



# 42C/D SERIES Ducted Chilled Water Fan Coil Unit With District Cooling Application (300 to 2000 CFM)



42DF



42CGT



42DE



42CET



42DC



MS ISO 9001 REG. NO. AR 0239

MAXIMIZING PERFORMANCE, ENERGY SAVINGS & COMFORT

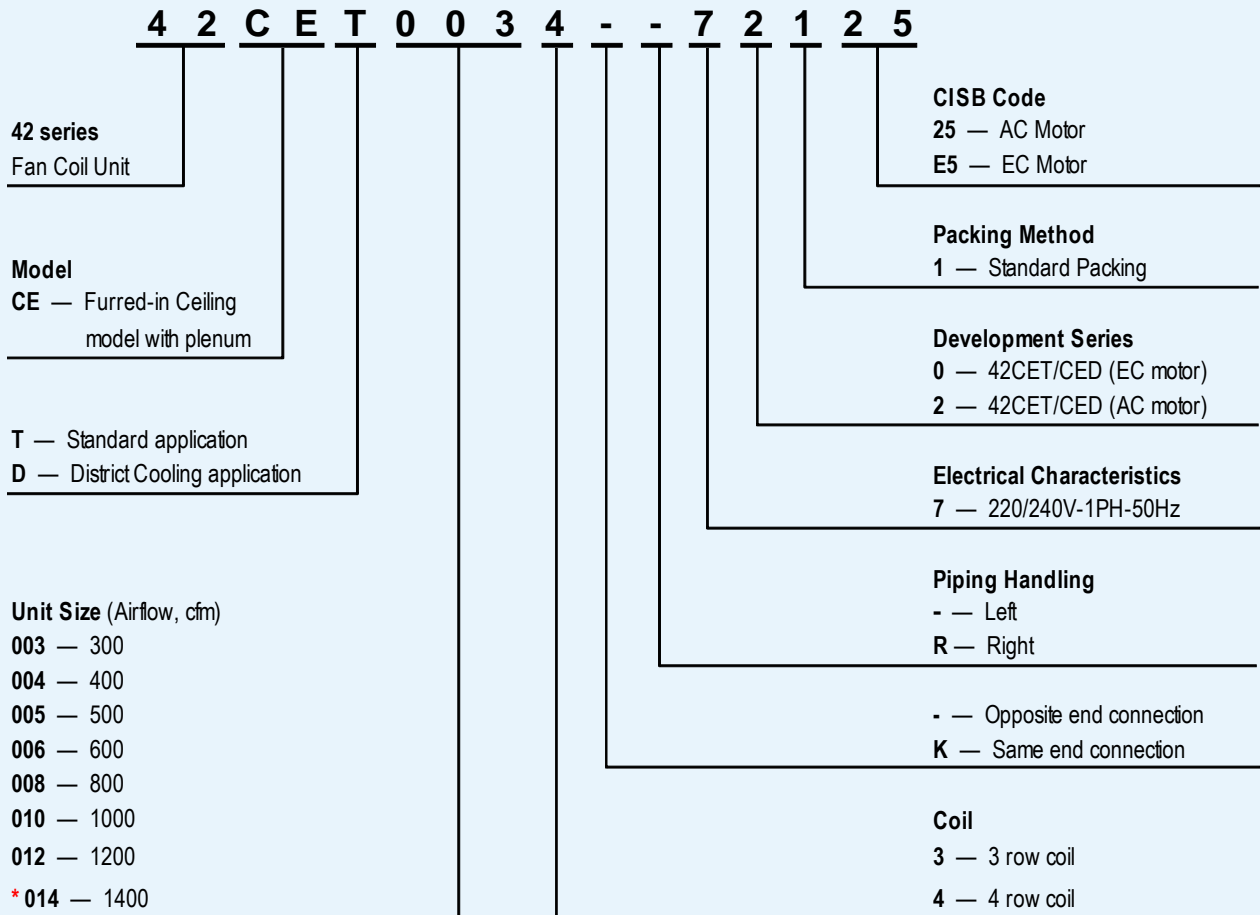
Copyright © 2013 Carrier International Sdn Bhd.

# MODEL NUMBER NOMENCLATURE



Turn to the Experts.™

## MODEL : 42CET/CED



**Note:**

\* Not applicable for EC motor.

## COMPUTER SELECTION

We have made available a computer program to finalize your selections. Please contact your Carrier representative for a computer selection based on your "Quick Selection" plus the design parameters of your application.



## TABLE OF CONTENTS

	Page
Model Number Nomenclature.....	2 - 3
Product Features.....	4
Technical Data.....	5 - 15
Unit Dimension and Weight.....	16 - 20
Performance Rating.....	21 - 26
Electrical Data.....	27 - 28
Wiring Diagram.....	29 - 31
Guide Specifications.....	32 - 33

# MODEL NUMBER NOMENCLATURE



Turn to the Experts™

## MODEL : 42CGT/CGD

**4 2 C G T 0 0 3 4 - - 7 0 1 2 5**

**42 series**  
Fan Coil Unit

**Model**  
CG — Cabinet model

T — Standard Application  
D — District Cooling Application

**Unit Size (Airflow, cfm)**

- 003 — 300
- 004 — 400
- 005 — 500
- 006 — 600
- 008 — 800
- 010 — 1000
- 012 — 1200

**CISB Code**  
25 — AC Motor

**Packing Method**  
1

**Development Series**  
0 — 42CGT, 42CGD

**Electrical Characteristics**  
7 — 220/240V-1Ph-50Hz

**Piping Handling**  
- — Left Handling  
R — Left Handling

Not used

**Coil**  
4 — 4 row coil

## MODEL : 42D SERIES

**4 2 D C - 0 1 0 4 - - 7 5 1 2 5**

**42 series Fan Coil Unit**

**Model**  
DC — Furred-in Ceiling model  
\* DE — Ceiling model with painted galvanized full casing  
\* DF — Exposed Ceiling Cabinet model

- — Standard application  
D — District Cooling application

**Unit Size (Airflow, cfm)**

- 006 — 600
- 008 — 800
- 010 — 1000
- 012 — 1200
- 014 — 1400
- 016 — 1600
- 018 — 1800
- 020 — 2000

**CISB Code**  
25 — AC Motor  
E5 — EC Motor

**Packing Method**  
1 — Standard Packing

**Development Series**  
1 — 42DC/DCD (EC motor)  
3 — 42DF/DFD (AC motor)  
4 — 42DE/DED (AC motor)  
5 — 42DC/DCD (AC motor)

**Electrical Characteristics**  
7 — 220/240V-1Ph-50Hz

**Piping Handling**  
- — Left  
R — Right

- — Opposite end connection  
\*\* K — Same end connection

**Coil**  
4 — 4 row coil

**Note:**

- \* Not applicable for EC motor.
- \*\* Applicable for 42DC/DCD model only.

## PRODUCT FEATURES



Turn to the Experts.™

If fan coil terminals are the answer to your job requirements, you can't afford to pass over Carrier's versatile and extensive range of fan coil units.

With Carrier's 42 series fan coil units, you can select furred-in or cabinet style, in capacities from 300 to 2,000 cfm. Units are ideal for installations in residential, hotels, motels, apartments, offices, hospitals, schools and other multi-room buildings.

Carrier room fan coil terminals provide unsurpassed year round comfort, with high cooling performance. Carrier 42 series terminal requires very little space and is easy to install. Piping, drain and wiring connections are readily accessible to save installation time and field labor expense.

Forget about expensive ductwork, forget about complex system controls, forget the aggravation and choose Carrier's easy to install room fan coil units – in pipe systems. Opt for quiet. Carrier room fan coil units operate at exceptionally low sound levels. Generous amount of insulation absorbs operating sound and rugged, rigid construction ensures vibration free operation at all fan speeds.

Carrier room fan coil units are economical. Three speed fans deliver just the right amount of conditioned air for your comfort needs at any load. And each individual unit can be shut off when not in use. Permanent Split Capacitor motors deliver peak operating efficiency. In choosing Carrier units, you can match your application with a wide range of custom-designed options and accessories.

When you go for Carrier 42 series, the advantages to owner, installer and the room occupants are too great to ignore.

### **Carrier 42 series fan coils give you design and equipment location flexibility**

- Wide range of popular capacities, 300 – 2000 cfm
- Available up to 11 sizes.
- Cabinet or furred-in units
- Choose from numerous control systems
- Select 3 row coils (42CET), 4 row coils (42CET, CGT, DC, DE & DF)
- Accommodates 2 pipe systems
- Fully insulated/low fan speed means quiet operation
- Draw outside air for odor dilution
- Uses only minimal space

### **Select Carrier fan coils for easy, low cost installation**

- Easy wiring, piping connections
- Mounting holes, slots speed hanging
- Requires no expensive ductwork
- Ideal for new construction or renovation

### **Save operating costs with Carrier fan coils**

- Higher efficiency & reliability Electronically Commuted Motor (42CET/CED, DC/DCD) - optional.
- Individual unit shut-off when not in use
- Efficient, 3 speed centrifugal fans
- Permanent Split Capacitor motors
- High efficiency heat transfer surface

### **Carrier fan coils save your service and maintenance expense**

- Nationwide Carrier service
- Insulated drain pan
- Easy access to components
- Rugged construction
- Factory leak test for coil
- Cleanable filters
- Long life, heavy duty bearings

# TECHNICAL DATA



Turn to the Experts™

## 42CET Furred-in Ceiling FCU with Plenum 3 Rows at nominal CFM

PERFORMANCE			MODEL: 42CET							
			003	004	005	006	008	010	012	014
Nominal Air Volume	High	CFM	300	400	500	600	800	1000	1200	1400
		ℓ/s	142	189	236	283	378	472	566	661
Cooling Capacity (Fluid)*		kW	3.07	3.97	4.34	4.79	7.26	7.89	9.76	10.95
		Btu/hr	10,474	13,539	14,808	16,341	24,766	26,909	33,296	37,352
Motor nominal power output		W	32	45	70	72	55 (x2)	70 (x2)	72 (x2)	70 (x3)
Motor current		Amp	- Refer to page 27 -							
Sound Pressure **	High	dB(A)	37.4	37.9	39.8	41.7	42.2	43.5	44.9	46.4
	Med		34.9	35.8	37.4	38.9	40.1	41.7	43.0	44.7
	Low		33.4	33.9	35.2	37.2	37.4	39.2	39.6	41.7
Water Flow		ℓ/s	0.13	0.17	0.19	0.20	0.31	0.34	0.42	0.47
Water Pressure Drop		kPa	15.6	34.6	20.2	21.3	21.0	22.8	28.2	37.6
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row		3							
	Working Pressure		1.72MPa							
Connections	In-Out (Thread)/ Material		¾" FPT (BSP) / Brass							
	Condensate Drain / Material		¾" MPT (BSP) / Steel							
Cabinet Size	Height	mm	241.4							
	Width	mm	556.8							
	Length	mm	770	890	970	1,170	1,410	1,530	1,770	2,010
Casing Material / Thickness			Galvanized Steel / 0.8 & 1.0mm							
Casing Treatment / External Finish			Non-painted / -							
Net Weight		kg	16.5	19.1	19.7	22.6	31.1	34.5	39.4	46.3

NOTE:  
 \* Based on motor at high speed, standard air and dry coil operation; 5.6°C water temperature rise; entering air temperature 26.7°C DB; 19.4°C WB; Entering water temperature 7.2°C.  
 \*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

**Electronically Commuted Motor (ECM) is available for unit size 003 to 012 - optional.**



-- For other design conditions, please apply the selection program to finalize your applications --



# TECHNICAL DATA (cont')



## 42CET Furred-in Ceiling FCU with Plenum 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42CET							
			003	004	005	006	008	010	012	014
Nominal Air Volume	High	CFM	300	400	500	600	800	1000	1200	1400
		ℓ/s	142	189	236	283	378	472	566	661
Cooling Capacity (Fluid)*		kW	3.38	4.25	4.58	4.99	7.55	8.58	11.5	13.53
		Btu/hr	11,530	14,486	15,637	17,009	25,758	29,270	39,232	46,157
Motor nominal power output		W	32	45	70	72	55 (x2)	70 (x2)	72 (x2)	70 (x3)
Motor current		Amp	- Refer to page 27 -							
Sound Pressure **	High	dB(A)	37.1	37.4	39.1	40.4	41.3	43.1	43.4	43.6
	Med		34.6	34.9	35.7	38.8	38.8	40.8	39.9	41.8
	Low		33.0	32.1	32.4	35.4	34.6	37.2	37.6	39.9
Water Flow		ℓ/s	0.14	0.18	0.20	0.21	0.32	0.37	0.49	0.58
Water Pressure Drop		kPa	13.5	23.8	17.6	9.3	17.4	24.5	30.8	46.4
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row		4							
	Working Pressure		1.72 MPa							
Connections	In-Out (Thread) / Material		¾" FPT (BSP) / Brass							
	Condensate Drain / Material		¾" MPT (BSP) / GI Steel							
Cabinet Size	Height	mm	241.4							
	Width	mm	556.8							
	Length	mm	770	890	970	1,170	1,410	1,530	1,770	2,010
Casing Material / Thickness			Galvanized Steel / 0.8 & 1.0mm							
Casing Treatment / External Finish			Non-painted / -							
Net Weight		kg	17.8	20.5	21.7	23.7	33.0	36.7	42.0	49.1

NOTE:  
 \* Based on motor at high speed, standard air and dry coil operation; 5.6°C water temperature rise; entering air temperature 26.7°C DB; 19.4°C WB; Entering water temperature 7.2°C.  
 \*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

**Electronically Commuted Motor (ECM) is available for unit size 003 to 012 - optional.**



-- For other design conditions, please apply the selection program to finalize your applications --



# TECHNICAL DATA (cont')



Turn to the Experts™

## 42CED Furred-in Ceiling FCU with Plenum 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42CED (District Cooling Application)							
			003	004	005	006	008	010	012	014
Nominal Air Volume	High	CFM	300	400	500	600	800	1000	1200	1400
		ℓ/s	142	189	236	283	378	472	566	661
Cooling Capacity (Fluid)*		kW	2.32	3.13	3.40	3.84	5.64	5.99	7.22	8.27
		Btu/hr	7,930	10,685	11,614	13,088	19,245	20,454	24,645	28,227
Motor nominal power output		W	32	45	70	72	55 (x2)	70 (x2)	72 (x2)	70 (x3)
Motor current		Amp	- Refer to page 27 -							
Sound Pressure **	High	dB(A)	37.1	37.4	39.1	40.4	41.3	43.1	43.3	43.6
	Med		34.6	34.9	35.7	38.8	38.8	40.8	39.9	41.8
	Low		33.0	32.1	32.4	35.4	34.6	37.2	37.6	39.9
Water Flow		ℓ/s	0.06	0.08	0.09	0.10	0.15	0.16	0.19	0.22
Water Pressure Drop		kPa	4.8	10.4	6.1	5.9	12.9	15.8	9.5	13.7
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row		4							
	Working Pressure		1.72MPa							
Connections	In-Out (Thread) / Material		¾" FPT (BSP) / Brass							
	Condensate Drain / Material		¾" MPT (BSP) / GI Steel							
Cabinet Size	Height	mm	241.4							
	Width	mm	556.8							
	Length	mm	770	890	970	1,170	1,410	1,530	1,770	2,010
Casing Material / Thickness			Galvanized Steel / 0.8 & 1.0mm							
Casing Treatment / External Finish			Non-painted / -							
Net Weight		kg	17.8	20.5	21.7	23.7	33.0	36.7	42.0	49.1

NOTE:  
 \* Based on motor at high speed, standard air and dry coil operation; 8.9°C water temperature rise; entering air temperature 24.4°C DB; 17.2°C WB; Entering water temperature 5.5°C.  
 \*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

**Electronically Commuted Motor (ECM) is available for unit size 003 to 012 - optional.**



-- For other design conditions, please apply the selection program to finalize your applications --



# TECHNICAL DATA (cont')



Turn to the Experts™

## 42CGT Horizontal Cabinet Model 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42CGT						
			003	004	005	006	008	010	012
Nominal Air Volume	High	CFM	300	400	500	600	800	1000	1200
		ℓ/s	142	182	236	283	378	472	566
Cooling Capacity (Fluid)*		kW	3.34	4.64	5.64	5.91	8.38	11.47	13.04
		Btu/hr	11,388	15,842	19,242	20,153	28,585	39,151	44,487
Motor nominal power output		W	35	48	68	75	58 (x2)	75 (x2)	78 (x3)
Motor current		Amp	- Refer to page 27 -						
Sound Pressure **	High	dB(A)	44.3	43.6	44.5	46.0	49.1	49.5	50.1
	Med		42.3	41.5	41.7	41.0	45.5	45.6	48.4
	Low		40.2	39.0	38.6	40.5	41.8	40.2	44.3
Water Flow		ℓ/s	0.14	0.20	0.24	0.25	0.36	0.49	0.56
Water Pressure Drop		kPa	12.7	22.6	46.9	8.8	21.6	47.3	48.1
Fan Type			Centrifugal Forward-curved blades						
Motor Type			Permanent Split Capacitor						
Coil	No. of Row	4							
	Working Pressure	1.6MPa							
Connections	In-Out (Sweat) / Material	3/4" / Copper							
	Condensate Drain / Material	7/8" / GI Steel							
Cabinet Size	Height	mm	310						
	Width	mm	582						
	Length	mm	1,030	1,150	1,230	1,350	1,670	2,030	2,270
Casing Material / Thickness			Galvanized Steel / 0.9 & 1.0 mm						
Casing Treatment / External Finish			Powder Painted / Morning Mist						
Net Weight		kg	39.7	44.6	46.9	50.9	65.0	79.8	90.7

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 5.6°C water temperature rise; entering air temperature 23.89°C DB; 17.2°C WB; Entering water temperature 7.2°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008



# TECHNICAL DATA (cont')



Turn to the Experts™

## 42CGD Horizontal Cabinet Model 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42CGD (District Cooling Application)						
			003	004	005	006	008	010	012
Nominal Air Volume	High	CFM	300	400	500	600	800	1000	1200
		l/s	142	182	236	283	378	472	566
Cooling Capacity (Fluid)*		kW	2.28	3.12	3.89	4.07	5.92	7.91	8.36
		Btu/hr	7,776	10,629	13,259	13,884	20,209	26,991	28,514
Motor nominal power output		W	35	48	68	75	58 (x2)	75 (x2)	78 (x3)
Motor current		Amp	- Refer to page 27 -						
Sound Pressure **	High	dB(A)	44.3	43.6	44.5	46.0	49.1	49.5	50.1
	Med		42.3	41.5	41.7	41.0	45.5	45.6	48.4
	Low		40.2	39.0	38.6	40.5	41.8	40.2	44.3
Water Flow		l/s	0.06	0.08	0.10	0.11	0.16	0.21	0.22
Water Pressure Drop		kPa	7.6	14.8	27.5	6.7	23.5	21.0	14.4
Fan Type		Centrifugal Forward-curved blades							
Motor Type		Permanent Split Capacitor							
Coil	No. of Row	4							
	Working Pressure	1.6MPa							
Connections	In-Out (Sweat) / Material	3/4" / Copper							
	Condensate Drain / Material	7/8" / GI Steel							
Cabinet Size	Height	mm	310						
	Width	mm	582						
	Length	mm	1,030	1,150	1,230	1,350	1,670	2,030	2,270
Casing Material / Thickness		Galvanized Steel / 0.9 & 1.0 mm							
Casing Treatment / External Finish		Powder Painted / Morning Mist							
Net Weight		kg	39.7	44.6	46.9	50.9	65.0	79.8	90.7

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 8.9°C water temperature rise; entering air temperature 24.4°C DB; 17.2°C WB; Entering water temperature 5.5°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008



**42DC Furred-in Ceiling FCU with Plenum  
4 Rows at nominal CFM**

PERFORMANCE			MODEL: 42DC							
			006	008	010	012	014	016	018	020
Nominal Air Volume	High	CFM	600	800	1000	1200	1400	1600	1800	2000
		l/s	283	378	472	566	661	755	852	943
Cooling Capacity (Fluid)*		kW	6.57	7.88	9.94	12.39	14.10	17.71	19.03	20.42
		Btu/hr	22,404	26,890	33,900	42,291	48,106	60,427	64,924	69,688
Motor nominal power output		W	120		200	120 (x2)	300	450		
Motor current		Amp	- Refer to page 27 -							
Sound Pressure **	High	dB(A)	40.3	42.0	48.4	47.2	49.2	48.6	48.9	49.7
	Med		38.3	38.9	44.8	43.1	46.4	46.9	47.6	48.1
	Low		35.5	36.5	38.6	39.8	44.6	44.8	44.7	45.6
Water Flow		l/s	0.28	0.34	0.42	0.53	0.60	0.76	0.81	0.87
Water Pressure Drop		kPa	25.6	33.3	52.7	85.7	82.0	114.6	96.6	117.6
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row	4								
	Working Pressure	1.72 MPa								
Connections	In-Out (Sweat) / Material	5/8" / Copper					1" / Copper			
	Condensate Drain / Material	7/8" / GI Steel								
Cabinet Size	Height	mm	416.3							
	Width	mm	762.4							
	Length	mm	641	768	870	997	1,124	1,251	1,378	1,479
Casing Material / Thickness			Galvanized Steel / 1.0 mm							
Casing Treatment / External Finish			Non-painted / -							
Net Weight		kg	39	44	63	72	75	76	83	95

NOTE:

\* Based on motor at high speed, standard air and dry coil operation; 5.6°C water temperature rise; entering air temperature 26.7°C DB; 19.4°C WB; Entering water temperature 7.2°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

**Electronically Commuted Motor (ECM) is available for all sizes - optional.**



LT101  
Controller

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008

# TECHNICAL DATA (cont')



Turn to the Experts™

## 42DCD Furred-in Ceiling FCU with Plenum 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42DCD (District Cooling Application)							
			006	008	010	012	014	016	018	020
Nominal Air Volume	High	CFM	600	800	1000	1200	1400	1600	1800	2000
		l/s	283	378	472	566	661	755	852	943
Cooling Capacity (Fluid)*		kW	4.89	6.68	8.02	9.50	11.2	14.26	15.15	15.76
		Btu/hr	16,678	22,785	27,375	32,416	38,215	48,650	51,681	53,757
Motor nominal power output		W	120		200	120 (x2)	300	450		
Motor current		Amp	- Refer to page 28 -							
Sound Pressure **	High	dB(A)	40.3	42.0	48.4	47.2	49.2	48.6	48.9	49.7
	Med		38.3	38.9	44.8	43.1	46.4	46.9	47.6	48.1
	Low		35.5	36.5	38.6	39.8	44.6	44.8	44.7	45.6
Water Flow		l/s	0.13	0.18	0.22	0.26	0.30	0.38	0.41	0.42
Water Pressure Drop		kPa	26.8	55.2	53.5	47.4	41.7	55.1	62.6	55.5
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row		4							
	Working Pressure		1.72 MPa							
Connections	In-Out (Sweat) / Material		5/8" / Copper				1" / Copper			
	Condensate Drain / Material		7/8" / GI Steel							
Cabinet Size	Height	mm	416.3							
	Width	mm	762.4							
	Length	mm	641	768	870	997	1,124	1,251	1,378	1,479
Casing Material / Thickness			Galvanized Steel / 1.0 mm							
Casing Treatment / External Finish			Non-painted / -							
Net Weight		kg	39	44	63	72	75	76	83	95

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 8.9°C water temperature rise; entering air temperature 24.4°C DB; 17.2°C WB; Entering water temperature 5.5°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

**Electronically Commuted Motor (ECM) is available for all sizes - optional.**



LT101  
Controller

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008

# TECHNICAL DATA (cont')



Turn to the Experts.™

## 42DE Ceiling Model with Double Skin Galvanized Full Casing 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42DE							
			006	008	010	012	014	016	018	020
Nominal Air Volume	High	CFM	600	800	1000	1200	1400	1600	1800	2000
		l/s	283	378	472	566	661	755	852	943
Cooling Capacity (Fluid)*		kW	6.53	7.85	9.78	12.03	15.23	17.03	19.62	20.51
		Btu/hr	22,286	26,769	33,367	41,063	51,963	58,118	66,954	69,969
Motor nominal power output		W	120		200	120 (x2)	300	450		
Motor current		Amp	- Refer to page 28 -							
Sound Pressure **	High	dB(A)	44.1	41.1	47.6	47.6	47.6	54.3	51.8	52.1
	Med		41.2	38.5	45.5	44.5	44.8	52.8	49.5	49.4
	Low		37.6	34.8	40.6	42.4	41.0	47.6	45.3	45.2
Water Flow		l/s	0.28	0.33	0.42	0.51	0.65	0.73	0.84	0.88
Water Pressure Drop		kPa	17.5	23.9	30.1	38.7	34.9	46.8	29.7	33.5
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row		4							
	Working Pressure		1.72 MPa							
Connections	In-Out (Sweat) / Material		5/8" / Copper		7/8" / Copper		1 1/8" / Copper			
	Condensate Drain / Material		7/8" / GI Steel							
Cabinet Size	Height	mm	479							
	Width	mm	965							
	Length	mm	787	914	1,016	1,143	1,270	1,397	1,524	1,626
Casing Material / Thickness			Galvanized Steel / 1.0 mm							
Casing Treatment / External Finish			Powder Painted / Morning Mist							
Net Weight		kg	62	71	78	89	95	101	110	114

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 5.6°C water temperature rise; entering air temperature 26.7°C DB; 19.4°C WB; Entering water temperature 7.2°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008

# TECHNICAL DATA (cont')



Turn to the Experts.™

## 42DED Ceiling Model with Double Skin Galvanized Full Casing 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42DED (District Cooling Application)							
			006	008	010	012	014	016	018	020
Nominal Air Volume	High	CFM	600	800	1000	1200	1400	1600	1800	2000
		l/s	283	378	472	566	661	755	852	943
Cooling Capacity (Fluid)*		kW	4.86	6.39	7.86	9.33	11.85	13.60	14.83	15.05
		Btu/hr	16,566	21,789	26,820	31,820	40,423	46,402	50,590	51,355
Motor nominal power output		W	120		200	120 (x2)	300	450		
Motor current		Amp	- Refer to page 28 -							
Sound Pressure **	High	dB(A)	44.1	41.1	47.6	47.6	47.6	54.3	51.8	52.1
	Med		41.2	38.5	45.5	44.5	44.8	52.8	49.5	49.4
	Low		37.6	34.8	40.6	42.4	41.0	47.6	45.3	45.2
Water Flow		l/s	0.13	0.17	0.21	0.25	0.32	0.37	0.40	0.40
Water Pressure Drop		kPa	15.1	30.1	50.2	18.7	30.1	42.6	53.7	35.2
Fan Type		Centrifugal Forward-curved blades								
Motor Type		Permanent Split Capacitor								
Coil	No. of Row	4								
	Working Pressure	1.72 MPa								
Connections	In-Out (Sweat) / Material	5/8" / Copper			7/8" / Copper		1 1/8" / Copper			
	Condensate Drain / Material	7/8" / GI Steel								
Cabinet Size	Height	mm	479							
	Width	mm	965							
	Length	mm	787	914	1,016	1,143	1,270	1,397	1,524	1,626
Casing Material / Thickness		Galvanized Steel / 1.0 mm								
Casing Treatment / External Finish		Powder Painted / Morning Mist								
Net Weight		kg	62	71	78	89	95	101	110	114

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 8.9°C water temperature rise; entering air temperature 24.4°C DB; 17.2°C WB; Entering water temperature 5.5°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008

# TECHNICAL DATA (cont')



Turn to the Experts.™

## 42DF Exposed Ceiling Cabinet Model 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42DF							
			006	008	010	012	014	016	018	020
Nominal Air Volume	High	CFM	600	800	1000	1200	1400	1600	1800	2000
		l/s	283	378	472	566	661	755	852	943
Cooling Capacity (Fluid)*		kW	5.07	7.20	8.82	10.62	12.67	14.49	17.48	19.59
		Btu/hr	17,282	24,577	30,102	36,235	43,227	49,450	59,635	66,856
Motor nominal power output		W	80		120	80 (x2)		120 (x2)		200 (x2)
Motor current		Amp	- Refer to page 28 -							
Sound Pressure **	High	dB(A)	44.1	41.1	47.6	47.6	47.6	54.3	51.8	52.1
	Med		41.2	38.5	45.5	44.5	44.8	52.8	49.5	49.4
	Low		37.6	34.8	40.6	42.4	41.0	47.6	45.3	45.2
Water Flow		l/s	0.22	0.31	0.38	0.45	0.54	0.62	0.75	0.84
Water Pressure Drop		kPa	10.6	20.9	24.6	31.3	25.7	35.0	24.2	30.8
Fan Type			Centrifugal Forward-curved blades							
Motor Type			Permanent Split Capacitor							
Coil	No. of Row		4							
	Working Pressure		1.72 MPa							
Connections	In-Out (Sweat) / Material		5/8" / Copper		7/8" / Copper		1 1/8" / Copper			
	Condensate Drain / Material		7/8" / GI Steel							
Cabinet Size	Height	mm	479							
	Width	mm	965							
	Length	mm	787	914	1,016	1,143	1,270	1,397	1,524	1,626
Casing Material / Thickness			Galvanized Steel / 1.0 mm							
Casing Treatment / External Finish			Powder Painted / Morning Mist							
Net Weight		kg	59	66	73	82	88	96	103	108

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 5.6°C water temperature rise; entering air temperature 26.7°C DB; 19.4°C WB; Entering water temperature 7.2°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

Rated in accordance with  
ARI Standard 440-2008

# TECHNICAL DATA (cont')



Turn to the Experts.™

## 42DFD Exposed Ceiling Cabinet Model 4 Rows at nominal CFM

PERFORMANCE			MODEL: 42DFD (District Cooling Application)							
			006	008	010	012	014	016	018	020
Nominal Air Volume	High	CFM	600	800	1000	1200	1400	1600	1800	2000
		l/s	283	378	472	566	661	755	852	943
Cooling Capacity (Fluid)*		kW	4.19	5.86	7.09	8.23	9.86	11.57	13.21	14.38
		Btu/hr	14,286	20,005	24,196	28,079	33,627	39,482	45,060	49,070
Motor nominal power output		W	80		120	80 (x2)		120 (x2)		200 (x2)
Motor current		Amp	- Refer to page 28 -							
Sound Pressure **	High	dB(A)	44.1	41.1	47.6	47.6	47.6	54.3	51.8	52.1
	Med		41.2	38.5	45.5	44.5	44.8	52.8	49.5	49.4
	Low		37.6	34.8	40.6	42.4	41.0	47.6	45.3	45.2
Water Flow		l/s	0.11	0.16	0.19	0.22	0.26	0.31	0.36	0.39
Water Pressure Drop		kPa	11.2	26.1	41.9	15.2	21.7	31.4	43.5	31.7
Fan Type		Centrifugal Forward-curved blades								
Motor Type		Permanent Split Capacitor								
Coil	No. of Row	4								
	Working Pressure	1.72 Mpa								
Connections	In-Out (Sweat) / Material	5/8" / Copper			7/8" / Copper			1 1/8" / Copper		
	Condensate Drain / Material	7/8" / GI Steel								
Cabinet Size	Height	mm	479							
	Width	mm	965							
	Length	mm	787	914	1,016	1,143	1,270	1,397	1,524	1,626
Casing Material / Thickness		Galvanized Steel / 1.0 mm								
Casing Treatment / External Finish		Powder Painted / Morning Mist								
Net Weight		kg	59	66	73	82	88	96	103	108

**NOTE:**

\* Based on motor at high speed, standard air and dry coil operation; 8.9°C water temperature rise; entering air temperature 24.4°C DB; 17.2°C WB; Entering water temperature 5.5°C.

\*\* Sound measurement in accordance with Standard JIS8616-2006 (1.5m below the unit bottom).

-- For other design conditions, please apply the selection program to finalize your applications --



**Performance Assurance**

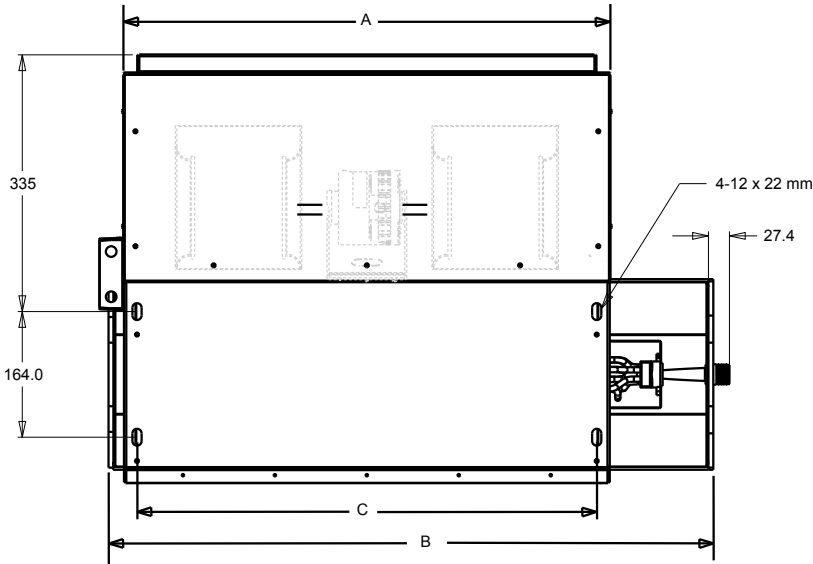
Rated in accordance with  
ARI Standard 440-2008

# UNIT DIMENSIONS AND WEIGHT



Turn to the Experts.™

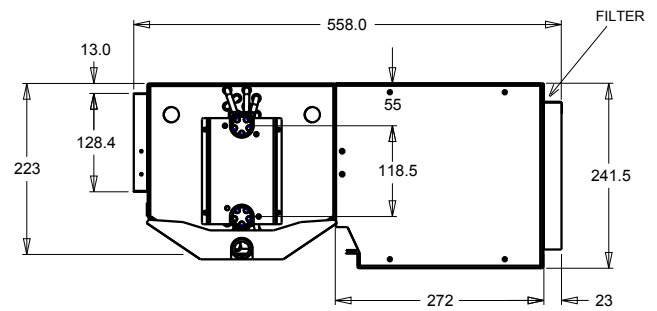
## 42CET/CED Furred-in Ceiling FCU with Plenum



TOP VIEW



FRONT VIEW



HEADER VIEW

MODEL 42CET/CED	DIMENSIONS (mm)			NET WEIGHT (kg)	
	A	B	C	3 Rows	4 Rows
003	636	770	600	16.5	17.8
004	756	890	720	19.1	20.5
005	836	970	800	19.7	21.7
006	956	1170	1000	22.6	23.7
008	1276	1410	1240	31.1	33.0
010	1396	1530	1360	34.5	36.7
012	1636	1770	1600	39.4	42.0
014	1876	2010	1840	46.3	49.1

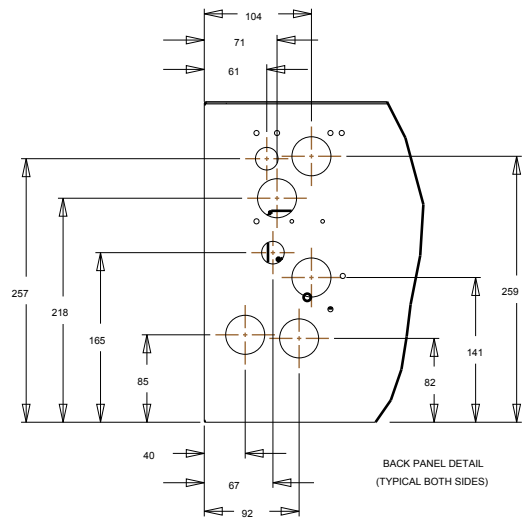
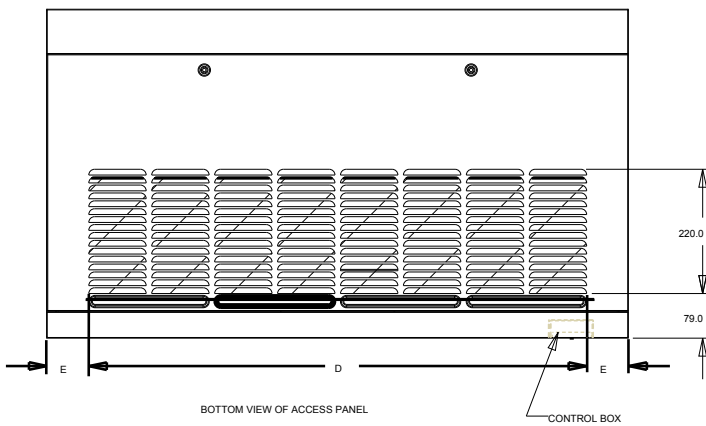
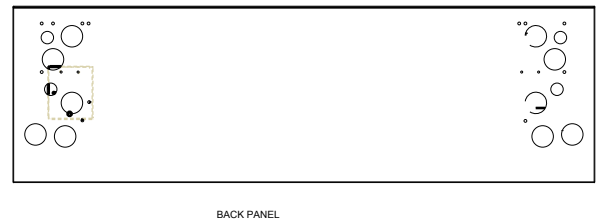
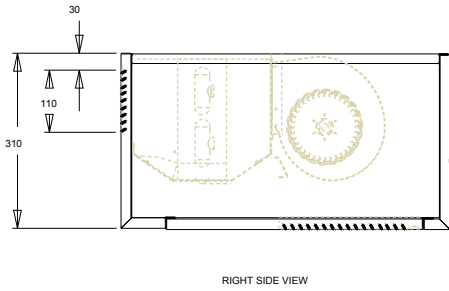
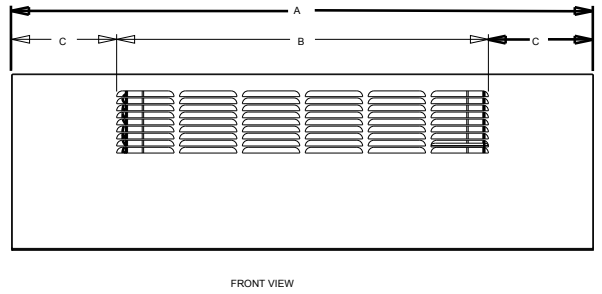
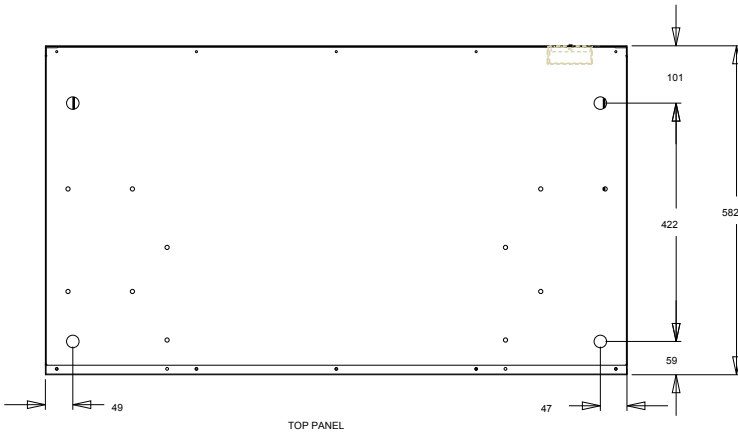


# UNIT DIMENSIONS AND WEIGHT (cont')



Turn to the Experts.™

## 42CGT/CGD Horizontal Cabinet Unit



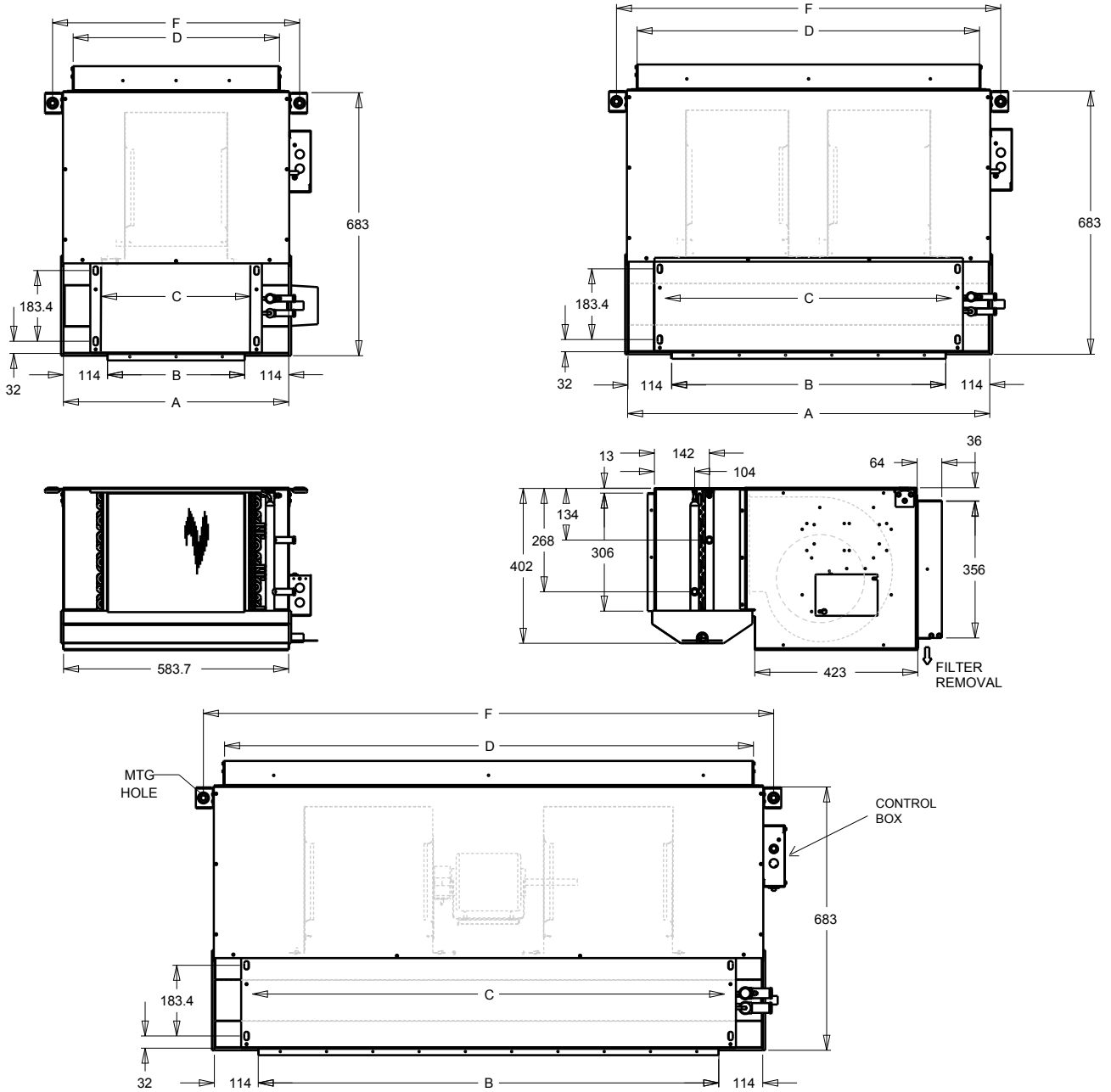
UNIT SIZE 42CGT	DIMENSIONS (mm)					NET WEIGHT (kg)
	A	B	C	D	G	
003	1030	658	186	881	74	39.7
004	1150	769	190	881	134	44.6
005	1230	880	175	881	174	46.9
006	1350	992	179	1102	123	50.9
008	1670	1325	172	1325	172	65.0
010	2030	1659	185	1325	352	79.8
012	2270	1882	193	1548	360	90.7

# UNIT DIMENSIONS AND WEIGHT (cont')



Turn to the Experts™

## 42DC/DCD Furred-in ceiling FCU with Plenum



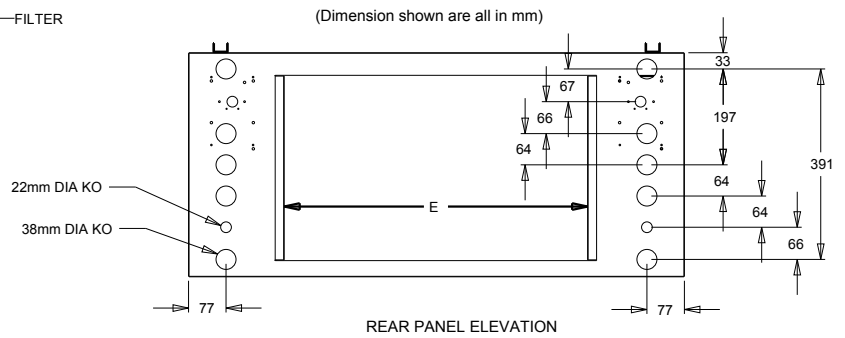
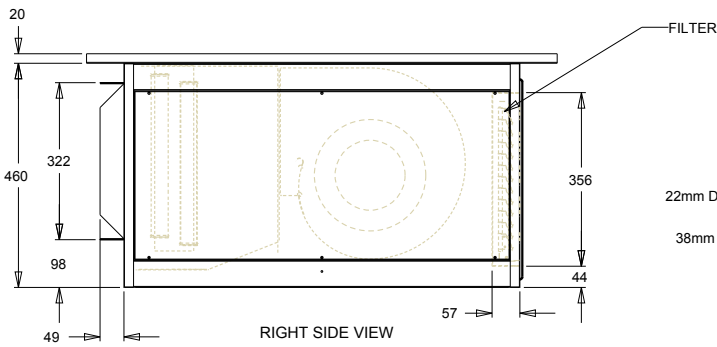
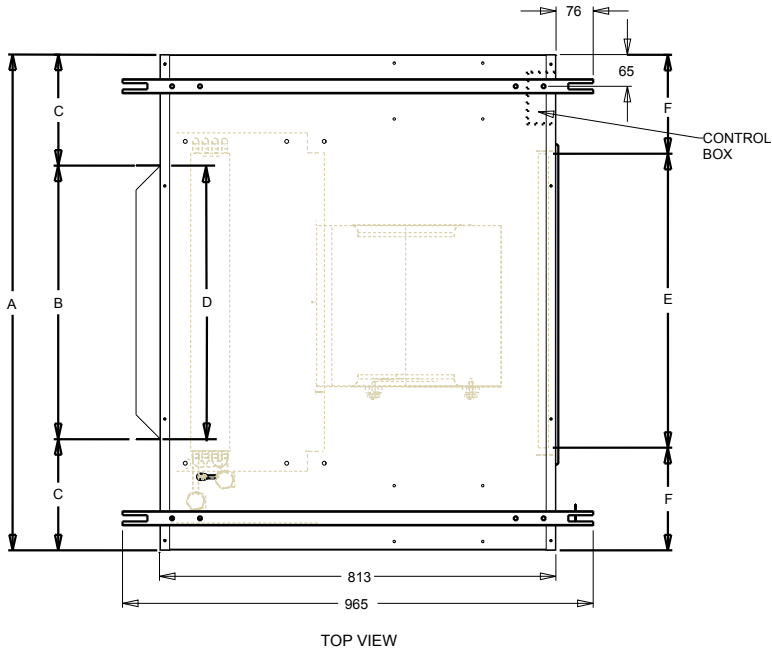
UNIT SIZE 42DC/DCD	DIMENSION (mm)						NET WEIGHT (kg)
	A	B	C	D	E	F	
006	584	356	381	432	533	641	41
008	711	483	508	559	660	768	46
010	813	584	610	660	762	870	66
012	940	711	737	737	889	997	74
014	1067	838	864	914	1016	1124	76
016	1194	965	991	1041	1143	1251	77
018	1321	1092	1178	1168	1270	1378	83
020	1422	1194	1219	1270	1372	1479	94

# UNIT DIMENSIONS AND WEIGHT (cont')



Turn to the Experts™

## 42DE/DED Furred-in ceiling FCU with Plenum

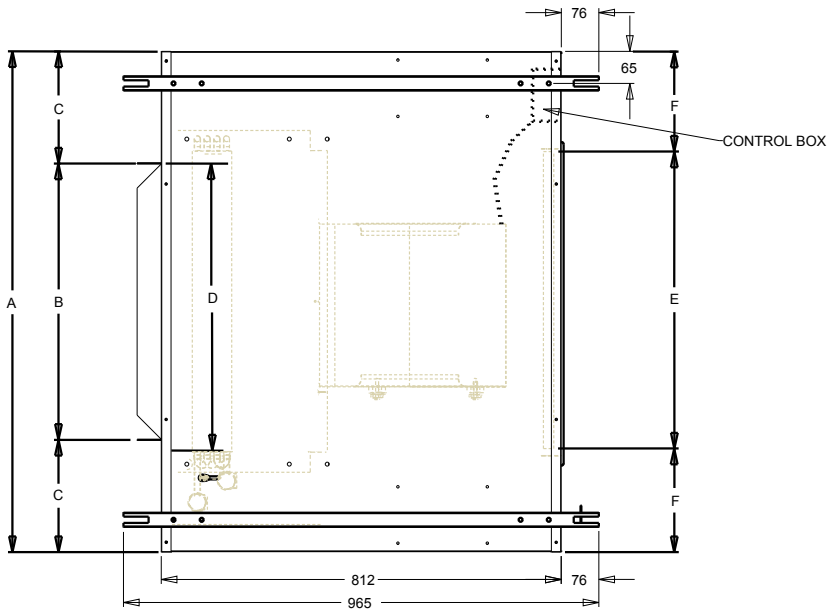


UNIT SIZE 42DE/DED	DIMENSIONS (mm)						NET WEIGHT (kg)
	A	B	C	D	E	F	
006	787	381	203	381	381	203	62
008	914	508	203	508	508	203	71
010	1016	610	203	610	610	203	78
012	1143	737	203	737	737	203	89
014	1270	837	203	837	837	203	95
016	1397	991	203	991	991	203	101
018	1524	1118	203	1118	1118	203	110
020	1626	1219	203	1219	1219	203	114

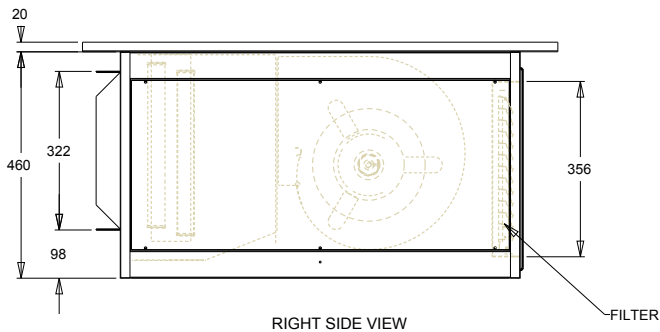
# UNIT DIMENSIONS AND WEIGHT (cont')



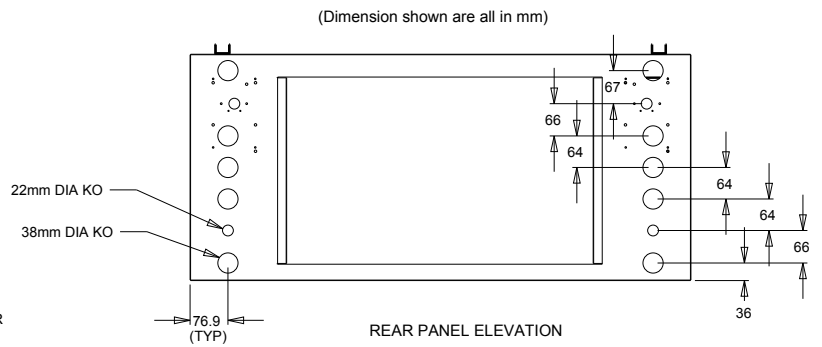
## 42DF/DFD Furred-in ceiling FCU with Plenum



TOP VIEW



RIGHT SIDE VIEW



REAR PANEL ELEVATION

UNIT SIZE 42DF/DFD	DIMENSIONS (mm)						NET WEIGHT (kg)
	A	B	C	D	E	F	
006	787	343	222	381	356	216	59
007	914	470	222	508	508	203	66
010	1016	572	222	610	610	203	73
012	1143	699	222	737	737	216	82
014	1270	826	222	864	864	203	88
016	1397	953	222	991	991	216	96
018	1524	1078	222	1118	1118	203	103
020	1626	1181	222	1219	1219	203	108

# PERFORMANCE RATING



Turn to the Experts™

## 42CET Furred-in Ceiling Model (3-Rows)

Model 42CET	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
003	High	50	122	3.07	2.07	12.9	12.1	0.13	15.6
	Medium		89	2.56	1.62	11.8	10.8	0.11	10.8
	Low		54	1.69	1.05	10.7	9.8	0.07	4.8
004	High	50	162	3.97	2.56	13.8	12.3	0.17	34.6
	Medium		115	3.27	1.97	12.7	10.9	0.14	23.8
	Low		71	2.18	1.28	11.9	10.0	0.09	10.6
005	High	50	189	4.34	3.08	13.4	12.8	0.19	20.2
	Medium		141	3.71	2.46	12.5	11.7	0.16	14.7
	Low		103	2.82	1.90	11.7	11.3	0.12	8.5
006	High	50	245	4.79	3.28	15.7	13.9	0.20	21.3
	Medium		190	4.13	2.69	15.1	13.2	0.18	16.4
	Low		145	3.40	2.17	14.5	12.6	0.15	11.1
008	High	50	332	7.26	4.91	14.6	13.1	0.31	21.0
	Medium		235	5.96	3.76	13.6	12.0	0.25	14.4
	Low		150	4.09	2.60	12.5	11.3	0.17	6.9
010	High	50	369	7.89	5.40	14.7	14.3	0.34	22.8
	Medium		271	6.58	4.25	13.9	12.4	0.28	16.6
	Low		182	4.68	3.01	13.2	11.8	0.20	8.5
012	High	50	498	9.76	6.99	15.2	13.8	0.42	28.2
	Medium		411	8.70	6.03	14.7	13.4	0.37	23.6
	Low		311	7.27	4.84	14.0	12.6	0.31	16.9
014	High	50	514	10.95	7.49	14.8	13.3	0.47	37.6
	Medium		430	9.93	6.53	14.3	12.7	0.42	32.0
	Low		343	8.37	5.43	13.8	12.3	0.36	23.8

**NOTE:** Air Conditions: EDB/EWB 26.7/19.4°C \* Water Conditions: EWT/LWT 7.2/12.8°C ΔT: 5.6°C  
 \* As per AHRI 440 Standard Cooling Rating 80.0°F (26.7°C) dry bulb, 67.0°F(19.4°C) wet-bulb and entering water temp 45°F (7.2°C).

## 42CET Furred-in Ceiling Model (4-Rows)

Model 42CET	Speed	ESP (Pa)	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
003	High	50	118	3.38	2.11	12.1	10.9	0.14	13.5
	Medium		83	2.76	1.60	11.0	9.2	0.12	9.0
	Low		51	1.84	1.02	10.3	8.1	0.08	4.0
004	High	50	156	4.25	2.61	13.0	11.3	0.18	23.8
	Medium		112	3.53	2.02	12.0	9.8	0.15	16.5
	Low		67	2.32	1.26	11.4	8.7	0.10	7.2
005	High	50	183	4.58	3.05	13.1	12.1	0.20	17.6
	Medium		137	3.88	2.44	12.2	10.9	0.17	12.6
	Low		102	2.99	1.91	11.4	10.6	0.13	7.6
006	High	50	235	4.99	3.50	14.5	13.3	0.21	9.3
	Medium		185	4.36	2.91	13.8	12.6	0.19	7.1
	Low		139	3.49	2.31	13.1	12.0	0.15	4.6
008	High	50	328	7.55	5.25	13.6	12.7	0.32	17.4
	Medium		230	6.18	3.99	12.5	11.4	0.26	11.9
	Low		148	4.26	2.77	11.4	10.8	0.18	5.7
010	High	50	360	8.58	5.68	13.8	12.5	0.37	24.5
	Medium		269	7.19	4.51	13.0	11.5	0.31	17.5
	Low		178	5.08	3.14	12.3	10.8	0.22	9.0
012	High	50	471	11.50	7.51	13.7	12.3	0.49	30.8
	Medium		393	10.36	6.52	13.2	11.6	0.44	25.3
	Low		299	8.56	5.24	12.4	10.8	0.37	17.8
014	High	50	510	13.53	8.72	12.7	11.6	0.58	46.4
	Medium		432	12.36	7.67	12.2	10.9	0.53	40.1
	Low		346	10.46	6.40	11.6	10.3	0.45	29.1

**NOTE:** Air Conditions: EDB/EWB 26.7/19.4°C \* Water Conditions: EWT/LWT 7.2/12.8°C ΔT: 5.6°C  
 \* As per AHRI 440 Standard Cooling Rating 80.0°F (26.7°C) dry bulb, 67.0°F(19.4°C) wet-bulb and entering water temp 45°F (7.2°C).

- - For other design conditions, please apply the selection program to finalize your applications - -

## PERFORMANCE RATING (cont')



Turn to the Experts.™

### 42CED Furred-in Ceiling Model (4-Rows) – District Cooling Application

Model 42CED	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
003	High	50	118	2.32	1.67	12.9	11.1	0.06	4.8
	Medium		83	1.90	1.27	11.9	9.9	0.05	3.5
	Low		51	1.26	0.81	11.4	9.2	0.03	2.1
004	High	50	156	3.13	2.24	12.6	10.9	0.08	10.4
	Medium		112	2.60	1.74	11.7	9.8	0.07	7.3
	Low		67	1.71	1.09	11.2	9.0	0.05	3.5
005	High	50	183	3.40	2.72	12.2	11.4	0.09	6.1
	Medium		137	2.88	2.18	11.4	10.6	0.08	4.4
	Low		102	2.22	1.70	10.7	10.3	0.06	2.8
006	High	50	235	3.84	3.15	13.4	12.2	0.10	5.9
	Medium		185	3.35	2.62	12.8	11.6	0.09	4.6
	Low		139	2.69	2.08	12.2	11.2	0.07	3.1
008	High	50	328	5.64	4.70	12.7	11.9	0.15	12.9
	Medium		230	4.61	3.57	11.7	10.9	0.12	8.8
	Low		148	3.18	2.48	10.7	10.4	0.09	4.2
010	High	50	360	5.99	4.91	13.3	12.1	0.16	15.8
	Medium		269	5.03	3.90	12.5	11.4	0.14	11.1
	Low		178	3.55	2.71	11.9	11.0	0.10	5.6
012	High	50	471	7.22	5.82	14.3	12.6	0.19	9.5
	Medium		393	6.51	5.05	13.9	12.1	0.17	7.7
	Low		299	5.38	4.06	13.3	11.6	0.14	5.3
014	High	50	510	8.27	6.57	13.9	12.3	0.22	13.7
	Medium		432	7.56	5.77	13.5	11.8	0.20	11.5
	Low		346	6.40	4.82	13.0	11.5	0.17	8.2

NOTE: Air Conditions: EDB/EWB 24.4/17.2°C

Water Conditions: EWT/LWT 5.5/14.4°C

ΔT: 8.9°C

- - For other design conditions, please apply the selection program to finalize your applications - -

## PERFORMANCE RATING (cont')



Turn to the Experts™

### 42CGT Cabinet Model (4-Rows)

Model 42CGT	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
003	High	0	143	3.34	2.43	12.8	12.6	0.14	12.7
	Medium		137	3.25	2.36	12.7	12.5	0.14	12.1
	Low		116	2.91	2.07	12.1	12.05	0.12	9.8
004	High	0	188	4.64	3.28	12.5	12.2	0.20	22.6
	Medium		163	4.22	2.94	12.0	11.8	0.18	18.3
	Low		133	3.75	2.51	11.3	11.0	0.16	12.3
005	High	0	225	5.64	3.97	12.3	12.1	0.24	46.9
	Medium		183	4.95	3.39	11.6	11.4	0.21	36.1
	Low		144	4.35	2.82	10.8	10.3	0.19	26.9
006	High	0	262	5.91	4.33	13.2	12.9	0.25	8.8
	Medium		203	5.05	3.55	12.4	12.1	0.22	6.6
	Low		156	4.26	2.88	11.6	11.3	0.18	4.7
008	High	0	340	8.38	5.94	12.4	12.2	0.36	21.6
	Medium		279	7.42	5.09	11.8	11.5	0.32	16.9
	Low		209	6.19	4.07	10.8	10.5	0.26	11.8
010	High	0	453	11.47	7.96	12.4	12.0	0.49	47.3
	Medium		378	10.20	6.94	11.7	11.4	0.44	37.4
	Low		302	9.01	5.82	10.9	10.4	0.38	29.1
012	High	0	523	13.04	9.15	12.4	12.1	0.56	48.1
	Medium		448	11.81	8.13	11.9	11.6	0.50	41.5
	Low		397	11.04	7.39	11.5	11.1	0.47	34.4

**NOTE:** Air Conditions: EDB/EWB 26.7/19.4°C \* Water Conditions: EWT/LWT 7.2/12.8°C ΔT: 5.6°C

\* As per AHRI 440 Standard Cooling Rating 80.0°F (26.7°C) dry bulb, 67.0°F (19.4°C) wet-bulb and entering water temp 45°F (7.2°C).

### 42CGD Cabinet Model (4-Rows) - District Cooling Application

Model 42CGD	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
003	High	0	143	2.28	2.02	12.9	12.4	0.06	7.6
	Medium		137	2.22	1.96	12.8	12.3	0.06	7.3
	Low		116	1.99	1.72	12.3	11.9	0.05	5.8
004	High	0	188	3.12	2.72	12.6	12.1	0.08	14.8
	Medium		163	2.83	2.43	12.2	11.9	0.08	12.4
	Low		133	2.51	2.08	11.6	11.3	0.07	9.6
005	High	0	225	3.89	3.33	12.3	11.9	0.10	27.5
	Medium		183	3.41	2.85	11.7	11.4	0.09	18.4
	Low		144	3.00	2.37	11.0	10.7	0.08	14.4
006	High	0	262	4.07	3.65	13.0	12.5	0.11	6.7
	Medium		203	3.48	3.00	12.4	11.9	0.09	4.9
	Low		156	2.93	2.43	11.7	11.4	0.08	3.5
008	High	0	340	5.92	5.05	12.3	11.8	0.16	23.5
	Medium		279	5.25	4.33	11.7	11.4	0.14	16.6
	Low		209	4.38	3.46	10.9	10.6	0.12	12.0
010	High	0	453	7.91	6.70	12.3	11.8	0.21	21.0
	Medium		378	7.03	5.84	11.8	11.4	0.19	13.7
	Low		302	6.21	4.90	11.1	10.7	0.17	11.0
012	High	0	523	8.36	7.33	13.0	12.3	0.22	14.4
	Medium		448	7.57	6.52	12.5	12.0	0.20	12.0
	Low		397	7.07	5.92	12.2	11.7	0.19	10.4

**NOTE:** Air Conditions: EDB/EWB 24.4/17.2°C

Water Conditions: EWT/LWT 5.5/14.4°C

ΔT: 8.9°C

-- For other design conditions, please apply the selection program to finalize your applications --

## PERFORMANCE RATING (cont')



Turn to the Experts™

### 42DC Furred-in Cabinet Model (4-Rows)

Model 42DC	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
006	High	50	313	6.57	4.69	14.5	13.4	0.28	25.6
	Medium		262	5.85	4.10	13.9	13.0	0.25	20.9
	Low		205	5.05	3.40	13.2	12.2	0.22	15.6
008	High	50	361	7.88	5.62	14.0	13.1	0.34	33.3
	Medium		282	6.76	4.65	13.2	12.4	0.29	25.0
	Low		200	5.39	3.55	12.2	11.4	0.23	16.3
010	High	50	512	9.94	7.39	14.9	13.9	0.42	52.7
	Medium		441	9.03	6.61	14.4	13.6	0.40	44.2
	Low		327	7.54	5.25	13.6	12.7	0.32	31.8
012	High	50	572	12.39	9.14	13.7	13.2	0.53	85.7
	Medium		495	11.28	8.18	13.2	12.8	0.48	72.9
	Low		397	9.88	6.89	12.5	12.1	0.42	58.1
014	High	50	755	14.10	10.68	15.1	14.1	0.60	82.7
	Medium		605	12.23	9.06	14.5	13.7	0.52	63.7
	Low		550	11.51	8.43	14.2	13.4	0.49	57.9
016	High	50	858	17.71	13.21	14.1	13.5	0.76	114.6
	Medium		767	16.51	12.17	13.7	13.2	0.70	100.3
	Low		688	15.36	11.20	13.4	13.0	0.66	88.8
018	High	50	937	19.03	13.77	14.7	13.6	0.81	96.6
	Medium		875	18.23	13.10	14.5	13.5	0.78	89.7
	Low		692	15.65	10.96	13.8	12.9	0.67	68.9
020	High	50	970	20.43	14.47	14.5	13.4	0.87	117.6
	Medium		890	19.32	13.56	14.3	13.2	0.83	105.4
	Low		693	16.55	11.19	13.5	12.5	0.71	80.4

**NOTE:** Air Conditions: EDB/EWB 26.7/19.4°C \* Water Conditions: EWT/LWT 7.2/12.8°C ΔT: 5.6°C  
 \* As per AHRI 440 Standard Cooling Rating 80.0°F (26.7°C) dry bulb, 67.0°F(19.4°C) wet-bulb and entering water temp 45°F (7.2°C).

### 42DCD Furred-in Cabinet Model (4-Rows) – District Cooling Applications

Model 42DCD	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
006	High	50	313	4.89	4.14	13.6	12.5	0.13	26.8
	Medium		262	4.35	3.62	13.1	12.1	0.12	21.5
	Low		205	3.76	3.01	12.4	11.5	0.10	16.0
008	High	50	361	6.68	5.08	12.9	11.5	0.18	55.2
	Medium		282	5.73	4.20	12.2	10.9	0.15	43.9
	Low		200	4.57	3.20	11.3	10.0	0.12	28.0
010	High	50	512	8.02	6.94	13.3	12.4	0.22	53.5
	Medium		441	7.29	6.21	12.9	12.1	0.20	45.6
	Low		327	6.09	4.93	12.1	11.4	0.16	33.4
012	High	50	572	9.50	8.05	12.9	12.1	0.26	47.4
	Medium		495	8.64	7.21	12.5	11.8	0.23	39.1
	Low		396	7.58	6.07	11.9	11.3	0.20	32.2
014	High	50	755	11.20	9.87	13.7	12.7	0.30	41.7
	Medium		605	9.72	8.37	13.1	12.3	0.26	32.8
	Low		550	9.14	7.79	12.8	12.1	0.25	29.2
016	High	50	858	14.26	12.06	12.9	12.1	0.38	55.1
	Medium		767	13.29	11.11	12.6	11.9	0.36	48.6
	Low		687	12.37	10.22	12.3	11.7	0.33	42.7
018	High	50	937	15.15	12.65	13.4	12.3	0.41	62.6
	Medium		875	14.51	12.03	13.2	12.1	0.39	59.1
	Low		692	12.46	10.07	12.5	11.6	0.33	44.6
020	High	50	970	15.76	13.23	13.3	12.2	0.42	55.5
	Medium		890	14.90	12.40	13.0	12.1	0.40	51.6
	Low		693	12.77	10.23	12.3	11.5	0.34	38.8

**NOTE:** Air Conditions: EDB/EWB 24.4/17.2°C Water Conditions: EWT/LWT 5.5/14.4°C ΔT: 8.9°C

- - For other design conditions, please apply the selection program to finalize your applications - -



## PERFORMANCE RATING (cont')



Turn to the Experts™

### 42DE Ceiling Model (4-Rows)

Model 42DE	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
006	High	50	313	5.87	4.68	14.5	14.1	0.25	14.2
	Medium		246	5.03	3.91	13.7	13.6	0.22	10.5
	Low		185	4.27	3.13	12.9	12.7	0.18	7.6
008	High	50	362	7.85	5.91	13.4	13.2	0.33	23.9
	Medium		275	6.62	4.79	12.5	12.4	0.28	17.8
	Low		197	5.28	3.67	11.5	11.5	0.23	11.6
010	High	50	470	9.78	7.40	13.9	13.5	0.42	30.1
	Medium		401	8.81	6.55	13.4	13.1	0.38	24.5
	Low		277	7.12	4.92	12.2	11.9	0.30	17.0
012	High	50	613	12.03	9.30	14.3	13.8	0.51	38.7
	Medium		500	10.56	7.99	13.7	13.4	0.45	30.6
	Low		352	8.64	6.10	12.6	12.3	0.37	21.7
014	High	50	770	15.23	11.71	14.3	13.8	0.65	34.9
	Medium		618	13.23	9.94	13.6	13.3	0.57	27.5
	Low		554	12.32	9.15	13.2	13.0	0.53	24.5
016	High	50	851	17.03	13.04	14.2	13.7	0.73	46.8
	Medium		751	15.75	11.91	13.8	13.4	0.67	40.7
	Low		676	14.69	10.98	13.4	13.2	0.63	36.3
018	High	50	961	19.62	14.84	14.1	13.6	0.84	29.7
	Medium		848	18.16	13.55	13.7	13.3	0.78	25.8
	Low		679	15.72	11.45	12.9	12.7	0.67	20.0
020	High	50	966	20.51	15.35	13.7	13.3	0.88	33.5
	Medium		873	19.19	14.21	13.4	13.1	0.82	30.0
	Low		681	16.49	11.73	12.6	12.4	0.70	22.8

**NOTE:** Air Conditions: EDB/EWB 26.7/19.4°C \* Water Conditions: EWT/LWT 7.2/12.8°C ΔT: 5.6°C  
 \* As per AHRI 440 Standard Cooling Rating 80.0°F (26.7°C) dry bulb, 67.0°F (19.4°C) wet-bulb and entering water temp 45°F (7.2°C).

### 42DED Ceiling Model (4-Rows) – District Cooling Applications

Model 42DED	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
006	High	50	313	4.86	4.36	13.0	12.5	0.13	15.1
	Medium		246	4.16	3.64	12.3	12.0	0.11	11.1
	Low		185	3.53	2.92	11.5	11.3	0.09	8.1
008	High	50	362	6.39	5.45	12.1	11.8	0.17	30.1
	Medium		275	5.39	4.41	11.3	11.1	0.15	22.5
	Low		197	4.30	3.38	10.4	10.3	0.12	14.7
010	High	50	470	7.86	6.81	12.6	12.1	0.21	50.2
	Medium		401	7.08	6.03	12.1	11.8	0.19	41.9
	Low		277	5.72	4.53	11.1	10.7	0.15	28.4
012	High	50	613	9.33	8.36	13.3	12.6	0.25	18.7
	Medium		500	8.18	7.18	12.7	12.2	0.22	15.1
	Low		352	6.69	5.48	11.7	11.3	0.18	10.0
014	High	50	770	11.85	10.56	13.2	12.5	0.32	30.1
	Medium		618	10.29	8.97	12.6	12.1	0.28	23.5
	Low		554	9.58	8.25	12.2	11.9	0.26	20.9
016	High	50	851	13.60	11.93	13.0	12.3	0.37	42.6
	Medium		751	12.58	10.89	12.6	12.1	0.34	36.2
	Low		676	11.73	10.05	12.3	11.9	0.32	32.5
018	High	50	961	14.83	12.88	13.4	12.5	0.40	53.7
	Medium		848	13.72	11.77	13.1	12.3	0.37	46.5
	Low		679	11.87	9.94	12.4	11.8	0.32	36.2
020	High	50	966	15.05	13.42	13.1	12.5	0.40	35.2
	Medium		873	14.09	12.43	12.8	12.3	0.38	31.2
	Low		681	12.10	10.26	12.1	11.7	0.32	23.4

**NOTE:** Air Conditions: EDB/EWB 24.4/17.2°C Water Conditions: EWT/LWT 5.5/14.4°C ΔT: 8.9°C

- - For other design conditions, please apply the selection program to finalize your applications - -

## PERFORMANCE RATING (cont')



Turn to the Experts™

### 42DF Exposed Ceiling Cabinet Model (4-Rows)

Model 42DF	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
006	High	0	248	5.07	3.94	13.8	13.6	0.22	10.6
	Medium		224	4.75	3.64	13.4	13.3	0.20	9.4
	Low		187	4.29	3.16	12.9	12.8	0.18	7.7
008	High	0	317	7.20	5.35	12.9	12.7	0.31	20.9
	Medium		269	6.54	4.70	12.4	12.3	0.28	17.5
	Low		215	5.70	3.95	11.7	11.5	0.24	13.5
010	High	0	402	8.82	6.56	13.4	13.1	0.38	24.6
	Medium		314	7.65	5.41	12.6	12.3	0.33	19.3
	Low		235	6.16	4.29	11.8	11.6	0.26	13.3
012	High	0	505	10.62	8.04	13.7	13.4	0.45	31.3
	Medium		430	9.62	7.11	13.2	12.9	0.41	25.8
	Low		381	9.00	6.47	12.8	12.5	0.38	23.3
014	High	0	578	12.67	9.45	13.4	13.1	0.54	25.7
	Medium		491	11.47	8.33	12.8	12.6	0.49	21.0
	Low		432	10.70	7.54	12.4	12.2	0.46	18.9
016	High	0	662	14.49	10.81	13.4	13.1	0.62	35.0
	Medium		530	12.70	9.09	12.7	12.4	0.54	28.3
	Low		452	11.66	8.05	12.4	11.8	0.50	23.9
018	High	0	801	17.48	12.97	13.5	13.1	0.75	24.2
	Medium		681	15.74	11.47	12.9	12.7	0.67	20.2
	Low		538	13.83	9.54	12.2	11.8	0.59	16.0
020	High	0	901	19.59	14.56	13.5	13.2	0.84	30.8
	Medium		761	17.58	12.82	13.0	12.7	0.75	25.6
	Low		596	15.36	10.59	12.2	11.8	0.66	20.1

**NOTE:** Air Conditions: EDB/EWB 26.7/19.4°C \* Water Conditions: EWT/LWT 7.2/12.8°C ΔT: 5.6°C  
 \* As per AHRI 440 Standard Cooling Rating 80.0°F (26.7°C) dry bulb, 67.0°F(19.4°C) wet-bulb and entering water temp 45°F (7.2°C).

### 42DFD Exposed Ceiling Cabinet Model (4-Rows) – District Cooling Applications

Model 42DFD	Speed	ESP Pa	Air Flow (ℓ/s)	Capacity (kW)		Air off FCU (°C)		Water Flow (ℓ/s)	Water Pressure (kPa)
				Total	Sensible	DB	WB		
006	High	0	248	4.19	3.65	12.4	12.3	0.11	11.2
	Medium		224	3.93	3.38	12.1	11.8	0.11	9.9
	Low		187	3.55	2.93	11.6	11.3	0.10	8.2
008	High	0	317	5.86	4.90	11.8	11.5	0.16	26.1
	Medium		269	5.32	4.30	11.3	11.0	0.14	22.0
	Low		215	4.64	3.62	10.7	10.4	0.12	17.2
010	High	0	402	7.09	6.01	12.2	11.8	0.19	41.9
	Medium		314	6.15	4.96	11.5	11.1	0.17	32.4
	Low		235	4.95	3.93	10.8	10.6	0.13	22.0
012	High	0	505	8.23	7.19	12.8	12.2	0.22	15.2
	Medium		430	7.45	6.36	12.3	11.9	0.20	12.4
	Low		381	6.97	5.78	12.0	11.5	0.19	10.9
014	High	0	578	9.86	8.48	12.4	12.0	0.26	21.7
	Medium		491	8.92	7.47	12.0	11.6	0.24	18.3
	Low		432	8.32	6.77	11.6	11.2	0.22	16.6
016	High	0	662	11.57	9.84	12.3	11.8	0.31	31.4
	Medium		530	10.14	8.28	11.6	11.2	0.27	25.2
	Low		452	9.31	7.33	11.2	10.7	0.25	21.8
018	High	0	801	13.21	11.20	13.0	12.2	0.36	43.5
	Medium		681	11.89	9.91	12.5	11.8	0.32	36.3
	Low		538	10.45	8.24	11.9	11.2	0.28	28.6
020	High	0	901	14.38	12.66	12.9	12.3	0.39	31.7
	Medium		761	12.90	11.15	12.4	12.0	0.35	26.4
	Low		596	11.27	9.21	11.8	11.3	0.30	20.3

**NOTE:** Air Conditions: EDB/EWB 24.4/17.2°C Water Conditions: EWT/LWT 5.5/14.4°C ΔT: 8.9°C

- - For other design conditions, please apply the selection program to finalize your applications - -

# ELECTRICAL DATA (cont')



## 42C MOTOR DATA

Model	Unit Size	Power Supply (V-Ph-Hz)	Fan Speed	Fan Speed (rpm)	Nominal Power Output (W)	Power Input (W)	Running Amps	Remarks
42CET 42CED	003	220/240-1-50	Hi	1,320	32	61	0.27	* Total motor amps and watts shown for units with 2 motors (size 008 to 010). ** Total motor amps and watts shown for units with 3 motors (size 014).
			Med	1,190		49	0.23	
			Low	1,080		40	0.19	
	004		Hi	1,320	45	82	0.36	
			Med	1,190		70	0.32	
			Low	1,080		61	0.29	
	005		Hi	1,320	70	97	0.42	
			Med	1,190		82	0.37	
			Low	1,080		72	0.33	
	006		Hi	1,320	72	114	0.50	
			Med	1,190		93	0.42	
			Low	1,080		84	0.38	
	008 *		Hi	1,320	55 (x2)	163	0.71	
			Med	1,190		135	0.61	
			Low	1,080		114	0.53	
	010 *		Hi	1,320	70 (x2)	189	0.83	
Med		1,190	154	0.68				
Low		1,080	129	0.46				
012 *	Hi	1,320	72 (x2)	261	1.20			
	Med	1,190		219	0.96			
	Low	1,080		190	0.84			
014 **	Hi	1,320	70 (x3)	297	1.32			
	Med	1,190		262	1.14			
	Low	1,080		235	1.04			
42CGT 42CGD	003	220~240-1-50	Hi	1,320	35	72	0.32	* Total motor amps and watts shown for units with 2 motors (size 008 to 010). ** Total motor amps and watts shown for units with 3 motors (size 012).
			Med	1,190		50	0.26	
			Low	1,080		36	0.20	
	004		Hi	1,320	48	81	0.36	
			Med	1,190		73	0.34	
			Low	1,080		64	0.30	
	005		Hi	1,320	68	92	0.41	
			Med	1,190		81	0.37	
			Low	1,080		77	0.35	
	006		Hi	1,320	75	114	0.51	
			Med	1,190		95	0.45	
			Low	1,080		90	0.43	
	008 *		Hi	1,320	58 (x2)	160	0.71	
			Med	1,190		136	0.61	
			Low	1,080		113	0.53	
	010 *		Hi	1,320	75 (x2)	239	1.05	
Med		1,190	208	0.94				
Low		1,080	191	0.88				
012 **	Hi	1,320	78 (x3)	333	1.57			
	Med	1,190		248	1.09			
	Low	1,080		228	0.99			

Note: Motor nameplate amps may vary.

# ELECTRICAL DATA (cont')



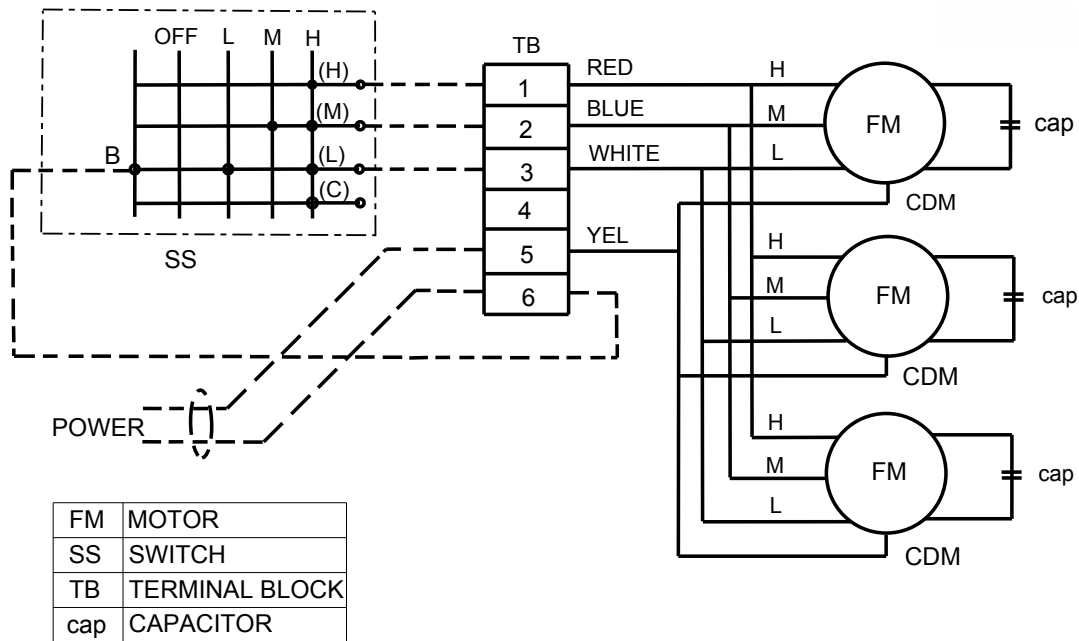
## 42D MOTOR DATA

Model	Unit Size	Power Supply (V / Ph / Hz)	Fan Speed	Fan Speed (rpm)	Nominal Power Output (W)	Power Input (W)	Running Amps	Remarks
42DC/DCD 42DE/DED	006	220~240/1/50	Hi	1,000	120	228	1.13	* Total motor amps and watts shown for units with 2 motors (size 012).
			Med	870		142	0.68	
			Low	750		106	0.52	
	008		Hi	1,000	120	247	1.21	
			Med	870		157	0.75	
			Low	750		115	0.57	
	010		Hi	1,000	200	446	2.02	
			Med	870		363	1.65	
			Low	750		248	1.14	
	012 *		Hi	1,000	120 (x2)	448	2.27	
			Med	870		278	1.33	
			Low	750		214	1.04	
	014		Hi	1,000	300	639	2.96	
			Med	870		467	2.14	
			Low	750		410	1.88	
	016		Hi	1,000	450	724	3.29	
			Med	870		610	2.77	
			Low	750		517	2.36	
018	Hi	1,000	450	806	3.68			
	Med	870		721	3.29			
	Low	750		517	2.35			
020	Hi	1,000	450	810	3.69			
	Med	870		720	3.27			
	Low	750		520	2.36			
42DF/DFD	006	220~240/1/50	Hi	1,000	80	162	0.77	* Total motor amps and watts shown for units with 2 motors (size 012 to 020).
			Med	870		123	0.57	
			Low	750		91	0.42	
	008		Hi	1,000	80	168	0.78	
			Med	870		121	0.56	
			Low	750		90	0.42	
	010		Hi	865	120	250	1.22	
			Med	750		172	0.84	
			Low	640		127	0.65	
	012 *		Hi	865	80 (x2)	313	1.43	
			Med	750		230	1.04	
			Low	640		178	0.82	
	014 *		Hi	865	80 (x2)	312	1.43	
			Med	750		231	1.05	
			Low	640		177	0.82	
	016 *		Hi	865	120 (x2)	380	1.82	
			Med	750		326	1.60	
			Low	640		214	1.13	
018 *	Hi	865	120 (x2)	475	2.38			
	Med	750		326	1.63			
	Low	640		214	1.12			
020 *	Hi	865	200 (x2)	912	4.30			
	Med	750		461	2.26			
	Low	640		288	1.44			

Note: Motor nameplate amps may vary.

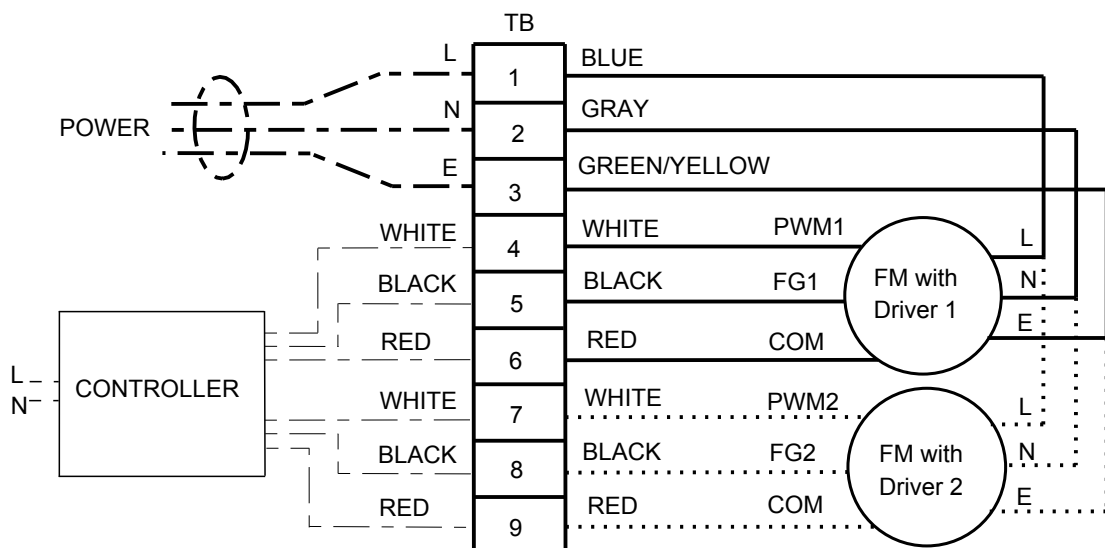
# WIRING DIAGRAM

## 42CET/CED & CGT/CGD Series Wiring Diagram (AC Motor)



- NOTE:
1. Caution – Disconnect power before servicing.
  2. Use 14 AWG, 75°C MIN, copper conductor.
  3. Motor(s) thermally protected.
  4. Provide disconnect means and over current protection as required.
  5. 42CET/CGT 003 to 006 are single motor; 42CET008 to 012 are double motors & 014 is three fan motors. Whereas 42CGT008 to 010 are double motor & 012 is three fan motors.
  6. Snap apart carefully at hinge to separate cover from the control box.

## 42CET/CED Series Wiring Diagram (EC Motor)



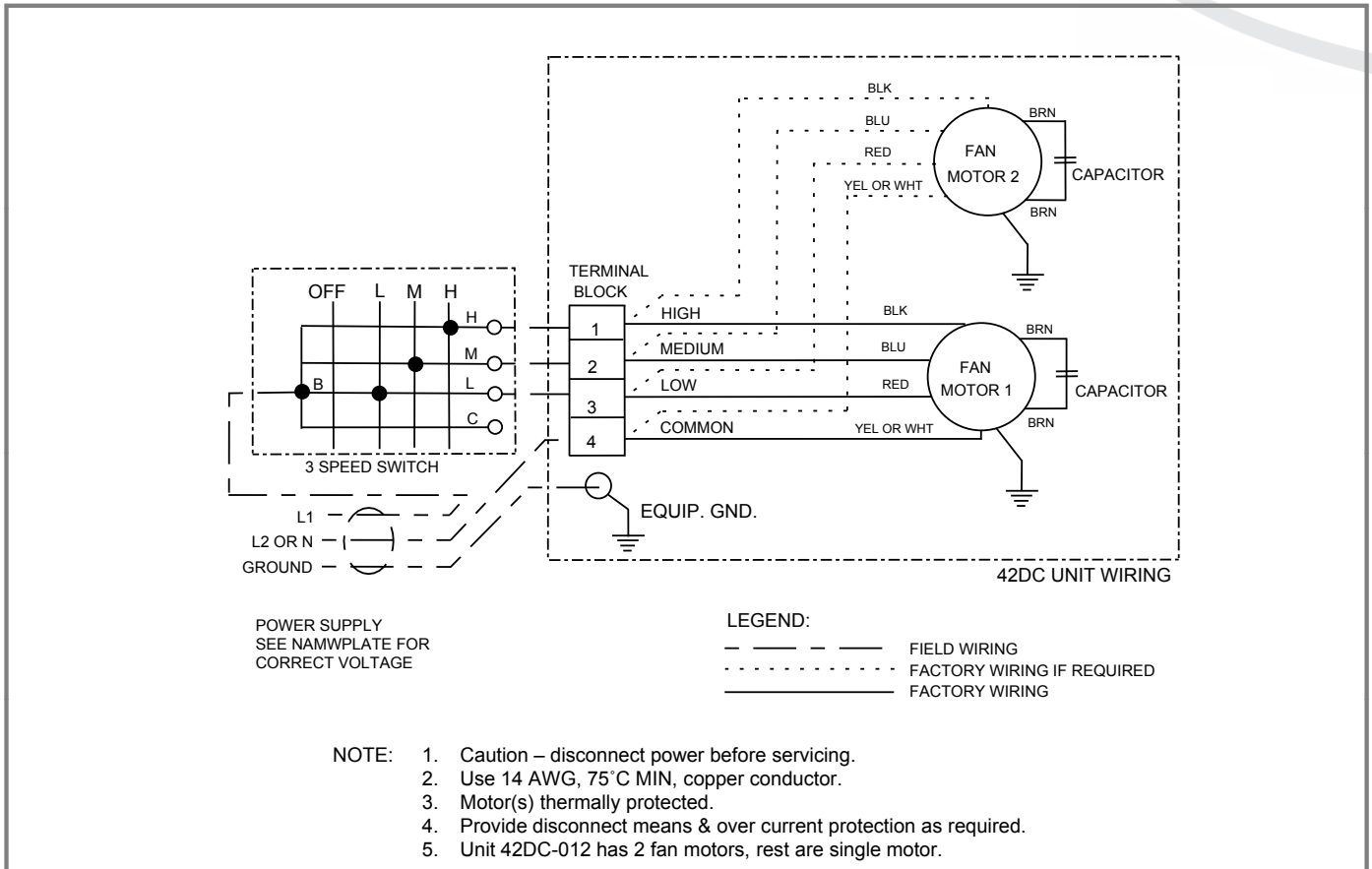
- LEGEND:
- FIELD WIRING
  - ..... FACTORY WIRING IF REQUIRED
  - FACTORY WIRING

FM	MOTOR
TB	TERMINAL BLOCK

- NOTE:
1. Caution – Disconnect power before servicing.
  2. 42CET/CED 002~006 – single motor; 008~012 – double motors.
  3. Single motor use 6 pole terminal block, double motors use 9 pole terminal block.
  6. Snap apart carefully at hinge to separate cover from the control box.

# WIRING DIAGRAM

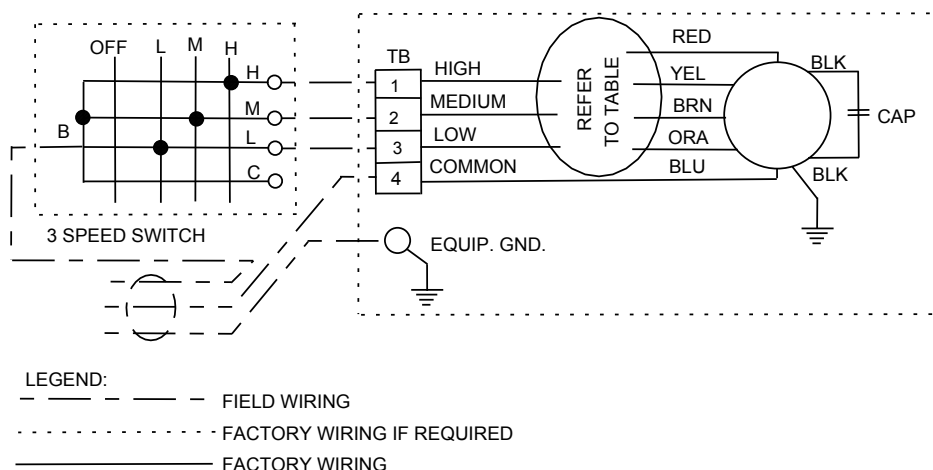
## 42DC/DCD/DE/DED 006~012 and 42DF/DFD Wiring Diagram (AC Motor)



## 42DC/DCD & 42DE/DED 014~020 Wiring Diagram (AC Motor)

MODEL	FAN MOTOR SPEED USED / COLOR			
	HI	MED	LOW	UNUSED
42DC/DCD014 & 42DE/DED014	RED	BROWN	ORANGE	YELLOW
42DC/DCD016 & 42DE/DED016	YELLOW	BROWN	ORANGE	RED
42DC/DCD018 & 42DE/DED018	RED	YELLOW	ORANGE	BROWN
42DC/DCD020 & 42DE/DED020	RED	YELLOW	ORANGE	BROWN

- NOTE: 1. Caution – disconnect power before servicing.  
 2. Use 14 AWG, 75°C MIN, copper conductor.  
 3. Motor(s) thermally protected.  
 4. Provide disconnect means & over current protection as required.

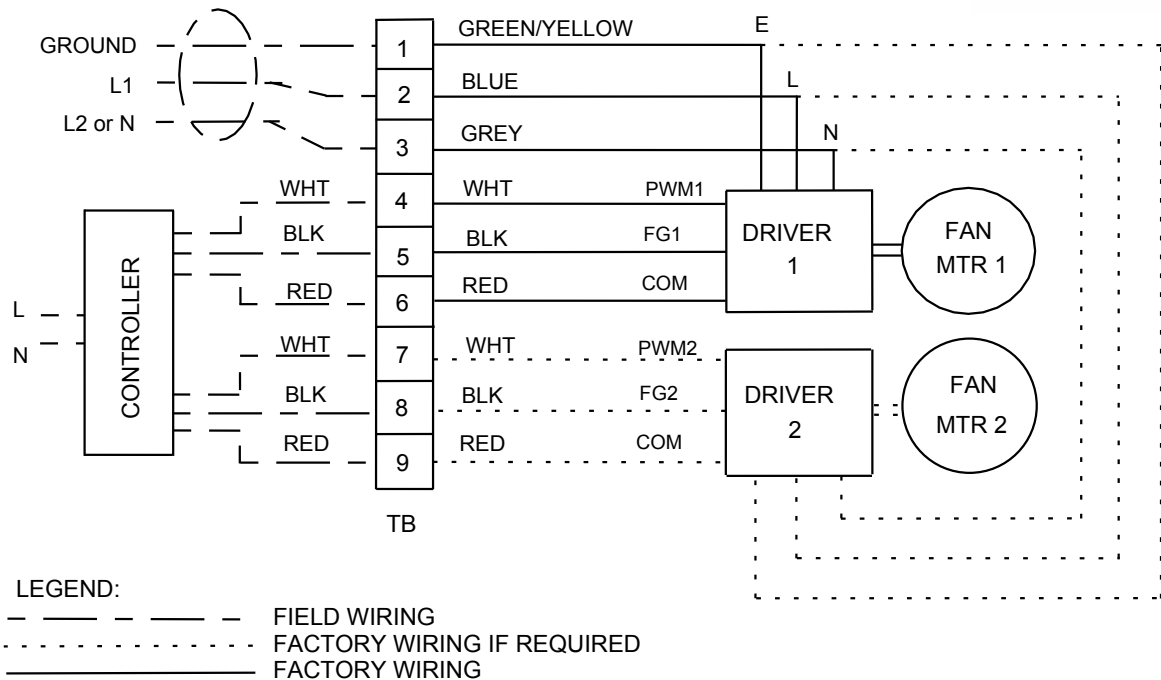


# WIRING DIAGRAM



Turn to the Experts.™

## 42DC/DCD006~020 Wiring Diagram (EC Motor)



- NOTE:**
1. Caution – disconnect power before servicing, wait for at least 20 sec to allow current completely drain off from driver.
  2. Use 14 AWG, 75°C MIN, copper conductor.
  3. Motor(s) thermally protected.
  4. Provide disconnect means & over-current protection as required.
  5. All models use 6 pole terminal block except 42DC-012 with 2 fan motors uses 9 pole terminal block.
  6. Use cable wire "UL2464" specification to ensure transmission reliability for motor to FCU controller.

## HVAC Guide Specifications

Size range: 300 to 2000 Nominal Cfm

### Part 1 – GENERAL

#### 1.1 System Description

Horizontal, room fan coil unit with furred-in, above ceiling for ducting, or with cabinet for exposed ceiling installations.

#### 1.2 Quality Assurance

Unit shall be tested in accordance with ARI Standard 440. Each coil shall be factory tested for leakage at 400 psig air pressure with coil submerged in water. Factory is ISO-9001 certified.

#### 1.3 Delivery storage and handling

Each unit shall be individually packaged from point of manufacture. Unit shall be handled and stored in accordance with the manufacturer's instructions.

### Part 2 - PRODUCTS

#### Equipment

##### 2.1 General

Factory assembled, horizontal, blow-thru type fan coil for furred-in, exposed ceiling or ducted installations. Unit shall be complete with water coil(s), fan(s), motor(s), drain pan, filters and all required wiring, collars for ducted units. Unit insulation are UL94 compliance, whereas drain pan insulation are UL94 & NFPA-90A compliance.

##### 2.2 42CET, CED Furred-in Units

Base 42CET, CED unit with factory installed plenum section and cleanable filter as shown on equipment drawings. The plenum shall be rear air return. Shall enclose the fan/motor assemblies, and shall be lined with 10mm thick PU insulation 20kg/m<sup>3</sup> density and 6.0mm PE insulation 28.6kg/m<sup>3</sup> density on the drain pan. Unit shall have a removable panel to provide access to fan/motor assemblies and unit identification label.

##### 2.3 42CGT/CGD Decorative Ceiling Fan Coil Unit

Unit with stamped discharge grille, removable bottom access panel with stamped return air grille, filter track and filter. The panel shall be fastened with slotted head, positive-locking quarter-turn fasteners.

Units have 12.7mm PU insulation on chassis and 10mm PU insulation on coil top panel with 20kg/m<sup>3</sup>, and 6.0mm PE insulation 28.6kg/m<sup>3</sup> density on the drain pan.

##### 2.4 42DC/DCD Horizontal Base Unit with Plenum for Concealed Installation

Unit have a factory installed, galvanized steel plenum section and one-in permanent filter. The plenum shall be rear return, lined with 12.7mm PU insulation 20kg/m<sup>3</sup> density and plenum box and 6.0mm PE insulation 28.6kg/m<sup>3</sup> density on the drain pan, and include a removable panel to provide access to the fan/motor assembly.

##### 2.5 42DE/DED Horizontal Painted Cabinet unit for concealed installation

Unit shall be constructed of galvanized steel with removable panels for access to internal components. Units have 12.7mm PU insulation 20kg/m<sup>3</sup> density on chassis and plenum box and 6.0mm PE insulation 28.6kg/m<sup>3</sup> density on the drain pan. Filter track with one-in permanent filter, one-in supply collar and 64mm return air collar on rear of unit for duct connection.

##### 2.6 42DF/DFD Horizontal Cabinet Unit for Exposed Installation

Unit shall be constructed of steel with morning mist recoatable baked enamel finish. Cabinet shall be lined with 12.7mm PU insulation 20kg/m<sup>3</sup> density on chassis and plenum box and 6.0mm PE insulation 28.6kg/m<sup>3</sup> density on the drain pan and have removable bottom access panel. Unit shall include hinged bar type return air grille on rear of unit with one-in permanent filter and integral double deflection supply grille.

##### 2.7 Fan

Direct driven, double width fan wheels with forward curved blades shall be statically and dynamically balanced. Scrolls shall be constructed of galvanized steel. Fan wheels shall be constructed of galvanized steel.

##### 2.8 Coils

Galvanized drain pan covers entire length & width of coil till the headers. Drain pan inside powder coated and outside insulated.

##### 42CET/CED & DC/DCD models

Standard base unit shall be equipped with a 3-row or 4-row coil for installation in a 2-pipe system. Coils shall have 7mm copper tubes, aluminium fins bonded to the tubes by mechanical expansion. Each coil shall have a manual air vent and threaded or sweat connections field piping (refer to Technical Data). Working pressure 1.72 MPa, 0.105mm fin thickness and 0.24mm tube wall thickness.

##### 42CGT/CGD, DE/DED & DF/DFD models

Standard base unit shall be equipped with 4-row coil for installation in a 2-pipe system. Coils shall have 9.5mm copper tubes, aluminium fins bonded to the tubes by mechanical expansion. Each coil shall have a manual air vent and threaded or sweat connections field piping (refer to Technical Data). Working pressure 1.72 MPa, 0.105mm fin thickness and 0.28mm tube wall thickness.

##### 2.9 Operating Characteristics

A one coil unit installed in a 2-pipe system shall be capable of providing cooling as determined by the operating mode of the central water supply system.





### 3.0 Electrical Requirements

Standard unit shall operate on 220/240v, single phase, 50Hz electric power. All internal wiring shall be in flexible conduit.

### 3.1 Motor(s)

Fan motors shall be 3-speed, 220/240v, single phase, 50Hz, permanent split capacitor type, with ball type bearings and oversized oil reservoirs to ensure lubrication.

The fan motor(s) shall be equipped with integral automatic temperature reset for motor protection.

Model	Unit Size	Motor Insulation Class	End Closure Type
42C series	All	B	Open Drip Proof
42DC/DCD	006~012	E	Open
	014~020	F	
42DE/DED	006~012	E	
	014~020	F	
42DF/DFD	All	E	

\* EC Motor is available as option (42GET/CED & 42DC/DCD), refer to factory for EC motor data.



LT101 Controller

### 3.2 Filter

Permanently washable aluminium filters with 21mm thick and 70% gravimetric efficiency as per European Union EN779 class.

Arrestance or Dust Spot Efficiency	US Ashrae 52.2	European Union EN779 Class	
AFI 65% - 70%	MERV 2	G2	65%≤Am≤85%

\* Refer to factory for synthetic fibre filter option.



turn to the experts<sup>SM</sup>



**Carrier International Sdn Bhd, Malaysia**

Manufacturer reserves the right to discontinue, or change at anytime, specifications or designs without notice and without incurring obligations.

42CD-E13-7PD