

Ceiling Floor MVD DC

Service manual



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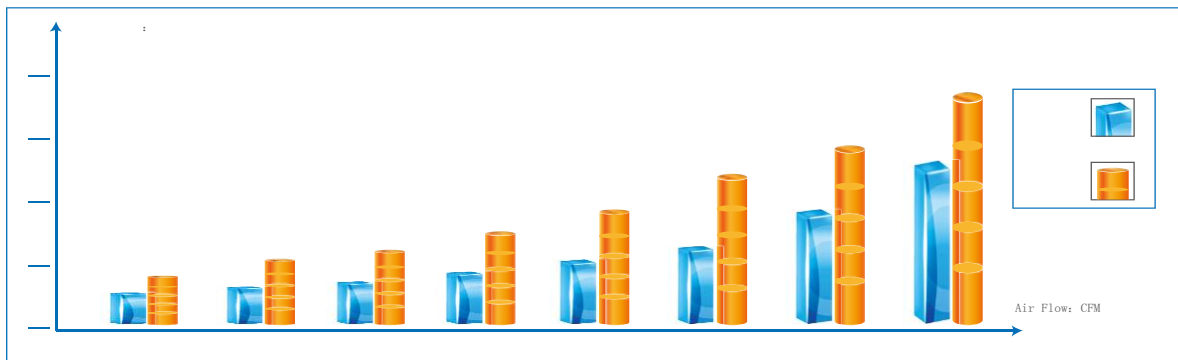
1. Features

1.1 Panel with LED display



1.2 Adopting DC fan motor

Efficiency can be up to 90%. Contrast with the AC fan motor, the power consumption of DC fan motor can reduce up to 30%.



1.3 Convenient for installation

- 1.3.1 The ceiling type can be easily installed into a corner of the ceiling even if the ceiling is very narrow.
- 1.3.2 It is especially useful when installation of an air conditioner in the center of the ceiling is impossible due to a structure such as one lighting.
- 1.3.3 The EXV is built-in the indoor unit, compact size, and convenient for the installation.
- 1.3.4 Reserved the socket on main control board for water pump and PCB can be customized if you need water pump function.

1.4 Three air flow speed: high/middle/low, double air guides.

1.5 Two direction auto swing (vertical & horizontal) and wide angle air flow

1.6 Low noise, creates quiet and comfortable environment.

- 1.6.1 Adoption of the Fujikoki brand electronic expansion valve, ensures precise flow control, as well as lower modulation noise when EXV operating.
- 1.6.2 Smoother airflow with less turbulence. Owing to the multiple-blade fan and the air guide design, the airflow is getting smoother and more comfortable



1.7 Wired control compatible

RM05/BG(T)E-A remote wireless controller which can set the indoor unit address is standard, and wired controller is optional.

1.8 Auto restart

When the indoor unit is powered off, it will auto restart when powered on again after 3 minutes and operate in the original state.

2. Specifications

Model			MVD-36DL/DHN1-C	MVD-45DL/DHN1-C	MVD-56DL/DHN1-C	MVD-71DL/DHN1-C
Power supply		V- Ph-Hz	220-240V, 1Ph, 50/60Hz			
Cooling	Capacity	kW	3.6	4.5	5.6	7.1
	Input	W	23	94	94	94
	Rated current	A	0.32	0.72	0.72	0.72
Heating	Capacity	kW	4	5	6.3	8
	Input	W	23	94	94	94
	Rated current	A	0.32	0.72	0.72	0.72
Indoor fan motor	Model		WZDK100-38GS-2	WZDK100-38GS-2	WZDK100-38GS-2	WZDK100-38GS-2
	Type		DC motor			
	Brand		Panasonic			
	Input	W	23	94	94	94
	Output	W	20	80	80	80
	Speed (h/m/l)	r/min	756/666/592	1310/1190/1040	1310/1190/1040	1310/1190/1040
Indoor coil	Number of rows		2	3	3	3
	Tube pitch * row pitch	mm	25.4*22	25.4*22	25.4*22	25.4*22
	Fin spacing	mm	1.8	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum			
	Tube outside diameter and type	mm	Φ9.52			
			Inner groove tube			
	length * height * width	mm	804*254*44	804*254*66	804*254*66	804*254*66
Number of circuits		3	3	3	3	
Indoor air flow (H/M/L)		m³/h	550/480/420	930/830/720	930/830/720	930/830/720
Indoor noise level (H/M/L)		dB(A)	40/38/36	43/41/38	43/41/38	43/41/38
Indoor unit	Dimension (W*H*D)	mm	990*203*660	990*203*660	990*203*660	990*203*660
	Packing (W*H*D)	mm	1089*296*744	1089*296*744	1089*296*744	1089*296*744
	Net/Gross weight	kg	25/31	27/33	27/33	27/33
Refrigerant type			R410A			
Throttle		Type	EXV (Built-in)			
		Model	BD20FKS(L)			
Design pressure		MPa	4.4/2.6			
Refrigerant piping	Liquid side/ Gas side	mm	Φ6.35/ Φ12.7		Φ9.52/ Φ15.9	
Connecting wiring	Power wiring	mm ²	3*2.5(L≤20m); 3*3.5(L≤50m)			
	Signal wiring	mm ²	3*0.75			
Drainage water pipe diameter			ODΦ25			
Controller			Wireless remote controller (RM05/BG(T)E-A) (Standard)			

Notes: 1. Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. Piping: 8m(horizontal)

2. Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. Piping: 8m(horizontal)

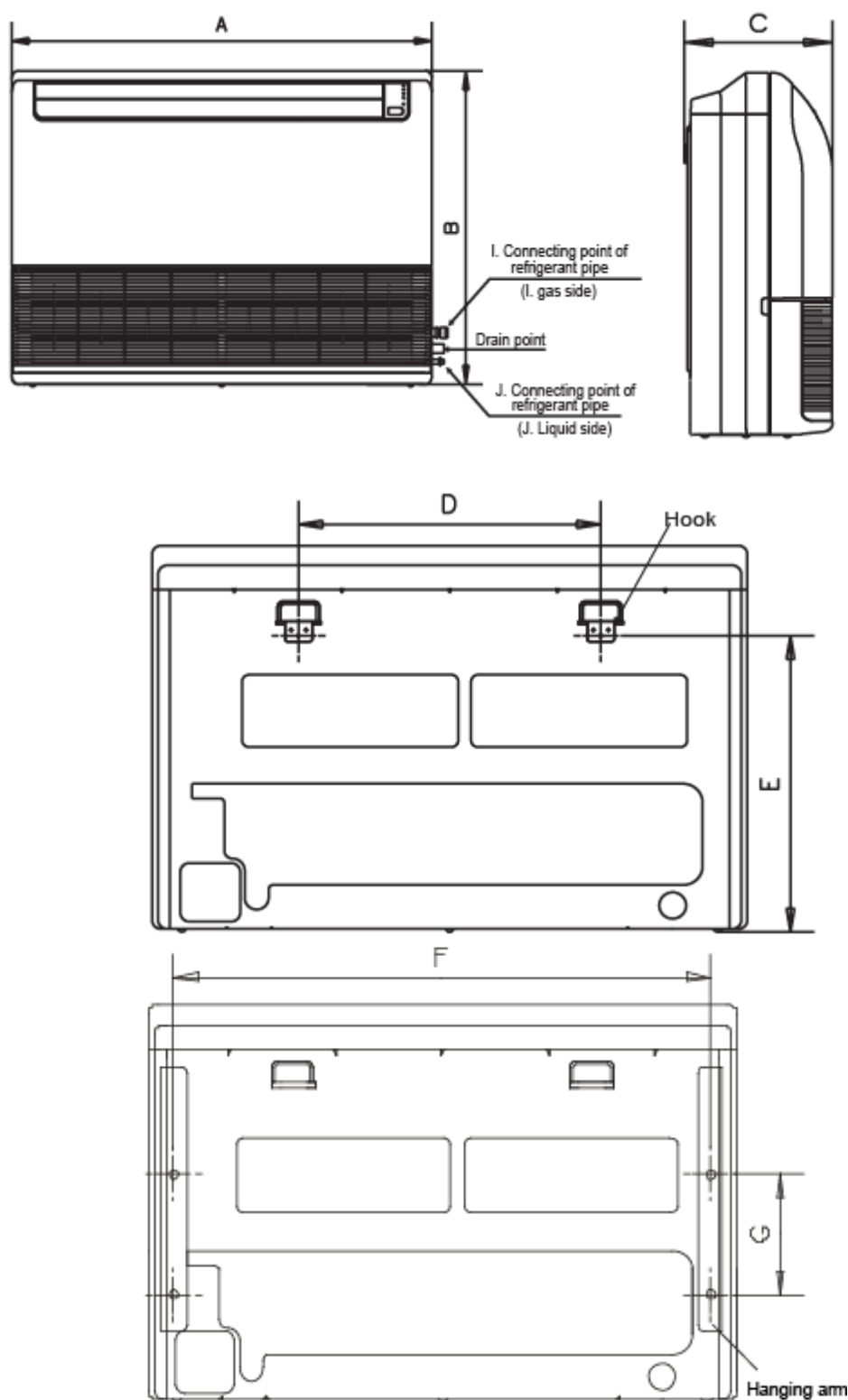
Model			MVD-80DL/DHN1-C	MVD-90DL/DHN1-C	MVD-112DL/DHN1-C	MVD-140DL/DHN1-C
Power supply		V- Ph-Hz	220-240V, 1Ph, 50/60Hz			
Cooling	Capacity	kW	8	9	11.2	14
	Input	W	126	126	65*2	65*2
	Rated current	A	1.14	1.14	0.6*2	0.6*2
Heating	Capacity	kW	9	10	12.5	15.5
	Input	W	126	126	65*2	65*2
	Rated current	A	1.14	1.14	0.6*2	0.6*2
Indoor fan motor	Model		WZDK100-38GS-1	WZDK100-38GS-1	WZDK100-38GS-2	WZDK100-38GS-2
	Type		DC motor			
	Brand		Panasonic			
	Input	W	126	126	65 * 2	65 * 2
	Output	W	100	100	55* 2	55* 2
	Speed (h/m/l)	r/min	1310/1210/1115	1310/1210/1115	1170/1070/995	1170/1070/995
Indoor coil	Number of rows		3	3	3	3
	Tube pitch * row pitch	mm	25.4*22	25.4*22	25.4*22	25.4*22
	Fin spacing	mm	1.8	1.8	1.8	1.8
	Fin type		Hydrophilic aluminum			
	Tube outside diameter and type	mm	Φ9.52			
			Inner groove tube			
	length * height * width	mm	1094*254*66		1360*254*66	
	Number of circuits		5	5	5	5
Indoor air flow (H/M/L)		m ³ /h	1,280/1,170/1,050	1,280/1,170/1,050	1,890/1,700/1,580	1,890/1,700/1,580
Indoor noise level (H/M/L)		dB(A)	45/43/40	45/43/40	47/45/42	47/45/42
Indoor unit	Dimension (W*H*D)	mm	1280*203*660	1280*203*660	1670*244*680	1670*244*680
	Packing (W*H*D)	mm	1379*296*744	1379*296*744	1764*329*760	1764*329*760
	Net/Gross weight	kg	33.5/40	33.5/40	49/57	49/57
Refrigerant type			R410A			
Throttle		Type	EXV (Built-in)			
		Model	BD20FKS(L)		BD24FKS(L)	
Design pressure		MPa	4.4/2.6			
Refrigerant piping	Liquid side/ Gas side	mm	Φ9.52/ Φ15.9			
Connecting wiring	Power wiring	mm ²	3 * 2.5(L≤20m); 3 * 3.5(L≤50m)			
	Signal wiring	mm ²	3*0.75			
Drainage water pipe diameter			ODΦ25			
Controller			Wireless remote controller (RM05/BG(T)E-A) (Standard)			

Notes: 1. Nominal cooling capacities are based on the following conditions: return air temperature: 27°CDB, 19°CWB, outdoor temperature: 35°CDB, equivalent ref. Piping: 8m(horizontal)

2. Nominal heating capacities are based on the following conditions: return air temperature: 20°CDB, outdoor temperature: 7°CDB, 6°CWB, equivalent ref. Piping: 8m(horizontal)

3. Dimensions

3.1 Outline dimension

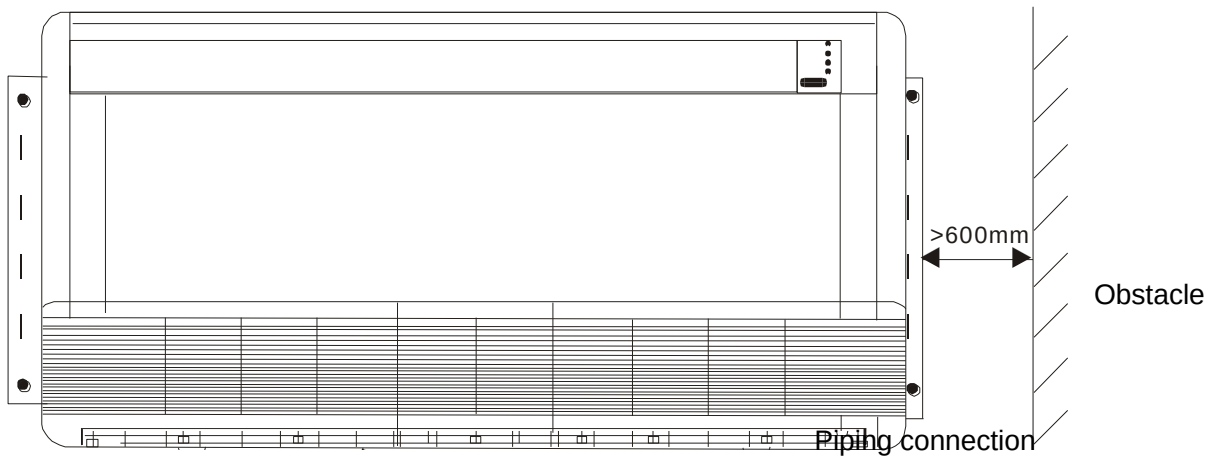


Model	A	B	C	D	E	F	G
36-71	990	660	203	505	506	907	200
80-90	1280	660	203	795	506	1195	200
112-140	1670	680	244	1070	450	1542	200

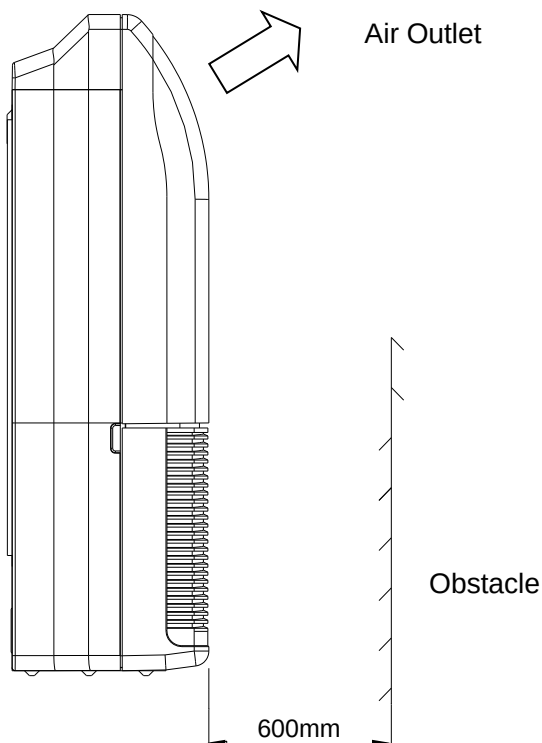
3.2 Refrigerant piping size

Model	I(Gas pipe)	J(Liquid pipe)
36-45	Φ12.7	Φ6.35
56-140	Φ15.9	Φ9.52

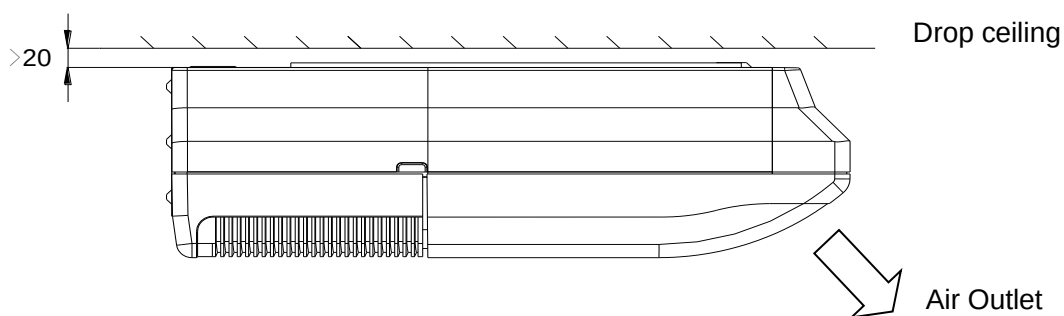
4. Service Spaces



Keep more than 600mm clearance between the unit and left/right side wall.



As well 600mm and up between the front panel and wall. For well ventilation.

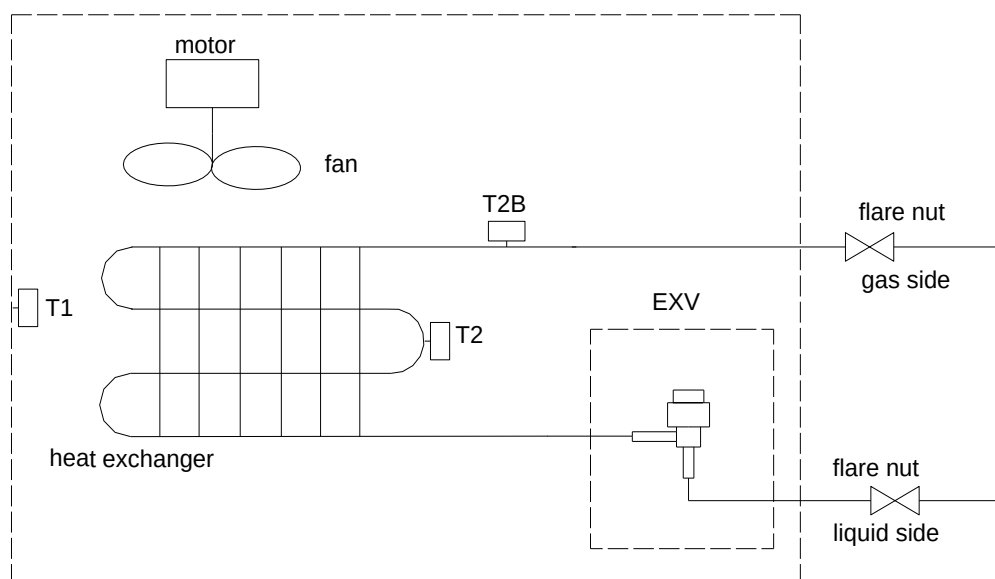


Keep 20mm up between the rear and wall if standing installed. As well 20mm between top and the drop ceiling if under ceiling installed

Note:

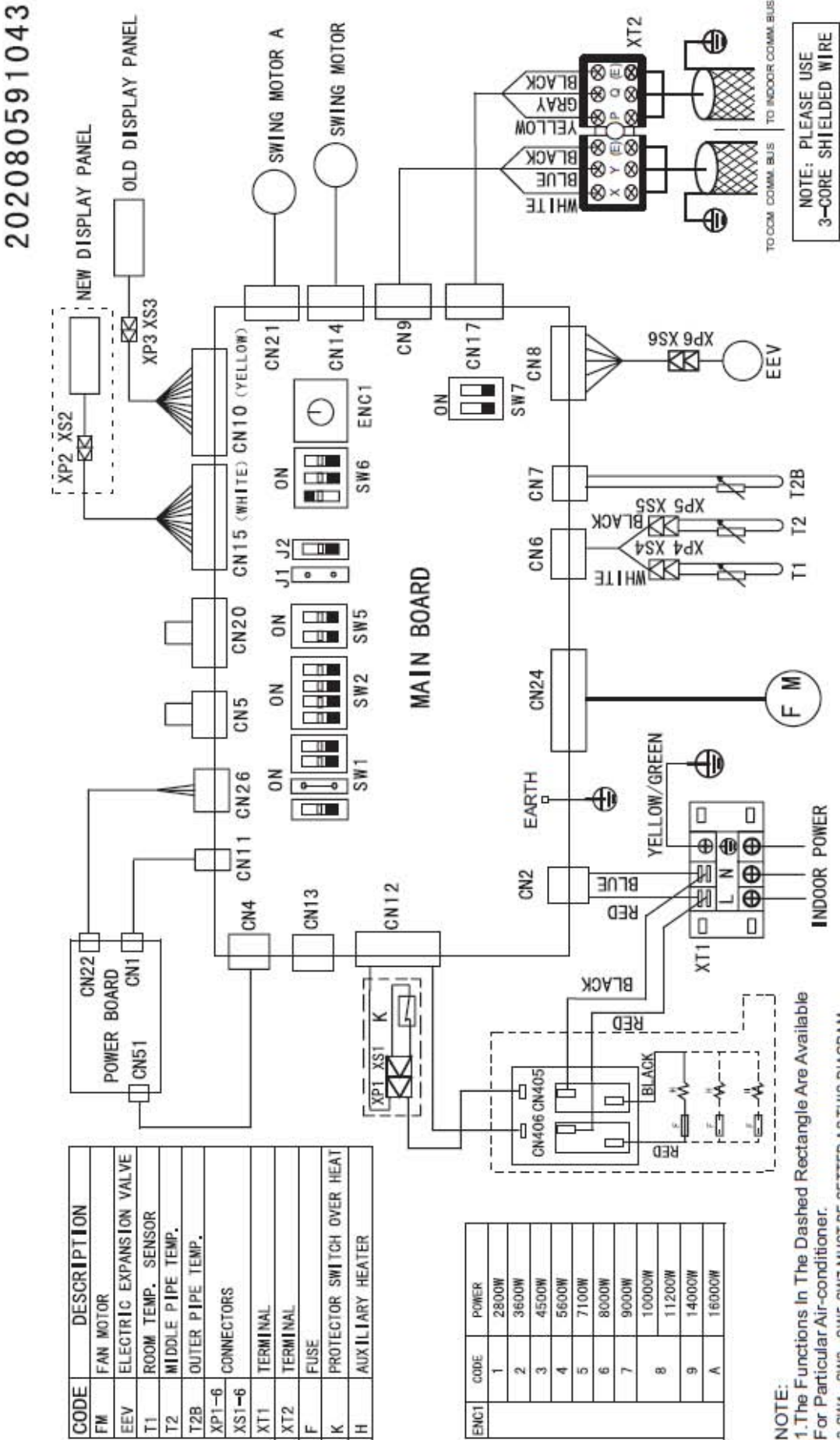
This indoor unit may be installed on ceilings up to 3.5 m in height. However, if the ceiling is higher than 2.7m, the remote control with follow me function should be customized.

5. Piping Diagrams



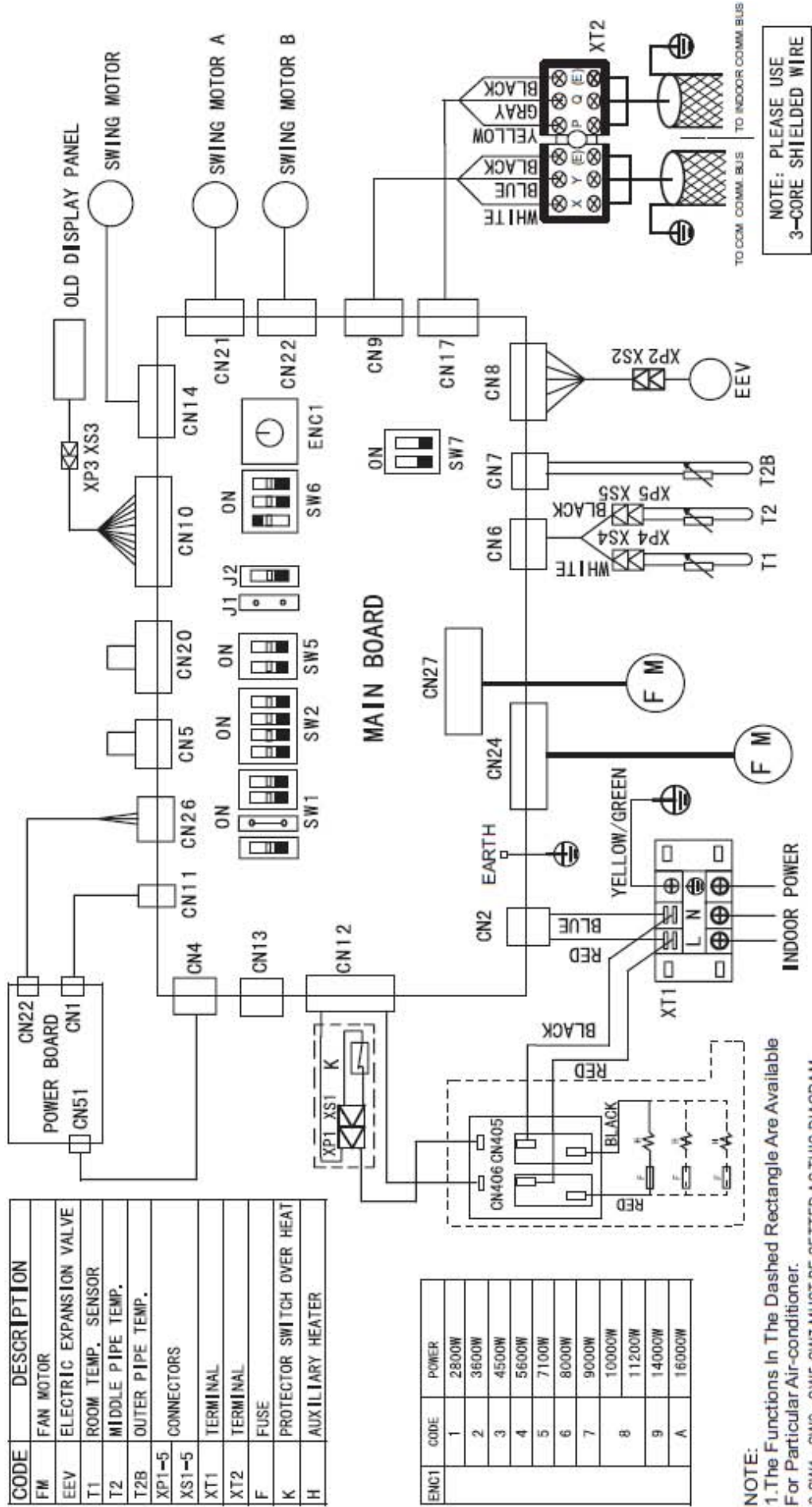
6. Wiring Diagrams

3,6kW to 9kW



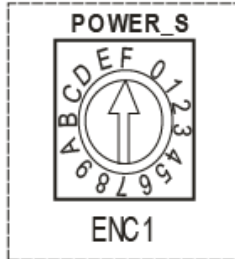
11,2kW to 14kW

202080591044



Horsepower set

Horsepower code



ENC1 switch code	Cooling power output
1	2800W
2	3600W
3	4500W
4	5600W
5	7100W
6	8000W
7	9000W
8	10000W
	11200W
9	14000W
A	16000W

Note: Base on different purposes to setting the switch cords on PC panel of indoor electrical control box. Once finish the setting, please cut off the main power, and then input power again, otherwise, setting function could not work.

Main board Code designation

SW1 definition

SW1 ON 1 2 3 4	1 means factory test mode 0 means add. auto searching mode (default setting)	SW1 ON 1 2 3 4	01 means DC fan static pressure is 1 (reserved)
SW1 ON 1 2 3 4	1 means DC fan is chosen 0 means AC fan is chosen	SW1 ON 1 2 3 4	10 means DC fan static pressure is 2 (reserved)
SW1 ON 1 2 3 4	00 means DC fan static pressure is 0 (reserved)	SW1 ON 1 2 3 4	11 means DC fan static pressure is 3 (reserved)

SW2 definition

SW2 ON 1 2 3 4	00 means the temperature is 15 degrees when shutting down the unit for cold wind proof.	SW2 ON 1 2 3 4	00 means the time of stopping indoor fan is 4 minutes
SW2 ON 1 2 3 4	01 means the temperature is 20 degrees when shutting down the unit for cold wind proof.	SW2 ON 1 2 3 4	01 means the time of stopping indoor fan is 8 minutes
SW2 ON 1 2 3 4	10 means the temperature is 24 degrees when shutting down the unit for cold wind proof.	SW2 ON 1 2 3 4	10 means the time of stopping indoor fan is 12 minutes
SW2 ON 1 2 3 4	11 means the temperature is 26 degrees when shutting down the unit for cold wind proof.	SW2 ON 1 2 3 4	11 means the time of stopping indoor fan is 16 minutes

SW5 definition

	● 00 means temperature compensation is 6 degrees under heating mode		● 10 means temperature compensation is 4 degrees under heating mode
	● 01 means temperature compensation is 2 degrees under heating mode		● 11 means temperature compensation is 8 degrees under heating mode

SW6 definition

	● 1 means old display panel ● 0 means new display panel
	● 1 means auto wind under auto mode ● 0 means auto wind under non auto mode
	reserved

SW7 definition

	Standard configure
	Last one in the network

J1,J2 definition

	J1 no Jumpers means power off memory function
	J1 Jumpers means no power off memory function
	reserved

0/1 definition

	Means 0
	Means 1

7. Capacity Tables

7.1 Cooling

TC: total capacity

SC: sensible capacity

WB: wet-bulb temperature

DB: dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (°C DB)	Indoor temperature (°C WB/DB)													
		14/20		16/23		18/26		19/27		20/28		22/30		24/32	
		TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC	TC	SC
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
3.6	10.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.7	2.5
	12.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.7	2.5
	14.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.6	2.4
	16.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.5	2.4
	18.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.5	2.4
	20.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.4	2.3
	21.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.3	2.4	4.4	2.3
	23.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.1	2.3	4.3	2.2
	25.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.1	2.3	4.2	2.2
	27.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.0	2.2	4.2	2.2
	29.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.0	2.2	4.1	2.2
	31.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	4.1	2.2
	33.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	3.9	2.1
	35.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.8	2.5	4.2	2.6	3.9	2.1
	37.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.9	2.1
	39.0	2.5	1.9	2.9	2.1	3.4	2.3	3.6	2.4	3.7	2.4	3.8	2.3	3.8	2.1
4.5	10.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.9	3.0
	12.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.9	3.0
	14.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.8	3.0
	16.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.6	2.9
	18.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.7	3.0
	20.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.7	3.0
	21.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.6	3.0
	23.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.3	3.4	5.5	3.0
	25.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.2	3.0	5.4	2.9
	27.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.1	3.0	5.2	2.8
	29.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.1	2.9	5.2	2.8
	31.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	5.0	2.9	5.1	2.7
	33.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	4.9	2.8	5.1	2.7
	35.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	4.8	2.8	5.0	2.7
	37.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.8	3.0	4.8	2.9	4.9	2.6
	39.0	3.1	2.4	3.7	2.6	4.2	2.8	4.5	2.9	4.6	2.8	4.7	2.8	4.8	2.6
5.6	10.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.3	3.5
	12.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.2	3.5
	14.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.1	3.5
	16.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	7.0	3.4
	18.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.8	3.4
	20.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.7	3.3
	21.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.6	3.3
	23.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.6	3.3
	25.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.6	3.6	6.5	3.2
	27.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.4	3.5	6.4	3.2
	29.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.3	3.5	6.4	3.3
	31.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.2	3.4	6.2	3.2
	33.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.2	3.4	6.2	3.2
	35.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	6.0	3.3	6.0	3.1
	37.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.9	3.5	5.9	3.2	6.0	3.1
	39.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.4	5.8	3.2	6.0	3.1
5.6	42.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.4	5.8	3.2	6.0	3.1
	44.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.4	5.8	3.2	6.0	3.1
	46.0	3.9	2.7	4.6	3.0	5.3	3.3	5.6	3.4	5.7	3.7	5.8	3.2	6.0	3.1

7.1	10.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	9.2	4.6
	12.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	9.1	4.5
	14.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	9.0	4.5
	16.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.9	4.4
	18.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.7	4.3
	20.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.5	4.2
	21.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.4	4.2
	23.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.3	4.1
	25.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.4	4.5	8.2	4.1
	27.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.4	8.1	4.3	8.2	4.1
	29.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	8.0	4.3	8.1	4.1
	31.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	7.9	4.3	7.8	4.0
	33.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	7.8	4.2	7.8	4.0
	35.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.5	4.5	7.6	4.1	7.7	3.9
	37.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.4	4.4	7.5	4.1	7.6	4.0
	39.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0
	42.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0
	44.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0
	46.0	4.9	3.6	5.8	4.0	6.7	4.3	7.1	4.5	7.2	4.3	7.4	4.1	7.6	4.0
8.0	10.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.4	5.6
	12.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	14.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.2	5.5
	16.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	10.0	5.4
	18.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.8	5.3
	20.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.6	5.2
	21.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	23.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.4	5.1
	25.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.4	5.5	9.3	5.0
	27.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.4	9.1	5.3	9.2	5.1
	29.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	9.0	5.3	9.1	5.0
	31.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.9	5.2	8.8	4.8
	33.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.8	5.2	8.8	4.8
	35.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.4	5.5	8.6	5.1	8.6	4.8
	37.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.3	5.4	8.4	5.0	8.6	4.9
	39.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
	42.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
	44.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
	46.0	5.5	4.4	6.6	4.9	7.5	5.3	8.0	5.5	8.1	5.3	8.3	5.0	8.6	4.9
9.0	10.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	11.7	6.0
	12.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	11.5	5.9
	14.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	11.4	5.9
	16.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	11.3	5.8
	18.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	11.0	5.8
	20.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	10.8	5.7
	21.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	10.6	5.6
	23.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	10.5	5.5
	25.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.6	6.1	10.4	5.5
	27.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.3	5.9	10.4	5.4
	29.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.1	5.7	10.3	5.4
	31.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	10.0	5.7	9.9	5.3
	33.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.6	6.0	9.9	5.6	9.9	5.3
	35.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.5	6.0	9.6	5.5	9.7	5.3
	37.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.3	5.8	9.5	5.4	9.6	5.3
	39.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.2	5.7	9.4	5.3	9.6	5.3
	42.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.2	5.7	9.4	5.3	9.6	5.3
	44.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.2	5.7	9.4	5.3	9.6	5.3
	46.0	6.2	4.9	7.3	5.3	8.4	5.8	9.0	5.9	9.2	5.7	9.4	5.3	9.6	5.3
10.0	10.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	13.0	7.3
	12.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.8	7.2
	14.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.7	7.1
	16.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.5	7.0
	18.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.2	6.8
	20.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	12.0	6.7
	21.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.9	7.3	11.8	6.6
	23.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.7	7.3	11.7	6.6

	25.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.6	7.2	11.6	6.5
	27.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.5	7.1	11.5	6.6
	29.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.4	7.1	11.4	6.5
	31.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.3	7.0	11.0	6.3
	33.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.6	7.0	11.2	6.9	11.0	6.3
	35.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.5	6.9	10.8	6.7	10.8	6.3
	37.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.4	6.9	10.8	6.7	10.7	6.2
	39.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.2	6.7	10.4	6.6	10.7	6.3
	42.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.2	6.7	10.4	6.6	10.7	6.3
	44.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.2	6.7	10.4	6.6	10.7	6.3
	46.0	6.9	5.6	8.1	6.2	9.4	6.9	10.0	7.0	10.2	6.7	10.4	6.6	10.7	6.3
11.2	10.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	15.5	8.2
	12.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	14.4	7.7
	14.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	14.2	7.6
	16.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	14.1	7.5
	18.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	14.0	7.5
	20.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	13.9	7.4
	21.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.3	7.6	13.8	7.4
	23.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.1	7.5	13.7	7.3
	25.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	13.0	7.4	13.6	7.2
	27.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	12.9	7.3	13.4	7.2
	29.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	12.8	7.3	13.3	7.2
	31.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	12.7	7.2	12.8	6.9
	33.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.9	7.4	12.5	7.2	12.5	6.8
	35.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.8	7.4	12.4	7.1	12.3	6.7
	37.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.6	7.3	12.3	7.0	12.1	6.6
	39.0	7.7	5.9	9.1	6.5	10.5	7.1	11.2	7.2	11.4	7.1	12.2	7.0	11.9	6.6
	42.0	7.7	6.0	9.1	6.6	10.4	7.2	11.2	7.3	11.4	7.1	11.6	6.6	12.0	6.6
	44.0	7.7	6.0	9.1	6.6	10.4	7.2	11.2	7.3	11.4	7.1	11.6	6.6	12.0	6.6
	46.0	7.7	6.0	9.1	6.6	10.4	7.2	11.2	7.3	11.4	7.1	11.6	6.6	12.0	6.6
14.0	10.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	18.2	9.4
	12.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	17.9	9.2
	14.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	17.8	9.2
	16.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	17.5	9.0
	18.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	17.1	8.8
	20.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	16.8	8.7
	21.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.7	9.3	16.5	8.5
	23.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.4	9.3	16.4	8.4
	25.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.2	9.3	16.2	8.4
	27.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.1	9.2	16.1	8.4
	29.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	16.0	9.1	16.0	8.4
	31.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	15.8	9.0	15.4	8.1
	33.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.8	9.0	15.7	8.9	15.4	8.1
	35.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.7	8.9	15.1	8.6	15.1	8.1
	37.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.6	8.8	15.1	8.6	15.0	8.0
	39.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.3	8.7	14.6	8.4	15.0	8.1
	42.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.3	8.7	14.6	8.4	15.0	8.1
	44.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.3	8.7	14.6	8.4	15.0	8.1
	46.0	9.7	7.2	11.3	7.9	13.2	8.8	14.0	9.0	14.3	8.7	14.6	8.4	15.0	8.1

7.2 Heating

TC: total capacity

WB: wet-bulb temperature **DB:** dry-bulb temperature

Indoor Unit size (kW)	Outdoor temperature (°C)		Indoor temperature (°C DB)					
			16.00	18.00	20.00	21.00	22.00	24.00
	WB	DB	TC	TC	TC	TC	TC	TC
	WB	DB	kW	kW	kW	kW	kW	kW
3.6	-20	-19.8	2.24	2.24	2.24	2.24	2.24	2.24
	-19	-18.8	2.40	2.40	2.40	2.40	2.40	2.40
	-17	-16.7	2.52	2.52	2.52	2.52	2.52	2.52
	-15	-14.7	2.60	2.60	2.60	2.60	2.60	2.60
	-13.00	-12.60	2.68	2.68	2.68	2.68	2.68	2.68
	-11.00	-10.50	2.80	2.80	2.80	2.80	2.80	2.80
	-10.00	-9.50	2.92	2.92	2.92	2.92	2.92	2.92
	-9.10	-8.50	3.00	3.00	3.00	3.00	3.00	3.00
	-7.60	-7.00	3.04	3.04	3.04	3.04	3.04	3.04
	-5.60	-5.00	3.16	3.16	3.16	3.16	3.16	3.16
	-3.70	-3.00	3.32	3.32	3.32	3.32	3.32	3.32
	-0.70	0.00	3.56	3.56	3.56	3.56	3.56	3.36
	2.20	3.00	3.76	3.76	3.76	3.76	3.68	3.36
	4.10	5.00	3.88	3.88	3.88	3.88	3.68	3.36
	6.00	7.00	4.00	4.00	4.00	3.88	3.68	3.36
	7.90	9.00	4.12	4.12	4.00	3.88	3.68	3.36
	9.80	11.00	4.24	4.24	4.00	3.88	3.68	3.36
4.5	11.80	13.00	4.40	4.32	4.00	3.88	3.68	3.36
	13.70	15.00	4.52	4.32	4.00	3.88	3.68	3.36
	-20	-19.8	2.80	2.80	2.80	2.80	2.80	2.80
	-19	-18.8	3.00	3.00	3.00	3.00	3.00	3.00
	-17	-16.7	3.15	3.15	3.15	3.15	3.15	3.15
	-15	-14.7	3.25	3.25	3.25	3.25	3.25	3.25
	-13.00	-12.60	3.35	3.35	3.35	3.35	3.35	3.35
	-11.00	-10.50	3.50	3.50	3.50	3.50	3.50	3.50
	-10.00	-9.50	3.65	3.65	3.65	3.65	3.65	3.65
	-9.10	-8.50	3.75	3.75	3.75	3.75	3.75	3.75
	-7.60	-7.00	3.80	3.80	3.80	3.80	3.80	3.80
	-5.60	-5.00	3.95	3.95	3.95	3.95	3.95	3.95
	-3.70	-3.00	4.15	4.15	4.15	4.15	4.15	4.15
	-0.70	0.00	4.45	4.45	4.45	4.45	4.45	4.20
	2.20	3.00	4.70	4.70	4.70	4.70	4.60	4.20
	4.10	5.00	4.85	4.85	4.85	4.85	4.60	4.20
	6.00	7.00	5.00	5.00	5.00	4.85	4.60	4.20
	7.90	9.00	5.15	5.15	5.00	4.85	4.60	4.20
5.6	9.80	11.00	5.30	5.30	5.00	4.85	4.60	4.20
	11.80	13.00	5.50	5.40	5.00	4.85	4.60	4.20
	13.70	15.00	5.65	5.40	5.00	4.85	4.60	4.20
	-20	-19.8	3.53	3.53	3.53	3.53	3.53	3.53
	-19	-18.8	3.78	3.78	3.78	3.78	3.78	3.78
	-17	-16.7	3.97	3.97	3.97	3.97	3.97	3.97
	-15	-14.7	4.10	4.10	4.10	4.10	4.10	4.10
	-13.00	-12.60	4.22	4.22	4.22	4.22	4.22	4.22
	-11.00	-10.50	4.41	4.41	4.41	4.41	4.41	4.41
	-10.00	-9.50	4.60	4.60	4.60	4.60	4.60	4.60
	-9.10	-8.50	4.73	4.73	4.73	4.73	4.73	4.73
	-7.60	-7.00	4.79	4.79	4.79	4.79	4.79	4.79
	-5.60	-5.00	4.98	4.98	4.98	4.98	4.98	4.98
	-3.70	-3.00	5.23	5.23	5.23	5.23	5.23	5.23
	-0.70	0.00	5.61	5.61	5.61	5.61	5.61	5.29
	2.20	3.00	5.92	5.92	5.92	5.92	5.80	5.29
	4.10	5.00	6.11	6.11	6.11	6.11	5.80	5.29
	6.00	7.00	6.30	6.30	6.30	6.11	5.80	5.29
7.1	7.90	9.00	6.49	6.49	6.30	6.11	5.80	5.29
	9.80	11.00	6.68	6.68	6.30	6.11	5.80	5.29
	11.80	13.00	6.93	6.80	6.30	6.11	5.80	5.29
	13.70	15.00	7.12	6.80	6.30	6.11	5.80	5.29
7.1	-20	-19.8	4.48	4.48	4.48	4.48	4.48	4.48

	-19	-18.8	4.80	4.80	4.80	4.80	4.80	4.80
	-17	-16.7	5.04	5.04	5.04	5.04	5.04	5.04
	-15	-14.7	5.20	5.20	5.20	5.20	5.20	5.20
	-13.00	-12.60	5.36	5.36	5.36	5.36	5.36	5.36
	-11.00	-10.50	5.60	5.60	5.60	5.60	5.60	5.60
	-10.00	-9.50	5.84	5.84	5.84	5.84	5.84	5.84
	-9.10	-8.50	6.00	6.00	6.00	6.00	6.00	6.00
	-7.60	-7.00	6.08	6.08	6.08	6.08	6.08	6.08
	-5.60	-5.00	6.32	6.32	6.32	6.32	6.32	6.32
	-3.70	-3.00	6.64	6.64	6.64	6.64	6.64	6.64
	-0.70	0.00	7.12	7.12	7.12	7.12	7.12	6.72
	2.20	3.00	7.52	7.52	7.52	7.52	7.36	6.72
	4.10	5.00	7.76	7.76	7.76	7.76	7.36	6.72
	6.00	7.00	8.00	8.00	8.00	7.76	7.36	6.72
	7.90	9.00	8.24	8.24	8.00	7.76	7.36	6.72
	9.80	11.00	8.48	8.48	8.00	7.76	7.36	6.72
8.0	11.80	13.00	8.80	8.64	8.00	7.76	7.36	6.72
	13.70	15.00	9.04	8.64	8.00	7.76	7.36	6.72
	-20	-19.8	5.04	5.04	5.04	5.04	5.04	5.04
	-19	-18.8	5.40	5.40	5.40	5.40	5.40	5.40
	-17	-16.7	5.67	5.67	5.67	5.67	5.67	5.67
	-15	-14.7	5.85	5.85	5.85	5.85	5.85	5.85
	-13.00	-12.60	6.03	6.03	6.03	6.03	6.03	6.03
	-11.00	-10.50	6.30	6.30	6.30	6.30	6.30	6.30
	-10.00	-9.50	6.57	6.57	6.57	6.57	6.57	6.57
	-9.10	-8.50	6.75	6.75	6.75	6.75	6.75	6.75
	-7.60	-7.00	6.84	6.84	6.84	6.84	6.84	6.84
	-5.60	-5.00	7.11	7.11	7.11	7.11	7.11	7.11
	-3.70	-3.00	7.47	7.47	7.47	7.47	7.47	7.47
	-0.70	0.00	8.01	8.01	8.01	8.01	8.01	7.56
	2.20	3.00	8.46	8.46	8.46	8.46	8.28	7.56
	4.10	5.00	8.73	8.73	8.73	8.73	8.28	7.56
9.0	6.00	7.00	9.00	9.00	9.00	8.73	8.28	7.56
	7.90	9.00	9.27	9.27	9.00	8.73	8.28	7.56
	9.80	11.00	9.54	9.54	9.00	8.73	8.28	7.56
	11.80	13.00	9.90	9.72	9.00	8.73	8.28	7.56
	13.70	15.00	10.17	9.72	9.00	8.73	8.28	7.56
	-20	-19.8	5.60	5.04	5.60	5.60	5.60	5.60
	-19	-18.8	6.00	5.40	6.00	6.00	6.00	6.00
	-17	-16.7	6.30	6.30	6.30	6.30	6.30	6.30
	-15	-14.7	6.50	6.50	6.50	6.50	6.50	6.50
	-13.00	-12.60	6.70	6.70	6.70	6.70	6.70	6.70
	-11.00	-10.50	7.00	7.00	7.00	7.00	7.00	7.00
	-10.00	-9.50	7.30	7.30	7.30	7.30	7.30	7.30
	-9.10	-8.50	7.50	7.50	7.50	7.50	7.50	7.50
	-7.60	-7.00	7.60	7.60	7.60	7.60	7.60	7.60
	-5.60	-5.00	7.90	7.90	7.90	7.90	7.90	7.90
	-3.70	-3.00	8.30	8.30	8.30	8.30	8.30	8.30
10.0	-0.70	0.00	8.90	8.90	8.90	8.90	8.90	8.40
	2.20	3.00	9.40	9.40	9.40	9.40	9.20	8.40
	4.10	5.00	9.70	9.70	9.70	9.70	9.20	8.40
	6.00	7.00	10.00	10.00	10.00	9.70	9.20	8.40
	7.90	9.00	10.30	10.30	10.00	9.70	9.20	8.40
	9.80	11.00	10.60	10.60	10.00	9.70	9.20	8.40
	11.80	13.00	11.00	10.80	10.00	9.70	9.20	8.40
	13.70	15.00	11.30	10.80	10.00	9.70	9.20	8.40
	-20	-19.8	6.16	6.16	6.16	6.16	6.16	6.16
	-19	-18.8	6.60	6.60	6.60	6.60	6.60	6.60
	-17	-16.7	6.93	6.93	6.93	6.93	6.93	6.93
	-15	-14.7	7.15	7.15	7.15	7.15	7.15	7.15
	-13.00	-12.60	7.37	7.37	7.37	7.37	7.37	7.37
	-11.00	-10.50	7.70	7.70	7.70	7.70	7.70	7.70
	-10.00	-9.50	8.03	8.03	8.03	8.03	8.03	8.03
	-9.10	-8.50	8.25	8.25	8.25	8.25	8.25	8.25
	-7.60	-7.00	8.36	8.36	8.36	8.36	8.36	8.36

	-5.60	-5.00	8.69	8.69	8.69	8.69	8.69	8.69
	-3.70	-3.00	9.13	9.13	9.13	9.13	9.13	9.13
	-0.70	0.00	9.79	9.79	9.79	9.79	9.79	9.24
	2.20	3.00	10.34	10.34	10.34	10.34	10.12	9.24
	4.10	5.00	10.67	10.67	10.67	10.67	10.12	9.24
	6.00	7.00	11.00	11.00	11.00	10.67	10.12	9.24
	7.90	9.00	11.33	11.33	11.00	10.67	10.12	9.24
	9.80	11.00	11.66	11.66	11.00	10.67	10.12	9.24
	11.80	13.00	12.10	11.88	11.00	10.67	10.12	9.24
	13.70	15.00	12.43	11.88	11.00	10.67	10.12	9.24
11.2	-20	-19.8	7.00	7.00	7.00	7.00	7.00	7.00
	-19	-18.8	7.50	7.50	7.50	7.50	7.50	7.50
	-17	-16.7	7.88	7.88	7.88	7.88	7.88	7.88
	-15	-14.7	8.13	8.13	8.13	8.13	8.13	8.13
	-13.00	-12.60	8.38	8.38	8.38	8.38	8.38	8.38
	-11.00	-10.50	8.75	8.75	8.75	8.75	8.75	8.75
	-10.00	-9.50	9.13	9.13	9.13	9.13	9.13	9.13
	-9.10	-8.50	9.38	9.38	9.38	9.38	9.38	9.38
	-7.60	-7.00	9.50	9.50	9.50	9.50	9.50	9.50
	-5.60	-5.00	9.88	9.88	9.88	9.88	9.88	9.88
	-3.70	-3.00	10.38	10.38	10.38	10.38	10.38	10.38
	-0.70	0.00	11.13	11.13	11.13	11.13	11.13	10.50
	2.20	3.00	11.75	11.75	11.75	11.75	11.50	10.50
	4.10	5.00	12.13	12.13	12.13	12.13	11.50	10.50
	6.00	7.00	12.50	12.50	12.50	12.13	11.50	10.50
	7.90	9.00	12.88	12.88	12.50	12.13	11.50	10.50
	9.80	11.00	13.25	13.25	12.50	12.13	11.50	10.50
	11.80	13.00	13.75	13.50	12.50	12.13	11.50	10.50
	13.70	15.00	14.13	13.50	12.50	12.13	11.50	10.50
	-20	-19.8	8.68	8.68	8.68	8.68	8.68	8.68
14.0	-19	-18.8	9.30	9.30	9.30	9.30	9.30	9.30
	-17	-16.7	9.77	9.77	9.77	9.77	9.77	9.77
	-15	-14.7	10.08	10.08	10.08	10.08	10.08	10.08
	-13.0	-12.6	10.4	10.4	10.4	10.4	10.4	10.4
	-11.0	-10.5	10.9	10.9	10.9	10.9	10.9	10.9
	-10.0	-9.5	11.3	11.3	11.3	11.3	11.3	11.3
	-9.1	-8.5	11.6	11.6	11.6	11.6	11.6	11.6
	-7.6	-7.0	11.8	11.8	11.8	11.8	11.8	11.8
	-5.6	-5.0	12.3	12.3	12.3	12.3	12.3	12.3
	-3.7	-3.0	12.9	12.9	12.9	12.9	12.9	12.9
	-0.7	0.0	13.8	13.8	13.8	13.8	13.8	13.0
	2.2	3.0	14.6	14.6	14.6	14.6	14.3	13.0
	4.1	5.0	15.0	15.0	15.0	15.0	14.3	13.0
	6.0	7.0	15.5	15.5	15.5	15.0	14.3	13.0
	7.9	9.0	16.0	16.0	15.5	15.0	14.3	13.0
	9.8	11.0	16.4	16.4	15.5	15.0	14.3	13.0
	11.8	13.0	17.1	16.7	15.5	15.0	14.3	13.0
	13.7	15.0	17.5	16.7	15.5	15.0	14.3	13.0

8. Electrical Characteristics

Model	Indoor Unit				Power Supply		IFM	
	Hz	Voltage	Min.	Max.	MCA	MFA	KW	FLA
MVD-36DL/DHN1-C	50/60	220-240	198	254	0.32	5	0.020	0.15
MVD-45DL/DHN1-C	50/60	220-240	198	254	0.89	5	0.080	0.72
MVD-56DL/DHN1-C	50/60	220-240	198	254	0.89	5	0.080	0.72
MVD-71DL/DHN1-C	50/60	220-240	198	254	0.89	5	0.080	0.72
MVD-80DL/DHN1-C	50/60	220-240	198	254	1.14	5	0.100	1.14
MVD-90DL/DHN1-C	50/60	220-240	198	254	1.14	5	0.100	1.14
MVD-112DL/DHN1-C	50/60	220-240	198	254	1.25	5	0.055*2	0.6*2
MVD-140DL/DHN1-C	50/60	220-240	198	254	1.25	5	0.055*2	0.6*2

Remark:

MCA: Min. CircuitAmps. (A)

MFA: Max. Fuse Amps. (A)

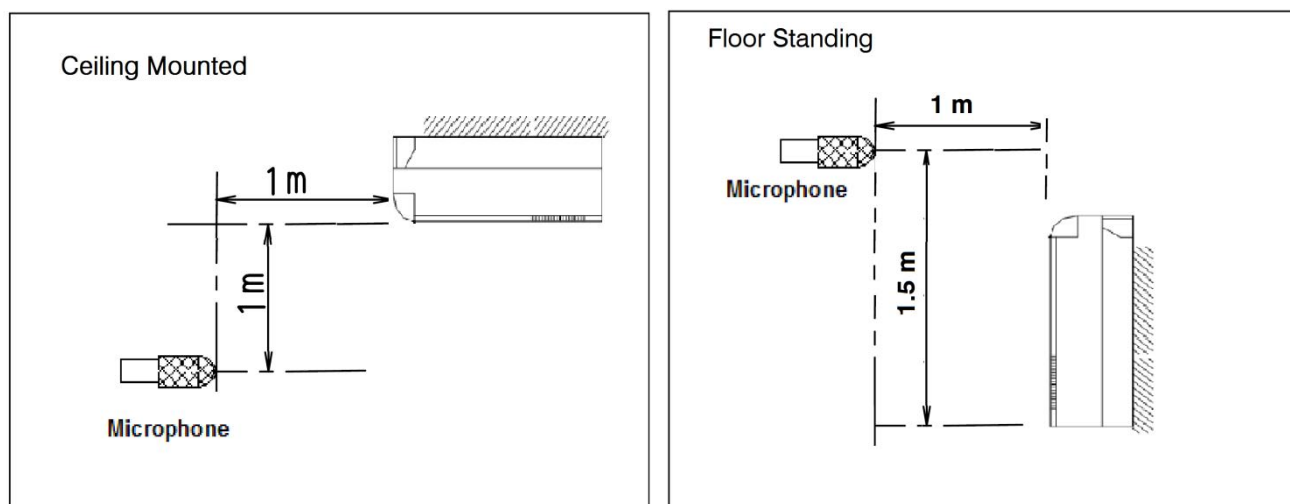
KW: Fan Motor Rated Output (kW)

FLA: Full Load Amps. (A)

IFM: Indoor Fan Motor

9. Sound Levels

9.1 Test condition



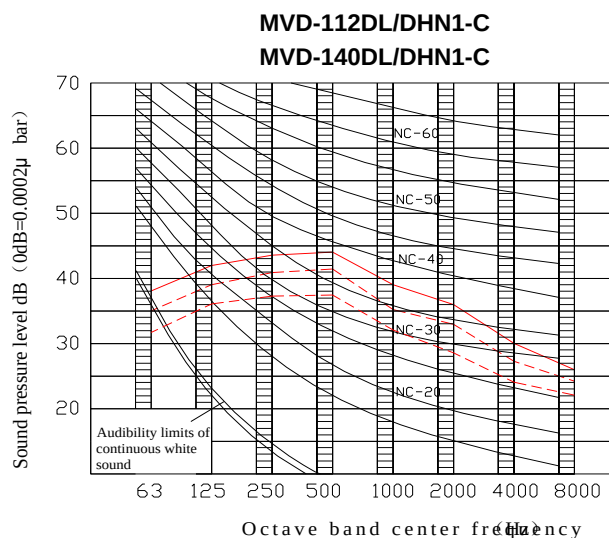
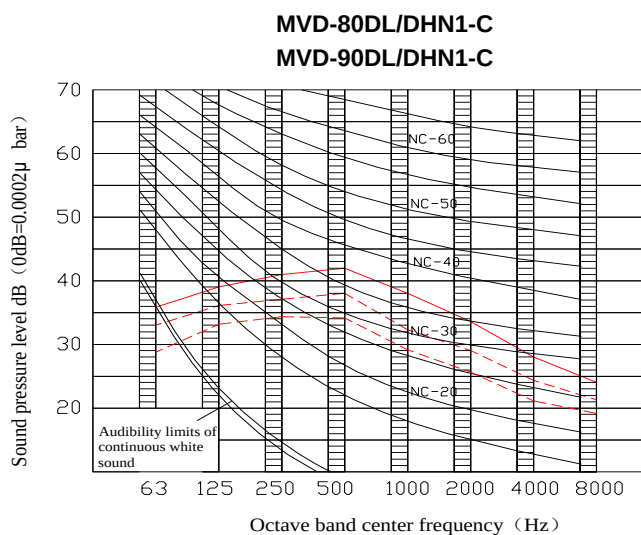
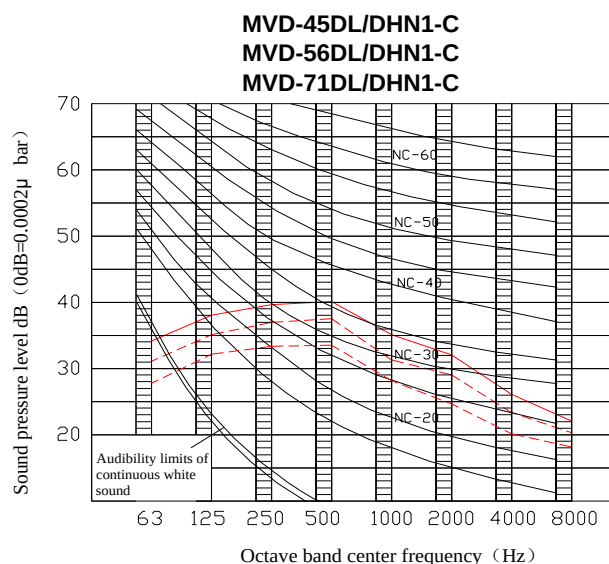
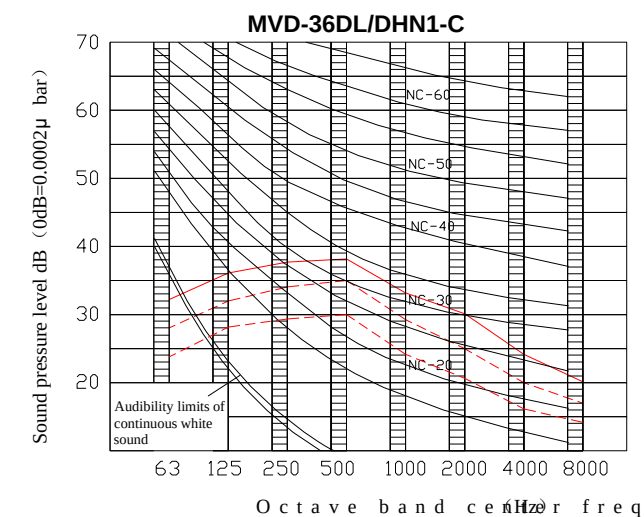
Note:

1. During actual operation, these values are normally somewhat higher as a result of ambient conditions.
2. Anechoic chamber conversion value, measured at a point 1m in front of the unit at a height of 1.5m.

9.2 Test data (Sound Pressure Levels)

Model	Sound level under three speeds of fan (dB(A))		
	H	M	L
MVD-36DL/DHN1-C	40	38	36
MVD-45DL/DHN1-C	43	41	38
MVD-56DL/DHN1-C	43	41	38
MVD-71DL/DHN1-C	43	41	38
MVD-80DL/DHN1-C	45	43	40
MVD-90DL/DHN1-C	45	43	40
MVD-112DL/DHN1-C	47	45	42
MVD-140DL/DHN1-C	47	45	42

9.3 Octave Band Level



10. Accessories

Name	Quantity	Shape	Usage
Installation manual	1	/	/
Hook	2		/
Hanging arm	2		/
Drainage pipe	1		Drainage
Pipe insulation material	1		Heat insulation for drainage pipe
Bolt assembly	4		/
Copper	1		Use for pipe connection of engineering installation
Remote controller	1		/
7# alkaline battery	2		/
Holder for remote controller	1		Hold the remote controller
Remoter controller manual	1		/
Mounting screw(ST2.9 10-C-H)	2		Installation Holder for remote controller
Network matching wire	1		The indoor unit which at the terminal of communication system should connect a impedance between port P and port Q.



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