

# FLOOR CEILING TYPE FAN COIL UNIT

(GC201405)

GREE MAKING BETTER AIR CONDITIONERS GREE MAKING BETTER AIR CONDITIONERS GREE MAKING BETTER AIR CONDITIONER GREE

TECHNICAL SALES GUIDE-50Hz/60Hz  
CAPACITY RANGE:34~204kW  
SUPER HIGH AMBIENT OPERATION TO 45 °C



GREE MAKING BETTER AIR CONDITIONERS GREE MAKING BETTER AIR CONDITIONERS GREE MAKING BETTER AIR CONDITIONER GREE



GREE ELECTRIC APPLIANCES, INC. OF ZHUHAI

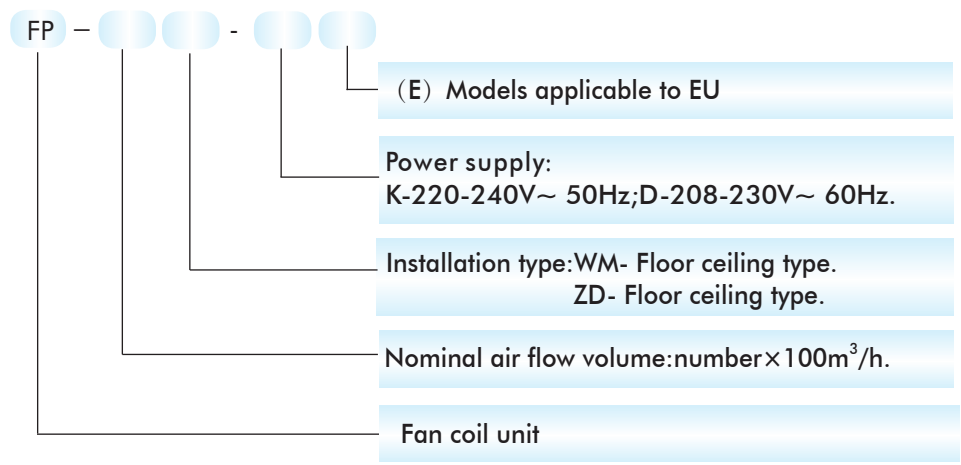
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## 1 MODEL LIST

Model name	Cooling/heating capacity (W)	Power supply (V, Ph, Hz)	Remarks
FP-34WM-D	2930/5360	208-230V~ 60Hz	
FP-51WM-D	3320/5760		
FP-68WM-D	4300/6950		
FP-85WM-D	5170/8100		
FP-102WM-D	5680/9200	208-230V~60Hz	
FP-136WM-D	7050/10600		
FP-170WM-D	9000/14500		
FP-204WM-D	9700/15900		
FP-34ZD-K	2000/6700	220-240V~ 50Hz	
FP-51ZD-K	2800/7600		
FP-68ZD-K	3600/8500		
FP-85ZD-K	4200/9500		
FP-34ZD-K(E)	1900/2400		
FP-34ZD-K(E)	2800/3400		
FP-68ZD-K(E)	3500/4100		
FP-85ZD-K(E)	3600/4200		
FP-102ZD-K	5400/12600	220-240V~ 50Hz	
FP-136ZD-K	6300/14000		
FP-170ZD-K	8900/19000		
FP-204ZD-K	9900/21000		
FP-102ZD-K(E)	5200/6000		
FP-136ZD-K(E)	6350/6700		
FP-170ZD-K(E)	8900/10800		
FP-204ZD-K(E)	9900/12200		

## 2 NOMENCLATURE



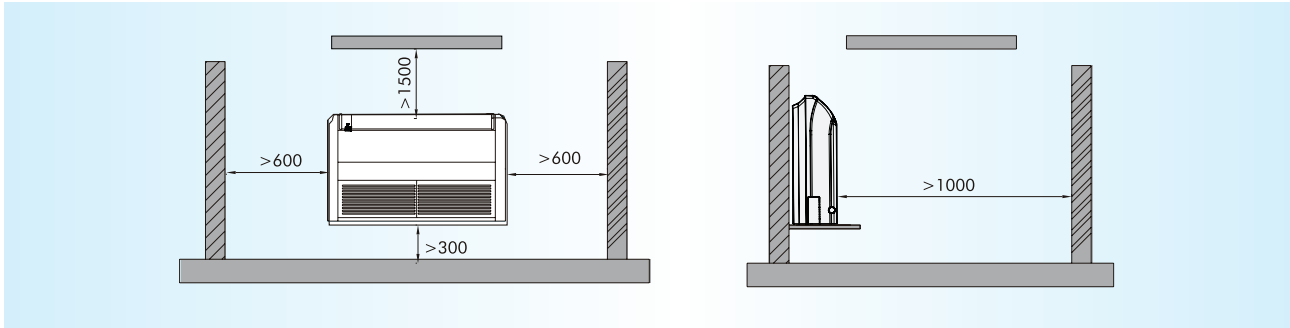
## 3 FEATURES & BENEFITS

1. Novel pattern: the exposed skin plates of unit looks so elegant and luxurious that they can be taken as the indoor decorations.
2. Compact design: A large number of non-metallic materials have been used, so that the body of the unit is quite light-weight and thin, which makes the unit looks sensuous.
3. Low noise: Dynamic principles have been adopted for the design of the fan blades so as to make sure the air volume is enough and running noise is considerably low.
4. Durable filter screen: The durable filter screen shares a cleaning cycle 20 times longer than that of the conventional filter screen, needless to clean it frequently.
5. Microcomputer control: The unit is able to automatically adjust the fan speed in accordance with the indoor ambient temperature to meet a wide range of users' requirements.
6. Small height of the unit, saving much installation space
7. Large cooling (heating) capacity, low noise, three-speed motor which can adjust the air volume and meet a wide range of users' requirements.
8. Excellent material, stringent process control, which guarantee the hi-quality and long life of the unit.
9. Die-formed drain pan, entirely bonded insulating material, carefree about the condensate water.

## 4 INSTALLATION

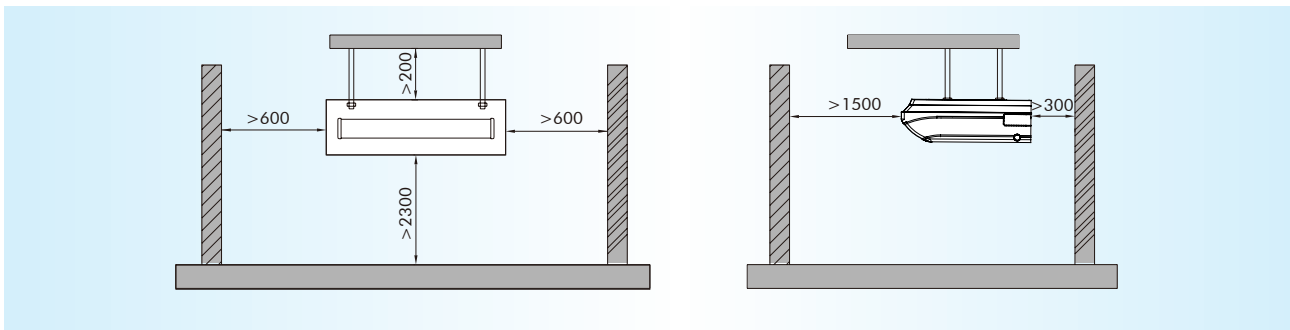
Floor Type:

Unit:mm

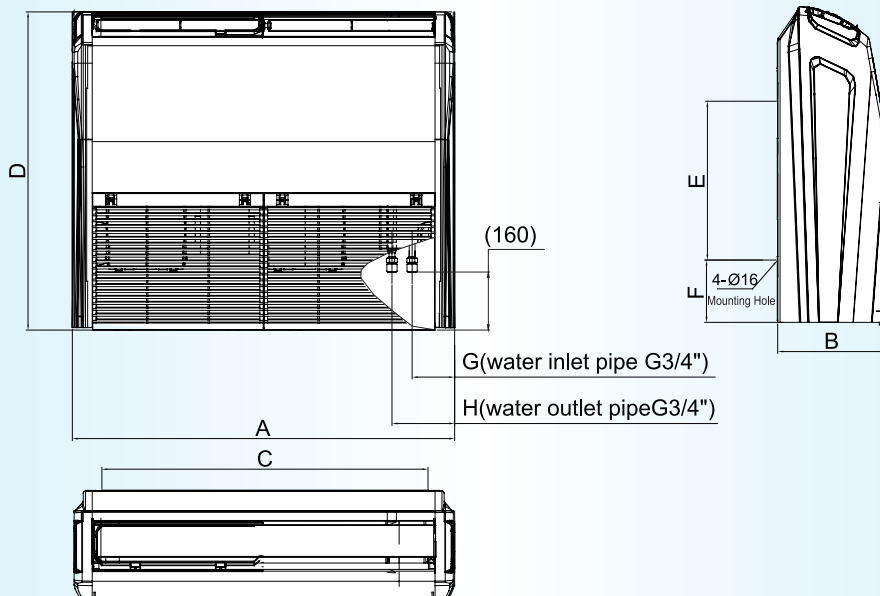


Ceiling Type:

Unit:mm



## 5 DIMENSION



Unit:mm

Type	A	B	C	D	E	F	G	H
FP-34WM-D	840	238	740	695	260	203	(130)	(215)
FP-51WM-D	840	238	740	695	260	203	(130)	(215)
FP-68WM-D	840	238	740	695	260	203	(130)	(215)
FP-85WM-D	840	238	740	695	260	203	(130)	(215)
FP-102WM-D	1300	188	1202	600	260	160	(106)	(172)
FP-136WM-D	1300	188	1202	600	260	160	(106)	(172)
FP-170WM-D	1590	238	1491	695	260	203	(97.5)	(178.5)
FP-204WM-D	1590	238	1491	695	260	203	(97.5)	(178.5)
FP-34ZD-K	840	238	740	695	260	203	(130)	(215)
FP-34ZD-K(E)	840	238	740	695	260	203	(130)	(215)
FP-51ZD-K	840	238	740	695	260	203	(130)	(215)
FP-51ZD-K(E)	840	238	740	695	260	203	(130)	(215)
FP-68ZD-K	840	238	740	695	260	203	(130)	(215)
FP-68ZD-K(E)	840	238	740	695	260	203	(130)	(215)
FP-85ZD-K	840	238	740	695	260	203	(130)	(215)
FP-85ZD-K(E)	840	238	740	695	260	203	(130)	(215)
FP-102ZD-K	1300	188	1202	600	260	160	(106)	(172)
FP-102ZD-K(E)	1300	188	1202	600	260	160	(106)	(172)
FP-136ZD-K	1300	188	1202	600	260	160	(106)	(172)
FP-136ZD-K(E)	1300	188	1202	600	260	160	(106)	(172)
FP-170ZD-K	1590	238	1491	695	260	203	(97.5)	(178.5)
FP-170ZD-K(E)	1590	238	1491	695	260	203	(97.5)	(178.5)
FP-204ZD-K	1590	238	1491	695	260	203	(97.5)	(178.5)
FP-204ZD-K(E)	1590	238	1491	695	260	203	(97.5)	(178.5)

Note: sizes in the brackets are just for reference.

## 6 SPECIFICATION

Model			FP-34WM-D	FP-51WM-D	FP-68WM-D	FP-85WM-D
Air flow volume	High	CFM	236	300	400	483
		m <sup>3</sup> /h	400	510	680	820
	Medium	CFM	172	232	291	362
		m <sup>3</sup> /h	292	395	495	615
	Low	CFM	147	155	194	241
		m <sup>3</sup> /h	250	264	330	410
Capacity	Cooling	W	2930	3320	4300	5170
	Heating	W	5360	5760	6950	8100
Power system	Type	V-Ph-Hz	208-230V~ 60Hz	208-230V~ 60Hz	208-230V~ 60Hz	208-230V~ 60Hz
	Input	W	47	49	69	81
Exterior static pressure		Pa	0	0	0	0
Water system	Water flow volume	m <sup>3</sup> /h	0.5	0.57	0.74	0.89
	Pressure drop	kPa	10	12	18	30
Coil	Type	-	Aluminum fin-copper tube			
	Operating pressure	MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa
Motor	Type	-	Isolation B Capacitor startup three-speed Motor			
	Capacitor	uF	1	1	1.5	2.5
Sound pressure level	Sound pressure level	dB(A)	41	41	46	49
Connection pipe size	Water inlet & outlet	inch	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)
	Condensing water drain	inch	3/4(outer groove)	3/4(outer groove)	3/4(outer groove)	3/4(outer groove)
Outline dimension (W×D×H)		mm	834×238×694	834×238×694	834×238×694	834×238×694
Package dimension (W×D×H)		mm	960×330×830	960×330×830	960×330×830	960×330×830
Net weight		kg	26	26	27	27
Gross weight		kg	33	33	34	34
Loading quantity	20'GP		112	112	112	112
	40'GP		224	224	224	224
	40'HQ		267	267	267	267

Model			FP-102WM-D	FP-136WM-D	FP-170WM-D	FP-204WM-D
Air flow volume	High	CFM	600	700	1000	1200
		m <sup>3</sup> /h	1020	1190	1700	2040
	Medium	CFM	450	525	750	926
		m <sup>3</sup> /h	765	892	1276	1575
	Low	CFM	300	350	500	618
		m <sup>3</sup> /h	510	595	850	1051
Capacity	Cooling	W	5680	7050	9000	9700
	Heating	W	9200	10600	14500	15900
Power system	Type	V-Ph-Hz	208-230V~ 60Hz	208-230V~ 60Hz	208-230V~ 60Hz	208-230V~ 60Hz
	Input	W	99	103	165	215
Exterior static pressure		Pa	0	0	0	0
Water system	Water flow volume	m <sup>3</sup> /h	0.93	1.15	1.55	1.66
	Pressure drop	kPa	50	55	55	55
Coil	Type	-	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
	Operating pressure	MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa
Motor	Type	-	Isolation B Capacitor startup three-speed Motor	Isolation B Capacitor startup three-speed Motor	Isolation B Capacitor startup three-speed Motor	Isolation B Capacitor startup three-speed Motor
	Capacitor	μF	3	3	5	6
Sound pressure level	Sound pressure level	dB(A)	51	51	48	50
Connection pipe size	Water inlet & outlet	inch	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)
	Condensing water drain	inch	3/4(outer groove)	3/4(outer groove)	3/4(outer groove)	3/4(outer groove)
Outline dimension (W×D×H)		mm	1300×188×600	1300×188×600	1590×238×695	1590×238×695
Package dimension (W×D×H)		mm	1414×248×724	1414×248×724	1714×330×830	1714×330×830
Net weight		kg	31.5	32.5	48.5	48.5
Gross weight		kg	36.5	37.5	57	57
Loading quantity		20'GP	108	108	58	58
		40'GP	220	220	111	111
		40'HQ	244	244	117	117

Notes:

- The water working temperature is from 7°C(44.6°F) to 60°C(140°F).
- The temperature exchange efficiency and enthalpy exchange efficiency are tested under these testing conditions as below:
  - Cooling efficiency: air 27°C(80.6°F) DB, 19.5°C(67.1°F) WB, entering water temperature 7°C(44.6°F) leaving water temperature 12°C(53.6°F).
  - Heating efficiency: air 21°C(69.8°F) DB, water temperature: 60°C(140°F)
- Sound power level complies with ISO 5151-sound pressure calculated at 1m distance.



# Floor Ceiling Type Fan Coil Unit Technical Sales Guide

Model			FP-34ZD-K	FP-51ZD-K	FP-68ZD-K	FP-85ZD-K
Air flow volume	High	CFM	235	300	400	424
		m <sup>3</sup> /h	400	510	680	720
	Medium	CFM	172	232	265	362
		m <sup>3</sup> /h	292	395	450	615
	Low	CFM	147	155	253	241
		m <sup>3</sup> /h	250	264	430	410
Capacity	Cooling	W	2000	2800	3600	4200
	Heating	W	5000	7200	8500	9500
Power system	Type	V-Ph-Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	W	36	58	72	80
Exterior static pressure		Pa	0	0	0	0
Water system	Water flow volume	L/s	0.125	0.14	0.16	0.20
	Pressure drop	kPa	16.5	5	10	20
Coil	Type		Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
	Operating pressure	MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa
Motor	Type		Isolation B Capacitor startup three-speed Motor			
	Capacitor	μF	1	1	1.5	3.0
Sound pressure level	Sound pressure level	dB(A)	37	38	45	47
Connection pipe size	Water inlet & outlet	inch	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)
	Condensing water drain	inch	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)
Outline dimension (W×D×H)		mm	834×238×694	834×238×694	834×238×694	834×238×694
Package dimension (W×D×H)		mm	963×333×845	963×333×845	963×333×845	963×333×845
Net weight		kg	26	26	27	27
Gross weight		kg	33	33	34	34
Loading quantity		20'GP	112	112	112	112
		40'GP	224	224	224	224
		40'HQ	267	267	267	267
Wireless remote controller			YB1FA(XFAN)	YB1FA(XFAN)	YB1FA(XFAN)	YB1FA(XFAN)

Model			FP-102ZD-K	FP-136ZD-K	FP-170ZD-K	FP-204ZD-K
Air flow volume	High	CFM	600	647	1059	1201
		m <sup>3</sup> /h	1020	1100	1800	2040
	Medium	CFM	450	518	751	927
		m <sup>3</sup> /h	765	880	1276	1575
	Low	CFM	300	324	500	619
		m <sup>3</sup> /h	510	550	850	1051
Capacity	Cooling	W	5400	6350	8900	9900
	Heating	W	11500	13700	19000	21000
Power system	Type	V-Ph-Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz	220-240V~ 50Hz
	Input	W	86	78	150	200
Exterior static pressure		Pa	0	0	0	0
Water system	Water flow volume	L/s	0.27	0.32	0.40	0.44
	Pressure drop	kPa	36	38	52	55
Coil	Type		Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube	Aluminum fin-copper tube
	Operating pressure	MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa	≤1.6MPa
Motor	Type		Isolation B Capacitor startup three-speed Motor			
	Capacitor	μF	3.0	3.0	5.0	10.0
Sound pressure level	Sound pressure level	dB(A)	49	48	50	55
Connection pipe size	Water inlet & outlet	inch	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)	3/4(inner groove)
	Condensing water drain	inch	3/4(outer groove)	3/4(outer groove)	3/4(outer groove)	3/4(outer groove)
Outline dimension (W×D×H)		mm	1300×188×600	1300×188×600	1590×238×695	1590×238×695
Package dimension (W×D×H)		mm	1417×251×739	1417×251×739	1717×333×845	1717×333×845
Net weight		kg	31.5	32.5	48.5	48.5
Gross weight		kg	36.5	37.5	57	57
Loading quantity		20'GP	108	108	58	58
		40'GP	220	220	111	111
		40'HQ	244	244	117	117
Wireless remote controller			YB1FA(XFAN)	YB1FA(XFAN)	YB1FA(XFAN)	YB1FA(XFAN)

# Floor Ceiling Type Fan Coil Unit Technical Sales Guide

Model			FP-34ZD-K ( E )	FP-51ZD-K ( E )	FP-68ZD-K ( E )	FP-85ZD-K ( E )
Air flow volume(H/M/L)		m <sup>3</sup> /h	400/300/210	510/400/310	680/550/450	690/570/485
		CFM	235/176/124	300/235/182	400/324/265	406/335/285
Capacity	Cooling	kW	1.9	2.8	3.5	3.6
	Heating	kW	2.4	3.4	4.1	4.2
Power System	Type	Ph/V/Hz	1/220~240/50	1/220~240/50	1/220~240/50	1/220~240/50
	Input	W	46	65	76	84
Water System	Water flow volume	l/s	0.09	0.13	0.17	0.17
	Pressure drop	kPa	20	20	32	16
		Ft.WG	6.56	6.56	10.50	5.25
Sound prssure level		dB(A)	37	38	45	47
Dimension(WxDxH)	Outline	mm	834X238X694	834X238X694	834X238X694	834X238X694
	Package	mm	963X333X845	963X333X845	963X333X845	963X333X845
Net weight/Gross weight		kg	26/33	26/33	26/33	26/33
Connetion pipe diameter	Water inlet & outlet	inch(mm)	3/4'(19.05)	3/4'(19.05)	3/4'(19.05)	3/4'(19.05)
	Condensed water drain	inch(mm)	5/8'(15.6)	5/8'(15.6)	5/8'(15.6)	5/8'(15.6)
Loading quantity	40'GP/40'HQ	set	224/267	224/267	224/267	224/267
Standard controller	Wireless remote	-	YB1FA	YB1FA	YB1FA	YB1FA
Optional controller	Wired remote	-	Z4E351B	Z4E351B	Z4E351B	Z4E351B

Model			FP-102ZD-K ( E )	FP-136ZD-K ( E )	FP-170ZD-K ( E )	FP-204ZD-K ( E )
Air flow volume(H/M/L)		m <sup>3</sup> /h	910/756/600	1030/854/700	1800/1260/850	1940/1500/1050
		CFM	535/445/353	606/502/412	1059/741/500	1141/882/618
Capacity	Cooling	kW	5.2	6.35	8.9	9.9
	Heating	kW	6	6.7	10.8	12.2
Power System	Type	Ph/V/Hz	1/220~240/50	1/220~240/50	1/220~240/50	1/220~240/50
	Input	W	95	96	152	200
Water System	Water flow volume	l/s	0.25	0.30	0.43	0.47
		Pressure drop	kPa	80	99	115
			Ft.WG	26.24	32.47	37.72
Sound prssure level		dB(A)	49	48	50	55
Dimension(WxDxH)	Outline	mm	1300X188X60	1300X188X60	238X288X695	238X288X695
	Package	mm	1417X251X739	1417X251X739	1771X333X845	1771X333X845
Net weight/Gross weight		kg	34/40	34/40	48.5/57	48.5/57
Connetion pipe diameter	Water inlet & outlet	inch(mm)	3/4'(19.05)	3/4'(19.05)	3/4'(19.05)	3/4'(19.05)
	Condensed water drain	inch(mm)	5/8'(15.6)	5/8'(15.6)	5/8'(15.6)	5/8'(15.6)
Loading quantity	40'GP/40'HQ	set	220/244	220/244	111/117	111/117
Standard controller	Wireless remote	-	YB1FA	YB1FA	YB1FA	YB1FA
Optional controller	Wired remote	-	Z4E351B	Z4E351B	Z4E351B	Z4E351B

Notes:

- 1.The water working temperature is from 7°C(44.6°F) to 60°C(140°F).
- 2.The temperature exchange efficiency and enthalpy exchange efficiency are tested under these testing conditions as below:
  - (1)Cooling efficiency: air 27°C(80.6°F) DB, 19°C(66.2°F) WB, entering water temperature 7°C(44.6°F) leaving water temperature 12°C(53.6°F).
  - (2)Heating efficiency: air 20°C(68°F) DB, water temperature: 45°C/40°C(113/104°F).
3. Sound power level complies with ISO 5151-sound pressure calculated at 1m distance.

## 7 PERFORMANCE RATING

### 7.1 Export sales for EU countries

Entering air dry/wet-bulb temperature (°C)	Entering/leaving water temperature (°C)					
	5/10	5/11	5/12	6/11	6/12	6/13
24/17	0.77	0.65	0.57	0.66	0.58	0.51
25/18	0.92	0.75	0.65	0.81	0.66	0.58
26/19	1.07	0.91	0.75	0.96	0.77	0.66
27/19	1.14	1.00	0.82	1.03	0.87	0.73
28/21	1.37	1.24	1.08	1.26	1.13	0.93
30/22	1.52	1.40	1.26	1.41	1.29	1.14

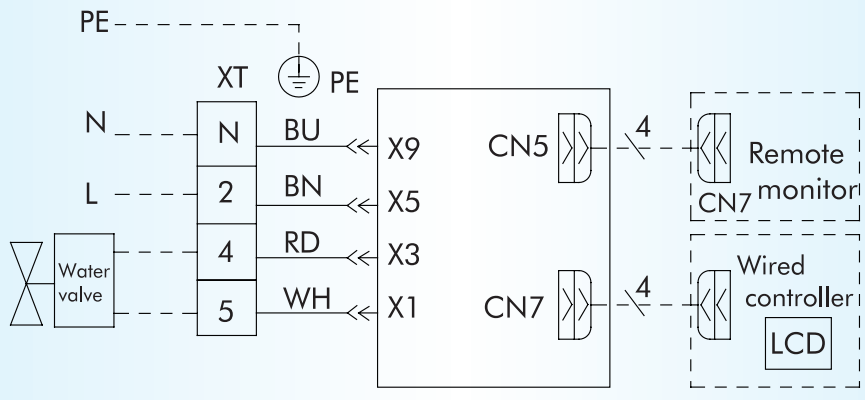
Entering air dry/wet-bulb temperature (°C)	Entering/leaving water temperature (°C)				
	7/12	7/13	7/14	8/13	9/14
24/17	0.59	0.52	0.46	0.53	0.48
25/18	0.69	0.59	0.52	0.60	0.53
26/19	0.84	0.68	0.59	0.73	0.61
27/19	1	0.75	0.65	0.81	0.70
28/21	1.15	1.01	0.81	1.04	0.92
30/22	1.31	1.18	1.00	1.20	1.08

### 7.2 Export sales for other countries

Entering air dry/wet-bulb temperature (°C)	Entering/leaving water temperature (°C)					
	5/10	5/11	5/12	6/11	6/12	6/13
24/17	0.84	0.70	0.62	0.72	0.63	0.56
25/18	1.00	0.81	0.70	0.88	0.72	0.63
26/19	1.16	0.99	0.82	1.04	0.84	0.72
27/19.5	1.24	1.08	0.89	1.12	0.95	0.79
28/21	1.49	1.35	1.18	1.37	1.23	1.01
30/22	1.65	1.52	1.37	1.54	1.40	1.24

Entering air dry/wet-bulb temperature (°C)	Entering/leaving water temperature (°C)				
	7/12	7/13	7/14	8/13	9/14
24/17	0.64	0.57	0.50	0.57	0.52
25/18	0.75	0.64	0.56	0.65	0.58
26/19	0.92	0.74	0.64	0.80	0.67
27/19.5	1.00	0.81	0.70	0.88	0.76
28/21	1.26	1.10	0.88	1.13	1.00
30/22	1.42	1.28	1.09	1.30	1.17



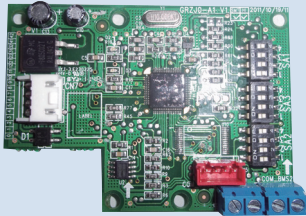
# 8 WIRING DIAGRAM



The wired controller and remote monitor system are the optional accessories.

## 9 OPERATION & CONTROLS

Key-part	Specification for wiring & function
Three speed switch	The unit motor is a single-phase permanent split capacitor with the three speeds tappings HIGH/MEDIUM/LOW wired to the terminal block with color-coded wires. Terminal 1—BLACK-HIGH SPEED Terminal 2—YELLOW-MEDIUMSPEED Terminal 3—BLUE-LOW SPEED
Motor	The fan coil unit is equipped with the three-speed motor.
Motor bearings	The motors have permanently lubricated ball bearings as a standard offering.
Insulation	The motors are provided with class B insulation

Model name	Appearance
wired remote controller XK26	 A wired remote controller with a small LCD screen displaying '888'. It features several buttons labeled: Enter/Cancel, Fan, Mode, Function, Timer, and On/Off.
wireless remote controller YB1FA	 A wireless remote controller with a larger LCD screen displaying '25' and '20.05'. It features buttons for ON/OFF, MODE, FAN, CLOCK, TIMER ON, BLOW, TEMP, TURBO, SLEEP, LIGHT, and the GREE logo.
Communication module	 A green printed circuit board (PCB) communication module with various electronic components, including a microcontroller, capacitors, and a terminal block with red and blue wires.



Gree Electric Appliances, Inc. of Zhuhai, founded in 1991, is the world's largest air conditioner enterprise integrating R&D, manufacturing, marketing and services.

Technology Innovation and quality are always our priority. With efforts of thousands of Gree's engineers, we own more than 3500 patents for our products.

Nowadays, we have 7 production bases in Zhuhai, Chongqing, Hefei and Zhengzhou(China), as well as Brazil, Pakistan and Vietnam, with annual production capacity of 30 million sets of residential air conditioners and 4 million sets of commercial air conditioners.

With the installation of Gree commercial air conditioners in important projects at home and abroad like Media Village for 2008 Beijing Olympic Games, Stadiums for 2010 World Cup in South Africa, as well as India Telecom base station, Gree commercial air conditioners are ready to develop steadily to every corner in the world, to present a more comfortable and harmonious working environment and family atmosphere.



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