



NEMA Premium Efficient MG1 motors, Table 12-12
SIMOTICS GP 1LE1 Standard Motors – Eagle Line

Self-ventilated or forced-air cooled motors · Aluminum series 1LE1023

Selection and ordering data

P _{rated} 50 Hz		P _{rated} 60 Hz		Frame size		Operating values at rated output														Aluminum series	m _{IM B3} J	Torque class
kW	hp	FS	rpm	Nm	η _{rated} 60 Hz	T _{rated} 60 Hz	EISA CC No. CC032A	η _{rated} 60 Hz	η _{rated} 60 Hz	η _{rated} 60 Hz	cos φ _{rated} 60 Hz	I _{rated} 460 V	T _{LR} / T _{ra}	I _{LR} / I _{ra}	T _B / T _{ra}	L _{pfA} 60 Hz	L _{WA} 60 Hz	1LE1023 - NEMA Premium Efficient version Article No.		CL		
▲ New																				▲ New		
• Cooling: self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC416) • Efficiency: NEMA Premium Efficient, UL, CSA and service factor (SF) 1.15 – for operation in the USA, Canada and Mexico • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																						
2-pole: 3000 rpm at 50 Hz, 3600 rpm at 60 Hz																						
0.75	1	80 M	3480	2.1	–	–	77	78	76	0.84	1.46	3	7.1	3.6	64	75	75	1LE1023-0DA2	11	0.0011 16		
1.1	1.5	80 M	3500	3	–	–	84	84	83	0.83	1.98	3.3	8.4	4.5	64	75	75	1LE1023-0DA3	12	0.0013 16		
1.5	2	90 S	3525	4.1	✓	–	85.5	85	82.5	0.84	2.6	3.1	9.8	4.9	69	81	81	1LE1023-0EA0	15	0.0021 16		
2.2	3	90 L	3530	6	✓	–	86.5	86.3	84.5	0.87	3.65	3	9.6	4.9	69	81	81	1LE1023-0EA4	19	0.0031 16		
3	4	100 L	3525	8.1	–	–	88.5	88.5	87.5	0.87	4.9	3.8	9.7	5.5	71	83	83	1LE1023-1AA4	26	0.0054 16		
4	5	112 M	3565	9.9	✓	–	88.5	88.5	87.5	0.87	6	3.8	10	5.6	73	85	85	1LE1023-1BA2	34	0.012 16		
5.5	7.5	132 S	3555	15	✓	–	89.5	89.5	88.5	0.9	8.6	2.1	8.6	4.4	72	84	84	1LE1023-1CA0	43	0.024 16		
7.5	10	132 S	3555	20	✓	–	90.2	90.2	89.2	0.91	11.5	2.4	9.5	4.7	72	84	84	1LE1023-1CA1	57	0.031 16		
11	15	160 M	3560	30	✓	–	91	91	90	0.88	17.2	2.8	8.5	4.3	77	89	89	1LE1023-1DA2	75	0.053 16		
15	20	160 M	3565	40	✓	–	91	91	90	0.86	24	3.1	9.7	4.8	77	89	89	1LE1023-1DA3	84	0.061 16		
18.5	25	160 L	3560	50	✓	–	91.7	91.7	90.7	0.9	28	3.1	9.4	4.4	77	89	89	1LE1023-1DA4	94	0.068 16		
22	30	180 M	3560	59	✓	–	91.7	91.4	90	0.89	34	2.8	8.3	3.9	78	85	85	▲ 1LE1023-1EA2	129	0.08 16		
30	40	200 L	3560	80	✓	–	92.4	92.2	91.4	0.87	47	2.9	7.6	3.6	78	86	86	▲ 1LE1023-2AA4	173	0.134 16		
37	50	200 L	3560	99	✓	–	93	92.8	91.6	0.88	57	2.8	7.5	3.6	79	86	86	▲ 1LE1023-2AA5	194	0.158 16		
4-pole: 1500 rpm at 50 Hz, 1800 rpm at 60 Hz																						
0.55	0.75	80 M	1750	3	–	–	82.5	82.2	79.4	0.74	1.13	2.7	6.9	3.8	55	66	66	1LE1023-0DB2	11	0.0021 16		
0.75	1	80 M	1760	4.1	–	–	85.5	84.5	81	0.71	1.55	3.1	8.3	4.7	55	66	66	1LE1023-0DB3	14	0.0029 16		
1.1	1.5	90 S	1750	6	✓	–	86.5	86.3	84.1	0.75	2.15	3.4	8.2	4.4	58	70	70	1LE1023-0EB0	16	0.0036 16		
1.5	2	90 L	1755	8.2	✓	–	86.5	87	85	0.77	2.85	3	8.4	4.3	58	70	70	1LE1023-0EB4	19	0.0049 16		
2.2	3	100 L	1770	12	–	–	89.5	89.5	88.5	0.81	3.8	3.5	9.6	5.1	62	74	74	1LE1023-1AB4	30	0.014 16		
3	4	100 L	1760	16	–	–	89.5	89.5	88.5	0.82	5.1	3.1	9.5	4.6	62	74	74	1LE1023-1AB5	30	0.014 16		
4	5	112 M	1770	20	✓	–	89.5	89.5	88.5	0.8	6.5	2.9	8.2	4.3	62	74	74	1LE1023-1BB2	34	0.017 16		
5.5	7.5	132 S	1780	30	✓	–	91.7	91.7	90.7	0.83	9.1	2.9	9.5	4.4	68	80	80	1LE1023-1CB0	64	0.046 16		
7.5	10	132 M	1770	40	✓	–	91.7	91.7	90.7	0.83	12.4	2.7	9.6	4.2	68	80	80	1LE1023-1CB2	64	0.046 16		
11	15	160 M	1775	59	✓	–	92.4	92.4	91.4	0.83	18	3	8.9	3.8	69	81	81	1LE1023-1DB2	83	0.083 16		
15	20	160 L	1780	80	✓	–	93	93	91.5	0.81	25	2.9	9.5	4.3	69	81	81	1LE1023-1DB4	100	0.099 16		
18.5	25	180 M	1775	100	✓	–	93.6	93.7	93.1	0.81	30.5	2.7	7.8	3.6	68	75	75	▲ 1LE1023-1EB2	134	0.13 16		
22	30	180 L	1775	118	✓	–	93.6	93.8	93.3	0.81	36.5	2.8	7.7	3.7	70	77	77	▲ 1LE1023-1EB4	142	0.14 16		
30	40	200 L	1778	161	✓	–	94.1	94.3	93.8	0.83	48	3	8.1	3.5	67	74	74	▲ 1LE1023-2AB5	189	0.22 16		
Voltages (≤ 600 V) ¹⁾																						
50 Hz		230 VΔ/400 VY		60 Hz		460 VY		No. of poles		Frame size		Motor type		Version				Order code(s)				
50 Hz		400 VΔ		60 Hz		460 VΔ		2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Standard		2 2		–				
50 Hz		500 VY						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Standard		3 4		–				
50 Hz		500 VΔ						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Without add. charge		2 7		–				
50 Hz		500 VΔ						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Without add. charge		4 0		–				
Further voltages		For price information, code numbers, order codes and descriptions, see from Page 2/57																				
Types of construction																						
		Without flange		IM B3 ²⁾				2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Standard		A		–				
		With flange		IM B5 ²⁾				2, 4		80 M ... 200 L		1LE1023-0D ... -2A		With additional charge		F		–				
		With standard flange		IM B14 ²⁾				2, 4		80 M ... 160 L		1LE1023-0D ... -2A		With additional charge		K		–				
Further types of construction		For price information, code letters and descriptions, see from Page 2/62																				
Motor protection																						
		Without						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Standard		A		–				
		PTC thermistor with 3 temperature sensors						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		With additional charge		B		–				
Further motor protection		For price information, code letters and descriptions, see from Page 2/70																				
Terminal box position																						
		Terminal box at top						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		Standard		4		–				
Further terminal box positions		For price information, code numbers and descriptions, see from Page 2/72																				
Special versions																						
		Forced-air cooled motors without ext. fan/fan cover (IC416)						2, 4		80 M ... 200 L		1LE1023-0D ... -2A		1LE1023- ... -Z F90 + . . . + . . .								
Options		For price information, order codes and descriptions, see from Page 2/74																				
														1LE1023- ... -Z ... + . . . + . . .								

- Not required
- ✓ Available

¹⁾ Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
²⁾ Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible,

provided that no requirements exist for condensation drainage holes (H03) and stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. When ordering with condensation drainage holes (H03), the type must be specified.



NEMA Premium Efficient MG1 motors, Table 12-12
SIMOTICS GP 1LE1 Standard Motors – Eagle Line



Self-ventilated or forced-air cooled motors · Aluminum series 1LE1023

Selection and ordering data (continued)

Operating values at rated output															Aluminum series		m _{IM B3} J	Torque class		
P _{rated} 50 Hz	P _{rated} 60 Hz	Frame size	n _{rated} 60 Hz	T _{rated} 60 Hz	EISA CC No. CC032A	η _{rated} 60 Hz	η _{rated} 60 Hz	η _{rated} 60 Hz	cos φ _{rated} 60 Hz	I _{rated} 60 Hz	T _{LR} /T _{ra} 60 Hz	I _{LR} /I _{ra} 60 Hz	T _B /T _{ra} 60 Hz	L _{pfA} 60 Hz	L _{WA} 60 Hz	1LE1023 – NEMA Premium Efficient version Article No.			CL	
kW	hp	FS	rpm	Nm		%	%	%		A							▲ New	CL		
• Cooling: self-ventilated (IC411) or with order code F90 forced-air cooled without external fan and fan cover (IC416) • Efficiency: NEMA Premium Efficient, UL, CSA and service factor (SF) 1.15 – for operation in the USA, Canada and Mexico • Insulation: thermal class 155 (temperature class F), IP55 degree of protection, utilization in accordance with thermal class 130 (temperature class B)																				
6-pole: 1000 rpm at 50 Hz, 1200 rpm at 60 Hz																				
0.37	0.5	80 M	1150	3.1	–	78.5	77.5	73	0.61	0.97	2.7	5	3.3	45	56	1LE1023-0DC2	12	0.0025	13	
0.55	0.75	80 M	1145	4.6	–	81.7	81.3	78	0.63	1.34	2.8	5.3	3.4	45	56	1LE1023-0DC3	14	0.0031	13	
0.75	1	90 S	1155	6.2	✓	82.5	82.3	79.5	0.65	1.76	2.4	5.3	3.1	46	58	1LE1023-0EC0	16	0.004	13	
1.1	1.5	100 L	1175	8.9	–	87.5	87.5	86.5	0.71	2.2	2.4	7	3.8	62	74	1LE1023-1AC3	30	0.014	13	
3	4	132 S	1175	24	✓	89.5	89.5	88.5	0.76	5.5	1.9	7.6	3.4	67	79	1LE1023-1CC0	52	0.037	13	
4	5	132 M	1175	30	✓	89.5	89.5	88.5	0.76	6.8	2.2	7.9	3.7	67	79	1LE1023-1CC2	52	0.037	13	
5.5	7.5	132 M	1175	45	✓	91	91	90	0.76	10	2.2	7.5	3.5	67	79	1LE1023-1CC3	52	0.037	13	
7.5	10	160 M	1185	60	✓	91	91	89.8	0.75	13.8	2.4	5.9	2.6	70	82	1LE1023-1DC2	93	0.098	13	
11	15	160 L	1180	89	✓	91.7	91.9	91	0.75	20	2.3	5.8	2.6	70	82	1LE1023-1DC4	115	0.12	13	
15	20	180 L	1178	122	✓	91.7	92	91.5	0.79	26	2.5	6.8	3	58	71	▲ 1LE1023-1EC4	130	0.19	16	
18.5	25	200 L	1180	150	✓	93	93.2	92.6	0.78	32	2.8	6.5	3	67	80	▲ 1LE1023-2AC4	166	0.28	16	
22	30	200 L	1180	178	✓	93	93.6	93.5	0.79	37.5	2.6	6.3	2.8	67	80	▲ 1LE1023-2AC5	179	0.32	16	
Voltages (≤ 600 V)¹⁾					No. of poles	Frame size	Motor type	Version											Order code(s)	
50 Hz	230 VΔ/400 VY	60 Hz	460 VY			6	80 M ... 200 L	1LE1023-0D ... -2A	Standard											2 2
50 Hz	400 VΔ	60 Hz	460 VΔ			6	80 M ... 200 L	1LE1023-0D ... -2A	Standard											3 4
50 Hz	500 VY					6	80 M ... 200 L	1LE1023-0D ... -2A	Without add. charge											2 7
50 Hz	500 VΔ					6	80 M ... 200 L	1LE1023-0D ... -2A	Without add. charge											4 0
Further voltages			For price information, code numbers, order codes and descriptions, see from Page 2/57																	
Types of construction					No. of poles	Frame size	Motor type	Version											Order code(s)	
Without flange			IM B3 ²⁾		6	80 M ... 200 L	1LE1023-0D ... -2A	Standard											A	
With flange			IM B5 ²⁾		6	80 M ... 200 L	1LE1023-0D ... -2A	With additional charge											F	
With standard flange			IM B14 ²⁾		6	80 M ... 160 L	1LE1023-0D ... -2A	With additional charge											K	
Further types of construction			For price information, code letters and descriptions, see from Page 2/62																	
Motor protection					No. of poles	Frame size	Motor type	Version											Order code(s)	
Without					6	80 M ... 200 L	1LE1023-0D ... -2A	Standard											A	
PTC thermistor with 3 temperature sensors					6	80 M ... 200 L	1LE1023-0D ... -2A	With additional charge											B	
Further motor protection			For price information, code letters and descriptions, see from Page 2/70																	
Terminal box position					No. of poles	Frame size	Motor type	Version											Order code(s)	
Terminal box at top					6	80 M ... 200 L	1LE1023-0D ... -2A	Standard											4	
Further terminal box positions			For price information, code numbers and descriptions, see from Page 2/72																	
Special versions					No. of poles	Frame size	Motor type	Version											Order code(s)	
Forced-air cooled motors without ext. fan/fan cover (IC416)					6	80 M ... 200 L	1LE1023-0D ... -2A	1LE1023- ...											-Z F90 + . . . + . . .	
Options			For price information, order codes and descriptions, see from Page 2/74																	
								1LE1023- ...											-Z . . . + . . . + . . .	

- Not required
- ✓ Available

¹⁾ Operating voltages only ≤ 600 V admissible in accordance with MG1 Table 12-12.
²⁾ Types derived from IM B3 (IM B6/7/8, IM V6 and IM V5), from IM B5 (IM V3 and IM V1) and from IM B14 (IM V19 and IM V18) are possible,

provided that no requirements exist for condensation drainage holes (H03) and stamping of the type on the rating plate. The basic type IM B3, IM B5 or IM B14 is stamped as standard on the rating plate. When ordering with condensation drainage holes (H03), the type must be specified.

Supplements to article numbers and special versions SIMOTICS GP 1LE1/1PC1 Standard Motors

Voltages · Aluminum series 1LE10, 1PC10

Selection and ordering data

Voltages	Voltage code 12th and 13th position of the Article No.	Additional identification code with order code and plain text if required	Motor category																
			Motor version	Motor type (alum.)	Motor type – frame size							80	90	100	112	132	160	180	200
			IE2 High Efficiency	1LE1001	1LE1001 ①														
				1PC1001	1PC1001 ②														
						1LE1041	1LE1041 APAC Line ③												
			IE3 Premium Efficiency	1LE1003	1LE1003 ④														
				1LE1043	1LE1043 APAC Line ⑤														
			IE4 Super Premium Efficiency	1LE1004								1LE1004 ⑥							
			IE1 Standard Efficiency	1LE1002								1LE1002 ⑦							
				1PC1002								1PC1002 ⑧							
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨														
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩														
			Motor version	Motor type	Frame size							80	90	100	112	132	160	180	200
1LE10 - - - - - 1PC10 - - - - - Order code			Voltage at 50 Hz or 60 Hz – Operating values at rated output for 60 Hz are stored in the Drive Technology Configurator (DTC)																
50 Hz 230 VΔ/400 VY, 60 Hz 460 VY	2	2	-	All	All	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
50 Hz 400 VΔ/690 VY, 60 Hz 460 VΔ ¹⁾	3	4	-	All except ③, ⑤, ⑨ and ⑩		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
50 Hz 400 VΔ, 60 Hz 460 VΔ ¹⁾				Only applicable for ③, ⑤, ⑨ and ⑩		☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	☐	
50 Hz 400 VY, 60 Hz 460 VY ^{2) 3)}	0	2		All except ⑥		☐	☐	-	-	-	-	-	-	-	-	-	-	-	
50 Hz 500 VY ⁶⁾ 60 Hz 575 VY	2	7	-	All except ⑥		○	○	○	○	○	○	○	○	○	○	○	○	○	
50 Hz 500 VΔ 60 Hz 575 VΔ	4	0	-	All except ⑥		-	-	○	○	○	○	○	○	○	○	○	○	○	
50 Hz 220 VΔ/380 VY 60 Hz 440 VY	2	1	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
50 Hz 380 VΔ/660 VY ¹⁾ , 60 Hz 440 VΔ	3	3	-	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
50 Hz 380 VΔ ¹⁾				Only applicable for ③, ⑤, ⑨ and ⑩		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
50 Hz 240 VΔ/415 VY, 60 Hz 480 VY	2	3	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
50 Hz 415 VΔ, 60 Hz 480 VΔ	3	5	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Multi-voltage at 60 Hz and required output at 60 Hz																			
60 Hz 230 VYY/460 VY; 50 Hz output, 9 main terminals and electrical design to NEMA	6	0	-	All except ②, ③, ⑦ and ⑧		-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
60 Hz 230 VYY/460 VY; 60 Hz output, 9 main terminals and electrical design to NEMA	6	1	-	All except ②, ③, ⑦ and ⑧		-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
60 Hz 230 VΔΔ/460 VΔ; 50 Hz output, 12 main terminals and electrical design to NEMA	6	2	-	All except ②, ③, ⑦ and ⑧		-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
60 Hz 230 VΔΔ/460 VΔ; 60 Hz output, 12 main terminals and electrical design to NEMA	6	3	-	All except ②, ③, ⑦ and ⑧		-	-	-	-	-	-	-	-	-	-	✓	✓	✓	
Voltage at 60 Hz and required output at 60 Hz																			
220 VΔ/380 VY; 50 Hz output	9	0	M2A	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
220 VΔ/380 VY; 60 Hz output	9	0	M1A	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
380 VΔ/660 VY; 50 Hz output ¹⁾	9	0	M2B	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
380 VΔ; 50 Hz output ¹⁾				Only applicable for ③, ⑤, ⑨ and ⑩		-	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
380 VΔ/660 VY; 60 Hz output ¹⁾	9	0	M1B	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
440 VY; 50 Hz output	9	0	M2C	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
440 VY; 60 Hz output	9	0	M1C	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
440 VΔ; 50 Hz output	9	0	M2D	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
440 VΔ; 60 Hz output	9	0	M1D	All except ③, ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
460 VY; 50 Hz output	9	0	M2E	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
460 VY; 60 Hz output	9	0	M1E	All except ③, ⑤, ⑨ and ⑩		○	○	○	○	○	○	○	○	○	○	○	○	○	
460 VΔ; 50 Hz output	9	0	M2F	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

For legends and footnotes, see Page 2/58.



Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Voltages · Aluminum series 1LE10, 1PC10

Voltages	Voltage code 12th and 13th position of the Article No.	Additional identifica- tion code with order code and plain text if required	Motor category											
			Motor version	Motor type (alum.)	Motor type – frame size									
			80	90	100	112	132	160	180	200				
1LE10 ■ - ■ ... 1PC10 ■ - ■ ...			IE2 High Efficiency	1LE1001	1LE1001 ①									
				1PC1001	1PC1001 ②									
				1LE1041	1LE1041 APAC Line ③									
			IE3 Premium Efficiency	1LE1003	1LE1003 ④									
				1LE1043	1LE1043 APAC Line ⑤									
			IE4 Super Premium Efficiency	1LE1004	1LE1004 ⑥									
			IE1 Standard Efficiency	1LE1002	1LE1002 ⑦									
				1PC1002	1PC1002 ⑧									
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨									
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩									
			Motor version	Motor type	Frame size									
					80	90	100	112	132	160	180	200		
Voltage at 60 Hz and required output at 60 Hz (continued)														
460 VΔ; 60 Hz output	9	0	M1F	All except ③, ⑤, ⑨ and ⑩	○	○	○	○	○	○	○	○		
575 VY; 50 Hz output ⁶⁾	9	0	M2G	All except ⑥	✓	✓	✓	✓	✓	✓	✓	✓		
575 VY; 60 Hz output ⁶⁾	9	0	M1G	All except ③, ⑤, ⑥, ⑨ and ⑩	✓	✓	✓	✓	✓	✓	✓	✓		
575 VΔ; 50 Hz output ⁶⁾	9	0	M2H	All except ⑥	✓	✓	✓	✓	✓	✓	✓	✓		
575 VΔ; 60 Hz output ⁶⁾	9	0	M1H	All except ③, ⑤, ⑥, ⑨ and ⑩	✓	✓	✓	✓	✓	✓	✓	✓		
Voltage at 87 Hz and 87 Hz output														
400 VΔ ⁴⁾	9	0	M3A	All	✓	✓	✓	✓	✓	✓	✓	✓		
Non-standard voltage and/or frequencies														
Non-standard winding ⁵⁾	9	0	M1Y • and customer specifications	All	✓	✓	✓	✓	✓	✓	✓	✓		

- Standard version
- Without additional charge
- This order code only determines the price of the version – Additional plain text is required.
- ✓ With additional charge
- Not possible

¹⁾ For North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient, voltages above 600 V will not be stamped.

²⁾ Frame sizes 80 and 90 with voltage code 02 can only be supplied without motor protection (motor protection code A).

³⁾ Delta connection is not possible.

⁴⁾ Only possible for 4-pole, 6-pole and 8-pole motors. The operating data for converter operation is also provided in a table on the rating plate.

⁵⁾ Plain text must be specified in the order: Voltage between 200 and 690 V (voltages outside this range are available on request), frequency, circuit, for 60 Hz additionally required rated output in kW.













⁶⁾ Not possible for 2-pole and 4-pole motors with increased output (11th position of Article No.: 6) in frame sizes 80 and 90.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Types of construction · Aluminum series 1LE10, 1PC10

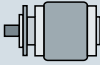



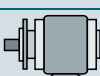





Selection and ordering data

Types of construction	Type of construction letter	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category		Motor type – frame size								
			Motor version	Motor type (alum.)	80	90	100	112	132	160	180	200	
			IE2 High Efficiency	1LE1001	1LE1001 ①								
				1PC1001		1PC1001 ②							
				1LE1041		1LE1041 APAC Line ③							
			IE3 Premium Efficiency	1LE1003	1LE1003 ④								
				1LE1043	1LE1043 APAC Line ⑤								
			IE4 Super Premium Efficiency	1LE1004		1LE1004 ⑥							
			IE1 Standard Efficiency	1LE1002		1LE1002 ⑦							
				1PC1002		1PC1002 ⑧							
			NEMA Energy Efficient	1LE1021		1LE1021 Eagle Line ⑨							
			NEMA Premium Efficient	1LE1023		1LE1023 Eagle Line ⑩							
Pole-changing	1LE1011		1LE1011 ⑪										
	1LE1012		1LE1012 ⑫										
1LE10 (-Z)		Motor version	Motor type	Frame size	80	90	100	112	132	160	180	200
1PC10 (-Z)	Order code											
Without flange													
IM B3 1) 2) 3)		A	-	All except ③ and ⑨		☐	☐	☐	☐	☐	☐	☐	☐
IM B6 2) 3)		T	-	All except ③ and ⑨		☐	☐	☐	☐	☐	☐	☐	☐
IM B7 2) 3)		U	-	All except ③ and ⑨		☐	☐	☐	☐	☐	☐	☐	☐
IM B8 2) 3)		V	-	All except ③ and ⑨		☐	☐	☐	☐	☐	☐	☐	☐
IM V6 2) 3)		D	-	All except ③ and ⑨		☐	☐	☐	☐	☐	☐	☐	☐
IM V5 without protective cover 2) 3)		C	-	All except ③ and ⑨		☐	☐	☐	☐	☐	☐	☐	☐
IM V5 with protective cover 2) 3) 4) 5) 6)		C	H00	All except ②, ③, ⑥, ⑨ and in combination with order code F90	✓	✓	✓	✓	✓	✓	✓	✓	✓
With flange													
		Acc. to EN 50347				FF165	FF165	FF215	FF215	FF265	FF300	FF300	FF350
		Acc. to DIN 42948				A 200	A 200	A 250	A 250	A 300	A 350	A 350	A 400
IM B5 2) 7)		F	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IM V1 without protective cover 2)		G	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IM V1 with protective cover 2) 4) 5) 6)		G	H00	All except ②, ⑥ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓
IM V3 4)		H	-	All	All	✓	✓	✓	✓	✓	✓	✓	✓
IM B35 3)		J	-	All except ③ and ⑨		✓	✓	✓	✓	✓	✓	✓	✓

For legends and footnotes, see Page 2/65.

Supplements to article numbers and special versions SIMOTICS GP 1LE1/1PC1 Standard Motors

Types of construction · Aluminum series 1LE10, 1PC10

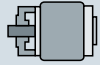









Types of construction	Type of construction letter	For types of construction with order code(s)	Motor category		Motor type – frame size												
			Motor version	Motor type (alum.)	80	90	100	112	132	160	180	200					
1LE10 (-Z) 1PC10 (-Z)	14th position of the Article No. Article No. with additional identification code -Z	Order code	IE2 High Efficiency	1LE1001 1PC1001	1LE1001 ①			1PC1001 ②									
				1LE1041	1LE1041 APAC Line ③												
			IE3 Premium Efficiency	1LE1003 1LE1043	1LE1003 ④												
				1LE1043	1LE1043 APAC Line ⑤												
			IE4 Super Premium Efficiency	1LE1004		1LE1004 ⑥											
			IE1 Standard Efficiency	1LE1002 1PC1002		1LE1002 ⑦				1PC1002 ⑧							
			NEMA Energy Efficient	1LE1021		1LE1021 Eagle Line ⑨											
			NEMA Premium Efficient	1LE1023		1LE1023 Eagle Line ⑩											
			Pole-changing	1LE1011 1LE1012		1LE1011 ⑪				1LE1012 ⑫							
						Motor version	Motor type	Frame size									
					80	90	100	112	132	160	180	200					
With special flange next larger		Acc. to EN 50347 Acc. to DIN 42948			-	-	FF265 A 300	FF265 A 300	FF300 A 350	-	-	-	-	-			
IM B5 2) 7)		F	P01	All	All	-	-	✓	✓	✓	-	-	-	-			
IM V1 without protective cover 2)		G	P01	All	All	-	-	✓	✓	✓	-	-	-	-			
IM V1 with protective cover 2) 4) 5) 6)		G	P01+H00	All except ②, ⑩ and in combination with order code F90		-	-	✓	✓	✓	-	-	-	-			
IM V3 4)		H	P01	All	All	-	-	✓	✓	✓	-	-	-	-			
IM B35 3)		J	P01	All except ③ and ⑨		-	-	✓	✓	✓	-	-	-	-			
With special flange next smaller		Acc. to EN 50347 Acc. to DIN 42948			-	-	FF165 A 200	FF165 A 200	FF215 A 250	FF265 A 300	FF265 A 300	FF300 A 350					
IM B5 2) 7)		F	P02	All	All	-	-	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.			
IM V1 without protective cover 2)		G	P02	All	All	-	-	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.			
IM V1 with protective cover 2) 4) 5) 6)		G	P02+H00	All except ②, ⑩ and in combination with order code F90		-	-	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.			
IM V3 4)		H	P02	All	All	-	-	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.			
IM B35 3)		J	P02	All except ③ and ⑨		-	-	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.	O.R.			

2

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

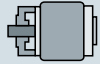



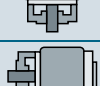
Types of construction · Aluminum series 1LE10, 1PC10

Types of construction	Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category											
			Motor version	Motor type (alum.)	Motor type – frame size									
			80	90	100	112	132	160	180	200				
			IE2 High Efficiency	1LE1001	1LE1001 ①									
				1PC1001	1PC1001 ②									
			IE3 Premium Efficiency	1LE1041	1LE1041 APAC Line ③									
				1LE1003	1LE1003 ④									
			IE4 Super Premium Efficiency	1LE1043	1LE1043 APAC Line ⑤									
				1LE1004	1LE1004 ⑥									
			IE1 Standard Efficiency	1LE1002	1LE1002 ⑦									
				1PC1002	1PC1002 ⑧									
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨									
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩									
Pole-changing	1LE1011	1LE1011 ⑪												
	1LE1012	1LE1012 ⑫												
1LE10 (-Z)		Motor version	Motor type	Frame size									
1PC10 (-Z)	Order code	80	90	100	112	132	160	180	200				
With standard flange			Acc. to EN 50347			FT100	FT115	FT130	FT130	FT165	FT215	-	-	
			Acc. to DIN 42948			C 120	C 140	C 160	C 160	C 200	C 250	-	-	
IM B14 ^{2) 8)}		K	-	All	All	✓	✓	✓	✓	✓	✓	-	-	
IM V19 ²⁾		L	-	All	All	✓	✓	✓	✓	✓	✓	-	-	
IM V18 without protective cover ²⁾		M	-	All	All	✓	✓	✓	✓	✓	✓	-	-	
IM V18 with protective cover ^{2) 4) 5) 6)}		M	H00	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	-	-	
IM B34 ³⁾		N	-	All except ③ and ⑨		✓	✓	✓	✓	✓	✓	-	-	
With special flange next larger			Acc. to EN 50347			FT130	FT130	FT165	FT165	FT215	-	-	-	
			Acc. to DIN 42948			C 160	C 160	C 200	C 200	C 250	-	-	-	
IM B14 ^{2) 8)}		K	P01	All	All	✓	✓	✓	✓	✓	-	-	-	
IM V19 ²⁾		L	P01	All	All	✓	✓	✓	✓	✓	-	-	-	
IM V18 without protective cover ²⁾		M	P01	All	All	✓	✓	✓	✓	✓	-	-	-	
IM V18 with protective cover ^{2) 4) 5) 6)}		M	P01+H00	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	-	-	-	
IM B34 ³⁾		N	P01	All except ③ and ⑨		✓	✓	✓	✓	✓	-	-	-	

For legends and footnotes, see Page 2/65.

Supplements to article numbers and special versions SIMOTICS GP 1LE1/1PC1 Standard Motors

Types of construction · Aluminum series 1LE10, 1PC10

Types of construction	Type of construction letter 14th position of the Article No.	For types of construction with order code(s) Article No. with additional identification code -Z	Motor category										
			Motor version	Motor type (alum.)	Motor type – frame size								
					80	90	100	112	132	160	180	200	
			IE2 High Efficiency	1LE1001	1LE1001 ①								
				1PC1001							1PC1001 ②		
				1LE1041	1LE1041 APAC Line ③								
			IE3 Premium Efficiency	1LE1003	1LE1003 ④								
				1LE1043	1LE1043 APAC Line ⑤								
			IE4 Super Premium Efficiency	1LE1004							1LE1004 ⑥		
			IE1 Standard Efficiency	1LE1002							1LE1002 ⑦		
				1PC1002							1PC1002 ⑧		
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨								
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩								
Pole-changing				1LE1011	1LE1011 ⑪								
				1LE1012	1LE1012 ⑫								
1LE10 ■ ... (-Z) 1PC10 ■ ... (-Z)			Motor version	Motor type	Frame size								
					80	90	100	112	132	160	180	200	
With special flange next smaller			Acc. to EN 50347		-	-	FT115	FT115	FT130	FT165	-	-	
			Acc. to DIN 42948		-	-	C 140	C 140	C 160	C 200	-	-	
IM B14 2) 8)		K	P02	All except ⑥	-	-	O. R.	O. R.	O. R.	O. R.	-	-	
IM V19 2)		L	P02	All except ⑥	-	-	O. R.	O. R.	O. R.	O. R.	-	-	
IM V18 without protective cover 2)		M	P02	All except ⑥	-	-	O. R.	O. R.	O. R.	O. R.	-	-	
IM V18 with protective cover 2) 4) 5) 6)		M	P02+H00	All except ②, ⑥ and ⑧ and in combination with order code F90	-	-	O. R.	O. R.	O. R.	O. R.	-	-	
IM B34 3)		N	P02	All except ③, ⑥ and ⑨	-	-	O. R.	O. R.	O. R.	O. R.	-	-	

- Standard version
- ✓ With additional charge
- Not possible
- O. R. Possible on request

- 1) The types of construction IM B6/7/8, IM V6 and IM V5 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B3 is then stamped on the rating plate. With type of construction IM V5 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 2) The type of construction is stamped on the rating plate. When ordering with condensation drainage holes (order code **H03**), if mounted in a different position, the position must be specified to ensure that the condensation drainage holes are positioned correctly.
- 3) For North America export version Eagle Line 1LE1021 NEMA Energy Efficient, types of construction with feet are not possible for 2-pole, 4-pole and 6-pole motors ≤ 200 hp in accordance with NEMA MG1 Table 12-11.
- 4) The "Standard cylindrical shaft extension" option (order code **L05**) is not possible.
- 5) In combination with an encoder it is not necessary to order the protective cover (order code **H00**), as this is delivered as a protection for the encoder as standard. In this case the protective cover is standard version (without additional charge).
- 6) Not possible for 1PC1 naturally cooled motors and 1LE1 forced-air cooled motors with order code **F90** without external fan and fan cover.
- 7) The types of construction IM V3 and IM V1 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B5 is then stamped on the rating plate. With type of construction IM V1 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.
- 8) The types of construction IM V19 and IM V18 with/without protective cover are also possible as long as no condensation drainage holes (order code **H03**) and no stamping of these types of construction on the rating plate are required. As standard the type of construction IM B14 is then stamped on the rating plate. With type of construction IM V18 with protective cover, the protective cover has to be additionally ordered with order code **H00**. The protective cover is not stamped on the rating plate.



Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Motor protection · Aluminum series 1LE10, 1PC10

Selection and ordering data

Motor protection	Motor protection letter 15th position in Article No.	Additional identification code with order code and plain text if required	Motor category									
			Motor version	Motor type (alum.)	Motor type – frame size							
					80	90	100	112	132	160	180	200
			IE2 High Efficiency	1LE1001	1LE1001							
				1PC1001	1PC1001							
				1LE1041	1LE1041 APAC Line							
			IE3 Premium Efficiency	1LE1003	1LE1003							
				1LE1043	1LE1043 APAC Line							
			IE4 Super Premium Efficiency	1LE1004	1LE1004							
			IE1 Standard Efficiency	1LE1002	1LE1002							
				1PC1002	1PC1002							
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line							
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line							
Pole-changing	1LE1011	1LE1011										
	1LE1012	1LE1012										
1LE10 1PC10			Motor version	Motor type	Frame size							
					80	90	100	112	132	160	180	200
Motor protection (winding protection)												
Without motor protection ¹⁾	A	–	All	All	☐	☐	☐	☐	☐	☐	☐	☐
Motor protection with PTC thermistors with 1 or 3 embedded temperature sensors for tripping ²⁾	B	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Motor protection by PTC thermistors with 2 or 6 embedded temperature sensors for alarm and tripping ²⁾	C	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor KTY 84-130 ²⁾	F	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Motor temperature detection with embedded temperature sensor 2 × KTY 84-130 ²⁾	G	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Installation of 3 Pt100 resistance thermometers ²⁾	H	–	All	All	–	–	✓	✓	✓	✓	✓	✓
NTC thermistors for tripping	Z	Q2A	All	All	–	–	✓	✓	✓	✓	–	–
Temperature detectors for tripping ²⁾	Z	Q3A	All	All	✓	✓	✓	✓	✓	✓	✓	✓

- ☐ Standard version
- ✓ With additional charge
- Not possible

¹⁾ Frame sizes 80 and 90 with voltage code 02 can only be supplied without motor protection (motor protection code A).

²⁾ Evaluation with appropriate tripping unit (see Catalog IC 10) is recommended. For pole-changing motors, double the number of temperature sensors or temperature detectors is required. This also results in a double additional charge.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Terminal box position · Aluminum series 1LE10, 1PC10

Selection and ordering data

Terminal box position	Terminal box position code 16th position of the Article No.	Additional identification code with order code and plain text if required	Motor category									
			Motor version	Motor type (alum.)	Motor type – frame size							
					80	90	100	112	132	160	180	200
			IE2 High Efficiency	1LE1001	1LE1001							
				1PC1001	1PC1001							
				1LE1041	1LE1041 APAC Line							
			IE3 Premium Efficiency	1LE1003	1LE1003							
				1LE1043	1LE1043 APAC Line							
			IE4 Super Premium Efficiency	1LE1004	1LE1004							
			IE1 Standard Efficiency	1LE1002	1LE1002							
				1PC1002	1PC1002							
			NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line							
			NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line							
Pole-changing	1LE1011	1LE1011										
	1LE1012	1LE1012										
			Motor version	Motor type	Frame size							
					80	90	100	112	132	160	180	200
1LE10												
1PC10		Order code										
Terminal box position												
Terminal box top ¹⁾	4	–	All	All	☐	☐	☐	☐	☐	☐	☐	☐
Terminal box on RHS ²⁾	5	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box on LHS ²⁾	6	–	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Terminal box at bottom ^{2) 3)}	7	–	All	All	–	–	✓	✓	✓	✓	–	–
☐	Standard version											
✓	With additional charge											
–	Not possible											

¹⁾ For types of construction with feet up to and including frame size 160, cast feet are standard. Screwed-on feet are available with order code **H01**. Frame sizes 180 and 200 are fitted as standard with screwed-on feet.

²⁾ For types of construction with feet, screwed-on feet are standard.

³⁾ Not generally possible for motors with feet.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

Selection and ordering data

Special versions	Additional identification code -Z with order code and plain text if required	Motor category												
		Motor version	Motor type (alum.)	Motor type – frame size										
				80	90	100	112	132	160	180	200			
		IE2 High Efficiency	1LE1001	1LE1001 ①										
			1PC1001			1PC1001 ②								
			1LE1041	1LE1041 APAC Line ③										
		IE3 Premium Efficiency	1LE1003	1LE1003 ④										
			1LE1043	1LE1043 APAC Line ⑤										
		IE4 Super Premium Efficiency	1LE1004			1LE1004 ⑥								
		IE1 Standard Efficiency	1LE1002			1LE1002 ⑦								
			1PC1002			1PC1002 ⑧								
		NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨										
		NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩										
		Pole-changing	1LE1011			1LE1011 ⑪								
			1LE1012			1LE1012 ⑫								
		Motor version	Motor type	Frame size										
		1LE10 -Z		80	90	100	112	132	160	180	200			
		1PC10 -Z	Order code											
Motor connection and terminal box														
External grounding	H04	All	All	✓	✓	✓	✓	✓	✓	✓	✓			
Terminal box on NDE ³⁾	H08	All	All	✓	✓	✓	✓	✓	✓	✓	✓			
Rotation of the terminal box through 90°, entry from DE ¹⁾	R10	All	All	○	○	○	○	○	○	✓	✓			
Rotation of the terminal box through 90°, entry from NDE	R11	All	All	○	○	○	○	○	○	✓	✓			
Rotation of the terminal box through 180°	R12	All	All	○	○	○	○	○	○	✓	✓			
One metal cable gland	R15	All	All	✓	✓	✓	✓	✓	✓	✓	✓			
Cable gland, maximum configuration	R18	All	All	–	–	–	–	–	–	✓	✓			
3 cables protruding, 0.5 m long ⁴⁾⁵⁾	R20	All except ⑩ and ⑫		✓	✓	✓	✓	✓	✓	–	–			
3 cables protruding, 1.5 m long ⁴⁾⁵⁾	R21	All except ⑩ and ⑫		✓	✓	✓	✓	✓	✓	O. R.	O. R.			
6 cables protruding, 0.5 m long ⁴⁾	R22	All	All	✓	✓	✓	✓	✓	✓	–	–			
6 cables protruding, 1.5 m long ⁴⁾	R23	All	All	✓	✓	✓	✓	✓	✓	O. R.	O. R.			
6 cables protruding, 3 m long ⁴⁾	R24	All	All	✓	✓	✓	✓	✓	✓	O. R.	O. R.			
Reduction piece for M cable gland in accordance with British Standard, both cable entries mounted ²⁾	R30	All	All	–	–	✓	✓	✓	✓	–	–			
Larger terminal box	R50	All, standard version for Eagle Line ⑨ and ⑩ < Size 100		✓	✓	✓	✓	✓	✓	✓	✓			
Auxiliary terminal box, aluminum	R60 <i>New!</i>	All	All	–	–	–	–	–	–	✓	✓			
Motor connector Han-Drive 10e for 230 VΔ/400 VY ³⁰⁾	R70	All	All	✓	✓	✓	✓	✓	–	–	–			
Motor connector Han-Drive 10e EMC for 230 VΔ/400 VY ³⁰⁾	R71	All	All	✓	✓	✓	✓	✓	–	–	–			
Small motor connector CQ12 with EMC	R72	All	All	✓	✓	–	–	–	–	–	–			
Small motor connector CQ12 without EMC	R73	All	All	✓	✓	–	–	–	–	–	–			
6-piece terminal board	R76 <i>New!</i>	All, only possible for 2 and 4-pole motors, not possible for ⑥		○	○	–	–	–	–	–	–			
Windings and insulation														
Temperature class 155 (F), utilized acc. to 155 (F), with service factor (SF)	N01	All	All	–	–	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 155 (F), with increased output	N02	All	All	–	–	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 155 (F), with increased coolant temperature	N03	All	All	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 45 °C, derating approx. 4 %	N05	All	All	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 50 °C, derating approx. 8 %	N06	All	All	✓	✓	✓	✓	✓	✓	✓	✓			
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 55 °C, derating approx. 13 %	N07	All	All	✓	✓	✓	✓	✓	✓	✓	✓			

For legends and footnotes, see Page 2/79.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

Special versions	Additional identification code -Z with order code and plain text if required	Motor category									
		Motor version	Motor type (alum.)	Motor type – frame size							
				80	90	100	112	132	160	180	200
		IE2 High Efficiency	1LE1001	1LE1001 ①							
			1PC1001	1PC1001 ②							
			1LE1041	1LE1041 APAC Line ③							
		IE3 Premium Efficiency	1LE1003	1LE1003 ④							
			1LE1043	1LE1043 APAC Line ⑤							
		IE4 Super Premium Efficiency	1LE1004	1LE1004 ⑥							
		IE1 Standard Efficiency	1LE1002	1LE1002 ⑦							
			1PC1002	1PC1002 ⑧							
		NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨							
		NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩							
Pole-changing	1LE1011	1LE1011 ⑪									
	1LE1012	1LE1012 ⑫									
1LE10 -Z 1PC10 -Z	Order code	Motor version	Motor type	Frame size							
				80	90	100	112	132	160	180	200
Windings and insulation (continued)											
Temperature class 155 (F), utilized acc. to 130 (B), coolant temperature 60 °C, derating approx. 18 %	N08	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class H ³¹⁾	N10	All except ③, ⑤, ⑥, ⑧ and ⑩		✓	✓	–	–	–	–	–	–
Temperature class 180 (H) at rated output and max. CT 60 °C ^{6) 31)}	N11	All except ⑥		✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 30 to 60 g water per m ³ of air	N20	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Increased air humidity/temperature with 60 to 100 g water per m ³ of air	N21	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized acc. to 130 (B), with higher coolant temperature and/or installation altitude	Y50 • and specified output, CT ... °C or IA ... m above sea level	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 155 (F), utilized according to 155 (F), other requirements	Y52 • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Temperature class 180 (H), utilized according to 155 (F), other requirements	Y75 • <i>New!</i> and specified output, CT ... °C or IA ... m above sea level	All except ⑥		–	–	O.R.	O.R.	O.R.	O.R.	–	–
Colors and paint finish											
Standard finish in RAL 7030 stone gray		All	All	□	□	□	□	□	□	□	□
Unpainted (only cast-iron parts primed)	S00	All	All	○	○	○	○	○	○	○	○
Unpainted, only primed	S01	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Special finish	S02 <i>New!</i>	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Special finish sea air resistant	S03	All	All	–	–	✓	✓	✓	✓	✓	✓
Top coat polyurethane ³⁴⁾	S06 <i>New!</i>	All	All	✓	✓	✓	✓	✓	✓	✓	✓
Finish in other standard RAL colors: RAL 1002, 1013, 1015, 1019, 2003, 2004, 3000, 3007, 5007, 5009, 5010, 5012, 5015, 5017, 5018, 5019, 6011, 6019, 6021, 7000, 7001, 7004, 7011, 7016, 7022, 7031, 7032, 7033, 7035, 9001, 9002, 9005 (see Catalog Section 1 "Introduction")	Y53 • <i>New!</i> and finish RAL	All	All	–	–	–	–	–	–	✓	✓
Finish in special RAL colors: For RAL colors, see "Special finish in special RAL colors" (see Catalog Section 1 "Introduction")	Y56 • <i>New!</i> and finish RAL	All	All	✓	✓	✓	✓	✓	✓	✓	✓



Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

Special versions	Additional identification code -Z with order code and plain text if required	Motor category																
		Motor version	Motor type (alum.)	Motor type – frame size							180	200						
				80	90	100	112	132	160									
		IE2 High Efficiency	1LE1001	1LE1001 ①														
			1PC1001	1PC1001 ②														
		IE3 Premium Efficiency	1LE1041	1LE1041 APAC Line ③														
			1LE1003	1LE1003 ④														
		IE4 Super Premium Efficiency	1LE1004	1LE1004 ⑥														
			1LE1002	1LE1002 ⑦														
		IE1 Standard Efficiency	1PC1002	1PC1002 ⑧														
			1LE1021	1LE1021 Eagle Line ⑨														
		1LE1023	1LE1023 Eagle Line ⑩															
		Pole-changing	1LE1011	1LE1011 ⑪														
1LE1012	1LE1012 ⑫																	
1LE10 -Z 1PC10 -Z	Order code	Motor version	Motor type	Frame size							80	90	100	112	132	160	180	200
Modular technology – Basic versions 7)																		
Mounting of holding brake (standard assignment) 8) 28)	F01	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of brake for higher switching frequency (operating brake)	F02	All	All	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	O. R.	
Mounting of separately driven fan 29)	F70	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of 1XP8012-10 (HTL) rotary pulse encoder 9) 10)	G01	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of 1XP8012-20 (TTL) rotary pulse encoder 9) 10)	G02	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Modular technology – Additional versions																		
Brake supply voltage 24 V DC	F10	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Brake supply voltage 230 V AC, 50/60 Hz	F11	All except ②, ⑧ and in combination with order code F90		✓	✓	○	○	○	○	○	○	○	○	○	○	○	○	
Brake supply voltage 400 V AC, 50/60 Hz	F12	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mechanical manual brake release with lever (no locking)	F50	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Special technology 6)																		
Mounting of LL 861 900 220 rotary pulse encoder 9)	G04	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of HQG 9 D 1024 I rotary pulse encoder 9)	G05	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mounting of HQG 10 D 1024 I rotary pulse encoder 9)	G06	All except ②, ⑧ and in combination with order code F90		–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Mechanical design and degrees of protection																		
Low-noise version for 2-pole motors with clockwise direction of rotation	F77	All except ②, ⑧ and in combination with order code F90		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Low-noise version for 2-pole motors with counter-clockwise direction of rotation	F78	All except ②, ⑧ and in combination with order code F90		–	–	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Prepared for mountings, center hole only 10)	G40	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	□	□	□	□	
Prepared for mountings with D12 shaft 15)	G41	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Prepared for mountings with D16 shaft 15)	G42	All except ②, ⑧ and in combination with order code F90		O. R.	O. R.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Protective cover for encoder (pre-assembled or supplied loose depending on frame size)	G43	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Protective cover 9) 11)	H00	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Screwed-on (instead of cast) feet	H01	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	□	□	□	□	
Vibration-proof version; vibration resistance to Class 3M4 according to IEC 60721-3-3	H02	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Condensation drainage holes 14)	H03	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Rust-resistant screws (externally)	H07	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Housing with screw mounting 32)	H10	Only possible for ① and ③ (frame sizes 80 and 90), ④, ⑤, ⑨ and ⑩		✓	✓	–	–	–	–	–	–	–	–	✓	✓	✓	✓	
IP65 degree of protection 13)	H20	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
IP56 degree of protection 12)	H22	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Drive-end seal for flange-mounting motors, oil-tight to 0.1 bar 16)	H23	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

For legends and footnotes, see Page 2/79.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

Special versions	Additional identification code -Z with order code and plain text if required	Motor category																	
		Motor version	Motor type (alum.)	Motor type – frame size							80	90	100	112	132	160	180	200	
		IE2 High Efficiency	1LE1001	1LE1001 ①															
			1PC1001		1PC1001 ②														
			1LE1041	1LE1041 APAC Line ③															
		IE3 Premium Efficiency	1LE1003	1LE1003 ④															
			1LE1043	1LE1043 APAC Line ⑤															
		IE4 Super Premium Efficiency	1LE1004		1LE1004 ⑥														
		IE1 Standard Efficiency	1LE1002		1LE1002 ⑦														
			1PC1002		1PC1002 ⑧														
		NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨															
		NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩															
Pole-changing	1LE1011		1LE1011 ⑪																
	1LE1012		1LE1012 ⑫																
1LE10 -Z 1PC10 -Z		Motor version	Motor type	Frame size							80	90	100	112	132	160	180	200	
Coolant temperature and installation altitude																			
Coolant temperature -40 to +40 °C ^{16) 28)}	D03	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Coolant temperature -30 to +40 °C ^{16) 28)}	D04	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Designs in accordance with standards and specifications																			
VIK version	C02	Only possible for ① and ④		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Motor without CE marking for export outside EEA (see EU Directive 640/2009)	D22	Only possible for ①, ②, ⑦ and ⑧		–	–	○	○	○	○	○	○	○	○	○	○	○	○	○	
Electrical according to NEMA MG1-12 ¹⁸⁾	D30	All, standard version for ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Version according to UL with "Recognition Mark" ¹⁹⁾	D31	All, standard version for ⑤, ⑨ and ⑩		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
KEMCO Korea Energy Efficiency Label	D33	Only possible for ⑤		○	○	○	○	○	○	○	○	○	○	○	○	○	○	○	
China Energy Efficiency Label	D34	Only possible for ①, ④, ⑤, ⑥, ⑨ and ⑩		–	–	○	○	○	○	○	○	○	○	○	○	○	○	○	
Canadian regulations (CSA) ^{37) 33)}	D40	All, standard version for ⑤, ⑨ and ⑩, not possible for ⑪ and ⑫		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Av. soon	Av. soon	Av. soon	
TR CU product safety certificate EAC for Eurasian customs union ³⁵⁾	D47 <i>New!</i>	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Train-compatible version ³¹⁾	L82	All except ②, ⑥ and ⑧		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	Av. soon	Av. soon	Av. soon	
Bearings and lubrication																			
Regreasing device with M10 x 1 grease nipple according to DIN 71412-A	L19 <i>New!</i>	All	All	–	–	–	–	–	–	–	–	–	–	–	–	–	–	–	
Located bearing DE	L20	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Located bearing NDE	L21	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Bearing design for increased cantilever forces ³⁶⁾	L22	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Regreasing device ²⁰⁾	L23	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Deep-groove bearings reinforced at both ends for DE and NDE, bearing size 63	L25	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Measuring nipple for SPM shock pulse measurement for bearing inspection ²⁰⁾	Q01	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Balance and vibration quantity																			
Vibration quantity level A		All	All	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	
Vibration quantity level B	L00	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Half-key balancing (standard)		All	All	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	
Balancing without key	L01	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Full-key balancing	L02	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Shaft and rotor																			
Shaft extension with standard dimensions, without feather keyway	L04	All	All	–	–	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Standard cylindrical shaft extension	L05	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Standard shaft made of stainless steel (e.g. 1.4021)	L06	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Concentricity of shaft extension in accordance with DIN 42955 Tolerance R	L07	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Concentricity of shaft extension, coaxiality and linear movement in accordance with DIN 42955 tolerance R for flange-mounting motors	L08	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard shaft extension, DE ²¹⁾	Y58 • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Non-standard shaft extension, NDE ²¹⁾	Y59 • and customer specifications	All	All	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

For legends and footnotes, see Page 2/79.

Supplements to article numbers and special versions

SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

Special versions	Additional identification code -Z with order code and plain text if required	Motor category											
		Motor version	Motor type (alum.)	Motor type – frame size							180	200	
				80	90	100	112	132	160				
1LE10-Z 1PC10-Z	Order code	IE2 High Efficiency	1LE1001	1LE1001 ①									
			1PC1001		1PC1001 ②								
			1LE1041	1LE1041 APAC Line ③									
		IE3 Premium Efficiency	1LE1003	1LE1003 ④									
			1LE1043	1LE1043 APAC Line ⑤									
		IE4 Super Premium Efficiency	1LE1004		1LE1004 ⑥								
		IE1 Standard Efficiency	1LE1002		1LE1002 ⑦								
			1PC1002		1PC1002 ⑧								
		NEMA Energy Efficient	1LE1021	1LE1021 Eagle Line ⑨									
		NEMA Premium Efficient	1LE1023	1LE1023 Eagle Line ⑩									
		Pole-changing	1LE1011		1LE1011 ⑪								
			1LE1012		1LE1012 ⑫								
		Motor version	Motor type	Frame size									
				80	90	100	112	132	160	180	200		
Heating and ventilation													
Sheet metal fan cover	F74	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓		
Fan cover for textile industry ²²⁾	F75	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓		
Metal external fan ^{23) 29)}	F76	All except ②, ⑧ and in combination with order code F90		✓	✓	✓	✓	✓	✓	✓	✓		
Without external fan and without fan cover	F90	All except ②, ⑧, ⑪ and ⑫		✓	✓	✓	✓	✓	✓	✓	✓		
Anti-condensation heating for 230 V	Q02	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Anti-condensation heating for 115 V	Q03	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Rating plate and extra rating plates													
Extra rating plate for voltage tolerance ²⁴⁾	B07	All except ②, ⑧, ⑪, ⑫ and 8-pole motors		✓	✓	✓	✓	✓	✓	✓	✓		
Second rating plate, loose ²⁵⁾	M10	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Rating plate, stainless steel	M11	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Extra rating plate or rating plate with deviating rating plate data	Y80 •	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Extra rating plate with customer specifications	Y82 •	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Additional information on rating plate and on package label (max. 20 characters)	Y84 •	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Adhesive label, supplied loose (printed with: Article No., Serial No.: 2 lines of text)	Y85 •	All	All	–	–	✓	✓	✓	✓	✓	✓		
Packaging, safety notes, documentation and test certificates													
Printed German/English Operating Instructions (Compact) enclosed ²⁷⁾		All	All	□	□	□	□	□	□	□	□		
Printed German/English Operating Instructions (Compact) enclosed in each wire-lattice pallet ²⁷⁾	B01	All	All	○	○	○	○	○	○	○	○		
Acceptance test certificate 3.1 according to EN 10204 ²⁸⁾	B02	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Printed German/English Operating Instructions enclosed	B04	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Document - Electrical data sheet	B60	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Document - Order dimensional drawing	B61	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Type test with heat run for horizontal motors, with acceptance	B83	All	All	✓	✓	✓	✓	✓	✓	✓	✓		
Wire-lattice pallet packaging	B99	All	All	○	○	○	○	○	○	○	○		
Connected in star for dispatch	M01	All	All	–	–	✓	✓	✓	✓	✓	✓		
Connected in delta for dispatch	M02	All	All	–	–	✓	✓	✓	✓	✓	✓		

For legends and footnotes, see Page 2/79.

Supplements to article numbers and special versions

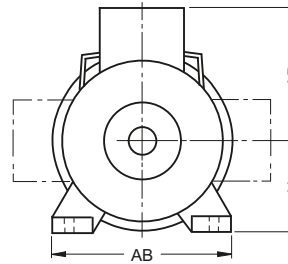
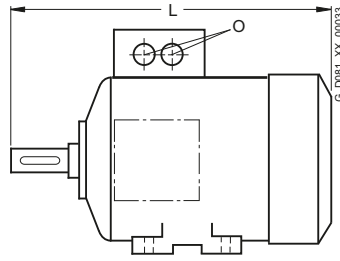
SIMOTICS GP 1LE1/1PC1 Standard Motors

Options · Aluminum series 1LE10, 1PC10

- Standard version
- Without additional charge
- This order code only determines the price of the version – Additional plain text is required
- ✓ With additional charge
- O. R. Possible on request
- Av. soon Available soon
- Not possible

- 1) With IM B5 flange, only possible in combination with **H08**.
- 2) Not possible in combination with order code **R15** "One metal cable gland".
- 3) With **H08**, feet dimensions C and CA differ from EN 50347! Further information is available in DT Configurator (see Appendix, "Tools and Configuring").
- 4) In combination with motor protection (15th position of the Article No.) or anti-condensation heating option, please inquire before ordering.
- 5) Not possible in combination with voltage code **22** or **34**.
- 6) Cannot be used for motors in UL version (order code **D31**). The grease lifetime specified in Catalog Section 1 "Introduction" refers to CT 40 °C. When the coolant temperature rises by 10 K, the grease service lifetime or relubrication interval is halved.
- 7) A second shaft extension is not possible. Please inquire for mounted brakes.
- 8) For order codes **F10**, **F11** and **F12**, the brake supply voltage must be specified or ordered.
- 9) All encoders are supplied with a protective cover as standard. The protective cover is omitted at the factory when a rotary pulse encoder is combined with a separately driven fan, because in this case the rotary pulse encoder is installed under the fan cover. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 10) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B. In combination with a separately driven fan (order code **F70**) the 1XP8032-10 rotary pulse encoder is used instead of 1XP8012-10 or 1XP8032-20 is used instead of 1XP8012-20.
- 11) Order code **H00** provides mechanical protection for encoders.
- 12) Not possible in combination with brake 2LM8 – order code **F01**.
- 13) Not possible in combination with HOG 9 D 1024I rotary pulse encoder (order code **G05**) and/or brake 2LM8 (order code **F01**).
- 14) Supplied with the condensation drainage holes sealed at the drive end DE and non-drive end NDE (IP55, IP56, IP65). If the condensation drainage holes are required for motors of the IM B6, IM B7 or IM B8 type of construction (feet on side or top), the motors must be ordered in the respective type of construction and with order code **H03**, so that the condensation drainage holes will be placed in the correct position.
- 15) Motors that are prepared for additional mountings (order codes **G40**, **G41**, **G42**) are supplied without a protective cover as standard. If a protective cover is requested as a cover or mechanical protection for mountings provided by the customer, this can be ordered with order code **G43**. Not possible in combination with order code **L00** vibration quantity level B.
- 16) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.
- 17) CCC certification is required for
 - 2-pole motors ≤ 2.2 kW
 - 4-pole motors ≤ 1.1 kW
 - 6-pole motors ≤ 0.75 kW
 - 8-pole motors ≤ 0.55 kW
- 18) Possible up to 600 V max. The rated voltage is indicated on the rating plate without voltage range. Order codes **D30** and **D31** do not authorize importing into USA and Mexico. The North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient are available for this purpose.
- 19) In connection with mountings, the respective technical specifications must be observed, please inquire before ordering.
- 20) Not possible when brake is mounted.
- 21) When motors are ordered that have a longer or shorter shaft extension than normal, the required position and length of the feather keyway must be specified in a sketch. It must be ensured that only feather keys in accordance with DIN 6885, Form A are permitted to be used. The feather keyway is positioned centrally on the shaft extension. The length is defined by the manufacturer in accordance with the appropriate standard. Not valid for: Conical shafts, non-standard threaded journals, non-standard shaft tolerances, friction welded journals, extremely "thin" shafts, special geometry dimensions (e.g. square journals), hollow shafts. Valid for non-standard shaft extensions DE or NDE. The feather keys are supplied in every case. For order codes **Y58**, **Y59** and **L05**:
 - Dimensions D and DA ≤ Inner diameter of roller bearing (see tables under "Dimensions")
 - Dimensions E and EA ≤ x length E (normal) of the shaft extension.
- 22) The special requirements of the textile industry regarding the sheet metal cover open up the possibility that a finger may be inserted between the cover and enclosure. The customer must implement appropriate measures to ensure that the installed system is "finger-safe".
- 23) Converter operation is permitted for 1LE1 motors with metal external fans. The metal external fan is not possible in combination with the low-noise version – order code **F77** or **F78**.
- 24) Can be ordered for 230 VΔ/400 VY or 400 VΔ/690 VY (voltage code "**22**" or "**34**"). Not possible in combination with order code **D34**.
- 25) As adhesive label for frame sizes 80 and 90.
- 26) The delivery time for the factory test certificate may differ from the delivery time for the motor and it will be dispatched by email.
- 27) The Operating Instructions (compact) are available in PDF format for all official EU languages at <http://support.automation.siemens.com/WWW/view/en/40761976>.
- 28) Not possible in combination with order code **N05**, **N06**, **N07**, **N08** and **N11**.
- 29) Order codes **F70** and **F76** cannot be combined.
- 30) When ordering with order code **R70** and **R71**, order code **R50** is included.
- 31) Not possible for 2-pole and 4-pole motors with increased output (11th position of Article No.: 6) in frame sizes 80 and 90.
- 32) Possible with frame sizes 180 and 200 with screw-mounted fan cover.
- 33) Frame sizes 180 and 200 are designed with metric entry thread.
- 34) Order code **S06** cannot be combined with order code **S00** and **S01**. It can be combined with **Y53** and **Y56** on request.
- 35) Please note the additional use of order code **D22** "Motor without CE marking for export outside EEA (see EU Directive 640/2009)".
- 36) A minimum cantilever force F_{min} of $0.5 \cdot F_{max}$ is required for NU bearings (cylindrical roller bearings) in contrast to bearings. Cylindrical roller bearings are not suitable for coupling output or for brief periods of no-load operation without cantilever force.
- 37) The rated voltage is indicated on the rating plate without voltage range. Order code **D40** does not authorize importing into Canada. The North America export versions Eagle Line 1LE1021 NEMA Energy Efficient and 1LE1023 NEMA Premium Efficient are available for this purpose.

Overview



Frame size	Type	Dimension				
		L	AD	H	AB	O
71 M	Cast-iron series, self-ventilated					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-OCA2, OCB2, OCC2	240	148	71	132	2 × M25 × 1.5
	1LE1503-, 1LE1523-OCA3, OCB3, OCC3	280	148	71	132	2 × M25 × 1.5
80 M	Aluminum series, self-ventilated					
	1LE1001	292	121	80	150	1 × M25 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001	253	121	80	150	1 × M25 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1521, 1LE1503-, 1LE1523-ODA2, ODB2, ODC2	292	158	80	150	2 × M25 × 1.5
1LE1503-, 1LE1523-ODA3, ODB3, ODC3	327	158	80	150	2 × M25 × 1.5	
90 S/ 90 L	Aluminum series, self-ventilated					
	1LE1001	347	126	90	165	1 × M25 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
1LE1001	295	126	90	165	1 × M25 × 1.5	
Cast-iron series, self-ventilated						
1LE1501, 1LE1521, 1LE1503-, 1LE1523-OEA0, OEB0, OEC0	347	163	90	165	2 × M25 × 1.5	
1LE1503-, 1LE1523-OEA4, OEB4, OEC4	387	163	90	165	2 × M25 × 1.5	
100 L	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	396 ¹⁾	166	100	196	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	431 ¹⁾	166	100	196	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	322	166	100	196	2 × M32 × 1.5
	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	431	166	100	196	2 × M32 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	357	166	100	196	2 × M32 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	389	193	100	196	2 × M32 × 1.5
1LE1523, 1LE1623	425	193	100	196	2 × M32 × 1.5	

Frame size	Type	Dimension				
		L	AD	H	AB	O
112 M	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	389 ¹⁾	177	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	414 ¹⁾	177	112	226	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	311	177	112	226	2 × M32 × 1.5
	Aluminum series, self-ventilated					
	1LE1003, 1LE1023	414	177	112	226	2 × M32 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023	336	177	112	226	2 × M32 × 1.5
	Cast-iron series, self-ventilated					
	1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	382	195	112	226	2 × M32 × 1.5
1LE1523, 1LE1623	409	195	112	226	2 × M32 × 1.5	
132 S/M	Aluminum series, self-ventilated					
	1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	465 ¹⁾	202	132	256	2 × M32 × 1.5
	Aluminum series, self-ventilated with increased output					
	1LE1001, 1LE1002	515 ¹⁾	202	132	256	2 × M32 × 1.5
	Aluminum series, forced-air cooled or naturally cooled					
	1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	381	202	132	256	2 × M32 × 1.5
	Aluminum series, self-ventilated					
	1LE1003-, 1LE1023-1CA0, 1CC0, 1CC2	465	202	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3	515	202	132	256	2 × M32 × 1.5
	Aluminum series, forced-air cooled					
	1LE1023-1CA0, 1CC0, 1CC2	381	202	132	256	2 × M32 × 1.5
	1CA1, 1CB0, 1CB2, 1CC3	431	202	132	256	2 × M32 × 1.5
Cast-iron series, self-ventilated						
1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	457	215	132	256	2 × M32 × 1.5	
1LE1523-, 1LE1623-1CA0, 1CC0, 1CC2	458	215	132	256	2 × M32 × 1.5	
1CA1, 1CB0, 1CB2, 1CC3	508	215	132	256	2 × M32 × 1.5	

¹⁾ The length is specified as far as the tip of the fan cover.

²⁾ Only for pole-changing types 1LE1011-1DP6 and 1LE1012-1DQ6 the dimension L is 664 mm.

Dimensions

SIMOTICS GP/SD 1LE1/1PC1 Standard Motors

Overall dimensions

Overview (continued)

Frame size	Type	Dimension				
		L	AD	H	AB	O
160 M/L	Aluminum series, self-ventilated 1LE1001, 1LE1002, 1LE1011, 1LE1012, 1LE1021	604 ¹⁾²⁾	237	160	300	2 × M40 × 1.5
	Aluminum series, self-ventilated with increased output 1LE1001, 1LE1002	664 ¹⁾	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled or naturally cooled 1LE1001, 1PC1001, 1LE1002, 1PC1002, 1LE1021	510	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated 1LE1501, 1LE1503, 1LE1521, 1LE1601, 1LE1603, 1LE1621	594	265	160	300	2 × M40 × 1.5
160 M	Aluminum series, self-ventilated 1LE1003, 1LE1023	604	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled 1LE1023	510	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated 1LE1523, 1LE1623	596	261	160	300	2 × M40 × 1.5
160 L	Aluminum series, self-ventilated 1LE1003, 1LE1023	664	237	160	300	2 × M40 × 1.5
	Aluminum series, forced-air cooled 1LE1023	570	237	160	300	2 × M40 × 1.5
	Cast-iron series, self-ventilated 1LE1523, 1LE1623	656	261	160	300	2 × M40 × 1.5
180 M	Aluminum series, self-ventilated 1LE1001					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1.5
	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-					
	1EA2, 1EB2	668	286	180	339	2 × M40 × 1.5
	1EA6	698				
	1LE15.3-, 1LE16.3-					
1EB2	668	286	180	339	2 × M40 × 1.5	
1EA2	698					
180 L	Aluminum series, self-ventilated 1LE1001					
	1EB4, 1EC4, 1ED4	668	286	180	339	2 × M40 × 1.5
	1EA6, 1EB6, 1EC6, 1ED6	698				
	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-					
	1EC4, 1EC6	668	286	180	339	2 × M40 × 1.5
	1EB6	698				
1LE15.3-, 1LE16.3-						
1EC4	668	286	180	339	2 × M40 × 1.5	
1EB4	698					
200 L	Aluminum series, self-ventilated 1LE1001					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5, 2AD5	721	315	200	378	2 × M50 × 1.5
	2AA6, 2AB6, 2AC6, 2AD6	746				
	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-					
	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	721	315	200	378	2 × M50 × 1.5
	2AA6	746				
1LE15.3-, 1LE16.3-						
2AA4, 2AC4	721	315	200	378	2 × M50 × 1.5	
2AA5, 2AB5, 2AC5	746					
225 S	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-2BB0, 2BD0	788	338	225	436	2 × M50 × 1.5
	1LE15.3-, 1LE16.3-2BB0	788	338	225	436	2 × M50 × 1.5
225 M	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-2BA2, 2BA6	818	338	225	436	2 × M50 × 1.5
	2BB2, 2BB6, 2BC2, 2BC6, 2BD6	848				
	1LE15.3-, 1LE16.3-2BA2	818	338	225	436	2 × M50 × 1.5
2BB2, 2BC2	848					
250 M	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-2CA2, 2CA6, 2CB2, 2CC2, 2CC6, 2CD2, 2CD6	887	410	250	490	2 × M63 × 1.5
	2CB6	957				
	1LE15.3-, 1LE16.3-2CA2, 2CB2, 2CC2	887	410	250	490	2 × M63 × 1.5
280 S	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-2DA0, 2DB0, 2DC0, 2DD0	960	433	280	540	2 × M63 × 1.5
	1LE15.3, 1LE16.3					
	2DA0, 2DB0, 2DC0	960	433	280	540	2 × M63 × 1.5
280 M	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-2DA2, 2DB2, 2DC2, 2DC6, 2DD2, 2DD6	960	433	280	540	2 × M63 × 1.5
	2DA6, 2DB6	1070				
	1LE15.3-, 1LE16.3-2DC2	960	433	280	540	2 × M63 × 1.5
	2DA2, 2DB2	1070				
	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-3AA0	1052	515	315	610	2 × M63 × 1.5
	3AB0, 3AC0, 3AD0	1082				
1LE15.3-, 1LE16.3-3AA0	1052	515	315	610	2 × M63 × 1.5	
3AB0, 3AC0	1082					
315 M	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-3AC2, 3AD2	1082	515	315	610	2 × M63 × 1.5
	3AA2	1217				
	3AB2	1247				
	1LE15.3-, 1LE16.3-3AA2	1217	515	315	610	2 × M63 × 1.5
	3AB2, 3AC2	1247				
315 L	Cast-iron series, self-ventilated 1LE15.1-, 1LE16.1-3AB4, 3AC4, 3AC5, 3AD4, 3AD5, 3AD6	1217	515	315	610	2 × M63 × 1.5
	3AA4	1247				
	3AA5, 3AA6	1372				
	3AB5, 3AB6, 3AC6	1402				
	1LE15.3-, 1LE16.3-3AA4	1217	515	315	610	2 × M63 × 1.5
	3AB4, 3AC4	1247	515	315	610	2 × M63 × 1.5
	3AA5	1372				
	3AB5, 3AC5, 3AC6	1402				

Overview

- Dimensional drawings according to EN 50347 and IEC 60072.

- Fits

The shaft extensions specified in the dimension tables (DIN 748) and centering spigot diameters (EN 50347) are machined with the following fits:

Dimension designation D, DA	ISO fit ISO 286-2	
	to 30	j6
	over 30 to 50	k6
	over 50	m6
N	to 250	j6
	over 250	h6
F, FA		h9
K		H17
S	Flange (FF)	H17

The drilled holes of couplings and belt pulleys should have an ISO fit of at least H7.

- Dimension tolerances

For the following dimensions, the admissible deviations are given below:

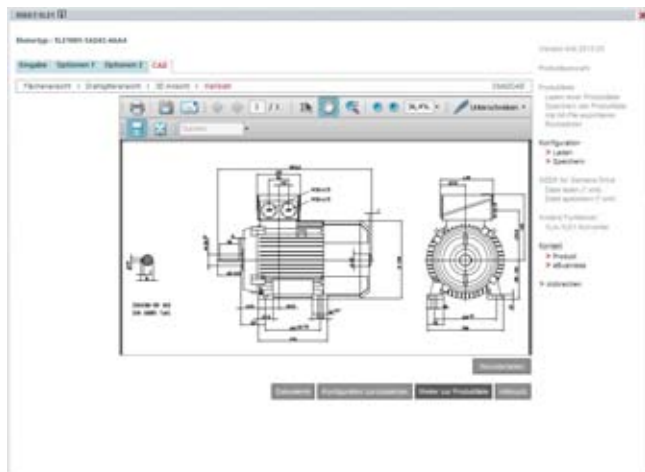
Dimension designation	Dimension	Admissible deviation
H	to 250	- 0.5
	over 250	- 1.0
E, EA		- 0.5

Keyways and feather keyways (dimensions GA, GC, F and FA) are made in compliance with DIN 6885 Part 1.

- All dimensions are specified in mm.

Dimension sheet generator (within the Drive Technology Configurator)**Overview**

A dimensional drawing can be created in the Drive Technology (DT) Configurator for every configurable motor. A dimensional drawing can be requested for every other motor.



When a complete Article No. is entered with or without order codes, a dimensional drawing can be called up under the "Documentation" tab.

These dimensional drawings can be presented in different views and sections and printed.

The corresponding dimension sheets can be exported, saved and processed further in DXF format (interchange/import format for CAD systems) or as bitmap graphics.

Online access in the Siemens Industry Mall

The DT Configurator is integrated into the Siemens Industry Mall and can be used on the Internet without installation.

English: www.siemens.com/dt-configurator

Offline access in the Interactive Catalog CA 01

The DT Configurator is also part of the Interactive Catalog CA 01 on DVD – the offline version of Siemens Industry Mall. CA 01 can be ordered from the relevant Siemens sales office or via the Internet: www.siemens.com/automation/CA01

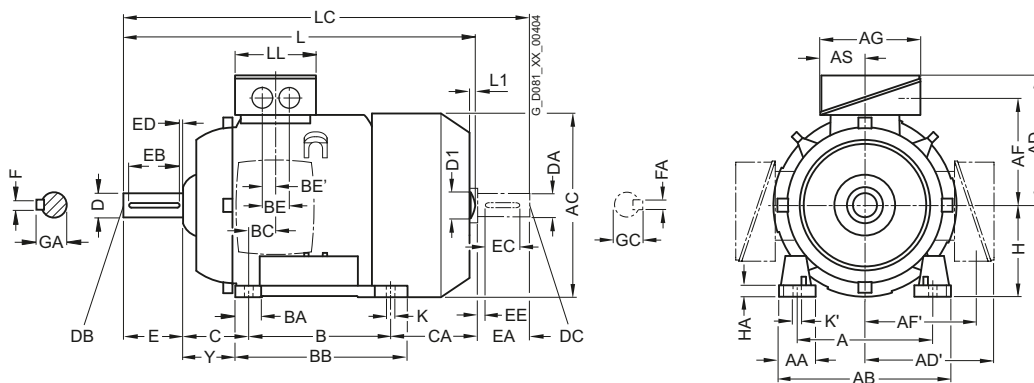
Dimensions

SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE1003, 1LE1023, 1LE1043 · Self-ventilated, frame sizes 80 M to 90 L

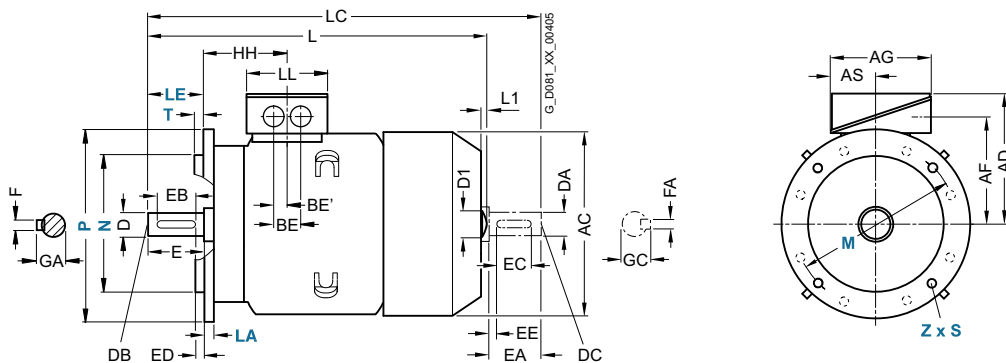
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (Z = the number of retaining holes)



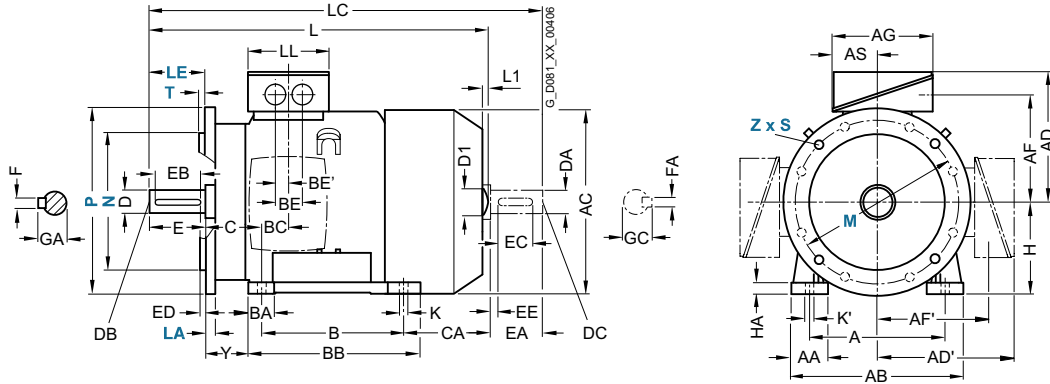
For motor		Dimension designation acc. to IEC																									
Frame size	Motor type	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BB	BC	BE	BE'	C	CA*	H	HA	Y				
80 M	1LE1003-0DA2,	2, 4, 6	125	30.5	150	159	121	-	96.5	-	93	43	100	32	118	23	-	18	50	-	80	8	41				
	-0DB2,																										
	-0DC2																										
	-0DA3,																										
-0DB3,	2, 4, 6	149	112	119.5	61.5																						
-0DC3																											
1LE1023-0DA2,																											
-0DB2,																											
90 S	1LE1003-0EA0,	2, 4, 6	140	30.5	165	178	126	-	101.5	-	93	43	100	33	143	22.5	-	18	56	-	90	10	47				
	-0EB0,																										
	-0EC0																										
	1LE1023-0EA0,																										
-0EB0,	2, 4, 6	154	117	119.5	61.5																						
-0EC0																											
1LE1003-0EA4,						2, 4, 6	140	30.5	165	178	126	-	101.5	-	93	43	100	33	143	22.5	-	18	56	-	90	10	47
-0EB4,																											
-0EC4																											
1LE1023-0EA4,																											
-0EB4,	2, 4, 6	154	117	119.5	61.5																						
-0EC4																											

* This dimension is assigned in EN 50347 to the frame size listed.

Dimensional drawings (continued)

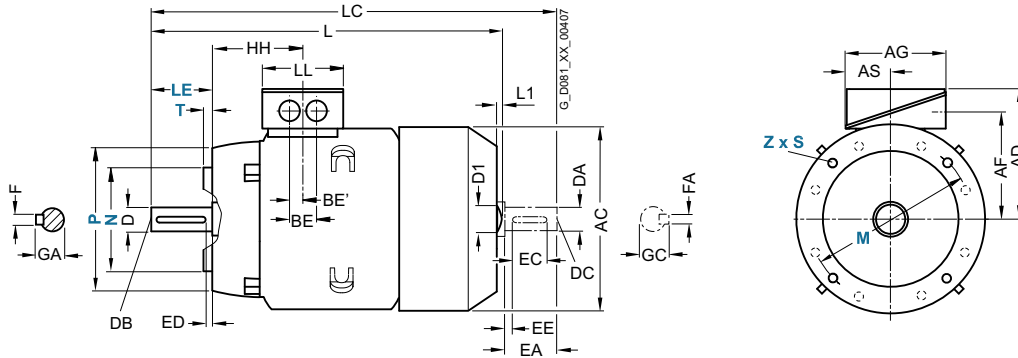
Type of construction IM B35

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see Page 1/34 (**Z** = the number of retaining holes)



For motor		No. of poles	Dimension designation acc. to IEC								DE shaft extension					NDE shaft extension																												
Frame size	Motor type		HH	K	K'	L ¹⁾	L1	D1	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC																				
80 M	1LE1003-0DA2,	2, 4, 6	73	9.5	13.5	292	-	-	-	79	19	M6	40	32	4	6	21.5	19	M6	40	32	4	6	21.5																				
	-0DB2,																																											
	-0DC2,																																											
	-0DA3,	327																																										
	-0DB3,	2, 4, 6				-																			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
	-0DC3																																											
1LE1023-0DA2,																																												
-0DB2,	2, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
-0DC2,																																												
-0DA3,																																												
-0DB3,	2, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
-0DC3																																												
1LE1023-0EA0,																																												
-0EB0,	2, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
-0EC0																																												
1LE1023-0EA0,																																												
-0EB0,	2, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
-0EC0																																												
1LE1023-0EA4,																																												
-0EB4,	2, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
-0EC4																																												
1LE1023-0EA4,																																												
-0EB4,	2, 4, 6	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-																					
-0EC4																																												
-0EC4																																												

¹⁾ The length is specified as far as the tip of the fan cover.

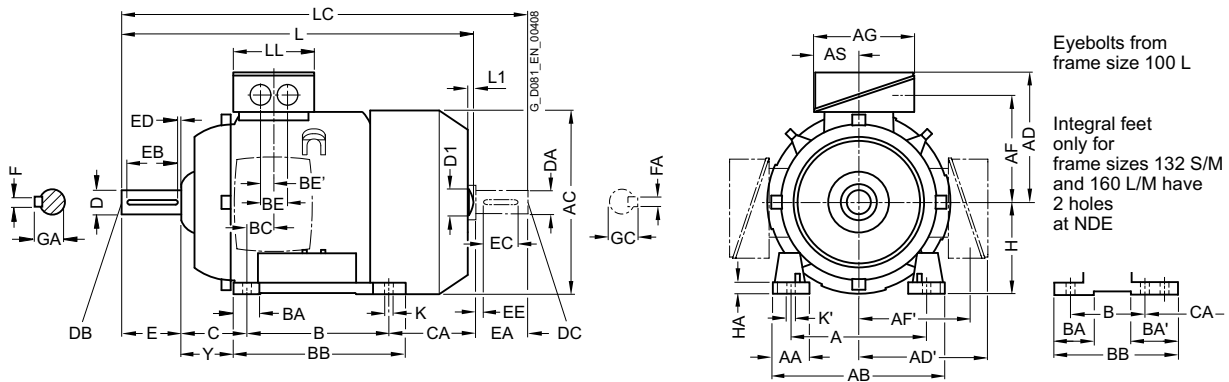
Dimensions

SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE1003, 1LE1023, 1LE1043 · Self-ventilated, frame sizes 100 L to 200 L

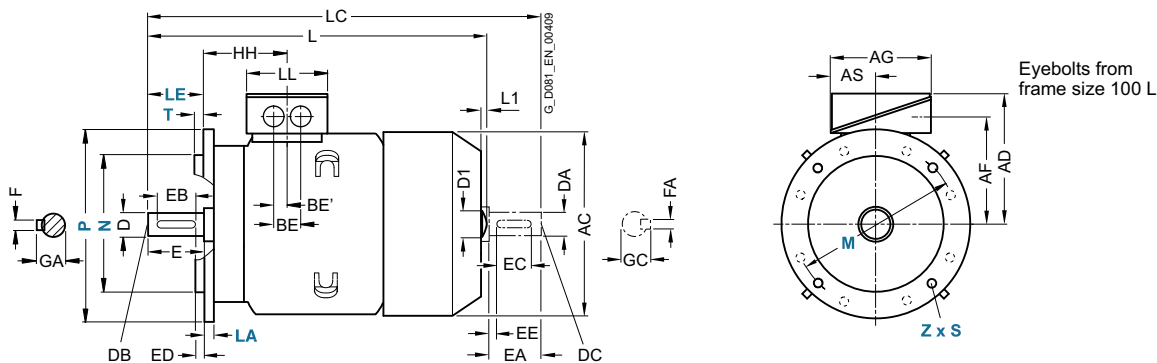
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC																					
Frame size	Motor type	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*	H	HA	Y
100 L	1AA4, 1AB4, 1AB5, 1AC3	2, 4, 6	160	42	196	198	166	166	125.5	125.5	135	63.5	140	37.5	-	176	33.5	50	25	63	176	100	12	45
112 M	1BA2, 1BB2	2, 4, 6	190	46	226	222	177	177	136.5	136.5	135	63.5	140	35.4	-	176	26	50	25	70	155	112	12	52
132 S	1CA0, 1CC0 1CA1, 1CB0	2, 6 2, 4	216	53	256	262	202	202	159.5	159.5	155	70.5	140	38	76 ¹⁾	218 ²⁾	26.5	48	24	89	128.5 ³⁾	132	15	69
132 M	1CC2 1CB2, 1CC3	6 4, 6, 8	216	53	256	262	202	202	159.5	159.5	155	70.5	178	38	76	218	26.5	48	24	89	128.5 ³⁾	132	15	69
160 M	1DA2, 1DA3, 1DB2, 1DC2	2, 4, 6	254	60	300	314	236.5	236.5	190	190	175	77.5	210	44	89 ⁴⁾	300 ⁵⁾	47	57	28.5	108	148 ⁶⁾	160	18	85
160 L	1DA4, 1DB4, 1DC4	2, 4, 6	254	60	300	314	236.5	236.5	190	190	175	77.5	254	44	-	300	47	57	28.5	108	208	160	18	85
180 M	1EA2 1EB2, 1EB4, 1EC4	2, 4, 6	279	65	339	356	259	259	212.5	212.5	175	77.5	241/ 279	80	100	328	30	57	28.5	121	-	180	20	95
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	2, 4, 6	318	70	378	396	296	296	238	238	225	102.5	305	90	100	355	45	75	37.5	133	-	200	25	108

* This dimension is assigned in EN 50347 to the frame size listed.

1) With screwed-on feet, dimension BA' is 38 mm.

2) With screwed-on feet, dimension BB is 180 mm.

3) With screwed-on feet, dimension CA is 166.5 mm.

4) With screwed-on feet, dimension BA' is 44 mm.

5) With screwed-on feet, dimension BB is 256 mm.

6) With screwed-on feet, dimension CA is 192 mm.

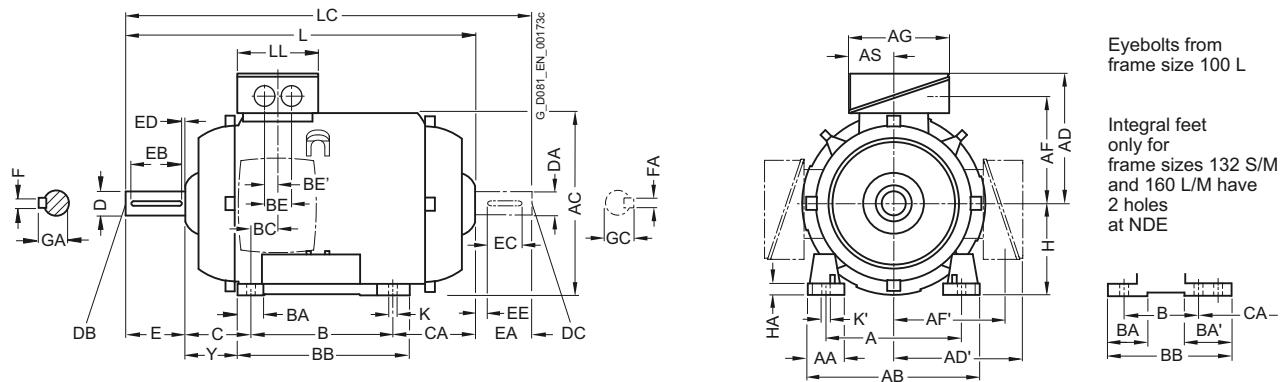
Dimensions

SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE1023, 1LE1043 · Forced-air cooled, frame sizes 80 M to 90 L

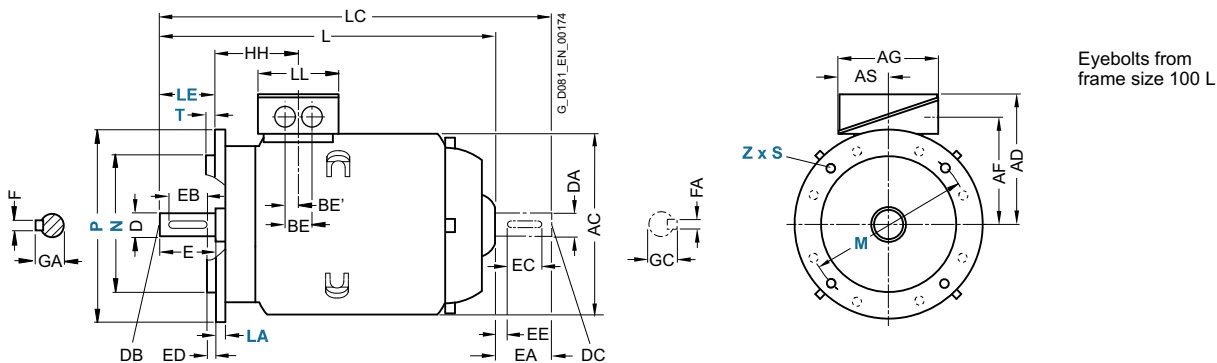
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (Z = the number of retaining holes)



Frame size	Motor type	No. of poles	Dimension designation acc. to IEC																					
			A	AA	AB	AC	AD	AD'	AF	AF'	AG	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*	H	HA	Y
80 M	0DA2, 0DB2, 0DC2	2, 4, 6	125	30.5	150	159	121	-	96.5	-	93	43	100	32	-	118	23	-	18	50	-	80	8	41
	0DA3, 0DB3, 0DC3	2, 4, 6																						
90 S	0EA0, 0EB0, 0EC0	2, 4, 6	140	30.5	165	178	126	-	101.5	-	93	43	100	33	-	143	22.5	-	18	56	-	90	10	47
90 L	0EA4, 0EB4, 0EC4	2, 4, 6	140	30.5	165	178	126	-	101.5	-	93	43	100	33	-	143	22.5	-	18	56	-	90	10	47

* This dimension is assigned in EN 50347 to the frame size listed.

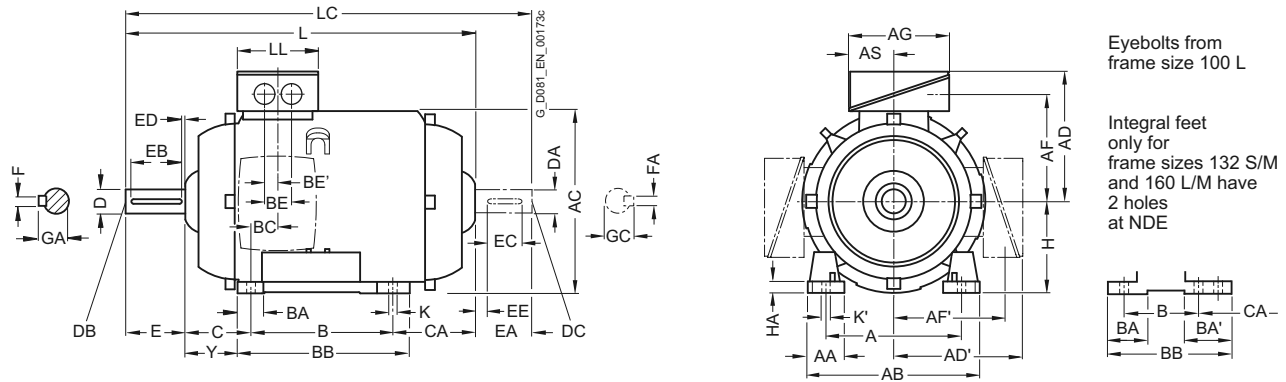
Dimensions

SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE1023, 1LE1043 · Forced-air cooled, frame sizes 100 L to 200 L

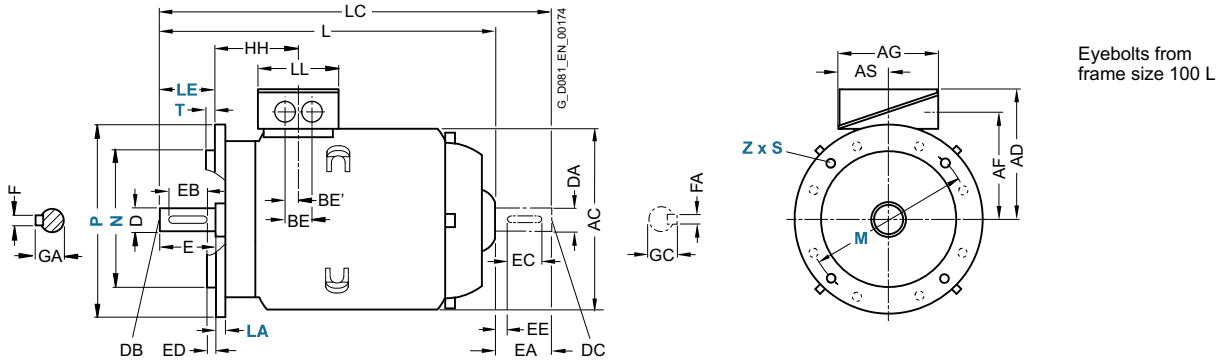
Dimensional drawings

Type of construction IM B3



Types of construction IM B5 and IM V1

For flange dimensions, see Page 1/34 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC																						
Frame size	Motor type	No. of poles	A	AA	AB	AC	AD	AD'	AF	AF'	AG	AQ	AS	B*	BA	BA'	BB	BC	BE	BE'	C	CA*	H	HA	Y
100 L	1AA4, 1AB4, 1AB5, 1AC3	2, 4 6	160	42	196	198	166	166	125.5	125.5	135	195	63.5	140	37.5	-	176	33.5	50	25	63	-	100	12	45
112 M	1BA2, 1BB2	2, 4	190	46	226	222	177	177	136.5	136.5	135	195	63.5	140	35.4	-	176	26	50	25	70	-	112	12	52
132 S	1CA0, 1CC0	2, 6	216	53	256	262	202	202	159.5	159.5	155	260	70.5	140	38	76 ¹⁾	218 ²⁾	26.5	48	24	89	-	132	15	69
132 M	1CC2	6	216	53	256	262	202	202	159.5	159.5	155	260	70.5	178	38	76	218	26.5	48	24	89	-	132	15	69
160 M	1DB2, 1DC2	4, 6, 8	254	60	300	314	236.5	236.5	190	190	175	260	77.5	210	44	89 ³⁾	300 ⁴⁾	47	57	28.5	108	-	160	18	85
160 L	1DA4, 1DB4, 1DC4	2, 4, 6	254	60	300	314	236.5	236.5	190	190	175	260	77.5	254	44	-	300	47	57	28.5	108	-	160	18	85
180 M	1EA2, 1EB2, 1EB4, 1EC4	2, 4, 6	279	65	339	356	259	259	212.5	212.5	175		77.5	241/ 279	80	100	328	30	57	28.5	121	-	180	20	95
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5	2, 4, 6	318	70	378	396	296	296	238	238	225		102.5	305	90	100	355	45	75	37.5	133	-	200	25	108

* This dimension is assigned in EN 50347 to the frame size listed.

1) With screwed-on feet, dimension BA' is 38 mm.

2) With screwed-on feet, dimension BB is 180 mm.

3) With screwed-on feet, dimension BA' is 44 mm.

4) With screwed-on feet, dimension BB is 256 mm.

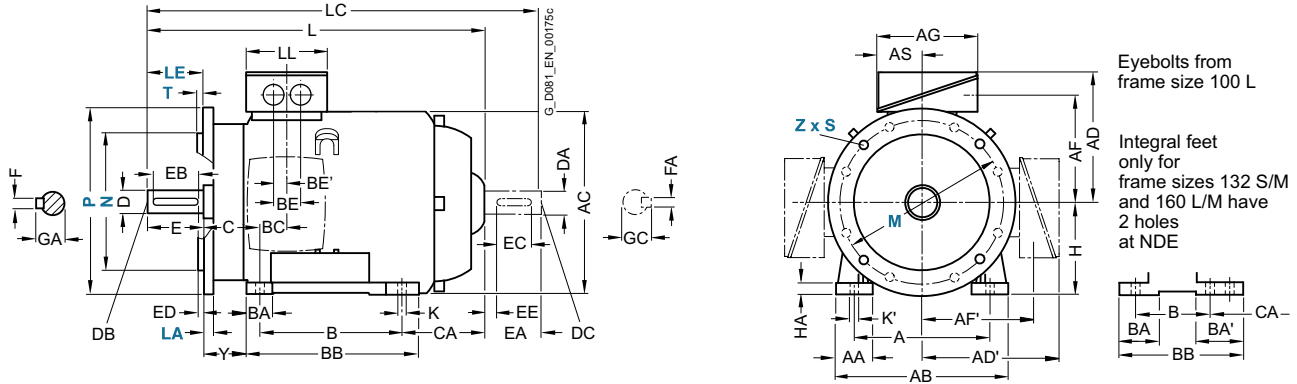
Dimensions SIMOTICS GP 1LE1 Standard Motors

Aluminum series 1LE1023, 1LE1043 · Forced-air cooled, frame sizes 100 L to 200 L

Dimensional drawings (continued)

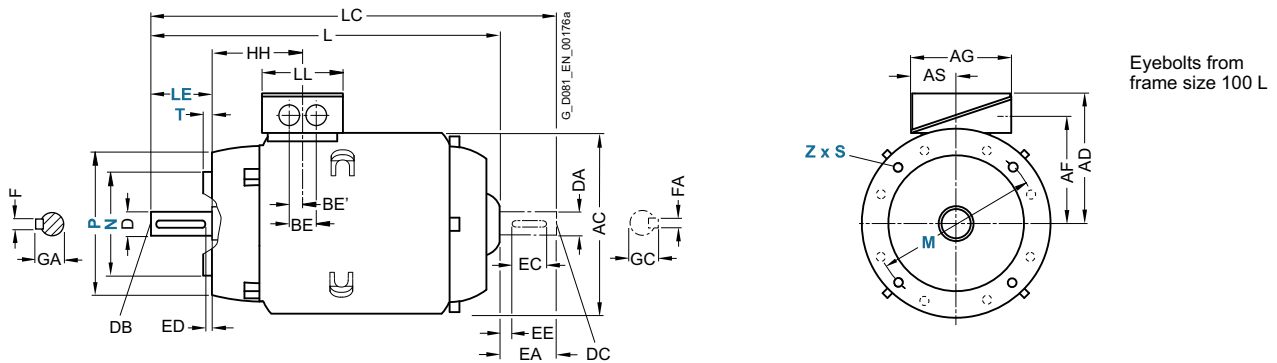
Type of construction IM B35

For flange dimensions, see Page 1/34 (Z = the number of retaining holes)



Type of construction IM B14

For flange dimensions, see Page 1/34 (Z = the number of retaining holes)



For motor			Dimension designation acc. to IEC						DE shaft extension						NDE shaft extension							
Frame size	Motor type	No. of poles	HH	K	K'	L ¹⁾	LC	LL	D	DB	E	EB	ED	F	GA	DA	DC	EA	EC	EE	FA	GC
100 L	1AA4, 1AB4, 1AB5, 1AC3	2, 4	96.5	12	16	356.5	-	112	28	M10	60	50	5	8	31	-	-	-	-	-	-	-
						430.5																
112 M	1BA2, 1BB2	2, 4	96	12	16	336	-	112	28	M10	60	50	5	8	31	-	-	-	-	-	-	-
132 S	1CA0, 1CC0	2, 6	115.5	12	16	380.5	-	130	38	M12	80	70	5	10	41	-	-	-	-	-	-	-
	1CA1, 1CB0	2, 4				430.5	-															
132 M	1CC2	6	115.5	12	16	380.5	-	130	38	M12	80	70	5	10	41	-	-	-	-	-	-	-
	1CB2, 1CC3	4, 6				430.5	-															
160 M	1DA2, 1DA3, 1DB2, 1DC2	2, 4, 6	155	15	19	510	-	145	42	M16	110	90	10	12	45	-	-	-	-	-	-	-
160 L	1DA4, 1DB4, 1DC4	2, 4, 6	155	15	19	570	-	145	42	M16	110	90	10	12	45	-	-	-	-	-	-	-
180 M	1EA2, 1EB2, 1EB4, 1EC4		151	14.5	19	592	706	145	48	M16	110	100	5	14	52	-	-	-	-	-	-	-
200 L	2AA4, 2AA5, 2AB5, 2AC4, 2AC5		178	18.5	25	642	759	185	55	M20	110	100	5	16	59	-	-	-	-	-	-	-

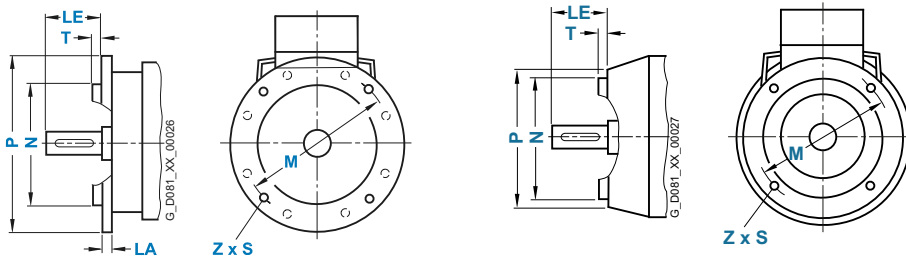
¹⁾ The length is specified as far as the tip of the fan cover.

Introduction

General technical specifications

Flange dimensions

Overview (continued)



In EN 50347, the frame sizes are allocated flange FF with through holes and flange FT with tapped holes.

The designation of flange A and C according to DIN 42948 (invalid since September 2003) are also listed for information purposes. See the table below. (Z = the number of retaining holes)

Frame size	Type of construction	Flange type	Flange with through holes (FF/A) Flange with tapped holes (FT/C)		Dimension designation acc. to IEC							
			Acc. to EN 50347	Acc. to DIN 42948	LA	LE	M	N	P	S	T	Z
71 M	IM B5, IM B35, IM V1, IM V3	Standard flange	FF130	A 160	9	30	130	110	160	10	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT85	C 105	–	30	85	70	105	M6	2.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code P01	FT115	C 140	–	30	115	95	140	M8	3	4
80 M	IM B5, IM B35, IM V1, IM V3	Standard flange	FF165	A 200	10	40	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT100	C 120	–	40	100	80	120	M6	3	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code P01	FT130	C 160	–	40	130	110	160	M8	3.5	4
90 S/L	IM B5, IM B35, IM V1, IM V3	Standard flange	FF165	A 200	10	50	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT115	C 140	–	50	115	95	140	M8	3	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code P01	FT130	C 160	–	50	130	110	160	M8	3.5	4
100 L	IM B5, IM B35, IM V1, IM V3	Standard flange	FF215	A 250	11	60	215	180	250	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code P01	FF265	A 300	12	60	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code P02	FF165	A 200	11	60	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT130	C 160	–	60	130	110	160	M8	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code P01	FT165	C 200	–	60	165	130	200	M10	3.5	4
112 M	IM B5, IM B35, IM V1, IM V3	Standard flange	FF215	A 250	11	60	215	180	250	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code P01	FF265	A 300	12	60	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code P02	FF165	A 200	11	60	165	130	200	12	3.5	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT130	C 160	–	60	130	110	160	M8	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code P01	FT165	C 200	–	60	165	130	200	M10	3.5	4
132 S/M	IM B5, IM B35, IM V1, IM V3	Standard flange	FF265	A 300	12	80	265	230	300	14.5	4	4
	IM B5, IM B35, IM V1, IM V3	Next larger standard flange – Order code P01	FF300	A 350	13	80	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code P02	FF215	A 250	11	80	215	180	250	14.5	4	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT165	C 200	–	80	165	130	200	M10	3.5	4
	IM B14, IM B34, IM V18, IM V19	Next larger standard flange – Order code P01	FT215	C 250	–	80	215	180	250	M12	4	4
160 M/L	IM B5, IM B35, IM V1, IM V3	Standard flange	FF300	A 350	13	110	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code P02	FF265	A 300	12	110	265	230	300	14.5	4	4
	IM B14, IM B34, IM V18, IM V19	Standard flange	FT215	C 250	–	110	215	180	250	M12	4	4
180 M/L	IM B5, IM B35, IM V1, IM V3	Standard flange	FF300	A 350	13	110	300	250	350	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code P02	FF 265	A 300	12	110	265	230	300	14.5	4	4
200 L	IM B5, IM B35, IM V1, IM V3	Standard flange	FF350	A 400	15	110	350	300	400	18.5	5	4
	IM B5, IM B35, IM V1, IM V3	Next smaller standard flange – Order code P02	FF300	A 350	13	110	300	250	350	18.5	5	4
225 S/M 2-pole 4- ... 8-pole	IM B5, IM B35, IM V1, IM V3	Standard flange	FF400	A 450	16	110	400	350	450	18.5	5	8
250 M	IM B5, IM B35, IM V1, IM V3	Standard flange	FF500	A 550	18	140	500	450	550	18.5	5	8
280 S/M	IM B5, IM B35, IM V1, IM V3	Standard flange	FF500	A 550	18	140	500	450	550	18.5	5	8
315 S/M/L 2-pole 4- ... 8-pole	IM B5, IM B35, IM V1, IM V3	Standard flange	FF600	A 660	22	140	600	550	660	24	6	8