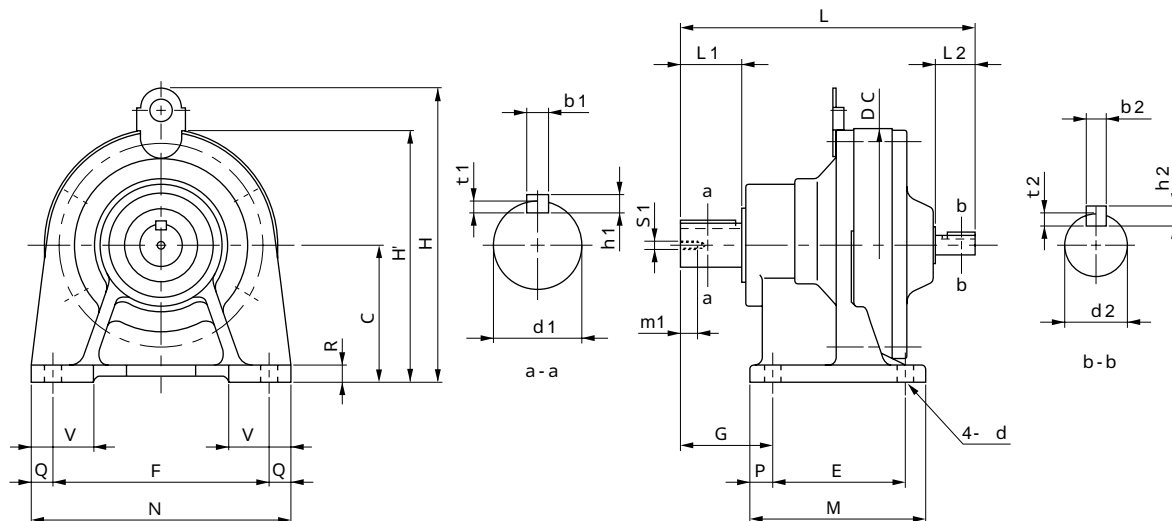
Notes : 1. Allowable Radial Load Pro is at the midpoint of the output shaft. When the radial load is beyond the midpoint of output shaft or when checking the thrust load, refer to page E-9 ~ 14.
2. Allowable Radial Load for input shaft is shown page E-15 ~ 16.
3. Printed in bold face is needed input power for starting. Please use within allowable output torque after starting.

$n_1 = 1750 \text{ (r/min)}$

2.08	1.74	1.40	1.18	0.946	0.847	0.690	0.575	0.503	0.394	0.341	0.283	0.231	Page of Dimension Table	Frame size
841	1003	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569		
3.64	3.22	2.61	2.20	1.76	1.57	1.50	1.50	1.50	1.50	1.50	1.50	1.50	CHH B-58 CHF B-63 CWW B-69	6225DA
15000	15900	16000	15100	16000	15900	15900	15100	15900	15100	15900	15100	15100		
1530	1620	1630	1540	1630	1620	1620	1540	1620	1540	1620	1540	1540		
145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000	145000		
14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	14800	CHH B-58 CHF B-63 CWW B-69	6225DB
4.58	4.16	3.35	2.36	2.26	2.20	2.20	2.20	2.20	2.20	2.20	2.20	2.20	CHH B-58 CHF B-63 CWW B-69	6235DA
18900	20500	20500	17200	20500	20500	20500	17200	20500	17200	20500	17200	17200		
1930	2090	2090	1750	2090	2090	2090	1750	2090	1750	2090	1750	1750		
179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000	179000		
18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200	18200		
													CHH B-58 CHF B-63 CWW B-69	6235DB
6.25	5.24	4.21	3.12	2.84	2.54	2.20	2.20	2.20	2.20	2.20	2.20	2.20	CHH B-58 CHF B-63 CWW B-69	6245DA
25800	25800	25800	22600	25800	25800	25800	22600	25800	22600	25800	22600	22600		
2630	2630	2630	2310	2630	2630	2630	2310	2630	2310	2630	2310	2310		
208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000	208000		
21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200	21200		
													CHH B-58 CHF B-63 CWW B-69	6245DB
7.86	7.00	5.63	4.27	3.80	3.70	3.70	3.70	3.70	3.70	3.70	3.70	3.70	CHH B-58 CHF B-63 CWW B-69	6255DA
32500	34500	34500	31000	34500	34500	34500	31000	34500	31000	34500	31000	31000		
3310	3520	3520	3160	3520	3520	3520	3160	3520	3160	3520	3160	3160		
258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000	258000		
26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300	26300		
													CHH B-58 CHF B-63 CWW B-69	6255DB
11.1	9.34	7.51	6.06	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	5.50	CHH B-58 CHF B-63 CWW B-69	6265DA
46000	46000	46000	44000	46000	46000	46000	44000	46000	44000	46000	44000	44000		
4690	4690	4690	4490	4690	4690	4690	4490	4690	4490	4690	4490	4490		
276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000	276000		
28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100	28100		
16.5	13.8	11.1	9.39	7.51	7.50	7.50	7.50	7.50	7.50	7.50	7.50	7.50	CHH B-58 CHF B-63 CWW B-69	6275DA
68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200	68200		
6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950	6950		
248000	248000	248000	245000	248000	248000	248000	245000	248000	245000	248000	245000	245000		
25300	25300	25300	25000	25300	25300	25300	25000	25300	25000	25300	25000	25000		

1750r/min

DIMENSION TABLE CNH - 606 ~ 612



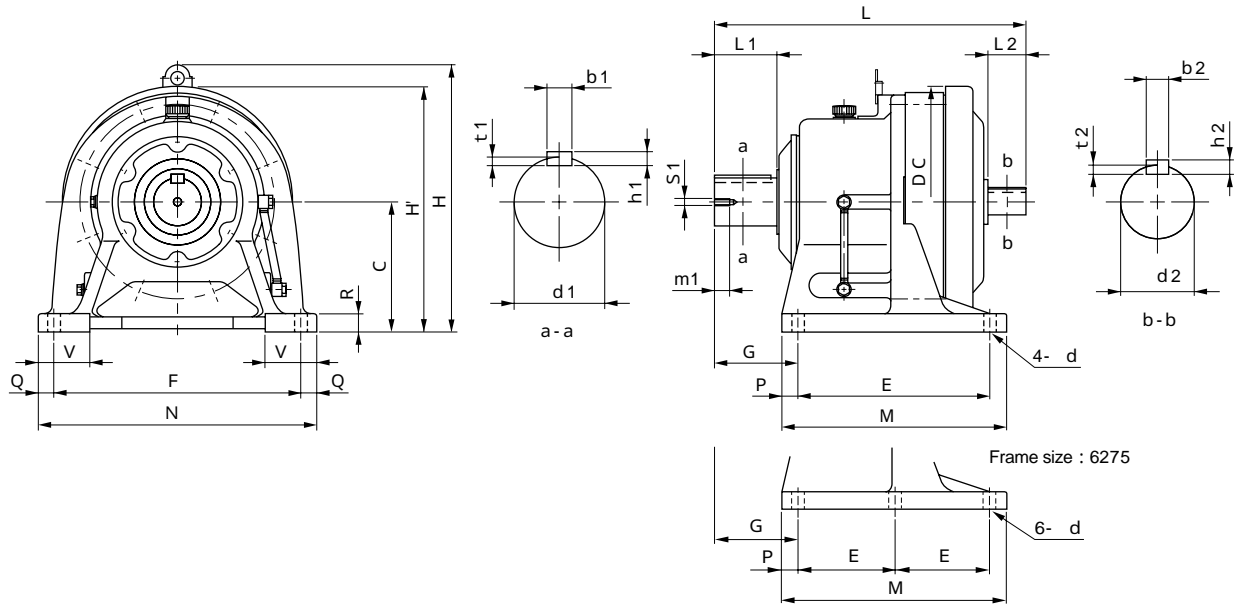
CNH	L	C	DC	E	F	G	H	H'	M	N	P	Q	R	V	d	W(kg)
606	145	80	110	60	120	41	-	135	84	144	12	12	10	35	9	2.5
607	151	80	110	60	120	47	-	135	84	144	12	12	10	35	9	2.5
608	179	90	134	75	120	52	-	157	99	144	12	12	13	37	9	8
609	202	100	150	90	150	60	-	175	135	180	15	15	12	40	11	11
Note:5 610	208	100	150	90	150	60	207	-	135	180	15	15	12	40	11	13
611	218	120	162	90	150	70	236	-	135	180	15	15	12	45	11	15
Note:5 612	259	120	204	115	190	82	257	-	155	230	20	20	15	55	14	24

Model	Note: 1	Output Shaft									Input Shaft				
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2		
CNH - 606 - Ratio		14	25	5	5	3	M5	16	12	25	4	4	2.5		
CNH - 607 - Ratio		18	30	6	6	3.5	M6	16	12	25	4	4	2.5		
CNH - 608 - Ratio		22	35	6	6	3.5	M6	16	12	25	4	4	2.5		
CNH - 609 - Ratio		28	35	8	7	4	M8	20	15	25	5	5	3		
Note:5 CNH - 610 - Ratio		28	35	8	7	4	M8	20	15	25	5	5	3		
CNH - 611 - Ratio		32	45	10	8	5	M8	20	15	25	5	5	3		
Note:5 CNH - 612 - Ratio		38	55	10	8	5	M8	20	18	35	6	6	3.5		

Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHH - 613 ~ 6275

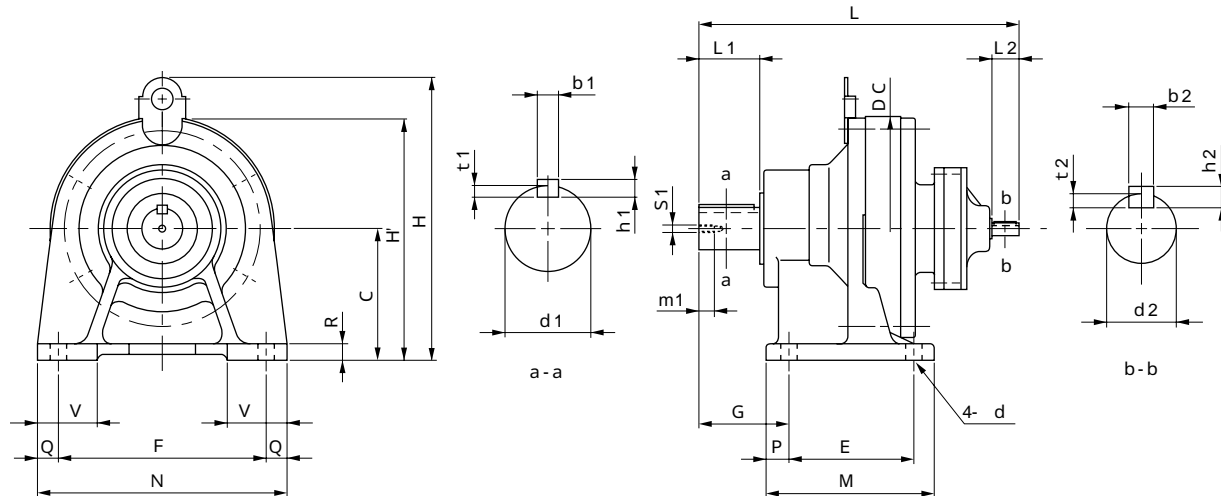


CHH	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
613	321	150	230	145	290	100	300	195	330	25	20	22	65	18	43
Note:5 614	341	150	230	145	290	120	300	195	330	25	20	22	65	18	44
616	413	160	318	150	370	139	367	238	410	44	20	25	75	18	84
Note:5 617	477	200	362	275	380	125	429	335	430	30	25	30	80	22	125
618	527	220	390	320	420	145	467	380	470	30	25	30	85	22	163
619	620	250	451	380	480	170	539	440	530	30	25	35	90	26	240
6205	678	250	471	360	440	215	530	440	530	40	45	35	100	26	255
6215	708	265	507	395	480	210	575	475	580	40	50	40	110	26	336
6225	752	280	549	420	540	230	610	520	620	50	40	40	115	33	409
6235	839	300	591	460	580	260	667	560	670	50	45	45	120	33	503
6245	877	335	637	480	630	263	729	580	720	50	45	45	128	39	614
6255	1040	375	703	520	670	320	815	630	780	55	55	50	140	39	957
6265	1150	400	772	590	770	390	874	700	880	55	55	55	160	45	1190
6275	1462	540	986	420	1050	485	1161	1040	1160	100	55	60	200	45	2460

Model	Note: 1	Output Shaft									Input Shaft				
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2		
CHH - 613 - Ratio		50	70	14	9	5.5	M10	18	22	40	6	6	3.5		
Note:5 CHH - 614 - Ratio		50	90	14	9	5.5	M10	18	22	40	6	6	3.5		
Note:5 CHH - 616 - Ratio		60	90	18	11	7	M10	18	30	45	8	7	4		
CHH - 617 - Ratio		70	90	20	12	7.5	M12	24	35	55	10	8	5		
CHH - 618 - Ratio		80	110	22	14	9	M12	24	40	65	12	8	5		
CHH - 619 - Ratio		95	135	25	14	9	M20	34	45	70	14	9	5.5		
CHH - 6205 - Ratio		100	165	28	16	10	M20	34	45	82	14	9	5.5		
CHH - 6215 - Ratio		110	165	28	16	10	M20	34	50	82	14	9	5.5		
CHH - 6225 - Ratio		120	165	32	18	11	M20	34	55	82	16	10	6		
CHH - 6235 - Ratio		130	200	32	18	11	M24	41	60	105	18	11	7		
CHH - 6245 - Ratio		140	200	36	20	12	M24	41	65	105	18	11	7		
CHH - 6255 - Ratio		160	240	40	22	13	M30	49	80	130	22	14	9		
CHH - 6265 - Ratio		170	300	40	22	13	M30	49	80	130	22	14	9		
CHH - 6275 - Ratio		180	330	45	25	15	M30	52	90	150	25	14	9		

Notes : 4. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.
 5. Center height option : Refer to the page B-70.
 6. The dimensions in these drawings are subject to change without notice.

DIMENSION TABLE CNH - 606 DA ~ 612 DB



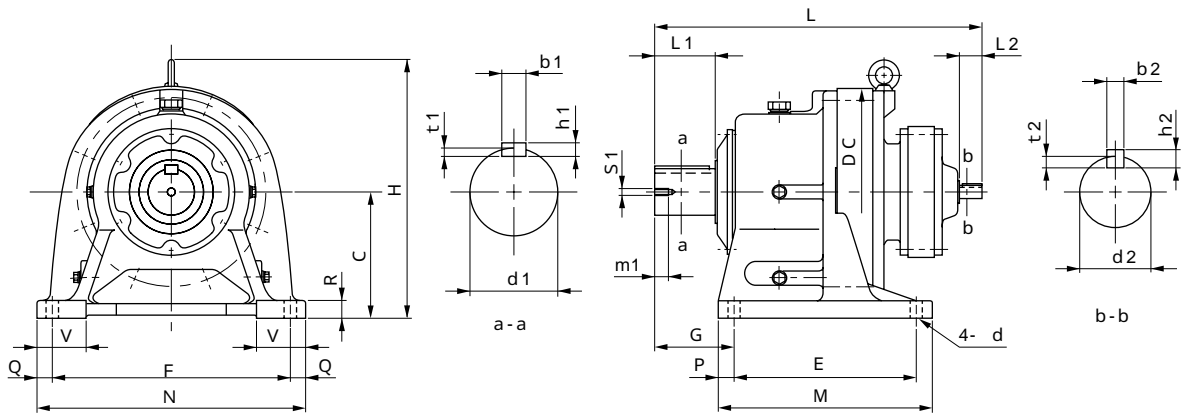
CNH	L	C	DC	E	F	G	H	H'	M	N	P	Q	R	V	d	W(kg)
606 DA	178	80	110	60	120	41	-	135	84	144	12	12	10	35	9	4.0
607 DA	184	80	110	60	120	47	-	135	84	144	12	12	10	35	9	4.5
609 DA	243	100	150	90	150	60	-	175	135	180	15	15	12	40	11	12
610 DA	257	100	150	90	150	60	207	-	135	180	15	15	12	40	11	15
612 DA	293	120	204	115	190	82	257	-	155	230	20	20	15	55	14	26
612 DB	312	120	204	115	190	82	257	-	155	230	20	20	15	55	14	29

Model	Note: 1	Output Shaft					Input Shaft					Notes: 2, 3, 4	
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CNH - 606 DA - Ratio		14	25	5	5	3	M5	16	12	25	4	4	2.5
CNH - 607 DA - Ratio		18	30	6	6	3.5	M6	16	12	25	4	4	2.5
CNH - 609 DA - Ratio		28	35	8	7	4	M8	20	12	25	4	4	2.5
CNH - 610 DA - Ratio		28	35	8	7	4	M8	20	12	25	4	4	2.5
CNH - 612 DA - Ratio		38	55	10	8	5	M8	20	12	25	4	4	2.5
CNH - 612 DB - Ratio		38	55	10	8	5	M8	20	15	25	5	5	3

- Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHH - 613 DA ~ 618 DA



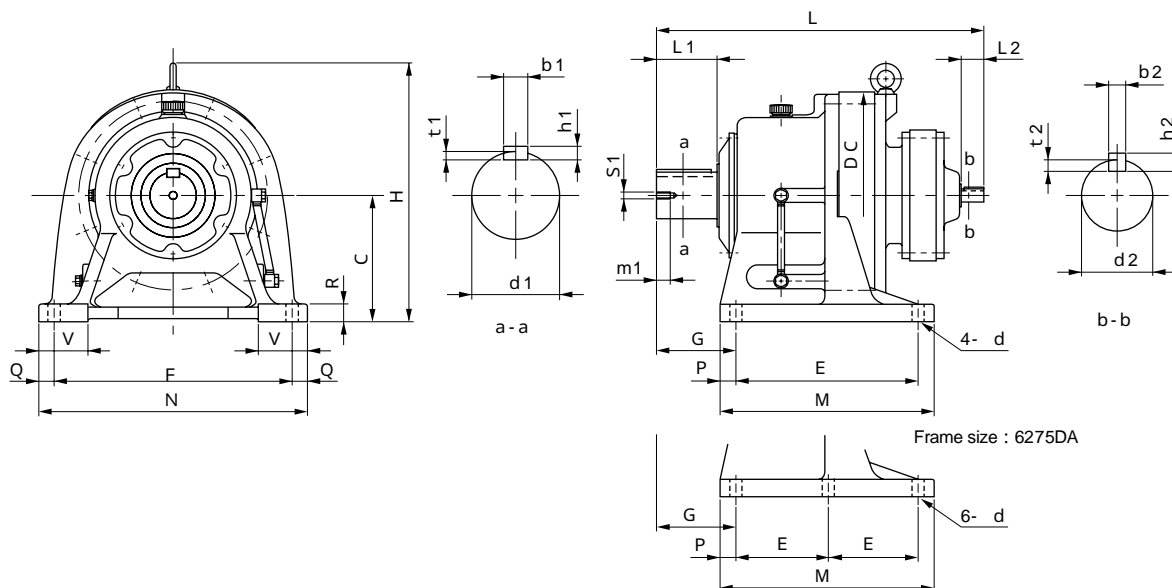
CHH	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
613 DA	347	150	230	145	290	100	300	195	330	25	20	22	65	18	41
613 DB	363	150	230	145	290	100	300	195	330	25	20	22	65	18	45
613 DC	369	150	230	145	290	100	300	195	330	25	20	22	65	18	46
614 DA	367	150	230	145	290	120	300	195	330	25	20	22	65	18	41
614 DB	383	150	230	145	290	120	300	195	330	25	20	22	65	18	45
614 DC	389	150	230	145	290	120	300	195	330	25	20	22	65	18	46
616 DA	433	160	300	150	370	139	349	238	410	44	20	25	75	18	85
616 DB	439	160	300	150	370	139	349	238	410	44	20	25	75	18	87
617 DA	478	200	340	275	380	125	416	335	430	30	25	30	80	22	121
617 DB	484	200	340	275	380	125	416	335	430	30	25	30	80	22	123
618 DA	526	220	370	320	420	145	451	380	470	30	25	30	85	22	165

Model	Note: 1	Output Shaft								Input Shaft					
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2		
CHH - 613 DA - Ratio		50	70	14	9	5.5	M10	18	12	25	4	4	2.5		
CHH - 613 DB - Ratio		50	70	14	9	5.5	M10	18	15	25	5	5	3		
CHH - 613 DC - Ratio		50	70	14	9	5.5	M10	18	15	25	5	5	3		
CHH - 614 DA - Ratio		50	90	14	9	5.5	M10	18	12	25	4	4	2.5		
CHH - 614 DB - Ratio		50	90	14	9	5.5	M10	18	15	25	5	5	3		
CHH - 614 DC - Ratio		50	90	14	9	5.5	M10	18	15	25	5	5	3		
CHH - 616 DA - Ratio		60	90	18	11	7	M10	18	15	25	5	5	3		
CHH - 616 DB - Ratio		60	90	18	11	7	M10	18	15	25	5	5	3		
CHH - 617 DA - Ratio		70	90	20	12	7.5	M12	24	15	25	5	5	3		
CHH - 617 DB - Ratio		70	90	20	12	7.5	M12	24	15	25	5	5	3		
CHH - 618 DA - Ratio		80	110	22	14	9	M12	24	15	25	5	5	3		

Notes : 4. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.

5. The dimensions in these drawings are subject to change without notice.

DIMENSION TABLE CHH - 616 DC ~ 6275DA



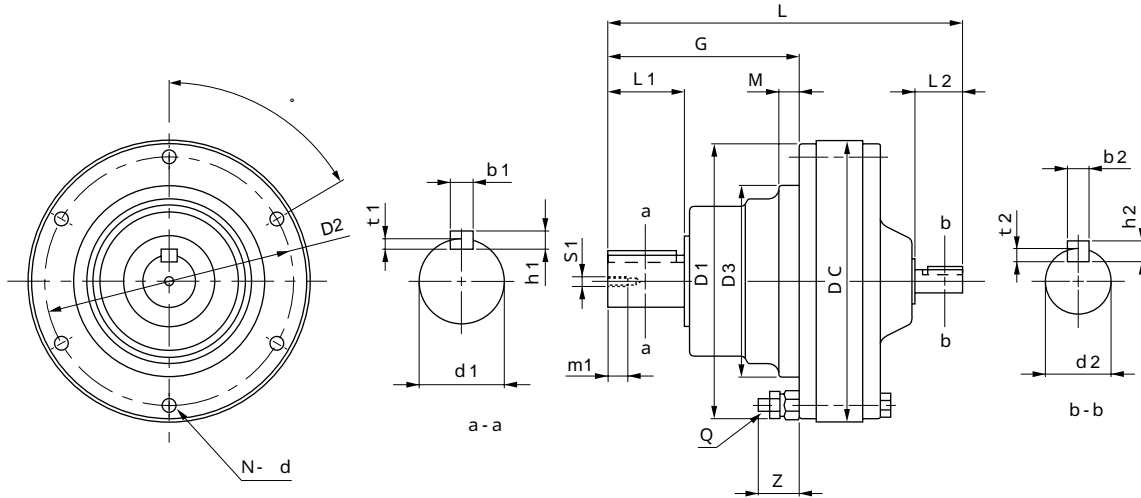
CHH	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W (kg)
616 DC	462	160	300	150	370	139	349	238	410	44	20	25	75	18	94
617 DC	509	200	340	275	380	125	416	335	430	30	25	30	80	22	128
618 DB	577	220	370	320	420	145	451	380	470	30	25	30	85	22	183
619 DA	629	250	430	380	480	170	531	440	530	30	25	35	90	26	241
619 DB	653	250	430	380	480	170	531	440	530	30	25	35	90	26	250
6205DA	670	250	448	360	440	215	530	440	530	40	45	35	100	26	260
6205DB	705	250	448	360	440	215	530	440	530	40	45	35	100	26	273
6215DA	731	265	485	395	480	210	575	475	580	40	50	40	110	26	354
6215DB	780	265	485	395	480	210	575	475	580	40	50	40	110	26	376
6225DA	773	280	526	420	540	230	610	520	620	50	40	40	115	33	429
6225DB	860	280	526	420	540	230	610	520	620	50	40	40	115	33	476
6235DA	883	300	562	460	580	260	667	560	670	50	45	45	120	33	548
6235DB	938	300	562	460	580	260	667	560	670	50	45	45	120	33	582
6245DA	921	335	614	480	630	263	729	580	720	50	45	45	128	39	656
6245DB	975	335	614	480	630	263	729	580	720	50	45	45	128	39	686
6255DA	1081	375	670	520	670	320	815	630	780	55	55	50	140	39	1010
6255DB	1133	375	670	520	670	320	815	630	780	55	55	50	140	39	1085
6265DA	1243	400	736	590	770	390	874	700	880	55	55	55	160	45	1340
6275DA	1504	540	950	420	1050	485	1161	1040	1160	100	55	60	200	45	2480

Model	Note: 1	Output Shaft						Notes: 2, 3, 5		Input Shaft					Notes: 2, 3, 5	
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2			
CHH - 616 DC - Ratio		60	90	18	11	7	M10	18	18	35	6	6	3.5			
CHH - 617 DC - Ratio		70	90	20	12	7.5	M12	24	18	35	6	6	3.5			
CHH - 618 DB - Ratio		80	110	22	14	9	M12	24	22	40	6	6	3.5			
CHH - 619 DA - Ratio		95	135	25	14	9	M20	34	18	35	6	6	3.5			
CHH - 619 DB - Ratio		95	135	25	14	9	M20	34	22	40	6	6	3.5			
CHH - 6205DA - Ratio		100	165	28	16	10	M20	34	18	35	6	6	3.5			
CHH - 6205DB - Ratio		100	165	28	16	10	M20	34	22	40	6	6	3.5			
CHH - 6215DA - Ratio		110	165	28	16	10	M20	34	22	40	6	6	3.5			
CHH - 6215DB - Ratio		110	165	28	16	10	M20	34	30	45	8	7	4			
CHH - 6225DA - Ratio		120	165	32	18	11	M20	34	22	40	6	6	3.5			
CHH - 6225DB - Ratio		120	165	32	18	11	M20	34	35	55	10	8	5			
CHH - 6235DA - Ratio		130	200	32	18	11	M24	41	30	45	8	7	4			
CHH - 6235DB - Ratio		130	200	32	18	11	M24	41	40	65	12	8	5			
CHH - 6245DA - Ratio		140	200	36	20	12	M24	41	30	45	8	7	4			
CHH - 6245DB - Ratio		140	200	36	20	12	M24	41	40	65	12	8	5			
CHH - 6255DA - Ratio		160	240	40	22	13	M30	49	35	55	10	8	5			
CHH - 6255DB - Ratio		160	240	40	22	13	M30	49	45	70	14	9	5.5			
CHH - 6265DA - Ratio		170	300	40	22	13	M30	49	45	70	14	9	5.5			
CHH - 6275DA - Ratio		180	330	45	25	15	M30	52	45	70	14	9	5.5			

- Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CNF - 606 ~ 612



CNF	L	G	D1	D2	D3 Note: 4	DC	Q	Z	M	N	d	*	W(kg)
606	145	69	110	98	80	110	M6	24	4	6	6.6	60	3
607	151	74	110	98	80	110	M6	24	4	6	6.6	60	3
608	179	91	134	118	95	134	M8	27	5	8	9	22.5	8
609	202	114	150	134	105	150	M8	26	6	8	9	22.5	8.5
610	208	114	150	134	105	150	M8	27	6	8	9	22.5	9.5
611	218	118	162	146	115	162	M8	28	6	8	9	22.5	11
612	259	139	200	180	140	204	M10	30	14	6	11	60	20

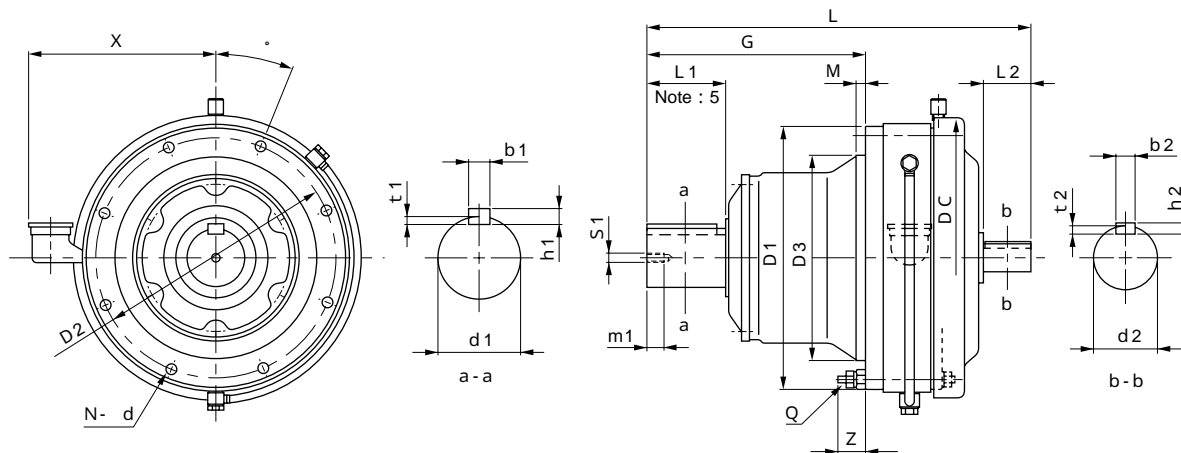
Model	Note: 1	Output Shaft								Input Shaft				
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2	
CNF - 606 - Ratio		14	25	5	5	3	M5	16	12	25	4	4	2.5	
CNF - 607 - Ratio		18	30	6	6	3.5	M6	16	12	25	4	4	2.5	
CNF - 608 - Ratio		22	35	6	6	3.5	M6	16	12	25	4	4	2.5	
CNF - 609 - Ratio		28	35	8	7	4	M8	20	15	25	5	5	3	
CNF - 610 - Ratio		28	35	8	7	4	M8	20	15	25	5	5	3	
CNF - 611 - Ratio		32	45	10	8	5	M8	20	15	25	5	5	3	
CNF - 612 - Ratio		38	55	10	8	5	M8	20	18	35	6	6	3.5	

Notes : 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 "g6".

5. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.

6. The dimensions in these drawings are subject to change without notice.

DIMENSION TABLE CHF - 613 ~ 6265



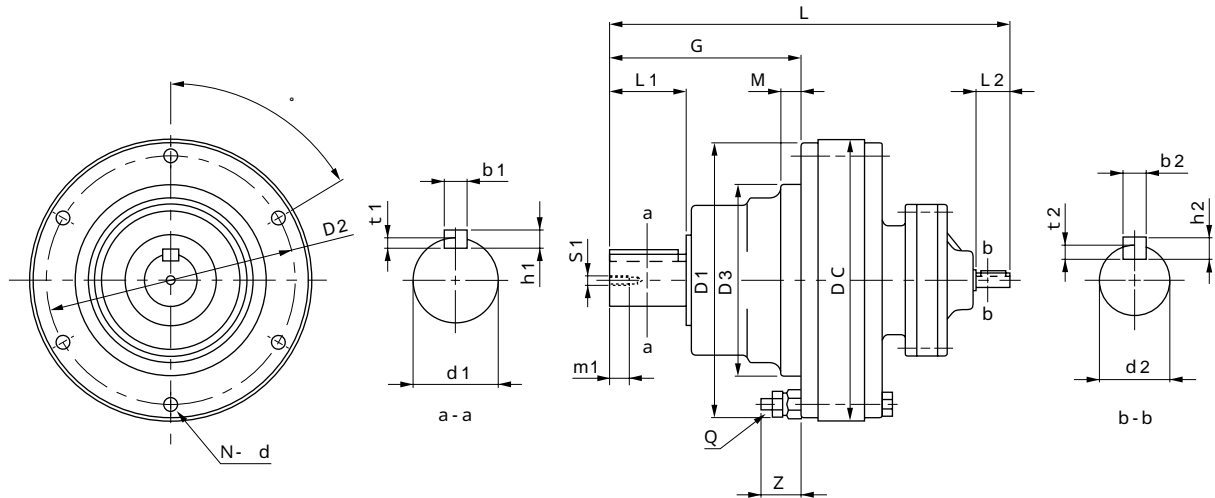
CHF	L	G	D1	D2	D3 Note: 4	DC	Q	Z	M	N	d	°	X	W(kg)
613	321	178	226	205	165	230	M10	31	16	6	11	60	208	36
614	341	198	226	205	165	230	M10	31	16	6	11	60	208	37
616	413	222	296	270	200	318	M12	35	10	6	14	30	228	66
617	477	262	330	300	250	362	M12	41	12	8	14	22.5	243	96
618	527	299	360	330	280	390	M12	38	12	8	14	22.5	258	131
619	620	365	420	380	320	451	M12	43	10	12	14	15	285	195
6205	678	410	443	405	360	471	M16	57	20	12	18	15	-	213
6215	708	423	480	440	390	507	M18	57	20	12	20.5	15	-	292
6225	752	454	521	475	420	549	M20	65	20	12	22	15	-	347
6235	839	505	557	510	455	591	M20	68	20	12	22	15	-	428
6245	877	529	615	560	500	637	M24	65	25	12	27	15	-	538
6255	1040	616	666	610	540	703	M24	88	30	12	27	15	-	794
6265	1150	712	730	660	570	772	M30	82	40	12	34	15	-	1020

Model	Note: 1	Output Shaft						Input Shaft					
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CHF - 613 - Ratio		50	70	14	9	5.5	M10	18	22	40	6	6	3.5
CHF - 614 - Ratio		50	90	14	9	5.5	M10	18	22	40	6	6	3.5
CHF - 616 - Ratio		60	90	18	11	7	M10	18	30	45	8	7	4
CHF - 617 - Ratio		70	90	20	12	7.5	M12	24	35	55	10	8	5
CHF - 618 - Ratio		80	110	22	14	9	M12	24	40	65	12	8	5
CHF - 619 - Ratio		95	135	25	14	9	M20	34	45	70	14	9	5.5
CHF - 6205 - Ratio		100	165	28	16	10	M20	34	45	82	14	9	5.5
CHF - 6215 - Ratio		110	165	28	16	10	M20	34	50	82	14	9	5.5
CHF - 6225 - Ratio		120	165	32	18	11	M20	34	55	82	16	10	6
CHF - 6235 - Ratio		130	200	32	18	11	M24	41	60	105	18	11	7
CHF - 6245 - Ratio		140	200	36	20	12	M24	41	65	105	18	11	7
CHF - 6255 - Ratio		160	240	40	22	13	M30	49	80	130	22	14	9
CHF - 6265 - Ratio		170	300	40	22	13	M30	49	80	130	22	14	9

Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CNF - 606 DA ~ 612 DB



CNF	L	G	D1	D2	D3 Note: 4	DC	Q	Z	M	N	d	°	W(kg)
606 DA	178	69	110	98	80	110	M6	26	4	6	6.6	60	4.5
607 DA	184	74	110	98	80	110	M6	26	4	6	6.6	60	4.5
609 DA	243	114	150	134	105	150	M8	26	6	8	9	22.5	10
610 DA	257	114	150	134	105	150	M8	27	6	8	9	22.5	12
612 DA	293	139	200	180	140	204	M10	30	14	6	11	60	22
612 DB	312	139	200	180	140	204	M10	30	14	6	11	60	25

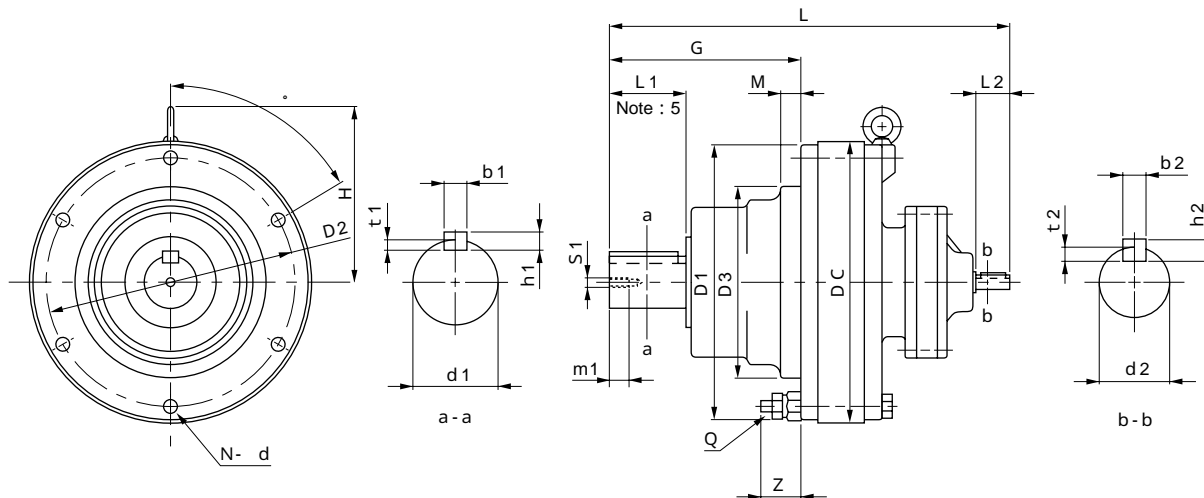
Model Note: 1	Output Shaft					Input Shaft						
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CNF - 606 DA - Ratio	14	25	5	5	3	M5	16	12	25	4	4	2.5
CNF - 607 DA - Ratio	18	30	6	6	3.5	M6	16	12	25	4	4	2.5
CNF - 609 DA - Ratio	28	35	8	7	4	M8	20	12	25	4	4	2.5
CNF - 610 DA - Ratio	28	35	8	7	4	M8	20	12	25	4	4	2.5
CNF - 612 DA - Ratio	38	55	10	8	5	M8	20	12	25	4	4	2.5
CNF - 612 DB - Ratio	38	55	10	8	5	M8	20	15	25	5	5	3

Notes : 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 "g6".

5. Output shaft length (L1) is shorter for vertical down (CVF) type. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.

6. The dimensions in these drawings are subject to change without notice.

DIMENSION TABLE CHF - 613 DA ~ 618 DA

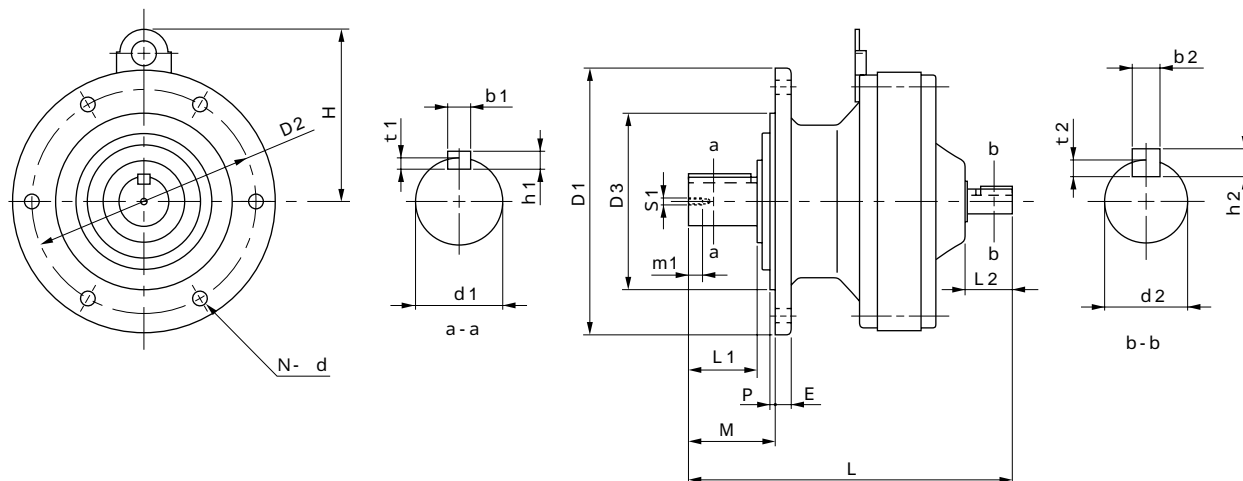


CHF	L	G	D1	D2	D3 Note: 4	DC	H	Q	Z	M	N	d	°	W(kg)
613 DA	347	178	226	205	165	230	150	M10	31	16	6	11	60	36
613 DB	363	178	226	205	165	230	150	M10	31	16	6	11	60	39
613 DC	369	178	226	205	165	230	150	M10	31	16	6	11	60	40
614 DA	367	198	226	205	165	230	150	M10	31	16	6	11	60	36
614 DB	383	198	226	205	165	230	150	M10	31	16	6	11	60	39
614 DC	389	198	226	205	165	230	150	M10	31	16	6	11	60	40
616 DA	433	222	296	270	200	300	189	M12	35	10	6	14	30	68
616 DB	439	222	296	270	200	300	189	M12	35	10	6	14	30	70
617 DA	478	262	330	300	250	340	216	M12	41	12	8	14	22.5	93
617 DB	484	262	330	300	250	340	216	M12	41	12	8	14	22.5	95
618 DA	526	299	360	330	280	370	231	M12	38	12	8	14	22.5	129

Model	Note: 1	Output Shaft								Input Shaft					
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2		
CHF - 613 DA - Ratio		50	70	14	9	5.5	M10	18	12	25	4	4	2.5		
CHF - 613 DB - Ratio		50	70	14	9	5.5	M10	18	15	25	5	5	3		
CHF - 613 DC - Ratio		50	70	14	9	5.5	M10	18	15	25	5	5	3		
CHF - 614 DA - Ratio		50	90	14	9	5.5	M10	18	12	25	4	4	2.5		
CHF - 614 DB - Ratio		50	90	14	9	5.5	M10	18	15	25	5	5	3		
CHF - 614 DC - Ratio		50	90	14	9	5.5	M10	18	15	25	5	5	3		
CHF - 616 DA - Ratio		60	90	18	11	7	M10	18	15	25	5	5	3		
CHF - 616 DB - Ratio		60	90	18	11	7	M10	18	15	25	5	5	3		
CHF - 617 DA - Ratio		70	90	20	12	7.5	M12	24	15	25	5	5	3		
CHF - 617 DB - Ratio		70	90	20	12	7.5	M12	24	15	25	5	5	3		
CHF - 618 DA - Ratio		80	110	22	14	9	M12	24	15	25	5	5	3		

Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE CNV - 606 ~ 612



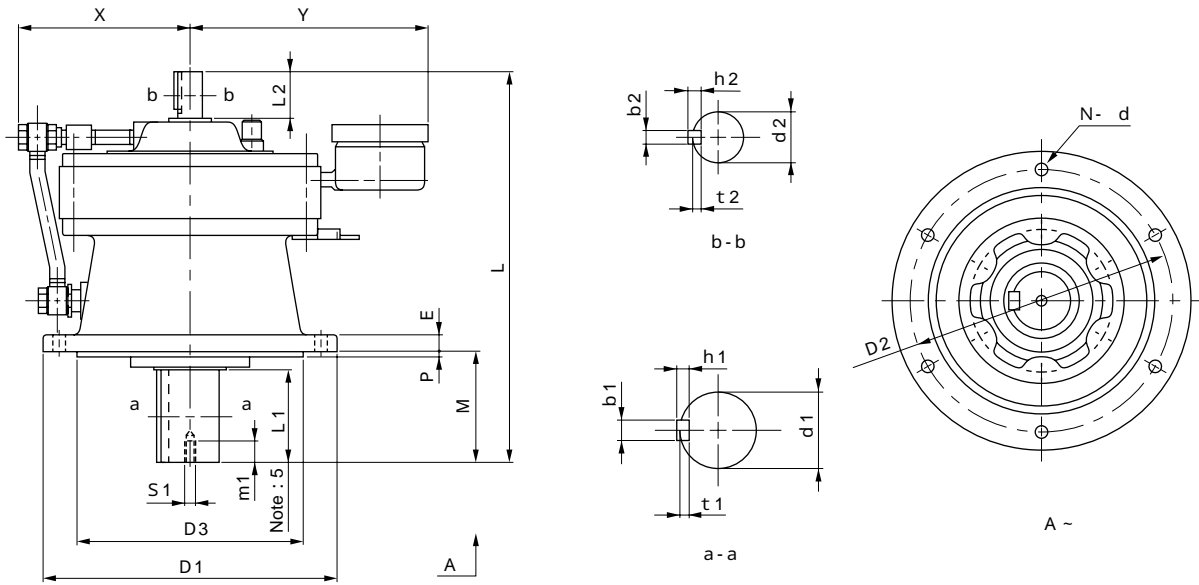
CNV	L	D1	D2	D3 <small>Note: 4</small>	H	M	E	P	N	d	W (kg)
606	145	120	102	80	-	34	8	3	6	9	3.5
607	151	160	134	110	-	42	9	3	4	11	4.5
608	179	160	134	110	-	48	9	3	4	11	8
609	202	160	134	110	107	48	9	3	4	11	9
610	208	160	134	110	107	48	9	3	4	11	11
611	218	210	180	140	116	58	11	4	6	11	13
612	259	210	180	140	137	69	13	4	6	11	23

Model <small>Note: 1</small>	Output Shaft <small>Notes: 2, 3, 5</small>						Input Shaft <small>Notes: 2, 3, 5</small>					
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CNV - 606 - Ratio	14	25	5	5	3	M5	16	12	25	4	4	2.5
CNV - 607 - Ratio	18	30	6	6	3.5	M6	16	12	25	4	4	2.5
CNV - 608 - Ratio	22	35	6	6	3.5	M6	16	12	25	4	4	2.5
CNV - 609 - Ratio	28	35	8	7	4	M8	20	15	25	5	5	3
CNV - 610 - Ratio	28	35	8	7	4	M8	20	15	25	5	5	3
CNV - 611 - Ratio	32	45	10	8	5	M8	20	15	25	5	5	3
CNV - 612 - Ratio	38	55	10	8	5	M8	20	18	35	6	6	3.5

- Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CVV - 613 ~ 614



CVV	L	D1	D2	D3 Note: 4	M	E	P	N	d	X	Y	W(kg)
613	321	260	230	200	76	15	4	6	11	152	233	42
614	341	260	230	200	96	15	4	6	11	152	233	43

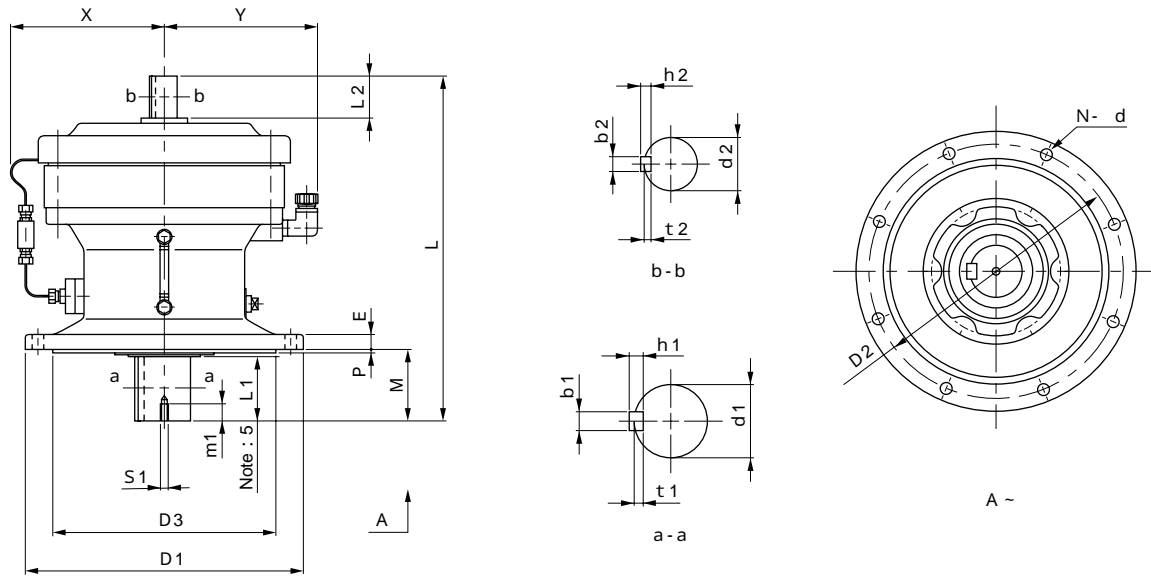
Model	Note: 1	Output Shaft								Input Shaft				
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2	
CW - 613 - Ratio		50	61	14	9	5.5	M10	18	22	40	6	6	3.5	
CW - 614 - Ratio		50	81	14	9	5.5	M10	18	22	40	6	6	3.5	

Notes : 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

5. Output shaft length (L1) is longer for horizontal (CHV) type. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.

6. The dimensions in these drawings are subject to change without notice.

DIMENSION TABLE CVV - 616 ~ 6275



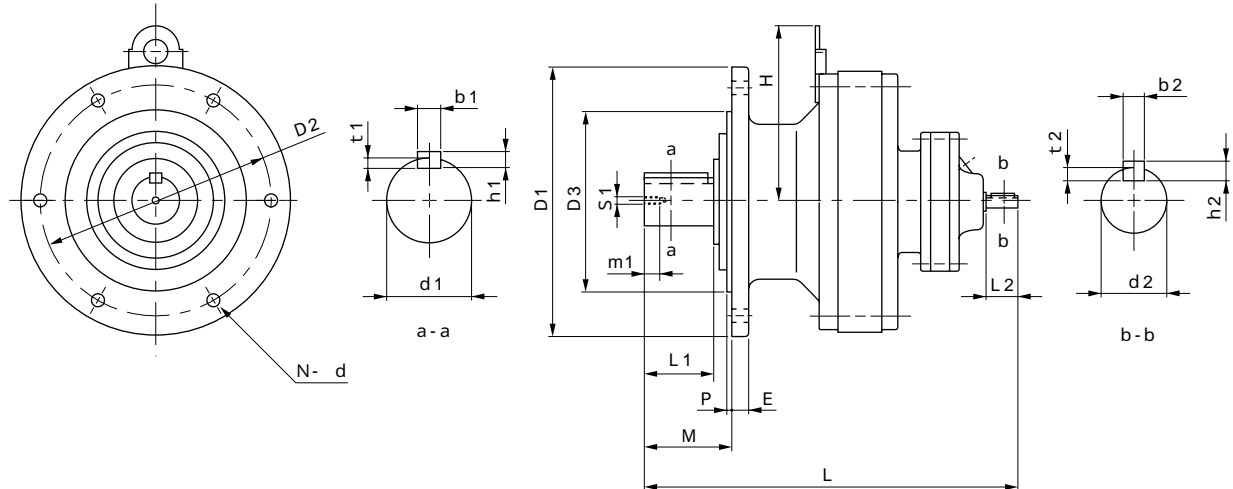
CVV	L	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	X	Y	W(kg)
616	413	340	310	270	89	20	4	6	11	217	200	79
617	477	400	360	316	94	22	5	8	14	222	225	125
618	527	430	390	345	110	22	5	8	18	237	240	150
619	620	490	450	400	145	30	6	12	18	265	270	225
6205	678	455	405	355	204	30	5	8	22	341	287	243
6215	708	490	440	390	203	35	7	8	24	348	306	314
6225	752	535	475	415	210	35	10	8	27	352	326	396
6235	839	570	510	450	250	40	10	8	27	359	344	474
6245	877	635	560	485	250	40	10	8	33	370	371	568
6255	1040	685	610	535	295	45	10	8	33	426	399	865
6265	1150	750	660	570	360	50	10	8	39	460	431	1125
6275	1462	1160	1020	900	355	60	10	8	39	610	613	2610

Model <small>Note: 1</small>	Output Shaft <small>Notes: 2, 3, 5</small>						Input Shaft <small>Notes: 2, 3, 5</small>					
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CVV - 616 - Ratio	60	80	18	11	7	M10	18	30	45	8	7	4
CVV - 617 - Ratio	70	84	20	12	7.5	M12	24	35	55	10	8	5
CVV - 618 - Ratio	80	100	22	14	9	M12	24	40	65	12	8	5
CVV - 619 - Ratio	95	125	25	14	9	M20	34	45	70	14	9	5.5
CVV - 6205 - Ratio	100	165	28	16	10	M20	34	45	82	14	9	5.5
CVV - 6215 - Ratio	110	165	28	16	10	M20	34	50	82	14	9	5.5
CVV - 6225 - Ratio	120	165	32	18	11	M20	34	55	82	16	10	6
CVV - 6235 - Ratio	130	200	32	18	11	M24	41	60	105	18	11	7
CVV - 6245 - Ratio	140	200	36	20	12	M24	41	65	105	18	11	7
CVV - 6255 - Ratio	160	240	40	22	13	M30	49	80	130	22	14	9
CVV - 6265 - Ratio	170	300	40	22	13	M30	49	80	130	22	14	9
CVV - 6275 - Ratio	180	320	45	25	15	M30	52	90	150	25	14	9

- Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CNV - 606 DA ~ 612 DB



CNV	L	D1	D2	D3 <small>Note: 4</small>	H	M	E	P	N	d	W(kg)
606 DA	178	120	102	80	-	34	8	3	6	9	5.0
607 DA	184	160	134	110	-	42	9	3	4	11	6.7
609 DA	243	160	134	110	107	48	9	3	4	11	11
610 DA	257	160	134	110	107	48	9	3	4	11	13
612 DA	293	210	180	140	137	69	13	4	6	11	25
612 DB	312	210	180	140	137	69	13	4	6	11	29

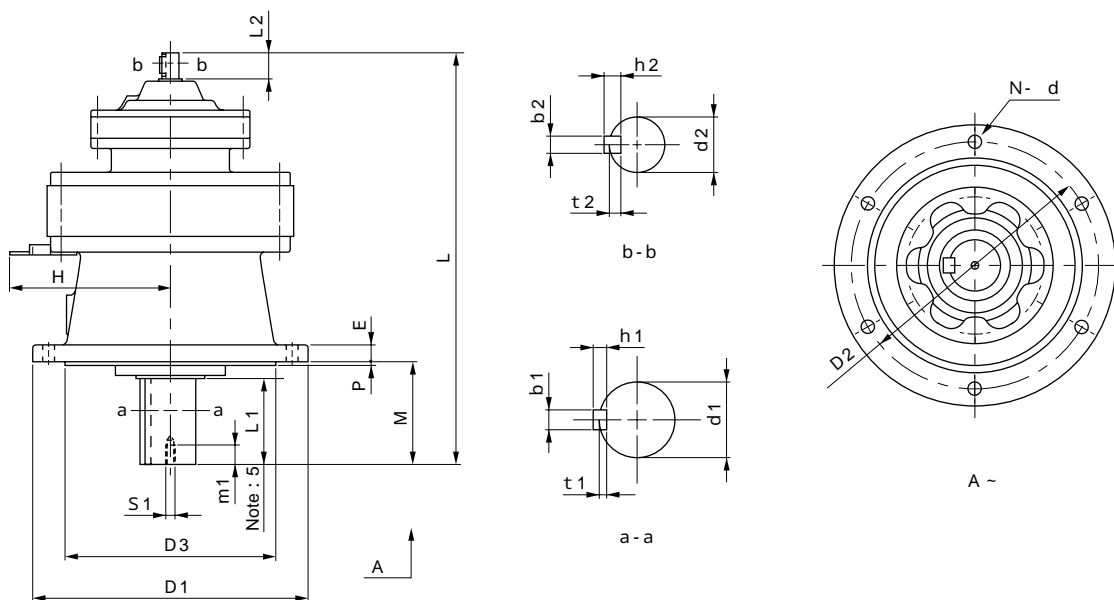
Model <small>Note: 1</small>	Output Shaft <small>Notes: 2, 3, 5</small>						Input Shaft <small>Notes: 2, 3, 5</small>					
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CNV - 606 DA - Ratio	14	25	5	5	3	M5	16	12	25	4	4	2.5
CNV - 607 DA - Ratio	18	30	6	6	3.5	M6	16	12	25	4	4	2.5
CNV - 609 DA - Ratio	28	35	8	7	4	M8	20	12	25	4	4	2.5
CNV - 610 DA - Ratio	28	35	8	7	4	M8	20	12	25	4	4	2.5
CNV - 612 DA - Ratio	38	55	10	8	5	M8	20	12	25	4	4	2.5
CNV - 612 DB - Ratio	38	55	10	8	5	M8	20	15	25	5	5	3

Notes : 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".

5. Output shaft length (L1) is longer for horizontal (CHV) type. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.

6. The dimensions in these drawings are subject to change without notice.

DIMENSION TABLE CVV - 613 DA ~ 618 DA



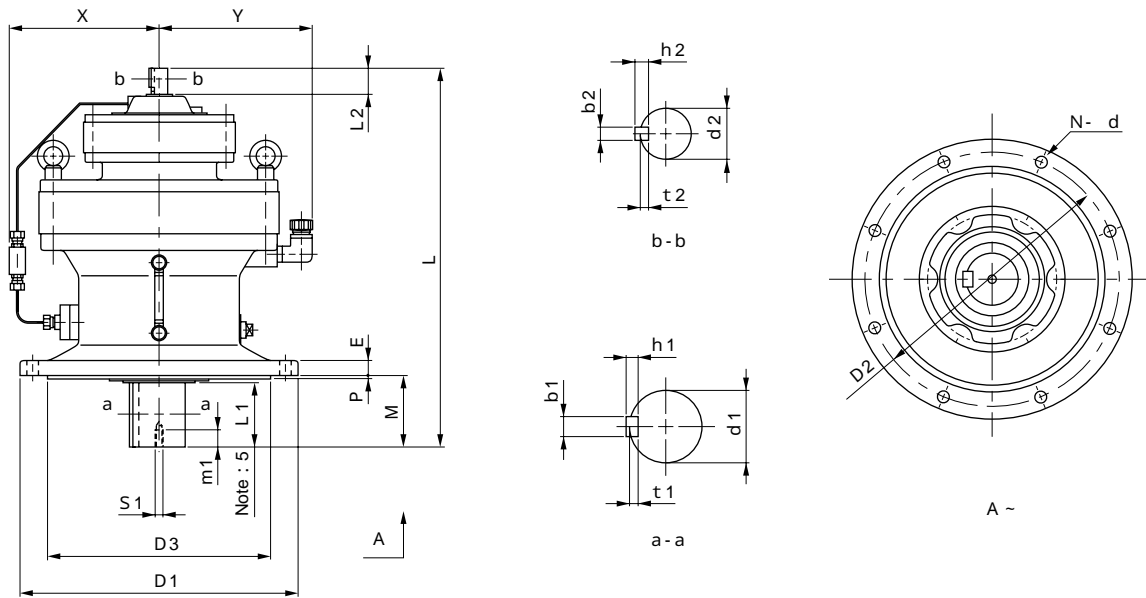
CVV	L	D1	D2	D3 <small>Note: 4</small>	M	E	P	N	d	H	W (kg)
613 DA	347	260	230	200	76	15	4	6	11	150	40
613 DB	363	260	230	200	76	15	4	6	11	150	43
613 DC	369	260	230	200	76	15	4	6	11	-	44
614 DA	367	260	230	200	96	15	4	6	11	150	40
614 DB	383	260	230	200	96	15	4	6	11	150	43
614 DC	389	260	230	200	96	15	4	6	11	-	44
616 DA	433	340	310	270	89	20	4	6	11	-	80
616 DB	439	340	310	270	89	20	4	6	11	-	82
617 DA	478	400	360	316	94	22	5	8	14	-	115
617 DB	484	400	360	316	94	22	5	8	14	-	117
618 DA	526	430	390	345	110	22	5	8	18	-	149

Model <small>Note: 1</small>	Output Shaft <small>Notes: 2, 3, 5</small>						Input Shaft <small>Notes: 2, 3, 5</small>					
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2
CVV - 613 DA - Ratio	50	61	14	9	5.5	M10	18	12	25	4	4	2.5
CVV - 613 DB - Ratio	50	61	14	9	5.5	M10	18	15	25	5	5	3
CVV - 613 DC - Ratio	50	61	14	9	5.5	M10	18	15	25	5	5	3
CVV - 614 DA - Ratio	50	81	14	9	5.5	M10	18	12	25	4	4	2.5
CVV - 614 DB - Ratio	50	81	14	9	5.5	M10	18	15	25	5	5	3
CVV - 614 DC - Ratio	50	81	14	9	5.5	M10	18	15	25	5	5	3
CVV - 616 DA - Ratio	60	80	18	11	7	M10	18	15	25	5	5	3
CVV - 616 DB - Ratio	60	80	18	11	7	M10	18	15	25	5	5	3
CVV - 617 DA - Ratio	70	84	20	12	7.5	M12	24	15	25	5	5	3
CVV - 617 DB - Ratio	70	84	20	12	7.5	M12	24	15	25	5	5	3
CVV - 618 DA - Ratio	80	100	22	14	9	M12	24	15	25	5	5	3

- Notes : 1. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CVV - 616 DC ~ 6275DA

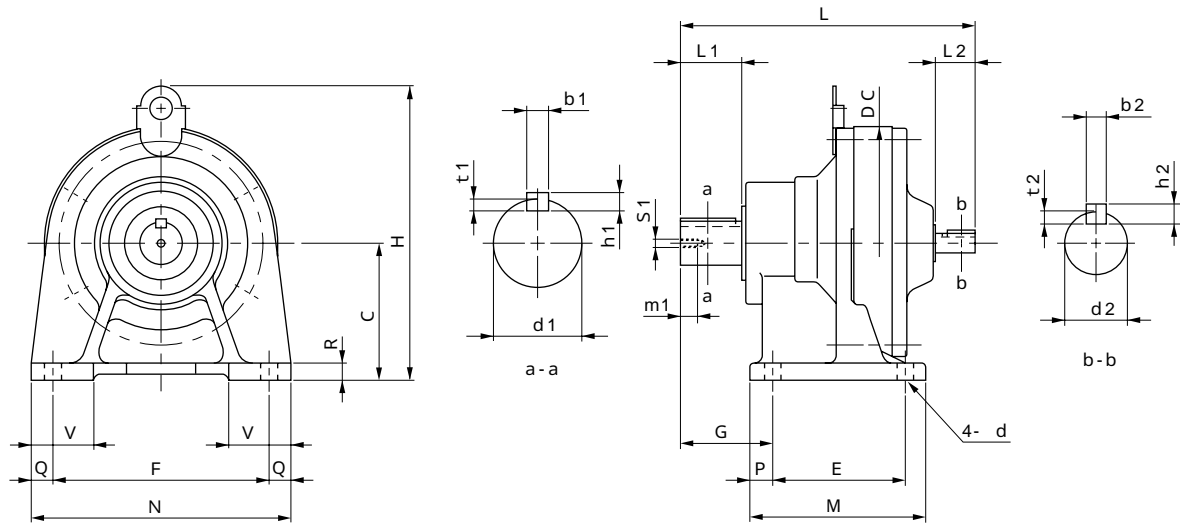


CVV	L	D1	D2	D3 Note: 4	M	E	P	N	d	X	Y	W(kg)
616 DC	462	340	310	270	89	20	4	6	11	196	200	90
617 DC	509	400	360	316	94	22	5	8	14	218	225	125
618 DB	577	430	390	345	110	22	5	8	18	233	240	171
619 DA	629	490	450	400	145	30	6	12	18	255	270	229
619 DB	653	490	450	400	145	30	6	12	18	255	270	240
6205DA	670	455	405	355	204	30	5	8	22	341	287	246
6205DB	705	455	405	355	204	30	5	8	22	341	287	258
6215DA	731	490	440	390	203	35	7	8	24	348	306	333
6215DB	780	490	440	390	203	35	7	8	24	348	306	355
6225DA	773	535	475	415	210	35	10	8	27	352	326	408
6225DB	860	535	475	415	210	35	10	8	27	352	326	455
6235DA	883	570	510	450	250	40	10	8	27	359	344	510
6235DB	938	570	510	450	250	40	10	8	27	359	344	544
6245DA	921	635	560	485	250	40	10	8	33	370	371	604
6245DB	975	635	560	485	250	40	10	8	33	370	371	633
6255DA	1081	685	610	535	295	45	10	8	33	395	399	925
6255DB	1133	685	610	535	295	45	10	8	33	395	399	993
6265DA	1243	750	660	570	360	50	10	8	39	427	431	1265
6275DA	1504	1160	1020	900	355	60	10	8	39	610	613	2660

Model	Note: 1	Output Shaft								Input Shaft				
		d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2	
CW - 616 DC - Ratio		60	80	18	11	7	M10	18	18	35	6	6	3.5	
CW - 617 DC - Ratio		70	84	20	12	7.5	M12	24	18	35	6	6	3.5	
CW - 618 DB - Ratio		80	100	22	14	9	M12	24	22	40	6	6	3.5	
CW - 619 DA - Ratio		95	125	25	14	9	M20	34	18	35	6	6	3.5	
CVV - 619 DB - Ratio		95	125	25	14	9	M20	34	22	40	6	6	3.5	
CVV - 6205DA - Ratio		100	165	28	16	10	M20	34	18	35	6	6	3.5	
CW - 6205DB - Ratio		100	165	28	16	10	M20	34	22	40	6	6	3.5	
CW - 6215DA - Ratio		110	165	28	16	10	M20	34	22	40	6	6	3.5	
CW - 6215DB - Ratio		110	165	28	16	10	M20	34	30	45	8	7	4	
CW - 6225DA - Ratio		120	165	32	18	11	M20	34	22	40	6	6	3.5	
CVV - 6225DB - Ratio		120	165	32	18	11	M20	34	35	55	10	8	5	
CVV - 6235DA - Ratio		130	200	32	18	11	M24	41	30	45	8	7	4	
CVV - 6235DB - Ratio		130	200	32	18	11	M24	41	40	65	12	8	5	
CW - 6245DA - Ratio		140	200	36	20	12	M24	41	30	45	8	7	4	
CW - 6245DB - Ratio		140	200	36	20	12	M24	41	40	65	12	8	5	
CW - 6255DA - Ratio		160	240	40	22	13	M30	49	35	55	10	8	5	
CVV - 6255DB - Ratio		160	240	40	22	13	M30	49	45	70	14	9	5.5	
CW - 6265DA - Ratio		170	300	40	22	13	M30	49	45	70	14	9	5.5	
CVV - 6275DA - Ratio		180	320	45	25	15	M30	52	45	70	14	9	5.5	

Notes : 4. The dimension tolerance in the diameter of the socket and spigot joints are in accordance with JIS B 0401-1976 " f8 ".
 5. Output shaft length (L1) is longer for horizontal (CHV) type. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details.
 6. The dimensions in these drawings are subject to change without notice.

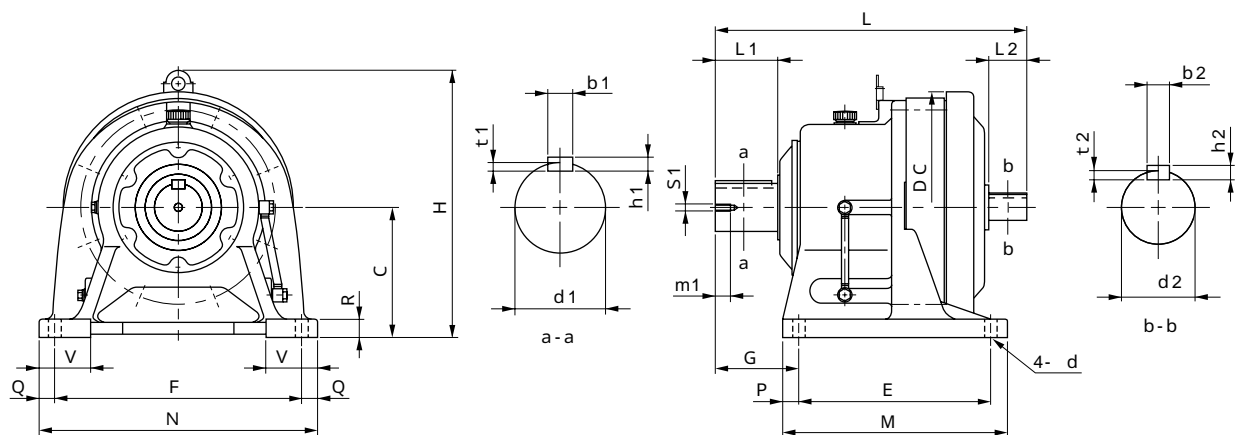
DIMENSION TABLE CNH - 610H, 612H CENTER HEIGHT OPTION



CNH	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
610H	208	120	150	90	150	60	227	135	180	15	15	12	45	11	14
612H	259	140	204	115	190	82	277	155	230	20	20	15	60	14	25

Model	Output Shaft							Input Shaft						
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2		
CNH - 610H - Ratio	28	35	8	7	4	M8	20	15	25	5	5	3		
CNH - 612H - Ratio	38	55	10	8	5	M8	20	18	35	6	6	3.5		

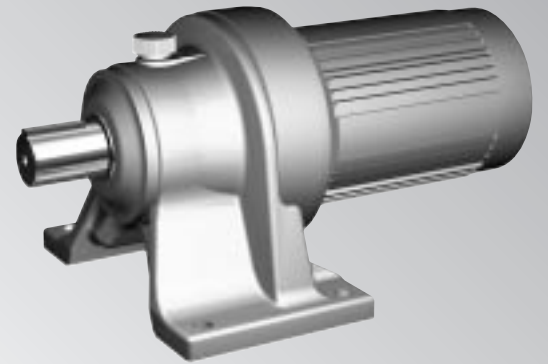
DIMENSION TABLE CHH - 614H, 616H CENTER HEIGHT OPTION



CHH	L	C	DC	E	F	G	H	M	N	P	Q	R	V	d	W(kg)
614H	341	160	230	145	290	120	310	195	330	25	20	22	70	18	46
616H	413	200	318	150	370	139	407	238	410	44	20	25	80	18	89

Model	Output Shaft							Input Shaft						
	d1	L1	b1	h1	t1	S1	m1	d2	L2	b2	h2	t2		
CHH - 614H - Ratio	50	90	14	9	5.5	M10	18	22	40	6	6	3.5		
CHH - 616H - Ratio	60	90	18	11	7	M10	18	30	45	8	7	4		

Notes : 1. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 2. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.
 3. Dimension of shaft end : Refer to the page E-27 ~ E-29 for details
 4. The dimensions in these drawings are subject to change without notice.



CYCLO[®] GEARMOTORS (AF MOTORS FOR INVERTER)



STANDARD SPECIFICATIONS

Gearmotors(AF Motors for Inverter)

Item		Standard Specification			Standard Specification with Built-in Brake	
AF Motors for Inverter	Capacity Range	0.1 ~ 37kW 4P 22, 30kW 6P			0.1kW x 4P ~ 22kW x 4P· FB Brake (Non Asbestos)	
	Protection Method	JP44 (Indoor)			JP44 (Indoor)	
	Enclosure	Totally enclosed fan cooled type (Over 22kW ; Totally enclosed Air over)			Totally enclosed fan cooled type	
	Power Source	200V60Hz, 220V60Hz			200V60Hz, 220V60Hz	
	Insulation	Insulation P	4P	6P	Insulation P	4P
		Class B	0.1 ~ 15kW	—	Class B	0.1 ~ 22kW
		Class F	22 ~ 37kW	22, 30kW	Class F	—
	Time Rating	Continuous rating (6 ~ 60Hz Torque cont.)			Continuous rating (6 ~ 60Hz Torque cont.)	
	Terminal box position & lead wire direction	On the left side viewed from the load side. Regarding the draw out hole direction, refer to Table C-1.			On the left side viewed from the load side. Regarding the draw out hole direction, refer to Table C-1.	
	Lead wiring (Lug type)	Lead wires P	4P	6P	Lead wires P	4P
3		0.1 ~ 5.5kW	—	5	0.1 ~ 5.5kW	
6		Note2 7.5 ~ 22kW	—	8	Note2 7.5 ~ 22kW	
8 (2 for thermostat) 3 (for Axial fan)		Note2 30, 37kW	Note2 22, 30kW	—	—	
Standards	According to JIS					
Cyclo Drive	Lubrication Method	Grease lubricated and oil lubricated models available.				
	Speed reduction method	Internal planetary gear mechanism with trochoidal curved tooth profile.				
	Direction of output shaft rotation	Single reduction	Clockwise rotation		As observed from the load when connected to R-U, S-V, T-W motors.	
Double reduction		Counter-clockwise rotation				
Ambient Conditions	Place of installation	Indoors(Place of minimum dust and humidity)				
	Ambient temperature	- 10 ~ 40				
	Ambient humidity	Under 85%				
	Elevation	Under 1,000 meters				
	Atmosphere	Well ventilated location, free of corrosive gases, explosive gases, vapors and dust.				
Method of Mounting	CHHM type-with slow speed shaft in horizontal direction and with legs. CVVM type-with slow speed shaft down in vertical direction and with mount. (No restrictions in mounting position of maintenance-free grease lubricated models, and the 2nd digit of type symbol provides " N ")					
Method of coupling with driven machine	Coupling, gears, chain sprocket or belt.					
Painting	Type : Acrylic modified phthalic Colour : Equivalent to mancel 6.5PB 3.6/8.2.					

Notes : 1. Refer to the technical section (page E-31 ~ 54) for motor specification other than standard.

2. Δ - start is also available. Please consult us.

Table C-1. Direction of Withdrawing Lead Wire.

Main frame mounting direction	Indoors(Standard)
Horizontal Type(Slow speed shaft in horizontal direction).	
Vertical Type(Slow speed shaft in vertical direction).	

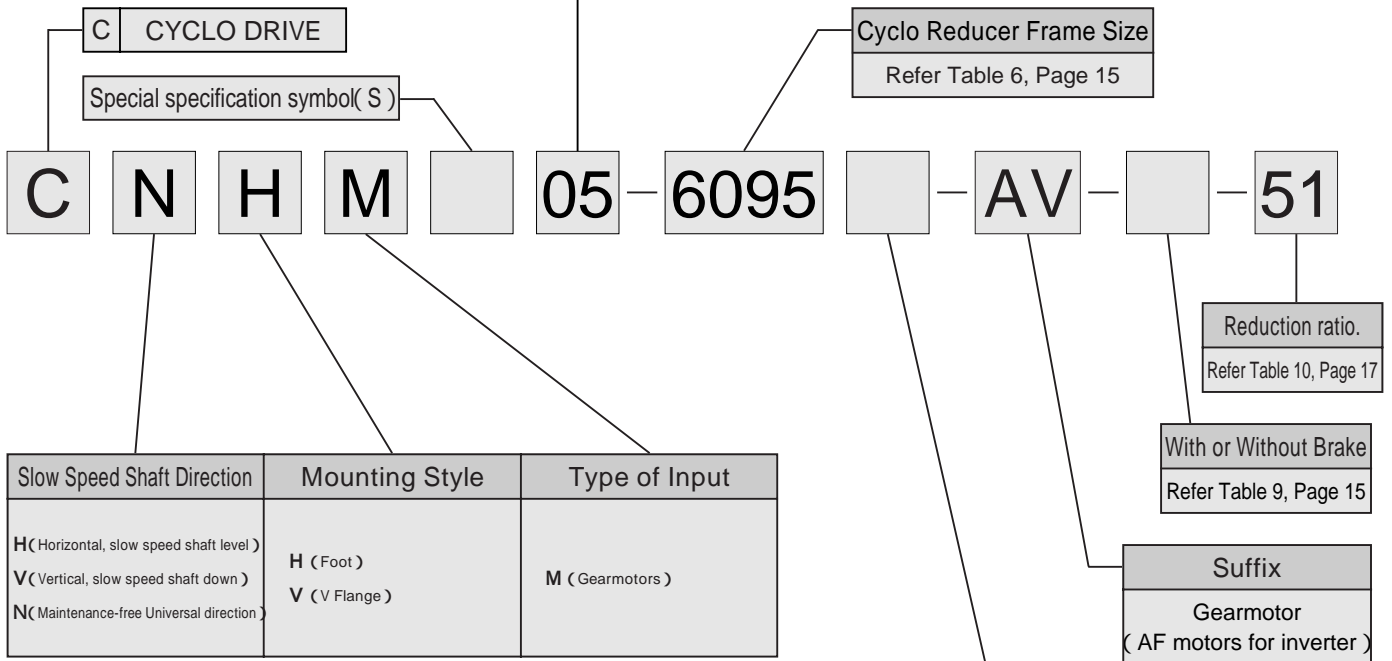
Note : Whenever not specified, the above direction shall be used. When the direction of withdrawal from the terminal box is other than specified above, refer to Page E-34.

NOMENCLATURE & MOUNTING POSITIONS

Table C-2. Motor Capacity Symbol

4	Capacity Symbol	01	02	05	1	2	3	5	8	10	15	20	25	30	40	50
	kW	0.1	0.2	0.4	0.75	1.5	2.2	3.7	5.5	7.5	11	15	18.5	22	33	37
	(HP)	(1/8)	(1/4)	(1/2)	(1)	(2)	(3)	(5)	(7.5)	(10)	(15)	(20)	(25)	(30)	(40)	(50)

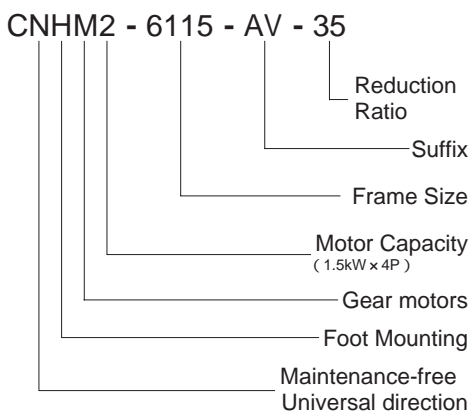
6	Capacity Symbol	206	256	306	406	506
	kW	15	18.5	22	30	37
	(HP)	(20)	(25)	(30)	(40)	(50)



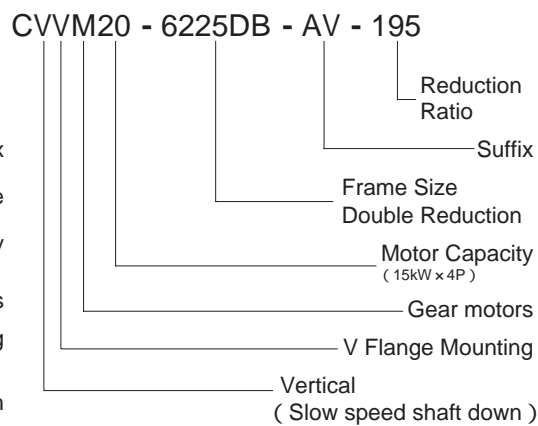
For examples of nomenclature and mounting positions please refer to page 16.

Shaft Spec.	Symbol
Metric JIS	No symbol
Inch Size	Y
AGMA	YA
AGMA	YB
AGMA	YC
Metric DIN	G

Example 1



Example 2



GEARMOTOR(AF MOTORS FOR INVERTER)MODEL SELECTION

(1) Selection Tables C-8 ~ C-15 are useful under these conditions :

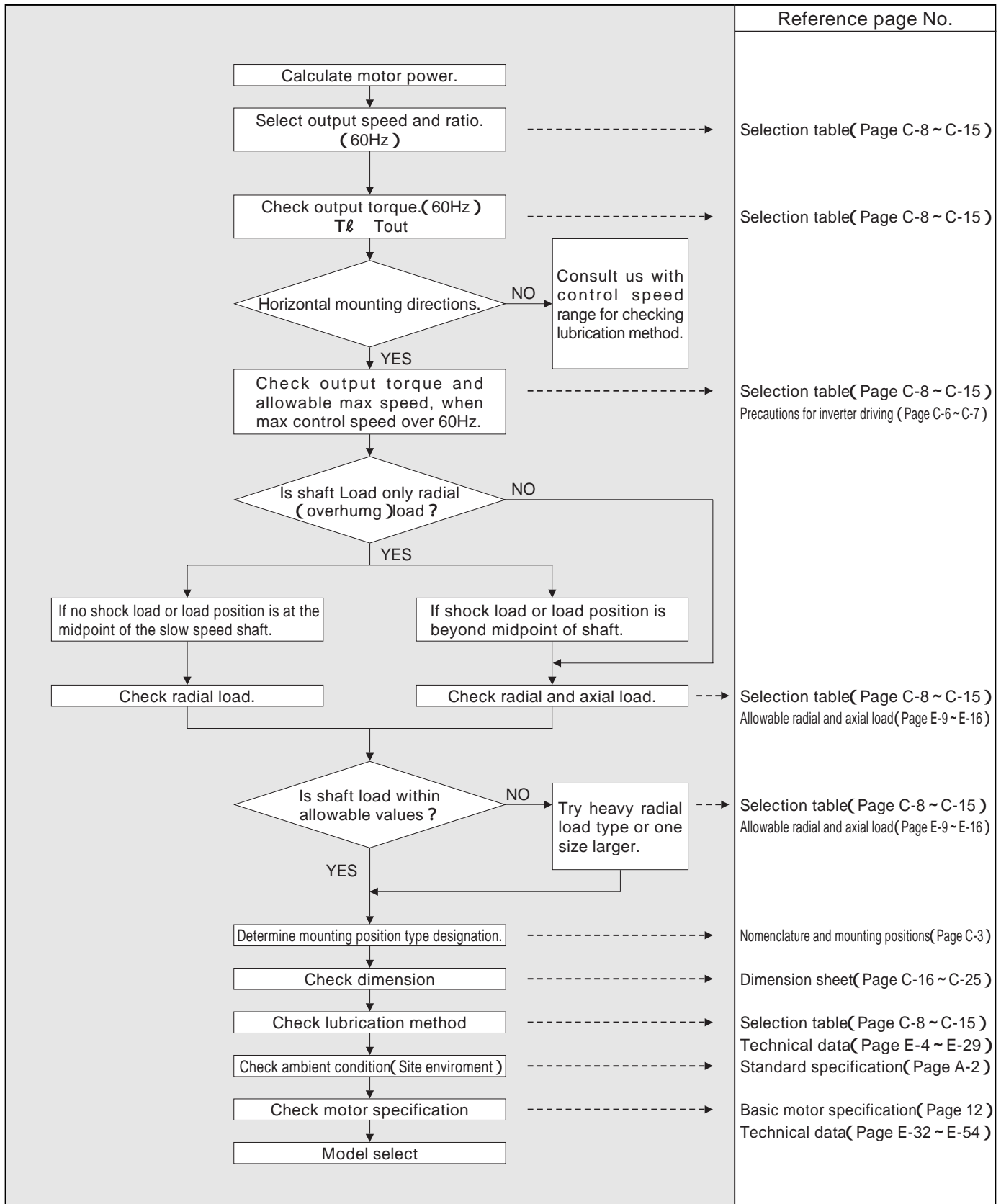
1. Continuous(10 hours)operation, under uniform(U)load conditions.(S, F. 1.0)
2. Speed control range within 1 : 10. Motor maximum speed 1800r/min(for 6P motor 1200r/min).
3. Acceleration start up within 1800r/min(for 6P motor 1200r/min). (Under standard conditions.)
4. Refer to Precautions for inverter driving on page C-6.

(2) Please consult us if operating conditions are different from (1)above.

1. Combination of CYCLO and motor size is different from selection table.
2. Using non-Sumitomo motor or inverter.
3. Using Sumitomo standard motor.(not AF motor)
4. Motor speed over 1800r/min(for 6P motor 1200r/min) Refer to allowable input speed in selection table.
5. Ambient temperature different from standard situation. Or using different lubrication oil from recommended oil(page E-6).

(3) These Items are requested for inquiry or consultation :

1. Ambient conditions.(Ambient temperature. Gas. etc...)
2. Type of driven machine. (Application)
3. Duty time and duty cycle.
4. Load conditions and Rate of Load.
5. Range of control speed. (min Hz, max Hz)
6. Name of model and maker when using non-Sumitomo motor or inverter.
7. Name of oil and maker when using non-recommended oil.



T_l : Actual transmitted torque at output shaft.[N·m, kgf·m]
 T_{out} : Output torque of gearmotor.[N·m, kgf·m]
 Pro : Allowable radial load of output shaft.[N, kgf]

Precautions for Inverter Driving

1. Constant torque operation

Constant torque operation needs a special motor for the inverter. Contact us especially when operation is in the frequency range less than 6 Hz.

The sensorless operation mode of our inverter HF-320 permits constant torque operation of general-purpose motors at 3.7 kW or less. (See page (C-1) for details.)

2. Operation in frequency range exceeding the base frequency (60 Hz)

Rated output operation will be carried out in the frequency range exceeding the base frequency. Therefore, the torque will decrease as the speed increases. Select an appropriate motor capacity according to the machine load characteristics. (See Fig. C-1.)

The frequency exceeding 60 Hz is regarded as the base frequency. The output torque is lower than that at 60 Hz, which is the standard base frequency, also when V/f is set for constant torque operation.

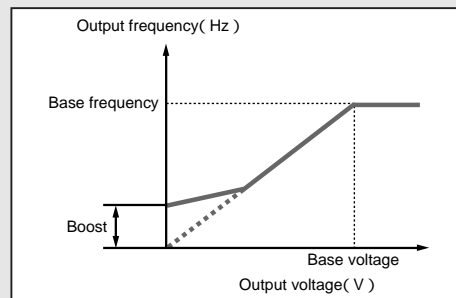
When such adjustment is made, insufficient torque may result at low frequency or during start-up.

Do not change the base frequency figure for cases other than reduction load characteristics.

3. V/f mode operation of general-purpose inverter

In the case of multiple operation of motors or V/f operation with an inverter that has no sensorless function, it is necessary to adjust the boost value in compensation for the start-up torque and slow-speed torque. Standard values are usually set before shipment from manufacturer's factory but overcurrent may result depending on the load condition and acceleration/deceleration. In such a case, change values appropriately as follows :

- In the case of a small capacity motor and a small load, a large boost setting may cause overexcitation of a motor, leading to overcurrent. In that case, lower the boost to return to a normal value.
- In cases where a load is large and overcurrent during start-up and slow-speed operation easily causes tripping, increase the boost to lower the current value. If no improvement is observed after boost adjustment, it is necessary to examine the motor capacity.

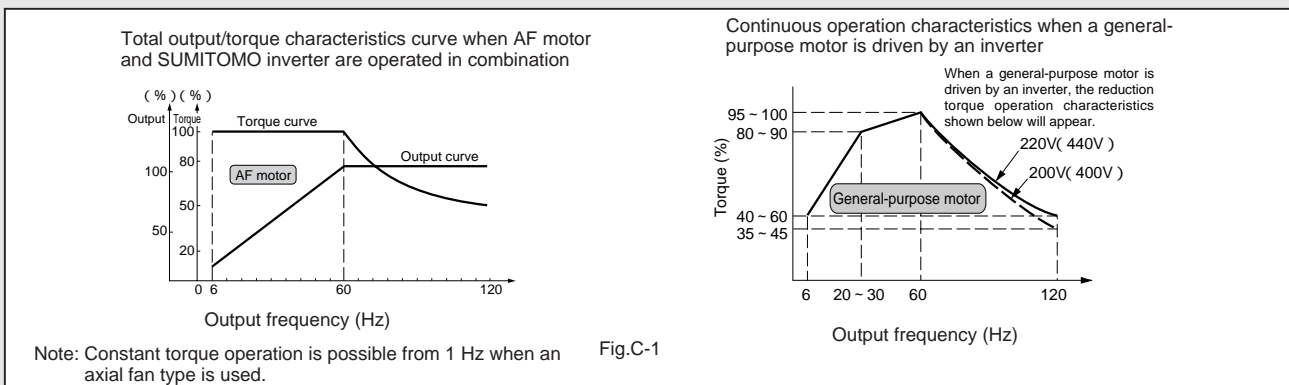


4. Operation by sensorless vector inverter

Some high-performance inverters of a newest type are equipped with a sensorless vector operation function. This function is basically valid only when a motor and an inverter are operated in one-to-one correspondence. The function does not apply to multiple operation or pole-change operation. Products to which the auto-tuning method is applied do not need adjustment as in the case of V/f operation due to automatic control of the motor characteristics. Vector operation is carried out on the basis of the motor data read by the inverter, and operation is controlled instantaneously in accordance with the load condition to continue optimal operation.

When the wiring distance between the motor and inverter becomes long (20 m or more), compensation may be necessary according to the drop in the line impedance. Select sufficiently thick cables when the wiring distance is long.

5. Output torque characteristics of motor



6. Motor temperature rise

When a general-purpose motor is combined with an inverter for variable-speed operation, the motor temperature rise may be slightly greater than if the motor is operated by a commercial power supply.

Possible causes are shown below :

Influence of output waveform . . . Unlike a commercial power supply, the output waveform of an inverter is not a complete sine wave but includes harmonics; therefore, motor damage will increase, raising the temperature slightly higher.

Decrease in motor cooling effect during slow-speed

operation A motor is cooled by its own fan. Therefore, when the motor speed is decreased by an inverter, the quantity of cooling air decreases, reducing the cooling effect.

When a motor is to be operated at frequencies lower than the frequency of a commercial power supply, reduce the load torque to hold down the temperature rise or use a special motor designed for inverter operation.

Constant Torque Operation of General-Purpose Motors

Operation with the following characteristics is possible when our inverter HF-320 series is used for sensorless control in combination with our general-purpose motors (3.7 kW or less).

A combination with a motor of standard frame size can be used for constant torque operation where an AF motor with a reducer of a larger frame size has conventionally been used.

Notes : 1. To select the combination with CYCLO, examine the lubrication method and torque during slow speed operation and rated output operation. Specify that inverter operation is desired when placing an order. (Refer to page C-4.)

2. Contact us for 400V class model because insulation selection is necessary for inverter operation.

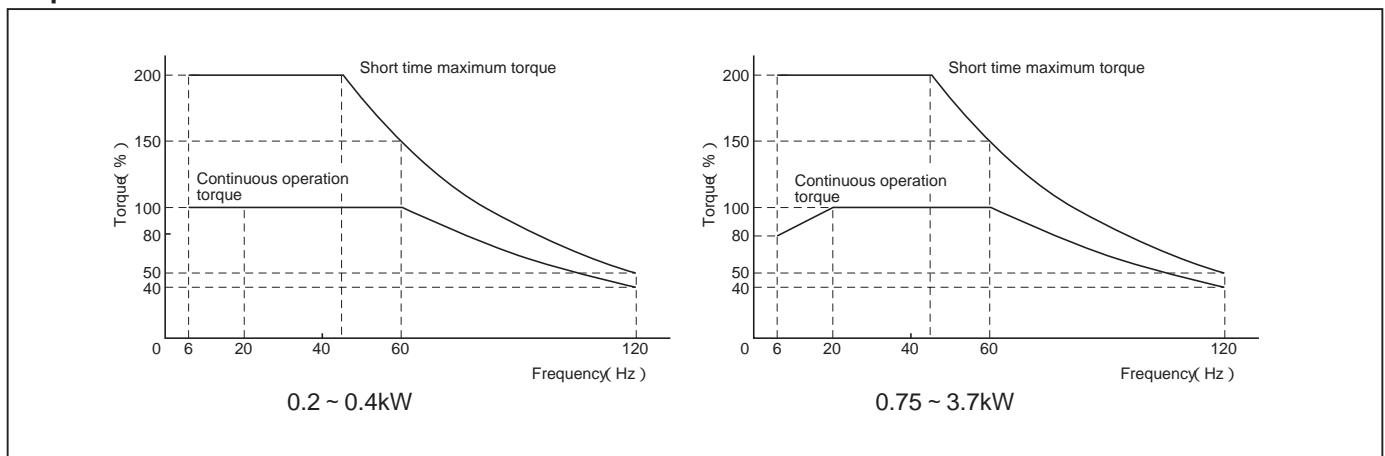
3. When a motor with brakes is to be operated for a long time at slow speed, the cooling effect of the fan will decrease and the brake temperature will rise substantially.

Contact us for details.

4. Contact us for details when a general-purpose motor is to be operated under V/F control. (Contact us also when SF-320 series is to be used.)

kW	Motor frame size	Insulation	Frequency range	Series of inverter
0.1	F63S	Class E	6 ~ 120Hz (Base frequency 60HZ)	H F - 320 Series
0.2	F63M			
0.4	F71M			
0.75	F80M	Class B		
1.5	F90L			
2.2	F100L			
3.7	F112M			

HF-320 Output Torque Characteristics During Operation in Sensorless Mode



The combination-output torque presupposes that the rating is 100% when the frequency of motor power is 60 Hz. Use an AF motor when constant torque is required at the power exceeding 5.5 kW.

0.1 kW

Gearmotor (AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity - symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584(120Hz)	3.11	0.317	756	77.1	01	- 6060	- AV	- 6	C-16	MF
21.9	219	438(120Hz)	4.15	0.423	866	88.3	01	- 6060	- AV	- 8	C-16	MF
15.9	159	318(120Hz)	5.70	0.581	1180	120	01	- 6060	- AV	- 11	C-16	MF
13.5	135	270(120Hz)	6.74	0.687	1180	120	01	- 6060	- AV	- 13	C-16	MF
11.7	117	234(120Hz)	7.78	0.793	1180	120	01	- 6060	- AV	- 15	C-16	MF
10.3	103	206(120Hz)	8.81	0.898	1180	120	01	- 6060	- AV	- 17	C-16	MF
8.33	83.3	167(120Hz)	10.9	1.11	1180	120	01	- 6060	- AV	- 21	C-16	MF
7.00	70.0	140(120Hz)	13.0	1.32	1180	120	01	- 6060	- AV	- 25	C-16	MF
6.03	60.3	121(120Hz)	15.0	1.53	1180	120	01	- 6060	- AV	- 29	C-16	MF
5.00	50.0	100(120Hz)	18.1	1.85	1180	120	01	- 6060	- AV	- 35	C-16	MF
4.07	40.7	81.4(120Hz)	22.3	2.27	1180	120	01	- 6065	- AV	- 43	C-16	MF
3.43	34.3	68.6(120Hz)	26.4	2.70	1770	180	01	- 6070	- AV	- 51	C-16	MF
2.97	29.7	59.4(120Hz)	30.6	3.12	1770	180	01	- 6070	- AV	- 59	C-16	MF
2.46	24.6	49.2(120Hz)	36.8	3.75	2560	261	01	- 6080	- AV	- 71	C-16	MF
2.01	20.1	40.2(120Hz)	45.1	4.60	2560	261	01	- 6085	- AV	- 87	C-16	MF
1.68	16.8	33.7(120Hz)	51.1	5.21	1770	180	01	- 6075DA	- AV	- 104	C-20	MF
1.45	14.5	28.9(120Hz)	59.4	6.06	3340	340	01	- 6090DA	- AV	- 121	C-20	MF
1.22	12.2	24.5(120Hz)	70.2	7.16	3340	340	01	- 6090DA	- AV	- 143	C-20	MF
1.06	10.6	21.2(120Hz)	81.0	8.26	3340	340	01	- 6090DA	- AV	- 165	C-20	MF
0.897	8.97	17.9(120Hz)	95.8	9.76	3340	340	01	- 6090DA	- AV	- 195	C-20	MF
0.758	7.58	15.2(120Hz)	113	11.6	3340	340	01	- 6090DA	- AV	- 231	C-20	MF
0.641	6.41	12.8(120Hz)	134	13.7	3340	340	01	- 6095DA	- AV	- 273	C-20	MF

0.2 kW

Gearmotor (AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity - symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584(120Hz)	6.22	0.634	751	76.6	02	- 6060	- AV	- 6	C-16	MF
21.9	219	438(120Hz)	8.29	0.846	859	87.5	02	- 6060	- AV	- 8	C-16	MF
15.9	159	318(120Hz)	11.4	1.16	1170	119	02	- 6060	- AV	- 11	C-16	MF
13.5	135	270(120Hz)	13.5	1.37	1180	120	02	- 6060	- AV	- 13	C-16	MF
11.7	117	234(120Hz)	15.6	1.59	1180	120	02	- 6060	- AV	- 15	C-16	MF
10.3	103	206(120Hz)	17.6	1.80	1180	120	02	- 6060	- AV	- 17	C-16	MF
8.33	83.3	167(120Hz)	21.8	2.22	1180	120	02	- 6065	- AV	- 21	C-16	MF
7.00	70.0	140(120Hz)	25.9	2.64	1770	180	02	- 6070	- AV	- 25	C-16	MF
6.03	60.3	121(120Hz)	30.1	3.07	1770	180	02	- 6070	- AV	- 29	C-16	MF
5.00	50.0	100(120Hz)	36.3	3.70	1770	180	02	- 6070	- AV	- 35	C-16	MF
4.07	40.7	81.4(120Hz)	44.6	4.54	1770	180	02	- 6075	- AV	- 43	C-16	MF
3.43	34.3	68.6(120Hz)	52.9	5.39	2560	261	02	- 6085	- AV	- 51	C-16	MF
2.97	29.7	59.4(120Hz)	61.2	6.24	2560	261	02	- 6085	- AV	- 59	C-16	MF
2.46	24.6	49.2(120Hz)	73.6	7.50	3290	335	02	- 6090	- AV	- 71	C-16	MF
2.01	20.1	40.2(120Hz)	90.2	9.20	3340	340	02	- 6090	- AV	- 87	C-16	MF
1.68	16.8	33.7(120Hz)	102	10.4	3340	340	02	- 6090DA	- AV	- 104	C-20	MF
1.47	14.7	29.4(120Hz)	123	12.6	5400	550	02	- 6100	- AV	- 119	C-16	MF
1.45	14.5	28.9(120Hz)	119	12.1	3340	340	02	- 6095DA	- AV	- 121	C-20	MF
1.22	12.2	24.5(120Hz)	140	14.3	3340	340	02	- 6095DA	- AV	- 143	C-20	MF
1.06	10.6	21.2(120Hz)	162	16.5	3340	340	02	- 6095DA	- AV	- 165	C-20	MF
0.897	8.97	17.9(120Hz)	192	19.5	3340	340	02	- 6095DA	- AV	- 195	C-20	MF
0.758	7.58	15.2(120Hz)	227	23.1	5400	550	02	- 6105DA	- AV	- 231	C-20	MF
0.641	6.41	12.8(120Hz)	268	27.3	5400	550	02	- 6105DA	- AV	- 273	C-20	MF

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication TP: Positive displacement pump lubrication

0.4 kW

Gearmotor
(AF motors for inverter)

Output Speed n ₂ r/min			Output Torque Tout		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584 (120Hz)	12.4	1.27	1810	184	05	- 6080	- AV	- 6	C-16	MF
21.9	219	438 (120Hz)	16.6	1.69	1960	200	05	- 6080	- AV	- 8	C-16	MF
15.9	159	318 (120Hz)	22.8	2.33	2160	220	05	- 6080	- AV	- 11	C-16	MF
13.5	135	270 (120Hz)	27.0	2.75	2320	237	05	- 6080	- AV	- 13	C-16	MF
11.7	117	234 (120Hz)	31.1	3.17	2400	245	05	- 6080	- AV	- 15	C-16	MF
10.3	103	206 (120Hz)	35.3	3.59	2510	256	05	- 6080	- AV	- 17	C-16	MF
8.33	83.3	167 (120Hz)	43.5	4.44	2450	250	05	- 6085	- AV	- 21	C-16	MF
7.00	70.0	140 (120Hz)	51.8	5.28	2520	256	05	- 6085	- AV	- 25	C-16	MF
6.03	60.3	121 (120Hz)	60.1	6.13	2560	261	05	- 6085	- AV	- 29	C-16	MF
5.00	50.0	100 (120Hz)	72.6	7.40	3340	340	05	- 6090	- AV	- 35	C-16	MF
4.07	40.7	81.4 (120Hz)	89.2	9.09	3340	340	05	- 6090	- AV	- 43	C-16	MF
3.43	34.3	68.6 (120Hz)	106	10.8	3340	340	05	- 6095	- AV	- 51	C-16	MF
2.97	29.7	59.4 (120Hz)	122	12.5	5400	550	05	- 6100	- AV	- 59	C-16	MF
2.46	24.6	49.2 (120Hz)	147	15.0	5400	550	05	- 6105	- AV	- 71	C-16	MF
2.01	20.1	40.2 (120Hz)	180	18.4	5400	550	05	- 6105	- AV	- 87	C-16	MF
1.68	16.8	33.7 (120Hz)	204	20.8	9810	1000	05	- 6120DB	- AV	- 104	C-20	MF
1.45	14.5	28.9 (120Hz)	238	24.2	9810	1000	05	- 6120DB	- AV	- 121	C-20	MF
1.22	12.2	24.5 (120Hz)	281	28.6	9810	1000	05	- 6120DB	- AV	- 143	C-20	MF
1.06	10.6	21.2 (120Hz)	324	33.0	9810	1000	05	- 6120DB	- AV	- 165	C-20	MF
0.897	8.97	17.9 (120Hz)	383	39.1	9810	1000	05	- 6120DB	- AV	- 195	C-20	MF
0.758	7.58	15.2 (120Hz)	454	46.3	9810	1000	05	- 6125DB	- AV	- 231	C-20	MF
0.641	6.41	12.8 (120Hz)	536	54.7	9810	1000	05	- 6125DB	- AV	- 273	C-20	MF

0.75 kW

Gearmotor
(AF motors for inverter)

Output Speed n ₂ r/min			Output Torque Tout		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584 (120Hz)	23.3	2.38	2670	273	1	- 6090	- AV	- 6	C-16	MF
21.9	219	438 (120Hz)	31.1	3.17	2980	304	1	- 6090	- AV	- 8	C-16	MF
15.9	159	318 (120Hz)	42.8	4.36	3340	340	1	- 6090	- AV	- 11	C-16	MF
13.5	135	270 (120Hz)	50.5	5.15	3340	340	1	- 6090	- AV	- 13	C-16	MF
11.7	117	234 (120Hz)	58.3	5.95	3340	340	1	- 6090	- AV	- 15	C-16	MF
10.3	103	206 (120Hz)	66.1	6.74	3340	340	1	- 6090	- AV	- 17	C-16	MF
8.33	83.3	167 (120Hz)	81.7	8.32	3340	340	1	- 6090	- AV	- 21	C-16	MF
7.00	70.0	140 (120Hz)	97.2	9.91	3340	340	1	- 6095	- AV	- 25	C-16	MF
6.03	60.3	121 (120Hz)	113	11.5	3340	340	1	- 6095	- AV	- 29	C-16	MF
5.00	50.0	100 (120Hz)	136	13.9	3330	339	1	- 6095	- AV	- 35	C-16	MF
4.07	40.7	81.4 (120Hz)	167	17.0	5400	550	1	- 6100	- AV	- 43	C-16	MF
3.43	34.3	68.6 (120Hz)	198	20.2	5390	549	1	- 6105	- AV	- 51	C-16	MF
2.97	29.7	59.4 (120Hz)	229	23.4	7610	776	1	- 6110	- AV	- 59	C-16	MF
2.46	24.6	49.2 (120Hz)	276	28.1	7610	776	1	- 6115	- AV	- 71	C-16	MF
2.01	20.1	40.2 (120Hz)	338	34.5	7610	776	1	- 6115	- AV	- 87	C-16	MF
1.68	16.8	33.7 (120Hz)	383	39.1	9810	1000	1	- 6120DB	- AV	- 104	C-20	MF
1.45	14.5	28.9 (120Hz)	446	45.4	9810	1000	1	- 6125DB	- AV	- 121	C-20	MF
1.22	12.2	24.5 (120Hz)	527	53.7	9810	1000	1	- 6125DB	- AV	- 143	C-20	MF
1.06	10.6	21.2 (120Hz)	608	62.0	9810	1000	1	- 6125DB	- AV	- 165	C-20	MF
0.897	8.97	17.9 (120Hz)	718	73.2	14700	1500	1	- 6135DB	- AV	- 195	C-21	G
0.758	7.58	15.2 (120Hz)	851	86.7	14700	1500	1	- 6135DB	- AV	- 231	C-21	G
0.641	6.41	12.8 (120Hz)	1010	103	16000	1630	1	- 6145DB	- AV	- 273	C-21	G

Notes : 4. CNHM, CHHM are TYPE designations. Detail is shown on page C-3.
 5. Please refer to page C-6 when not operated 6 to 60Hz.
 6. For vertical type, please consult us on lubrication method.

1.5 kW

Gearmotor (AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity - symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584(120Hz)	46.7	4.76	3880	396	2	- 6100	- AV	- 6	C-16	MF
21.9	219	438(120Hz)	62.2	6.34	4330	441	2	- 6100	- AV	- 8	C-16	MF
15.9	159	318(120Hz)	85.5	8.72	4920	501	2	- 6100	- AV	- 11	C-16	MF
13.5	135	270(120Hz)	101	10.3	5110	521	2	- 6100	- AV	- 13	C-16	MF
11.7	117	234(120Hz)	117	11.9	5400	550	2	- 6100	- AV	- 15	C-16	MF
10.3	103	206(120Hz)	132	13.5	5400	550	2	- 6100	- AV	- 17	C-16	MF
8.33	83.3	167(120Hz)	163	16.6	5400	550	2	- 6105	- AV	- 21	C-16	MF
7.00	70.0	140(120Hz)	194	19.8	5400	550	2	- 6105	- AV	- 25	C-16	MF
6.03	60.3	121(120Hz)	226	23.0	5400	550	2	- 6105	- AV	- 29	C-16	MF
5.00	50.0	100(120Hz)	272	27.7	7360	751	2	- 6115	- AV	- 35	C-16	MF
4.07	40.7	81.4(120Hz)	334	34.1	7610	776	2	- 6115	- AV	- 43	C-16	MF
3.43	34.3	68.6(120Hz)	397	40.4	9810	1000	2	- 6120	- AV	- 51	C-16	MF
2.97	29.7	59.4(120Hz)	459	46.8	9810	1000	2	- 6125	- AV	- 59	C-16	MF
2.46	24.6	49.2(120Hz)	552	56.3	12900	1320	2	- 6130	- AV	- 71	C-17	PB
2.01	20.1	40.2(120Hz)	677	69.0	13900	1420	2	- 6135	- AV	- 87	C-17	PB
1.68	16.8	33.7(120Hz)	766	78.1	14700	1500	2	- 6135DC	- AV	- 104	C-21	G
1.45	14.5	28.9(120Hz)	891	90.9	14700	1500	2	- 6135DC	- AV	- 121	C-21	G
1.22	12.2	24.5(120Hz)	1050	107	15900	1620	2	- 6145DC	- AV	- 143	C-21	G
1.06	10.6	21.2(120Hz)	1220	124	16000	1630	2	- 6145DC	- AV	- 165	C-21	G
0.897	8.97	17.9(120Hz)	1440	146	22100	2250	2	- 6165DB	- AV	- 195	C-21	G
0.758	7.58	15.2(120Hz)	1700	173	22100	2250	2	- 6165DB	- AV	- 231	C-21	G
0.641	6.41	12.8(120Hz)	2010	205	22100	2250	2	- 6165DB	- AV	- 273	C-21	G

2.2 kW

Gearmotor (AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity - symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584(120Hz)	68.4	6.98	4370	445	3	- 6110	- AV	- 6	C-16	MF
21.9	219	438(120Hz)	91.2	9.30	4870	496	3	- 6110	- AV	- 8	C-16	MF
15.9	159	318(120Hz)	125	12.8	5560	567	3	- 6110	- AV	- 11	C-16	MF
13.5	135	270(120Hz)	148	15.1	5740	586	3	- 6110	- AV	- 13	C-16	MF
11.7	117	234(120Hz)	171	17.4	6120	624	3	- 6110	- AV	- 15	C-16	MF
10.3	103	206(120Hz)	194	19.8	6180	630	3	- 6110	- AV	- 17	C-16	MF
8.33	83.3	167(120Hz)	240	24.4	6540	667	3	- 6115	- AV	- 21	C-16	MF
7.00	70.0	140(120Hz)	285	29.1	6620	675	3	- 6115	- AV	- 25	C-16	MF
6.03	60.3	121(120Hz)	331	33.7	6800	693	3	- 6115	- AV	- 29	C-16	MF
5.00	50.0	100(120Hz)	399	40.7	8830	900	3	- 6120	- AV	- 35	C-16	MF
4.07	40.7	81.4(120Hz)	490	50.0	9380	956	3	- 6125	- AV	- 43	C-16	MF
3.43	34.3	68.6(120Hz)	582	59.3	11500	1180	3	- 6135	- AV	- 51	C-17	PB
2.97	29.7	59.4(120Hz)	673	68.6	12100	1230	3	- 6135	- AV	- 59	C-17	PB
2.46	24.6	49.2(120Hz)	810	82.5	16000	1630	3	- 6145	- AV	- 71	C-17	PB
2.01	20.1	40.2(120Hz)	992	101	22100	2250	3	- 6160	- AV	- 87	C-17	PB
1.68	16.8	33.7(120Hz)	1120	115	22100	2250	3	- 6160DC	- AV	- 104	C-22	PB
1.45	14.5	28.9(120Hz)	1310	133	22100	2250	3	- 6160DC	- AV	- 121	C-22	PB
1.22	12.2	24.5(120Hz)	1550	158	22100	2250	3	- 6165DC	- AV	- 143	C-22	PB
1.06	10.6	21.2(120Hz)	1780	182	22100	2250	3	- 6165DC	- AV	- 165	C-22	PB
0.897	8.97	17.9(120Hz)	2100	214	22100	2250	3	- 6165DC	- AV	- 195	C-22	PB
0.758	7.58	15.2(120Hz)	2500	254	29500	3010	3	- 6175DC	- AV	- 231	C-22	PB
0.641	6.41	12.8(120Hz)	2950	301	29500	3010	3	- 6175DC	- AV	- 273	C-22	PB

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication TP: Positive displacement pump lubrication

3.7 kW

Gearmotor
(AF motors for inverter)

Output Speed n ₂ r/min			Output Torque Tout		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)					CNHM	CNHM
29.2	292	389(80Hz)	115	11.7	4910	500	5	- 6120	- AV	- 6	C-16	MF
21.9	219	438(120Hz)	153	15.6	5470	557	5	- 6120	- AV	- 8	C-16	MF
15.9	159	318(120Hz)	211	21.5	6200	632	5	- 6120	- AV	- 11	C-16	MF
13.5	135	270(120Hz)	249	25.4	6400	652	5	- 6120	- AV	- 13	C-16	MF
11.7	117	234(120Hz)	288	29.3	6860	699	5	- 6120	- AV	- 15	C-16	MF
10.3	103	206(120Hz)	326	33.2	6920	705	5	- 6125	- AV	- 17	C-16	MF
8.33	83.3	167(120Hz)	403	41.1	7570	772	5	- 6125	- AV	- 21	C-16	MF
7.00	70.0	140(120Hz)	480	48.9	7900	806	5	- 6125	- AV	- 25	C-16	MF
6.03	60.3	121(120Hz)	556	56.7	9700	989	5	- 6130	- AV	- 29	C-17	PB
5.00	50.0	100(120Hz)	671	68.4	10200	1040	5	- 6135	- AV	- 35	C-17	PB
4.07	40.7	81.4(120Hz)	825	84.1	15800	1610	5	- 6145	- AV	- 43	C-17	PB
3.43	34.3	68.6(120Hz)	978	99.7	16000	1630	5	- 6145	- AV	- 51	C-17	PB
2.97	29.7	59.4(120Hz)	1130	115	22100	2250	5	- 6160	- AV	- 59	C-17	PB
2.46	24.6	34.0(83Hz)	1360	139	21900	2240	5	- 6165	- AV	- 71	C-17	PB
2.01	20.1	27.8(83Hz)	1670	170	21800	2220	5	- 6165	- AV	- 87	C-17	PB
1.68	16.8	33.7(120Hz)	1890	193	22100	2250	5	- 6165DC	- AV	- 104	C-22	PB
1.45	14.5	28.9(120Hz)	2200	224	29500	3010	5	- 6175DC	- AV	- 121	C-22	PB
1.22	12.2	24.5(120Hz)	2600	265	29500	3010	5	- 6175DC	- AV	- 143	C-22	PB
1.06	10.6	21.2(120Hz)	3000	306	29500	3010	5	- 6175DC	- AV	- 165	C-22	PB
0.897	8.97	17.9(120Hz)	3540	361	41700	4250	5	- 6185DB	- AV	- 195	C-22	PB
0.758	7.58	15.2(120Hz)	4200	428	41700	4250	5	- 6185DB	- AV	- 231	C-22	PB
0.641	6.41	12.8(120Hz)	4960	506	41700	4250	5	- 6185DB	- AV	- 273	C-22	PB

5.5 kW

Gearmotor
(AF motors for inverter)

Output Speed n ₂ r/min			Output Torque Tout		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)					CNHM	CNHM
29.2	292	584(120Hz)	171	17.4	5710	582	8	- 6130	- AV	- 6	C-17	PB
21.9	219	438(120Hz)	228	23.3	6360	648	8	- 6130	- AV	- 8	C-17	PB
15.9	159	318(120Hz)	314	32.0	7240	739	8	- 6130	- AV	- 11	C-17	PB
13.5	135	270(120Hz)	371	37.8	7530	768	8	- 6130	- AV	- 13	C-17	PB
11.7	117	234(120Hz)	428	43.6	7680	783	8	- 6130	- AV	- 15	C-17	PB
10.3	103	206(120Hz)	485	49.4	8230	839	8	- 6135	- AV	- 17	C-17	PB
8.33	83.3	167(120Hz)	599	61.0	8760	893	8	- 6135	- AV	- 21	C-17	PB
7.00	70.0	140(120Hz)	713	72.7	9070	925	8	- 6135	- AV	- 25	C-17	PB
6.03	60.3	121(120Hz)	827	84.3	14100	1430	8	- 6140	- AV	- 29	C-17	PB
5.00	50.0	100(120Hz)	998	102	15000	1530	8	- 6145	- AV	- 35	C-17	PB
4.07	40.7	56.3(83Hz)	1230	125	18900	1930	8	- 6160	- AV	- 43	C-17	PB
3.43	34.3	47.4(83Hz)	1450	148	19600	2000	8	- 6165	- AV	- 51	C-17	PB
2.97	29.7	41.1(83Hz)	1680	171	21700	2220	8	- 6165	- AV	- 59	C-17	PB
2.46	24.6	34.0(83Hz)	2020	206	24700	2520	8	- 6175	- AV	- 71	C-18	PB
2.01	20.1	27.8(83Hz)	2480	253	26400	2690	8	- 6175	- AV	- 87	C-18	PB
1.68	16.8	33.7(120Hz)	2810	286	37700	3840	8	- 6180DB	- AV	- 104	C-22	PB
1.45	14.5	28.9(120Hz)	3270	333	40000	4070	8	- 6185DB	- AV	- 121	C-22	PB
1.22	12.2	24.5(120Hz)	3860	394	41700	4250	8	- 6185DB	- AV	- 143	C-22	PB
1.06	10.6	21.2(120Hz)	4460	454	41700	4250	8	- 6185DB	- AV	- 165	C-22	PB
0.897	8.97	17.9(120Hz)	5270	537	58300	5940	8	- 6195DB	- AV	- 195	C-22	PB
0.758	7.58	15.2(120Hz)	6240	636	59000	6010	8	- 6195DB	- AV	- 231	C-22	PB
0.641	6.41	12.8(120Hz)	7370	752	59000	6010	8	- 6195DB	- AV	- 273	C-22	PB

Notes : 4. CNHM, CHHM are TYPE designations. Detail is shown on page C-3.
 5. Please refer to page C-6 when not operated 6 to 60Hz.
 6. For vertical type, please consult us on lubrication method.

1.5 ~ 5.5kW

7.5 kW

Gearmotor
(AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584(120Hz)	233	23.8	5650	576	10	- 6130	- AV	- 6	C-17	PB
21.9	219	438(120Hz)	311	31.7	6290	641	10	- 6130	- AV	- 8	C-17	PB
15.9	159	318(120Hz)	428	43.6	7150	729	10	- 6130	- AV	- 11	C-17	PB
13.5	135	270(120Hz)	505	51.5	7430	758	10	- 6130	- AV	- 13	C-17	PB
11.7	117	234(120Hz)	583	59.5	7570	771	10	- 6135	- AV	- 15	C-17	PB
10.3	103	206(120Hz)	661	67.4	8100	826	10	- 6135	- AV	- 17	C-17	PB
8.33	83.3	167(120Hz)	817	83.2	13100	1330	10	- 6145	- AV	- 21	C-17	PB
7.00	70.0	140(120Hz)	972	99.1	13700	1390	10	- 6145	- AV	- 25	C-17	PB
6.03	60.3	121(120Hz)	1130	115	14000	1420	10	- 6145	- AV	- 29	C-17	PB
5.00	50.0	100(120Hz)	1360	139	17500	1790	10	- 6165	- AV	- 35	C-17	PB
4.07	40.7	56.3(83Hz)	1670	170	18600	1900	10	- 6165	- AV	- 43	C-17	PB
3.43	34.3	47.4(83Hz)	1980	202	22100	2250	10	- 6170	- AV	- 51	C-18	PB
2.97	29.7	41.1(83Hz)	2290	234	23100	2360	10	- 6175	- AV	- 59	C-18	PB
2.46	24.6	34.0(83Hz)	2760	281	33100	3380	10	- 6180	- AV	- 71	C-18	PB
2.01	20.1	27.8(83Hz)	3380	345	35600	3620	10	- 6185	- AV	- 87	C-18	PB
1.68	16.8	33.7(120Hz)	3830	391	37300	3800	10	- 6185DB	- AV	- 104	C-22	PB
1.45	14.5	28.9(120Hz)	4460	454	40000	4070	10	- 6185DB	- AV	- 121	C-22	PB
1.22	12.2	24.5(120Hz)	5270	537	57900	5900	10	- 6195DB	- AV	- 143	C-22	PB
1.06	10.6	21.2(120Hz)	6080	620	58300	5940	10	- 6195DB	- AV	- 165	C-22	PB
0.897	8.97	17.9(120Hz)	7180	732	58300	5940	10	- 6195DB	- AV	- 195	C-22	PB
0.758	7.58	15.2(120Hz)	8510	867	84100	8570	10	- 6205DB	- AV	- 231	C-23	PB
0.641	6.41	12.8(120Hz)	10100	1030	104000	10600	10	- 6215DA	- AV	- 273	C-23	PB

11 kW

Gearmotor
(AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	584(120Hz)	342	34.9	5540	564	15	- 6135	- AV	- 6	C-17	PB
21.9	219	438(120Hz)	456	46.5	6150	627	15	- 6135	- AV	- 8	C-17	PB
15.9	159	318(120Hz)	627	63.9	6980	712	15	- 6135	- AV	- 11	C-17	PB
13.5	135	270(120Hz)	741	75.6	11100	1140	15	- 6140	- AV	- 13	C-17	PB
11.7	117	234(120Hz)	855	87.2	11600	1190	15	- 6140	- AV	- 15	C-17	PB
10.3	103	206(120Hz)	969	98.8	12100	1240	15	- 6145	- AV	- 17	C-17	PB
8.33	83.3	115(83Hz)	1200	122	15000	1530	15	- 6160	- AV	- 21	C-17	PB
7.00	70.0	96.8(83Hz)	1430	145	15700	1600	15	- 6165	- AV	- 25	C-17	PB
6.03	60.3	83.4(83Hz)	1650	169	16300	1660	15	- 6165	- AV	- 29	C-17	PB
5.00	50.0	69.2(83Hz)	2000	203	19700	2010	15	- 6170	- AV	- 35	C-18	PB
4.07	40.7	56.3(83Hz)	2450	250	20900	2130	15	- 6175	- AV	- 43	C-18	PB
3.43	34.3	47.4(83Hz)	2910	296	29600	3010	15	- 6180	- AV	- 51	C-18	PB
2.97	29.7	41.1(83Hz)	3360	343	30900	3150	15	- 6185	- AV	- 59	C-18	PB
2.46	24.6	29.9(73Hz)	4050	413	46300	4720	15	- 6190	- AV	- 71	C-18	PB
2.01	20.1	24.5(73Hz)	4960	506	49700	5070	15	- 6195	- AV	- 87	C-18	PB
1.68	16.8	33.7(120Hz)	5620	573	51800	5280	15	- 6195DB	- AV	- 104	C-22	PB
1.45	14.5	28.9(120Hz)	6540	666	55500	5660	15	- 6195DB	- AV	- 121	C-22	PB
1.06	10.6	21.2(120Hz)	8910	909	84100	8570	15	- 6205DB	- AV	- 165	C-23	PB
0.897	8.97	17.9(120Hz)	10500	1070	104000	10600	15	- 6215DA	- AV	- 195	C-23	PB
0.758	7.58	15.2(120Hz)	12500	1270	104000	10600	15	- 6215DA	- AV	- 231	C-23	PB
0.641	6.41	12.8(120Hz)	14800	1510	137000	13900	15	- 6225DA	- AV	- 273	C-23	PB

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9 ~ 14.

3. Marked models need operation conditions evaluated.(Amb temp, Load condition etc...)Please consult us.

15 kW

Gearmotor (AF motors for inverter)

Output Speed n ₂ r/min			Output Torque Tout		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)					CNHM	CHHM
29.2	292	355(73Hz)	467	47.6	9670	986	20	- 6160	- AV	- 6	C-17	PB
21.9	219	401(120Hz)	622	63.4	10800	1100	20	- 6160	- AV	- 8	C-17	PB
15.9	159	292(120Hz)	855	87.2	12200	1240	20	- 6160	- AV	- 11	C-17	PB
13.5	135	247(120Hz)	1010	103	12700	1300	20	- 6165	- AV	- 13	C-17	PB
11.7	117	142(73Hz)	1170	119	13500	1370	20	- 6165	- AV	- 15	C-17	PB
10.3	103	142(83Hz)	1320	135	13900	1410	20	- 6165	- AV	- 17	C-17	PB
8.33	83.3	115(83Hz)	1630	166	14800	1510	20	- 6165	- AV	- 21	C-17	PB
7.00	70.0	85.2(73Hz)	1940	198	17500	1780	20	- 6170	- AV	- 25	C-18	PB
6.03	60.3	73.4(73Hz)	2260	230	18400	1870	20	- 6175	- AV	- 29	C-18	PB
5.00	50.0	69.2(83Hz)	2720	277	26500	2700	20	- 6180	- AV	- 35	C-18	PB
4.07	40.7	56.3(83Hz)	3340	341	28300	2880	20	- 6185	- AV	- 43	C-18	PB
3.43	34.3	41.7(73Hz)	3970	404	29200	2980	20	- 6185	- AV	- 51	C-18	PB
2.97	29.7	36.1(73Hz)	4590	468	43400	4430	20	- 6195	- AV	- 59	C-18	PB
2.46	24.6	29.9(73Hz)	5520	563	45900	4680	20	- 6195	- AV	- 71	C-18	PB
2.01	20.1	24.5(73Hz)	6770	690	84100	8570	20	- 6205	- AV	- 87	C-19	PB
1.45	14.5	26.5(120Hz)	8910	909	101000	10300	20	- 6215DB	- AV	- 121	C-23	PB
1.06	10.6	19.4(120Hz)	12200	1240	104000	10600	20	- 6215DB	- AV	- 165	C-23	PB
0.897	8.97	16.5(120Hz)	14400	1460	122000	12400	20	- 6225DB	- AV	- 195	C-23	PB
0.758	7.58	13.9(120Hz)	17000	1730	162000	16500	20	- 6235DA	- AV	- 231	C-23	PB
0.641	6.41	11.8(120Hz)	20100	2050	188000	19200	20	- 6245DA	- AV	- 273	C-23	PB

18.5 kW

Gearmotor (AF motors for inverter)

Output Speed n ₂ r/min			Output Torque Tout		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)					CNHM	CHHM
29.2	292	292(60Hz)	575	58.7	10900	1110	25	- 6175	- AV	- 6	C-18	PB
21.9	219	219(60Hz)	767	78.2	12000	1220	25	- 6175	- AV	- 8	C-18	PB
15.9	159	193(73Hz)	1060	108	13800	1410	25	- 6175	- AV	- 11	C-18	PB
13.5	135	164(73Hz)	1250	127	14300	1460	25	- 6175	- AV	- 13	C-18	PB
11.7	117	142(73Hz)	1440	147	15000	1530	25	- 6175	- AV	- 15	C-18	PB
10.3	103	125(73Hz)	1630	166	15600	1590	25	- 6175	- AV	- 17	C-18	PB
8.33	83.3	101(73Hz)	2010	205	16800	1710	25	- 6175	- AV	- 21	C-18	PB
7.00	70.0	85.2(73Hz)	2400	244	17300	1760	25	- 6175	- AV	- 25	C-18	PB
6.03	60.3	73.4(73Hz)	2780	284	24700	2520	25	- 6180	- AV	- 29	C-18	PB
5.00	50.0	60.8(73Hz)	3360	342	26300	2680	25	- 6185	- AV	- 35	C-18	PB
4.07	40.7	40.7(60Hz)	4120	420	28000	2850	25	- 6185	- AV	- 43	C-18	PB
3.43	34.3	41.7(73Hz)	4890	499	41300	4210	25	- 6195	- AV	- 51	C-18	PB
2.97	29.7	36.1(73Hz)	5660	577	43100	4400	25	- 6195	- AV	- 59	C-18	PB
2.01	20.1	20.1(60Hz)	8340	851	90600	9240	25	- 6215	- AV	- 87	C-19	PB
1.45	14.5	17.6(73Hz)	11000	1120	106000	10800	25	- 6225DB	- AV	- 121	C-23	PB
1.06	10.6	12.9(73Hz)	15000	1530	143000	14500	25	- 6235DB	- AV	- 165	C-23	PB
0.897	8.97	10.9(73Hz)	17700	1810	150000	15300	25	- 6235DB	- AV	- 195	C-23	PB
0.758	7.58	9.22(73Hz)	21000	2140	179000	18200	25	- 6245DB	- AV	- 231	C-23	PB
0.641	6.41	7.80(73Hz)	24800	2530	188000	19200	25	- 6245DB	- AV	- 273	C-23	PB

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

5. CNHM, CHHM are TYPE designations. Detail is shown on page C-3.

6. Please refer to page C-6 when not operated 6 to 60Hz.

7. For vertical type, please consult us on lubrication method.

7.5 ~ 18.5kW

22kW

Gearmotor
(AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
29.2	292	292(60Hz)	684	69.8	10800	1100	30	- 6175	- AV	- 6	C-18	PB
21.9	219	219(60Hz)	912	93.0	11900	1220	30	- 6175	- AV	- 8	C-18	PB
15.9	159	193(73Hz)	1250	128	13700	1390	30	- 6175	- AV	- 11	C-18	PB
13.5	135	164(73Hz)	1480	151	14200	1450	30	- 6175	- AV	- 13	C-18	PB
11.7	117	142(73Hz)	1710	174	14800	1510	30	- 6175	- AV	- 15	C-18	PB
10.3	103	125(73Hz)	1940	198	15400	1570	30	- 6175	- AV	- 17	C-18	PB
8.33	83.3	101(73Hz)	2400	244	16600	1690	30	- 6175	- AV	- 21	C-18	PB
7.00	70.0	85.2(73Hz)	2850	291	23500	2400	30	- 6180	- AV	- 25	C-18	PB
6.03	60.3	73.4(73Hz)	3310	337	24500	2500	30	- 6185	- AV	- 29	C-18	PB
5.00	50.0	60.8(73Hz)	3990	407	26000	2650	30	- 6185	- AV	- 35	C-18	PB
4.07	40.7	40.7(60Hz)	4900	500	39400	4020	30	- 6195	- AV	- 43	C-18	PB
2.97	29.7	29.7(60Hz)	6730	686	79200	8070	30	- 6205	- AV	- 59	C-19	PB
2.01	20.1	20.1(60Hz)	9920	1010	95700	9760	30	- 6225	- AV	- 87	C-19	PB
1.45	14.5	17.6(73Hz)	13100	1330	106000	10800	30	- 6225DB	- AV	- 121	C-23	PB
1.06	10.6	12.9(73Hz)	17800	1820	143000	14500	30	- 6235DB	- AV	- 165	C-23	PB
0.897	8.97	10.9(73Hz)	21100	2150	167000	17000	30	- 6245DB	- AV	- 195	C-23	PB
0.758	7.58	9.22(73Hz)	25000	2540	179000	18200	30	- 6245DB	- AV	- 231	C-23	PB
0.641	6.41	7.80(73Hz)	29500	3010	229000	23400	30	- 6255DA	- AV	- 273	C-23	PB

30kW

Gearmotor
(AF motors for inverter)

Output Speed n_2 r/min			Output Torque T_{out}		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
15.9	159	193(73Hz)	1710	174	18200	1850	40	- 6185	- AV	- 11	C-18	PB
13.5	135	164(73Hz)	2020	206	18800	1920	40	- 6185	- AV	- 13	C-18	PB
11.7	117	142(73Hz)	2330	238	19800	2020	40	- 6185	- AV	- 15	C-18	PB
10.3	103	125(73Hz)	2640	270	20800	2120	40	- 6185	- AV	- 17	C-18	PB
8.33	83.3	83.3(60Hz)	3270	333	22400	2280	40	- 6185	- AV	- 21	C-18	PB
7.00	70.0	70.0(60Hz)	3890	396	23100	2360	40	- 6185	- AV	- 25	C-18	PB
6.03	60.3	60.3(60Hz)	4510	460	34500	3520	40	- 6195	- AV	- 29	C-18	PB
5.55	55.5	55.5(60Hz)	4910	500	35800	3650	406	- 6190	- AV	- 21	C-18	PB
5.00	50.0	50.0(60Hz)	5440	555	36300	3700	40	- 6195	- AV	- 35	C-18	PB
4.07	40.7	40.7(60Hz)	6690	682	72600	7400	40	- 6205	- AV	- 43	C-19	PB
2.97	29.7	29.7(60Hz)	9180	935	80300	8180	40	- 6215	- AV	- 59	C-19	PB
2.71	27.1	27.1(60Hz)	10000	1020	83100	8480	406	- 6215	- AV	- 43	C-19	PB
1.97	19.7	19.7(60Hz)	13800	1410	119000	12200	406	- 6235	- AV	- 59	C-19	PB
1.45	14.5	17.6(73Hz)	17800	1820	133000	13500	40	- 6235DB	- AV	- 121	C-23	PB
1.06	10.6	12.9(73Hz)	24300	2480	158000	16100	40	- 6245DB	- AV	- 165	C-23	PB
0.897	8.97	10.9(73Hz)	28700	2930	204000	20800	40	- 6255DB	- AV	- 195	C-23	PB
0.758	7.58	9.22(73Hz)	34000	3470	265000	27000	40	- 6265DA	- AV	- 231	C-23	PB
0.641	6.41	7.80(73Hz)	40200	4100	276000	28100	40	- 6265DA	- AV	- 273	C-23	PB

Notes : 1. Output Speed $n_2 = n_1 / \text{Reduction Ratio}$.

2. Allowable Radial Load Pro is at the midpoint of the slow speed shaft. When the radial load is beyond the midpoint of slow speed shaft or when checking the thrust load, refer to pages E-9~14.

3. Marked models need operation conditions evaluated.(Amb temp, Load condition etc...)Please consult us.

37kW

Gearmotor
(AF motors for inverter)

Output Speed n ₂ r/min			Output Torque T _{out}		Allowable Radial Load Pro		Input capacity symbol	Frame Size	Suffix	Reduction Ratio	Page of Dimension Table	Lubrication Method
6Hz	60Hz	Allowable max speed (Horizontal)	60Hz(N·m)	60Hz(kgf·m)	60Hz(N)	60Hz(kgf)						
15.9	159	193(73Hz)	2110	215	25400	2590	50	- 6195	- AV	- 11	C-18	PB
13.5	135	164(73Hz)	2490	254	26400	2690	50	- 6195	- AV	- 13	C-18	PB
11.7	117	142(73Hz)	2880	293	27700	2820	50	- 6195	- AV	- 15	C-18	PB
10.3	103	125(73Hz)	3260	332	29100	2970	50	- 6195	- AV	- 17	C-18	PB
8.33	83.3	83.3(60Hz)	4030	411	31300	3190	50	- 6195	- AV	- 21	C-18	PB
7.77	77.7	77.7(60Hz)	4320	441	31300	3190	506	- 6190	- AV	- 15	C-18	PB
7.00	70.0	70.0(60Hz)	4800	489	32700	3330	50	- 6195	- AV	- 25	C-18	PB
6.03	60.3	60.3(60Hz)	5560	567	34200	3490	50	- 6195	- AV	- 29	C-18	PB
5.55	55.5	55.5(60Hz)	6050	617	35500	3610	506	- 6195	- AV	- 21	C-18	PB
4.07	40.7	40.7(60Hz)	8250	841	73800	7520	50	- 6215	- AV	- 43	C-19	PB
2.97	29.7	29.7(60Hz)	11300	1150	84700	8630	50	- 6225	- AV	- 59	C-19	PB
2.71	27.1	27.1(60Hz)	12400	1260	87700	8940	506	- 6225	- AV	- 43	C-19	PB
1.97	19.7	19.7(60Hz)	17000	1730	133000	13500	506	- 6245	- AV	- 59	C-19	PB
1.45	14.5	17.6(73Hz)	22000	2240	180000	18400	50	- 6255DB	- AV	- 121	C-23	PB
1.06	10.6	12.9(73Hz)	30000	3060	194000	19800	50	- 6255DB	- AV	- 165	C-23	PB
0.897	8.97	10.9(73Hz)	35400	3610	248000	25300	50	- 6265DA	- AV	- 195	C-23	PB
0.758	7.58	9.22(73Hz)	42000	4280	265000	27000	50	- 6265DA	- AV	- 231	C-23	PB

22 ~ 37kW

Notes : 4. Lubrication Method MF: Maintenance-free grease lubrication G: Grease lubrication PB: Oil bath lubrication P: Forced oil lubrication

TP: Positive displacement pump lubrication

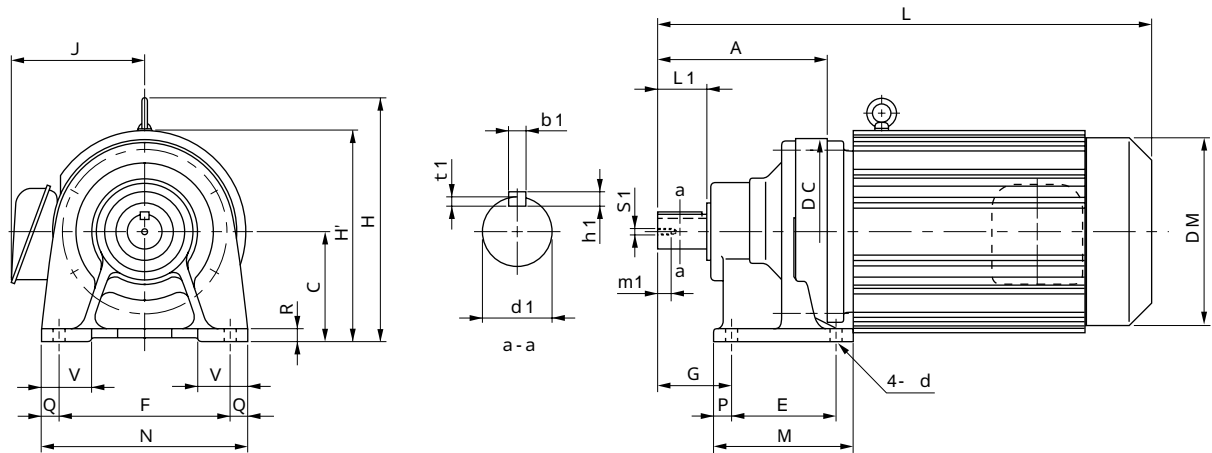
5. CNHM, CHHM are TYPE designations. Detail is shown on page C-3.

6. Please refer to page C-6 when not operated 6 to 60Hz.

7. For vertical type, please consult us on lubrication method.

DIMENSION TABLE

CNHMI- 606 ~ 612 - AV



CNHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
606	92	80	110	60	120	41	84	144	12	12	10	35	9	14	25	5	5	3	M5	16
607	98	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
608	129	90	134	75	120	52	99	144	12	12	13	37	9	22	35	6	6	3.5	M6	16
609	142	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610	156	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
611	170	120	162	90	150	70	135	180	15	15	12	45	11	32	45	10	8	5	M8	20
612	186	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model	Motor		Standard									With Brake					
	kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)			
CNHM01 - 606 - AV - (B) - Ratio	0.1	4	268	-	138	85	124	7	300	-	138	85	124	8			
CNHM02 - 606 - AV - (B) - Ratio	0.2	4	288	-	138	85	124	8	320	-	138	85	124	9			
CNHM01 - 607 - AV - (B) - Ratio	0.1	4	274	-	138	85	124	7	306	-	138	85	124	8			
CNHM02 - 607 - AV - (B) - Ratio	0.2	4	294	-	138	85	124	8	326	-	138	85	124	9			
CNHM01 - 608 - AV - (B) - Ratio	0.1	4	300	-	157	85	124	10	332	-	157	85	124	11			
CNHM02 - 608 - AV - (B) - Ratio	0.2	4	320	-	157	85	124	12	352	-	157	85	124	13			
CNHM05 - 608 - AV - (B) - Ratio	0.4	4	361	203	-	114	148	16	404	203	-	114	148	17			
CNHM02 - 609 - AV - (B) - Ratio	0.2	4	338	-	175	85	124	13	370	-	175	85	124	15			
CNHM05 - 609 - AV - (B) - Ratio	0.4	4	379	213	-	114	148	17	422	213	-	114	148	20			
CNHM1 - 609 - AV - (B) - Ratio	0.75	4	412	220	-	119	160	20	474	220	-	119	160	25			
CNHM02 - 610 - AV - (B) - Ratio	0.2	4	352	207	-	85	124	18	384	207	-	85	124	20			
CNHM05 - 610 - AV - (B) - Ratio	0.4	4	393	213	-	114	148	22	436	213	-	114	148	25			
CNHM1 - 610 - AV - (B) - Ratio	0.75	4	426	220	-	119	160	26	488	220	-	119	160	31			
CNHM2 - 610 - AV - (B) - Ratio	1.5	4	446	226	-	126	173	30	509	226	-	126	173	36			
CNHM1 - 611 - AV - (B) - Ratio	0.75	4	436	240	-	119	160	25	493	240	-	119	160	30			
CNHM2 - 611 - AV - (B) - Ratio	1.5	4	456	246	-	126	173	29	519	246	-	126	173	35			
CNHM3 - 611 - AV - (B) - Ratio	2.2	4	491	266	-	147	212	39	563	266	-	147	212	49			
CNHM2 - 612 - AV - (B) - Ratio	1.5	4	476	246	-	126	173	39	539	246	-	126	173	46			
CNHM3 - 612 - AV - (B) - Ratio	2.2	4	499	266	-	147	212	49	571	266	-	147	212	59			
CNHM5 - 612 - AV - (B) - Ratio	3.7	4	543	266	-	147	212	56	615	266	-	147	212	66			

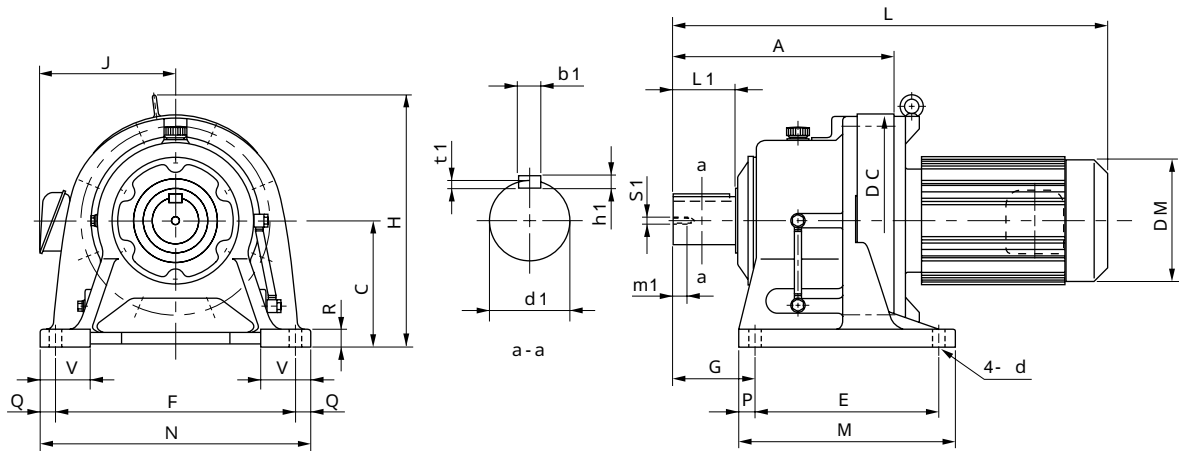
Notes : 1. Motor capacity symbol is inserted in [].

2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 " .

3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note 1} - 613 ~ 616 - AV



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
613	240	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614	260	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
616	308	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18

Model	Notes 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM2 - 613 - AV - (B) - Ratio		1.5	4	530	274	126	173	57	593	274	126	173	64	
CHHM3 - 613 - AV - (B) - Ratio		2.2	4	553	296	147	212	67	625	296	147	212	77	
CHHM5 - 613 - AV - (B) - Ratio		3.7	4	597	296	147	212	74	669	296	147	212	84	
CHHM8 - 613 - AV - (B) - Ratio		5.5	4	620	323	188	251	89	715	323	188	251	107	
CHHM10 - 613 - AV - (B) - Ratio		7.5	4	680	323	188	251	102	775	323	188	251	120	
CHHM15 - 613 - AV - (B) - Ratio		11	4	770	358	232	324	154	875	321	259	324	188	
CHHM3 - 614 - AV - (B) - Ratio		2.2	4	573	296	147	212	68	645	296	147	212	78	
CHHM5 - 614 - AV - (B) - Ratio		3.7	4	617	296	147	212	75	689	296	147	212	85	
CHHM8 - 614 - AV - (B) - Ratio		5.5	4	640	323	188	251	90	735	323	188	251	108	
CHHM10 - 614 - AV - (B) - Ratio		7.5	4	700	323	188	251	103	795	323	188	251	121	
CHHM15 - 614 - AV - (B) - Ratio		11	4	790	358	232	324	155	895	321	259	324	189	
CHHM3 - 616 - AV - (B) - Ratio		2.2	4	621	310	147	212	105	693	310	147	212	115	
CHHM5 - 616 - AV - (B) - Ratio		3.7	4	665	310	147	212	112	737	310	147	212	122	
CHHM8 - 616 - AV - (B) - Ratio		5.5	4	693	333	188	251	128	788	333	188	251	145	
CHHM10 - 616 - AV - (B) - Ratio		7.5	4	753	333	188	251	142	848	333	188	251	159	
CHHM15 - 616 - AV - (B) - Ratio		11	4	838	368	232	324	195	943	368	259	324	229	
CHHM20 - 616 - AV - (B) - Ratio		15	4	933	368	297	394	267	1098	368	297	394	318	

marked models motor extends beneath the reducer base. Center height option is prepared, please refer page C-24, C-25.

Notes : 4. The dimensions in these drawings are subject to change without notice.

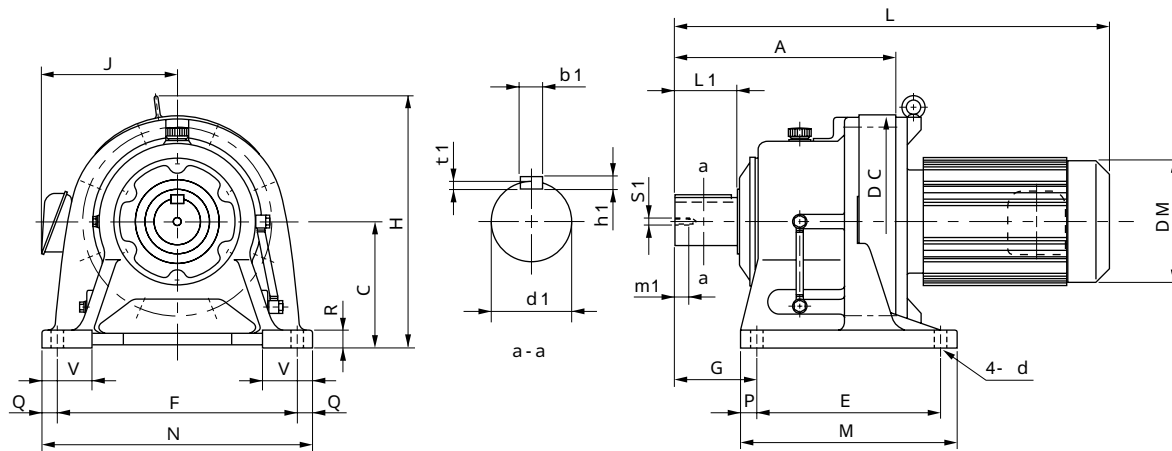
5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

6. When equipped with brake, " B "is inserted following the frame size.

7. Dimension of shaft end : Refer to the page E-27 for details.

Note 1

DIMENSION TABLE CHHM□- 617 ~ 619 - AV



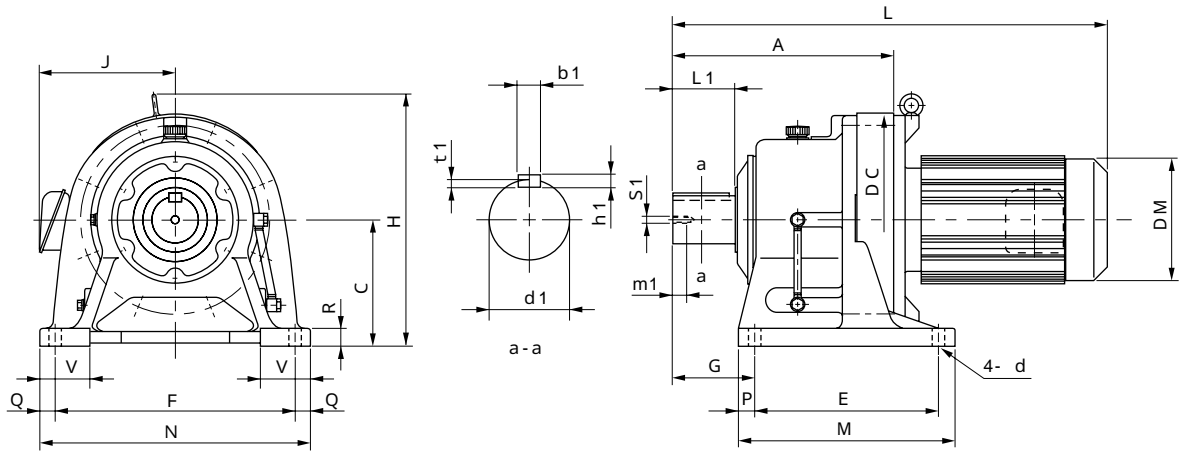
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
617	352	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618	389	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619	465	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model	Motor		Standard					With Brake					
	Notes 5, 6	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM8 - 617 - AV - (B) - Ratio		5.5	4	742	403	188	251	168	837	403	188	251	186
CHHM10 - 617 - AV - (B) - Ratio		7.5	4	802	403	188	251	182	897	403	188	251	200
CHHM15 - 617 - AV - (B) - Ratio		11	4	882	413	232	324	236	987	413	259	324	270
CHHM20 - 617 - AV - (B) - Ratio		15	4	977	428	297	394	304	1142	428	297	394	355
CHHM25 - 617 - AV - (B) - Ratio		18.5	4	977	428	297	394	304	1142	428	297	394	355
CHHM30 - 617 - AV - (B) - Ratio		22	4	977	428	297	394	321	1142	428	297	394	364
CHHM10 - 618 - AV - (B) - Ratio		7.5	4	839	438	188	251	220	934	438	188	251	238
CHHM15 - 618 - AV - (B) - Ratio		11	4	919	438	232	324	280	1024	438	259	324	309
CHHM20 - 618 - AV - (B) - Ratio		15	4	1014	448	297	394	342	1179	448	297	394	393
CHHM25 - 618 - AV - (B) - Ratio		18.5	4	1014	448	297	394	342	1179	448	297	394	393
CHHM30 - 618 - AV - (B) - Ratio		22	4	1014	448	297	394	359	1179	448	297	394	402
CHHM40 - 618 - AV - (B) - Ratio		30	4	1129	481	297	394	407	1344	481	297	394	504
CHHM15 - 619 - AV - (B) - Ratio		11	4	995	467	232	324	345	1100	467	259	324	380
CHHM20 - 619 - AV - (B) - Ratio		15	4	1090	511	297	394	417	1255	511	297	394	462
CHHM25 - 619 - AV - (B) - Ratio		18.5	4	1090	511	297	394	417	1255	511	297	394	462
CHHM30 - 619 - AV - (B) - Ratio		22	4	1090	511	297	394	432	1255	511	297	394	475
CHHM40 - 619 - AV - (B) - Ratio		30	4	1205	511	297	394	470	1420	511	297	394	567
CHHM406 - 619 - AV - (B) - Ratio		30	6	1205	511	297	394	470	1420	511	297	394	567
CHHM50 - 619 - AV - (B) - Ratio		37	4	1205	511	297	394	470	1420	511	297	394	567
CHHM506 - 619 - AV - (B) - Ratio		37	6	1205	511	297	394	470	1420	511	297	394	567

Notes : 1. Motor capacity symbol is inserted in □.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note 1}I- 6205 ~ 6255 - AV



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6205	502	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215	526	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6225	566	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6235	628	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6245	657	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255	775	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49

Model	Motor		Standard						With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM20 - 6205 - AV - (B) - Ratio	15	4	1127	530	297	394	438	1292	530	297	394	483	
CHHM30 - 6205 - AV - (B) - Ratio	22	4	1127	530	297	394	451	1292	530	297	394	496	
CHHM40 - 6205 - AV - (B) - Ratio	30	4	1242	530	297	394	489	1457	530	297	394	583	
CHHM25 - 6215 - AV - (B) - Ratio	18.5	4	1151	575	297	394	515	1316	575	297	394	560	
CHHM40 - 6215 - AV - (B) - Ratio	30	4	1266	575	297	394	566	1481	575	297	394	661	
CHHM406 - 6215 - AV - (B) - Ratio	30	6	1266	575	297	394	566	1481	575	297	394	661	
CHHM50 - 6215 - AV - (B) - Ratio	37	4	1266	575	297	394	566	1481	575	297	394	661	
CHHM30 - 6225 - AV - (B) - Ratio	22	4	1191	610	297	394	613	1401	610	297	394	658	
CHHM50 - 6225 - AV - (B) - Ratio	37	4	1306	610	297	394	651	1521	610	297	394	746	
CHHM406 - 6235 - AV - (B) - Ratio	30	6	1368	667	297	394	744	1583	667	297	394	832	
CHHM506 - 6245 - AV - (B) - Ratio	37	6	1452	729	412	484	956	-	-	-	-	-	
CHHM506 - 6255 - AV - (B) - Ratio	37	6	1570	815	412	484	1275	-	-	-	-	-	

Notes : 4. The dimensions in these drawings are subject to change without notice.

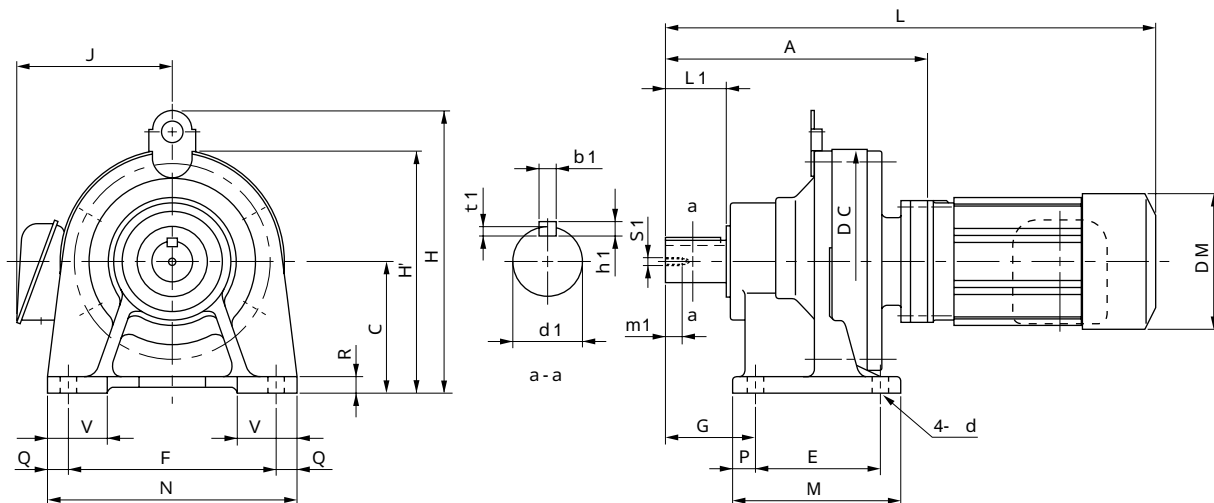
5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.

6. When equipped with brake, " B "is inserted following the frame size.

7. Dimension of shaft end : Refer to the page E-27 for details.

Note 1

DIMENSION TABLE CNHMI- 607 DA ~ 612 DB - AV



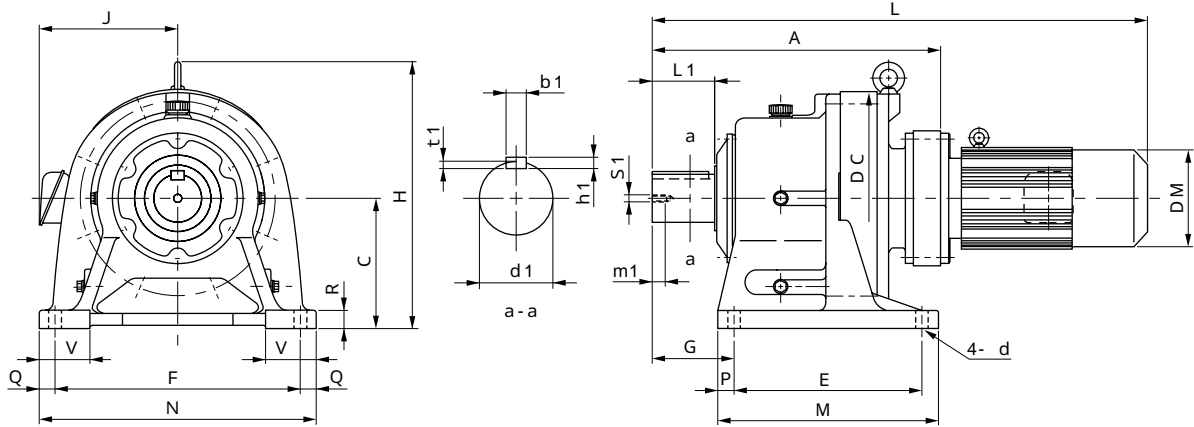
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
607 DA	131	80	110	60	120	47	84	144	12	12	10	35	9	18	30	6	6	3.5	M6	16
609 DA	190	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
610 DA	204	100	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612 DB	252	120	204	115	190	82	155	230	20	20	15	55	14	38	55	10	8	5	M8	20

Model	Notes 5, 6	Motor		Standard							With Brake					
		kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)	
CNHM01 - 607 DA - AV -(B)- Ratio		0.1	4	307	-	140	85	124	9	339	-	138	85	124	10	
CNHM01 - 609 DA - AV -(B)- Ratio		0.1	4	366	207	-	85	124	17	398	207	-	85	124	18	
CNHM02 - 609 DA - AV -(B)- Ratio		0.2	4	386	207	-	85	124	18	418	207	-	85	124	19	
CNHM02 - 610 DA - AV -(B)- Ratio		0.2	4	400	207	-	85	124	20	432	207	-	85	124	21	
CNHM05 - 612 DB - AV -(B)- Ratio		0.4	4	489	257	-	114	148	38	532	257	-	114	148	41	
CNHM1 - 612 DB - AV -(B)- Ratio		0.75	4	516	257	-	119	160	41	578	257	-	119	160	46	

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note 1}- 613 DB ~ 616 DB - AV



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft <small>Notes 2, 3, 7</small>						
														d1	L1	b1	h1	t1	S1	m1
613 DB	303	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
613 DC	317	150	230	145	290	100	195	330	25	20	22	65	18	50	70	14	9	5.5	M10	18
614 DB	323	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
614 DC	337	150	230	145	290	120	195	330	25	20	22	65	18	50	90	14	9	5.5	M10	18
616 DB	387	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18

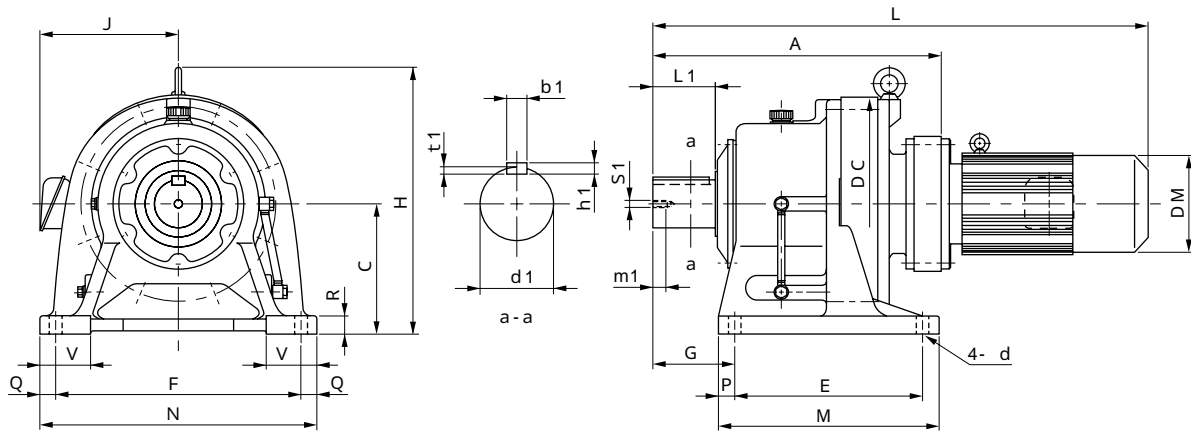
Model <small>Notes 5, 6</small>	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM1 - 613 DB - AV - (B) - Ratio	0.75	4	573	270	119	160	56	635	270	119	160	61
CHHM2 - 613 DC - AV - (B) - Ratio	1.5	4	607	276	126	173	63	670	276	126	173	69
CHHM1 - 614 DB - AV - (B) - Ratio	0.75	4	593	270	119	160	56	655	270	119	160	61
CHHM2 - 614 DC - AV - (B) - Ratio	1.5	4	627	276	126	173	63	690	276	126	173	69
CHHM2 - 616 DB - AV - (B) - Ratio	1.5	4	677	349	126	173	104	740	349	126	173	110

CHHM

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27 for details.

Note 1

DIMENSION TABLE CHHM□- 616 DC ~ 619 DB - AV



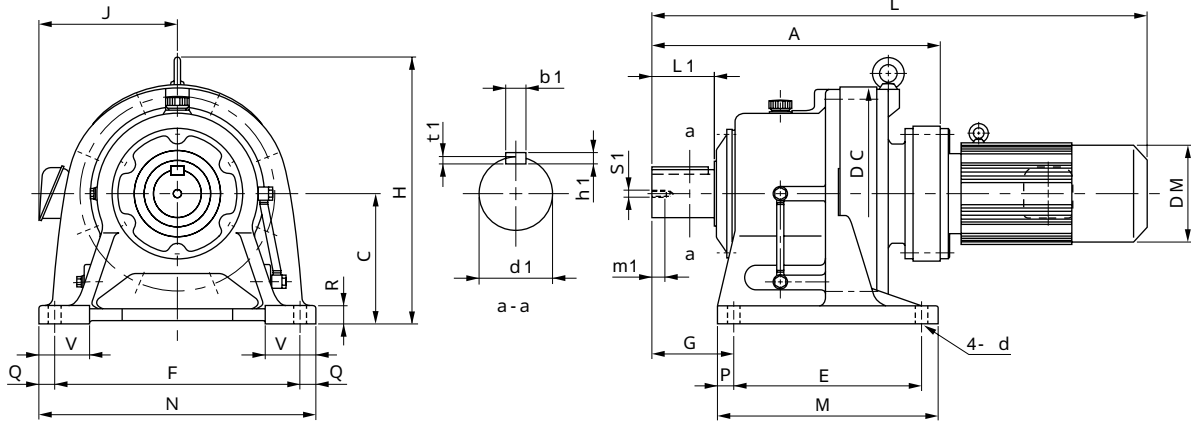
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
616 DC	389	160	300	150	370	139	238	410	44	20	25	75	18	60	90	18	11	7	M10	18
617 DC	436	200	340	275	380	125	335	430	30	25	30	80	22	70	90	20	12	7.5	M12	24
618 DB	496	220	370	320	420	145	380	470	30	25	30	85	22	80	110	22	14	9	M12	24
619 DB	572	250	430	380	480	170	440	530	30	25	35	90	26	95	135	25	14	9	M20	34

Model	Motor		Standard					With Brake				
	kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM3 - 616 DC - AV -(B)- Ratio	2.2	4	702	349	147	212	120	774	349	147	212	130
CHHM5 - 616 DC - AV -(B)- Ratio	3.7	4	746	349	147	212	127	818	349	147	212	137
CHHM3 - 617 DC - AV -(B)- Ratio	2.2	4	749	416	147	212	154	821	416	147	212	164
CHHM5 - 617 DC - AV -(B)- Ratio	3.7	4	793	416	147	212	161	865	416	147	212	171
CHHM5 - 618 DB - AV -(B)- Ratio	3.7	4	853	451	147	212	213	925	451	147	212	223
CHHM8 - 618 DB - AV -(B)- Ratio	5.5	4	876	451	188	251	228	971	451	188	251	246
CHHM10 - 618 DB - AV -(B)- Ratio	7.5	4	936	451	188	251	242	1031	451	188	251	260
CHHM8 - 619 DB - AV -(B)- Ratio	5.5	4	952	531	188	251	296	1047	531	188	251	314
CHHM10 - 619 DB - AV -(B)- Ratio	7.5	4	1012	531	188	251	310	1107	531	188	251	328
CHHM15 - 619 DB - AV -(B)- Ratio	11	4	1102	531	232	324	362	1207	531	259	324	396

Notes : 1. Motor capacity symbol is inserted in □.
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note 1} - 6205DB ~ 6265DA - AV



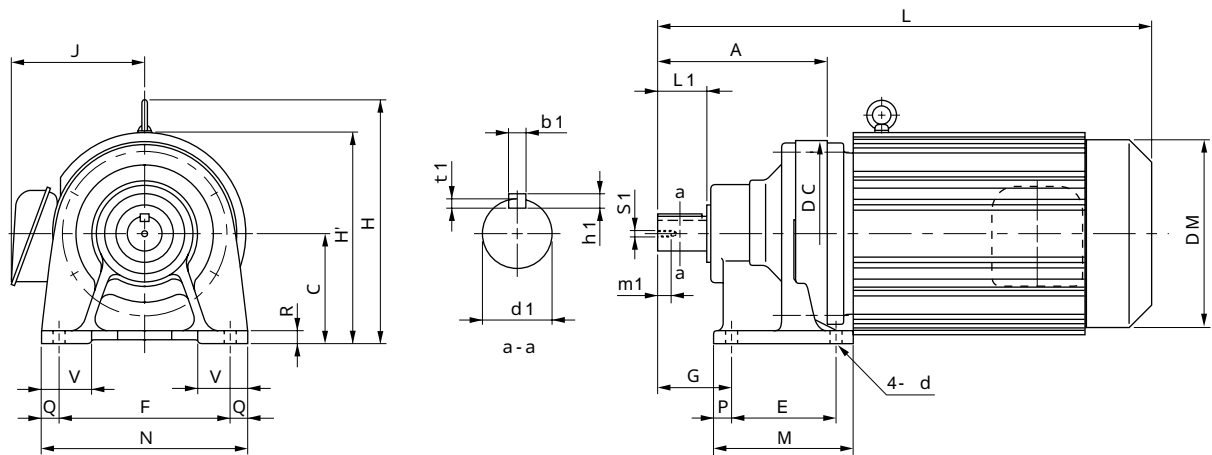
CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
6205DB	624	250	448	360	440	215	440	530	40	45	35	100	26	100	165	28	16	10	M20	34
6215DA	650	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6215DB	675	265	485	395	480	210	475	580	40	50	40	110	26	110	165	28	16	10	M20	34
6225DA	692	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6225DB	735	280	526	420	540	230	520	620	50	40	40	115	33	120	165	32	18	11	M20	34
6235DA	778	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6235DB	800	300	562	460	580	260	560	670	50	45	45	120	33	130	200	32	18	11	M24	41
6245DA	816	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6245DB	837	335	614	480	630	263	580	720	50	45	45	128	39	140	200	36	20	12	M24	41
6255DA	956	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6255DB	978	375	670	520	670	320	630	780	55	55	50	140	39	160	240	40	22	13	M30	49
6265DA	1088	400	736	590	770	390	700	880	55	55	55	160	45	170	300	40	22	13	M30	49

Model	Notes 5, 6	Motor		Standard					With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)
CHHM10 - 6205DB - AV - (B) - Ratio		7.5	4	1064	530	188	251	333	1159	530	188	251	351
CHHM15 - 6205DB - AV - (B) - Ratio		11	4	1154	530	232	324	385	1249	530	259	324	418
CHHM10 - 6215DA - AV - (B) - Ratio		7.5	4	1090	575	188	251	414	1185	575	188	251	432
CHHM15 - 6215DA - AV - (B) - Ratio		11	4	1180	575	232	324	466	1285	575	259	324	500
CHHM20 - 6215DB - AV - (B) - Ratio		15	4	1300	575	297	394	559	1465	575	297	394	610
CHHM15 - 6225DA - AV - (B) - Ratio		11	4	1222	610	232	324	541	1327	610	259	324	575
CHHM20 - 6225DB - AV - (B) - Ratio		15	4	1360	610	297	394	656	1525	610	297	394	707
CHHM25 - 6225DB - AV - (B) - Ratio		18.5	4	1360	610	297	394	656	1525	610	297	394	707
CHHM30 - 6225DB - AV - (B) - Ratio		22	4	1360	610	297	394	673	1525	610	297	394	724
CHHM20 - 6235DA - AV - (B) - Ratio		15	4	1403	667	297	394	732	1568	667	297	394	783
CHHM25 - 6235DB - AV - (B) - Ratio		18.5	4	1425	667	297	394	777	1590	667	297	394	820
CHHM30 - 6235DB - AV - (B) - Ratio		22	4	1425	667	297	394	777	1590	667	297	394	820
CHHM40 - 6235DB - AV - (B) - Ratio		30	4	1540	667	297	394	815	1755	667	297	394	912
CHHM20 - 6245DA - AV - (B) - Ratio		15	4	1441	729	297	394	835	1606	729	297	394	886
CHHM25 - 6245DB - AV - (B) - Ratio		18.5	4	1462	729	297	394	861	1627	729	297	394	912
CHHM30 - 6245DB - AV - (B) - Ratio		22	4	1462	729	297	394	878	1627	729	297	394	921
CHHM40 - 6245DB - AV - (B) - Ratio		30	4	1577	729	297	394	930	1792	729	297	394	1027
CHHM30 - 6255DA - AV - (B) - Ratio		22	4	1581	815	297	394	1210	1746	815	297	394	1253
CHHM40 - 6255DB - AV - (B) - Ratio		30	4	1718	815	297	394	1318	1928	815	297	394	1415
CHHM50 - 6255DB - AV - (B) - Ratio		37	4	1718	815	297	394	1318	1928	815	297	394	1415
CHHM40 - 6265DA - AV - (B) - Ratio		30	4	1828	874	297	394	1570	2043	874	297	394	1667
CHHM50 - 6265DA - AV - (B) - Ratio		37	4	1828	874	297	394	1570	2043	874	297	394	1667

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27 for details.

Note 1

DIMENSION TABLE CNHML- 610H, 612H - AV Center Height Option



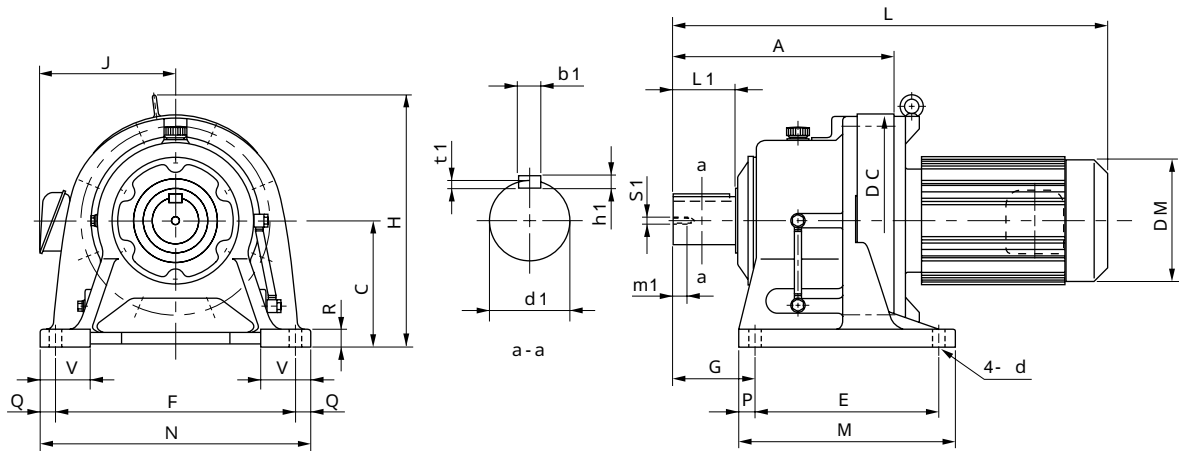
CNHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
610H	156	120	150	90	150	60	135	180	15	15	12	40	11	28	35	8	7	4	M8	20
612H	186	140	204	115	190	82	155	230	20	20	15	60	14	38	55	10	8	5	M8	20

Model	Notes 5, 6	Motor		Standard							With Brake					
		kW	P	L	H	H'	J	DM	W(kg)	L	H	H'	J	DM	W(kg)	
CNHM02 - 610H - (B) - Ratio		0.2	4	352	227	-	85	124	19	384	227	-	85	124	21	
CNHM05 - 610H - (B) - Ratio		0.4	4	393	233	-	114	148	23	436	233	-	114	148	26	
CNHM1 - 610H - (B) - Ratio		0.75	4	426	240	-	119	160	27	488	240	-	119	160	32	
CNHM2 - 610H - (B) - Ratio		1.5	4	446	246	-	126	173	31	509	246	-	126	173	37	
CNHM2 - 612H - (B) - Ratio		1.5	4	476	266	-	126	173	40	539	266	-	126	173	47	
CNHM3 - 612H - (B) - Ratio		2.2	4	499	286	-	147	212	50	571	286	-	147	212	60	
CNHM5 - 612H - (B) - Ratio		3.7	4	543	286	-	147	212	57	615	286	-	147	212	67	

Notes : 1. Motor capacity symbol is inserted in [].
 2. Dimension of shaft end diameter : Dimension tolerance in accordance with JIS B 0401-1976 " h6 ".
 3. Dimension of shaft end key : Parallel key in accordance with JIS B 1301-1976.

DIMENSION TABLE

CHHM^{Note 1} - 614H, 616H - AV Center Height Option



CHHM	A	C	DC	E	F	G	M	N	P	Q	R	V	d	Output Shaft						
														d1	L1	b1	h1	t1	S1	m1
614H	260	160	230	145	290	120	195	330	25	20	22	70	18	50	90	14	9	5.5	M10	18
616H	308	200	300	150	370	139	238	410	44	20	25	80	18	60	90	18	11	7	M10	18

Model	Notes 5, 6	Motor		Standard						With Brake				
		kW	P	L	H	J	DM	W(kg)	L	H	J	DM	W(kg)	
CHHM3 - 614H - (B) - Ratio		2.2	4	573	306	147	212	70	645	306	147	212	80	
CHHM5 - 614H - (B) - Ratio		3.7	4	617	306	147	212	77	689	306	147	212	87	
CHHM8 - 614H - (B) - Ratio		5.5	4	640	333	188	251	92	735	333	188	251	110	
CHHM10 - 614H - (B) - Ratio		7.5	4	700	333	188	251	106	795	333	188	251	124	
CHHM15 - 614H - (B) - Ratio		11	4	790	368	232	324	158	895	368	259	324	192	
CHHM3 - 616H - (B) - Ratio		2.2	4	621	350	147	212	110	693	350	147	212	120	
CHHM5 - 616H - (B) - Ratio		3.7	4	665	350	147	212	117	737	350	147	212	127	
CHHM8 - 616H - (B) - Ratio		5.5	4	693	373	188	251	133	788	373	188	251	150	
CHHM10 - 616H - (B) - Ratio		7.5	4	753	373	188	251	147	848	373	188	251	164	
CHHM15 - 616H - (B) - Ratio		11	4	838	408	232	324	200	943	408	259	324	234	
CHHM20 - 616H - (B) - Ratio		15	4	933	408	297	394	272	1098	408	297	394	323	

marked models motor extends beneath the reducer base.

- Notes : 4. The dimensions in these drawings are subject to change without notice.
 5. 0 or 5 is inserted in by combination with reduction ratio. Refer to the selection list for details.
 6. When equipped with brake, " B "is inserted following the frame size.
 7. Dimension of shaft end : Refer to the page E-27 for details.

CNHM/CHHM

HIGH EFFICIENCY MOTORS



High-Efficiency Motor

Energy-saving motor conforming to E Pact (U.S.), NRCan (Canada)

Energy-Saving

In order to prevent "Global Warming", measures to control carbon dioxide and other greenhouse effect gases discharged into the atmosphere have been addressed on a global scale. Various countries have instituted energy conservation laws to reduce power consumption at factories and offices.

To meet such requirements, Sumitomo Heavy Industries, Ltd has developed high-efficiency motors.

Features of High Efficiency Motors

Conforming to high-efficiency regulations and standards

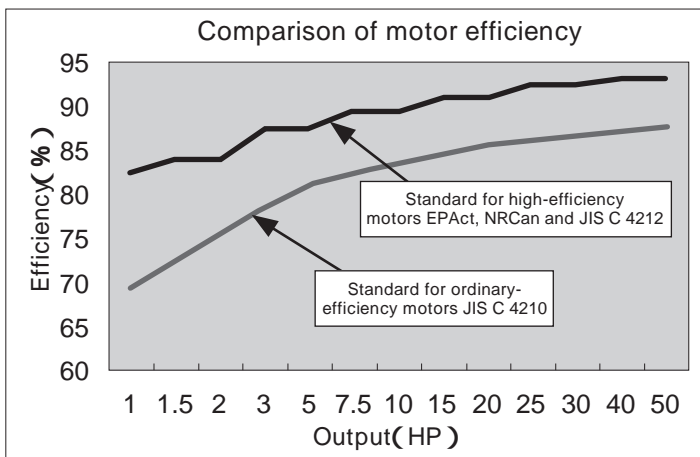
Our motors meet the high-efficiency specifications and requirements for energy-saving motors demanded in the U.S. (E Pact) and Canada (NRCan).

Conforming to international standards

Our motors have passed the tests conducted in conformity with the UL and CSA standards

High-efficiency gearmotors

Combination with various speed reducers is possible.



Notes : E Pact : Energy Policy Act of 1992 (USA)
 NRCan : Canada's Energy Efficiency Act and Energy Efficiency Regulations by Natural Resources Canada (NRCan)

High-Efficiency Regulations and Standards

1. High-efficiency regulations

- U.S. Based on the Energy Policy Act (E Pact) that came into effect in the U.S. in 1992, motors and other products with built-in motors to be sold in the U.S. later than October 24, 1997 are subject to the regulations. Penal regulations apply to motors that fail to satisfy the energy efficiency standards. (Capacity: 1-200 HP; voltage: 230 & 460 V; commercial power supply) However, gearmotors are excluded at present. In view of the situation in Canada, regulations may apply to gearmotors as well in the future.
- Canada Natural Resources Canada (NRCan) enacted the Energy Efficiency Act (EEAct) in 1992 and the Energy Efficiency Regulations (EER) in 1995. These regulations have been applied to standard motors imported to Canada later than February 3, 1995. New regulations were added to gearmotors and explosion-proof motors to be imported later than November 27, 1999. Motors and gearmotors that fail to satisfy the efficiency standard cannot be imported. Accordingly, gearmotors shall also be of a high-efficiency type. (Capacity: 1-200 HP; frame: IEC 90 or larger; voltage: 600 V or less; constant-speed motor)
- Japan Law concerning the Rational Use of Energy (overall law promoting efficient use of energy and eliminating waste of energy) was enacted in 1977, and the notification, "Reduction of annual energy consumption at factories by 1% on average", was given in 1997. Furthermore, "Promotion of systematic energy-saving investment" and "Expansion of object factories and offices" were revised in April 1999. There is no regulation with regard to motors at present, but adoption of regulations is anticipated in accordance with the trends in foreign countries.

2. Standards

- UL Standards Safety standards required primarily in the U.S. The UL standards are the most general standards applied to motored machines in the U.S. and frequently quoted during negotiations for export of motored machines to the U.S. The UL standards are intended to ensure the safety of equipment, appliances, and materials in order to protect human life and assets from fire and other accidents. It is recommended to use these UL products in terms of the observance of the Product Liability (PL) Law, as well.
- CSA Standards ... Safety standards required in Canada. The CSA standards are voluntary standards developed spontaneously by members of the association. Most of the standards have been adopted officially as Canadian national standards, which are quoted in laws and ordinances by the federal government, state government, and other local authorities. The CSA standards adopted as the Canadian national standards have standard Nos. prefixed with "CAN" for discrimination. (Example: CAN/CSA C22.1)
- JIS The Japanese Industrial Standards for high-efficiency motors were enacted in July 2000, and issued "Low-voltage three-phase squirrel-cage high-efficiency induction motors, JIS C 4212" as technical data.

High-efficiency motor

Specifications for High-Efficiency Motors

Capacity range		1HP 0.75kW	1.5HP 1.1kW	2HP 1.5kW	3HP 2.2kW	5HP 3.7kW	7.5HP 5.5kW	10HP 7.5kW	15HP 11kW	20HP 15kW	25HP 18.5kW	30HP 22kW	40HP 30kW	50HP 37kW
Number of phases / poles		3-phase ; 4-pole												
Power supply		For various specifications												
Housing structure		Totally enclosed fan-cooled type												
Time rating		Continuous												
Japanese standards		Conforming to JIS C 4212, High-Efficiency motor standards												
International standards		UL / CSA standards												
Optional specifications		For various flanges and brakes												
Minimum efficiency standards value	EPAct	82.5%	84.0%	84.0%	87.5%	87.5%	89.5%	89.5%	91.0%	91.0%	92.4%	92.4%	93.0%	93.0%
	NPCan													

Note : Contact us for the specifications and price of high-efficiency motors.

Applications have been made for the qualifications of international standards concerning 15-50 HP.

Energy-Saving Effect

1. Calculation of annual electrical saving:

$$\text{Annual saving (JPY/yr)} = \text{Difference between standard and high-efficiency motors (kw)} \times \text{Operating hours (h/yr)} \times \text{Electricity rate (JPY/kwh)}$$

2. Calculation of period to recover the price difference of a high-efficiency motor:

$$\text{Recovery period (yr)} = \left(\text{Price of high-efficiency motor (JPY)} - \text{Price of standard motor (JPY)} \right) / \text{Annual electricity saving (JPY/yr)}$$

3. Example

A standard motor replaced with a high-efficiency motor under

the following conditions : 4-pole; 3HP; 230 V / 60Hz;

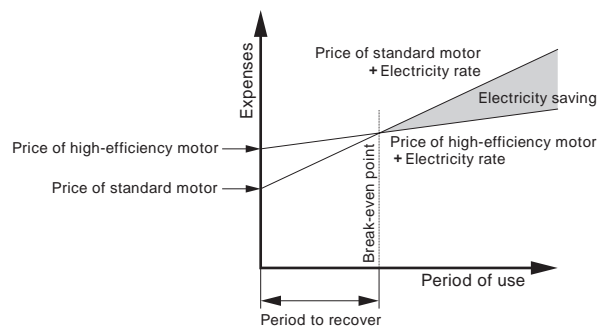
load factor : 100%; annual operation time : 4,000 h/yr;

electricity rate; JPY17/kwh

Annual saving (JPY/yr)

$$= \left(\frac{100}{84.4} - \frac{100}{87.5} \right) \times 2.2 \text{ [kW]} \times 4,000 \text{ [h / yr]} \times \text{JPY}17 \text{ / [kwh]}$$

$$= \text{JPY}6,200 \text{ / yr}$$



Economy of a high-efficiency motor

High-efficiency motor

GEARMOTOR E SERIES
LOW REDUCTION RATIO $1/3 \sim 1/10$



Gearmotor E Series

Low Reduction Ratio 1/3 ~ 1/10

The products of page D-6 ~ D-7 are not certified by ISO 9001 and ISO 14001.

1. Characteristics

Smooth, Silent Operation

An innovative, reduced noise design and advanced manufacturing techniques result in a low vibration, quiet and smooth-running motor.

Compact-Sized Yet High-Performance

A balanced design providing high performance in a compact package is the result of Sumitomo's expertise in the use of advanced technology.

Longer Service Interval

Long-life grease has been packed in the gear assembly, allowing operation for a longer period of time without frequent grease replenishment.



Standard Product Range.

Power	1/3	1/4	1/5	1/6	1/8	1/10
0.1kW	Frame E10		Shaft diameter		18	
0.2kW	Frame E10		Shaft diameter		18	
0.4kW	Frame E20		Shaft diameter		18	
0.75kW	Frame E30		Shaft diameter		22	
1.5kW	Frame E40		Shaft diameter		24	
2.2kW	Frame E50		Shaft diameter		32	
3.7kW	Frame E60		Shaft diameter		38	
5.5kW	Frame E70		Shaft diameter		42	
7.5kW	Frame E80		Shaft diameter		48	
11kW	Frame E90		Shaft diameter		56	

2. Nomenclature

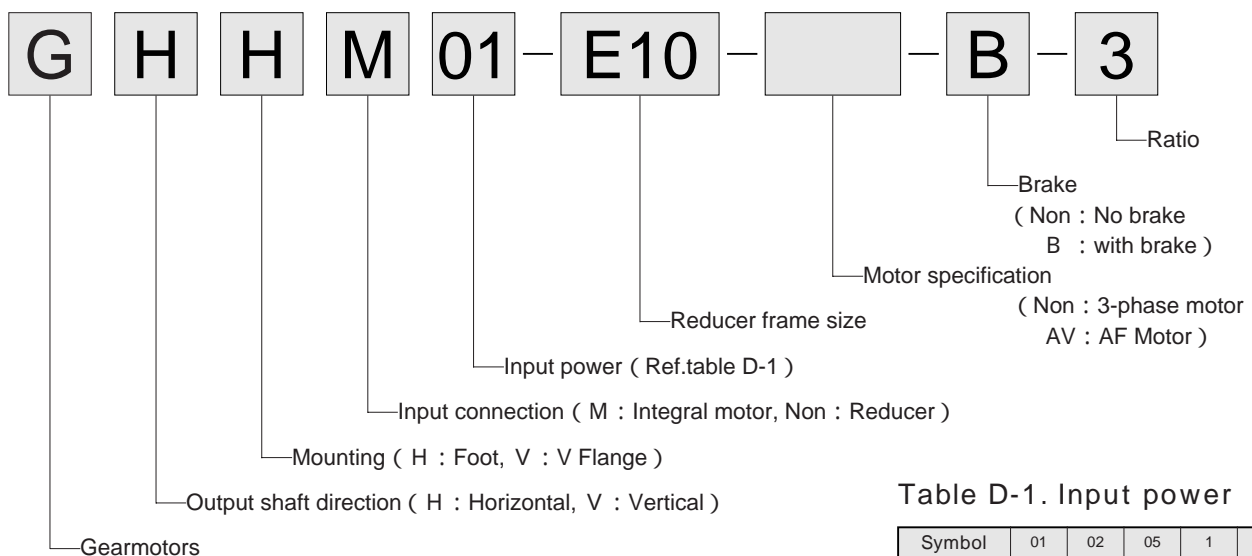
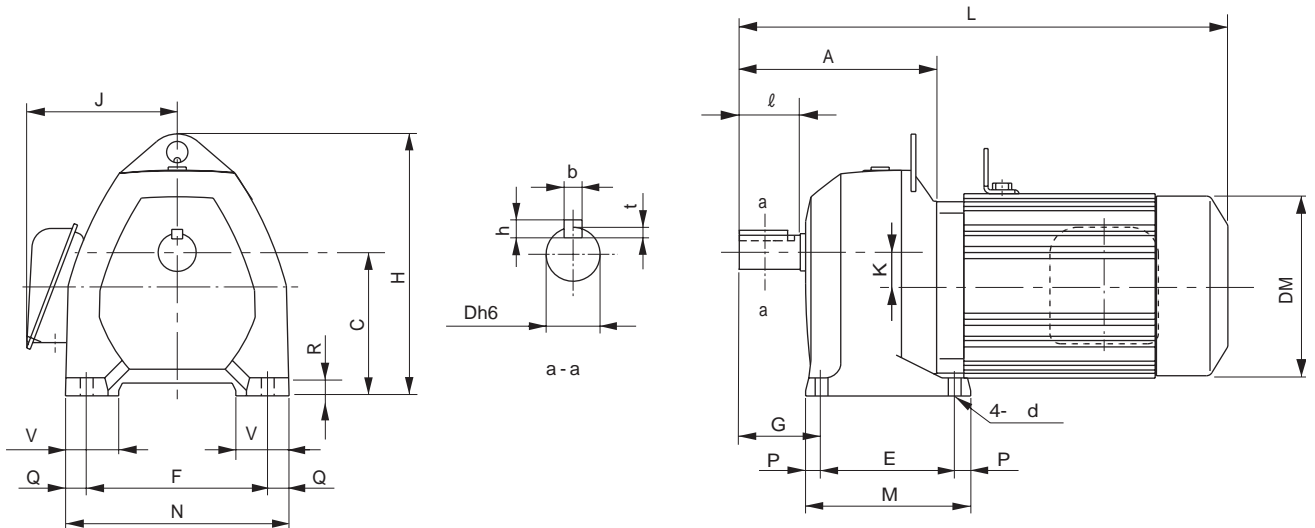


Table D-1. Input power

Symbol	01	02	05	1	2
kW × 4P	0.1	0.2	0.4	0.75	1.5

Symbol	3	5	8	10	15
kW × 4P	2.2	3.7	5.5	7.5	11

3. Dimensions



Frame	Input		Ratio	Dimensions													Output shaft dimensions							Mass (kg)		
	kW	P		A	C	E	F	G	K	M	N	P	Q	R	d	V	D	ℓ	b	h	t	L	H		J	DM
E10	0.1	4P	3 : 1	100	85	40	110	42	16.5	64	134	12	12	10	10	30	18	28	6	6	3.5	209	128	85	119	7
	0.2			100	85	40	110	42	16.5	64	134	12	12	10	10	30	18	28	6	6	3.5	251	128	85	124	7
E20	0.4		3 : 1	109	90	65	130	43.5	20	90	154	12.5	12	12	12	30	18	28	6	6	3.5	280	137	85	124	11
E30	0.75		4 : 1	132	105	75	130	54	22(24.5)	105	155	15	12.5	12	12	35	22	36	6	6	3.5	365	196	114	148	17
E40	1.5		5 : 1	149	120	90	140	54	26(28)	120	170	15	15	14	12	43	24	36	8	7	4	429	215	119	160	28
E50	2.2		6 : 1	186	135	125	170	78	33(35)	155	210	15	20	17	12	50	32	58	10	8	5	485	246	126	173	45
E60	3.7		8 : 1	197	150	140	190	83	34(37)	180	245	20	27.5	22	15	63	38	58	10	8	5	519	274	147	212	59
E70	5.5		10 : 1	243	180	160	220	107	42(51)	200	280	20	30	25	19	65	42	82	12	8	5	644	320	147	212	78
E80	7.5			260	200	195	270	107	52(55)	235	330	20	30	32	19	75	48	82	14	9	5.5	671	362	188	251	112
E90	11			282	225	215	300	112	55(63)	265	360	25	30	35	24	85	56	82	16	10	6	755	393	188	251	145

- Notes : 1. Values in the brackets() are for models with ratio 3 : 1
 2. Output shaft dimension : Tolerance is in accordance with JIS B 0401-1976 " h6 ".
 3. Dimensions of shaft end key are in accordance with JIS B 1301-1976 parallel key.
 4. The dimensions and the weights in this drawing subject to change without notice.

4. Lubrication

Reducers are sealed with long-life grease, replenishment is practically unnecessary, but overhaul in approximately 20,000 hours or 3-5 years of operation will provide longer service life.

TECHNICAL INFORMATION



REDUCER

Lubrication

1. Standard Type

Table E-1 Horizontal (Slow Speed Shaft Not Inclined)

a) Single Reduction

Reduction Ratio Frame Size	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119
6060 6065																
6070 6075																
6080 6085																
6090 6095																
6100 6105 610H																
6110 6115																
6120 6125 612H																
6130 6135	Oil Bath (PB)															
6140 6145 614H																
6160 6165 616H																
6170 6175																
6180 6185																
6190 6195																
6205																
6215																
6225																
6235																
6245																
6255																
6265																
6275																

b) Double Reduction

Reduction Ratio Frame Size	104	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1015	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569																														
6060DA 6065DA																																																									
6070DA 6075DA																																																									
6090DA 6095DA																																																									
6100DA 6105DA																																																									
6120DA 6120DB																																																									
6125DA 6125DB																																																									
6130DA 6135DA	Grease (G)																																																								
6130DB 6135DB																																																									
6130DC 6135DC																																																									
6140DA 6140DB																																																									
6140DC																																																									
6145DA 6145DB																																																									
6145DC																																																									
6160DA 6165DA																																																									
6160DB 6165DB																																																									
6170DA 6175DA																																																									
6170DB 6175DB																																																									
6180DA 6185DA	Oil Bath (PB)																																																								
6160DC 6165DC																																																									
6170DC 6175DC																																																									
6180DB 6185DB																																																									
6190DA 6195DA																																																									
6190DB 6195DB																																																									
6205DA 6205DB																														165																											
6215DA 6215DB																														121																											
6225DA 6225DB																																																									
6235DA 6235DB																																																									
6245DA 6245DB																																																									
6255DA 6255DB																																																									
6265DA																																																									
6275DA																	377																																								

Note : This table shows the standard lubrication method when the Cyclo Drive is driven at the standard input speed.

Table E-2 Vertical Type (Consult us in advance when the slow speed shaft direction is upward)
(Downward Slow Speed Shaft Direction)

a) Single Reduction

Reduction Ratio / Frame Size	6	8	11	13	15	17	21	25	29	35	43	51	59	71	87	119				
6060 6065																				
6070 6075												59								
6080 6085												87								
6090 6095	Maintenance-Free Type Grease (MF)																			
6100 6105																				
6110 6115																				
6120 6125																				
6130 6135																				
6140 6145																				
6160 6165																	Oil Bath (PB)			
6170 6175																				
6180 6185																				
6190 6195																				
6205	Forced Oil Lubrication (P)																			
6215																				
6225																				
6235																				
6245																				
6255																				
6265																				
6275																	TP	TP	TP	TP

TP : Positive Displacement Pump Lubrication (See Table E-3)

b) Double Reduction

Reduction Ratio / Frame Size	104	121	143	165	195	231	273	319	377	473	559	649	731	841	1003	1015	1247	1479	1849	2065	2537	3045	3481	4437	5133	6177	7569																			
6060DA 6065DA																																														
6070DA 6075DA																	2537																													
6090DA 6095DA																	5133																													
6100DA 6105DA	Maintenance-Free Type Grease (MF)																																													
6120DA 6120DB																																														
6125DA 6125DB																																														
6130DA 6135DA																																														
6130DB 6135DB																																														
6130DC 6135DC																																														
6140DA 6140DB																																														
6140DC																																														
6145DA 6145DB																																														
6145DC																																														
6160DA 6165DA	Grease (G)																																													
6160DB 6165DB																																														
6170DA 6175DA																																														
6170DB 6175DB																																														
6180DA 6185DA																																														
6160DC 6165DC																															473															
6170DC 6175DC																															841															
6180DB 6185DB																															1015															
6190DA 6195DA																															2065															
6190DB 6195DB																															1849															
6205DA 6205DB	165																Forced Oil Lubrication (P)																													
6215DA 6215DB	121																2537																													
6225DA 6225DB	(P)																																													
6235DA 6235DB																																														
6245DA 6245DB																																														
6255DA 6255DB																																														
6265DA																																														
6275DA																	TP : Positive Displacement Pump Lubrication (See Table E-3)																													

Note : This table shows the standard lubrication method when the Cyclo Drive is driven at the standard input speed.

Table E-3 Trochoid Pump Type

Cyclo Drive			Trochoid Pump					
Type	Frame Size	Reduction Ratio	Pump Type	Pump Motor	50 Hz Zone		60 Hz Zone	
					Discharge ℓ /min	Max. Pressure kg/cm ²	Discharge ℓ /min	Max. Pressure kg/cm ²
Vertical shaft	6275	29,43,59,87	TOP216HA-VB3	0.75 kW 4P	24.0	8	28.8	5.0
	6275DA	All reduction ratios	TOP204HA-VB3	0.4 kW 4P	6.0	16	7.2	11.5

Note : 1. Trochoid pump manufactured by Nippon Oil Pump Mfg. Ltd. used as the standard pump.
 2. A relief valve(Pressure set at 3 kgf/cm²) is a standard attachment in the trochoid pump.

LUBRICANTS

1. Grease Lubricated Models

The grease lubricated models shown in Table E-4 are packed with grease prior to shipment; they may be used without replenishment.

(i) Maintenance-Free Series.

The models in the shaded □ column of Tables E-1 and E-2 are sealed with long-life grease(Alvania Grease RA), replenishment is practically unnecessary, but replacement approximately every 20,000 hours of operation or 4 ~ 5 years, will provide longer service life.

(ii) Grease lubricated models, other than as specified in (i) above.

Please replenish or replace, as specified in the Instruction Manual.

Table E-4 Standard Grease

Ambient Temperature	Cyclo Drive			Sumitomo Manufactured Motor		
	(i) Maintenance-Free Series	(ii) Other than (i) models		Sealed Bearings	Open Bearings	
					E,B Type insulation	F Type insulation
Shell Oil	Shell Oil	Cosmo Oil	Kyodo Yushi	Shell Oil	Shell Oil	
-10 } 50	SHELL ALVANIA GREASE RA	SHELL ALVANIA GREASE 2	COSMO GREASE DYNAMAX SH No.2	MULTEMP SRL	SHELL ALVANIA GREASE 2	DARINA GREASE 2

Note): 1. Avoid the use of grease other than shown in Table E-4
 2. Drives shown in column (ii) of Table 32 are packed with COSMO GREASE DYNAMAX SH No.2, at the time of shipment.
 3. The mixture of the two types of grease shown in column (ii) is permissible.
 4. For consistent use in ambient temperatures other than 0 ~ 40 , please consult us.

2. Oil Lubricated Models

The oil lubricated models are not filled with oil prior to shipping. Before operating, please be sure to fill the unit with oil up to the red line on the oil gauge.

Table E-5 Mild EP Oil Brand Recommended (Equivalent to SP Type Industrial High-Pressure Gear Oil or JIS K2219 No.2 Industrial Gear Oil)

Ambient temp.	Gulf Oil	Esso Oil	Mobil Oil	Shell Oil	Caltex Oil	BP Oil
-10 to 5	EP Lubricant HD 68	Spartan EP 68	Mobil gear 626 (ISO VG 68)	Omala Oil 68		Energol GR-XP 68
0 to 35	EP Lubricant HD 100 HD 150	Spartan EP 100 EP 150	Mobil gear 627 629 (ISO VG 100, 150)	Omala Oil 100 150	Meropa 100 150	Energol GR-XP 100 GR-XP 150
30 to 50	EP Lubricant HD 220 HD 320 HD 460	Spartan EP 220 EP 320 EP 460	Mobil gear 630 632 633 634 (ISO VG 220 ~ 460)	Omala Oil 220 320 460	Meropa 220 320 460	Energol GR-XP 220 GR-XP 320 GR-XP 460

Notes : 1. For use in winter or relatively low ambient temperature, use the lower viscosity oil specified for each ambient temperature range.

2. For consistent use in ambient temperatures other than 0 ~ 40 , please consult us.

VOLUME OF OIL FILLING

Table E-6 Volume of Oil Filling, litres (Approximate)

Single Reduction	Frame Size	6130 6135	6140 6145 614H	6160 6165 616H	6170 6175	6180 6185	6190 6195	6205	6215	6225	6235	6245	6255	6265	6275
	Horizontal	0.7	0.7	1.4	1.9	2.5	4.0	5.5	8.5	10	15	16	21	29	56
	Vertical	1.1	1.1	1.0	1.9	2.0	2.7	5.7	7.5	10	12	15	42	51	(60)

Double Reduction	Frame Size	6160 DC 6165 DC	6170 DC 6175 DC	6180 DB 6185 DB	6190 DA 6195 DA	6190 DB 6195 DB	6205 DA	6205 DB	6215 DA	6215 DB	6225 DA	6225 DB	6235 DA	6235 DB	6245 DA	6245 DB	6255 DA	6255 DB	6265 DA	6275 DA
	Horizontal	1.5	2.4	3.5	5.8	6.0	6.0	6.0	10	10	11	11	17	17	18	18	23	23	32	60
	Vertical	1.0	1.9	2.0	2.7	2.7	11	11	14	14	18	18	23	23	29	29	42	42	51	(60)

() with trochoid pump.

How to refer to the rating plate

There are two types of rating plates, Type I and Type II. Examples of typical plates are shown below, refer to the proper one.

1. Gearmotor

(1) Rating plate type I : Gearmotor

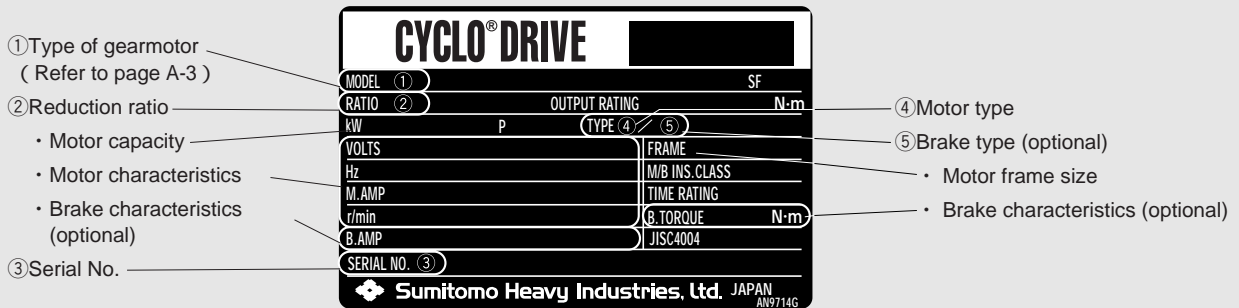


Fig.E-1 Rating plate of gearmotor (Type I)

(2) Rating plate type II : Reducer with motor

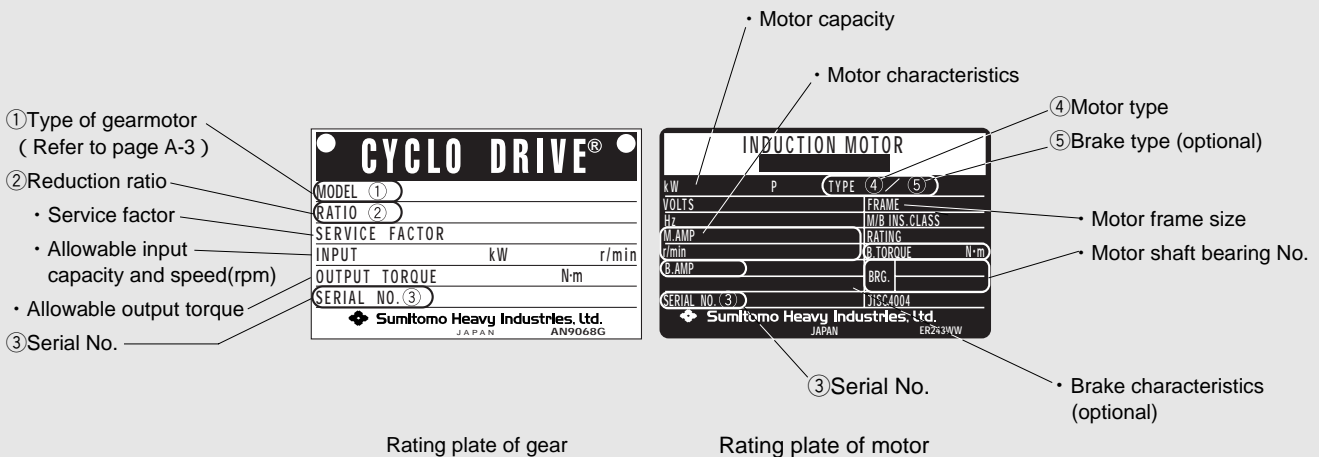


Fig.E-2 Rating plates of reducer with motor (Type II)

Technical

Reducer

Motor

Common

2. Reducer

(1) Rating plate type I

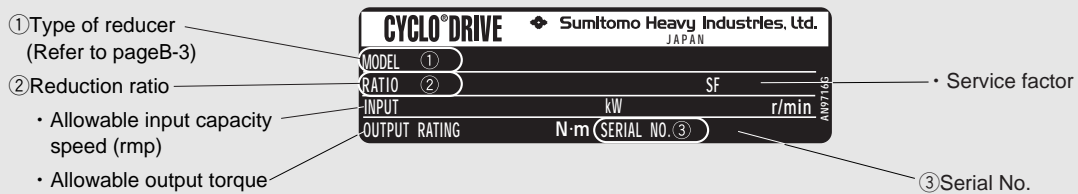


Fig.E-3 Rating plate of reducer(Type I)

(2) Rating plate type II

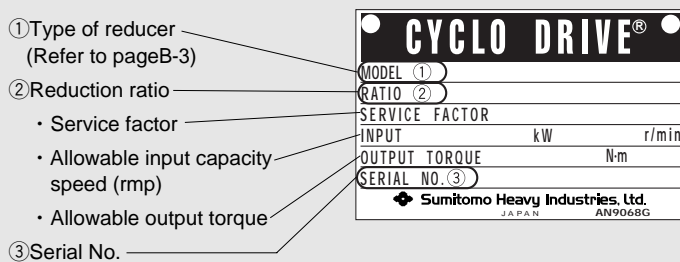


Fig.E-4 Rating plate of reducer (Type II)

ALLOWABLE RADIAL AND AXIAL LOAD

Please confirm the radial load on the high speed shaft using the following formula :

1. Radial· Axial Load on Slow Speed Shaft

Please confirm the radial· axial load on the slow speed shaft using the following formula :

① Radial load P_r

$$P_r = \frac{T \ell}{R} \cdot \frac{P_{ro}}{L_f \cdot C_f \cdot F_s} \quad [\text{N, kgf}]$$

② Axial load P_a

$$P_a = \frac{P_{ao}}{C_f \cdot F_s} \quad [\text{N, kgf}]$$

③ When radial· axial load co-exist.

$$\left(\frac{P_r \cdot L_f}{P_{ro}} + \frac{P_a}{P_{ao}} \right) \cdot C_f \cdot F_s \leq 1$$

P_r : Actual radial load [N, kgf]

$T \ell$: Actual transmitted torque[N·m, kgf·m]on slow speed shaft of the reducer.

R : Pitch circle radius[m]of sprocket, gear, pulley, etc.

P_{ro} : Allowable radial load[N, kgf] (Refer to selection table)

P_a : Actual axial load[N, kgf]

P_{ao} : Allowable axial load [N, kgf] (Table E-10, 11)

L_f : Load location factor(Table E-9)

C_f : Coupling factor(Table E-7)

F_s : Shock factor(Table E-8)

• When the radial load exceeds the allowable values, a larger frame size may be selected, but depending upon the extent of the load, this may be avoided by using the heavy radial load type; please refer to Page E-12.

• In case of particularly extreme frequency of starting, please consult us.

Table E-7 Coupling Factor C_f

Coupling Method	C_f
Chain	1
Gears	1.25
V-Belt	1.5

Table E-8 Shock Factor F_s

Degree of Shock	F_s
When practically no shock	1
When there is light shock	1 ~ 1.2
When there is severe shock	1.4 ~ 1.6

Further detailed intermediate values in Tables E-9 ~ E-11 should be calculated according to the interpolation method.

Example of calculation according to interpolation method.

Load Location Factor

Frame size 6075 Load Location Factor for $L=18\text{mm}$ calculated below.

$$1.00 + \frac{1.29-1.00}{20-15} \times (18-15) = 1.17$$

Thrust Load Capacity

Frame size 6180 Output Speed Thrust Load Capacity for 130r/min calculated below.

$$12500 + \frac{13100-12500}{150-125} \times (150-130) = 12980 \quad [\text{N}]$$

Table E-9 Load Location Factor(Slow Speed Shaft)Lf

Frame size		Lmm																								
Single Reduction	Double Reduction	~ 5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200	225	250	275	300	
6060 6065	6060DA 6065DA	0.83	0.94	1.19	1.56	-	-	-	-	-	-	-	-	-	-	-	-	-								
6070 6075	6070DA 6075DA	0.82	0.91	1.00	1.29	1.59	1.88	-	-	-	-	-	-	-	-	-	-	-								
6080 6085	-	0.81	0.87	0.94	1.03	1.28	1.54	1.80	-	-	-	-	-	-	-	-	-	-								
6090 6095	6090DA 6095DA	0.86	0.92	0.97	1.13	1.38	1.64	1.90	-	-	-	-	-	-	-	-	-	-								
6100 6105 610H	6100DA 6105DA	0.86	0.92	0.97	1.13	1.38	1.64	1.90	-	-	-	-	-	-	-	-	-	-								
6110 6115	-	0.78	0.84	0.90	0.96	1.02	1.08	1.19	1.36	1.53	-	-	-	-	-	-	-	-								
6120 6125 612H	6120DA 6120DB 6125DA 6125DB	-	0.82	0.87	0.92	0.97	1.08	1.25	1.42	1.59	1.76	-	-	-	-	-	-	-								
6130 6135	6130DA 6130DB 6130DC 6135DA 6135DB 6135DC	-	-	0.83	0.87	0.92	0.96	1.00	1.13	1.25	1.38	1.63	1.88	-	-	-	-	-								
6140 6145 614H	6140DA 6140DB 6140DC 6145DA 6145DB 6145DC	-	-	-	0.66	0.73	0.80	0.87	0.93	1.00	1.10	1.30	1.50	1.70	1.90	-	-	-								
6160 6165 616H	6160DA 6160DB 6160DC 6165DA 6165DB 6165DC	-	-	-	0.83	0.87	0.90	0.93	0.97	1.00	1.11	1.32	1.53	1.75	1.96	-	-	-								
6170 6175	6170DA 6170DB 6170DC 6175DA 6175DB 6175DC	-	-	-	0.86	0.89	0.92	0.94	0.97	1.00	1.11	1.32	1.53	1.75	1.96	-	-	-								
6180 6185	6180DA 6180DB 6185DA 6185DB	-	-	-	-	0.85	0.87	0.90	0.93	0.95	0.98	1.09	1.26	1.43	1.60	1.78	-	-								
6190 6195	6190DA 6190DB 6195DA 6195DB	-	-	-	-	-	0.85	0.87	0.89	0.91	0.93	0.97	1.04	1.18	1.32	1.46	1.75	-	-							
6205	6205DA 6205DB	-	-	-	-	-	-	-	0.70	0.74	0.77	0.84	0.91	0.98	1.05	1.12	1.26	1.40	1.54	-	-	-	-	-	-	-
6215	6215DA 6215DB	-	-	-	-	-	-	-	0.70	0.73	0.77	0.84	0.91	0.98	1.05	1.13	1.27	1.41	1.56	-	-	-	-	-	-	-
6225	6225DA 6225DB	-	-	-	-	-	-	-	0.86	0.88	0.90	0.93	0.96	0.99	1.02	1.06	1.12	1.19	1.25	-	-	-	-	-	-	-
6235	6235DA 6235DB	-	-	-	-	-	-	-	0.82	0.84	0.85	0.88	0.91	0.94	0.97	1.00	1.06	1.12	1.18	1.24	1.30	-	-	-	-	-
6245	6245DA 6245DB	-	-	-	-	-	-	-	0.83	0.84	0.86	0.89	0.92	0.94	0.97	1.00	1.06	1.11	1.17	1.23	1.29	-	-	-	-	-
6255	6255DA 6255DB	-	-	-	-	-	-	-	-	0.83	0.85	0.88	0.90	0.93	0.95	1.00	1.05	1.10	1.22	1.36	1.52	1.69	-	-	-	-
6265	6265DA	-	-	-	-	-	-	-	-	-	-	-	0.83	0.85	0.88	0.90	0.94	0.98	1.04	1.17	1.29	1.45	1.61	1.77	1.93	
6275	6275DA	-	-	-	-	-	-	-	-	-	-	-	-	0.67	0.71	0.75	0.82	0.90	0.98	1.09	1.21	1.35	1.50	1.65	1.79	

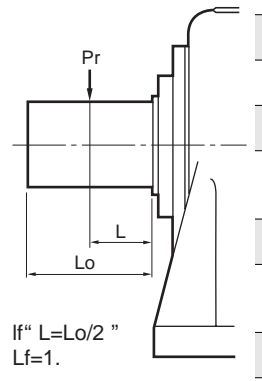


Table E-10 Axial Load Capacity(Slow Speed Shaft)Pao(N)

(Cf, Lf, Fs=1)

Frame size		Output Speed r/min																
Single Reduction	Double Reduction	~ 10	15	20	25	30	35	40	50	60	80	100	125	150	200	250	300	
6060 6065	6060DA 6065DA	294	294	294	294	294	294	294	294	294	294	294	294	294	294	-	-	
6070 6075	6070DA 6075DA	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	785	
6080 6085	-	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	
6090 6095	6090DA 6095DA	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	981	
6100 6105 610H	6100DA 6105DA	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	
6110 6115	-	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	1470	
6120 6125 612H	6120DA 6120DB 6125DA 6125DB	2940	2940	2940	2940	2940	2940	2940	2940	2940	2940	2940	2940	2940	2940	2770	2500	2390
6130 6135	6130DA 6130DB 6130DC 6135DA 6135DB 6135DC	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920	3920
6140 6145 614H	6140DA 6140DB 6140DC 6145DA 6145DB 6145DC	5400	5400	5400	5400	5400	5400	5400	5400	5400	5400	5230	4860	4560	4370	3850	3670	3450
6160 6165 616H	6160DA 6160DB 6160DC 6165DA 6165DB 6165DC	6870	6870	6870	6870	6870	6870	6870	6870	6870	6870	6870	6870	6870	6870	6300	5700	-
6170 6175	6170DA 6170DB 6170DC 6175DA 6175DB 6175DC	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9810	9680	9020	8090	7330	6880	
6180 6185	6180DA 6180DB 6185DA 6185DB	13700	13700	13700	13700	13700	13700	13700	13700	13700	13700	13700	13100	12500	11000	-	-	
6190 6195	6190DA 6190DB 6195DA 6195DB	19600	19600	19600	19600	19600	19600	19600	19600	19600	19600	19600	18500	17500	15400	-	-	
6205	6205DA 6205DB	26500	23500	21100	19600	18600	18100	17700	16700	15700	14200	13200	12800	12300	11300	-	-	
6215	6215DA 6215DB	27500	24500	22100	20600	19600	18600	18100	17200	16200	14700	13700	13200	12800	11800	-	-	
6225	6225DA 6225DB	29400	25600	23200	21700	20600	19600	18700	17600	16700	15300	14400	13600	13100	12100	-	-	
6235	6235DA 6235DB	35300	31400	28400	26500	25000	23500	22600	21100	20100	18600	17700	16700	-	-	-	-	
6245	6245DA 6245DB	37300	33800	30900	28800	27300	26100	25100	23500	22300	21000	19900	19100	-	-	-	-	
6255	6255DA 6255DB	48100	43100	39400	36900	35100	33600	32300	30400	28500	26800	25500	24200	-	-	-	-	
6265	6265DA	52000	52000	51000	47500	44800	42800	41600	38900	37300	34800	33000	31100	-	-	-	-	
6275	6275DA	58900	58900	58900	58900	58900	58900	58900	58900	58900	-	-	-	-	-	-	-	

Table E-1 1 Axial Load Capacity(Slow Speed Shaft)Pao(kgf)

(Cf, Lf, Fs=1)

Frame size		Output Speed r/min																
Single Reduction	Double Reduction	~ 10	15	20	25	30	35	40	50	60	80	100	125	150	200	250	300	
6060 6065	6060DA 6065DA	30	30	30	30	30	30	30	30	30	30	30	30	30	30	-	-	
6070 6075	6070DA 6075DA	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80	
6080 6085	-	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
6090 6095	6090DA 6095DA	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	
6100 6105 610H	6100DA 6105DA	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
6110 6115	-	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	150	
6120 6125 612H	6120DA 6120DB 6125DA 6125DB	300	300	300	300	300	300	300	300	300	300	300	300	300	282	255	244	
6130 6135	6130DA 6130DB 6130DC 6135DA 6135DB 6135DC	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	400	
6140 6145 614H	6140DA 6140DB 6140DC 6145DA 6145DB 6145DC	550	550	550	550	550	550	550	550	550	550	533	495	465	445	392	374	352
6160 6165 616H	6160DA 6160DB 6160DC 6165DA 6165DB 6165DC	700	700	700	700	700	700	700	700	700	700	700	700	700	642	581	-	
6170 6175	6170DA 6170DB 6170DC 6175DA 6175DB 6175DC	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	1000	987	919	825	747	701
6180 6185	6180DA 6180DB 6185DA 6185DB	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1400	1340	1270	1120	-	-
6190 6195	6190DA 6190DB 6195DA 6195DB	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	2000	1890	1780	1570	-	-
6205	6205DA 6205DB	2700	2400	2150	2000	1900	1850	1800	1700	1600	1450	1350	1300	1250	1150	-	-	
6215	6215DA 6215DB	2800	2500	2250	2100	2000	1900	1850	1750	1650	1500	1400	1350	1300	1200	-	-	
6225	6225DA 6225DB	3000	2610	2360	2210	2100	2000	1910	1790	1700	1560	1470	1390	1340	1230	-	-	
6235	6235DA 6235DB	3600	3200	2900	2700	2550	2400	2300	2150	2050	1900	1800	1700	-	-	-	-	
6245	6245DA 6245DB	3800	3450	3150	2940	2780	2660	2560	2400	2270	2140	2030	1950	-	-	-	-	
6255	6255DA 6255DB	4900	4390	4020	3760	3580	3430	3290	3100	2910	2730	2600	2470	-	-	-	-	
6265	6265DA	5300	5300	5200	4840	4570	4360	4240	3970	3800	3550	3360	3170	-	-	-	-	
6275	6275DA	6000	6000	6000	6000	6000	6000	6000	6000	-	-	-	-	-	-	-	-	

Technical
Reducer
Motor
Common

2. Heavy Radial Load Type(Complementary Options)

When the radial load of the slow speed shaft exceeds the allowable value of the standard Cyclo reducer, a larger frame size may be selected, but depending upon the degree of the load, this may be avoided by using the heavy radial load type. Please refer to Table E-12 ~ 15, for the allowable radial load on the slow speed shaft of the heavy radial load type.

Table E-12 Allowable Radial Load Pro(N) (Max)on the Slow Speed Shaft of the Light Heavy Radial Load Type.

(Cf, Lf, Fs=1)

Frame size		Output Speed r/min			~ 1	2	3	4	5	6	8	10	15	20	25	30	
Single Reduction	Double Reduction																
6130 6135	6130DA 6130DB 6130DC				14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700	14700
	6135DA 6135DB 6135DC																
6160 6165 616H	6160DA 6160DB 6160DC				22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100	22100
	6165DA 6165DB 6165DC																
6170 6175	6170DA 6170DB 6170DC				29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500	29500
	6175DA 6175DB 6175DC																
6180 6185	6180DA 6180DB				41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700	41700
	6185DA 6185DB																
6190 6195	6190DA 6190DB				59000	59000	59000	59000	59000	59000	59000	59000	59000	59000	59000	59000	59000
	6195DA 6195DB																

Frame size		Output Speed r/min			35	40	50	60	80	100	125	150	200	250	300
Single Reduction	Double Reduction														
6130 6135	6130DA 6130DB 6130DC				14700	14700	14700	14700	14100	13500	12600	11900	10900	10200	9660
	6135DA 6135DB 6135DC														
6160 6165 616H	6160DA 6160DB 6160DC				22100	22100	22100	22100	22100	21600	20100	19000	17500	16300	15400
	6165DA 6165DB 6165DC														
6170 6175	6170DA 6170DB 6170DC				29500	29500	29500	29500	29500	29300	27400	25900	23800	22200	21100
	6175DA 6175DB 6175DC														
6180 6185	6180DA 6180DB				41700	41700	41700	41700	41300	38600	36200	34200	31400	-	-
	6185DA 6185DB														
6190 6195	6190DA 6190DB				59000	59000	55200	53000	47200	44000	41000	38300	34700	-	-
	6195DA 6195DB														

Table E-13 Allowable Radial Load Pro(kgf) (Max)on the Slow Speed Shaft of the Light Heavy Radial Load Type.

(Cf, Lf, Fs=1)

Frame size		Output Speed r/min			~ 1	2	3	4	5	6	8	10	15	20	25	30	
Single Reduction	Double Reduction																
6130 6135	6130DA 6130DB 6130DC				1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500	1500
	6135DA 6135DB 6135DC																
6160 6165 616H	6160DA 6160DB 6160DC				2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250	2250
	6165DA 6165DB 6165DC																
6170 6175	6170DA 6170DB 6170DC				3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010	3010
	6175DA 6175DB 6175DC																
6180 6185	6180DA 6180DB				4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250	4250
	6185DA 6185DB																
6190 6195	6190DA 6190DB				6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010	6010
	6195DA 6195DB																

Frame size		Output Speed r/min			35	40	50	60	80	100	125	150	200	250	300
Single Reduction	Double Reduction														
6130 6135	6130DA 6130DB 6130DC				1500	1500	1500	1500	1440	1380	1280	1210	1110	1040	985
	6135DA 6135DB 6135DC														
6160 6165 616H	6160DA 6160DB 6160DC				2250	2250	2250	2250	2250	2200	2050	1940	1780	1660	1570
	6165DA 6165DB 6165DC														
6170 6175	6170DA 6170DB 6170DC				3010	3010	3010	3010	3010	2990	2790	2640	2430	2260	2150
	6175DA 6175DB 6175DC														
6180 6185	6180DA 6180DB				4250	4250	4250	4250	4210	3930	3690	3490	3200	-	-
	6185DA 6185DB														
6190 6195	6190DA 6190DB				6010	6010	5630	5400	4810	4490	4180	3900	3540	-	-
	6195DA 6195DB														

Table E-14 Allowable Radial Load Prof N (Max) on the Slow Speed Shaft of the Heavy Radial Load Type.

(Cf, Lf, Fs=1)

Frame size		Output Speed r/min			~ 1	2	3	4	5	6	8	10	15	20	25	30
Single Reduction	Double Reduction															
6130	6135	6130DA 6135DA	6130DB 6135DB	6130DC 6135DC	24000	24000	24000	24000	24000	24000	24000	24000	23800	21800	20400	19300
6160	6165 616H	6160DA 6165DA	6160DB 6165DB	6160DC 6165DC	33600	33600	33600	33600	33600	33600	33600	33600	33600	33600	33300	31500
6170	6175	6170DA 6175DA	6170DB 6175DB	6170DC 6175DC	45900	45900	45900	45900	45900	45900	45900	45900	45900	45900	45300	42900
6180	6185	6180DA 6185DA	6180DB 6185DB		55700	55700	55700	55700	55700	55700	55700	55700	55700	55700	55700	55700
6190	6195	6190DA 6195DA	6190DB 6195DB		71800	71800	71800	71800	71800	71800	71800	71800	71800	71800	71800	69300
6205		6205DA	6205DB		97800	97800	97800	97800	97800	97800	97800	97800	89100	81800	76500	72400
6215		6215DA	6215DB		132000	132000	132000	132000	126000	119000	109000	102000	90500	83000	77600	73500
6225		6225DA	6225DB		161000	161000	161000	161000	156000	148000	135000	126000	112000	103000	96300	91100
6235		6235DA	6235DB		183000	183000	183000	183000	183000	183000	170000	159000	141000	129000	121000	114000
6245		6245DA	6245DB		223000	223000	223000	223000	209000	198000	181000	169000	150000	138000	129000	122000
6255		6255DA	6255DB		274000	274000	274000	274000	258000	244000	224000	210000	185000	170000	159000	151000
6265		6265DA			283000	283000	283000	283000	283000	283000	270000	253000	224000	205000	191000	181000
6275		6275DA			272000	272000	272000	272000	272000	272000	272000	272000	272000	272000	272000	272000

Frame size		Output Speed r/min			35	40	50	60	80	100	125	150	200	250	300
Single Reduction	Double Reduction														
6130	6135	6130DA 6135DA	6130DB 6135DB	6130DC 6135DC	18400	17800	16500	15600	14400	13500	12600	11900	10900	10200	9660
6160	6165 616H	6160DA 6165DA	6160DB 6165DB	6160DC 6165DC	30100	28900	27000	25600	23500	22000	20500	19400	17900	16600	15400
6170	6175	6170DA 6175DA	6170DB 6175DB	6170DC 6175DC	40900	39300	36800	34800	31900	29900	27900	26400	24300	22200	21100
6180	6185	6180DA 6185DA	6180DB 6185DB		54000	51900	48500	45900	42100	39400	36900	34900	32000	-	-
6190	6195	6190DA 6195DA	6190DB 6195DB		66100	63500	59400	56300	51600	48300	45100	42800	39300	-	-
6205		6205DA	6205DB		69100	66400	62100	58800	54000	50500	47100	44600	41000	-	-
6215		6215DA	6215DB		70100	67400	63000	59600	54800	51300	47900	45400	41600	-	-
6225		6225DA	6225DB		87000	83500	78100	74000	67900	63500	59400	56300	51500	-	-
6235		6235DA	6235DB		109000	105000	98100	92900	85300	79800	74500	-	-	-	-
6245		6245DA	6245DB		116000	112000	105000	98900	90800	84900	79400	-	-	-	-
6255		6255DA	6255DB		144000	139000	129000	123000	112000	105000	98300	-	-	-	-
6265		6265DA			174000	166000	156000	148000	135000	126000	118000	-	-	-	-
6275		6275DA			-	-	-	-	-	-	-	-	-	-	-

- Notes : 1. Please use JIS B1051 erection bolts, with strength in excess of 8.8.
 2. The heavy radial load type is distinguished with the R2, suffix following the frame size.
 Example : CHHM5-6135-R2
 3. Please consult us, as the following conditions require special review :
 • When the shaft direction is vertical(Vertical type).
 • When a thrust load is simultaneously imposed on the slow speed shaft.

Technical
 Reducer
 Motor
 Common

Table E-15 Allowable Radial Load Prof (kgf) (Max) on the Slow Speed Shaft of the Heavy Radial Load Type.

(Cf, Lf, Fs=1)

Frame size		Output Speed r/min			~ 1	2	3	4	5	6	8	10	15	20	25	30
Single Reduction	Double Reduction															
6130 6135	6130DA 6135DA	6130DB 6135DB	6130DC 6135DC	2450	2450	2450	2450	2450	2450	2450	2450	2450	2430	2220	2080	1970
6160 6165 616H	6160DA 6165DA	6160DB 6165DB	6160DC 6165DC	3430	3430	3430	3430	3430	3430	3430	3430	3430	3430	3430	3390	3210
6170 6175	6170DA 6175DA	6170DB 6175DB	6170DC 6175DC	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4680	4620	4370
6180 6185	6180DA 6185DA	6180DB 6185DB		5680	5680	5680	5680	5680	5680	5680	5680	5680	5680	5680	5680	5680
6190 6195	6190DA 6195DA	6190DB 6195DB		7320	7320	7320	7320	7320	7320	7320	7320	7320	7320	7320	7320	7060
6205	6205DA	6205DB		9970	9970	9970	9970	9970	9970	9970	9970	9970	9080	8340	7800	7380
6215	6215DA	6215DB		13500	13500	13500	13500	12800	12100	11100	10400	9230	8460	7910	7490	
6225	6225DA	6225DB		16400	16400	16400	16400	15900	15100	13800	12800	11400	10500	9820	9290	
6235	6235DA	6235DB		18700	18700	18700	18700	18700	18700	17300	16200	14400	13100	12300	11600	
6245	6245DA	6245DB		22700	22700	22700	22700	21300	20200	18500	17200	15300	14100	13100	12400	
6255	6255DA	6255DB		27900	27900	27900	27900	26300	24900	22800	21400	18900	17300	16200	15400	
6265	6265DA			28800	28800	28800	28800	28800	28800	27500	25800	22800	20900	19500	18500	
6275	6275DA			27700	27700	27700	27700	27700	27700	27700	27700	27700	27700	27700	27700	27700

Frame size		Output Speed r/min			35	40	50	60	80	100	125	150	200	250	300
Single Reduction	Double Reduction														
6130 6135	6130DA 6135DA	6130DB 6135DB	6130DC 6135DC	1880	1810	1680	1590	1470	1380	1280	1210	1110	1040	985	
6160 6165 616H	6160DA 6165DA	6160DB 6165DB	6160DC 6165DC	3070	2950	2750	2610	2400	2240	2090	1980	1820	1690	1570	
6170 6175	6170DA 6175DA	6170DB 6175DB	6170DC 6175DC	4170	4010	3750	3550	3250	3050	2840	2690	2480	2260	2150	
6180 6185	6180DA 6185DA	6180DB 6185DB		5500	5290	4940	4680	4290	4020	3760	3560	3260	-	-	
6190 6195	6190DA 6195DA	6190DB 6195DB		6740	6470	6060	5740	5260	4920	4600	4360	4010	-	-	
6205	6205DA	6205DB		7040	6770	6330	5990	5500	5150	4800	4550	4180	-	-	
6215	6215DA	6215DB		7150	6870	6420	6080	5590	5230	4880	4630	4240	-	-	
6225	6225DA	6225DB		8870	8510	7960	7540	6920	6470	6060	5740	5250	-	-	
6235	6235DA	6235DB		11100	10700	10000	9470	8700	8130	7590	-	-	-	-	
6245	6245DA	6245DB		11800	11400	10700	10100	9260	8650	8090	-	-	-	-	
6255	6255DA	6255DB		14700	14200	13100	12500	11400	10700	10000	-	-	-	-	
6265	6265DA			17700	16900	15900	15100	13800	12800	12000	-	-	-	-	
6275	6275DA			-	-	-	-	-	-	-	-	-	-	-	

Notes : 1. Please use JIS B1051 erection bolts, with strength in excess of 8.8.

2. The heavy radial load type is distinguished with the R2, suffix following the frame size.

Example : CHHM5-6135-R2

3. Please consult us, as the following conditions require special review :

- When the shaft direction is vertical (Vertical type).
- When a thrust load is simultaneously imposed on the slow speed shaft.

3. Radial Load on High Speed Shaft for Reducer

Please confirm the radial load on the high speed shaft, in accordance with the following formula :

$$Pr = \frac{Pro}{Lf \cdot Cf \cdot Fs} \text{ [N, kgf]}$$

- Pr : Actual radial load(N, kgf)
- Pro : Allowable radial load(N, kgf)(Table E-17, 18)
- Lf : Load location factor(Table E-16)
- Cf : Coupling factor(Table E-7)
- Fs : Shock factor(Table E-8)

Table E-16 Radial Load Location Factor(High Speed Shaft)Lf

Frame size		Lmm																			
Single Reduction	Double Reduction	5	10	15	20	25	30	35	40	45	50	60	70	80	90	100	120	140	160	180	200
6060 6065	6060DA 6065DA 6070DA 6075DA	0.73	0.91	1.20	1.60	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6070 6075	6090DA 6095DA 6100DA 6105DA 6120DA 6125DA 6130DA 6135DA 6140DA 6145DA	0.73	0.91	1.20	1.60	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6080 6085	-	0.73	0.91	1.20	1.60	2.00	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6090 6095	6120DB 6125DB 6130DB 6135DB 6140DB 6145DB 6160DA 6165DA 6170DA 6175DA	0.88	0.96	1.20	1.59	2.00	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6100 6105 610H	6130DC 6135DC 6140DC 6145DC 6160DB 6165DB 6170DB 6175DB 6180DA 6185DA	0.91	0.97	1.20	1.59	2.00	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6110 6115	-	0.91	0.97	1.20	1.59	2.00	2.38	-	-	-	-	-	-	-	-	-	-	-	-	-	-
6120 6125 612H	6160DC 6165DC 6170DC 6175DC 6190DA 6195DA 6205DA	-	0.81	0.93	1.14	1.41	1.67	1.96	2.22	-	-	-	-	-	-	-	-	-	-	-	-
6130 6135	6180DB 6185DB 6190DB 6195DB 6205DB 6215DA 6225DA	-	0.78	0.89	1.00	1.23	1.45	1.69	1.92	2.13	-	-	-	-	-	-	-	-	-	-	-
6140 6145 614H	-	-	0.78	0.89	1.00	1.23	1.45	1.69	1.92	2.13	-	-	-	-	-	-	-	-	-	-	-
6160 6165 616H	6215DB 6235DA 6245DA	-	0.92	0.95	0.98	1.05	1.18	1.28	1.41	1.52	1.64	1.85	-	-	-	-	-	-	-	-	-
6170 6175	6255DB 6255DA	-	-	0.93	0.96	0.99	1.05	1.16	1.28	1.39	1.49	1.72	1.92	2.17	-	-	-	-	-	-	-
6180 6185	6235DB 6245DB	-	-	-	0.93	0.96	0.99	1.05	1.15	1.25	1.35	1.56	1.75	1.96	2.17	-	-	-	-	-	-
6190 6195	6255DB 6265DA 6275DA	-	-	-	0.93	0.95	0.98	1.00	1.09	1.16	1.25	1.41	1.59	1.75	1.92	2.08	-	-	-	-	-
6205	-	-	-	-	-	0.93	0.95	0.97	1.00	1.04	1.10	1.22	1.33	1.45	1.56	1.68	1.91	-	-	-	-
6215	-	-	-	-	-	0.93	0.95	0.98	1.00	1.03	1.08	1.19	1.29	1.40	1.51	1.61	1.82	-	-	-	-
6225	-	-	-	-	-	0.94	0.96	0.98	1.00	1.02	1.04	1.08	1.14	1.24	1.33	1.42	1.60	-	-	-	-
6235	-	-	-	-	-	0.84	0.86	0.87	0.89	0.93	0.98	1.07	1.16	1.25	1.34	1.44	1.62	-	-	-	-
6245	-	-	-	-	-	0.91	0.92	0.94	0.96	0.98	0.99	1.07	1.15	1.24	1.33	1.42	1.59	-	-	-	-
6255	-	-	-	-	-	-	0.92	0.93	0.94	0.96	0.99	1.03	1.09	1.16	1.22	1.34	1.47	1.60	1.72	-	-
6265	-	-	-	-	-	-	0.92	0.93	0.94	0.96	0.99	1.03	1.09	1.16	1.22	1.34	1.47	1.60	1.72	-	-
6275	-	-	-	-	-	-	-	-	0.93	0.94	0.97	0.99	1.04	1.14	1.22	1.39	1.56	1.72	1.92	2.08	-

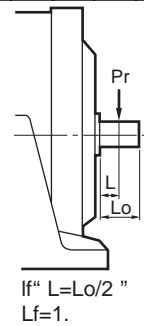


Table E-17 Radial Load Capacity(High Speed Shaft)Pro(N)

(Cf, Lf, Fs=1)

Frame size		Ratio				Input Speed r/min							
Single Reduction	Double Reduction				1750	1450	1165	980	870	720	580		
6060 6065	6060DA 6065DA 6070DA 6075DA	6 ~ 17,25 ~ 35				196	147	147	196	196	196	196	
		21,43				78.5	29.4	49.1	49.1	49.1	49.1	49.1	
6070 6075	6090DA 6095DA 6100DA 6105DA 6120DA 6125DA 6130DA 6135DA 6140DA 6145DA	6 ~ 17,25 ~ 35,51,59				196	147	147	196	196	196	196	
		21,43				49.1	49.1	49.1	49.1	49.1	147	196	
6080 6085	—	6 ~ 15,21 ~ 29,43 ~ 59,87				196	147	147	196	196	196	196	
		17,35,71				49.1	49.1	49.1	49.1	49.1	147	196	
6090 6095	6120DB 6125DB 6130DB 6135DB 6140DB 6145DB 6160DA 6165DA 6170DA 6175DA	6 ~ 17,25 ~ 71,119				294	294	294	294	294	294	294	
		21,87				196	196	196	196	245	245	294	
6100 6105 610H	6130DC 6135DC 6140DC 6145DC 6160DB 6165DB 6170DB 6175DB 6180DA 6185DA	6 ~ 11,17 ~ 119				441	441	491	540	589	589	589	
		13,15				441	343	441	491	491	540	589	
6110 6115	—	6,8,21 ~ 87				441	343	441	491	491	540	589	
		11 ~ 17				196	196	196	196	245	245	294	
6120 6125 612H	6160DC 6165DC 6170DC 6175DC 6190DA 6195DA 6205DA	6 ~ 17				590	690	740	780	880	880	880	
		21 ~ 87				540	440	490	540	590	880	880	
6130 6135	6180DB 6185DB 6190DB 6195DB 6205DB 6215DA 6225DA	6 ~ 17,21				1370	1370	1370	1520	1620	1720	1860	
		25 ~ 87				1280	1280	1280	1370	1470	1570	1770	
6140 6145 614H	—	6,8				1370	1370	1370	1520	1620	1720	1860	
		11 ~ 21				1230	980	1080	1180	1230	1320	1470	
		25				1080	1130	1180	1280	1320	1370	1470	
		29 ~ 87				540	590	590	690	690	690	1080	
6160 6165 616H	6215DB 6235DA 6245DA	8 ~ 25,51,59				1770	1770	1960	2060	2160	2160	2160	
		29 ~ 43,71,87				1080	1180	1280	1370	1370	1570	1770	
6170 6175	6255DB 6255DA	11 ~ 87				2060	2060	2260	2260	2350	2450	2650	
6180 6185	6235DB 6245DB	11 ~ 87				2750	2550	2750	2940	3040	3340	3430	
6190 6195	6255DB 6265DA 6275DA	11 ~ 25				3040	3040	3240	3530	3630	3920	3920	
		29 ~ 87				2650	2550	2840	2940	3140	3340	3630	
6205	—	11 ~ 87				5400	4910	5400	5890	6080	6230	6180	
6215	—	11 ~ 87				5740	5100	5440	6130	6330	6820	7260	
6225	—	11 ~ 87				6620	5790	5980	6130	6620	6970	7500	
6235	—	11 ~ 87				—	—	10000	9520	9170	8980	8730	
6245	—	11 ~ 87				—	—	11100	10100	10100	10600	11200	
6255	—	11 ~ 87				—	—	11800	10800	11300	12300	13100	
6265	—	11 ~ 87				—	—	11800	10800	11300	12300	13100	
6275	—	29 ~ 87				—	—	14700	14700	14700	14700	14700	

Table E-18 Radial Load Capacity(High Speed Shaft)Pro(kgf)

(Cf, Lf, Fs=1)

Frame size		Ratio				Input Speed r/min							
Single Reduction	Double Reduction				1750	1450	1165	980	870	720	580		
6060 6065	6060DA 6065DA 6070DA 6075DA	6 ~ 17,25 ~ 35				20	15	15	20	20	20	20	
		21,43				8	3	5	5	5	5	5	
6070 6075	6090DA 6095DA 6100DA 6105DA 6120DA 6125DA 6130DA 6135DA 6140DA 6145DA	6 ~ 17,25 ~ 35,51,59				20	15	15	20	20	20	20	
		21,43				5	5	5	5	5	15	20	
6080 6085	—	6 ~ 15,21 ~ 29,43 ~ 59,87				20	15	15	20	20	20	20	
		17,35,71				5	5	5	5	5	15	20	
6090 6095	6120DB 6125DB 6130DB 6135DB 6140DB 6145DB 6160DA 6165DA 6170DA 6175DA	6 ~ 17,25 ~ 71,119				30	30	30	30	30	30	30	
		21,87				20	20	20	20	25	25	30	
6100 6105 610H	6130DC 6135DC 6140DC 6145DC 6160DB 6165DB 6170DB 6175DB 6180DA 6185DA	6 ~ 11,17 ~ 119				45	45	50	55	60	60	60	
		13,15				45	35	45	50	50	55	60	
6110 6115	—	6,8,21 ~ 87				45	35	45	50	50	55	60	
		11 ~ 17				20	20	20	20	25	25	30	
6120 6125 612H	6160DC 6165DC 6170DC 6175DC 6190DA 6195DA 6205DA	6 ~ 17				60	70	75	80	90	90	90	
		21 ~ 87				55	45	50	55	60	90	90	
6130 6135	6180DB 6185DB 6190DB 6195DB 6205DB 6215DA 6225DA	6 ~ 17,21				140	140	140	155	165	175	190	
		25 ~ 87				130	130	130	140	150	160	180	
6140 6145 614H	—	6,8				140	140	140	155	165	175	190	
		11 ~ 21				125	100	110	120	125	135	150	
		25				110	115	120	130	135	140	150	
		29 ~ 87				55	60	60	70	70	70	110	
6160 6165 616H	6215DB 6235DA 6245DA	8 ~ 25,51,59				180	180	200	210	220	220	220	
		29 ~ 43,71,87				110	120	130	140	140	160	180	
6170 6175	6255DB 6255DA	11 ~ 87				210	210	230	230	240	250	270	
6180 6185	6235DB 6245DB	11 ~ 87				280	260	280	300	310	340	350	
6190 6195	6255DB 6265DA 6275DA	11 ~ 25				310	310	330	360	370	400	400	
		29 ~ 87				270	260	290	300	320	340	370	
6205	—	11 ~ 87				550	501	550	600	620	635	630	
6215	—	11 ~ 87				585	520	555	625	645	695	740	
6225	—	11 ~ 87				675	590	610	625	675	710	765	
6235	—	11 ~ 87				—	—	1020	970	935	915	890	
6245	—	11 ~ 87				—	—	1130	1030	1030	1080	1140	
6255	—	11 ~ 87				—	—	1200	1100	1150	1250	1340	
6265	—	11 ~ 87				—	—	1200	1100	1150	1250	1340	
6275	—	29 ~ 87				—	—	1500	1500	1500	1500	1500	

INTRODUCTION TO MOMENT OF INERTIA

1. Starting Time Moment of inertia

For successful starting of a driven machine, the starting torque must be adequately larger than the load torque and even after starting commences, the motor torque must consistently be greater than the load torque, until reaching full load speed.

The difference between the motor torque and the load torque during the starting period is referred to as the accelerating torque. If the average accelerating torque is taken as \bar{T}_a (N·m), the starting time t_s (s) up to the rotating speed n (r/min), is calculated according to the following formula :

$$t_s = \frac{(J_M + J_C + J_L) \cdot n}{9.55 \cdot \bar{T}_a} \text{ (S)}$$

J_M : Motor moment of inertia(Inclusive of brake drum)

J_C : Cyclo reducer moment of Inertia

J_L : Driven machine moment of Inertia(Inclusive of coupling, pulley)
when converted to the motor shaft.

Average accelerating torque \bar{T}_a

Here, the average accelerating torque, refers to the average value of the difference between the motor torque and the load torque or the actual torque for accelerating the load, as shown in the graph at the right. For determining the starting time, the motor torque curve and load torque curve are necessary. However, since it is extremely difficult to determine the average accelerating torque by this method, the average accelerating torque at the actual load time is calculated according to the following formula:

When starting at full voltage, the average accelerating torque T_a (N·m) may roughly be calculated by the following formula :

$$\bar{T}_a = 0.8 \left(\frac{T_s + T_m}{2} \right) - \bar{T}_L \text{ (N} \cdot \text{m)}$$

Furthermore, if the average load torque \bar{T}_L (N·m) during the starting period is equivalent the full load torque \bar{T}_L (N·m) of the motor may roughly be equal to the following :

In case of constant torque load $\bar{T}_L = T_L$ (N·m)

In case of square of reduced torque load . . $\bar{T}_L = 0.34T_L$ (N·m)

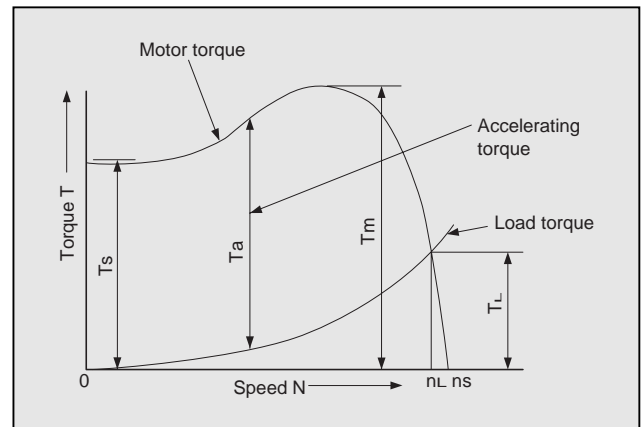


Fig E-5 Torque Curve

T_s : Starting torque

T_m : Maximum torque (Stalling torque)

T_a : Accelerating torque

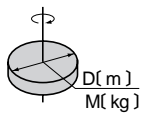
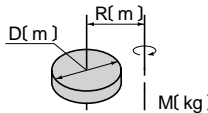
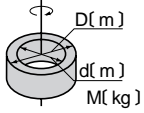
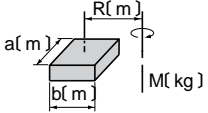
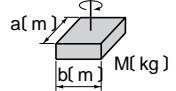
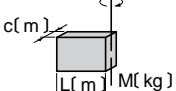
T_L : Full load torque

n_s : Synchronous rotating speed

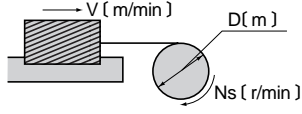
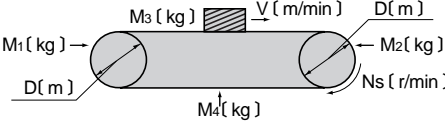
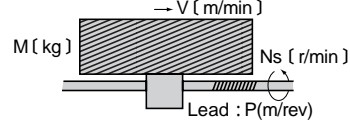
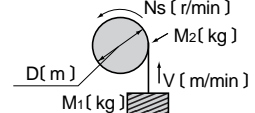
n_L : Full load rotating speed

2. Calculation of Moment of Inertia

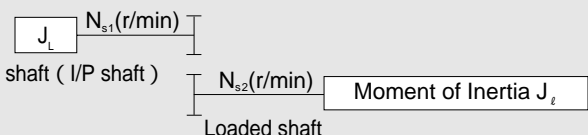
(1) Moment of Inertia of rotating motion

Rotating motion on the center of gravity		Rotating motion off the center of gravity	
	$J = \frac{1}{8} MD^2 \text{ [kg}\cdot\text{m}^2 \text{]}$		$J = \frac{M}{4} \left(\frac{1}{2} D^2 + 4R^2 \right) \text{ [kg}\cdot\text{m}^2 \text{]}$
	$J = \frac{1}{8} M(D^2 + d^2) \text{ [kg}\cdot\text{m}^2 \text{]}$		$J = \frac{M}{4} \left(\frac{a^2 + b^2}{3} + 4R^2 \right) \text{ [kg}\cdot\text{m}^2 \text{]}$
	$J = \frac{1}{12} M(a^2 + b^2) \text{ [kg}\cdot\text{m}^2 \text{]}$		$J = \frac{1}{12} M(4L^2 + C^2) \text{ [kg}\cdot\text{m}^2 \text{]}$

(2) Moment of Inertia of rectilinear motion (Loaded shaft side)

General application		$J = \frac{M}{4} \left(\frac{V}{\pi \cdot N_s} \right)^2 = \frac{M}{4} D^2 \text{ [kg}\cdot\text{m}^2 \text{]}$
Horizontal motion by conveyor		$J = \frac{1}{4} \left(\frac{M_1 + M_2}{2} + M_3 + M_4 \right) \times D^2 \text{ [kg}\cdot\text{m}^2 \text{]}$
Horizontal motion by lead screw		$J = \frac{M}{4} \left(\frac{V}{\pi \cdot N_s} \right)^2 = \frac{M}{4} \left(\frac{P}{\pi} \right)^2 \text{ [kg}\cdot\text{m}^2 \text{]}$
Vertical motion by hoist		$J = \frac{M_1 D^2}{4} + \frac{1}{8} M_2 D^2 \text{ [kg}\cdot\text{m}^2 \text{]}$

(3) Calculation of moment of inertia at different rotating speeds

	$J_L = \left(\frac{N_{s2}}{N_{s1}} \right)^2 J_l = \left(\frac{1}{Z} \right)^2 J_l$ <p style="text-align: right;">Z : Total ratio</p>
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INTRODUCTION TO GD²

1. Starting Time GD²

For successful starting of a driven machine, the starting torque must be adequately larger than the load torque and even after starting commences, the motor torque must consistently be greater than the load torque, until reaching full load speed.

The difference between the motor torque and the load torque during the starting period is referred to as the accelerating torque: If the average accelerating torque is taken as \bar{T}_a (kgf·m), the starting time t_s (s) up to the rotating speed n (r/min), is calculated according to the following formula :

$$t_s = \frac{(GD_m^2 + GD_c^2 + GD_l^2) \cdot n}{375 \cdot \bar{T}_a} \text{ (S)}$$

However GD_m^2 : GD² (kgf · m²) of motor (Inclusive of brake drum)

GD_c^2 : GD² (kgf · m²) of Cyclo reducer

GD_l^2 : GD² (kgf · m²) of driven machine (Inclusive of coupling, pulley) when converted to the motor shaft.

Average accelerating torque \bar{T}_a

Here, the average accelerating torque, refers to the average value of the difference between the motor torque and the load torque or the actual torque for accelerating the load, as shown in the graph at the right. For determining the starting time, the motor torque curve and load torque curve are necessary. However, since it is extremely difficult to determine the average accelerating torque by this method, the average accelerating torque at the actual load time is calculated according to the following formula.

When starting at full voltage, the average accelerating torque T_a (kgf · m) may roughly be calculated by the following formula :

$$\bar{T}_a = 0.8 \left(\frac{T_s + T_m}{2} \right) - \bar{T}_L \text{ (kgf · m)}$$

Furthermore, if the average load torque \bar{T}_L (kgf · m) during the starting period is equivalent, the full load torque T_L (kgf · m) of the motor may roughly be equal to the following :

In case of constant torque load $\bar{T}_L = T_L$ (kgf · m)

In case of square of reduced torque load . . $\bar{T}_L = 0.34T_L$ (kgf · m)

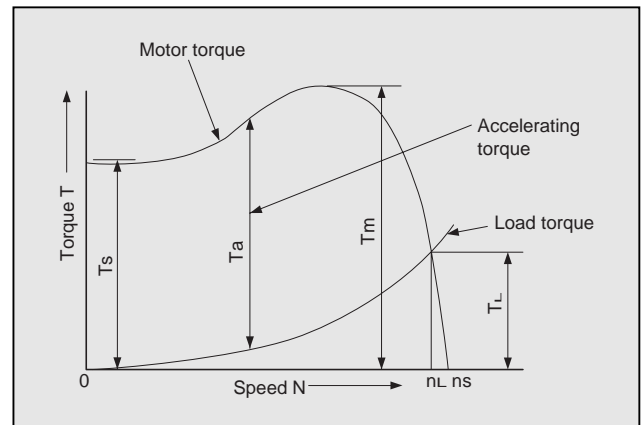
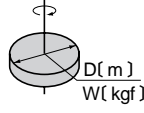
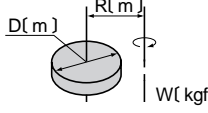
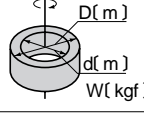
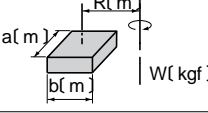
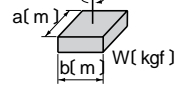
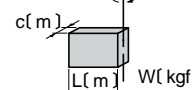


Fig E-6 Torque Curve

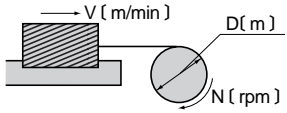
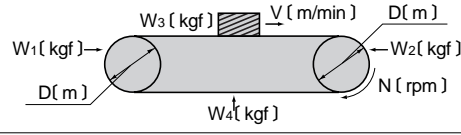
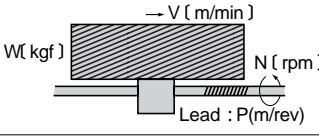
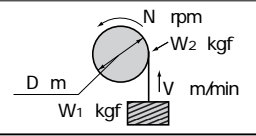
- T_s : Starting torque
- T_m : Maximum torque (Stalling torque)
- T_a : Accelerating torque
- T_L : Full load torque
- n_s : Synchronous rotating speed
- n_L : Full load rotating speed

2. Calculation of GD²

(1) GD² of rotating motion

Rotating motion on the center of gravity		Rotating motion off the center of gravity	
	$GD^2 = \frac{1}{2} WD^2 \quad [\text{kgf} \cdot \text{m}^2]$		$GD^2 = W \left(\frac{1}{2} D^2 + 4R^2 \right) [\text{kgf} \cdot \text{m}^2]$
	$GD^2 = \frac{1}{2} W (D^2 + d^2) [\text{kgf} \cdot \text{m}^2]$		$GD^2 = W \left(\frac{a^2 + b^2}{3} + 4R^2 \right) [\text{kgf} \cdot \text{m}^2]$
	$GD^2 = \frac{1}{3} W (a^2 + b^2) [\text{kgf} \cdot \text{m}^2]$		$GD^2 = \frac{1}{3} W (4L^2 + C^2) [\text{kgf} \cdot \text{m}^2]$

(2) GD² of rectilinear motion (Loaded shaft side GD²)

General application		$GD^2 = W \left(\frac{V}{\pi \cdot N} \right)^2 = WD^2 \quad [\text{kgf} \cdot \text{m}^2]$
Horizontal motion by conveyor		$GD^2 = \left(\frac{W_1 + W_2}{2} + W_3 + W_4 \right) \times D^2 \quad [\text{kgf} \cdot \text{m}^2]$
Horizontal motion by lead screw		$GD^2 = W \left(\frac{V}{\pi \cdot N} \right)^2 = W \left(\frac{P}{\pi} \right)^2 \quad [\text{kgf} \cdot \text{m}^2]$
Vertical motion by hoist		$GD^2 = W_1 D^2 + \frac{1}{2} W_2 D^2 \quad [\text{kgf} \cdot \text{m}^2]$

(3) Calculation of GD² at different rotating speeds

	$GD_L^2 = \left(\frac{N_2}{N_1} \right)^2 GD^2 = \left(\frac{1}{Z} \right)^2 GD^2$ <p style="text-align: right;">Z : Total ratio</p>
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Moment of Inertia • GD²

Table E-19 Moment of Inertia • GD² on Motor Shaft of Cyclo Gearmotor
(Single Stage Reduction, Only Cyclo part)

Unit : GD_c^2 (× 10⁴kgf•m²) • J_c (Moment of inertia) (× 10⁴kg•m²)

Frame Size	Reduction Ratio															
	6		8		11		13		15		17		21		25	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.666	0.167	0.532	0.133	0.449	0.112	0.423	0.106	0.407	0.102	0.396	0.099	0.378	0.095	0.366	0.092
6070 6075	0.682	0.171	0.541	0.135	0.454	0.114	0.426	0.107	0.409	0.102	0.398	0.100	0.379	0.095	0.367	0.092
6080 6085	1.61	0.403	1.32	0.330	1.12	0.280	1.07	0.268	1.02	0.255	0.997	0.249	0.688	0.172	0.665	0.166
6090 6095	3.82	0.955	2.96	0.740	2.37	0.593	2.49	0.623	2.42	0.605	2.12	0.530	1.61	0.403	1.56	0.390
6100 6105	3.07	0.768	2.22	0.555	1.36	0.340	1.40	0.350	1.28	0.320	0.897	0.224	1.03	0.258	0.942	0.236
6110 6115	5.99	1.50	4.44	1.11	3.38	0.845	3.07	0.768	2.88	0.720	2.75	0.688	2.44	0.610	2.38	0.595
6120 6125	12.4	3.10	10.1	2.53	6.24	1.56	6.82	1.71	6.46	1.62	4.82	1.21	5.56	1.39	5.17	1.29
6130 6135	34.3	8.58	23.5	5.88	17.3	4.33	14.7	3.68	13.2	3.30	12.1	3.03	10.0	2.51	9.39	2.35
6140 6145	37.7	9.43	25.6	6.40	18.2	4.55	14.7	3.68	13.3	3.33	11.8	2.95	10.1	2.52	9.41	2.35
6160 6165	98.7	24.7	68.9	17.2	45.4	12.4	41.5	11.0	37.7	9.90	32.2	8.35	29.9	7.65	28.2	71.5
6170 6175	264	66.0	197	49.3	153	37.5	140	35.3	124	31.3	119	30.0	111	28.0	107	27.0
6180 6185	—	—	—	—	231	58.5	209	52.8	186	46.8	177	44.5	167	42.3	156	39.3
6190 6195	—	—	—	—	545	136	503	126	478	120	460	115	428	107	415	104
6205	—	—	—	—	646	162	—	—	565	141	—	—	517	129	—	—
6215	—	—	—	—	990	248	—	—	864	216	—	—	789	197	—	—
6225	—	—	—	—	1220	305	—	—	1030	258	—	—	927	232	—	—
6235	—	—	—	—	1990	498	—	—	1710	428	—	—	1530	383	—	—
6245	—	—	—	—	3610	903	—	—	3170	793	—	—	2890	723	—	—
6255	—	—	—	—	5870	1470	—	—	5120	1280	—	—	4630	1160	—	—
6265	—	—	—	—	8590	2150	—	—	7460	1870	—	—	6800	1700	—	—
6275	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Frame Size	Reduction Ratio															
	29		35		43		51		59		71		87		119	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.361	0.090	0.356	0.089	0.351	0.088	—	—	—	—	—	—	—	—	—	—
6070 6075	0.362	0.091	0.356	0.089	0.351	0.088	0.348	0.087	0.346	0.087	—	—	—	—	—	—
6080 6085	0.650	0.163	0.633	0.158	0.380	0.095	0.373	0.093	0.370	0.093	0.365	0.091	0.363	0.091	—	—
6090 6095	1.30	0.325	1.01	0.253	0.993	0.248	0.968	0.242	0.723	0.181	0.954	0.239	0.712	0.178	0.944	0.236
6100 6105	0.651	0.163	0.607	0.152	0.573	0.143	0.790	0.198	0.528	0.132	0.767	0.192	0.511	0.128	0.750	0.188
6110 6115	2.32	0.580	2.23	0.558	2.19	0.548	2.13	0.533	2.12	0.530	2.10	0.525	2.09	0.523	—	—
6120 6125	3.63	0.908	3.46	0.865	3.30	0.825	4.58	1.15	3.15	0.788	4.48	1.12	3.04	0.760	—	—
6130 6135	8.63	2.16	8.33	2.08	7.84	1.96	7.71	1.93	7.64	1.91	7.45	1.86	7.40	1.85	—	—
6140 6145	8.63	2.16	8.34	2.09	7.84	1.96	7.65	1.91	7.64	1.91	7.45	1.86	7.40	1.85	—	—
6160 6165	25.2	6.35	24.3	6.10	23.3	5.85	23.0	5.75	23.1	5.78	22.1	5.53	21.8	5.45	—	—
6170 6175	102	25.5	100	25.3	97.7	24.5	96.7	24.2	95.6	23.9	95.2	23.8	94.7	23.7	—	—
6180 6185	149	37.5	147	37.0	144	36.0	140	35.0	139	34.8	138	34.5	137	34.3	—	—
6190 6195	402	101	393	98.3	387	96.8	383	95.8	380	95.0	378	94.5	376	94.0	—	—
6205	482	121	—	—	460	115	—	—	451	113	—	—	446	117	—	—
6215	735	184	—	—	700	175	—	—	686	172	—	—	678	170	—	—
6225	840	210	—	—	788	197	—	—	766	192	—	—	753	188	—	—
6235	1410	353	—	—	1340	335	—	—	1300	325	—	—	1290	323	—	—
6245	2720	680	—	—	2600	650	—	—	2550	638	—	—	2530	633	—	—
6255	4320	1080	—	—	4140	1040	—	—	4060	1020	—	—	4010	1000	—	—
6265	6330	1580	—	—	6030	1510	—	—	5900	1480	—	—	5820	1460	—	—
6275	19600	4900	—	—	18900	4730	—	—	18600	4650	—	—	18400	4600	—	—

Notes : 1. Table E-19 does not include J • GD² of motor.

Obtain the J • GD² of the single stage reduction gearmotor by adding the J • GD² of the motor Tables E-21, 22.

2. Calculate the J • GD² of the 2-Stage reduction model from the following formula :

J • GD² of the 2-stage reduction model =

$$J \cdot GD^2 \text{ of 1st stage} + \frac{J \cdot GD^2 \text{ (2nd stage)}}{(\text{Reduction ratio of 1st stage})^2}$$

Calculate the J • GD² of the 1st stage(Input side)in the same manner as calculating the J • GD² of single stage reduction model.

For the J • GD² of the 2nd stage(output side), the values shown in Table E-19 may be used.

* The values in Table E-19 are subject to change without notice.

Technical

Reducer

Motor

Common

Table E-20 Moment of Inertia · GD² on High Speed Shaft of Cyclo Reducer
(Single Stage Reducer)

Unit : $\frac{GD_c^2}{(\times 10^{-4} \text{kgf} \cdot \text{m}^2)}$ · $\frac{J_c(\text{Moment of Inertia})}{(\times 10^{-4} \text{kg} \cdot \text{m}^2)}$

Frame Size	Reduction Ratio															
	6		8		11		13		15		17		21		25	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.764	0.191	0.630	0.158	0.547	0.137	0.521	0.130	0.505	0.126	0.494	0.124	0.476	0.119	0.464	0.116
6070 6075	0.780	0.195	0.639	0.160	0.552	0.138	0.524	0.131	0.507	0.127	0.496	0.124	0.477	0.119	0.465	0.116
6080 6085	1.70	0.425	1.41	0.353	1.22	0.305	1.16	0.290	1.11	0.278	1.09	0.273	0.782	0.196	0.759	0.190
6090 6095	4.06	1.015	2.73	0.683	2.60	0.650	2.25	0.563	2.18	0.545	2.36	0.590	1.380	0.345	1.330	0.333
6100 6105	3.32	0.830	1.98	0.495	1.60	0.400	1.15	0.288	1.03	0.259	1.18	0.295	0.783	0.196	0.695	0.174
6110 6115	6.23	1.56	4.68	1.17	3.62	0.905	3.31	0.828	3.12	0.780	2.99	0.748	2.68	0.670	2.62	0.655
6120 6125	13.8	3.45	8.68	2.17	7.64	1.91	5.42	1.36	5.06	1.27	6.22	1.56	4.17	1.04	3.77	0.943
6130 6135	36.8	9.20	26.0	6.50	19.8	4.95	17.2	4.30	15.8	3.95	14.6	3.65	12.6	3.15	18.9	4.73
6140 6145	41.7	10.4	28.9	7.23	21.2	5.30	17.3	4.33	15.8	3.95	14.5	3.63	12.6	3.15	12.0	3.00
6160 6165	146	36.5	116	29.0	92.6	23.2	88.7	22.2	84.9	21.2	79.4	19.9	77.1	19.3	75.4	18.9
6170 6175	315	78.8	248	62.0	204	51.0	191	47.8	175	43.8	170	42.5	161	40.3	158	39.5
6180 6185	—	—	—	—	292	73.0	271	67.8	247	61.8	239	59.8	228	57.0	217	54.3
6190 6195	—	—	—	—	678	169	636	159	611	152	594	148	561	140	548	137
6205	—	—	—	—	946	237	—	—	864	216	—	—	817	204	—	—
6215	—	—	—	—	1490	373	—	—	1360	340	—	—	1290	323	—	—
6225	—	—	—	—	1930	483	—	—	1750	438	—	—	1640	410	—	—
6235	—	—	—	—	3240	810	—	—	2960	740	—	—	2780	695	—	—
6245	—	—	—	—	4940	1240	—	—	4500	1130	—	—	4220	1060	—	—
6255	—	—	—	—	8910	2230	—	—	8160	2040	—	—	7670	1920	—	—
6265	—	—	—	—	11700	2930	—	—	10600	2650	—	—	9960	2490	—	—
6275	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—

Frame Size	Reduction Ratio																GD ² of fan	
	29		35		43		51		59		71		87		119		Moment of Inertia	
	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c	GD _c ²	J _c
6060 6065	0.460	0.115	0.454	0.114	0.449	0.112	—	—	—	—	—	—	—	—	—	—	—	—
6070 6075	0.460	0.115	0.454	0.114	0.450	0.113	0.446	0.112	0.445	0.111	—	—	—	—	—	—	—	—
6080 6085	0.744	0.186	0.727	0.182	0.474	0.119	0.467	0.117	0.463	0.116	0.459	0.115	0.456	0.114	—	—	—	—
6090 6095	1.54	0.385	1.25	0.313	1.23	0.308	0.731	0.183	0.960	0.240	0.717	0.179	0.949	0.237	0.707	0.177	—	—
6100 6105	0.899	0.225	0.854	0.214	0.820	0.205	0.543	0.136	0.776	0.194	0.520	0.130	0.758	0.190	0.503	0.126	—	—
6110 6115	2.56	0.64	2.47	0.618	2.43	0.608	2.37	0.593	2.36	0.590	2.34	0.585	2.33	0.583	—	—	—	—
6120 6125	5.03	1.26	4.86	1.22	4.70	1.18	3.19	0.798	4.55	1.14	3.08	0.770	4.44	1.11	—	—	—	—
6130 6135	11.2	2.80	10.9	2.73	10.3	2.58	10.2	2.55	10.2	2.55	9.97	2.49	9.93	2.48	—	—	—	—
6140 6145	11.2	2.80	10.9	2.73	10.3	2.58	10.2	2.55	10.2	2.55	9.99	2.50	9.93	2.48	—	—	—	—
6160 6165	72.4	18.1	71.5	17.9	70.5	17.6	70.2	17.6	70.3	17.6	69.3	17.3	69.0	17.3	—	—	35.4	8.85
6170 6175	153	38.3	151	37.8	148	37.0	147	36.8	146	36.5	146	36.5	145	36.3	—	—	33.3	8.33
6180 6185	211	52.8	209	52.3	206	51.5	202	50.5	200	50.0	199	49.8	198	49.5	—	—	32.7	8.18
6190 6195	535	133	527	131	520	130	516	129	513	128	511	127	509	127	—	—	83.6	20.9
6205	782	196	—	—	760	190	—	—	750	188	—	—	745	186	—	—	248	62.0
6215	1240	310	—	—	1200	300	—	—	1190	298	—	—	1180	295	—	—	419	105
6225	1550	388	—	—	1500	375	—	—	1480	370	—	—	1470	368	—	—	599	150
6235	2660	665	—	—	2580	645	—	—	2550	638	—	—	2530	633	—	—	1040	260
6245	4040	1010	—	—	3930	983	—	—	3880	970	—	—	3850	963	—	—	1040	260
6255	7360	1840	—	—	7180	1800	—	—	7100	1780	—	—	7060	1770	—	—	2370	593
6265	9480	2370	—	—	9180	2300	—	—	9050	2260	—	—	8980	2250	—	—	2370	593
6275	—	—	—	—	29900	7480	—	—	29600	7400	—	—	29400	7350	—	—	9540	2390

Notes : 1. The value of the fan has been to the J · GD² of the Frame sizes of 6160 ~ 6275.
2. The J · GD² of the 2-stage reduction model is calculated by the following formula :

$$J \cdot GD^2 \text{ of 2-stage reduction model} = J \cdot GD^2 \text{ of 1st stage} + \frac{J \cdot GD^2 \text{ of 2nd stage}}{(\text{Reduction ratio of 1st stage})^2}$$

Use value in Table E-20 for J · GD² of 1st stage.

For the J · GD² of the 2nd stage, deduct the J · GD² of the fan from the value in Table E-20.

* Values Table E-20 are subject to change without notice.

Table E-21 Moment of Inertia · GD² of Three Phase Motor

Unit : GD_M² kgf·m² · J_M(Moment of Inertia)kg·m²

kW,P	0.1kW × 4P		0.2kW × 4P		0.25kW × 4P		0.4kW × 4P		0.55kW × 4P		0.75kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0013	0.000325	0.0020	0.000500	0.0020	0.000500	0.0026	0.000650	0.00405	0.00101	0.00480	0.00120
With Brake	0.0014	0.000350	0.0022	0.000550	0.0022	0.000550	0.0027	0.000675	0.00445	0.00111	0.00520	0.00130

kW,P	1.1kW × 4P		1.5kW × 4P		2.2kW × 4P		3.0kW × 4P		3.7kW × 4P		5.5kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0074	0.00185	0.0085	0.00213	0.0133	0.00333	0.0281	0.00700	0.0339	0.00848	0.0457	0.0114
With Brake	0.0083	0.00208	0.0094	0.00235	0.0149	0.00373	0.0325	0.00810	0.0383	0.00958	0.0501	0.0125

kW,P	7.5kW × 4P		11kW × 4P		15kW × 4P		18.5、22kW × 4P		30kW × 4P		37kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.107	0.0268	0.150	0.0375	0.359	0.0898	0.9	0.225	1.0	0.250	1.23	0.308
With Brake	0.121	0.0303	0.164	0.0410	0.531	0.133	0.929	0.232	1.03	0.257	1.28	0.321

kW,P	45kW × 4P		55kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M
Standard	1.37	0.343	2.70	0.675

kW,P	15kW × 6P		22kW × 6P		30kW × 6P		37kW × 6P		45kW × 6P		55kW × 6P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	1.27	0.318	1.45	0.363	1.9	0.475	2.4	0.600	4.0	1.00	4.7	1.18

Table E-22 Moment of inertia · GD² of Motor for Inverter

Unit : GD_M² kgf·m² · J_M(Moment of Inertia)kg·m²

kW,P	0.1kW × 4P		0.2kW × 4P		0.4kW × 4P		0.75kW × 4P		1.5kW × 4P		2.2kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0020	0.000500	0.0026	0.000650	0.00480	0.00120	0.0085	0.00213	0.0133	0.00333	0.0339	0.00848
With Brake	0.0022	0.000550	0.0027	0.000675	0.00520	0.00130	0.0094	0.00235	0.0149	0.00373	0.0383	0.00958

kW,P	3.7kW × 4P		5.5kW × 4P		7.5kW × 4P		11kW × 4P		15kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.0457	0.0114	0.107	0.0268	0.150	0.0375	0.359	0.0898	0.9	0.225
With Brake	0.0501	0.0125	0.121	0.0303	0.164	0.0410	0.531	0.133	—	—

kW,P	18.5kW × 4P		22kW × 4P		30kW × 4P		37kW × 4P	
	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M	GD _M ²	J _M
Standard	0.9	0.225	1.0	0.250	1.23	0.308	1.37	0.343
With Brake	0.929	0.232	1.03	0.257	1.28	0.321	—	—

[Example 1] CNHM2-6115-29

- (1) J_M=0.00213kg·m²
(Standard 1.5kW × 4-Pole motor in Table E-21)
- (2) Frame size 6115 of Cyclo reducer.
J_c : Reduction ratio of 29 = 0.580 × 10⁻⁴kg·m²
(From the Table E-19)
- (3) J of CNHM2-6115-29
J = Motor J_M + Cyclo reducer J_c
= 0.00213 + 0.000058
= 0.002188kg·m²

[Example 2] CVVM20-6215DA-165(15 × 11)

- (1) J_M=0.0898kg·m² (Standard 15kW × 4-Pole motor in Table E-21)
- (2) Combination of Cyclo reducer, Frame size 6215 with ratio 15 + Frame size 6135 with ratio 11. (Refer Page 9)
- (3) 1st stage of 6135 Ratio 11, J_c = 4.33 × 10⁻⁴kg·m²
- (4) 2nd stage of 6215 Ratio 15, J_c = 216 × 10⁻⁴kg·m²
(Both (3) & (4) from Table E-19)
- (5) Cyclo reducer J_c = 4.33 × 10⁻⁴ + $\frac{216 \times 10^{-4}}{11^2}$ = 0.0006kg·m²
- (6) J of CVVM20-6215DA-165
J = Motor J_M + Cyclo reducer J_c
= 0.0898 + 0.0006
= 0.0904kg·m²

Technical

Reducer

Motor

Common

OPERATING PRINCIPLES

The reducer portion of the CYCLO gearmotor is fundamentally different in principle and mechanism from the involute gearing mechanism of competitive gearmotors. The unique speed reducer portion is an ingenious combination of the following two mechanisms:

A combination of a planet gear and a fixed internal sun gear. In the CYCLO gearmotor, the planet gear has cycloidal-shaped teeth and the sun gear has circular pin teeth.

The number of teeth in the planet gear is one or two less than the sun gear.

A constant speed internal gearing mechanism.

See Fig.E-7

In equation 1, below, P identifies the number of the planet gear teeth, S that of the sun gear, ω_2 the angular velocity of the planet gear around its own axis. The velocity ratio of ω_2 to ω_1 is shown as follows:

$$\frac{\omega_2}{\omega_1} = 1 - \frac{S}{P} = - \frac{S-P}{P} \dots \text{Equation 1}$$

With S greater by one or two than P in this equation, the highest velocity ratio is obtainable.

That is, if S-P=1 is applied to Equation 1, the velocity ratio may be calculated from the following equation:

$$\frac{\omega_2}{\omega_1} = \frac{1}{P} \dots \text{Equation 2}$$

Or if S-P=2 is applied to Equation 1, the velocity ratio may be calculated from the following equation:

$$\frac{\omega_2}{\omega_1} = \frac{2}{P} \dots \text{Equation 3}$$

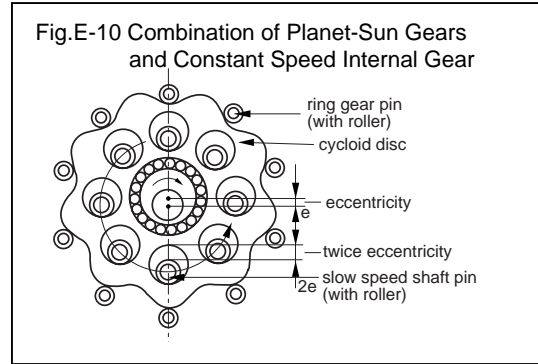
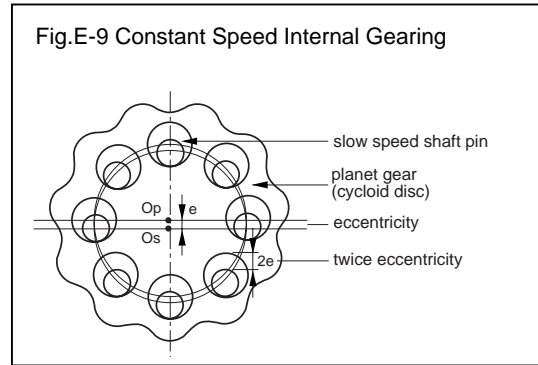
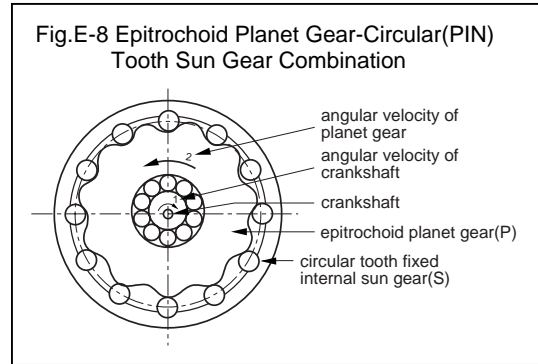
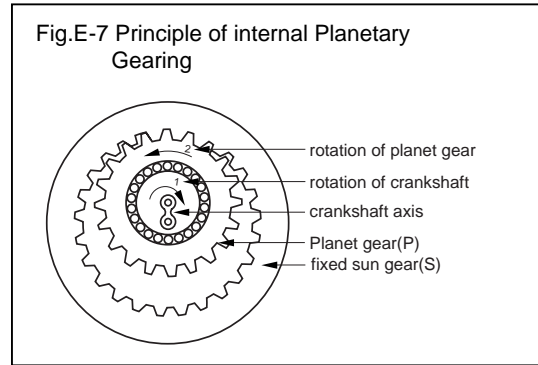
As the crankshaft rotates at the angular velocity ω_1 around the axis of the sun gear, the planet gear rotates at the angular

$$\text{velocity} - \frac{1}{P} \omega_1 \text{ or } - \frac{2}{P} \omega_1$$

when P indicates the number of the teeth of the planet gear and the symbol '-' indicates that the rotation of the planet gear is in a reverse direction to that of the crankshaft.

In the CYCLO gearmotor, illustrated in Fig.E-8, circular teeth(pins) are adapted for the sun gear and epitrochoid curved teeth for the planet gear, thereby avoiding tooth top interference. The rotation of the planet gear around its own axis is taken out through a constant speed internal gearing mechanism as shown in Fig.E-9.

In this mechanism shown in Fig.E-10, the pins of the slow speed shaft are evenly spaced on a circle that is concentric to the axis of the sun gear. The pins transmit the rotation of the planet gear by rolling internally on the circumference of the bores of each planet gear or cycloid disc. The diameter of the bores minus the diameter of the slow speed shaft pins is equal to twice the eccentricity value of the crank shaft (eccentric). This mechanism smoothly transmits only the rotation of the planet gear around its own axis to the slow speed shaft.



Construction Drawing

Construction of gearmotor and reducer

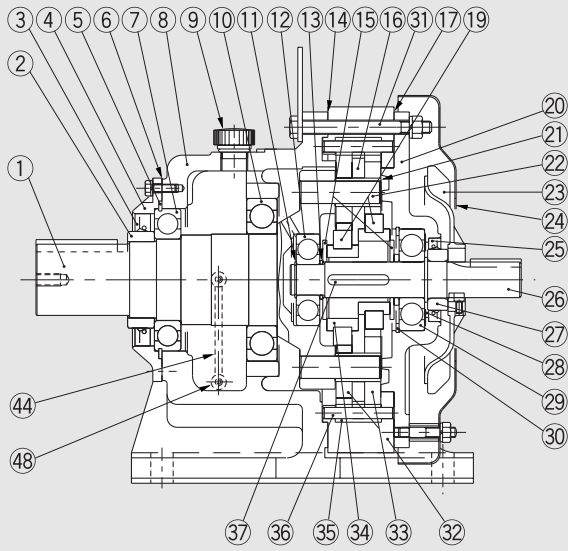


Fig.E-11 Type CHH (Horizontal-Reducer)
Single reduction (Example: Frame size 6175)

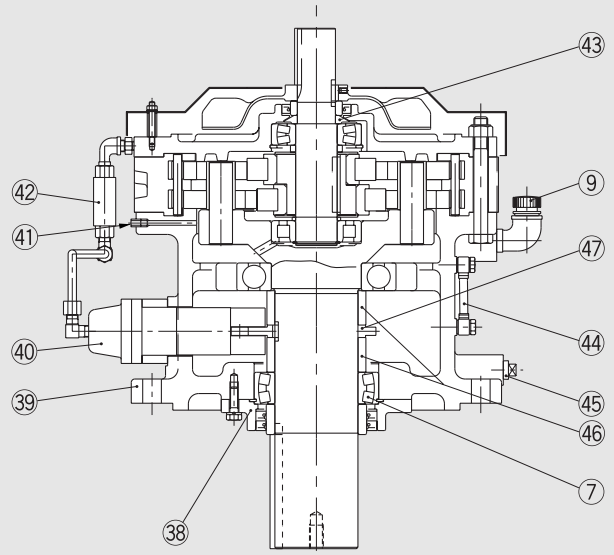


Fig.E-12 Type CVV (Vertical-Reducer)
Single reduction (Example: Frame size 6225)

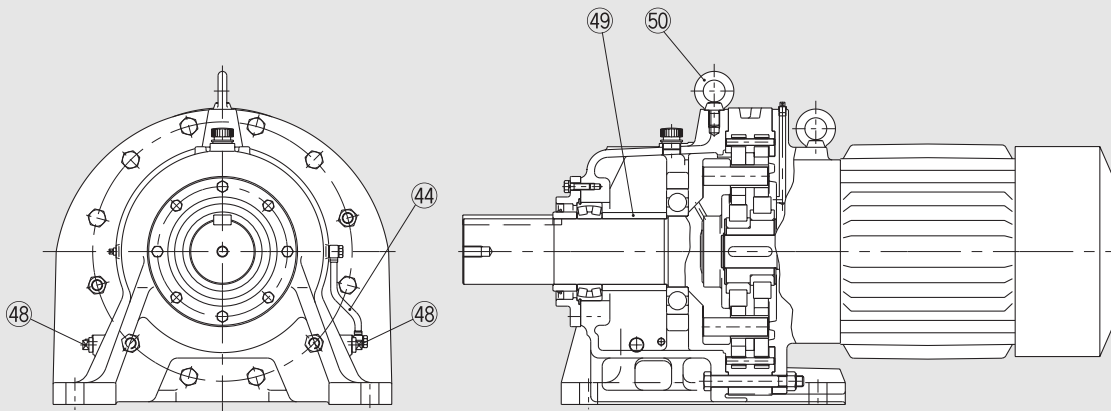


Fig.E-13 Type CHHM (Horizontal-Gearmotor)
Single reduction (Example: Frame size 6225)

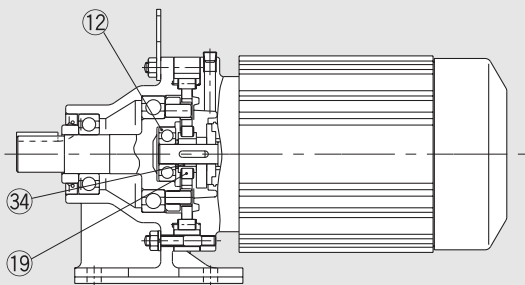


Fig.E-14 Type CNHM (Horizontal-Gearmotor)
Single reduction (Example: Frame size 6085)

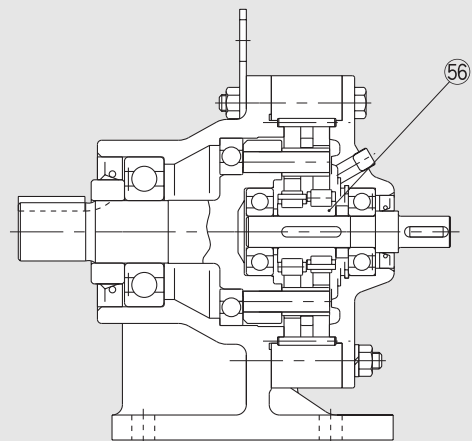


Fig.E-15 Type CNH (Horizontal-Reducer)
Single reduction (Example: Frame size 6105)

Technical

Reducer

Motor

Common

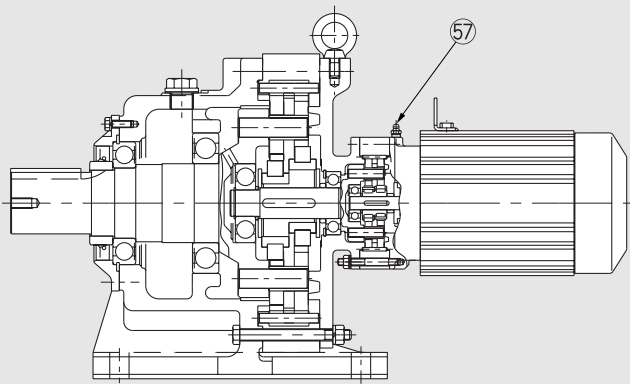


Fig.E-16 Type CHHM (Horizontal Gearmotor)
Double reduction (Example: Frame size grease lubricated 6185DB)

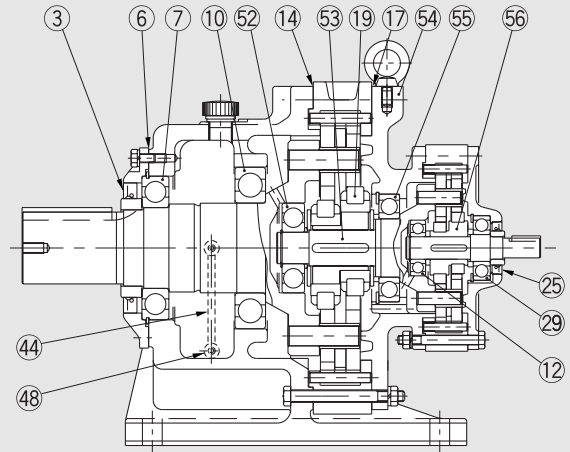


Fig.E-17 Type CHH (Horizontal Reducer)
Double reduction (Example: Frame size 6185DB)

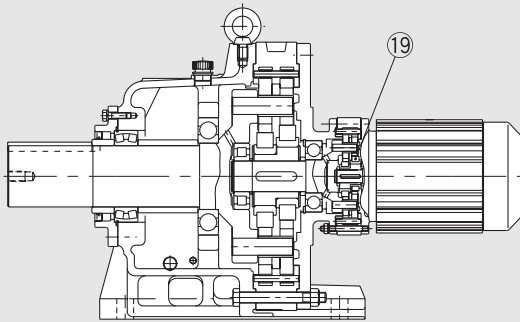


Fig.E-18 Type CHHM (Horizontal Gearmotor)
Double reduction (Example: Frame size 6225DB)

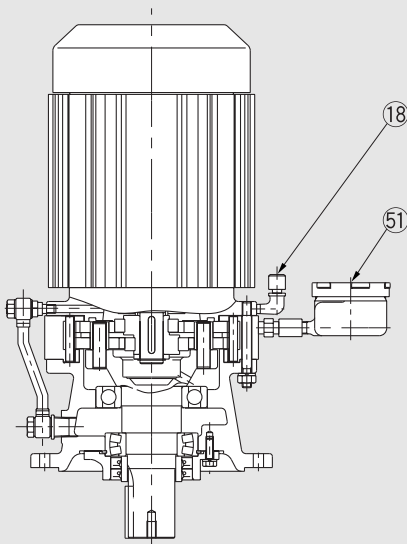


Fig.E-19 Type CVVM (Vertical Gearmotor)
Single reduction (Example: Frame size 6145)

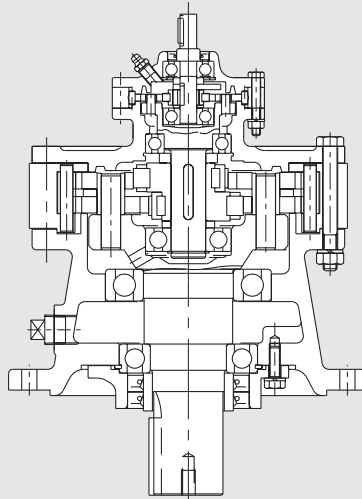


Fig.E-20 Type CVV (Vertical Reducer)
Double reduction (Example: Frame size 6135DA)

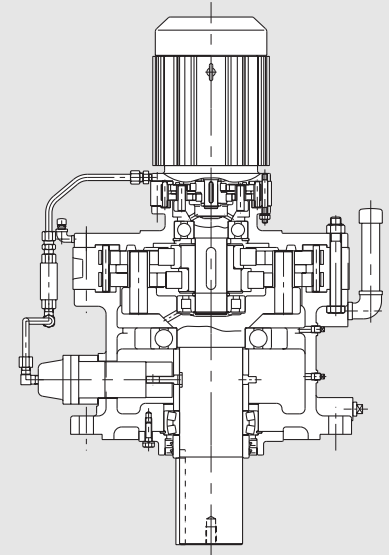
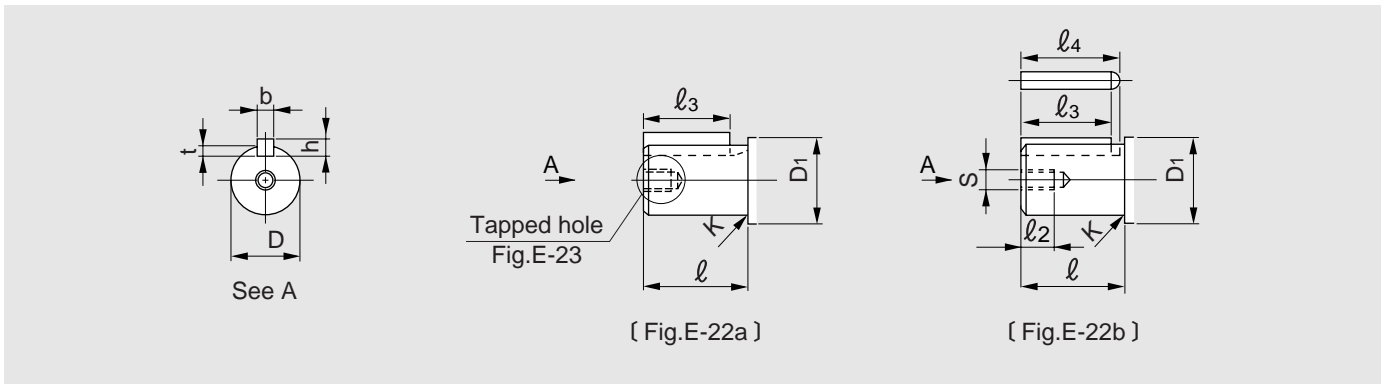


Fig.E-21 Type CVVM (Vertical Gearmotor)
Double reduction (Example: Frame size 6225DA)

Principal parts

No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name	No.	Part Name
1	Slow speed shaft	13	Spacer	25	Oil seal	37	Key	49	Spacer
2	Collar(Slow speed shaft)	14	Gasket B	26	High speed shaft	38	Gland	50	Eye bolt
3	Oil seal	15	End plate	27	Collar (High Speed Shaft)	39	Flanged casing	51	Oil filler
4	Slow speed end cap	16	Spacer ring	28	Spacer	40	Plunger pump	52	Intermediate shaft, bearing A
5	Retaining ring	17	Gasket C	29	High speed shaft, bearing B	41	Air vent plug	53	Intermediate shaft
6	Gasket A	18	Air vent plug	30	Retaining ring	42	Oil signal	54	Intermediate cover
7	Slow speed shaft, bearing A	19	Bearing for eccentric (High speed shaft section)	31	Bolt for ring gear housing	43	Oil slinger	55	Intermediate shaft, bearing B
8	Horizontal casing	20	High speed end shield	32	Ring gear housing	44	Oil level gauge	56	Eccentric bearing (Double)
9	Oil filler plug	21	Slow speed shaft roller	33	Cycloid disc	45	Plug (Oil drain)	57	Grease nipple
10	Slow speed shaft, bearing B	22	Slow speed shaft pin	34	Eccentric	46	Spacer		
11	Retaining ring	23	Cooling fan	35	Ring gear roller	47	Cam		
12	High speed shaft, bearing A	24	Fan cover	36	Ring gear pin	48	Plug (Oil drain)		

DETAILED DIMENSION OF SLOW SPEED SHAFT



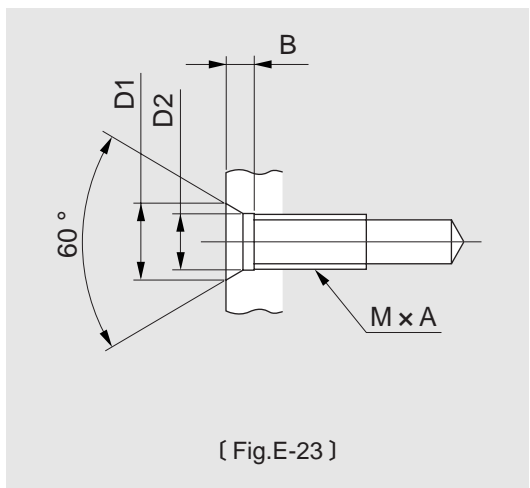
Dimension of high speed shaft end ; Dimension tolerance in accordance with JIS B 0401-1976 "h6".
Dimension of shaft end key ; Parallel key in accordance with JIS B 1301-1976.

Table E-23 Dimension of Slow Speed Shaft

Frame size		Slow Speed Shaft													
Single Reduction	Double Reduction	Fig.	D (h6)	Tolerance	D1	l	K (Roundness)	t	b (Key) (h9)		h (Key)		l3 (Key)	l4	
									Tolerance	Tolerance	Tolerance	Tolerance			
6060	6060DA	E-22b	14	0	30	25	-	3	+0.1	5	0	5	0	20	22.5
6065	6065DA														
6070	6070DA														
6075	6075DA	E-22b	18	-0.011	30	30	-	3.5	0	6	-0.030	6	-0.030	25	-
6080	-	E-22b	22	0	45	35	-	3.5	+0.2	6	0	6	0	30	33
6085	-														
6090	6090DA	E-22a	28	-0.013	45	35	-	4	+0.2	8	0	7	0	32	-
6095	6095DA														
6100	6100DA														
6105	6105DA	E-22a	28	-0.013	50	35	-	4	0	8	-0.036	7	-0.090	32	-
610H	-	E-22b	32	0	55	45	-	5	+0.2	10	0	8	0	37	42
6110	-														
6115	-	E-22a	38	-0.016	65	55	-	5	+0.2	10	0	8	0	50	-
6120	6120DA 6120DB														
6125	6125DA 6125DB														
612H	-														

Table E-24 Dimension of Tapped hole

Frame size		Tap	Depth	Center hole		
Single Reduction	Double Reduction	M	A	D1	D2	B
6060	6060DA	M5	16	7	5.2	2.6
6065	6065DA	M5	16	7	5.2	2.6
6070	6070DA	M6	16	9	6.2	3.4
6075	6075DA	M6	16	9	6.2	3.4
6080	-	M6	16	9	6.2	3.4
6085	-	M6	16	9	6.2	3.4
6090	6090DA	M8	20	11	8.2	3.6
6095	6095DA	M8	20	11	8.2	3.6
6100	6100DA	M8	20	11	8.2	3.6
6105	6105DA	M8	20	11	8.2	3.6
610H	-	M8	20	11	8.2	3.6
6110	-	M8	20	11	8.2	3.6
6115	-	M8	20	11	8.2	3.6
6120	6120DA 6120DB	M8	20	11	8.2	3.6
6125	6125DA 6125DB	M8	20	11	8.2	3.6
612H	-	M8	20	11	8.2	3.6



[Fig.E-23]

Technical
Reducer
Motor
Common

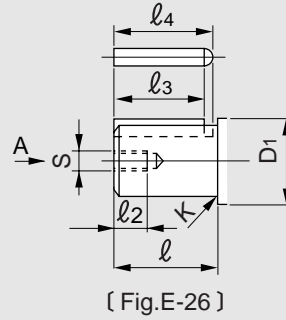
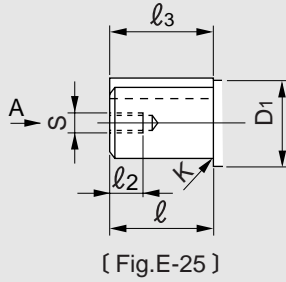
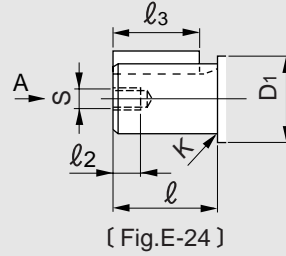
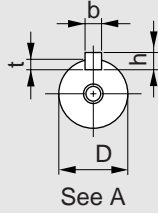


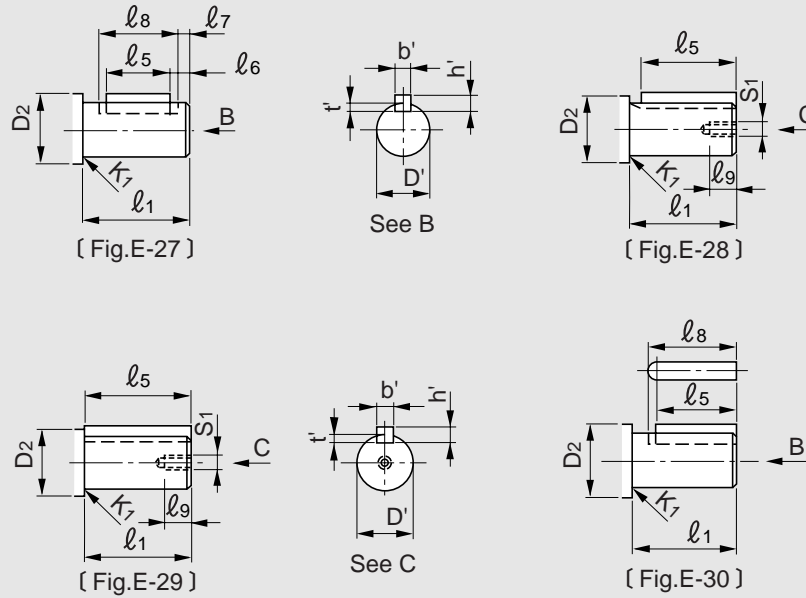
Table E-25 Dimension of Slow Speed Shaft

Frame size		Slow Speed Shaft															
Single Reduction	Double Reduction	Fig.	D (h6)	Tolerance	D1	ℓ	K (Roundness)	s	ℓ2	t	Tolerance	b (Key) (h9)		h (Key) Tolerance		ℓ3 (Key)	ℓ4
6130	6130DA 6130DB 6130DC	E-24	50	0	65	70 (61)	—	M10	18	5.5	+0.2 0	14	0 -0.043	9	0 -0.090	56	—
6135	6135DA 6135DB 6135DC	E-24				90 (81)	—	M10	18	5.5		14		9		80	
6140	6140DA 6140DB 6140DC	E-24	50	-0.016	65	90 (81)	—	M10	18	5.5	+0.2 0	14	0 -0.043	9	0 -0.090	80	—
6145	6145DA 6145DB 6145DC	E-24				90 (81)	—	M10	18	5.5		14		9		80	
614H	—	E-24	60	0	85	90 (80)	—	M10	18	7	+0.2 0	18	0 -0.052	11	0 -0.110	80	—
6160	6160DA 6160DB 6160DC	E-24				90 (80)	—	M10	18	7		18		11		80	
6165	6165DA 6165DB 6165DC	E-24	60	0	85	90 (80)	—	M10	18	7	+0.2 0	18	0 -0.052	11	0 -0.110	80	—
616H	—	E-24				90 (80)	—	M10	18	7		18		11		80	
6170	6170DA 6170DB 6170DC	E-24	70	-0.019	95	90 (84)	—	M12	24	7.5	+0.2 0	20	0 -0.052	12	0 -0.110	80	—
6175	6175DA 6175DB 6175DC	E-24				90 (84)	—	M12	24	7.5		20		12		80	
6180	6180DA 6180DB	E-24	80	0	110	110 (100)	—	M12	24	9	+0.2 0	22	0 -0.052	14	0 -0.110	100	—
6185	6185DA 6185DB	E-24				110 (100)	—	M12	24	9		22		14		100	
6190	6190DA 6190DB	E-26	95	0	120	135 (125)	—	M20	34	9	+0.3 0	25	0 -0.063	14	0 -0.130	125	137.5
6195	6195DA 6195DB	E-26				135 (125)	—	M20	34	9		25		14		125	137.5
6205	6205DA 6205DB	E-25	100	-0.022	120	165	—	M20	34	10	+0.3 0	28	0 -0.063	16	0 -0.130	165	—
6215	6215DA 6215DB	E-25	110		130	165	—	M20	34	10		28		16		165	—
6225	6225DA 6225DB	E-25	120	0	145	165	—	M20	34	11	+0.3 0	32	0 -0.063	18	0 -0.130	165	—
6235	6235DA 6235DB	E-25	130		160	200	—	M24	41	11		32		18		200	—
6245	6245DA 6245DB	E-25	140	-0.025	170	200	—	M24	41	12	+0.3 0	36	0 -0.063	20	0 -0.130	200	—
6255	6255DA 6255DB	E-25	160		190	240	—	M30	49	13		40		22		240	—
6265	6265DA	E-25	170	0	200	300	—	M30	49	13	+0.3 0	40	0 -0.063	22	0 -0.130	300	—
6275	6275DA	E-25	180		230 (330/320)	—	M30	52	15	45		25		330 (320)		—	

Note : " ℓ , ℓ₃ " dimensions in parentheses are for models with vertical output shaft.

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DETAILED DIMENSION OF HIGH SPEED SHAFT



Dimension of high speed shaft end ; Dimension tolerance in accordance with JIS B 0401-1976 "h6"
 Dimension of shaft end key ; Parallel key in accordance with JIS B 1301-1976
 S1 & 9 Dimension Tap Hole is only for vertical (Type CVV,CVF) Single stage only

Table E-26 Dimension of High Speed Shaft

Frame size		High Speed Shaft																			
Single Reduction	Double Reduction	Fig.	D' (h6)	Tolerance	D2	l1	K1 (Roundness)	t'	Tolerance	b' (Key)		h' (Key)		l5 (Key)	l6	l7	l8	S1	l9		
										(h9)	Tolerance	Tolerance	Tolerance								
6060	6060DA	E-27	12	0	17	25	0.5	2.5	+0.1 0	4	0 -0.030	4	0 -0.030	18	3	1	22	-	-		
6065	6065DA	E-27	12		17	25	0.5	2.5		4		4		18				-	-		
6070	6070DA	E-27	12		17	25	0.5	2.5		4		4		18				-	-		
6075	6075DA	E-27	12		17	25	0.5	2.5		4		4		18				-	-		
6080	-	E-27	12		17	25	0.5	2.5		4		4		18				-	-		
6085	-	E-27	12		17	25	0.5	2.5		4		4		18				-	-		
6090	6090DA	E-27	15		20	25	1	3		5		5		16				-	-		
6095	6095DA	E-27	15		20	25	1	3		5		5		16				-	-		
6100	6100DA	E-27	15		20	25	1	3		5		5		16				3.5	21	-	-
6105	6105DA	E-27	15		20	25	1	3		5		5		16				3.5		1	-
610H	-	E-27	15	20	25	1	3	5	5	16	3.5	1	-	-							
6110	-	E-27	15	20	25	1	3	5	5	16	3.5	1	-	-							
6115	-	E-27	15	20	25	1	3	5	5	16	3.5	1	-	-							
6120	6120DA 6120DB	E-30	18	32	35	-	3.5	6	6	25	-	-	28	-	-						
6125	6125DA 6125DB	E-30	18	32	35	-	3.5	6	6	25	-	-	28	-	-						
612H	-	E-30	18	32	35	-	3.5	6	6	25	-	-	28	-	-						
6130	6130DA 6130DB 6130DC	E-30	22	38	40	-	3.5	6	6	32	-	-	35	-	-						
6135	6135DA 6135DB 6135DC	E-30	22	38	40	-	3.5	6	6	32	-	-	35	-	-						
6140	6140DA 6140DB 6140DC	E-30	22	38	40	-	3.5	6	6	32	-	-	35	-	-						
6145	6145DA 6145DB 6145DC	E-30	22	38	40	-	3.5	6	6	32	-	-	35	-	-						
614H	-	E-30	22	38	40	-	3.5	6	6	32	-	-	35	-	-						
6160	6160DA 6160DB 6160DC	E-29	30	70	45	-	4	8	0 -0.036	7	0 -0.090	45	-	-	-	M10	20				
6165	6165DA 6165DB 6165DC	E-29	30	70	45	-	4	8	0 -0.036	7		50	-	-	-	M12	25				
616H	-	E-29	30	70	45	-	4	8	0 -0.036	7		50	-	-	-	M12	25				
6170	6170DA 6170DB 6170DC	E-28	35	70	55	-	5	10	0 -0.090	8		63	-	-	-	M16	30				
6175	6175DA 6175DB 6175DC	E-28	35	70	55	-	5	10	0 -0.090	8		63	-	-	-	M16	30				
6180	6180DA 6180DB	E-28	40	70	65	-	5	12	0 -0.090	8		70	-	-	-	M16	30				
6185	6185DA 6185DB	E-28	40	70	65	-	5	12	0 -0.090	8		70	-	-	-	M16	30				
6190	6190DA 6190DB	E-29	45	82	70	-	5.5	14	0 -0.043	9		82	-	-	-	-	-				
6195	6195DA 6195DB	E-29	45	82	70	-	5.5	14	0 -0.043	9		82	-	-	-	-	-				
6205	6205DA 6205DB	E-29	45	82	82	-	5.5	14	0 -0.043	9		82	-	-	-	-	-				
6215	6215DA 6215DB	E-29	50	82	82	-	5.5	14	0 -0.043	9	82	-	-	-	-	-					
6225	6225DA 6225DB	E-29	55	90	82	-	6	16	0 -0.110	10	82	-	-	-	-	-					
6235	6235DA 6235DB	E-29	60	110	105	-	7	18	0 -0.110	11	105	-	-	-	-	-					
6245	6245DA 6245DB	E-29	65	110	105	-	7	18	0 -0.110	11	105	-	-	-	-	-					
6255	6255DA 6255DB	E-29	80	130	130	-	9	22	0 -0.052	14	130	-	-	-	-	-					
6265	6265DA	E-29	80	130	130	-	9	22	0 -0.052	14	130	-	-	-	-	-					
6275	6275DA	E-30	90	140	150	-	9	25	0 -0.052	14	140	-	-	-	-	-					

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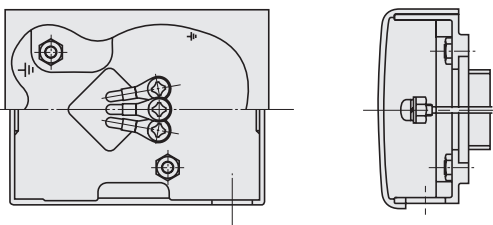
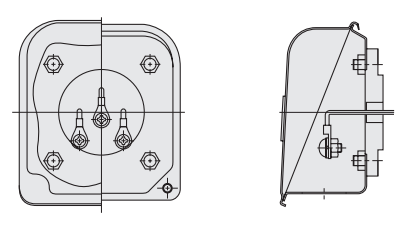
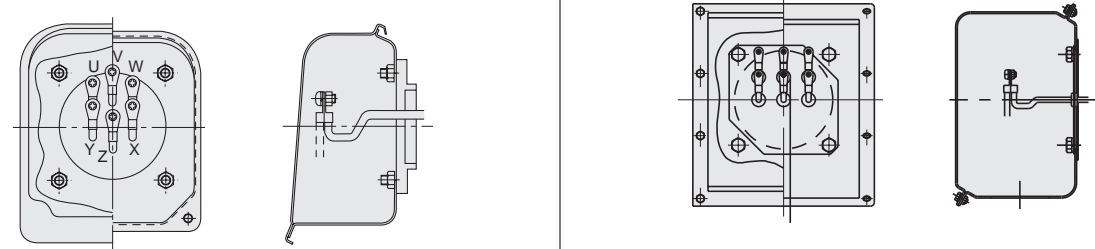
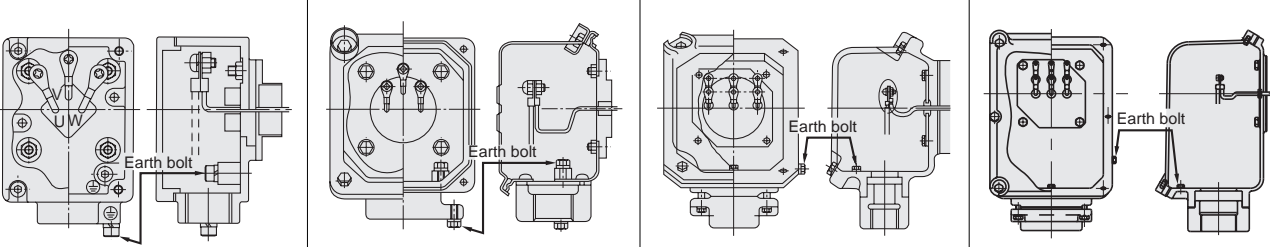
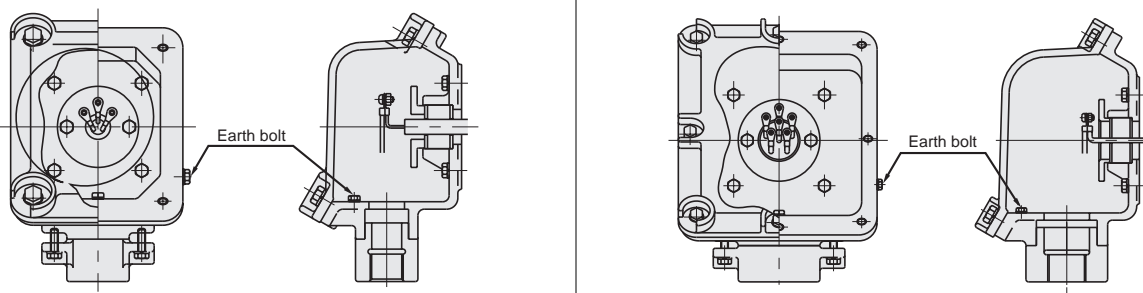
Motor

Common

Motor

TERMINAL BOX SPECIFICATIONS

1. Construction of Terminal Box

Indoor Type	3-Phase Motor	0.1kW × 4P ~ 0.4kW × 4P	3-Phase Motor	0.55kW × 4P ~ 7.5kW × 4P
	AF Motor for Inverter	0.1kW × 4P ~ 0.2kW × 4P	AF Motor for Inverter	0.4kW × 4P ~ 5.5kW × 4P
				
	Note: 4			
Indoor Type	3-Phase Motor	11kW × 4P ~ 45kW × 4P 15kW × 6P ~ 37kW × 6P	3-Phase Motor	55kW × 4P ~ 75kW × 4P 45kW × 6P ~ 75kW × 6P
	AF Motor for Inverter	7.5kW × 4P ~ 37kW × 4P		
Outdoor Type • Increased Safety Explosion-proof Motors	Outdoor Type 3-Phase Motor	0.4kW × 4P max.	0.55kW × 4P ~ 15kW × 4P	18.5kW × 4P ~ 45kW × 4P 15kW × 6P ~ 37kW × 6P
	Increased Safety Explosion-Proof Motors 3-Phase Motor	0.4kW × 4P max.	0.55kW × 4P ~ 15kW × 4P	18.5kW × 4P ~ 37kW × 4P 15kW × 6P ~ 37kW × 6P
				
Flame Proof Motors	Three Phase Motor	22kW × 4P max. 15kW × 6P ~ 22kW × 6P	Three Phase Motor	30kW × 4P 30kW × 6P ~ 37kW × 6P
				

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3. Mounting direction of terminal box

The terminal box mounting direction can be changed in units of 90°, but specify the direction according to the following table when placing an order.

Cable port direction	Terminal box mounting position (As viewed from output shaft with motor being horizontal)	
	Left side	Right side
Type A		
Type B		
Type C		
Type D		

Cable port direction	Terminal box mounting position (As viewed from output shaft with motor being horizontal)	
	Top	Down
Type A		
Type B		
Type C		
Type D		

Note : Direction shows lead wire outside of terminal box.

4. Position of terminal box and directions of lead wire for standard.

	Indoor					
	Horizontal type(Horizontal slow speed shaft)				Vertical type(Vertical slow speed shaft, Down)	
	3phase	AF motor	3phase/with brake	AF motor/with brake	3phase	3phase/with brake
Terminal box mounting position	Left side	Left side	Left side	Left side	Left side	Left side
Cable port direction	A	A	A	A	A	A

	Outdoor, Explosion proof Type			
	Horizontal type(Horizontal slow speed shaft)		Vertical type(Vertical slow speed shaft, Down)	
	3phase	3phase/with brake	3phase	3phase/with brake
Terminal box mounting position	Left side	Left side	Left side	Left side
Cable port direction	B	B	A	A

4. Details of motor cover mounting

Refer to the dimensions FA or FB shown below when designing a gearmotor mounting space.

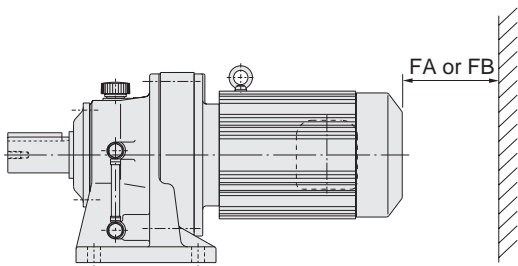
(1) Dimensions FA : Dimensions necessary to remove the fan cover or brake cover without removing the motor from the equipment.

(2) Dimensions FB : Minimum space required for adequate ventilation

Note : 1. It is necessary to remove the gearmotor from the equipment when removing the fan or brake cover.

2. The minimum space when the wall at the back of the motor fan is closed tightly.

3. AF(Inverter) of 30kw or above are a differently ventilated type.

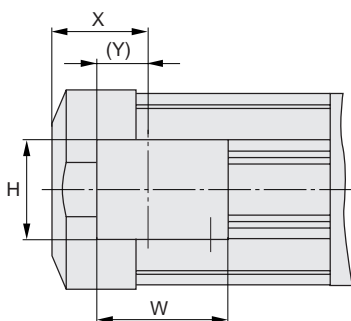


Dimension of FA and FB

Unit : mm

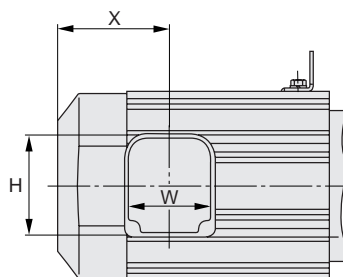
Specification	Indoor Type				Indoor Type/with brake				
	3-phase		Inverter		3-phase		Inverter		
	FA	FB	FA	FB	FA	FB	FA	FB	
Capacity									
0.1kW × 4P	-	-	48	20	49	-	61	20	
0.2kW × 4P	48	20	48	20	61	20	61	20	
0.25kW × 4P	48	20	-	-	61	20	-	-	
0.4kW × 4P	48	20	49	20	61	20	93	20	
0.55kW × 4P	49	20	-	-	93	20	-	-	
0.75kW × 4P	49	20	52	20	93	20	115	20	
1.1kW × 4P	52	20	-	-	115	20	-	-	
1.5kW × 4P	52	20	56	20	115	20	121	20	
2.2kW × 4P	56	20	60	20	121	20	132	20	
3.0kW × 4P	60	20	-	-	132	20	-	-	
3.7kW × 4P	60	20	60	20	132	20	132	20	
5.5kW × 4P	60	20	75	25	132	20	170	25	
7.5kW × 4P	75	25	75	25	170	25	170	25	
11kW × 4P	75	25	130	30	170	25	220	30	
15kW × 4P	130	30	155	30	220	30	367	30	
18.5kW × 4P	155	30	170	30	367	30	370	30	
22kW × 4P	155	30	170	30	367	30	370	30	
30kW × 4P	170	30	140	30	370	30	295	30	
37kW × 4P	230	30	140	30	445	30	295	30	

4. Dimensions of terminal box mounting centers



3-phase 0.1kW ~ 0.4kW

AF 0.1kW ~ 0.2kW



3-phase 0.55kW ~ 55kW

AF 0.4kW ~ 37kW

Unit : mm

Specification	Indoor Type						Indoor Type/with Brake					
	3-phase			Inverter			3-phase			Inverter		
	X	W(Y)	H	X	W(Y)	H	X	W(Y)	H	X	W(Y)	H
Capacity												
0.1kW × 4P	35	81.5 (32)	62	59	81.5 (32)	-	70	81.5 (32)	62	91	81.5 (32)	-
0.2kW × 4P	59	81.5 (32)	62	59	81.5 (32)	62	91	81.5 (32)	62	91	81.5 (32)	62
0.25kW × 4P	59	81.5 (32)	62	-	-	-	91	81.5 (32)	62	-	-	-
0.4kW × 4P	59	81.5 (32)	62	97	85	96	91	81.5 (32)	62	140	85	96
0.55kW × 4P	97	85	96	-	-	-	140	85	96	-	-	-
0.75kW × 4P	97	85	96	100	85	96	140	85	96	162	85	96
1.1kW × 4P	100	85	96	-	-	-	162	85	96	-	-	-
1.5kW × 4P	100	85	96	105	85	96	162	85	96	168	85	96
2.2kW × 4P	105	85	96	127	100	111	168	85	96	199	100	111
3.0kW × 4P	127	100	111	-	-	-	199	100	111	-	-	-
3.7kW × 4P	127	100	111	127	100	111	199	100	111	199	100	111
5.5kW × 4P	127	100	111	143	122	141	199	100	111	238	122	141
7.5kW × 4P	143	122	141	143	122	141	238	122	141	238	122	141
11kW × 4P	143	122	141	295	122	141	238	122	141	385	122	141
15kW × 4P	295	122	141	340	166	187	385	122	141	550	166	187
18.5kW × 4P	340	166	187	340	166	187	550	166	187	550	166	187
22kW × 4P	340	166	187	340	166	187	550	166	187	550	166	187
30kW × 4P	340	166	188	460	166	188	550	166	188	712	166	188
37kW × 4P	430	166	188	460	166	188	645	166	188	712	166	188
45kW × 4P	430	166	188	495	240	268	645	166	188	670	240	188
55kW × 4P	465	240	268	535	240	268	-	-	-	-	-	-

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TABLE OF MOTOR CHARACTERISTICS

Table E-27 Characteristics of Non-Explosion Proof Motors

(1) 200V class

Motor Frame Size	Pole		4 P													
	Power		200V - 50Hz				200V - 60Hz				220V - 60Hz					
	Output power (kW)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-63S	0.1	0.69	274	281	2.7	1430	0.60	255	245	2.5	1710	0.62	311	297	2.8	1730
F-63M	0.2	1.2	238	233	4.6	1420	1.1	223	207	4.2	1700	1.1	273	250	4.8	1720
F-63M	0.25	1.4	202	222	5.0	1390	1.3	182	189	4.6	1620	1.2	230	251	5.2	1670
F-71M	0.4	2.3	221	237	9.1	1410	2.0	203	210	8.3	1700	2.0	249	257	9.4	1730
F-80S	0.55	2.8	202	227	11.2	1420	2.6	183	189	10.5	1700	2.5	224	240	11.7	1720
F-80M	0.75	3.9	219	215	16.0	1430	3.4	203	190	15.1	1730	3.3	247	242	16.8	1740
F-90S	1.1	5.3	238	226	26.5	1420	4.8	210	192	24.4	1700	4.6	257	246	27.2	1720
F-90L	1.5	7.0	228	224	34.1	1430	6.3	206	192	31.2	1720	6.0	250	243	34.9	1740
F-100L	2.2	9.6	231	255	52	1430	8.8	204	204	46.9	1710	8.3	248	260	52	1720
F-112S	3.0	12.8	224	237	74	1420	11.8	195	186	67.2	1710	11.0	238	225	74	1720
F-112M	3.7	15.1	231	236	94	1420	14.2	202	188	83	1700	13.1	246	238	93	1720
F-132S	5.5	22.2	237	256	147	1420	20.8	208	208	129	1700	19.2	254	263	145	1720
F-132M	7.5	29.5	252	261	198	1450	27.4	220	224	175	1750	25.6	267	271	195	1750
F-160M	11	42.1	256	282	294	1450	39.7	223	236	260	1740	36.9	270	296	289	1750
G-160L	15	53	271	265	360	1470	52	220	222	313	1760	48	275	280	349	1770
F-180MG	18.5	66	293	312	522	1450	65	236	257	450	1740	59	295	324	504	1750
F-180MG	22	79	246	262	522	1440	78	199	216	450	1720	70	248	272	504	1740
F-180L	30	109	244	265	690	1450	105	200	233	598	1730	96	249	280	668	1740
F-200L	37	132	256	287	892	1460	130	209	244	768	1720	118	259	306	858	1730
F-200L	45	162	252	288	1076	1450	158	205	248	922	1720	143	255	311	1032	1730
F-225S	55	193	252	234	1266	1460	191	207	204	1066	1730	173	256	253	1190	1740

Motor Frame Size	Pole		6 P													
	Power		200V - 50Hz				200V - 60Hz				220V - 60Hz					
	Output power (kW)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-180MG	15	56	271	232	358	970	55	222	195	308	1160	50	276	246	344	1170
F-180L	18.5	72	311	274	500	980	67	258	234	430	1170	63	321	293	480	1170
F-180L	22	84	261	230	500	970	79	216	196	430	1160	73	269	246	480	1170
F-200L	30	112	269	267	694	960	106	221	228	598	1170	98	275	287	668	1180
F-200L	37	137	289	293	912	970	130	237	251	784	1160	120	296	314	878	1160
F-225S	45	165	238	244	962	970	159	195	209	818	1150	145	242	262	914	1160
F-250S	55	199	231	242	1146	970	195	188	208	970	1150	176	234	260	1084	1160
F-250M	75	270	271	296	1830	970	262	221	255	1536	1160	239	274	320	1718	1170

(2) 400V class

Motor Frame Size	Pole		4 P													
	Power		400V - 50Hz				400V - 60Hz				440V - 60Hz					
	Output power (kW)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-63S	0.1	0.36	261	261	1.3	1430	0.31	246	224	1.2	1710	0.32	300	289	1.4	1730
F-63M	0.2	0.62	233	236	2.3	1420	0.54	219	202	2.1	1700	0.54	268	266	2.4	1720
F-63M	0.25	0.69	202	222	2.5	1390	0.64	182	189	2.3	1620	0.58	230	251	2.6	1670
F-71M	0.4	1.2	221	229	4.5	1420	1.0	209	201	4.1	1700	1.0	256	262	4.6	1730
F-80S	0.55	1.4	202	227	5.6	1420	1.3	183	189	5.3	1700	1.2	224	240	5.9	1720
F-80M	0.75	1.9	219	215	8.0	1430	1.7	203	190	7.6	1730	1.7	247	242	8.4	1740
F-90S	1.1	2.7	238	226	13.3	1420	2.4	210	192	12.2	1700	2.3	257	246	13.6	1720
F-90L	1.5	3.5	228	224	17.1	1430	3.1	206	192	15.6	1720	3.0	250	243	17.5	1740
F-100L	2.2	4.8	231	255	26.0	1430	4.4	204	204	23.5	1710	4.2	248	260	26.2	1720
F-112S	3.0	6.4	224	237	37	1420	5.9	195	186	33.6	1710	5.5	238	225	37	1720
F-112M	3.7	7.5	231	236	46.9	1420	7.1	202	188	41.4	1700	6.6	246	238	46.4	1720
F-132S	5.5	11.1	237	256	73	1420	10.4	208	208	65	1700	9.6	254	263	73	1720
F-132M	7.5	14.8	252	261	99	1450	13.7	220	224	88	1750	12.8	267	271	98	1750
F-160M	11	21.0	256	282	147	1450	19.8	223	236	130	1740	18.4	270	296	145	1750
G-160L	15	26.8	271	265	180	1470	26.1	220	222	157	1760	23.8	275	280	175	1770
F-180MG	18.5	33.1	293	312	261	1450	32.3	236	257	225	1740	29.6	295	324	252	1750
F-180MG	22	39.3	246	262	261	1440	38.8	199	216	225	1720	35.1	248	272	252	1740
F-180L	30	54	244	265	345	1450	53	200	223	299	1730	47.8	249	280	334	1740
F-200L	37	66	256	287	446	1460	65	209	244	384	1720	59	259	306	429	1730
F-200L	45	81	252	288	538	1450	79	205	248	461	1720	72	255	311	516	1730
F-225S	55	96	252	234	633	1460	96	207	204	533	1730	87	256	253	595	1740

Motor Frame Size	Pole		6 P													
	Power		400V - 50Hz				400V - 60Hz				440V - 60Hz					
	Output power (kW)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-180MG	15	27.9	271	232	179	970	27.3	222	195	154	1160	25.0	276	246	172	1170
F-180L	18.5	36	311	274	250	980	33.4	258	234	215	1170	31.3	321	293	240	1170
F-180L	22	41.9	261	230	250	970	39.7	216	196	215	1160	36.5	269	246	240	1170
F-200L	30	56	269	267	347	960	53	221	228	299	1170	48.8	275	287	334	1180
F-200L	37	69	289	293	456	970	65	237	251	392	1160	60	296	314	439	1160
F-225S	45	82	238	244	481	970	80	195	209	409	1150	72	242	262	457	1160
F-250S	55	100	231	242	573	970	97	188	208	485	1150	88	234	260	542	1160
F-250M	75	135	271	296	915	970	131	221	255	768	1160	120	274	266	859	1170

Note : The characteristics of the 4-pole motor with built-in brake is the same as shown in Table E-27 (1) and (2).

For the electrical current of the brakes, please refer to Table E-39 on Page E-30.

* Because the values in the above table are subject to change without notice, please consult us if confirmed values are necessary.

Table E-28 Characteristics of Increased Safety Explosion Proof Motors.

(1) 200V class

Motor Frame Size	Pole Power Output power (kW)	4 P														
		200V - 50Hz					200V - 60Hz					220V - 60Hz				
		Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-63S	0.1	0.69	274	281	2.7	1430	0.60	255	245	2.5	1710	0.62	311	297	2.8	1730
F-63M	0.2	1.2	238	233	4.6	1420	1.1	223	207	4.2	1700	1.1	273	250	4.8	1720
F-71M	0.4	2.3	221	237	9.1	1410	2.0	203	210	8.3	1700	2.0	249	257	9.4	1730
F-80M	0.75	3.9	219	215	16.0	1430	3.4	203	190	15.1	1730	3.3	247	242	16.8	1740
F-90L	1.5	7.0	228	224	34.1	1430	6.3	206	192	31.2	1720	6.0	250	243	34.9	1740
F-100L	2.2	9.6	231	255	52	1430	8.8	204	204	46.9	1710	8.3	248	260	52	1720
F-112M	3.7	15.1	231	236	94	1420	14.2	202	188	83	1700	13.1	246	238	93	1720
F-132S	5.5	22.9	243	286	158	1420	21.1	209	229	139	1700	19.7	254	291	156	1720
F-132M	7.5	29.5	252	261	198	1450	27.4	220	224	175	1750	25.6	267	271	195	1750
F-160M	11	41.9	251	297	302	1450	39.5	220	247	265	1740	36.7	275	309	296	1750
G-160L	15	53	271	265	360	1470	52	220	222	313	1760	48	295	280	349	1770
F-180LG	18.5	66	293	312	522	1450	65	236	257	450	1740	59	295	324	504	1750
F-180LG	22	79	246	262	522	1440	78	199	216	450	1720	70	248	272	504	1740
F-200LG	30	105	245	281	706	1440	105	195	231	610	1720	94	245	292	684	1740
F-200L	37	128	245	289	857	1440	128	195	241	742	1720	115	245	305	832	1740
F-225S	45	154	243	228	985	1460	154	198	193	844	1740	139	246	241	943	1750
F-225S	55	186	267	261	1328	1460	186	217	225	1130	1740	168	269	280	1261	1750

Motor Frame Size	Pole Power Output power (kW)	6 P														
		200V - 50Hz					200V - 60Hz					220V - 60Hz				
		Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-180LG	15	56	271	232	358	970	55	222	195	308	1160	50	276	246	344	1170
F-180L	18.5	72	311	274	500	980	67	258	234	430	1170	63	321	293	480	1170
F-180L	22	84	261	230	500	970	79	216	196	430	1160	73	269	246	480	1170
F-200L	30	107	252	253	652	970	107	204	212	558	1160	97	256	287	668	1180
F-225S	37	136	239	241	793	970	132	196	206	678	1160	121	243	314	878	1160
F-225S	45	163	235	245	946	970	163	190	208	809	1150	146	237	262	914	1160
F-250S	55	199	242	257	1184	970	198	196	219	1011	1150	178	244	260	1084	1160

(2) 400V class

Motor Frame Size	Pole Power Output power (kW)	4 P														
		400V - 50Hz					400V - 60Hz					440V - 60Hz				
		Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-63S	0.1	0.36	261	261	1.3	1430	0.31	246	224	1.2	1710	0.32	300	289	1.4	1730
F-63M	0.2	0.62	233	236	2.3	1420	0.54	219	202	2.1	1700	0.54	268	266	2.4	1720
F-71M	0.4	1.2	221	229	4.5	1420	1.0	209	201	4.1	1700	1.0	256	262	4.6	1730
F-80M	0.75	1.9	219	215	8.0	1430	1.7	203	190	7.6	1730	1.7	247	242	8.4	1740
F-90L	1.5	3.5	228	224	17.1	1430	3.1	206	192	15.6	1720	3.0	250	243	17.5	1740
F-100L	2.2	4.8	231	255	26.0	1430	4.4	204	204	23.5	1710	4.2	248	260	26.2	1720
F-112M	3.7	7.5	231	236	46.9	1420	7.1	202	188	41.4	1700	6.6	246	238	46.4	1720
F-132S	5.5	11.4	233	286	79	1420	10.5	209	229	70	1700	9.9	254	291	78	1720
F-132M	7.5	14.8	252	261	99	1450	13.7	220	224	88	1750	12.8	267	271	98	1750
F-160M	11	21.0	251	297	151	1450	19.7	220	247	133	1740	18.3	267	309	148	1750
G-160L	15	26.8	271	265	180	1470	26.1	220	222	157	1760	23.8	275	280	175	1770
F-180LG	18.5	33.1	293	312	261	1450	32.3	236	257	225	1740	29.6	295	324	252	1750
F-180LG	22	39.3	246	262	261	1440	38.8	199	216	225	1720	35.1	248	272	252	1740
F-200LG	30	52	245	281	353	1440	53	195	231	305	1720	47.2	245	292	342	1740
F-200L	37	64	245	289	429	1440	64	195	241	371	1720	58	245	305	416	1740
F-225S	45	77	243	222	492	1460	77	198	193	422	1740	70	246	241	471	1750
F-225S	55	93	267	261	664	1460	93	217	225	565	1740	84	269	280	630	1750

Motor Frame Size	Pole Power Output power (kW)	6 P														
		400V - 50Hz					400V - 60Hz					440V - 60Hz				
		Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)	Rated Current	Torque max. (%)	Starting Torque (%)	Starting Current (A)	Output Speed (rpm)
F-180LG	15	27.9	271	232	179	970	27.3	222	195	154	1160	25.0	276	246	172	1170
F-180L	18.5	36	311	274	250	980	33.4	258	234	215	1170	31.3	321	293	240	1170
F-180L	22	41.9	261	230	250	970	39.7	216	196	215	1160	36.5	269	246	240	1170
F-200L	30	54	252	253	326	970	53	204	212	279	1160	48.4	256	269	313	1170
F-225S	37	68	239	241	396	970	66	196	206	339	1160	60	243	258	379	1160
F-225S	45	81	235	245	473	970	81	190	208	404	1150	73	237	261	453	1160
F-250S	55	99	242	257	592	970	99	196	219	506	1150	89	244	275	566	1160

* Because the values shown in the above table are subject to change without notice, please consult us if confirmed values are

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Table E-29 Characteristics of AF Motor for Inverter

(1) 200V class

Motor Frame size	Pols	4 P							
	Power	200V - 60Hz				220V - 60Hz			
	Output power (kW)	Frequency (Hz)	Voltage (v)	Rated Current (A)	Output Speed (r/min)	Frequency (Hz)	Voltage (v)	Rated Current (A)	Output Speed (r/min)
FA-63S	0.1	60	200	0.83	1750	60	200	0.91	1760
		6	34	0.75	120	6	34	0.75	120
FA-63M	0.2	60	200	1.5	1750	60	220	1.6	1760
		6	34	1.5	130	6	34	1.5	130
FA-71M	0.4	60	200	2.3	1735	60	220	2.4	1745
		6	35	2.2	115	6	35	2.2	115
FA-80M	0.75	60	200	3.9	1740	60	220	4.0	1755
		6	31	3.9	120	6	31	3.9	120
FA-90L	1.5	60	200	6.6	1720	60	220	6.4	1735
		6	33	6.5	105	6	33	6.5	105
FA-100L	2.2	60	200	9.3	1745	60	220	9.1	1755
		6	31	9.4	140	6	31	9.3	140
FA-112M	3.7	60	200	14.8	1740	60	220	14.0	1750
		6	30	14.9	120	6	30	14.8	125
FA-132S	5.5	60	200	21.5	1750	60	220	20.2	1760
		6	30	21.4	130	6	30	21.3	135
FA-132M	7.5	60	200	29.1	1755	60	220	27.4	1765
		6	30	28.2	145	6	30	28.2	145
G-160L	11	60	200	41.4	1760	60	220	38.5	1770
		6	32	39.4	155	6	32	39.6	155
F-180MG	15	60	200	58	1775	60	220	53	1780
		6	32	53	165	6	32	53	165
F-180L	22	60	200	84	1770	60	220	77	1775
		6	32	79	160	6	32	79	160
BF-200L	30	60	200	110	1770	60	220	100	1780
		6	32	101	165	6	32	101	165
BF-200L	37	60	200	135	1770	60	220	123	1775
		6	32	123	165	6	30	123	165

(2) 400V class

Motor Frame size	Pols	4 P							
	Power	400V - 60Hz				440V - 60Hz			
	Output power (kW)	Frequency (Hz)	Voltage (v)	Rated Current (A)	Output Speed (r/min)	Frequency (Hz)	Voltage (v)	Rated Current (A)	Output Speed (r/min)
FA-63S	0.1	60	400	0.42	1750	60	440	0.46	1760
		6	68	0.37	125	6	68	0.37	125
FA-63M	0.2	60	400	0.74	1755	60	440	0.84	1765
		6	68	0.75	130	6	68	0.75	130
FA-71M	0.4	60	400	1.2	1735	60	440	1.2	1745
		6	70	1.1	115	6	70	1.1	115
FA-80M	0.75	60	400	1.9	1740	60	440	2.0	1755
		6	62	1.9	120	6	62	1.9	120
FA-90L	1.5	60	400	3.3	1720	60	440	3.2	1735
		6	66	3.2	105	6	66	3.2	105
FA-100L	2.2	60	400	4.7	1745	60	440	4.5	1755
		6	62	4.7	140	6	62	4.7	140
FA-112M	3.7	60	400	7.4	1740	60	440	7.0	1750
		6	60	7.4	120	6	60	7.4	125
FA-132S	5.5	60	400	10.7	1750	60	440	10.10	1760
		6	60	10.7	130	6	60	10.70	135
FA-132M	7.5	60	400	14.6	1755	60	440	13.7	1765
		6	60	14.1	145	6	60	14.1	145
G-160L	11	60	400	20.7	1760	60	440	19.3	1770
		6	64	19.7	155	6	64	19.8	155
F-180MG	15	60	400	28.8	1775	60	440	26.4	1780
		6	64	26.3	165	6	64	26.3	165
F-180L	22	60	400	42.1	1770	60	440	38.7	1775
		6	64	39.4	160	6	64	39.3	160
BF-200L	30	60	400	55	1770	60	440	50	1780
		6	64	51	165	6	64	51	165
BF-200L	37	60	400	68	1770	60	440	62	1775
		6	64	62	165	6	64	62	165

* Because the values in the above table are subject to change without notice, please consult us if confirmed values are necessary.

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Specifications and construction of built-in brake

Table E-30 Standard brake motor specification

Brake type	Standard torque (N·m)	Output power (kW x 4P)		Moment of inertia (x 10 ⁻⁴ kg·m ²)	Total braking energy (x 10 ³ J)	Motion delay (Sec)		Brake current (A)				Constructions
		General-purpose motors	AF Motor			Standard braking circuit	Quick braking circuit	200V 50/60Hz	220V 60Hz	400V 50/60Hz	440V 60Hz	
FB-01A1	1.0	0.1		3.6	12	0.55 / 0.75	0.015 ~ 0.02	0.07	0.08	0.04	0.04	Fig. E-35
FB-02A1	2.0	0.2 / 0.25	0.1	5.6	12	~ 0.2		0.1	0.1	0.05	0.06	
FB-05A1	4.0	0.4	0.2	6.9	12	0.1 ~ 0.15	0.01 ~ 0.015	0.1	0.1	0.05	0.06	
FB-1B	7.5	0.55 / 0.75	0.4	11 / 13	33	0.2 ~ 0.3	0.01 ~ 0.02	0.1	0.1	0.1	0.1	Fig. E-36
FB-2B	15	1.1 / 1.5	0.75	21 / 24	38			0.3	0.3	0.1	0.2	
FB-3B	22	2.2	1.5	38	45	0.3 ~ 0.4		0.3	0.3	0.1	0.2	
FB-5B	37	3.0 / 3.7	2.2	81 / 98	235	0.4 ~ 0.5	0.01 ~ 0.02	0.5	0.6	0.3	0.3	Fig. E-37
FB-8B	55	5.5	3.7	128	235	0.3 ~ 0.4		0.5	0.6	0.3	0.3	
FB-10B	75	7.5	5.5	309	343	0.7 ~ 0.8	0.03 ~ 0.04	0.8	0.9	0.4	0.4	Fig. E-38
FB-15B	110	11	7.5	418	343	0.5 ~ 0.6		0.8	0.9	0.4	0.4	
FB-20	150	15	11	1070	1010	² 1.7 ~ 1.8	0.03 ~ 0.06	0.44	0.49	⁴ -	⁴ -	Fig. E-39
FB-30	190	18.5	15	2430	1010	² 1.4 ~ 1.5	0.03 ~ 0.06	0.44	0.49	⁴ -	⁴ -	Fig. E-40
	220	22										
	200	30	22	2620								
¹ ESB250	250	37	30	3205	262	³ 0.065	-	1.154	1.154	⁴ -	⁴ -	Fig. E-41

1. Continuous rating applies to both motor and brake of the FB and ESB brakes, but continuous operation is impossible with vertical and inverted 4P input of the ESB type brake.
 2. Quick braking circuit is recommended for FB-20 and FB-30.
 3. Braking time for DC braking.
 4. FB-20, FB-30 and ESB type brake comes in a 200V class only. When the power supply is 400V, use a transformer. The capacity of the transformer is 250-300 VA and the secondary voltage is 200-220V.
- The FB brakes have a rectifier inside a terminal box. The rectifier of the ESB type brake is to be placed separately.
 - Use a special DC power unit (HD-110M3) for the ESB brake. (See p.E-42 of the rectifier.) The DC power unit is made as an indoor type. Install it in a place where it will not be splashed by water.
 - Nonasbestos lining is used for the FB brake.
 - When greater stopping accuracy is desired for lifter units, etc., use the quick braking circuit. (0.1kW x 4P - 15kW x 4P)
 - Low-noise type brakes are also available as an option. (0.1kW x 4P - 11kW x 4P)
 - FB and ESB brakes need DC power supply, and the spring braking system (non-electromagnetic braking system) is adopted.

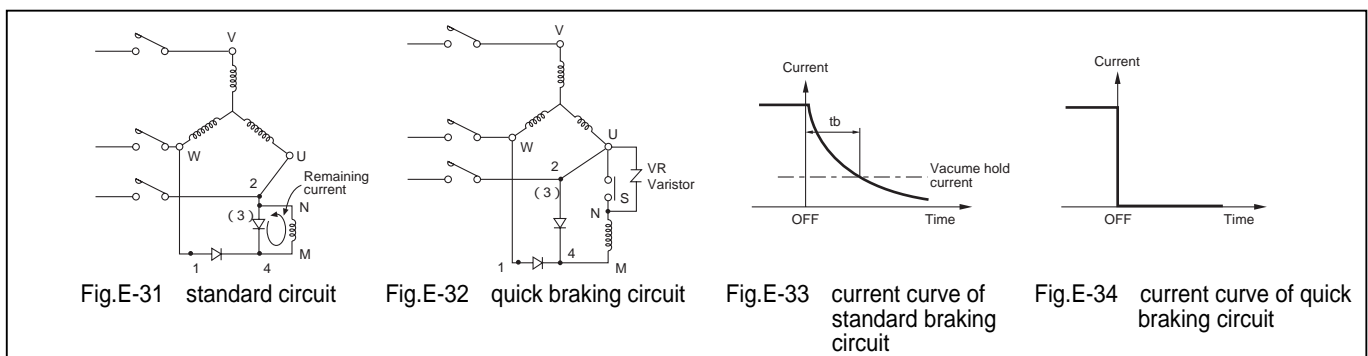
Output power of a rectifier (FB Brake)

	Input Voltage	Output Voltage
FB-01A- FB-15B	AC200V	DC90V
	AC220V	DC99V
	AC400V	DC180V
	AC440V	DC198V
FB-20 FB-30	AC220V	Instantaneous Voltage DC180V Steady Voltage DC90V

Refer to p.E-42 for the output voltage of ESB brake.

Why quick braking circuit shortens braking time.

See Fig.E-31 and Fig.E-32 for differences between standard braking circuit and quick braking circuit.
See Fig.E-33 and Fig.E-34 for current curves of standard braking circuit and quick braking circuit.



In the standard circuit Shown in Fig.E-31, some current remains after the power is turned off due to the saved energy in the inductance L of brake coil. The current curve is shown in the Fig.E-33. When it is connected to quick braking circuit as Show in Fig.E-32 and S is released at the same time, no current remains as there is no closed circuit with the brake coil. (See the Fig.E-34)

Therefore, it shortens the braking time by t_b in the Fig.E-33. Quick braking circuit is to release all current by ON/OFF of brake coil at the same time with power ON/OFF. (VR varistor must be used to protect the rectifier and connection S.)

Circuit in the rectifier

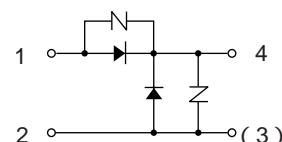
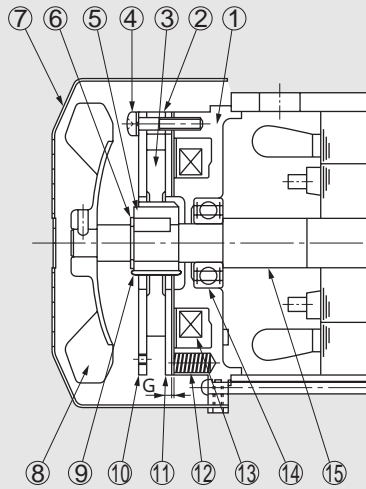


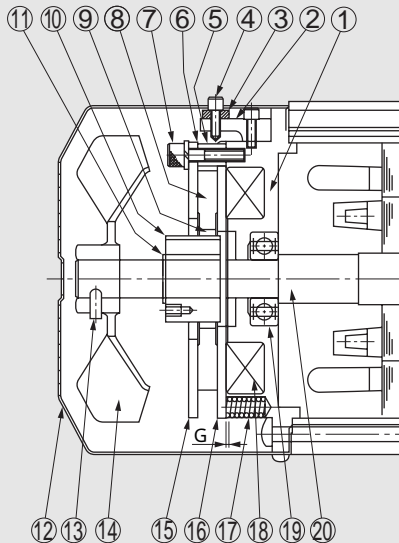
Fig.E-35 FB-01A1, 02A1, 05A1
(FB-01A1without Fan)



Part No.	Description
1	Stationary core
2	Spacer
3	Brake lining
4	Assembling bolt
5	Boss
6	Shaft retaining C-ring
7	Cove
8	Fan (except for 0.1kW x 4 Poles)
9	Leaf spring
10	Fixed plate
11	Armature plate
12	Spring
13	Electromagnetic coil
14	Ball bearing
15	Motor shaft

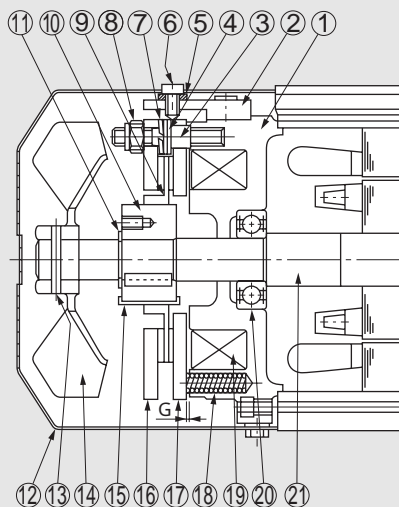
Brake releasing unit is optionally available.

Fig.E-36 FB-1B, 2B, 3B



Part No.	Description
1	Stationary core
2	Release fitting
3	Manual release protection spacer
4	Brake release bolt
5	Spacer
6	Gap adjusting shim
7	Assembling bolt
8	Brake lining
9	Leaf spring
10	Boss
11	Shaft retaining C-ring
12	Cover
13	Fan set bolt
14	Fan
15	Fixed plate
16	Armature plate
17	Spring
18	Electromagnetic coil
19	Ball bearing
20	Motor shaft

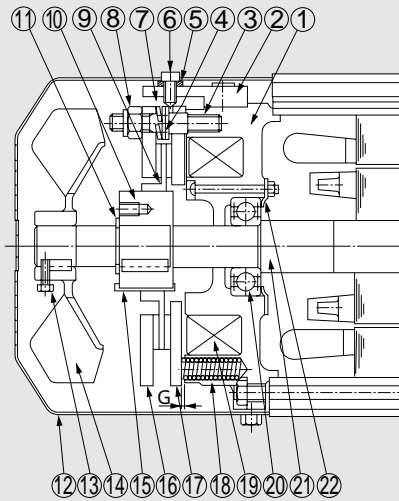
Fig.E-37 FB-5B, 8B



Part No.	Description
1	Stationary core
2	Release fitting
3	Stud bolt
4	Adjusting washer
5	Manual release protection spacer
6	Brake release bolt
7	Spring washer
8	Gap adjusting nut
9	Brake lining
10	Boss
11	Shaft retaining C-ring
12	Cover
13	Spring pin
14	Fan
15	Leaf spring
16	Fixed plate
17	Armature plate
18	Spring
19	Electromagnetic coil
20	Ball bearing
21	Motor shaft

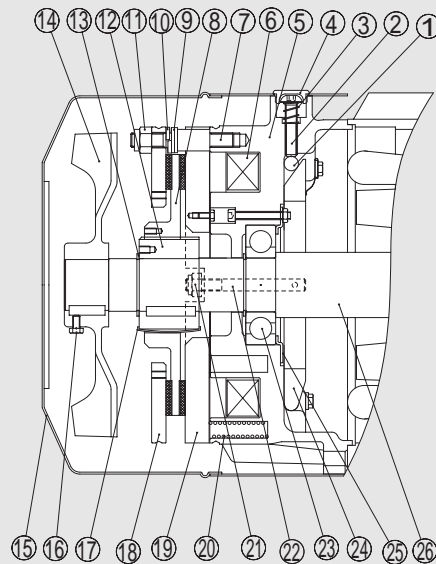
Technical
Reducer
Motor
Common

Fig.E-38 FB-10B, 15B



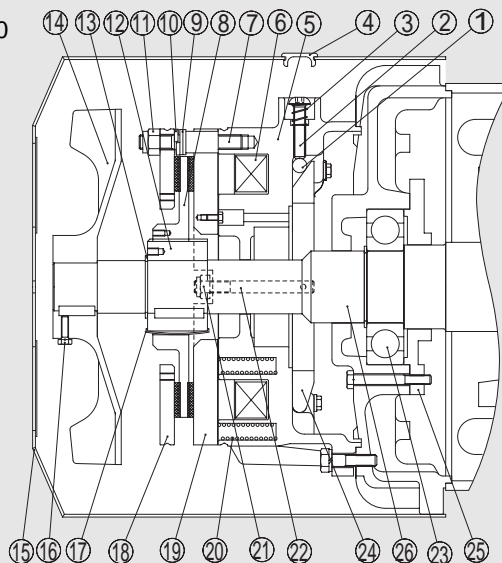
Part No.	Description
1	Stationary core
2	Release fitting
3	Stud bolt
4	Adjusting washer
5	Manual release protection spacer
6	Brake release bolt
7	Spring washer
8	Gap adjusting nut
9	Brake lining
10	Boss
11	Shaft retaining C-ring
12	Cover
13	Fan set bolt
14	Fan
15	Leaf spring
16	Fixed plate
17	Armature plate
18	Spring
19	Electromagnetic coil
20	Ball bearing
21	Motor shaft
22	Bearing cover

Fig.E-39 FB-20



Part No.	Description	Part No.	Description
1	Roller	14	Fan
2	Brake release bolt	15	Cover
3	Auxiliary spring	16	Fan set bolt
4	Plug	17	Leaf spring
5	Stationary core	18	Fixed plate
6	Electromagnetic coil	19	Armature plate
7	Stud bolt	20	Spring
8	Brake lining	21	Nut
9	Adjusting washer	22	Stud bolt
10	Spring washer	23	Ball bearing
11	Gap adjusting nut	24	Release lever
12	Boss	25	Bearing cover
13	Shaft retaining C-ring	26	Motor shaft

Fig.E-40 FB-30



Part No.	Description	Part No.	Description
1	Roller	14	Fan
2	Brake release bolt	15	Cover
3	Auxiliary spring	16	Fan set bolt
4	Plug	17	Leaf spring
5	Stationary core	18	Fixed plate
6	Electromagnetic coil	19	Armature plate
7	Stud bolt	20	Spring
8	Brake lining	21	Nut
9	Adjusting washer	22	Stud bolt
10	Spring washer	23	Ball bearing
11	Gap adjusting nut	24	Release lever
12	Boss	25	Bearing cover
13	Shaft retaining C-ring	26	Motor shaft

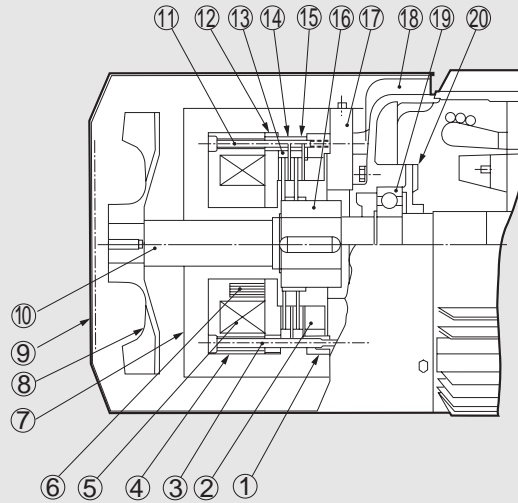
Technical

Reducer

Motor

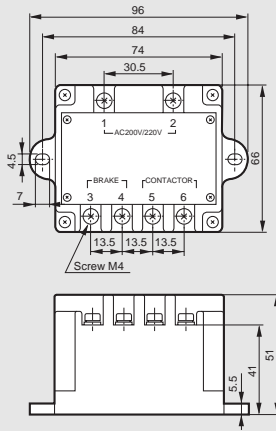
Common

Fig.E-41 ESB220、250

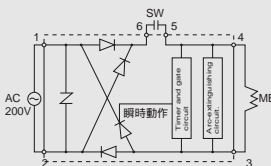


Part No.	Description
1	Center ring
2	Gap adjusting screw
3	Assembling bolt
4	Field
5	Brake coil
6	Actuating spring
7	Brake cover (not provided for indoor type)
8	Fan
9	Fan cover
10	Shaft
11	Lock bolt
12	Armature
13	Inner disc
14	Outer disc
15	Spacer bushing
16	Hub
17	Brake adapter plate
18	Opposite drive end bracket
19	Opposite drive end bearing
20	Opposite drive end bearing cover

Power Module
Model HD-110M3



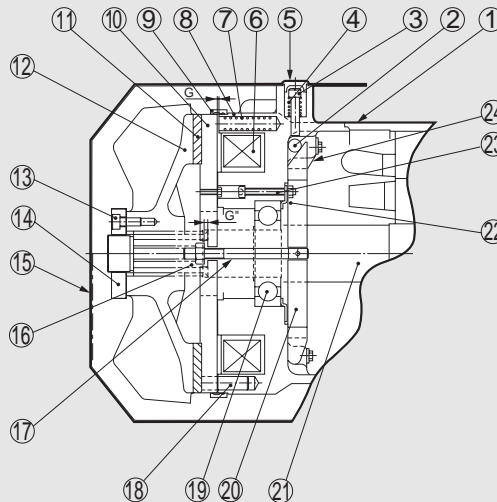
Circuit(Diagram)



- Rated input voltage : AC220/220V 50/60Hz
- Maximum input voltage : AC240V 50/60Hz
- Minimum input voltage : AC170V 50/60Hz
- Standard output voltage : DC180V
- Instantaneous voltage : DC180V
- With AC200V input
- Steady voltage : DC90V
- Maximum output current : DC1.8A (Steady output)
- Overexcitation time : 0.4 ~ 1.2sec
- Insulation resistance : at least 100M (measured with 1000V megger)
- Insulation with stand voltage : Application of AC2000V for over 1 time
- Maximum frequency : Inching(On-time 1.2 sec or less), 8 cycles/min
- Constant(On-time over 1.2sec), 30 cycles/min
- Ambient temperature : - 20 ~ + 60

1. Take care to avoid dust and water.
2. Transformer is necessary for 400v power source the rating is 250-300VA with 200-220v secondary voltage.

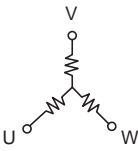
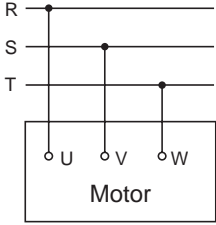
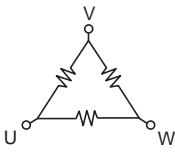
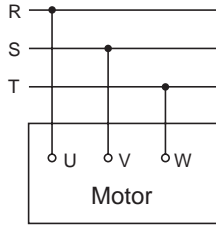
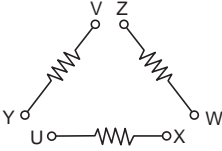
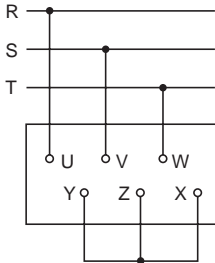
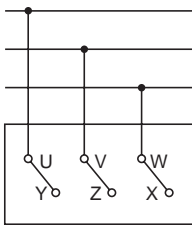
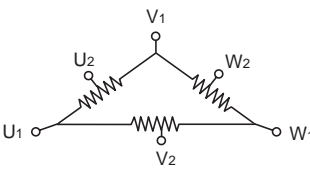
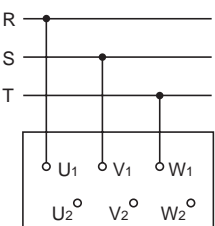
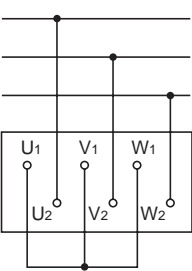
Fig.E-42 CMB-20



Part No.	Description
1	Motor
2	Roller
3	Brake release bolt
4	Auxiliary spring
5	Plug
6	Electromagnetic coil
7	Spring
8	Stationary core
9	Dust seal
10	Armature plate
11	Brake lining
12	Brake wheel
13	Bolt
14	Retaining nut
15	Cover
16	U nut
17	Stud bolt
18	Retaining pin
19	Ball bearing
20	Release lever
21	Motor shaft
22	Bearing cover
23	Bearing cover bolt
24	Release lever stopper

CONNECTION

1. 3-Phase Induction Motor

Applica-tion	Wiring	Connection & Terminal code	Remarks
Direct Start-up			Standard motor under 3.7kW
			Standard motor 5.5kW ~ 7.5kW (Flame Proof motor under 22kW)
λ- Start-up		<p>Start-up time λ Connection</p>  <p>After full acceleration Connection</p> 	<p>Standard Motor</p> <p>①Capacity: more than 11kW. (Flame Proof motor over 30kW)</p> <p>②Power Source</p> <p>200V Class 200V · 50/60Hz 220V · 60Hz</p> <p>400V Class 400V · 50/60Hz 440V · 60Hz</p> <p>If other than the above-mentioned voltages, please consult us.</p>
2-step speed Single wiring (Constant torque)		<p>Low speed side ()</p>  <p>High speed side (λλ)</p> 	4/8 pole motor

Technical

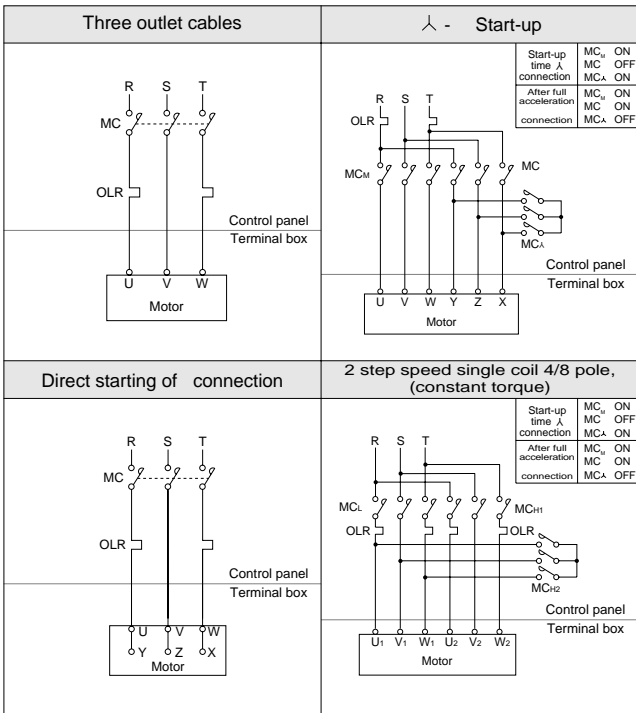
Reducer

Motor

Common

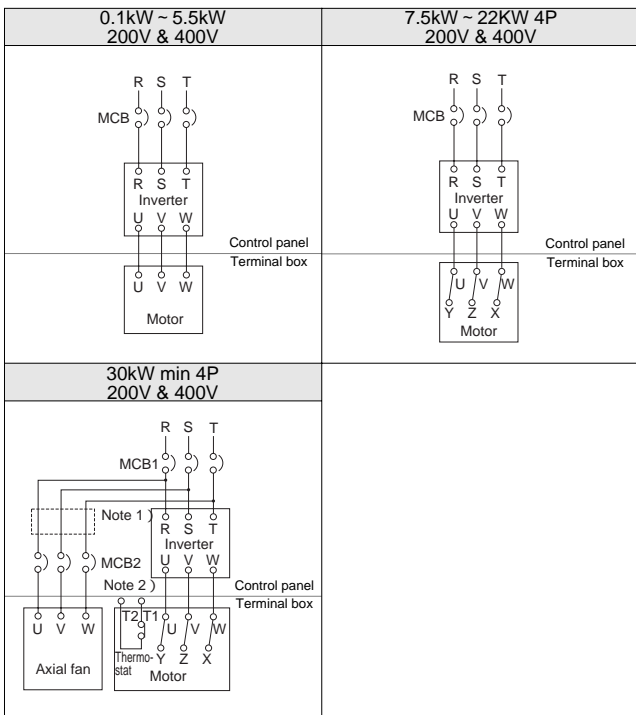
Example of connection

a. Example of 3-phase motor connection



b. 3-phase motor

Example of connection for inverter-driving



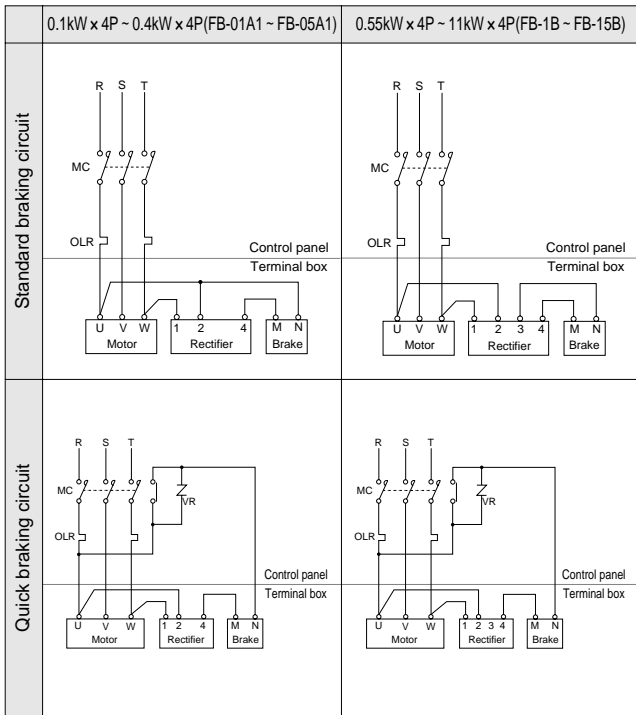
The AF motor is designed for inverter-driving. When the capacity is small, the Δ connection is adopted, and when it is intermediate or larger, the Δ connection is adopted.

Δ - change-over operation by commercial power will also be possible.

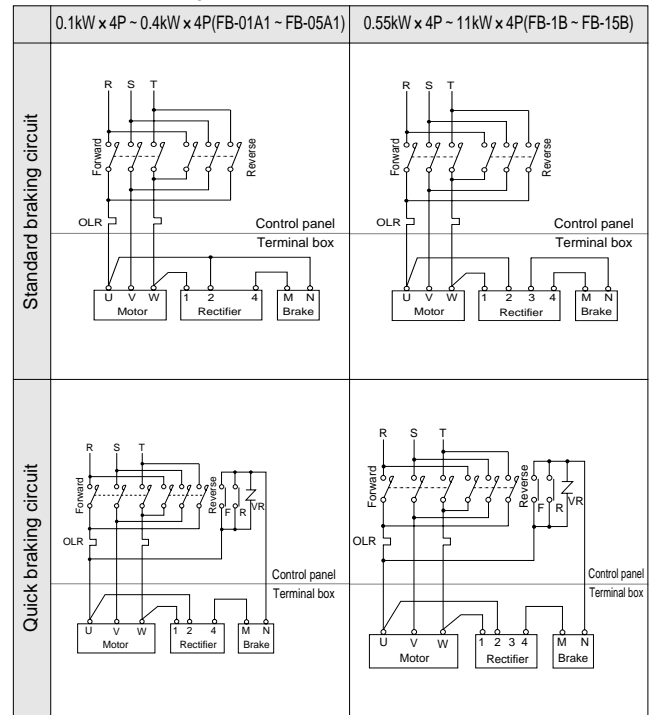
Notes : 1. The standard voltage of the axial fan is 3 ,200V. Provide a 400/200V transformer for the 400V power supply. Contact us for inquiries about a 400V fan.

- Thermostat specifications (For totally enclosed separate ventilation type)
Terminal code : T1 and T2 or P1 and P2
Operating temperature : 135 (Type F insulation)
Operation : Normally closed (b contact point)
Max. current : 24VDC; 18A; 230VAC ; 13A

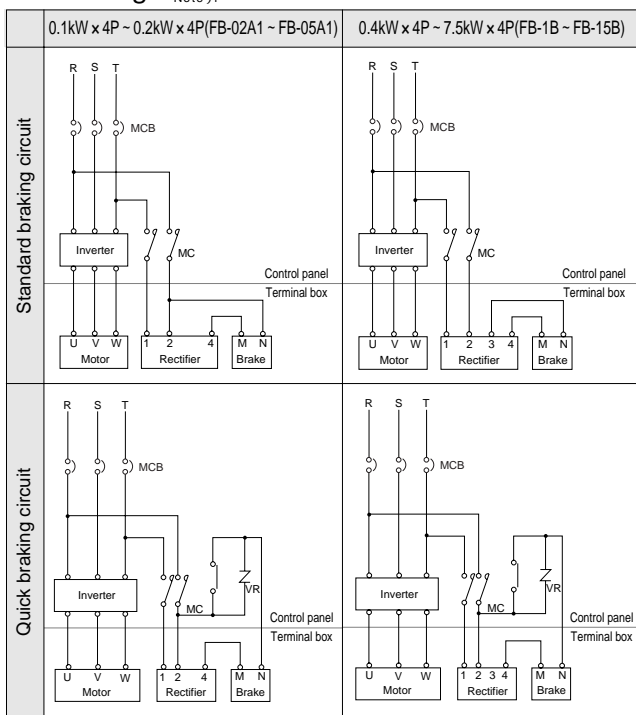
c. 3-phase motor with FB brake
 Example of connection for only one direction of rotation



d. 3-phase motor with FB brake
 Example of connection for normal / reverse operation



e. 3-phase motor with FB brake
 Example of connection for inverter-driving



- Notes : 1. Interlock with the inverter is necessary to open / close the MC. Refer to the inverter operation manual or guide.
 2. When operating under fast braking circuit, it should be closed circuit between brake N and rectifier 2.

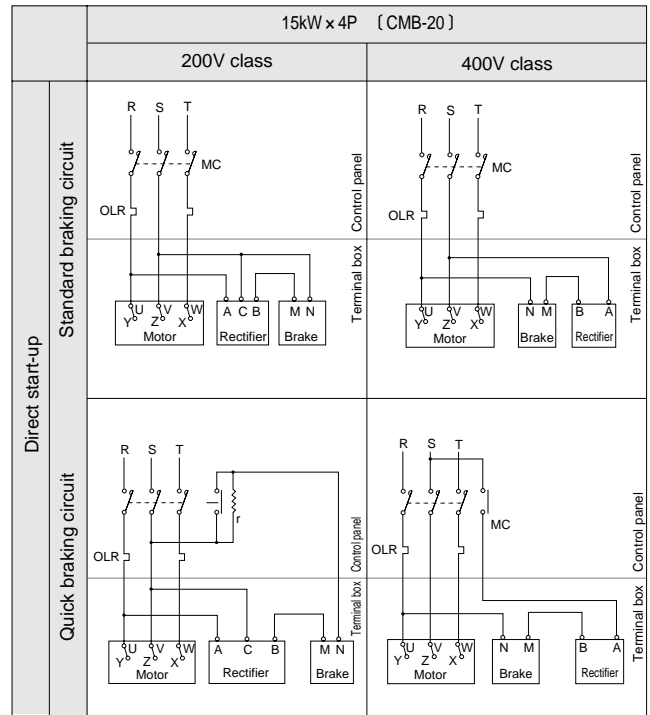
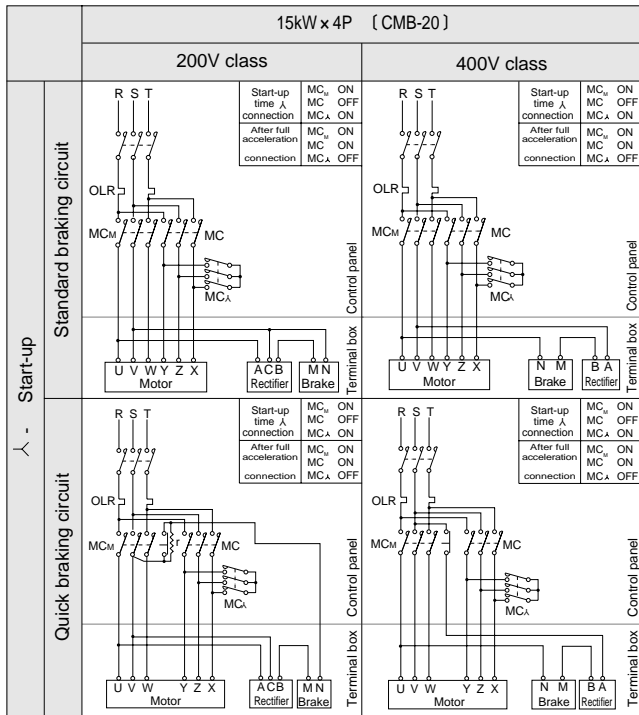
Electromagnetic contactor and OLR : Overload relay are not supplied by Sumitomo.
 VR : varistor is optionally available at Sumitomo.

Brake input power	200V ~ 230V	380V ~ 460V
Rated voltage of varistor	AC260 ~ AC300V	AC510V
Varistor voltage	430V ~ 470V	820V
Rated capacity of varistor	FB-01A1,02A1,05A1	0.2Watt and above
	FB-1B	0.4Watt and above
	FB-2B,3B,5B,8B	0.4Watt and above
	FB-10B,15B	1Watt and above

For the contact capacity of the emergency braking circuit, we recommend the DC braking capacity (for DC coil load) that is more than five times the braking current.

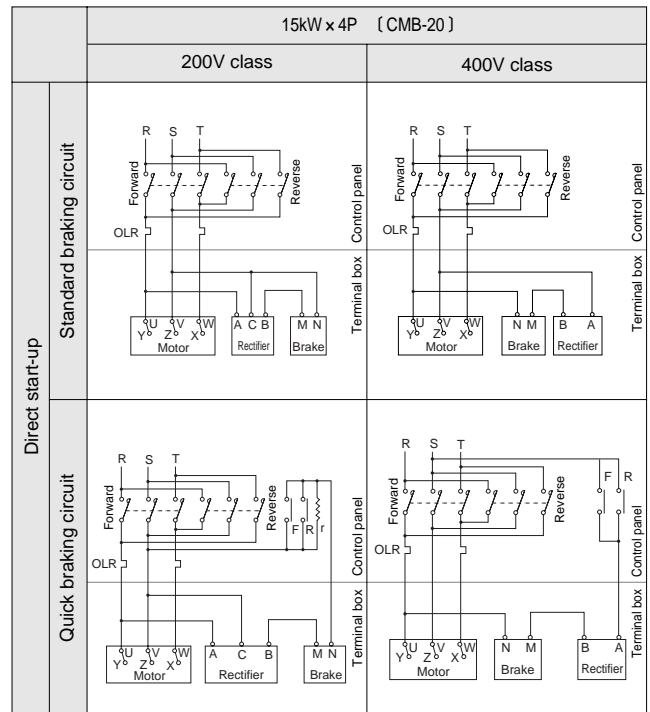
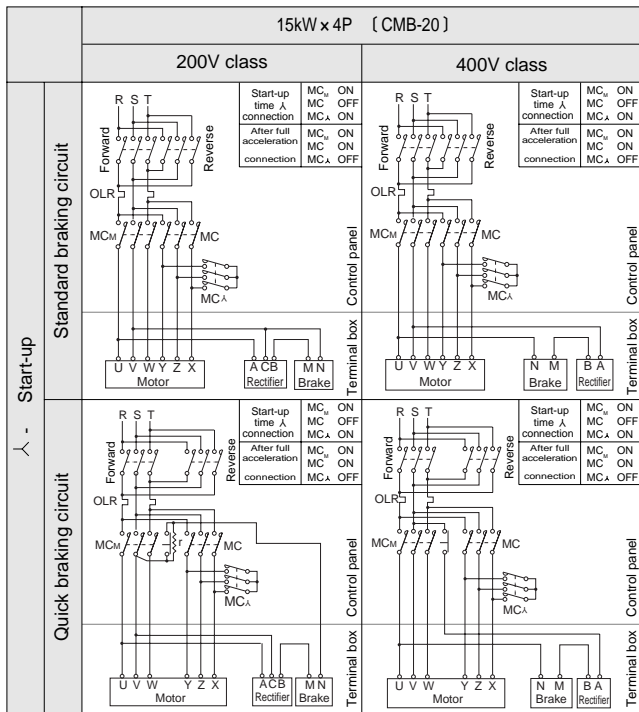
f. Motor with CMB brake

Example of connection for only one direction of rotation



g. Motor with CMB brake

Example of connection for normal / reverse operation



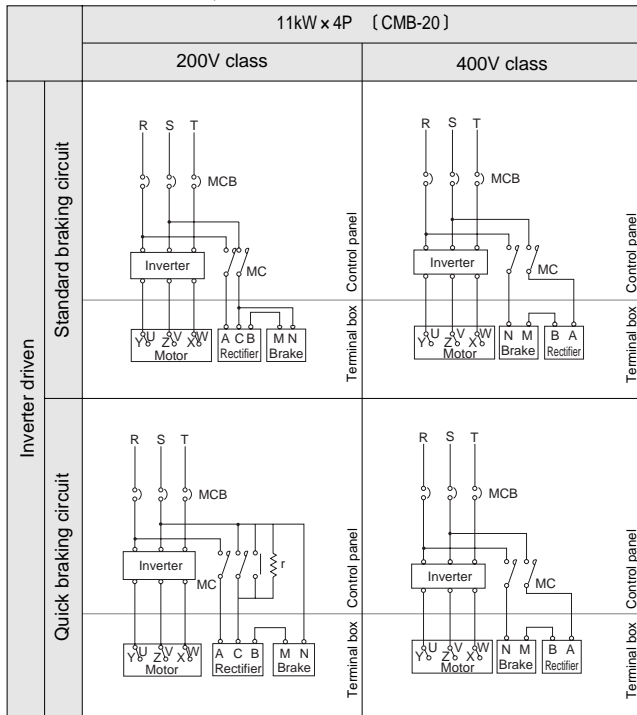
Electromagnetic contactor and OLR : Overload relay is not supplied by Sumitomo.

VR : varistor is optionally available at Sumitomo

r : Discharging resistor (5 ~ 10Watt, 200 ~ 300)

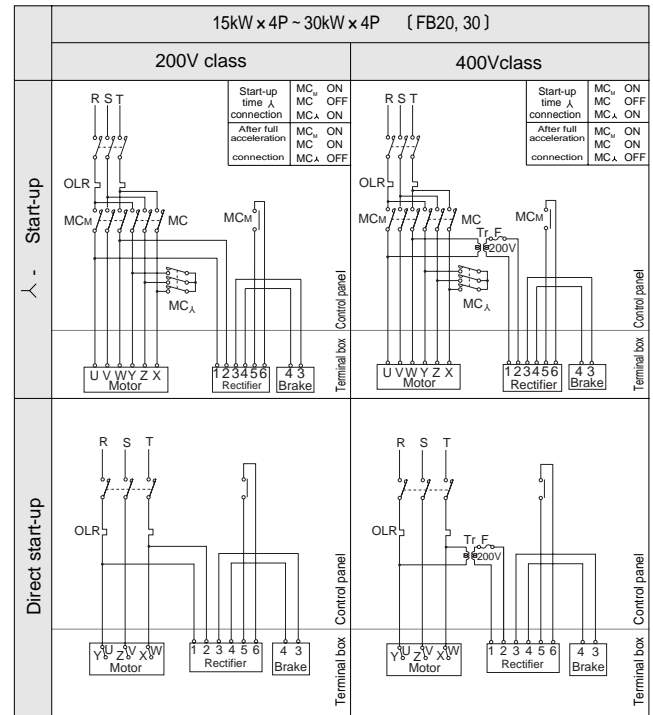
h. Motor with CMB brake

Example of connection for inverter-driving (Note)



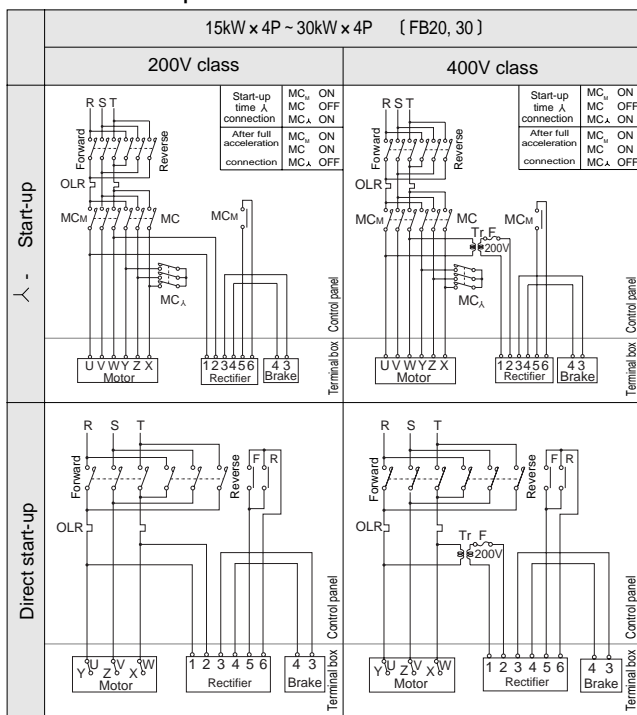
i. Motor with FB brake

Example of connection for only one direction of rotation



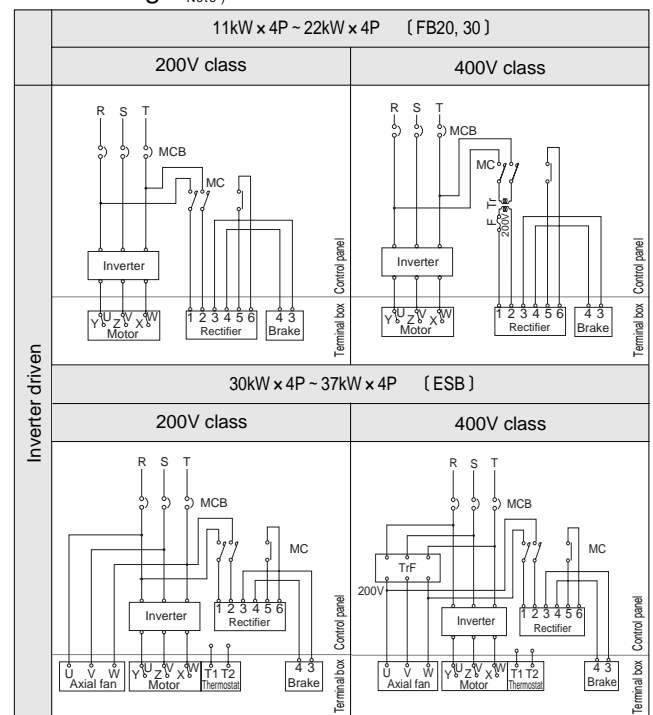
j. Motor with FB brake

Example of connection for normal / reverse operation



k. Motor with FB, ESB brake

Example of connection for inverter-driving (Note)



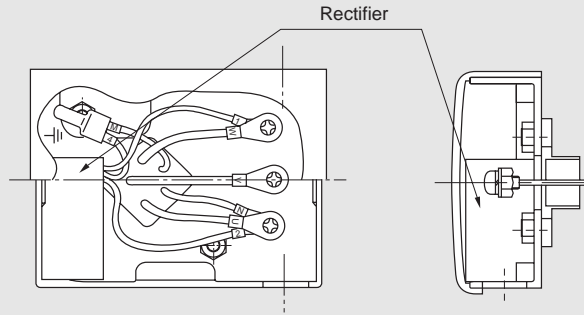
Electromagnetic contactor and the following parts are not supplied by Sumitomo.

- OLR : Overload relay
- r : Discharging resistor (5 ~ 10Watt, 200 ~ 300)
- Tr : Power transformer 250VA ~ 300VA, Secondary voltage 200V ~ 220V
- F : Fuse 3 ~ 5A

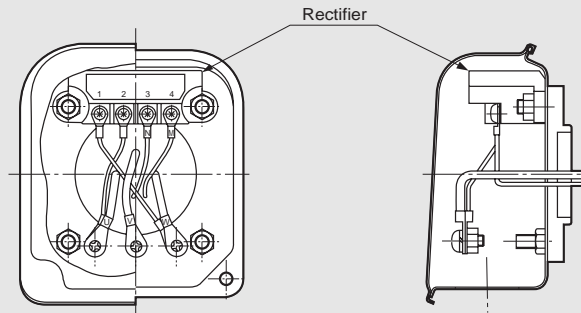
Note : Interlock with the inverter is necessary to open / close the MC.
Refer to the inverter operation manual or guide.

Structure of brake terminal box

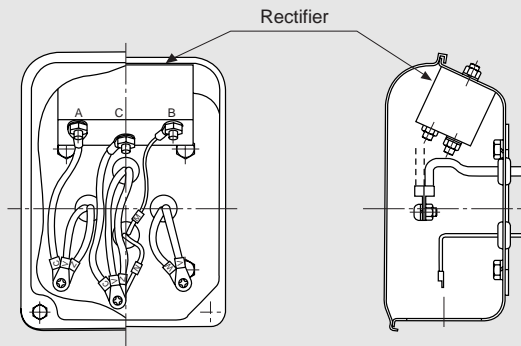
Indoor type standard
(FB-01A1 ~ FB-05A1)



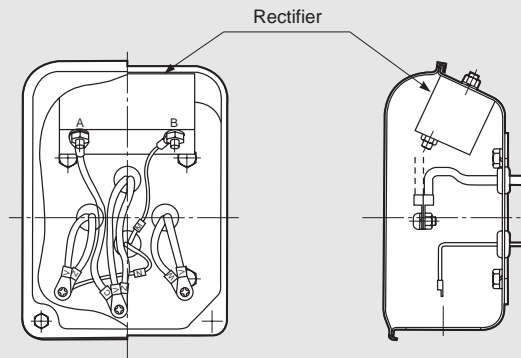
Indoor type standard
(FB-1B ~ 15B)



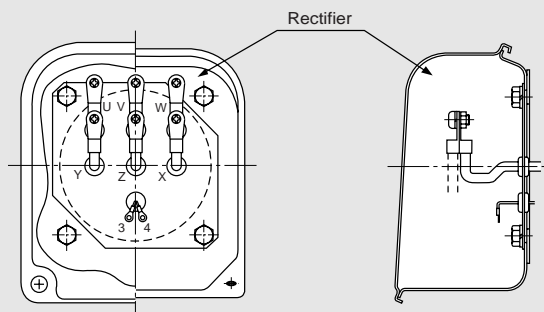
Indoor type standard
200V class
(CMB-20)



Indoor type standard
400V class
(CMB-20)



Indoor type standard
(ESB-220, 250)



Protection

No.1 Symbol type of protection of humans and solid foreign substances }
 No.2 Symbol type of protection against water permeation } Classified according to combination.

Protection Method of Motors

No.1 Symbol No.1 type	No.2 Symbol No.2 type	0 Non-protected type	2 Drip-proof type	3 Spray-proof type	4 Splash-proof type	5 Water-jet-proof type	6 Sea-wave-proof type	7 Immersion-proof type	8 Submersible type
0 (Non-protected type)		JP00			×	×	×	×	
1 (Semi-protected type)		JP10	JP12S			×	×	×	
2 (Protected type)		JP20	JP22S	JP23S	JP24	×	×	×	
4 (Totally enclosed type)		×			JP44	JP45			
5 (Dust-proof type)		×			JP54	JP55	JP56		

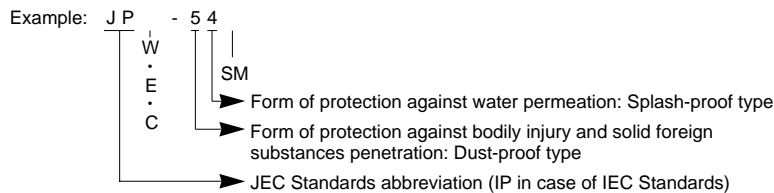
- Notes : 1: X denotes difficulty in forming the combination.
 2. Outlined columns denote the manufacturing range of Sumitomo standard.
 3. Please consult us if operating conditions include splashed water, or rain.
 4. Protection type is JP44, JP54 for indoor model, JPW44, JPW54 for outdoor model.

Class of No.1 Symbol

Type	Symbol	Description
Non-protected	0	Constructed without special protection against human contact and penetration of solid foreign substances.
Semi-protected	1	Constructed to prevent inadvertent contact with rotating and conductive parts inside the machine, by hand or other critical parts of human body. Constructed to prevent penetration of solid foreign substances over 50 mm in diameter.
Protected	2	Constructed to prevent contact with rotating and conductive parts inside the machine, by hand or other critical parts of the human body. Constructed to prevent penetration by solid substances over 12mm in diameter.
Totally enclosed	4	Constructed to prevent contact with the rotating and conductive parts inside the machine, by tools, electric wires, etc., with minimum width and thickness over 1mm. Constructed to prevent penetration of solid foreign substances over 1mm diameter. However, water drainage outlet and exhaust outlet may be of Symbol 2 construction.
Dust-proof type	5	Constructed to prevent contact with rotating and conductive parts inside the machine by any foreign object. Constructed for maximum protection against dust particles penetration, but such penetration will not interfere with normal operation.

Class of No.2 Symbol

Type	Symbol	Description
Non-protected	0	Constructed without special protection against water permeation.
Drip-proof	2	Constructed to prevent harmful effect from dripping water falling from within 15 ° direction from vertical.
Spray-proof	3	Constructed to prevent harmful effect from dripping water falling from within 60 ° direction from vertical.
Splash-proof	4	Constructed to prevent harmful effect from dripping water falling from any direction.
Water-jet-proof	5	Constructed to prevent harmful effect from spray from any direction.
Sea-wave-proof	6	Constructed to prevent harmful effect from strong spray from any direction.
Immersion-proof	7	Constructed for submersion into water of prescribed depth and time, but not having any harmful effect in spite of water permeation.
Submersible	8	Constructed to assure normal operations under water.



- S : Test of form of protection against water permeation conducted when motor is stopped.
 M : Test of form of protection against water permeation, conducted while motor is operating.
 When no S or M stipulated : Test conducted when motor stopped and when operating
- W : Outdoor type
 E : Explosion-proof type
 C : Form of protection against other harmful atmosphere.

Cooling

Enclosure Construction	JEC Standards	IEC Standards
Totally enclosed, non-ventilated (TENV)	JCN4	IC410
Totally enclosed, fan-cooled (TEFC)	JC4 (JCA4S)	IC411
Totally enclosed, Air over (TEAO)	(JCA4F)	IC416

Technical

Reducer

Motor

Common

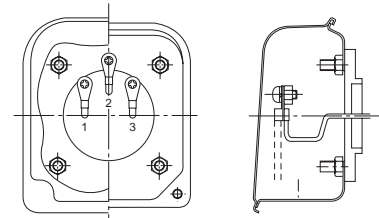
International Standards and corresponding Sumitomo standards

UL Standards (Underwriters Laboratories)

UL Standards are established for safety by a commercial testing institute in the US to prevent harmful effect to human life, fire and disaster based on a series of scientific study, research and experiment. It is not regulated to comply with the standards by Federal Government, but it is regulated by some states or cities. Approved products by UL standards are highly appreciated in the US to represent your reliability.

Motor	Non-explosion proof single-phase induction motor 1	Non-explosion proof 3-phase induction motor	3-phase induction motor with brake
Power	1/8 ~ 1HP x 4P	1/8 ~ 60HP x 4P	1/8 ~ 8HP x 4P
Voltage	115V, 230V	208V, 230V, 460V, 575V	
Frequency	60Hz	60Hz	
Insulation	Class A	3Class A (Class B, Class F)	Class F
Ambient conditions	Indoor type 2		

1 Contact us for manufacture of a single-phase motor or a motor with brake. 2 The outdoor type is unavailable.
3 Contact us for manufacture of insulation type B and F.



3-Phase indoor terminal box

Differences from Sumitomo standard models

- Terminal symbol: 1,2,3
- Name plate with UL mark and measurement in HP
- Opposite rotating direction
- Copper terminal box
- UL standard motor coil and brake coil

Remarks

- Manufacturing and repair work may be conducted only at authorized factories.
- Motor for inverter (AF motor) is excluded from UL approval. Sumitomo supplies UL compliant AF motor. (UL mark is not fixed on a nameplate of UL compliant products.)



SM-CYCLO® 3 PHASE INDUCTION MOTOR		
HP	P	TYPE
VOLTS		FRAME
Hz		INS. CLASS
AMP		TIME RATING
RPM		SERVICE FACTOR
CODE		MAX. AMB °C
SER. NO.		

SUMITOMO MACHINERY CORP. OF AMERICA
CHESAPEAKE, VIRGINIA

UL nameplate

CSA Standards (Canadian Standard Association)

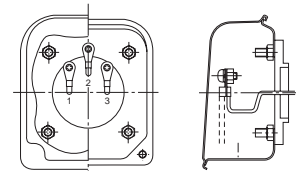
National standards established by a semi-governmental organization in Canada. Most states in Canada require electronic products to be approved by CSA. CSA is considered equivalent in some states in the US.

Motor	Single phase induction motor 1	3-phase induction motor	3-phase induction motor with brake	High efficiency 3-phase induction motor 1	High efficiency 3-phase induction motor with brake 1
Power	1/8 ~ 1HP x 4P	1/8 ~ 60HP x 4P	1/8 ~ 30HP x 4P	1.5 ~ 50HP x 4P	1.5 ~ 30HP x 4P
Voltage	115V, 230V	208V, 230V, 460V, 575V		230V, 460V, 575V	
Frequency	60Hz				
Insulation	Class B(and Class F)				
Ambient conditions	Indoor type 2				

1: Contact us for manufacture of a single-phase motor or a high-efficiency motor with brake. 2: Outdoor type not supplied

Differences from Sumitomo standard models

- Terminal symbol: 1,2,3(with Brake type, T₁, T₂, T₃)
- The frame size of a high-efficiency motor is specil.
- Name plate with CSA mark and measurement in HP
- Opposite rotating direction
- Copper terminal box
- CSA standard motor coil



3-Phase indoor terminal box

Remarks

- If exporting to Canada, it should be CSA approved motor and if above 1HP, High efficiency motor is needed.
- Manufacturing and repair work may be conducted only at authorized factories.
- Motor for inverter (AF motor) is excluded from CSA approval. Sumitomo supplies CSA compliant AF motor. (CSA mark is not fixed on a nameplate of CSA compliant products.)

NRCan established the energy efficiency act (EEACT) in 1992 and the energy efficiency regulations (EER) in 1995, and additional regulations were applied to gearmotors imported on November 27, 1999 or later. Import of gearmotors that do not meet the efficiency standards has been banned.

SM-CYCLO™ 3 PHASE INDUCTION MOTOR		
HP	P	TYPE
VOLTS		FRAME
Hz		M/B INS. CLASS /
M. AMP		TIME RATING
RPM		SERVICE FACTOR
B. AMP		MAX. AMB °C
B. TORQUE	FT-LB	ENCLOSURE TE
MANUF. No.		

SUMITOMO MACHINERY CORP. OF AMERICA
CHESAPEAKE, VIRGINIA

CSA nameplate

Technical

Reducer

Motor

Common

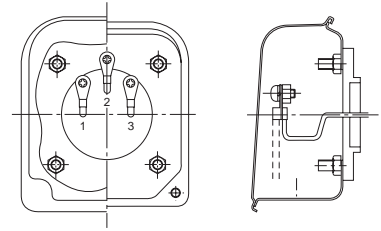
NEMA Standards (National Electrical Manufacturers Association)

Established by a manufacturers' association to provide standards of most electrical products for both manufacturers and consumers.

Differences from Sumitomo standard models

- Terminal symbol: 1,2,3
- Name plate marked with NEMA DESIGN and measurement in HP
- Opposite rotating direction
- Copper terminal box

NEMA standard motor coil



3-Phase indoor terminal box

Remarks

- No approval is required to state NEMA compliance
- NEMA is also applicable for inverter motor (AF motor), but limited to terminal symbols, measurement in HP, rotating direction and terminal box.

3 PHASE INDUCTION MOTOR	
HP	P TYPE /
VOLTS	FRAME -
Hz	M/B INS. CLASS /
M. AMP	TIME RATING
RPM	SERVICE FACTOR
CODE	MAX. AMB. °C
B. AMP	B. TORQUE FT-LB
SERIAL NO.	NEMA DESIGN

Sumitomo Heavy Industries, Ltd.
JAPAN

NEMA nameplate

Other standards

Application of International Standards (Example)

: Sumitomo standards

: Manufactured to special specification on customer's request

Country/Standards	Japan JIS JEM JEC	International IEC	UK BS	Germany VDE DIN
Standard output			: 4kwmax. : 5.5kwmin.	: 4kwmax. : 5.5kwmin.
Applicable output frame size		-		
Motor mounting dimension of corresponding frame size	(Note)	(Note)	(Note)	(Note)
Shaft end dimension	(Note)	(Note)	(Note)	(Note)
Dimension tolerance of shaft end key and key groove	(Note)	(Note)	(Note)	(Note)
Insulation class				-
Lead wire code				
Standard direction of rotation				
Description on nameplate				
Characteristic testing method				
Standard voltage	200V · 220V 400V · 440V		415V	220V 380V
Standard frequency	50Hz · 60Hz	50Hz · 60Hz	50Hz	50Hz

IEC - International Electrotechnical Commission.
BS - British Standards.

(Note): Denotes dimension of standard flange-mount CYCLO DRIVE. Consult us for flange dimensions required for standards.

Major Japanese Standards

- | | |
|--|--|
| (1) General rotating electrical machines
JIS C 4004 (1992) : General rules for rotating electrical machines
JEC-200 (1993) : Rotating machinery in general
JEM 1188 (1969) : Rated output values of electric motors | JIS C 0904 (1983) : Test methods on electrical apparatus for explosive gas atmospheres in general industries
JIS C 0905 (1983) : Supplementary requirements for construction of electrical apparatus for explosive atmosphere in general industries |
| (2) General 3-phase induction motors
JIS C 4210 (1983) : Low-voltage 3-phase squirrel cage induction motors for general purpose
JIS C4212 (2000) : High efficiency low-voltage 3-phase squirrel cage induction motors.
JEC-37 (1979) : Induction machines | Recommended practices for explosion-protected electrical installations in general industries (1979)
Rules for authorization of explosion-proof construction of electrical machine tools (1981) |
| (3) Methods of testing and calculating characteristics
JEC-37 (1979) : Induction machines
JIS C 4207 (1995) : Calculating method of 3-phase induction motors characteristics | (6) Others
JIS C 4003 (1977) : Classification of materials for insulation of electrical machinery and apparatus
JEC-147 (1960) : Classification of materials for insulation of electrical machinery and apparatus |
| (4) Dimensions
JEM 1400 (1991) : Dimension of low-voltage 3-phase squirrel cage induction motors for general purpose
JEM 1401 (1991) : Dimensions of flange-mounted low-voltage 3-phase squirrel cage induction motors for general purposes | JEM 1313 (1983) : Noise levels for low-voltage 3-phase squirrel-cage induction motors for general purpose |
| (5) Explosion-proof construction
JIS C 0903 (1983) : Electrical apparatus for explosive atmospheres in general industries | Remarks: JEC Japanese Electrotechnical Committee Standards
JIS Japanese Industrial Standard
JEM Japan Electrical Manufacturers' Association |

Technical

Reducer

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Common

EC directives and CE marking

The CE mark is to be affixed to products that conform to EC directives, in order to certify the quality and safety of products and ensure free distribution of products across borders within the region of the EU (European Union).

EC directives applicable to machine products and implementation period

The following three directives apply to ordinary machine products.

EC directives	Details	Objects	Details of directive
Machinery directive Machinery Directive		Aggregates of parts, which are movable (Industrial machines, primarily)	Essential matters related to safety of machines are stipulated. Machines that are electrically dangerous shall fulfill the requirements for low voltage.
Low Voltage Directive Low Voltage Directive		Products driven by power of 50-1,000 VAC or 75-15,000 VDC	Products not conforming to standards cannot be put on the market.
EMC Directives Electromagnetic Compatibility Directive Electromagnetic Compatibility		All types of products that may cause jamming (electromagnetic radiation) or have their functions impeded by nearby radio waves	EMI : Not to cause external electromagnetic interference EMS : To withstand external electromagnetic interference

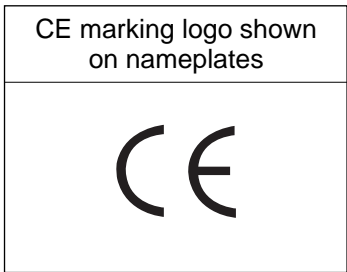
Transition period and time limit for enforcement of CE marking for major directives

EC Directive	Year	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003
Machinery Directive 89/392/EEC Original 91/368/EEC Revision 93/44/EEC Revision					1/1		1/1								
				Transition			Enforcement								
EMC Directives 89/336/EEC Original 92/31/EEC Revision				1/1				1/1							
				Transition			Enforcement								
Low Voltage Directive 73/23/EEC Original 93/68/EEC Revision							1/1		1/1						
							Transition			Enforcement					

Measures to take for EC directives and CE marking related to gear motors

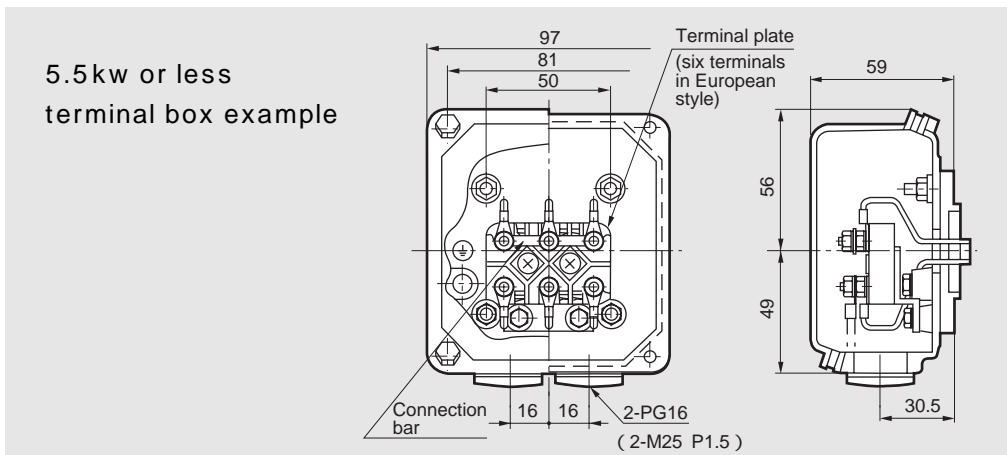
Among EC directives, the machinery directive (issued in January 1995) concerning induction motors and low voltage directive (issued in January 1997) are applicable.

The EMC directive (issued in January 1996) does not apply to induction motors.



Standard Specifications of CE Marking Motors

- Input power : 0.1kW ~ 4kW 230/400V 50Hz Dual voltage direct starting
 5.5kW or more 400V 50Hz λ - Start
- Insulation : 0.1kW ~ 0.4kW Class E
 0.75kW or more Class B
- Rated time : Continuous
- Characteristics : IEC34-1
- Protection : IP54 (without brake)、IP44 (with brake)
- Terminal box : (Material) 5.5kw or less : Aluminum (PG16 bolts \times 2pcs or M25 bolts (P1.5) \times 2pcs)
 7.5kw or more : cast iron (PG21 bolts \times 2pcs or M32 bolts (P1.5) \times 2pcs)
 (specification) Terminal plate (six terminals European style)
 with grounding terminal
 Conduit tube in European size (PG bolts or M bolt) different from
 Japanese standard of conduit tube PF bolts.
- Shaft rotating direction : Rotating direction is reverse to Japanese standard direction.
- Insulation : Distances between insulated surfaces and spaces in accordance with IEC standards.
- External dimensions : Same as standard except for the terminal box
- TÜV test report : Acquired for a representative model 0.75kW \times 4p, 230V/400V (Oct 1996)
 CE marking motors are manufactured in accordance with the model.
- Declaration of Conformity : Declaration of Conformity is available when necessary for CE marking



Manufacturing range of CE Marking motors

3-phase induction motor

Input power symbol	230/400V dual voltage															400V		
	01	012	018	02	03	04	05	08	1	1H	2	3	4	5	6	8	10	15
kW \times 4P	(0.1)	0.12	0.18	(0.2)	0.25	0.37	(0.4)	0.55	0.75	1.1	1.5	2.2	3	(3.7)	4	5.5	7.5	11
Frame	F63S		F63M			F71M		F80S	F80M	F90S	F90L	F100L	F112S	F112M		F132S	F132M	F160M

- Motors of kW without brackets () in the above table are standard in Europe while motors of kW with brackets () are used only in Japan and other countries.
- European standard kW motors are recommended. Motors of kW with brackets () are also available.
 3-phase 200V/50Hz, 200V/60Hz, 220V/60Hz
 3-phase 400V/50Hz, 400V/60Hz, 440V/60Hz
 3-phase 380V/50Hz, 3 415V/50Hz
 Contact us when motors of kW and voltage not shown in the above table are required
- Consult us when M bolt (Metric bolt) is needed for conduit tube.

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Frequency and Voltage Situation in The World

Country / Area		Frequency	Voltage	
North America	Japan	50Hz / 60Hz	Single phase 100V / 200V, 3-phase 200V	
	America	60Hz	Single phase 115V / 230V, 3-phase 230V	
	Canada	60Hz	Single phase 120V / 347V, 3-phase 230V, 460V, 575V	
Asia	Korea	60Hz	Single phase 110V / 220V, 3-phase 220V / 380V	
	Taiwan	60Hz	Single phase 110V / 220V, 3-phase 200V / 220V / 380V	
	Hong Kong	50Hz	Single phase 200V / 220V, 3-phase 346V / 380V	
	China	50Hz	Single phase 220V, 3-phase 220V / 380V	
	Philippines	60Hz	Single phase 220V, 3-phase 380V	
	Thailand	50Hz	Single phase 220V, 3-phase 220V / 380V	
	Singapore	50Hz	Single phase 230V, 3-phase 415V	
	Malaysia	50Hz	Single phase 240V, 3-phase 415V	
	Indonesia	50Hz	Single phase 220V, 3-phase 380V	
	India	50Hz	Single phase 40V, 3-phase 240V / 415V	
	Bangladesh	50Hz	Single phase 230V, 3-phase 400V	
	Oceania	Australia	50Hz	Single phase 240V, 3-phase 415V
		Guam	60Hz	Single phase 120V, 3-phase 240V / 480V
New Zealand		50Hz	Single phase 230V, 3-phase 230V / 415V	
Europe	Austria	50Hz	Single phase 230V, 3-phase 400V	
	Belgium	50Hz	Single phase 230V, 3-phase 400V	
	Bulgaria	50Hz	Single phase 220V, 3-phase 380V	
	Denmark	50Hz	Single phase 230V, 3-phase 400V	
	Finland	50Hz	Single phase 230V, 3-phase 400V	
	France	50Hz	Single phase 230V, 3-phase 400V	
	Germany	50Hz	Single phase 230V, 3-phase 400V	
	Greece	50Hz	Single phase 230V, 3-phase 400V	
	Hungary	50Hz	Single phase 220V, 3-phase 380V	
	Italy	50Hz	Single phase 220V, 3-phase 380V	
	Luxembourg	50Hz	Single phase 230V, 3-phase 400V	
	Netherlands	50Hz	Single phase 230V, 3-phase 400V	
	Norway	50Hz	Single phase 220V / 230V, 3-phase 380V	
	Poland	50Hz	Single phase 220V, 3-phase 380V	
	Portugal	50Hz	Single phase 230V, 3-phase 400V / 480V	
	Romania	50Hz	Single phase 220V, 3-phase 380V	
	Spain	50Hz	Single phase 127V / 220V, 3-phase 220V / 380V	
Sweden	50Hz	Single phase 230V / 400V, 3-phase 400V / 690V		
Switzerland	50Hz	Single phase 230V, 3-phase 400V		
United Kingdom	50Hz	Single phase 230V, 3-phase 400V		

Mainly used voltages of the country are shown above. Voltage may differ also in the same area.

Marked 120V is usual in U.S.A. and Canada, even standard is 115V for single-phase.

Technical
Reducer
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Common

Common

Painting Specifications

1. Specifications

Painting area	Kind of painting		Additional lead time(days)	Painting specifications			Applied paint	Weather resistance	Submersible	Oil-proof	Acid resistance	Alkal resistance	Heat resistance(°C)	Application	
	Classification	Paint of finish coat		Type	Layers (μm)	Quality	Brand								
Cast Iron : Near White blast cleaning	Standard	-	0	Under coating	1	Modified alkyd resin	UNIGRAOUND PTC PRIMER						100	Standard under coat	
		Acrylic modified phtalic	0	Finish coating	1 (15 - 30)	Acrylic modified alkyd resin	SUPIKA # 3000	x		△	△		100	Standard finish coat	
	Standard export painting	Acrylic modified phtalic	2	Under coating	1 (30 - 60)	Modified alkyd resin	UNIGRAOUND PTC PRIMER	x		△	x		100	Export	
				Finish coating	1 (15 - 30)	Acrylic modified alkyd resin	SUPIKA 3000								
	Steel plate : Power tool cleaning	Special painting (including rust-proof and heat resisting painting) one layer of Uniground PTC Primer as the first primer	Modified epoxy	3	Under coating	1 (20 - 40)	Vinyl modified alkyd resin	NEO-GOSE 500 Red lead primer				△	△	100	Moderate corrosive atmosphere, sea side, outdoor humid atmosphere, chemical plant area, etc.
					Finish coating	1 (30 - 60)	Acrylic modified alkyd resin	Acron 300							
			Long oil phtalic (synthetic resin type)	7	Under coating	2 (40 - 70)	Lead rust preventive paint	SD MARINE PRIMER (rust)	x	x	△	x		100	Ocean-going vessel & boat, bridge, sea side, outdoor humid atmosphere, etc.
					Finish coating	2 (30 - 60)	Synthetics resin paint	PENFORTE # 600							
		Chlorde rubber	10	Under coating	2 (40 - 70)	Lead rust preventive paint	SD MARINE PRIMER (rust)							80	Ocean-going vessel & boat, bridge, sea side, outdoor humid atmosphere, etc.
				Second coating	1 (20 - 40)	Phenol M.I.O pain	SHINTO MIO								
				Finish coating	2 (40 - 70)	Chloride rubber paint	RUBBER # 100								
		Phenol	7	Under coating	2 (40 - 70)	Lead rust preventive paint	SD MARINE PRIMER (rust)	x			△		100	In-and-out door of acid treating plant and chemical plant, etc.	
Finish coating				2 (30 - 60)	Phenol resin enamel	NEW AKNON									
Heat-proof silver		7	Under coating	1 (20 - 40)	Lead rust preventive paint	SD MARINE PRIMER (rust)	x	x	x	x			120	Heating furnace (120), etc.	
	Finish coating		1 (15 - 30)	Aluminum paint	SILVER TOP (heat resisting)										
Extra rust-proof painting	Epoxy	10	Under coating	1 (50 - 60)	Special permeability epoxy aluminum paint	CARBOMASTIC 15	◎					150	Chemical contact area, chemical plant, anti-corrosion plant, etc.		
			Finish coating	3 (30 - 90)	Polyamide epoxy	NEO-GOSE 200									
	Epoxy	10	Under coating	1 (50 - 60)	Special permeability epoxy aluminum paint	CARBOMASTIC 15	◎					150	Nuclear power plant, etc.		
			Finish coating	3 (120 - 240)	Polyamide epoxy	NEO-GOSE 2300CW									
	Polyurethane	10	Under coating	1 (50 - 60)	Special permeability epoxy aluminum paint	CARBOMASTIC 15	◎					150	Nuclear power plant, etc.		
			Finish coating	3 (45 - 90)	Polyisocyanate urethane resin paint	NY POLIN K finish coat									
Extra rust-preventive painting (sand blast undercoating)	Thick film epoxy	12		5 (250 - 350)	Thick film type modified epoxy resin paint	NEO-GOSE 2300 NTHB	◎	◎				100	Submersible equipment, marine structure, etc.		

- Notes : 1. Additional lead time for coating refers to the number of days required for special coating compared to standard painting.
 2. Standard coating color is 6.5PB 3.6/8.2.
 3. Coating may be substituted.
 4. The coatings marked with ☉ may fade from the sun's ray.
 5. Consult us when ambient temperature is above the heat resistance temperature.
 (The above heat resistance temperature is only for the painting and not for Cyclo Drive)
 6. Consult us when ambient temperature varies widely in a short period.

- ◎ : Appropriate
 △ : Caution in selection
 x : Inappropriate

Technical
 Reducer
 Motor
 Common

2. Surface Conditioning

Treatment	Surface condition after treatment	Methods	Standards	
			SSPC	SIS
Class 1 Near white blast cleaning	Surface to be completely free of mill scales, rust, corrosive substances, dirt and other foreign substances. However, solidly embedded residues (mill scales, rust, slight smears or discoloration of oxide substances) may be excepted, provided that a minimum of 95% of the surface area is visually free of any residues and the remaining area is limited to smears, stains and other minute loose particles.	Near White Blast Cleaning Shot blast Sand blast, etc.	SP-10	Sa-2 1/2
Class 2 Power tool cleaning	Except for solidly embedded mill scales, the surface shall be completely free of loose mill scales, rust, corrosive substances, oil & grease, dirt and other foreign matters. However, solidly embedded residue (mill scales, rust, slight smears or stains of oxide substances) may be excepted. If there is any porous corrosion in the surface, residual rust and coating peelings may remain in such pores, but a minimum of two-thirds of the surface shall be visually free of such residues, with the remaining area being limited to minor smears, stains and other loose minute particles.	Commercial Blast Cleaning Power Tool Cleaning Disk sander Wire wheel Grinder, etc.	SP-6 (SP-3)	Sa-2 (St-3)
Class 3 Hand tool cleaning	Remove the loose scale, rust, coating peelings, oil & grease and other foreign matters, with a wire brush, scrapper, etc. The surface shall have a slight metallic luster.	Hand Tool Cleaning Wire brush Scrapper, etc.	SP-2	St-2

Lef. SSPC(U.S.A Steel Structural Painting Councils)and SIS(Sweeden, Svensk Standard,S.I.S 055900)

RUST PROOFING STANDARDS

Rust proofing treatment has been conducted on all completely assembled models, prior to shipment.

Lubrication	Grease Lubricated Models	Oil Lubricated Models
Rust-proofing Period	1Year	6 Months(Note : 1)
Storage Condition	Generally to be stored inside the shop or warehouse, relatively free of humidity, dust, extreme temperature fluctuation, corrosive gas and similar atmosphere.	

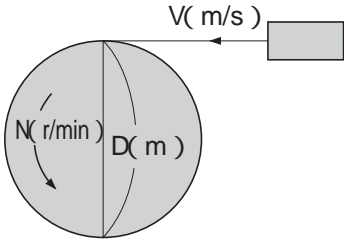
Notes : 1. Rust-proofing treatment will be conducted for an effective period of 6 ~ 12 months, on all oil lubricated models for export. Please specify " Export Rust-proofing " for all export models.

2. For extended storage longer than these standards or in the event of adverse storage conditions, please consult us.

REFERENCE DATA

FORMULA of DRIVE SYSTEM(SI Units)

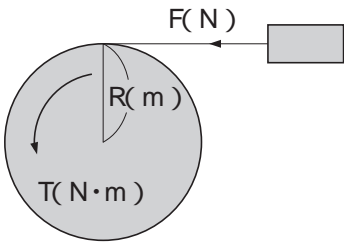
1. Revolving Speed N(r/min), Velocity V(m/s)



$$V = \pi \cdot D \cdot \frac{N}{60} \text{ (m/s)}$$

D : Wheel Diameter (m)
 $\pi = 3.14$

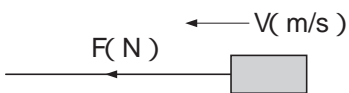
2. Torque T(N · m)



$$T = F \cdot R \text{ (N · m)}$$

F : Load (N)
 R : Wheel Radius (m)

3. Power P(kW)



$$P = \frac{F \cdot V}{1000} \text{ (kW)}$$

F : load (N)
 V : Velocity (m/s)

4. Power P(kW), Torque T(N · m), Revolving Speed N(r/min)

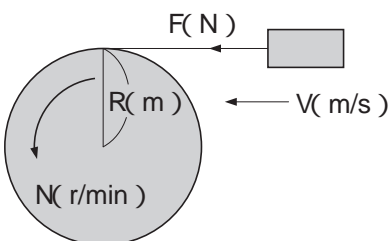
$$P = \frac{N \cdot T}{9550} \text{ (kW)}, \quad T = \frac{9550 \cdot P}{N} \text{ (N · m)}$$

$$P = \frac{F \cdot V}{1000} \text{ (kW)} \quad V = \pi \cdot 2 \cdot R \cdot \frac{N}{60} \text{ (m/s)}$$

$$P = \frac{F \cdot \pi \cdot 2 \cdot R \cdot \frac{N}{60}}{1000} = \frac{2 \cdot \pi}{1000 \times 60} \cdot N \cdot F \cdot R \text{ (kW)}$$

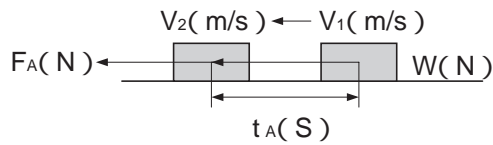
Since $T = F \cdot R$

$$P = \frac{2 \cdot \pi}{1000 \times 60} \cdot N \cdot T = \frac{N \cdot T}{9550} \text{ (kW)}$$



Technical
 Reducer
 Motor
 Common

5. Acceleration Force F_A (N)



m : Weight (kg)
 a : Acceleration (m/s^2)
 t_A : Acceleration Time (s)

$$F_A = m \cdot a = m \cdot \frac{V_2 - V_1}{t_A} \text{ (N)}$$

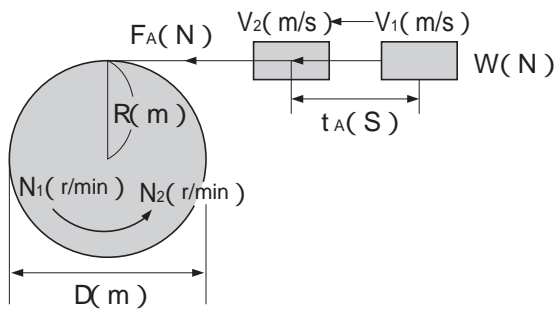
$$= \frac{V_2 - V_1}{t_A}$$

6. Acceleration Torque T_A (N · m)

$$T_A = F_A \cdot R, \quad F_A = m \cdot \frac{V_2 - V_1}{t_A}$$

$$V_2 = \omega_2 \cdot D \cdot \frac{N_2}{60}, \quad V_1 = \omega_1 \cdot D \cdot \frac{N_1}{60},$$

$$D = 2 \cdot R$$



$$T_A = m \cdot \frac{\omega_2 \cdot R - \omega_1 \cdot R}{t_A} \cdot R$$

$$= \frac{2 \cdot m \cdot R \cdot \omega_2 - 2 \cdot m \cdot R \cdot \omega_1}{60 \cdot t_A} \cdot R$$

$$= \frac{m \cdot R^2 \cdot (N_2 - N_1)}{9.55 \cdot t_A} \text{ (N · m)}$$

Since $m \cdot R^2$ is J (Moment of inertia : $kg \cdot m^2$)

$$T_A = \frac{J}{9.55} \cdot \frac{N_2 - N_1}{t_A} \text{ (N · m)}$$

7. Synchronized Revolving Speed of AC Motor N_0 (r/min)

$$N_0 = \frac{120 \cdot f}{P} \text{ (r/min)}$$

f : Power Supply Frequency (Hz)
 P : No. of motor Poles

8. Rated Revolving Speed of AC Motor N (r/min)

$$N = N_0 (1 - S) \text{ (r/min)}$$

N_0 : Synchronized Revolving Speed (r/min)
 S : Slippage

Technical

Reducer

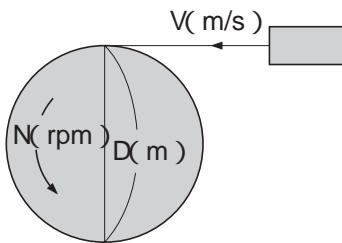
Motor

Common

REFERENCE DATA

FORMULA of DRIVE SYSTEM(GRAVITY Units)

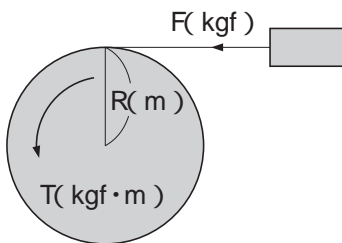
1. Revolving Speed N(rpm), Velocity V(m/s)



$$V = \pi \cdot D \cdot \frac{N}{60} \text{ (m/s)}$$

D : Wheel Diameter (m)
 $\pi = 3.14$

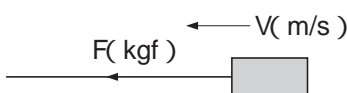
2. Torque T(kgf · m)



$$T = F \cdot R \text{ (kgf} \cdot \text{m)}$$

F : Load (kgf)
 R : Wheel Radius (m)

3. Power P(kW)



$$P = \frac{F \cdot V}{102} \text{ (kW)}$$

F : Load (kgf)
 V : Velocity (m/s)

4. Power P(kW), Torque T(kgf · m), Revolving Speed N(rpm)

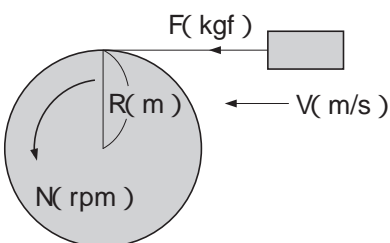
$$P = \frac{N \cdot T}{975} \text{ (kW)}, \quad T = \frac{975 \cdot P}{N} \text{ (kgf} \cdot \text{m)}$$

$$P = \frac{F \cdot V}{102} \text{ (kW)} \quad V = \pi \cdot 2 \cdot R \cdot \frac{N}{60} \text{ (m/s)}$$

$$P = \frac{F \cdot \pi \cdot 2 \cdot R \cdot \frac{N}{60}}{102} = \frac{2 \cdot \pi}{102 \times 60} \cdot N \cdot F \cdot R \text{ (kW)}$$

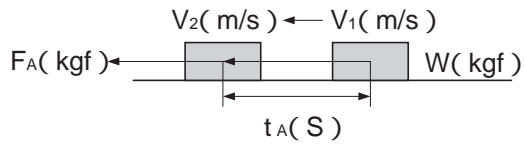
Since $T = F \cdot R$

$$P = \frac{2 \cdot \pi}{102 \times 60} \cdot N \cdot T = \frac{N \cdot T}{975} \text{ (kW)}$$



Technical
 Reducer
 Motor
 Common

5. Acceleration Force F_A (kgf)



$$F_A = m \cdot a = \frac{W}{g} \cdot \frac{V_2 - V_1}{t_A} \text{ (kgf)}$$

$$m = \frac{W}{g} \cdot \frac{V_2 - V_1}{t_A}$$

W : Weight (kgf)

g : Acceleration of Gravity 9.8 (m/s²)

m : Mass (kgf · s²/m)

a : Acceleration (m/s²)

t_A : Acceleration Time (s)

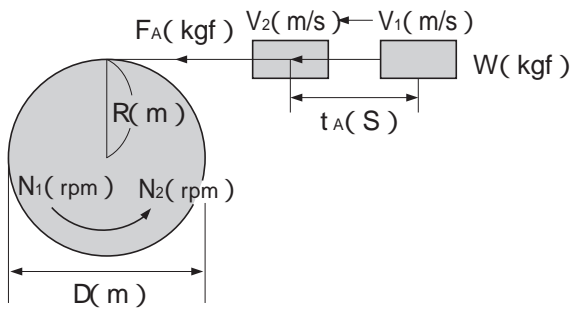
6. Acceleration Torque T_A (kgf · m)

$$T_A = F_A \cdot R,$$

$$F_A = \frac{W}{g} \cdot \frac{V_2 - V_1}{t_A}$$

$$V_2 = \omega_2 \cdot R = \frac{N_2}{60} \cdot \frac{D}{2}$$

$$V_1 = \omega_1 \cdot R = \frac{N_1}{60} \cdot \frac{D}{2}, \quad R = \frac{D}{2}$$



$$\begin{aligned} T_A &= \frac{W}{g} \cdot \frac{\frac{D}{2} \cdot \frac{N_2}{60} - \frac{D}{2} \cdot \frac{N_1}{60}}{t_A} \cdot \frac{D}{2} \\ &= \frac{W \cdot D}{60 \cdot g} \cdot \frac{N_2 - N_1}{t_A} \cdot \frac{D}{2} \\ &= \frac{W \cdot D^2}{375} \cdot \frac{N_2 - N_1}{t_A} \text{ (kgf} \cdot \text{m)} \end{aligned}$$

Since $W \cdot D^2$ is GD^2 (Flywheel Effect · kgf·m²)

$$T_A = \frac{GD^2}{375} \cdot \frac{N_2 - N_1}{t_A} \text{ (kgf} \cdot \text{m)}$$

7. Synchronized Revolving Speed of AC Motor N_0 (rpm)

$$N_0 = \frac{120 \cdot f}{P} \text{ (rpm)}$$

f : Power Supply Frequency (Hz)

P : No. of Motor Poles

8. Rated Revolving Speed of AC Motor N (rpm)

$$N = N_0(1 - S) \text{ (rpm)}$$

N_0 : Synchronized Revolving Speed (rpm)

S : Slippage

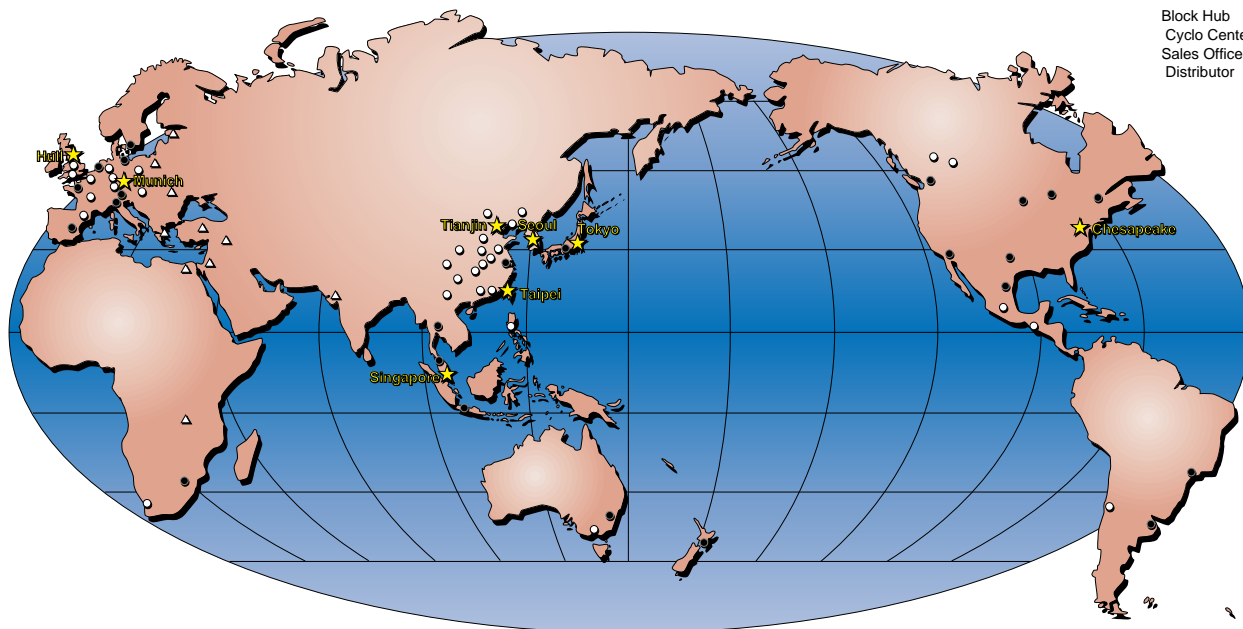
Warranty

The scope of our warranty for our products is limited to the range of our manufacture.

Warranty (period and contents)

Warranty Period	The warranty for new Cyclo, units shall be 24 months from date of shipment.
Warranty Condition	<p>In the event that any problem or damage to the Product arises during the “ Warranty Period ” from defects in the Product whenever the Product is properly installed and combined with the Buyer’s equipment or machines, maintained as specified in the maintenance manual, and properly operated under the conditions described in the catalog or as otherwise agree upon in writing between the Seller and the Buyer or its customers ; the Seller will provide, at its sole discretion, appropriate repair or replacement of the Product without charge at a designated facility, except as stipulated in the “ Warranty Exclusions ” as described below.</p> <p>However, if the Product is installed or integrated into the Buyer’s equipment or machines, the Seller shall not reimburse the cost of : removal or re-installation of the Product or other incidental costs related thereto, any lost opportunity, any profit loss or other incidental or consequential losses or damages incurred by the Buyer or its customers.</p>
Warranty Exclusions	<p>Notwithstanding the above warranty, the warranty as set forth herein shall not apply to any problem or damage to the Product that is caused by :</p> <ol style="list-style-type: none"> 1. installation, connection, combination or integration of the Product in or to the other equipment or machine that is rendered by any person or entity other than the Seller ; 2. insufficient maintenance or improper operation by the Buyer or its customers, such that the Product is not maintained in accordance with the maintenance manual provided or designated by the Seller ; 3. improper use or operation of the Product by the Buyer or its customers that is not informed to the Seller, including, without limitation, the Buyer’s or its customers’ operation of the Product not in conformity with the specifications, or use of lubricating oil in the Product that is not recommended by the Seller ; 4. any problem or damage on any equipment or machine to which the Product is installed, connected or combined or on any specifications particular to the Buyer or its customers ; 5. any changes, modifications, improvements or alterations to the Product or those functions that are rendered on the Product by any person or entity other than the Seller ; 6. any parts in the Product that are supplied or designated by the Buyer or its customers ; 7. earthquake, fire, flood, sea-breeze, gas, thunder, acts of God or any other reasons beyond the control of the Seller ; 8. normal wear and tear, or deterioration of the Product’s parts, such as bearings, oil-seals ; 9. any other troubles, problems or damage to the Product that are not attributable to the Seller.

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