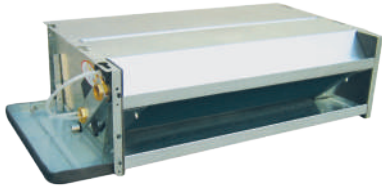


EC Motor Fan Coil Unit

NOBUS  **CLIMATE**

Features

1 Unique Design Overview



Ceiling Concealed



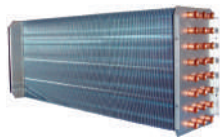
Ceiling Exposed



Vertical Exposed

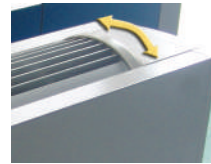
► High energy efficiency with seamless copper tube mechanically expanded to aluminum fins.

► Stylish and elegant design for high quality individual application.

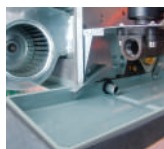


► High reliability and fire resistance by galvanized steel fan blade and shell.

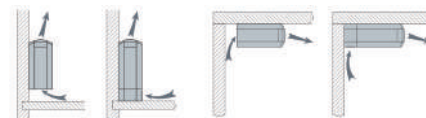
► More comfortable with wide air diffusion thanks to rotary air outlet grill max. reaches 75°.



► V shape drain pan design guarantees the highest drainage efficiency.

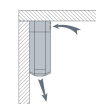


► All-in-one design guarantees great flexibility of installation both in ceiling suspended and vertical placed.



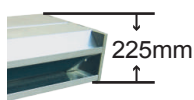
Cooling/Heating

Cooling/Heating

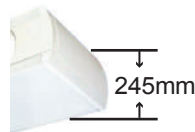


Heating

► Space saving:



Concealed Type



Exposed Type



Features

2 More Energy-saving & Pay Back Time Analysis

► Model selection :

Based on model FC06 with 600 CFM air flow, 30 Pa, EC motor vs AC motor.

► Fan speed is in accordance with the setting condition :

- EC FCU, Power Inupt (W): 13W(L) → 52W(H)
- AC FCU, Power Inupt (W): 70W(L) → 112W(H)

► Energy saving percentage calculation :

Low speed running: $(70 - 13) \div 70 \times 100\% = 81.4\%$
 High speed running: $(112 - 52) \div 112 \times 100\% = 53.6\%$

Conclusion: EC FCU is more energy saving with 53.6% - 81.4%.

► Investment pay back time analysis:

- In normal condition, room temp. will reach the setting temp. after FCU running in 1 hour, then the FCU will run at low speed.
- Compared between EC FCU and AC FCU, the EC FCU can save 57W while running at low speed and can save 60W while running at high speed. We only assume that EC FCU can save 57W constantly compared with AC FCU.
- Price gap: EC FCU model FC06 is with 18 USD more than AC FCU.
- Electricity price: On average 0.23 USD per kW•h.
- CO₂ emission: 1 kW•h will cause 0.625 kg CO₂ emission.

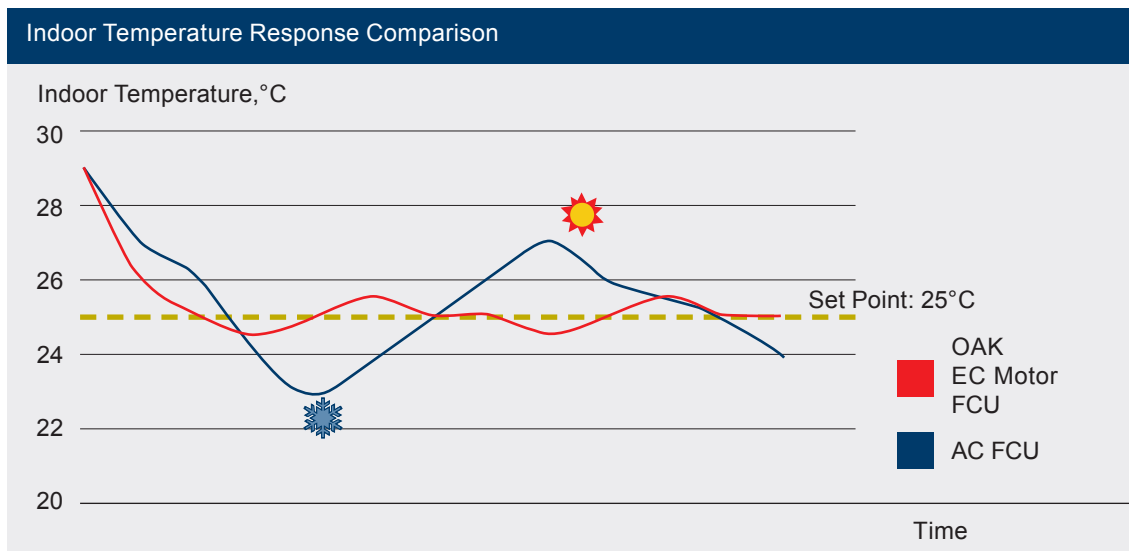
Project Type	Fan Coil Unit Running Time	Electricity Saving kW•h	CO ₂ Emission Reduction kg	Running Cost Saving Yearly USD	Pay Back Time
Office Building	12Hr/D, 260 Ds/Y	$0.057 \times 12 \times 260 \approx 178$	$178 \times 0.625 = 111$	$178 \times 0.23 = 40.94$	5.5 Months
Shopping Mall	12Hr/D, 365 Ds/Y	$0.057 \times 12 \times 365 \approx 250$	$250 \times 0.625 = 156$	$250 \times 0.23 = 57.50$	4 Months
Hotel	18Hr/D, 365 Ds/Y	$0.057 \times 18 \times 365 \approx 375$	$375 \times 0.625 = 234$	$375 \times 0.23 = 86.25$	2.5 Months
Hospital	24Hr/D, 365 Ds/Y	$0.057 \times 24 \times 365 \approx 500$	$500 \times 0.625 = 312$	$500 \times 0.23 = 115.00$	2 Months



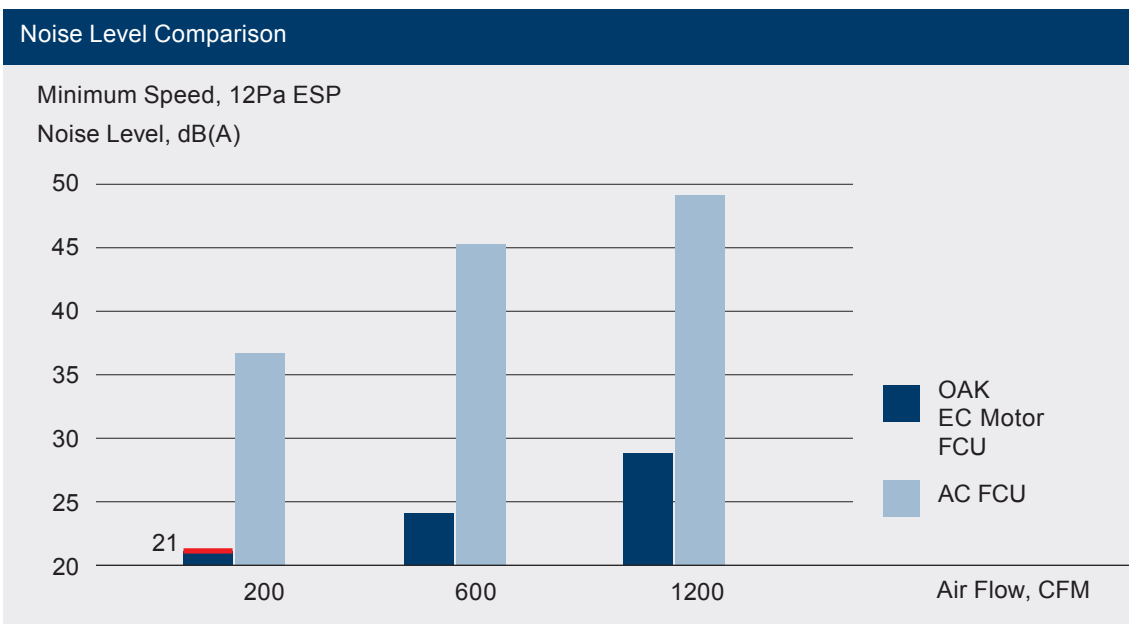
Features

3 More comfortable

- ▶ The EC motor fan coil unit adopts electronic commutation motor to replace the carbon brush motor to avoid electromagnetic interference and electromagnetic noise generated by the mechanical commutation. Its quiet operation and stepless speed adjustment help create a comfortable indoor environment with a swift indoor temperature response and comfortable air flow.
- ▶ The traditional AC fan coil unit has a plus or minus 2°C indoor temperature deviation is, and three speed step, easily to cause sudden hot or cold.
- ▶ The EC motor fan coil unit achieves a plus or minus 0.5°C indoor temperature accuracy via motor stepless speed regulation fan to realize to create a more comfortable environment.



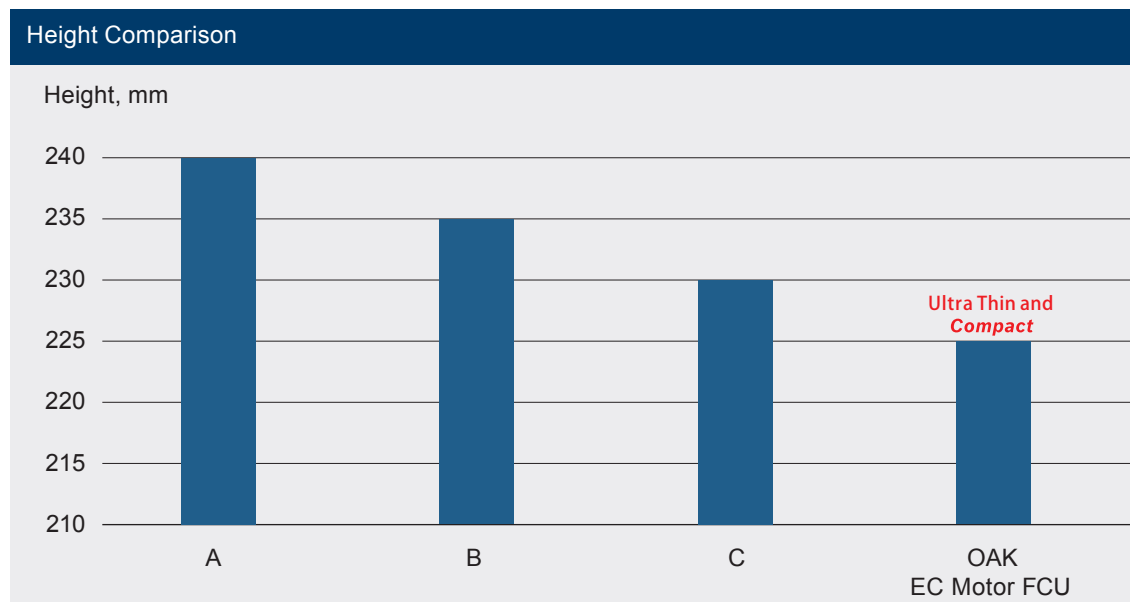
- ▶ The EC motor fan coil unit features stable running and slight vibration, greatly reducing vibration and noise caused by on/off and fan speed switch.
 - ▶ The EC motor fan coil unit can realize minimum RPM running via stepless speed regulation.
 - ▶ The EC motor fan coil unit has a large diameter galvanized fan and a low noise fan motor.
- Every product is strictly tested for dynamic balancing before delivery, in order to ensure minimum noise level upon a satisfied air flow and external pressure basis.



Features

4 More Compact

- ▶ The EC motor fan coil unit features aesthetical outline and compact dimensions. The fuselage height is only 225 mm, ultra-thin design makes the unit can be installed within the fairly narrow ceiling top.
- ▶ The EC motor fan coil unit enjoys the most compact size, compared with world class competitors.



5 More Reliable

- ▶ High quality and long life electronic commutation module is used to reduce traditional AC motor components wearing out during operation.
- ▶ The EC motor is equipped with high precision high quality permanent lubricated closed ball bearing, which is of low noise and long service life.
- ▶ The motor shaft is processed with conditioning chrome plating treatment, durable and reliable.
- ▶ Highly efficient heat exchanger is made of high quality thin purple pole, with efficient louver hydrophilic aluminium fin. Precision machinery tube expansion ensures a high thermal efficiency.
- ▶ The strengthened air supply of the large diameter impeller fan makes the maximum heat transfer efficiency of the unit.
- ▶ The safe and leak proof drainpan is made from whole stamping molding. No welding or solder joint. Overall paste type flame retardant insulation material covers the drainpan, eliminating water leakage. Specially designed drainpan has a certain slope, ensuring a quick condensation discharge.



Features



6 Intelligent Control

- ▶ Microcomputer control system is used to realize a wide range stepless speed regulation. Users can select mode between multi-step speed or stepless speed. The EC motor fan coil unit can be running stably under a wide voltage range .
- ▶ Motor and power supply have multiple protection functions such as sudden abnormal working current protection, abnormal load protection, and low consumption locked-rotor protection, etc.
- ▶ Users can select running modes among heating, cooling and ventilation, modify fan speed and set temperature points via clicking buttons on the thermostat. Unit's working status and settings can be reviewed on LCD.
- ▶ According to the comparison results of environmental temperature and set temperature, the thermostat automatically controls the EC motor and electric valve to achieve the purpose of regulating temperature.
- ▶ Customer can either use the optional thermostat or use their own thermostats, the EC motor fan coil unit is compatible with any standard thermostat.



Specifications

2 Pipe System 2 Rows

Specification	Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14	
Air Flow	Max.	CFM	235	347	441	541	635	876	1029	1212	1441
		m3/h	400	590	750	920	1080	1490	1750	2060	2450
	Min.	CFM	118	176	218	271	318	441	512	606	724
		m3/h	200	300	370	460	540	750	870	1030	1230
Total Cooling Capacity kW	Max.	1.97	2.67	3.45	4.23	5.02	7.12	8.46	9.83	11.11	
	Min.	1.45	1.99	2.57	3.17	3.76	5.35	6.36	7.39	8.36	
Sensible Cooling Capacity kW	Max.	1.39	1.84	2.41	2.97	3.59	5.00	6.75	6.94	7.96	
	Min.	0.94	1.19	1.56	2.05	2.49	3.30	44.77	4.65	5.42	
Heating Capacity kW	Max.	2.91	3.71	5.18	6.35	7.54	10.70	12.73	14.75	16.72	
	Min.	2.18	2.80	3.88	4.76	5.64	8.06	9.57	11.08	12.58	
Power Input W	12 Pa	8-17	9-20	10-36	11-44	12-56	20-78	23-88	26-114	28-139	
	30 Pa	10-26	11-34	12-42	13-51	15-63	25-91	26-101	28-140	30-166	
	50 Pa	12-29	13-38	14-49	15-56	17-80	26-101	28-125	30-173	32-208	
Max Current	A	0.13	0.17	0.22	0.25	0.36	0.46	0.57	0.79	0.95	
Static Pressure	Pa	12Pa/30Pa/50Pa									
Noise Level dB(A)	12 Pa	21-35	22-37	20-39	22-41	24-43	28-44	28-46	29-48	30-50	
	30 Pa	22-38	23-40	21-42	23-44	25-45	29-46	29-48	30-50	31-52	
	50 Pa	23-40	24-42	22-44	24-45	26-47	30-48	30-50	31-52	32-54	
Water Flow	kg/h	350	470	600	740	870	1230	1460	1700	1910	
	l/s	0.097	0.131	0.167	0.206	0.242	0.342	0.406	0.472	0.531	
Water Resistance	kPa	10	18	19	23	24	23	36	21	35	
Fan Type		Forward curve centrifugal fan									
Motor	Type	EC Motor									
	Protection Class	IP42									
	Power Supply	220~230V/1Ph/50 or 60Hz									
Coil	Type	Seamless copper mechanically expanded into aluminum fins									
	Rows	2									
	Max. Working Pressure	1.6 MPa									
Inlet/Outlet Water Pipe		3/4" FPT									
Condensate Water Pipe		Φ20									
Unit Dimension W*D*H (mm)	Ceiling Concealed	645*450*225	795*450*225	875*450*225	945*450*225	1095*450*225	1395*450*225	1545*450*225	1695*450*225	1995*450*225	
	Ceiling Exposed	850*505*245	1000*505*245	1080*505*245	1150*505*245	1300*505*245	1600*505*245	1750*505*245	1900*505*245	2200*505*245	
	Vertical Exposed	850*245*639	1000*245*639	1080*245*639	1150*245*639	1300*245*639	1600*245*639	1750*245*639	1900*245*639	2200*245*639	
Packing Dimension W*D*H (mm)	Ceiling Concealed	665*470*235	815*470*235	895*470*235	965*470*235	1115*470*235	1415*470*235	1565*470*235	1710*470*235	2015*470*235	
	Ceiling Exposed	870*520*260	1020*520*260	1100*520*260	1170*520*260	1320*520*260	1620*520*260	1770*520*260	1920*520*260	2220*520*260	
	Vertical Exposed	870*260*660	1020*260*660	1100*260*660	1170*260*660	1320*260*660	1620*260*660	1770*260*660	1920*260*660	2220*260*660	
Unit Weight kg	Ceiling Concealed	14	18	19	20	22	34	36	38	39	
	Ceiling Exposed	23	28	29	30	34	48	51	53	55	
	Vertical Exposed	24	29	30	31	35	49	52	54	56	
Gross Weight kg	Ceiling Concealed	15	19	20	21	23	35	37	39	40	
	Ceiling Exposed	24	29	30	31	35	49	52	54	56	
	Vertical Exposed	25	30	31	32	36	50	53	55	57	

Note:

- Nominal Testing condition:
Cooling: entering air temp 27°C DB/19.5°C WB; entering water temp 7°C, leaving water temp 12°C;
Heating: entering air temp 21°C; entering water temp 60°C, the same water flow as in cooling;
- Sound pressure level are measured in acoustic room, position of the measure point is 1m in the front and 1m below the vertical center line of the unit;
- Static pressure is measured without filter and air outlet.

Specifications

2 Pipe System 3 Rows

Specification	Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14	
Air Flow	Max.	CFM	235	347	441	541	635	876	1029	1212	1441
		m3/h	400	590	750	920	1080	1490	1750	2060	2450
	Min.	CFM	118	176	218	271	318	441	512	606	724
		m3/h	200	300	370	460	540	750	870	1030	1230
Total Cooling Capacity kW	Max.	2.09	3.06	3.89	4.74	5.73	7.79	9.35	11.10	13.08	
	Min.	1.55	2.29	2.91	3.56	4.28	5.85	0.71	8.35	9.83	
Sensible Cooling Capacity kW	Max.	1.47	2.11	2.72	3.33	4.10	5.47	7.46	7.84	9.37	
	Min.	1.00	1.37	1.77	2.30	2.83	3.61	5.00	5.25	6.37	
Heating Capacity kW	Max.	3.13	4.25	5.84	7.12	8.58	11.69	14.03	16.64	19.63	
	Min.	1.91	2.55	3.50	4.34	5.15	7.13	8.56	9.98	11.78	
Power Input W	12 Pa	8-17	9-20	10-36	11-44	12-56	20-78	23-88	26-114	28-139	
	30 Pa	10-26	11-34	12-42	13-51	15-63	25-91	26-101	28-140	30-166	
	50 Pa	12-29	13-38	14-49	15-56	17-80	26-101	28-125	30-173	32-208	
Max Current	A	0.13	0.17	0.22	0.25	0.36	0.46	0.57	0.79	0.95	
Static Pressure	Pa	12Pa/30Pa/50Pa									
Noise Level dB(A)	12 Pa	21-36	22-38	20-40	22-42	24-43	28-45	28-47	29-49	30-51	
	30 Pa	22-39	23-41	21-43	23-45	25-45	29-47	29-49	30-51	31-53	
	50 Pa	23-41	24-43	22-45	24-46	26-47	30-49	30-51	31-53	32-55	
Water Flow	kg/h	370	540	680	830	870	1350	1610	1920	2250	
	l/s	0.103	0.150	0.189	0.231	0.242	0.375	0.447	0.533	0.625	
Water Resistance	kPa	10	18	19	23	24	23	36	21	35	
Fan Type		Forward curve centrifugal fan									
Motor	Type	EC Motor									
	Protection Class	IP42									
	Power Supply	220~230V/1Ph/50 or 60Hz									
Coil	Type	Seamless copper mechanically expanded into aluminum fins									
	Rows	3									
	Max. Working Pressure	1.6 MPa									
Inlet/Outlet Water Pipe		3/4" FPT									
Condensate Water Pipe		Φ20									
Unit Dimension W*D*H (mm)	Ceiling Concealed	645*450*225	795*450*225	875*450*225	945*450*225	1095*450*225	1395*450*225	1545*450*225	1695*450*225	1995*450*225	
	Ceiling Exposed	850*505*245	1000*505*245	1080*505*245	1150*505*245	1300*505*245	1600*505*245	1750*505*245	1900*505*245	2200*505*245	
	Vertical Exposed	850*245*639	1000*245*639	1080*245*639	1150*245*639	1300*245*639	1600*245*639	1750*245*639	1900*245*639	2200*245*639	
Packing Dimension W*D*H (mm)	Ceiling Concealed	665*470*235	815*470*235	895*470*235	965*470*235	1115*470*235	1415*470*235	1565*470*235	1710*470*235	2015*470*235	
	Ceiling Exposed	870*520*260	1020*520*260	1100*520*260	1170*520*260	1320*520*260	1620*520*260	1770*520*260	1920*520*260	2220*520*260	
	Vertical Exposed	870*260*660	1020*260*660	1100*260*660	1170*260*660	1320*260*660	1620*260*660	1770*260*660	1920*260*660	2220*260*660	
Unit Weight kg	Ceiling Concealed	15	19	20	21	22	36	38	40	42	
	Ceiling Exposed	24	29	30	31	34	50	53	55	58	
	Vertical Exposed	25	30	31	32	35	51	54	56	59	
Gross Weight kg	Ceiling Concealed	16	20	21	22	23	37	39	42	44	
	Ceiling Exposed	25	30	31	32	35	51	54	56	59	
	Vertical Exposed	26	31	32	33	36	52	55	58	61	

Note:

- Nominal Testing condition:
Cooling: entering air temp 27°C DB/19.5°C WB; entering water temp 7°C, leaving water temp 12°C;
Heating: entering air temp 21°C; entering water temp 60°C, the same water flow as in cooling;
- Sound pressure level are measured in acoustic room, position of the measure point is 1m in the front and 1m below the vertical center line of the unit;
- Static pressure is measured without filter and air outlet.

Specifications

4 Pipe System 3+1 Rows

Specification		Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14
Air Flow	Max.	CFM	235	347	441	541	635	876	1029	1212	1441
		m3/h	400	590	750	920	1080	1490	1750	2060	2450
	Min.	CFM	118	176	218	271	318	441	512	606	724
		m3/h	200	300	370	460	540	750	870	1030	1230
Total Cooling Capacity kW	Max.		2.03	2.98	3.78	4.63	5.62	7.56	9.13	10.88	12.83
	Min.		1.50	2.23	3.82	3.48	4.19	5.68	6.93	8.19	9.64
Sensible Cooling Capacity kW	Max.		1.47	2.11	2.72	3.33	4.10	5.47	7.46	7.84	9.37
	Min.		0.97	1.33	1.71	2.16	2.75	3.50	4.85	5.10	6.18
Heating Capacity kW	Max.		1.94	2.71	3.64	4.66	5.44	7.76	9.36	11.04	12.57
	Min.		1.46	2.05	2.73	3.50	4.08	5.84	7.04	8.29	9.44
Power Input W	12 Pa		8-17	9-20	10-36	11-44	12-56	20-78	23-88	26-114	28-139
	30 Pa		10-26	11-34	12-42	13-51	15-63	25-91	26-101	28-140	30-166
	50 Pa		12-29	13-38	14-49	15-56	17-80	26-101	28-125	30-173	32-208
Max Current	A		0.13	0.17	0.22	0.25	0.36	0.46	0.57	0.79	0.95
Static Pressure	Pa		12Pa/30Pa/50Pa								
Noise Level dB(A)	12 Pa		21-37	22-39	20-41	22-43	24-45	28-46	28-48	29-50	30-52
	30 Pa		22-40	23-42	21-44	23-46	25-47	29-48	29-50	30-52	31-54
	50 Pa		23-42	24-44	22-46	24-47	26-49	30-50	30-52	31-54	32-56
Water Flow	Cooling 3R	kg/h	370	540	680	830	990	1350	1610	1920	2250
		l/s	0.103	0.150	0.189	0.231	0.275	0.375	0.447	0.533	0.625
	Heating 1R	kg/h	230	310	420	540	630	890	1080	1270	1450
		l/s	0.064	0.086	0.117	0.150	0.175	0.247	0.300	0.353	0.403
Water Resistance	Cooling 3R	kPa	10	18	19	23	24	23	36	21	35
	Heating 1R	kPa	5	12	17	28	25	16	18	23	29
Fan Type		Forward curve centrifugal fan									
Motor	Type	EC Motor									
	Protection Class	IP42									
	Power Supply	220~230V/1Ph/50 or 60Hz									
Coil	Type	Seamless copper mechanically expanded into aluminum fins									
	Rows	4									
	Max. Working Pressure	1.6MPa									
Inlet/Outlet Water Pipe		3/4" FPT									
Condensate Water Pipe		Φ20									
Unit Dimension W*D*H (mm)	Ceiling Concealed	645*450*225	795*450*225	875*450*225	945*450*225	1095*450*225	1395*450*225	1545*450*225	1695*450*225	1995*450*225	1995*450*225
	Ceiling Exposed	850*505*245	1000*505*245	1080*505*245	1150*505*245	1300*505*245	1600*505*245	1750*505*245	1900*505*245	2200*505*245	2200*505*245
	Vertical Exposed	850*245*639	1000*245*639	1080*245*639	1150*245*639	1300*245*639	1600*245*639	1750*245*639	1900*245*639	2200*245*639	2200*245*639
Packing Dimension W*D*H (mm)	Ceiling Concealed	665*470*235	815*470*235	895*470*235	965*470*235	1115*470*235	1415*470*235	1565*470*235	1710*470*235	2015*470*235	2015*470*235
	Ceiling Exposed	870*520*260	1020*520*260	1100*520*260	1170*520*260	1320*520*260	1620*520*260	1770*520*260	1920*520*260	2220*520*260	2220*520*260
	Vertical Exposed	870*260*660	1020*260*660	1100*260*660	1170*260*660	1320*260*660	1620*260*660	1770*260*660	1920*260*660	2220*260*660	2220*260*660
Unit Weight kg	Ceiling Concealed	17	22	23	24	27	39	41	43	46	46
	Ceiling Exposed	26	32	33	35	39	53	56	58	62	62
	Vertical Exposed	27	33	34	36	40	54	57	59	63	63
Gross Weight kg	Ceiling Concealed	18	23	24	25	28	40	42	45	48	48
	Ceiling Exposed	27	33	34	36	40	54	57	59	63	63
	Vertical Exposed	28	34	35	37	41	55	58	61	65	65

Note:

- Nominal Testing condition:
Cooling: entering air temp 27°C DB/19.5°C WB; entering water temp 7°C, leaving water temp 12°C;
Heating: entering air temp 21°C; entering water temp 60°C, the same water flow as in cooling;
- Sound pressure level are measured in acoustic room, position of the measure point is 1m in the front and 1m below the vertical center line of the unit;
- Static pressure is measured without filter and air outlet.

Specifications

4 Pipe System 2+2 Rows

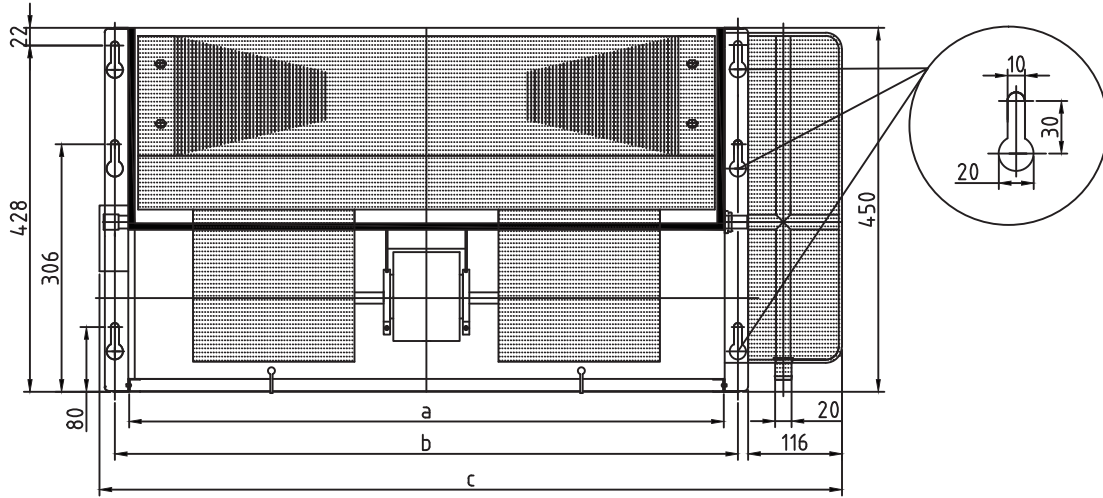
Specification		Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14
Air Flow	Max.	CFM	235	347	441	541	635	876	1029	1212	1441
		m3/h	400	590	750	920	1080	1490	1750	2060	2450
	Min.	CFM	118	176	218	271	318	441	512	606	724
		m3/h	200	300	370	460	540	750	870	1030	1230
Total Cooling Capacity kW	Max.		1.60	2.34	3.00	4.11	4.71	6.28	7.35	9.83	11.29
	Min.		1.19	1.75	2.24	3.08	3.53	4.71	5.51	7.39	8.48
Sensible Cooling Capacity kW	Max.		1.16	1.66	2.16	2.96	3.44	4.54	6.01	7.08	8.25
	Min.		0.76	1.04	1.36	1.92	2.30	2.91	3.90	4.60	5.44
Heating Capacity kW	Max.		2.40	3.51	4.50	6.16	7.06	9.42	11.02	14.74	16.93
	Min.		1.78	2.62	3.36	4.62	5.29	7.06	8.26	11.08	12.72
Power Input W	12 Pa		8-17	9-20	10-36	11-44	12-56	20-78	23-88	26-114	28-139
	30 Pa		10-26	11-34	12-42	13-51	15-63	25-91	26-101	28-140	30-166
	50 Pa		12-29	13-38	14-49	15-56	17-80	26-101	28-125	30-173	32-208
Max Current	A		0.13	0.17	0.22	0.25	0.36	0.46	0.57	0.79	0.95
Static Pressure	Pa		12Pa/30Pa/50Pa								
Noise Level dB(A)	12 Pa		21-37	22-39	20-41	22-43	24-45	28-46	28-48	29-50	30-52
	30 Pa		22-40	23-42	21-44	23-46	25-47	29-48	29-50	30-52	31-54
	50 Pa		23-42	24-44	22-46	24-47	26-49	30-50	30-52	31-54	32-56
Water Flow	Cooling 3R	kg/h	280	400	520	710	810	1080	1270	1690	1950
		l/s	0.078	0.111	0.144	0.197	0.225	0.30	0.353	0.469	0.542
	Heating 1R	kg/h	280	400	520	710	810	1080	1270	1690	1950
		l/s	0.078	0.111	0.144	0.197	0.225	0.30	0.353	0.469	0.542
Water Resistance	Cooling 3R	kPa	18	14	24	17	21	28	24	38	43
	Heating 1R	kPa	18	14	24	17	21	28	24	38	43
Fan Type		Forward curve centrifugal fan									
Motor	Type	EC Motor									
	Protection Class	IP42									
	Power Supply	220~230V/1Ph/50 or 60Hz									
Coil	Type	Seamless copper mechanically expanded into aluminum fins									
	Rows	4									
	Max. Working Pressure	1.6MPa									
Inlet/Outlet Water Pipe		3/4" FPT									
Condensate Water Pipe		Φ20									
Unit Dimension W*D*H (mm)	Ceiling Concealed	645*450*225	795*450*225	875*450*225	945*450*225	1095*450*225	1395*450*225	1545*450*225	1695*450*225	1995*450*225	2200*505*245
	Ceiling Exposed	850*505*245	1000*505*245	1080*505*245	1150*505*245	1300*505*245	1600*505*245	1750*505*245	1900*505*245	2200*505*245	2200*505*245
	Vertical Exposed	850*245*639	1000*245*639	1080*245*639	1150*245*639	1300*245*639	1600*245*639	1750*245*639	1900*245*639	2200*245*639	2200*245*639
Packing Dimension W*D*H (mm)	Ceiling Concealed	665*470*235	815*470*235	895*470*235	965*470*235	1115*470*235	1415*470*235	1565*470*235	1710*470*235	2015*470*235	2220*520*260
	Ceiling Exposed	870*520*260	1020*520*260	1100*520*260	1170*520*260	1320*520*260	1620*520*260	1770*520*260	1920*520*260	2220*520*260	2220*520*260
	Vertical Exposed	870*260*660	1020*260*660	1100*260*660	1170*260*660	1320*260*660	1620*260*660	1770*260*660	1920*260*660	2220*260*660	2220*260*660
Unit Weight kg	Ceiling Concealed	17	22	23	24	27	39	41	43	46	62
	Ceiling Exposed	26	32	33	35	39	53	56	58	62	63
	Vertical Exposed	27	33	34	36	40	54	57	59	63	65
Gross Weight kg	Ceiling Concealed	18	23	24	25	28	40	42	45	48	65
	Ceiling Exposed	27	33	34	36	40	54	57	59	63	65
	Vertical Exposed	28	34	35	37	41	55	58	61	65	65

Note:

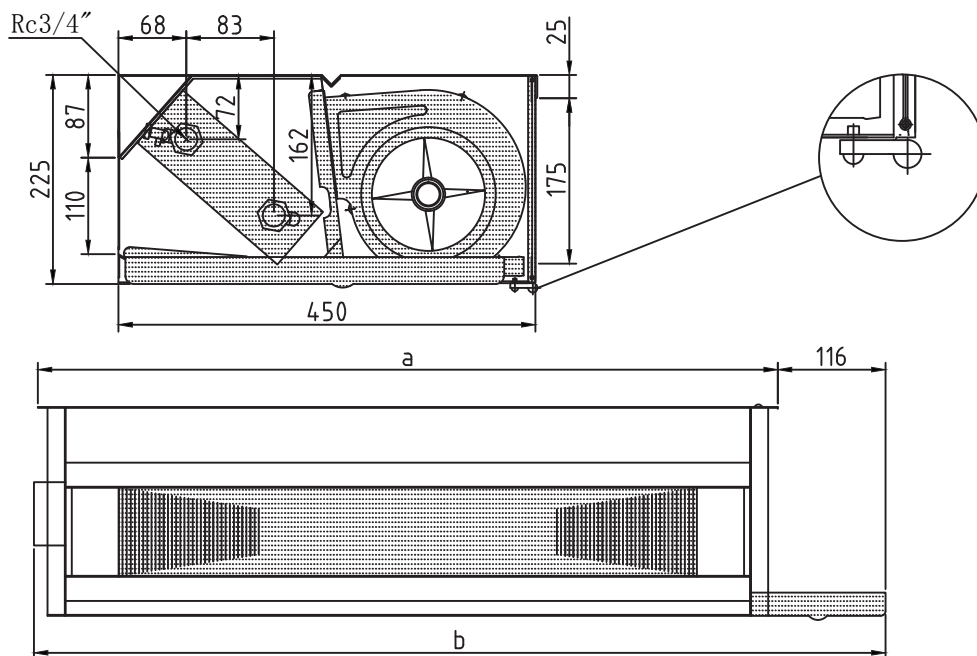
- Nominal Testing condition:
Cooling: entering air temp 27°C DB/19.5°C WB; entering water temp 7°C, leaving water temp 12°C;
Heating: entering air temp 21°C; entering water temp 60°C, the same water flow as in cooling;
- Sound pressure level are measured in acoustic room, position of the measure point is 1m in the front and 1m below the vertical center line of the unit;
- Static pressure is measured without filter and air outlet.

Dimensions

Ceiling Concealed Type



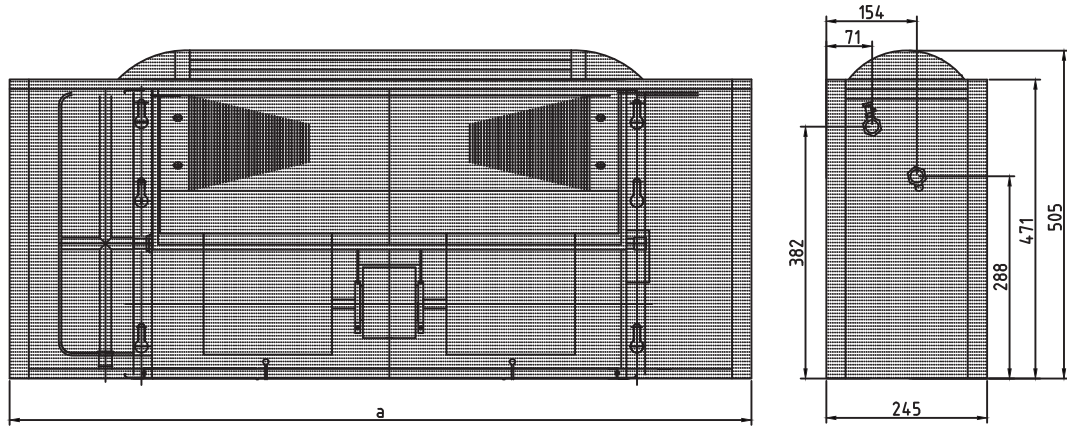
Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14
a	464	614	694	764	914	1214	1364	1514	1814
b	499	649	729	799	949	1249	1399	1549	1849
c	645	795	875	945	1095	1395	1545	1649	1995



Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14
a	524	674	754	824	974	1274	1424	1574	1874
b	645	795	875	945	1095	1395	1545	1695	1995

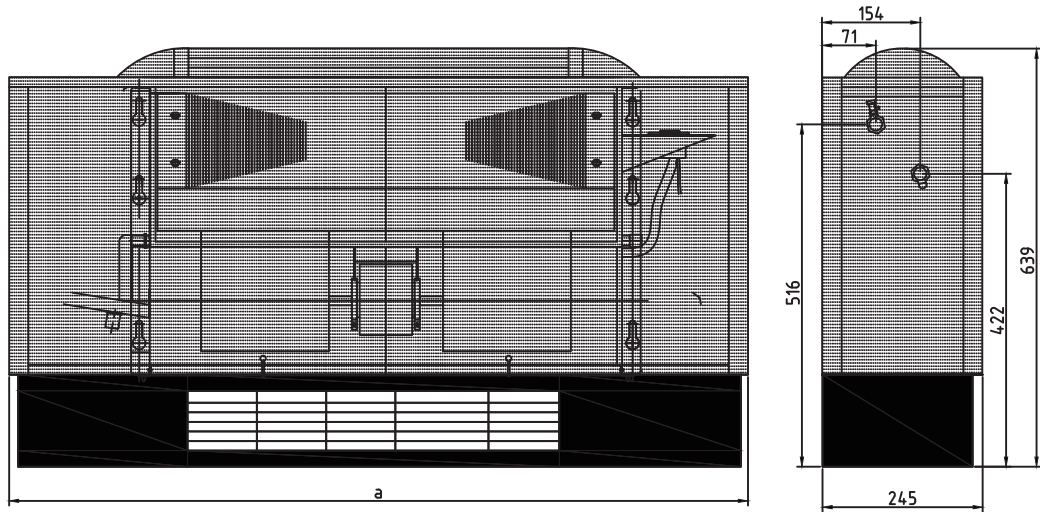
Dimensions

Ceiling Exposed Type



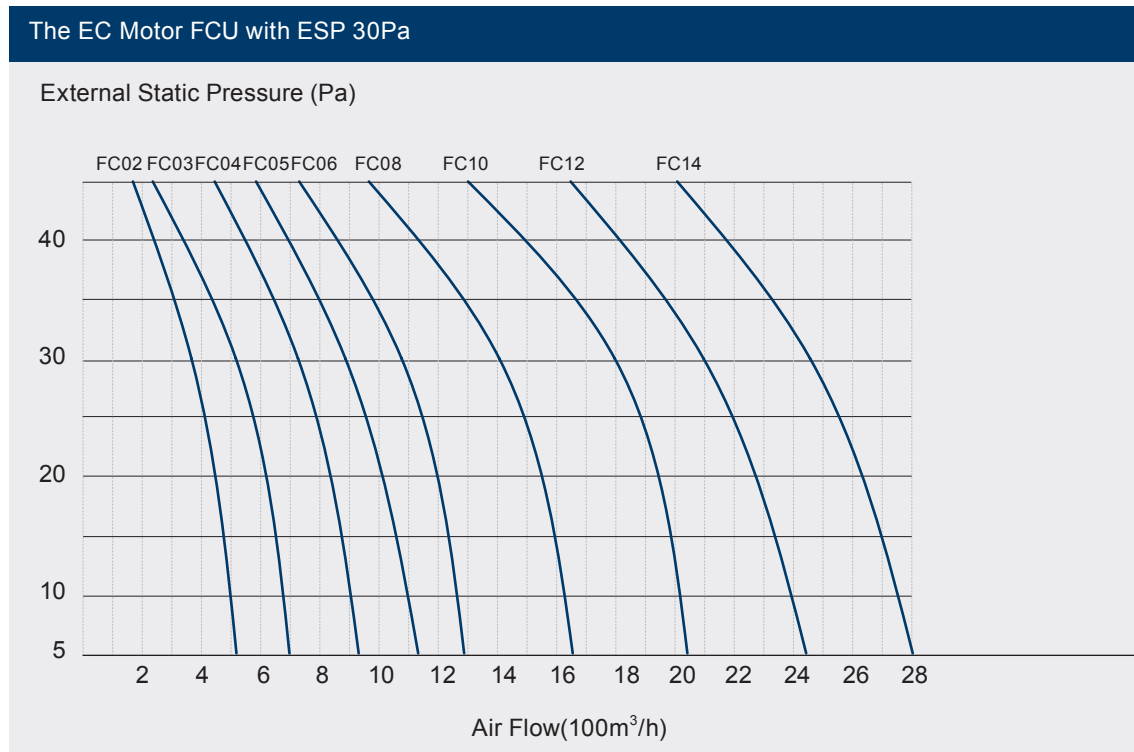
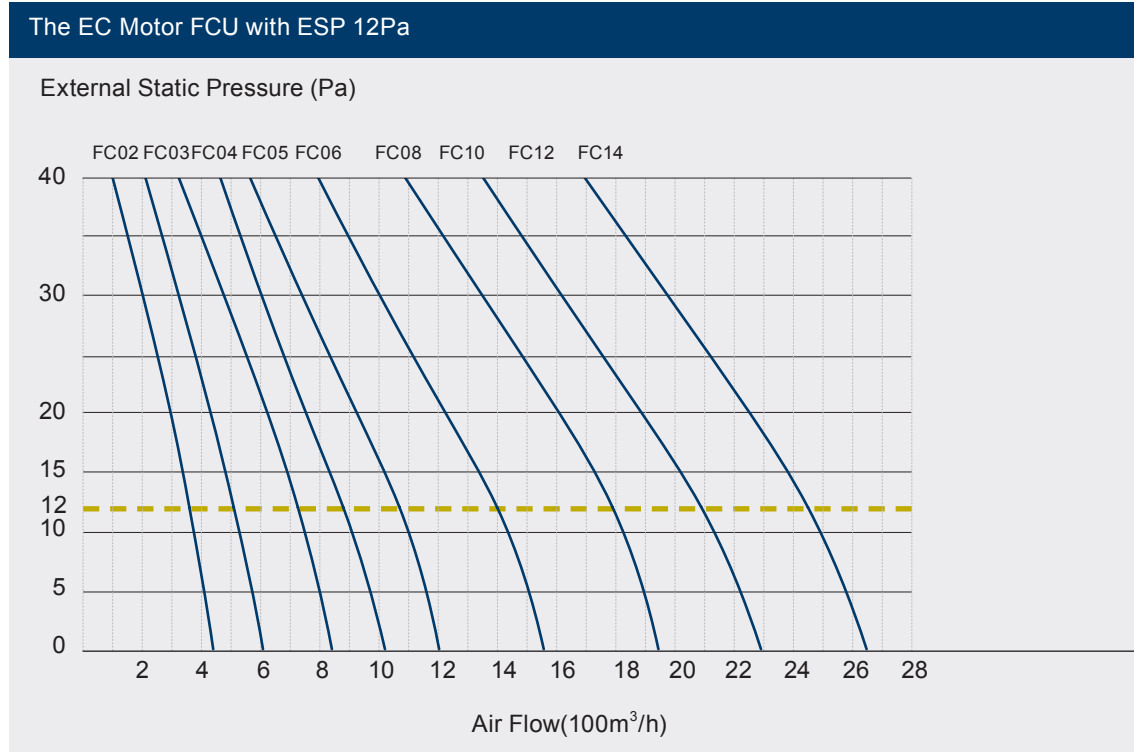
Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14
a	850	1000	1080	1150	1300	1600	1750	1900	2200

Vertical Exposed Type



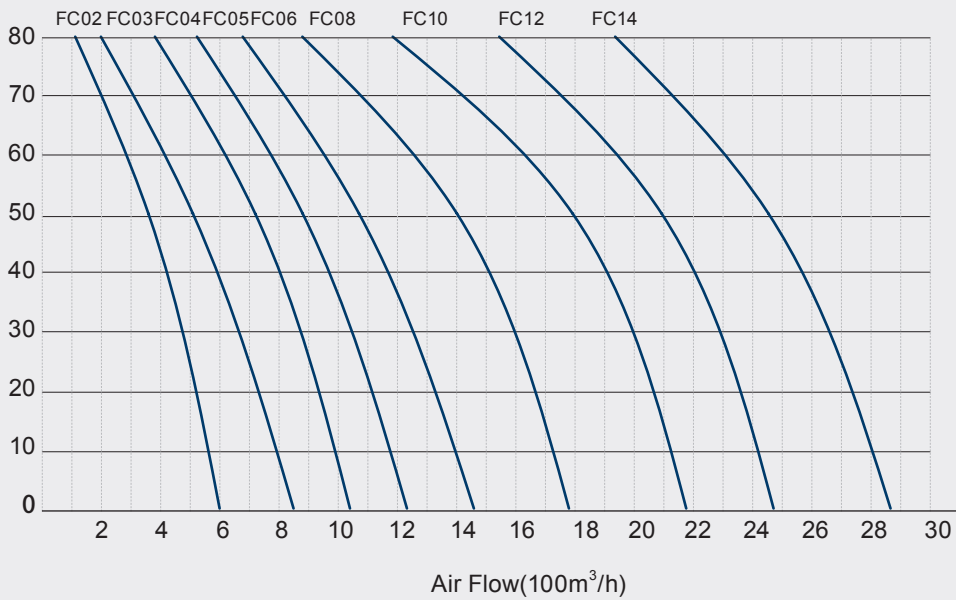
Model	FC02	FC03	FC04	FC05	FC06	FC08	FC10	FC12	FC14
a	850	1000	1080	1150	1300	1600	1750	1900	2200

Fan Curve



The EC Motor FCU with ESP 50Pa

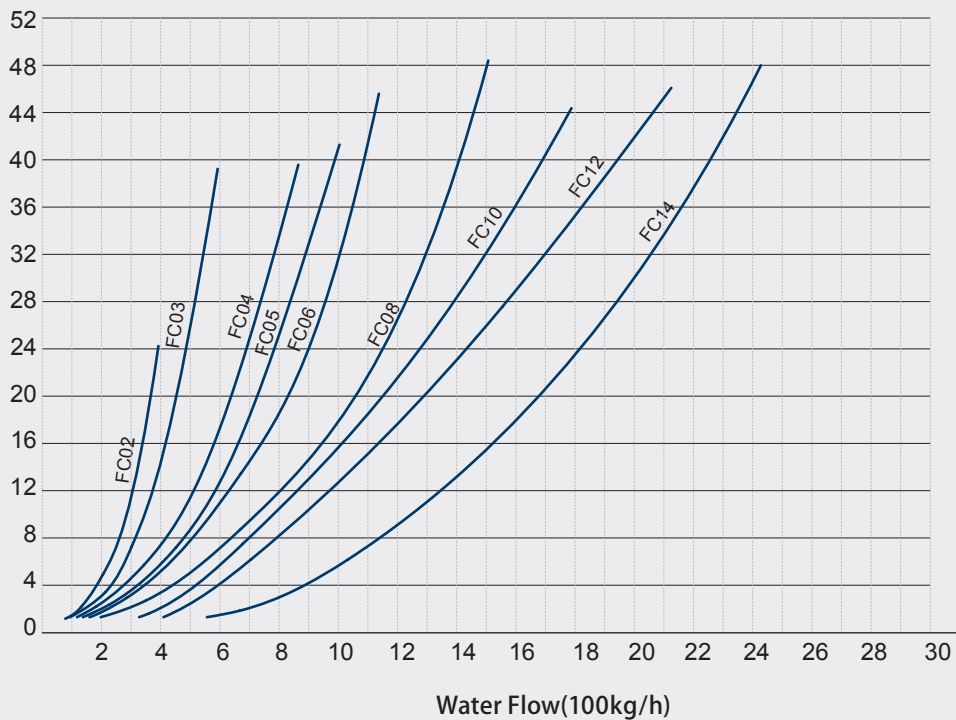
External Static Pressure (Pa)



Water Flow-Pressure Drop

The EC Motor FCU

Water Pressure Drop (kPa)



Correction Factors

Cooling Capacity Correction Factors

EWT (°C)	5	6	7	8	9	10	11	12
Correction Factor	1.15	1.07	1	0.92	0.85	0.77	0.7	0.62

Note: air side condition, entering DB 27°C, WB 19.5°C.

Heating Capacity Correction Factors

EWT (°C)	35	40	45	50	55	60	65	70
Correction Factor	0.36	0.49	0.62	0.74	0.87	1	1.13	1.26

Note: air side condition, entering DB 21°C.

Cooling Capacity Correction Factors Based on Different Ambient Conditions

WB (°C)	DB (°C)	24	25	26	27	28	29	30
17		0.76						
18			0.85					
19				0.94				
19.5					1			
20						1.06		
21							1.15	
22								1.25

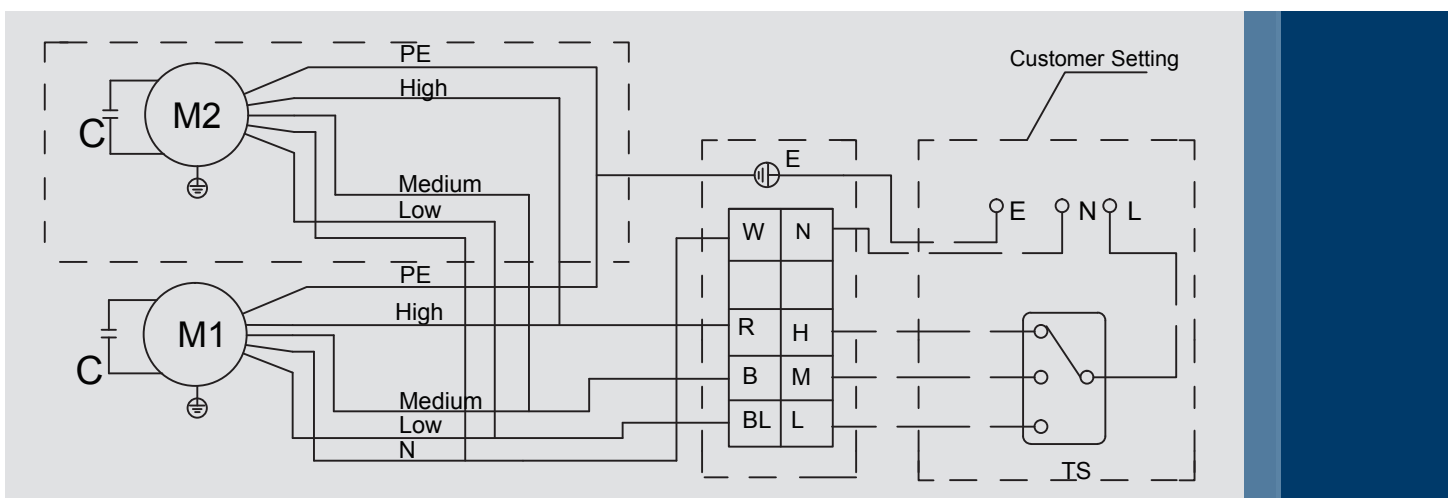
Note: entering cooling water temperature 7°C.

Heating Capacity Correction Factors Based on Different Ambient Conditions

DB (°C)	18	19	20	21	22	23	24
Correction Factor	1.1	1.07	1.02	1	0.97	0.94	0.9

Note: entering heating water temperature 60°C.

Wiring diagram



B:Black, **BL:**Blue, **R:**Red, **W:**White, **TS:** Fan Speed Controller, **C:**Capacitor, **M1/M2:**Four Speed Motor.
H: High, **M:** Medium, **L:** Low, **E:** Earth Line, **L:** Live Line, **N:** Null Line

***Note:**

1. Wiring between speed terminals to speed controller
2. Components in dashed part may not exist in some models

NOBUS

