Part 1 General Information

1. Product lineup

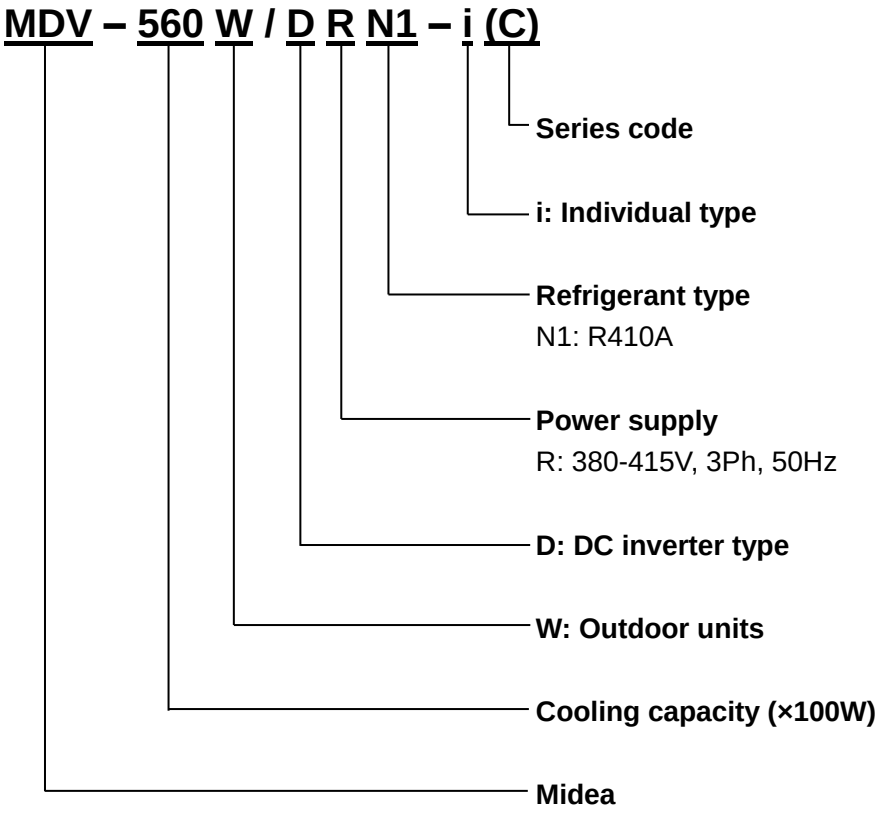
380-415V/3Ph/50Hz

Model name	External appearance
MDV-560W/DRN1-i(C)	
MDV-615W/DRN1-i(C) MDV-670W/DRN1-i(C)	

Outdoor units basic information

Model	Net dimension W×H×D (mm)	Net/Gross weight (kg)	Max. quantity of connectable indoor units
MDV-560W/DRN1-i(C)	1390×1615×765	360/375	33
MDV-615W/DRN1-i(C)	1585×1615×765	385/400	36
MDV-670W/DRN1-i(C)	1585×1615×765	390/405	39

2. Nomenclature



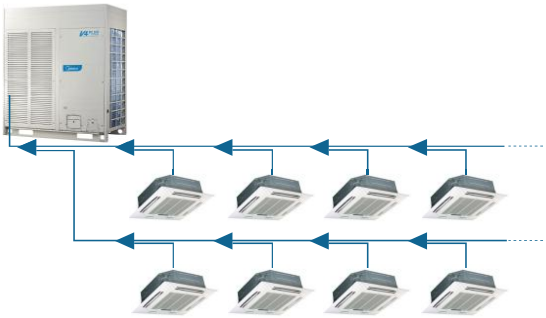
3. Features

3.1 Wide application range

3.1.1 Wide capacity range

The whole product lineup of V4+I series will be from 7HP to 30HP, which is designed to optimize performance and better match varieties of application requirement. Especially, the integrated designed V4+I series is focus on provide better air conditioning system solution for the small and middle-sized buildings in the global market.

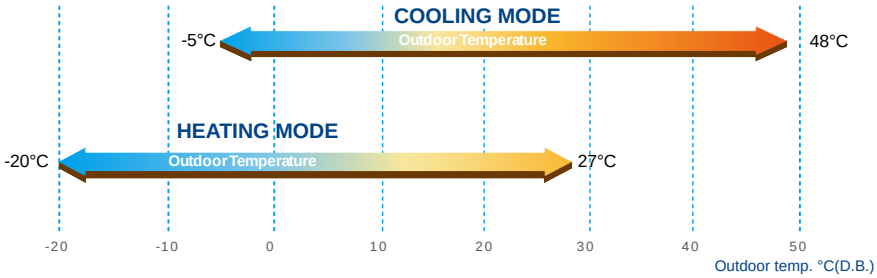
3.1.2 Flexible indoor units connection



A 24HP outdoor unit supports up to 39 indoor units, freeing up considerable space outside, use your backyard more wisely with much more space available created by less number of outdoor units.

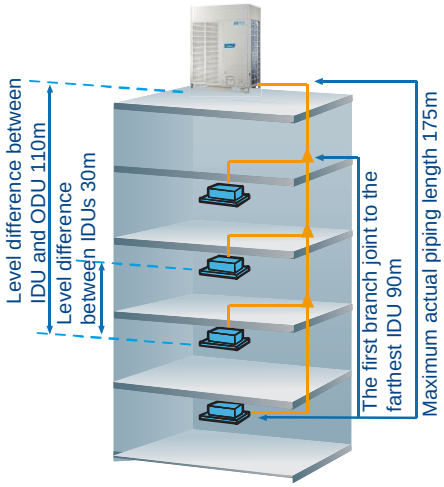
- **Maximum 39 indoor units** for a 24HP outdoor units installation
- **Maximum 36 indoor units** for a 22HP outdoor units installation
- **Maximum 33 indoor units** for a 20HP outdoor units installation

3.1.3 Wide operation range



The V4+I series system operates stably at extreme temperatures ranging from minus 20°C to 48°C.

3.1.4 Flexible piping design



V4+I series offers an extended piping length of 175m (200m equivalent piping length) with a total system piping length of **1,000**m.

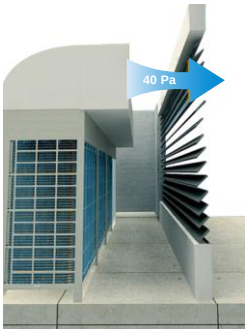
In case the outdoor unit is located above the indoor unit the height difference between outdoor unit and indoor unit is up to **110**m.

In case the outdoor unit is located below the indoor unit the height difference between outdoor unit and indoor unit is up to **70**m.

The longest piping length is 40m standard. It can be extended to **90**m*.

*For more information, please contact your local Midea dealer.

3.1.5 High external static pressure



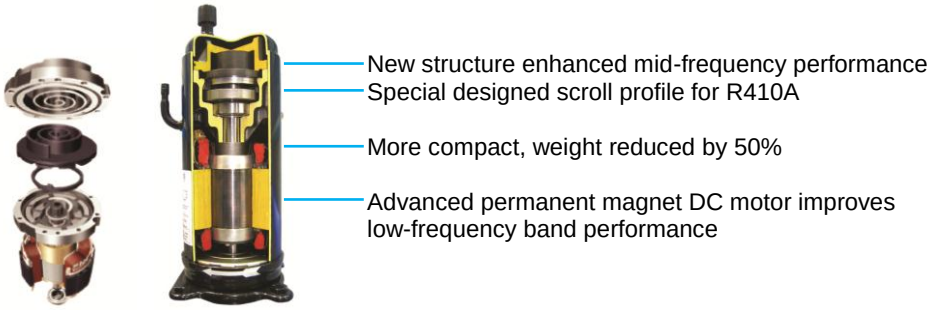
High static pressure propeller and optimized fan guard can adapt to various installation environments.

Midea now offers 40Pa* external pressure for customized applications. A standard 0-20Pa function is equipped by default

3.2 High efficiency

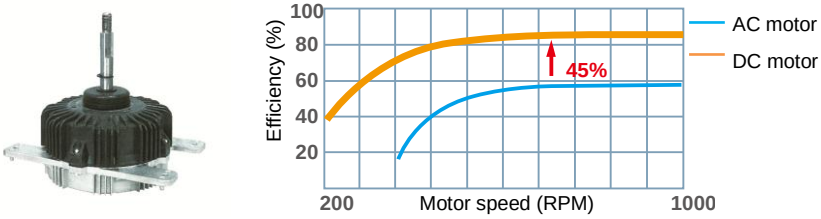
3.2.1 High efficiency DC inverter compressor

High efficiency DC inverter compressor reduces poser consumption by 25%.



3.2.2 High efficiency DC motor

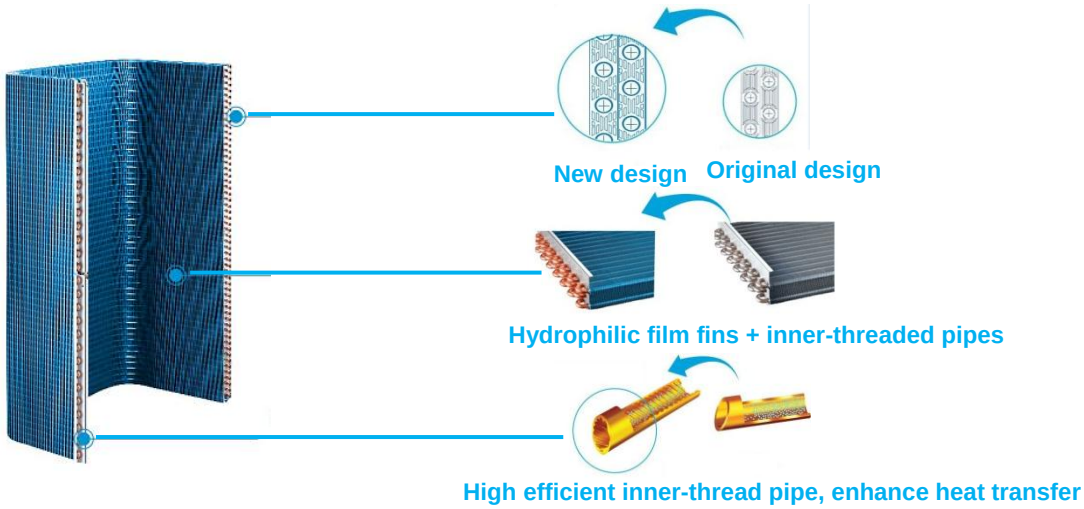
According to the running load and pressure, it controls the speed of DC fan to achieve the minimum power consumption.



3.2.3 High efficiency heat exchanger

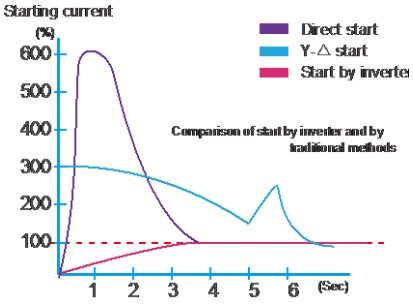
The new designed window fins enlarge the heat-exchanging area, decrease the air resistance, save more power and enhance heat exchange performance.

Hydrophilic film fins and inner-threaded copper pipes optimize heat exchange efficiency.



3.3 Enhanced comfort

3.3.1 Intelligent soft start technology

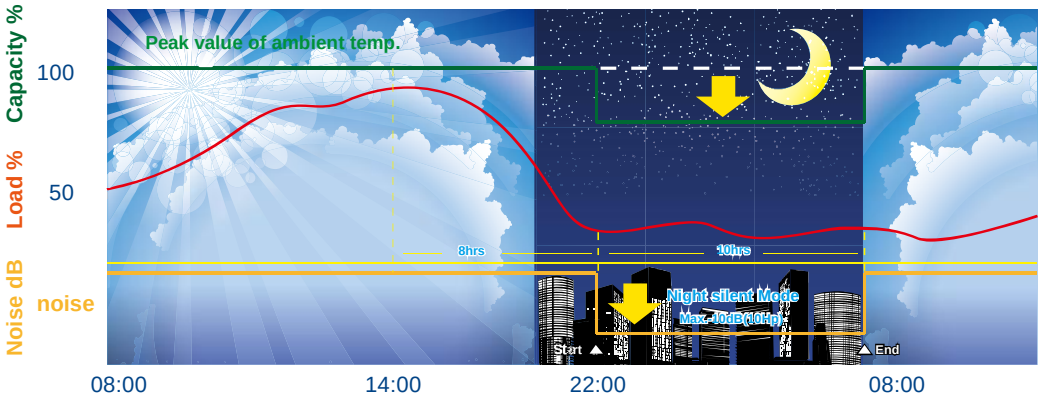


DC inverter compressor soft start function reduces strike to the electric network. This kind of high-performance and low sound scroll compressor operates at a faster rate when starting, reducing start-up time. It also helps the unit to quickly adjust the room temperature to the set level.

3.3.2 Night silent operation mode

Midea's Night Silent Mode feature which is easily set on the PCB board allows the unit to be set to vary time options during Non-Peak and Peak operation time optimizing the units noise output.
Extra silent operation mode can reduce sound level further, minimum 46.8dB (A).
Night silent operation will be activated X hours after the peak temperature during daytime, and it will go back to normal operation after Y hours.

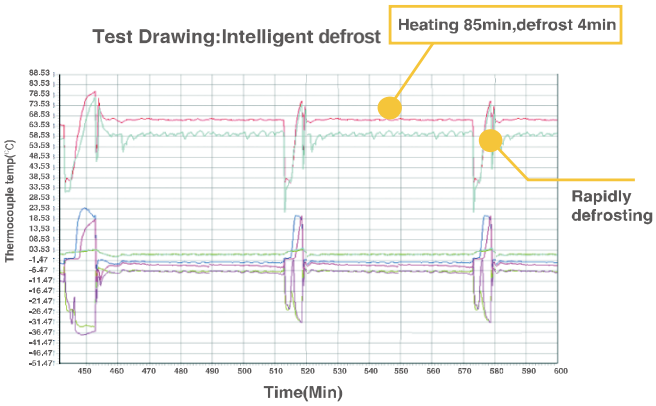
Model 1→X: 6 hours, Y: 10 hours Model 2→X: 8 hours, Y: 10 hours
Model 3→X: 6 hours, Y: 12 hours Model 4→X: 8 hours, Y: 8 hours

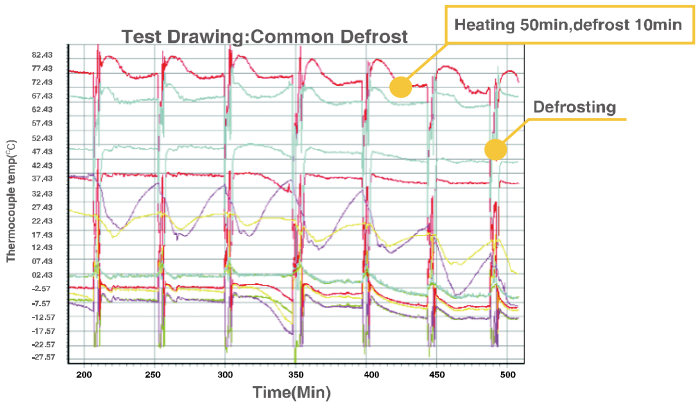


Notes:

This function can be activated by setting at site. Temperature (load) curve shown in the graph is just an example.

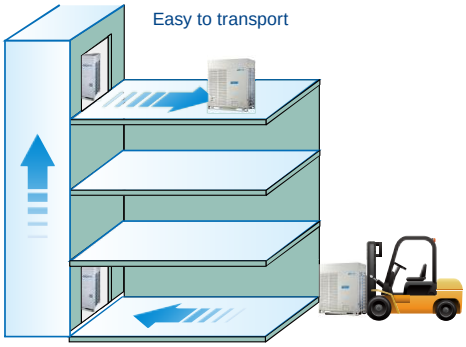
3.3.3 Intelligent defrosting raises heat capacity





3.4 Easy installation and service

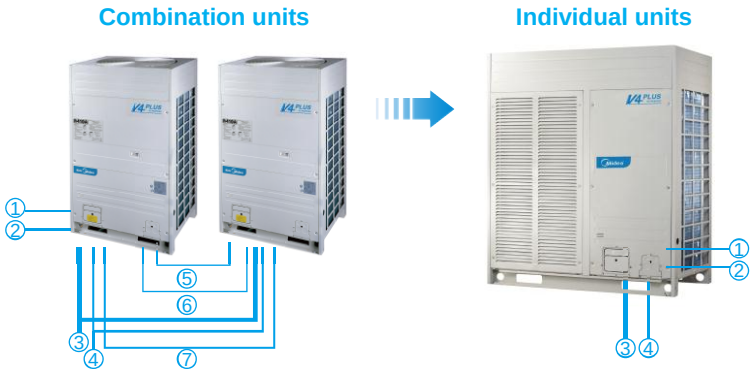
3.4.1 Compact design for effective use of space



Compact size and light weight design minimizes the installation footprint, reduces the installation floor load, and easier for transportation. For some projects the units can even be transported through the elevator or forklift, lessen access problem at the jobsite.

3.4.2 Integrated design

Compare with combination units, the individual units no need complicated piping and wiring in the jobsite. It eliminates the communication wire, power wire, oil balance pipe, and refrigerant distributors between units. Lessing brazing joint can optimize the installation quality and eliminated the possibility of moisture get into the system.

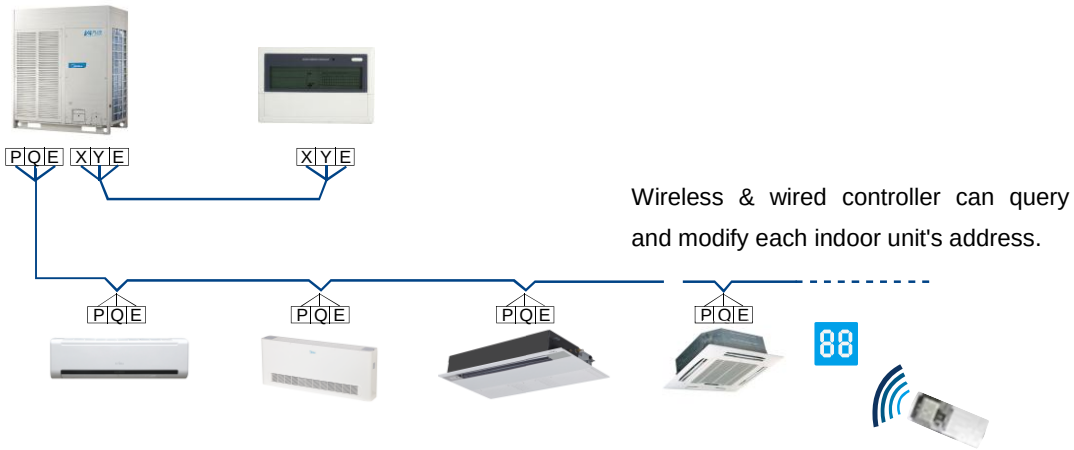


①Power wire and grounding wire
②Communication wire
③Main gas pipe
④Main liquid pipe
⑤Power wire and grounding wire
⑥Communication wire
⑦Oil balance pipe

3.4.3 Simple signal line connection

Installation is easier as communication wiring can be shared by indoor & outdoor units. It's easy for the user to retrofit the existing system with a centralized control by simply connecting to the outdoor units.

- PQE & XYE: only one set of PQE communication wires can achieve communication among indoor units, outdoor units and the network.
- Reversible communication, central controller can be connected from indoor side or outdoor side as you wish.



3.4.4 Auto addressing

Outdoor unit can distribute address for each indoor unit automatically.

Wireless and wired controllers can enquire and modify each indoor unit's address.

3.4.5 Easy maintenance

Reserved checking window on electric control box for convenient spot checking and status enquiry.

Self-diagnosis function helps service engineers locate faults quickly and easily.

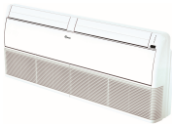
Compressor is located near the door, which simplifies checks and enables valve or compressor parts to be replaced easily.

4. Indoor units lineup

Capacity (×100W)	Cassette type			
	One-way cassette	Two-way cassette	Compact four-way cassette	Four-way cassette
				
22		•	•	
28	•	•	•	•
36	•	•	•	•
45	•	•	•	•
56	•	•		•
71		•		•
80				•
90				•
100				•
112				•
140				•

Capacity (×100W)	Duct type					
	Low static pressure duct	Medium static pressure duct	High static pressure duct			
						
18	•					
22	•	•				
28	•	•				
36	•	•				
45	•	•				
56	•	•				
71		•	•			
80		•	•			
90		•	•			
100						
112		•	•			
140		•		•		
160				•		
200					•	
250					•	
280					•	
400						•
450						•
560						•

Indoor units lineup

Capacity (×100W)	Floor-standing/Ceiling & Floor/Console			
	Cased floor-standing	Uncased floor-standing	Ceiling & floor	console
				
22	•	•		•
28	•	•		•
36	•	•	•	•
45	•	•	•	•
56	•	•	•	
71	•	•	•	
80	•	•	•	
90			•	
112			•	
140			•	
160			•	

Capacity (×100W)	Wall mounted/Fresh air processing unit				
	Wall mounted (S panel)	Wall mounted (C panel)	Wall mounted (R panel)	Fresh air processing unit	
					
22	•	•			
28	•	•			
36	•	•			
45	•	•			
56	•	•			
71			•		
80			•		
90			•		
125				•	
140				•	
200					•
250					•
280					•

Note:

Due to continuous improvement, specifications are subject to change without prior notice.

Part 2 Specifications & Performances

1. Specifications

Model			MDV-560W/DRN1-i(C)	MDV-615W/DRN1-i(C)	MDV-670W/DRN1-i(C)
Power supply		V-Ph-Hz	380-415/3/50	380-415/3/50	380-415/3/50
Cooling	Capacity	kW	56.0	61.5	67.0
	Power input	kW	17.0	18.8	20.8
	EER		3.30	3.27	3.22
Heating	Capacity	kW	63.0	69.0	75.0
	Power input	kW	16.0	17.9	19.8
	COP		3.94	3.86	3.79
DC inverter compressor	Model		E655DHD-65D2YG	E655DHD-65D2YG	E655DHD-65D2YG
	Type		Scroll	Scroll	Scroll
	Brand		Hitachi	Hitachi	Hitachi
	Quantity		1	1	1
	Capacity	kW	31.59	31.59	31.59
	Input	kW	10.34	10.34	10.34
	Crankcase heater	W	30×2	30×2	30×2
	Refrigerant oil type		FVC68D	FVC68D	FVC68D
	Refrigerant oil charge	ml	500	500	500
Fixed inverter compressor	Model		E605DH-59D2YG	E655DH-65D2YG	E855DH-80D2YG
	Type		Scroll	Scroll	Scroll
	Brand		Hitachi	Hitachi	Hitachi
	Quantity		2	2	2
	Capacity	kW	15.39×2	17.1×2	20.9×2
	Input	kW	5.13×2	5.74×2	7.08×2
	Crankcase heater	W	33×2	33×2	33×2
	Refrigerant oil type		FVC68D	FVC68D	FVC68D
	Refrigerant oil charge	ml	500×2	500×2	1100×2
Outdoor fan motor	Model		WZDK450-38G+YDK450-6C	WZDK750-38G-5+YDK450-6C	WZDK750-38G-5+YDK450-6C
	Type		DC+AC	DC+AC	DC+AC
	Quantity		2	2	2
	Brand		Panasonic, Nidec/YongAn, Broad-ocean, Weiling, Match-well		
	Insulation class		E/F	E/F	E/F
	Safe class		IP44	IP44	IP44
	Input	W	420+720	780+720	780+720
	Output	W	340+450	625+450	625+450
	Rated current	A	3.6+3.3	5.7+3.3	5.7+3.3
Outdoor fan	Material		ASG20	ASG20	ASG20
	Type		Axial fan	Axial fan	Axial fan
	Quantity	mm	2	2	2

	Diameter	mm	562/700	700/700	700/700
	Height		162/202	200/202	200/202
	External static pressure	Pa	0-20 (default)	0-20 (default)	0-20 (default)
		Pa	20-40 (customized)	20-40 (customized)	20-40 (customized)
Outdoor coil	Number of rows		2	2	2
	Tube pitch(a)×row pitch(b)	mm	22×19	22×19	22×19
	Fin spacing	mm	1.6	1.6	1.6
	Fin type		Hydrophilic fin	Hydrophilic fin	Hydrophilic fin
	Tube outside diameter	mm	7.94	7.94	7.94
	Tube type		Inner thread tube	Inner thread tube	Inner thread tube
	Coil dimension (W×H×D)	mm	3135×1232×38	3504×1232×38	3504×1232×38
	Number of circuits		inlet:28; outlet:28	inlet:52; outlet:33	inlet:52; outlet:33
Outdoor air flow		m^3/h	20000	23000	23000
Sound pressure level		dB(A)	62	63	63
Connectable indoor unit	Total capacity	%	50-130	50-130	50-130
	Max. quantity		33	36	39
Outdoor unit	Net dimension (W×H×D)		1390×1615×765	1585×1615×765	1585×1615×765
	Packing (W×H×D)	mm	1455×1790×830	1650×1810×840	1650×1810×840
	Net/Gross weight	mm	360/375	385/400	390/405
Refrigerant	Type		R410A	R410A	R410A
	Factory charged	kg	17	18.5	18.5
Throttle type			EXV	EXV	EXV
Design pressure (Hi/Lo)		MPa	4.4/2.6	4.4/2.6	4.4/2.6
Refrigerant piping	Liquid pipe	mm	Φ19.1	Φ19.1	Φ19.1
	Gas pipe	mm	Φ31.8	Φ31.8	Φ31.8
Ambient temp. range	Cooling	°C	-5~48	-5~48	-5~48
	Heating	°C	-20~27	-20~27	-20~27

Notes:

Capacities are based on the following conditions:

Cooling: Indoor temperature 27 °C DB/19 °C WB; Outdoor temperature 35 °C DB/24 °C WB.

Heating: Indoor temperature 20 °C DB/15 °C WB; Outdoor temperature 7 °C DB/6 °C WB.

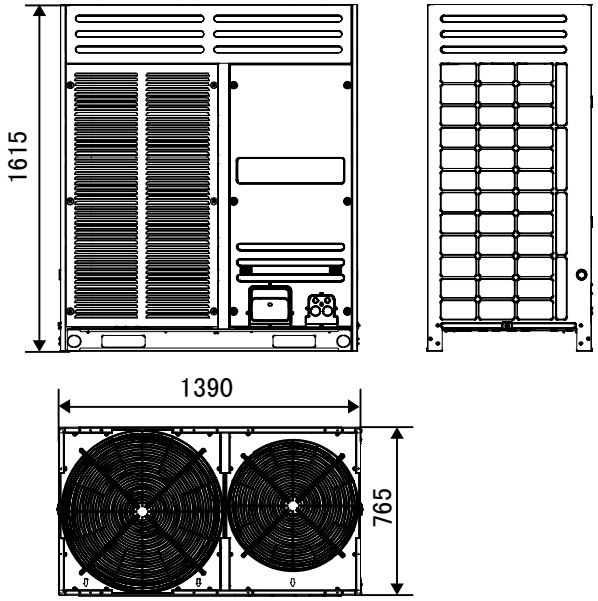
Piping length: Interconnecting piping length 7.5m, level difference of zero.

Sound values are measured in a semi-anechoic room, at a position 1m in front of the unit and 1.3m above the floor.

The above data may be changed without notice for future improvement on quality and performance.

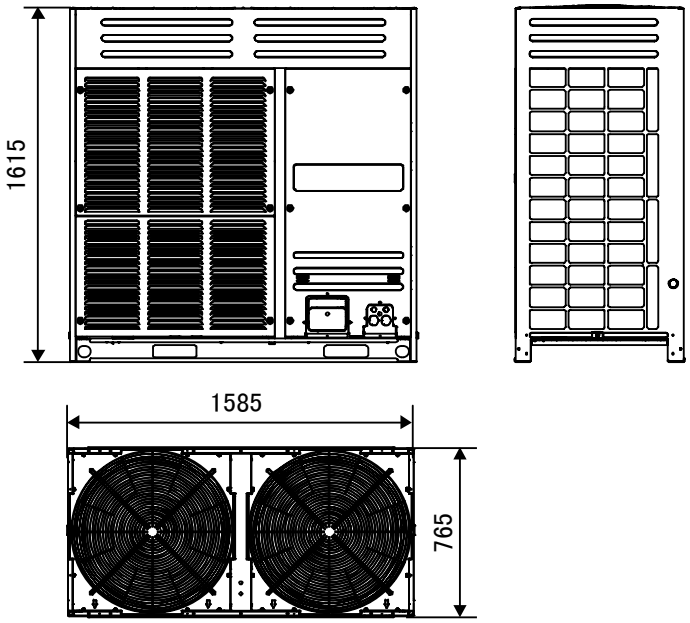
2. Dimensions

MDV-560W/DRN1-i(C)



Top view

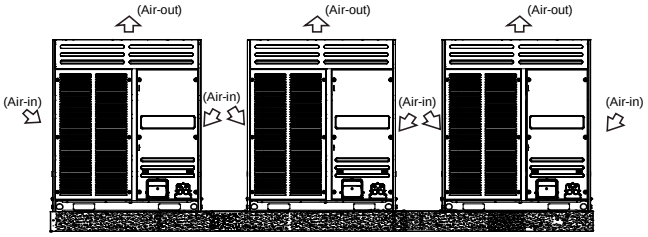
MDV-615W/DRN1-i(C); MDV-670W/DRN1-i(C)



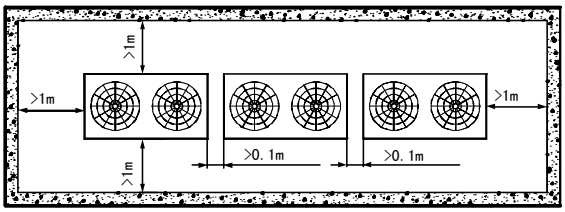
Top view

3. Service space

- Ensure enough space for maintenance. The modules in the same system must be on the same height. When installing the unit, leave enough space for maintenance.



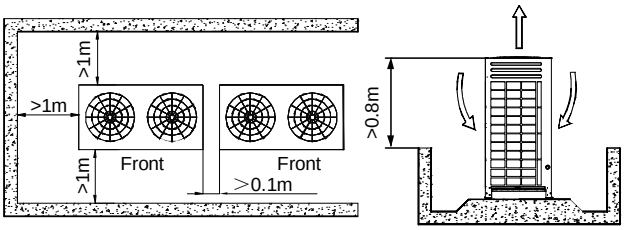
Installation and maintenance surface



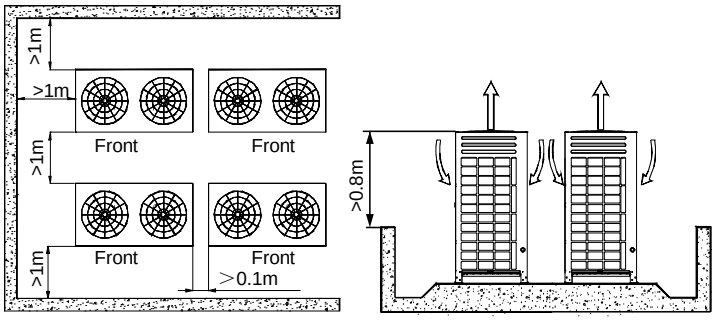
Top view of the outdoor unit

- When the outdoor unit is higher than the surrounding obstacle

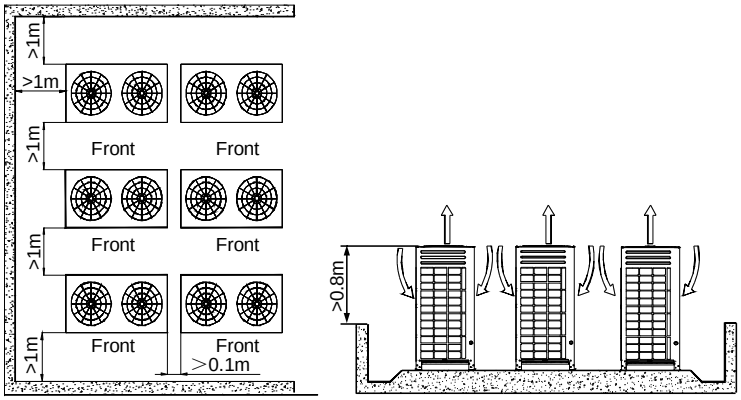
One row



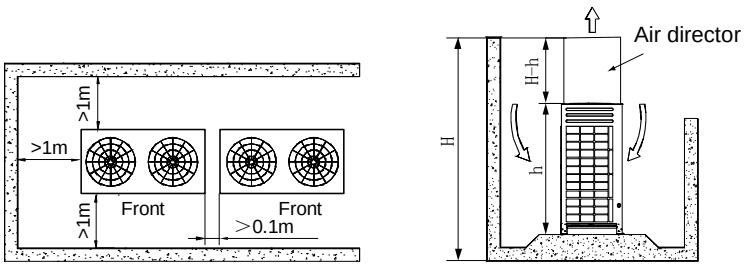
Two rows



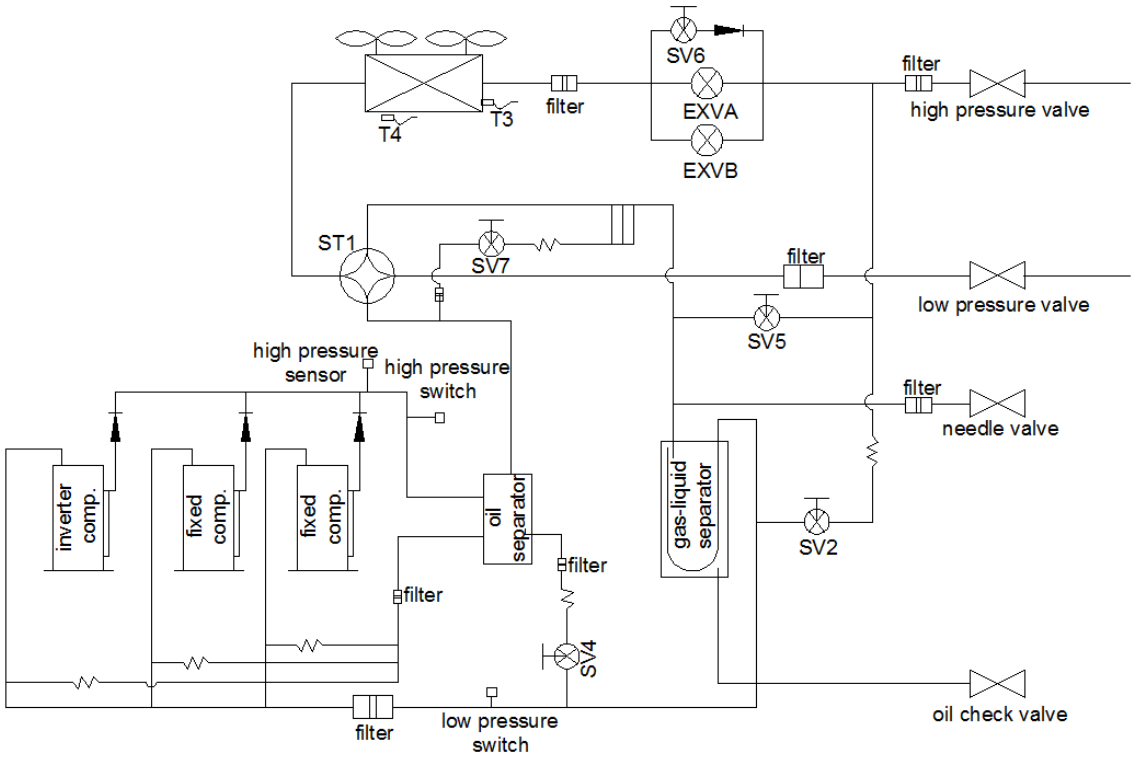
More than two rows



- When the outdoor unit is lower than the surrounding obstacle, to avoid cross connection of the outdoor hot air from affecting the heat exchange effect, please add an air director onto the exhaust hood of the outdoor unit to facilitate heat dissipation. See the figure below. The height of the air director is HD (namely H-h). Please make the air director on site.



4. Piping diagrams



Key components:

Oil separator: It is used to separate oil from high pressure and high temperature gas refrigerant, which is pumped out from compressor. The separation efficiency is up to 99%, it makes the oil return back to each compressor very soon.

Gas-liquid separator: It is used to store the liquid refrigerant and oil; it can protect the compressor from liquid hammer.

Four-way valve (ST1): It is used to change the refrigerant flow direction; it is closed in cooling mode and opened in heating mode.

EXV (Electromagnetic Expansion Valve): It is used to adjust refrigerant volume.

SV2: It is used to protect compressor. When any compressor discharge temperature is higher than 100^{o}C, SV2 will be open to spray a little liquid refrigerant to cooling compressor, and it will be closed when the discharge temperature is lower than 90^{o}C.

SV4: It is used to help the oil in oil separator return back to compressor, guarantee the oil balance among compressors. When the unit is initial power on, SV4 will open 120 seconds, then it will reopen after DC inverter compressor running 5 minutes and then it will close after DC inverter compressor running 15 minutes. Later, SV4 will open 3 minutes after DC inverter running 20 minutes regularly.

SV5: It is used to enlarge refrigerant volume to accelerate defrosting speed. In defrosting mode, SV5 will be open to cut the refrigerant flowing circle, so the defrosting process will take less time, in cooling mode, SV5 will always be closed.

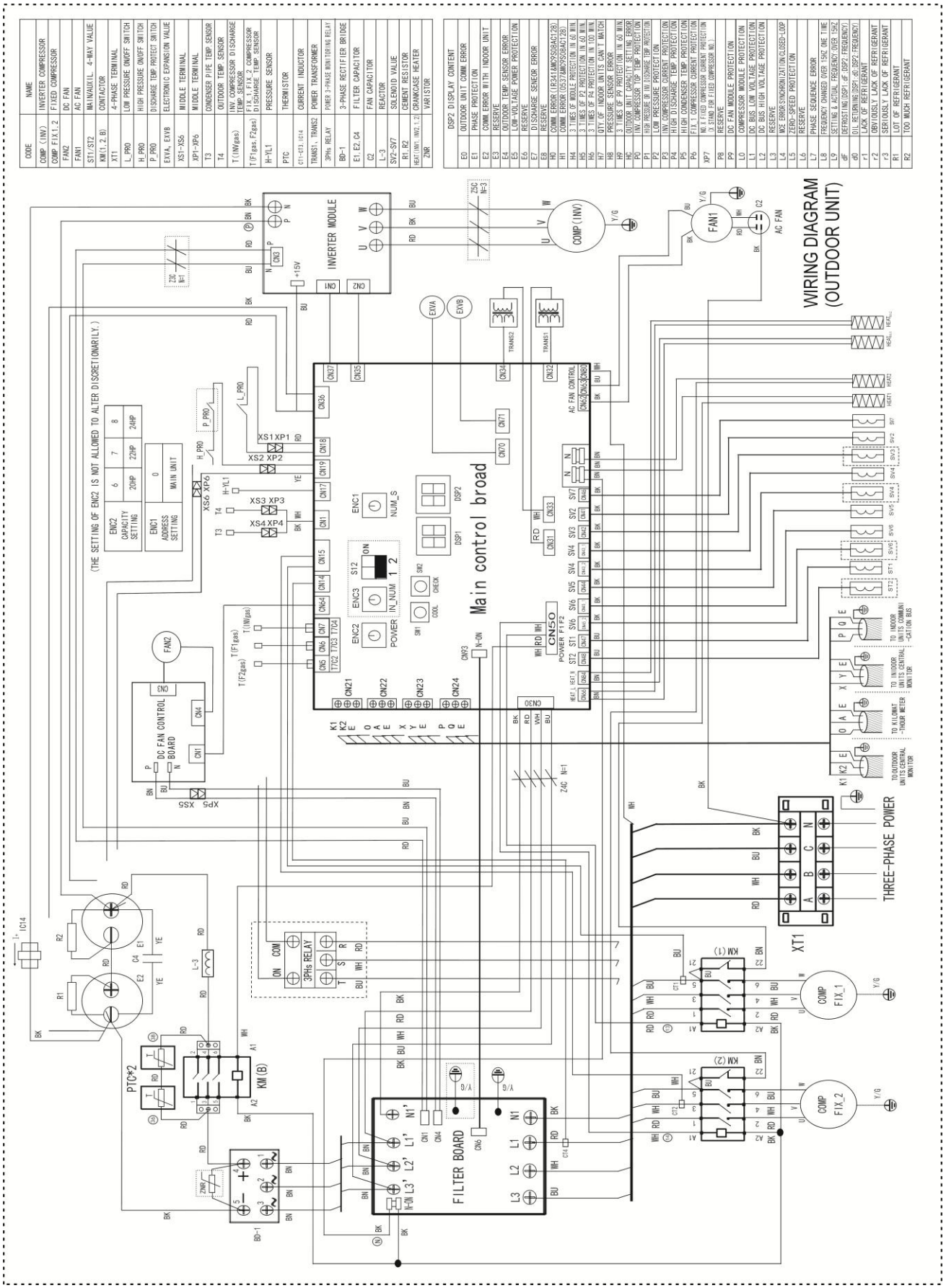
SV6: It is used to by-pass refrigerant. It will be closed in heating and standby mode. It will be open in forced cooling and oil return mode. In cooling mode, it will be open or closed according to discharge pressure.

SV7: It is used to balance system pressure before open the unit, and it can guarantee system reliability in low temperature heating mode.

High pressure sensor: It is used to supervisor the discharge pressure of the compressor and to control the DC fan speed.

T3: Pipe temperature sensor; **T4:** Ambient temperature sensor

5. Wiring diagrams and field wiring



CODE	NAME
COMP (INV)	INVERTER COMPRESSOR
COMP FIX1, 2	FIXED COMPRESSOR
FAN2	DC FAN
FAN1	AC FAN
ST1/ST2	MAINVALVE1, 4-WAY VALVE
KM(1, 2, B)	CONTACTOR
XT1	4-PHASE TERMINAL
L_PRO	LOW PRESSURE ON/OFF SWITCH
H_PRO	HIGH PRESSURE ON/OFF SWITCH
P_PRO	DISCHARGE TEMP PROTECT SWITCH
EXVA, EXVB	ELECTRONIC EXPANSION VALVE
XS1-XS6	MIDDLE TERMINAL
XP1-XP6	MIDDLE TERMINAL
T3	CONDENSER PIPE TEMP SENSOR
T4	OUTDOOR TEMP SENSOR
T(INVgas)	INV COMPRESSOR DISCHARGE TEMP. SENSOR
T(F1gas, F2gas)	FIX_1, FIX_2 COMPRESSOR DISCHARGE TEMP. SENSOR
H-YL1	PRESSURE SENSOR
PTC	THERMISTOR
C1~C13, IC14	CURRENT INDUCTOR
TRANS1, TRANS2	POWER TRANSFORMER
3PHs RELAY	POWER 3-PHASE MONITORING RELAY
BD-1	3-PHASE RECTIFIER BRIDGE
E1 E2, C4	FILTER CAPACITOR
C2	FAN CAPACITOR
L-3	REACTOR
SV2-SV7	SOLENOID VALVE
R1, R2	CEMENT RESISTOR
HEAT1(INV), HEAT2	CRANKCASE HEATER
ZNR	VARISTOR

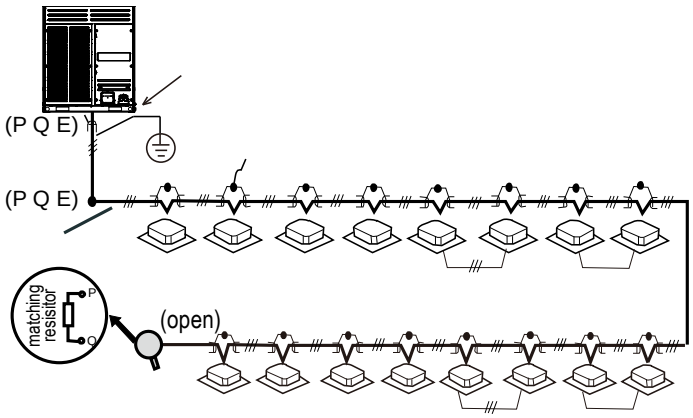
DSP2	DISPLAY CONTENT
E0	OUTDOOR UNIT COMM ERROR
E1	PHASE PROTECTION
E2	COMM ERROR WITH INDOOR UNIT
E3	RESERVE
E4	OUTDOOR TEMP SENSOR ERROR
E5	LOW-VOLTAGE POWER PROTECTION
E6	RESERVE
E7	DISCHARGE SENSOR ERROR
E8	RESERVE
H0	COMM ERROR(1R341AMC2S08AC128)
H1	COMM ERROR(0537AMCP509AC128)
H4	3 TIMES OF MODULE PROTECTION IN 60 MIN.
H5	3 TIMES OF P2 PROTECTION IN 60 MIN.
H6	3 TIMES OF P4 PROTECTION IN 100 MIN.
H7	QTY OF INDOOR UNITS CAN'T MATCH
H8	PRESSURE SENSOR ERROR
H9	3 TIMES OF P9 PROTECTION IN 60 MIN
HC	OUTDOOR UNIT CAPACITY SETTING ERROR
P0	INV COMPRESSOR TOP TEMP PROTECTION
P1	HIGH PRESSURE PROTECTION
P2	LOW PRESSURE PROTECTION
P3	INV COMPRESSOR CURRENT PROTECTION
P4	HIGH DISCHARGE TEMP PROTECTION
P5	HIGH CONDENSER TEMP PROTECTION
P6	FIX_1 COMPRESSOR CURRENT PROTECTION
XP7	NO.1 FIXED COMPRESSOR CURRENT PROTECTION (X STAND FOR FIXED COMPRESSOR NO.)
P8	RESERVE
P9	DC FAN MODULE PROTECTION
L0	COMPRESSOR MODULE PROTECTION
L1	DC BUS LOW VOLTAGE PROTECTION
L2	DC BUS HIGH VOLTAGE PROTECTION
L3	RESERVE
L4	MCE ERROR(SYNCHRONIZATION CLOSED-LOOP
L5	ZERO-SPEED PROTECTION
L6	RESERVE
L7	PHASE SEQUENCE ERROR
L8	FREQUENCY CHANGED OVER 15HZ ONE TIME
L9	SETTING & ACTUAL FREQUENCY OVER 15HZ
dF	DEFROSTING(DSP1: dF, DSP2: FREQUENCY)
d0	OIL RETURNING(DSP1: d0, DSP2: FREQUENCY)
r1	LACK OF REFRIGERANT
r2	OBVIOUSLY LACK OF REFRIGERANT
r3	SERIOUSLY LACK OF REFRIGERANT
R1	LOT OF REFRIGERANT
R2	TOO MUCH REFRIGERANT

6. Field wiring

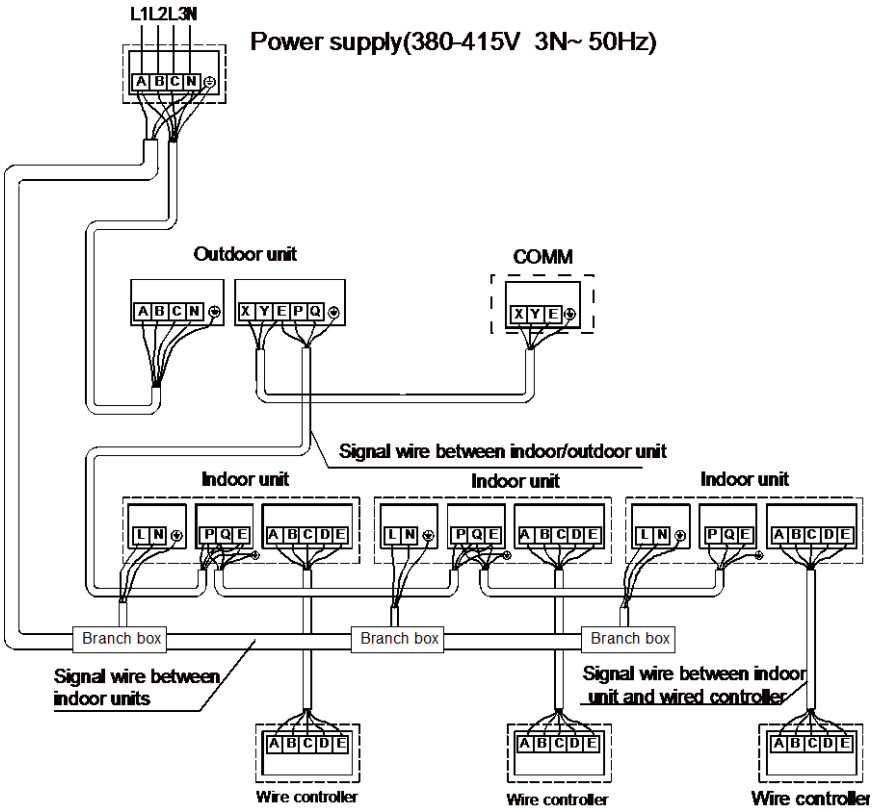
- The control line should be shielded wire. Using other wiring shall create signal interference, thus leading to error operation.
- The shielded nets at the two sides of shielded wires are either grounded to the earth, or connected with each other and jointed to the sheet metal along to the earth.
- Control wire could not be bound together with refrigerant pipeline and power wire. When power wire and control wire is distributed in parallel form, keep gap between them above 300mm so as to preventing signal interference.
- Control wire could not form closed loop.
- Control wire has polarity, so be careful when connecting.

6.1 Signal wire between outdoor unit and indoor unit

Signal wire of indoor/outdoor unit adopts 3-core shielded wire (≥0.75mm2) which has polarity, please connect it correctly.



6.2 Example wiring connection



7. Electric characteristics

Model	Units				Power supply			Compressor		OFM	
	Hz	Voltage (V)	Min. (V)	Max. (V)	MCA (A)	TOCA (A)	MFA (A)	MSC (A)	RLA (A)	kW	FLA (A)
MDV-560W/DRN1-i(C)	50	380~415	342	440	42	46	50	-/62/62	17.8+8.8×2	0.79	6.9
MDV-615W/DRN1-i(C)	50	380~415	342	440	44	46	50	-/68/68	17.8+9.8×2	1.1	9
MDV-670W/DRN1-i(C)	50	380~415	342	440	47.4	50.8	55	-/80/80	17.8+12×2	1.1	9

Notes:

1. RLA is based on the following conditions, Indoor temp. 27°C DB/19°C WB, Outdoor temp. 35°C DB
2. TOCA means the total value of each OC set.
3. MSC means the Max. current during the starting of compressor.
4. Voltage range.
   Units are suitable for use on electrical systems where voltage supplied to unit terminals is not below or above listed range limits.
5. Maximum allowable voltage variation between phases is 2%
6. Selection wire size based on the larger value of MCA or TOCA
7. MFA is used to select the circuit breaker and the ground fault circuit interrupter (earth circuit breaker).

MCA: Min. Circuit Amps. (A)
TOCA: Total Over-current Amps. (A)
MFA: Max. Fuse Amps. (A)
MSC: Max. Starting Amps. (A)
RLA: Rated Locked Amps. (A)
OFM: Outdoor Fan Motor.
FLA: Full Load Amps. (A)
KW: Rated Motor Output (KW)

8. Capacity tables

8.1 Cooling capacity

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-5	49.2	6.95	58.6	8.48	68.0	9.09	70.6	9.46	74.0	9.73	75.8	10.58	77.7	10.65
	-2	49.2	6.95	58.6	8.65	68.0	9.09	70.6	9.52	74.0	9.73	75.8	10.72	77.7	10.75
	0	49.2	7.07	58.6	8.80	68.0	9.43	70.6	10.04	74.0	10.30	75.8	10.85	77.7	10.90
	2	49.2	7.19	58.6	8.81	68.0	9.75	70.6	10.60	74.0	10.41	75.8	10.93	77.7	11.06
	4	49.2	7.36	58.6	8.99	68.0	10.08	70.6	10.65	74.0	10.55	75.8	10.92	77.7	11.27
	6	49.2	7.50	58.6	9.17	68.0	10.46	70.6	10.74	73.2	10.88	74.9	10.92	76.9	11.35
	8	49.2	7.68	58.6	9.38	68.0	10.98	70.6	11.26	72.3	11.23	74.1	3.90	75.9	11.46
	10	49.2	7.84	58.6	9.58	68.0	11.39	70.6	11.64	71.4	4.04	73.2	4.06	75.0	11.79
	12	49.2	7.97	58.6	9.76	68.0	11.62	69.6	4.03	70.6	4.06	72.2	4.07	74.0	11.87
	14	49.2	8.13	58.6	9.94	67.8	4.05	68.8	4.06	69.6	4.08	71.4	4.09	73.2	12.14
	16	49.2	8.27	58.6	10.15	67.0	4.06	67.8	4.08	68.6	4.10	70.4	4.12	72.2	12.33
	18	49.2	8.43	58.6	10.36	66.0	12.14	66.8	12.21	67.8	12.28	69.6	12.40	71.4	12.51
	20	49.2	8.62	58.6	11.02	65.0	12.74	66.0	12.81	66.8	12.88	68.6	12.99	70.4	13.13
	21	49.2	8.84	58.6	11.41	64.6	13.04	65.6	13.11	66.4	13.18	68.2	13.31	70.0	13.43
	23	49.2	9.49	58.6	12.24	63.8	13.63	64.6	13.70	65.4	13.77	67.2	13.91	69.0	14.05
	25	49.2	10.13	58.6	13.11	62.8	14.23	63.6	14.30	64.6	14.39	66.4	14.53	68.2	14.66
	27	49.2	10.81	58.6	14.02	62.0	14.82	62.8	14.92	63.6	14.98	65.4	15.15	67.2	15.31
	29	49.2	11.55	58.6	14.98	61.0	15.42	61.8	15.51	62.8	15.60	64.6	15.76	66.4	15.92
	31	49.2	12.33	58.4	15.86	60.0	16.04	61.0	16.13	61.8	16.20	63.6	16.38	65.4	16.57
	33	49.2	13.13	57.4	16.45	59.2	16.63	60.0	16.73	61.0	16.82	62.8	17.00	64.4	17.19
	35	49.2	14.00	56.4	17.05	58.2	17.25	59.2	17.35	60.0	17.44	61.8	17.64	63.6	17.83
	37	49.2	14.89	55.6	17.67	57.4	17.87	58.2	17.96	59.2	18.08	60.8	18.29	62.6	18.49
	39	49.2	15.86	54.6	17.85	56.4	18.47	57.4	18.58	58.2	18.70	60.0	18.90	61.8	19.13
	41	49.2	16.69	54.0	18.02	55.8	18.64	56.8	18.76	57.6	18.87	59.4	18.94	59.4	19.31
	43	49.2	17.11	53.6	18.11	55.5	18.69	56.5	18.84	57.0	18.90	58.3	18.98	58.7	19.35
	45	49.2	17.96	53.3	18.28	54.9	18.87	55.9	18.96	56.2	18.98	56.7	19.04	57.6	19.71
	48	49.2	18.60	55.2	18.87	59.9	19.04	61.0	19.13	61.5	19.20	61.2	19.37	62.3	19.42
120%	-5	45.4	6.71	54.0	8.13	62.8	9.61	67.2	10.48	70.4	10.93	72.0	11.28	73.6	11.58
	-2	45.4	6.78	54.0	8.22	62.8	9.71	67.2	10.54	70.4	11.06	72.0	11.37	73.6	11.62
	0	45.4	6.84	54.0	8.27	62.8	9.82	67.2	10.57	70.4	11.16	72.0	11.44	73.6	11.64
	2	45.4	6.86	54.0	8.36	62.8	9.89	67.2	10.67	70.4	11.20	72.0	11.52	73.6	11.66
	4	45.4	6.93	54.0	8.46	62.8	10.03	67.2	10.77	70.4	11.35	72.0	11.55	73.6	11.70
	6	45.4	7.00	54.0	8.53	62.8	10.15	67.2	10.89	70.4	11.47	72.0	11.64	73.6	11.73
	8	45.4	7.06	54.0	8.61	62.8	10.29	67.2	11.03	70.4	11.59	72.0	11.68	73.6	11.79
	10	45.4	7.15	54.0	8.73	62.8	10.38	67.2	11.23	70.4	11.60	72.0	11.72	73.6	11.84
	12	45.4	7.29	54.0	8.89	62.8	10.58	67.2	11.43	69.4	11.64	71.0	11.65	72.6	11.92
	14	45.4	7.42	54.0	9.07	62.8	10.79	67.2	11.66	68.4	11.72	70.2	11.83	71.8	12.06
	16	45.4	7.56	54.0	9.26	62.8	11.00	66.8	4.10	67.6	11.89	69.2	12.03	70.8	12.24
	18	45.4	7.70	54.0	9.44	62.8	11.36	65.8	12.14	66.6	12.19	68.2	12.30	70.0	12.42
	20	45.4	7.86	54.0	9.81	62.8	12.23	65.0	12.74	65.8	12.78	67.4	12.90	69.0	13.01
	21	45.4	7.93	54.0	10.15	62.8	12.67	64.4	13.04	65.2	13.08	67.0	13.20	68.6	13.33
	23	45.4	8.48	54.0	10.88	62.8	13.56	63.6	13.61	64.4	13.68	66.0	13.82	67.6	13.93
	25	45.4	9.05	54.0	11.64	61.8	14.16	62.6	14.21	63.4	14.27	65.2	14.41	66.8	14.55
	27	45.4	9.67	54.0	12.44	61.0	14.73	61.8	14.82	62.6	14.89	64.2	15.03	65.8	15.17
	29	45.4	10.31	54.0	13.29	60.0	15.33	60.8	15.42	61.6	15.49	63.2	15.65	65.0	15.79
	31	45.4	11.00	54.0	14.18	59.0	15.95	60.0	16.01	60.8	16.11	62.4	16.27	64.0	16.43
	33	45.4	11.71	54.0	15.12	58.2	16.54	59.0	16.63	59.8	16.70	61.4	16.89	63.0	17.05
	35	45.4	12.46	54.0	16.13	57.2	17.13	58.0	17.23	59.0	17.32	60.6	17.51	62.2	17.69
	37	45.4	13.26	54.0	17.18	56.4	17.76	57.2	17.85	58.0	17.94	59.6	18.12	61.2	18.33
	39	45.4	14.11	53.8	18.15	55.4	18.35	56.2	18.47	57.0	18.56	58.8	18.76	60.4	18.95
	41	45.4	14.50	53.4	18.28	55.0	18.48	55.8	18.60	56.6	18.69	58.4	18.82	58.7	19.09
	43	45.4	14.72	53.1	18.40	54.5	18.59	55.3	18.67	56.1	18.76	57.3	18.87	57.8	19.47
	45	45.4	14.89	52.8	18.58	54.0	18.77	54.8	18.84	55.6	18.90	56.2	18.93	57.2	19.89
	48	52.6	15.01	60.6	18.78	61.8	18.94	62.4	18.98	63.8	19.05	64.1	19.00	65.4	20.15

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-5	41.6	5.86	49.6	7.30	57.6	8.71	61.6	9.35	65.6	10.06	70.6	10.44	72.2	10.77
	-2	41.6	5.97	49.6	7.39	57.6	8.78	61.6	9.44	65.6	10.13	70.6	10.55	72.2	10.82
	0	41.6	6.03	49.6	7.43	57.6	8.85	61.6	9.50	65.6	10.25	70.6	10.65	72.2	10.95
	2	41.6	6.17	49.6	7.50	57.6	8.99	61.6	9.60	65.6	10.36	70.6	10.80	72.2	11.09
	4	41.6	6.29	49.6	7.59	57.6	9.07	61.6	9.72	65.6	10.51	70.6	10.95	72.2	11.19
	6	41.6	6.35	49.6	7.68	57.6	9.16	61.6	9.88	65.6	10.63	70.6	11.07	72.2	11.36
	8	41.6	6.41	49.6	7.80	57.6	9.26	61.6	9.98	65.6	10.75	70.6	11.14	72.2	11.48
	10	41.6	6.48	49.6	7.90	57.6	9.39	61.6	10.15	65.6	10.93	70.6	11.22	72.2	11.58
	12	41.6	6.62	49.6	8.06	57.6	9.58	61.6	10.36	65.6	11.14	69.8	11.39	71.2	11.73
	14	41.6	6.74	49.6	8.20	57.6	9.76	61.6	10.54	65.6	11.34	68.8	11.48	70.4	11.82
	16	41.6	6.85	49.6	8.36	57.6	9.94	61.6	10.75	65.6	11.57	68.0	11.62	69.4	11.95
	18	41.6	6.99	49.6	8.52	57.6	10.15	61.6	11.04	65.6	12.12	67.0	12.21	68.6	12.33
	20	41.6	7.13	49.6	8.71	57.6	10.75	61.6	11.87	64.6	12.72	66.2	12.81	67.6	12.92
	21	41.6	7.19	49.6	8.96	57.6	11.14	61.6	12.30	64.2	13.01	65.6	13.11	67.2	13.22
	23	41.6	7.54	49.6	9.60	57.6	11.94	61.6	13.20	63.2	13.59	64.8	13.72	66.2	13.84
	25	41.6	8.04	49.6	10.26	57.6	12.76	61.6	14.14	62.4	14.18	63.8	14.32	65.4	14.44
	27	41.6	8.57	49.6	10.97	57.6	13.66	60.6	14.73	61.4	14.78	63.0	14.92	64.4	15.05
	29	41.6	9.14	49.6	11.71	57.6	14.59	59.8	15.33	60.6	15.40	62.0	15.53	63.6	15.67
	31	41.6	9.74	49.6	12.49	57.6	15.58	58.8	15.92	59.6	15.99	61.2	16.13	62.6	16.29
	33	41.6	10.36	49.6	13.31	57.2	16.43	58.0	16.52	58.8	16.59	60.2	16.75	61.8	16.91
	35	41.6	11.02	49.6	14.18	56.2	17.02	57.0	17.12	57.8	17.21	59.2	17.37	60.8	17.53
	37	41.6	11.73	49.6	15.10	55.4	17.64	56.2	17.71	56.8	17.80	58.4	17.99	59.8	18.15
	39	41.6	12.46	49.6	16.09	54.4	18.24	55.2	18.33	56.0	18.42	57.4	18.60	59.0	18.79
	41	41.6	12.59	49.6	16.21	54.0	18.37	54.8	18.46	55.6	18.55	56.7	18.73	57.2	18.92
	43	41.6	12.72	49.6	16.42	53.5	18.50	54.3	18.59	55.1	18.68	56.2	18.80	56.3	19.30
	45	41.6	13.13	49.6	16.51	53.0	18.67	53.8	18.81	54.7	18.85	55.6	19.31	55.8	19.75
	48	45.6	13.59	54.3	17.91	57.2	18.79	58.0	18.94	59.2	19.05	59.9	19.39	60.3	19.96
100%	-5	37.8	5.34	45.0	6.43	52.4	7.65	56.0	8.19	59.6	8.89	67.0	10.13	70.8	10.57
	-2	37.8	5.40	45.0	6.51	52.4	7.74	56.0	8.35	59.6	9.01	67.0	10.25	70.8	10.64
	0	37.8	5.46	45.0	6.58	52.4	7.82	56.0	8.45	59.6	9.10	67.0	10.42	70.8	10.76
	2	37.8	5.57	45.0	6.67	52.4	7.91	56.0	8.56	59.6	9.20	67.0	10.57	70.8	10.93
	4	37.8	5.61	45.0	6.73	52.4	8.02	56.0	8.69	59.6	9.32	67.0	10.68	70.8	11.05
	6	37.8	5.69	45.0	6.87	52.4	8.13	56.0	8.84	59.6	9.45	67.0	10.83	70.8	11.22
	8	37.8	5.80	45.0	6.97	52.4	8.28	56.0	8.94	59.6	9.61	67.0	11.00	70.8	11.41
	10	37.8	5.87	45.0	7.10	52.4	8.41	56.0	9.10	59.6	9.78	67.0	11.18	70.8	11.57
	12	37.8	5.96	45.0	7.24	52.4	8.57	56.0	9.26	59.6	9.97	67.0	11.39	69.8	11.66
	14	37.8	6.07	45.0	7.38	52.4	8.73	56.0	9.44	59.6	10.15	67.0	11.61	69.0	11.80
	16	37.8	6.19	45.0	7.51	52.4	8.91	56.0	9.62	59.6	10.36	66.6	11.75	68.0	11.94
	18	37.8	6.30	45.0	7.65	52.4	9.07	56.0	9.81	59.6	10.56	65.8	12.14	67.2	12.23
	20	37.8	6.42	45.0	7.81	52.4	9.35	56.0	10.31	59.6	11.32	64.8	12.72	66.2	12.83
	21	37.8	6.48	45.0	7.88	52.4	9.69	56.0	10.68	59.6	11.71	64.4	13.01	65.8	13.13
	23	37.8	6.64	45.0	8.41	52.4	10.38	56.0	11.43	59.6	12.55	63.6	13.61	64.8	13.72
	25	37.8	7.08	45.0	8.98	52.4	11.11	56.0	12.26	59.6	13.45	62.6	14.21	64.0	14.32
	27	37.8	7.56	45.0	9.58	52.4	11.87	56.0	13.11	59.6	14.39	61.6	14.80	63.0	14.94
	29	37.8	8.04	45.0	10.22	52.4	12.67	56.0	14.00	59.4	15.28	60.8	15.42	62.2	15.53
	31	37.8	8.57	45.0	10.91	52.4	13.52	56.0	14.94	58.6	15.88	59.8	16.01	61.2	16.15
	33	37.8	9.10	45.0	11.62	52.4	14.41	56.0	15.95	57.6	16.47	59.0	16.61	60.4	16.77
	35	37.8	9.67	45.0	12.35	52.4	15.37	56.0	17.00	56.6	17.07	58.0	17.23	59.4	17.37
	37	37.8	10.29	45.0	13.15	52.4	16.38	55.0	17.60	55.8	17.69	57.2	17.84	58.4	17.99
	39	37.8	10.93	45.0	13.98	52.4	17.44	54.2	18.19	54.8	18.28	56.2	18.44	57.6	18.63
	41	37.8	11.44	45.0	14.49	52.4	18.07	53.4	18.32	54.4	18.56	55.2	18.88	56.8	19.01
	43	37.8	11.95	45.0	15.00	52.4	18.41	52.5	18.53	54.0	18.74	55.6	19.00	55.8	19.22
	45	37.8	12.63	45.0	15.68	52.4	18.72	51.4	18.79	53.7	19.08	55.1	19.29	54.6	19.48
	48	39.1	13.18	46.6	16.22	54.3	18.75	51.0	19.00	55.5	19.42	53.6	19.49	55.4	19.66

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-5	34.0	4.72	40.6	5.66	47.2	6.68	50.4	7.29	53.6	7.76	60.2	8.92	66.8	10.21
	-2	34.0	4.76	40.6	5.72	47.2	6.77	50.4	7.39	53.6	7.85	60.2	9.01	66.8	10.31
	0	34.0	4.84	40.6	5.80	47.2	6.87	50.4	7.48	53.6	7.95	60.2	9.11	66.8	10.39
	2	34.0	4.91	40.6	5.87	47.2	6.94	50.4	7.60	53.6	8.08	60.2	9.30	66.8	10.55
	4	34.0	4.98	40.6	5.96	47.2	7.06	50.4	7.70	53.6	8.18	60.2	9.44	66.8	10.70
	6	34.0	5.05	40.6	6.07	47.2	7.19	50.4	7.84	53.6	8.32	60.2	9.59	66.8	10.88
	8	34.0	5.15	40.6	6.19	47.2	7.34	50.4	7.95	53.6	8.47	60.2	9.77	66.8	10.98
	10	34.0	5.25	40.6	6.32	47.2	7.47	50.4	8.06	53.6	8.66	60.2	9.89	66.8	11.16
	12	34.0	5.34	40.6	6.44	47.2	7.61	50.4	8.20	53.6	8.82	60.2	10.08	66.8	11.36
	14	34.0	5.43	40.6	6.55	47.2	7.74	50.4	8.36	53.6	8.98	60.2	10.26	66.8	11.57
	16	34.0	5.52	40.6	6.67	47.2	7.90	50.4	8.52	53.6	9.16	60.2	10.47	66.6	11.78
	18	34.0	5.61	40.6	6.80	47.2	8.04	50.4	8.68	53.6	9.35	60.2	10.68	65.8	12.14
	20	34.0	5.73	40.6	6.96	47.2	8.20	50.4	8.87	53.6	9.69	60.2	11.48	64.8	12.72
	21	34.0	5.77	40.6	7.01	47.2	8.34	50.4	9.16	53.6	10.04	60.2	11.89	64.4	13.01
	23	34.0	5.89	40.6	7.29	47.2	8.93	50.4	9.83	53.6	10.77	60.2	12.76	63.4	13.61
	25	34.0	6.21	40.6	7.79	47.2	9.55	50.4	10.52	53.6	11.50	60.2	13.65	62.6	14.20
	27	34.0	6.60	40.6	8.29	47.2	10.19	50.4	11.23	53.6	12.30	60.2	14.62	61.6	14.80
	29	34.0	7.03	40.6	8.84	47.2	10.88	50.4	11.98	53.6	13.15	59.6	15.28	60.8	15.39
	31	34.0	7.47	40.6	9.42	47.2	11.59	50.4	12.78	53.6	14.02	58.6	15.88	59.8	16.01
	33	34.0	7.93	40.6	10.01	47.2	12.37	50.4	13.63	53.6	14.96	57.8	16.49	59.0	16.61
	35	34.0	8.43	40.6	10.65	47.2	13.17	50.4	14.52	53.6	15.95	56.8	17.09	58.0	17.23
	37	34.0	8.93	40.6	11.32	47.2	14.02	50.4	15.46	53.6	17.00	55.8	17.69	57.2	17.82
	39	34.0	9.48	40.6	12.05	47.2	14.91	50.4	16.47	53.6	18.10	55.0	18.31	56.2	18.44
	41	34.0	9.81	40.6	12.60	47.2	15.46	50.4	16.91	53.6	18.21	54.6	18.77	55.8	18.88
	43	34.0	10.28	40.6	13.14	47.2	16.00	50.4	17.34	53.6	18.60	54.3	19.02	55.3	19.17
	45	34.0	10.94	40.6	13.79	47.2	16.66	50.4	17.93	53.6	19.11	54.0	19.21	54.5	19.43
	48	34.0	11.55	40.6	14.43	47.2	17.29	50.4	18.15	53.6	19.28	59.5	19.48	58.9	19.69
80%	-5	30.2	4.16	36.0	4.92	41.8	5.82	44.8	6.19	47.8	6.67	53.6	7.71	59.4	8.80
	-2	30.2	4.22	36.0	4.98	41.8	5.87	44.8	6.29	47.8	6.73	53.6	7.78	59.4	8.88
	0	30.2	4.29	36.0	5.04	41.8	5.95	44.8	6.36	47.8	6.85	53.6	7.89	59.4	9.00
	2	30.2	4.38	36.0	5.11	41.8	6.03	44.8	6.48	47.8	6.97	53.6	8.05	59.4	9.18
	4	30.2	4.45	36.0	5.20	41.8	6.15	44.8	6.63	47.8	7.10	53.6	8.20	59.4	9.30
	6	30.2	4.53	36.0	5.32	41.8	6.24	44.8	6.78	47.8	7.23	53.6	8.32	59.4	9.46
	8	30.2	4.61	36.0	5.44	41.8	6.39	44.8	6.89	47.8	7.39	53.6	8.44	59.4	9.64
	10	30.2	4.65	36.0	5.57	41.8	6.55	44.8	7.06	47.8	7.56	53.6	8.64	59.4	9.74
	12	30.2	4.72	36.0	5.66	41.8	6.67	44.8	7.19	47.8	7.72	53.6	8.80	59.4	9.92
	14	30.2	4.81	36.0	5.77	41.8	6.78	44.8	7.31	47.8	7.86	53.6	8.96	59.4	10.10
	16	30.2	4.88	36.0	5.87	41.8	6.92	44.8	7.45	47.8	8.00	53.6	9.14	59.4	10.29
	18	30.2	4.97	36.0	5.98	41.8	7.06	44.8	7.61	47.8	8.16	53.6	9.33	59.4	10.49
	20	30.2	5.06	36.0	6.09	41.8	7.19	44.8	7.74	47.8	8.32	53.6	9.67	59.4	11.23
	21	30.2	5.11	36.0	6.14	41.8	7.26	44.8	7.84	47.8	8.50	53.6	10.01	59.4	11.64
	23	30.2	5.20	36.0	6.28	41.8	7.61	44.8	8.34	47.8	9.10	53.6	10.72	59.4	12.49
	25	30.2	5.36	36.0	6.67	41.8	8.13	44.8	8.91	47.8	9.71	53.6	11.48	59.4	13.36
	27	30.2	5.71	36.0	7.10	41.8	8.66	44.8	9.51	47.8	10.38	53.6	12.26	59.4	14.30
	29	30.2	6.07	36.0	7.56	41.8	9.23	44.8	10.13	47.8	11.09	53.6	13.08	59.4	15.28
	31	30.2	6.44	36.0	8.04	41.8	9.83	44.8	10.79	47.8	11.82	53.6	13.98	58.4	15.88
	33	30.2	6.85	36.0	8.55	41.8	10.47	44.8	11.50	47.8	12.58	53.6	14.89	57.6	16.47
	35	30.2	7.26	36.0	9.10	41.8	11.13	44.8	12.23	47.8	13.40	53.6	15.88	56.6	17.07
	37	30.2	7.70	36.0	9.64	41.8	11.85	44.8	13.04	47.8	14.27	53.6	16.93	55.8	17.66
	39	30.2	8.16	36.0	10.29	41.8	12.60	44.8	13.86	47.8	15.19	53.6	18.03	54.8	18.28
	41	30.2	8.34	36.0	10.38	41.8	12.79	44.8	14.23	47.8	15.47	53.6	18.49	54.5	18.61
	43	30.2	8.59	36.0	10.47	41.8	12.97	44.8	14.47	47.8	15.68	53.6	18.70	54.1	18.80
	45	30.2	8.83	36.0	10.59	41.8	13.22	44.8	14.78	47.8	15.95	53.6	18.91	53.5	19.11
	48	30.2	9.12	36.0	10.67	47.0	13.43	44.8	14.98	47.8	16.09	53.6	19.10	59.6	19.37

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-5	26.4	3.71	31.6	4.35	36.6	4.93	39.2	5.29	41.8	5.65	46.8	6.46	52.0	7.43
	-2	26.4	3.74	31.6	4.37	36.6	4.96	39.2	5.39	41.8	5.75	46.8	6.56	52.0	7.53
	0	26.4	3.76	31.6	4.44	36.6	5.07	39.2	5.49	41.8	5.85	46.8	6.69	52.0	7.63
	2	26.4	3.78	31.6	4.46	36.6	5.15	39.2	5.60	41.8	5.95	46.8	6.84	52.0	7.75
	4	26.4	3.84	31.6	4.57	36.6	5.26	39.2	5.70	41.8	6.08	46.8	6.95	52.0	7.93
	6	26.4	3.90	31.6	4.65	36.6	5.39	39.2	5.88	41.8	6.23	46.8	7.07	52.0	8.09
	8	26.4	3.97	31.6	4.78	36.6	5.51	39.2	5.97	41.8	6.36	46.8	7.27	52.0	8.24
	10	26.4	4.05	31.6	4.86	36.6	5.66	39.2	6.09	41.8	6.53	46.8	7.42	52.0	8.34
	12	26.4	4.15	31.6	4.93	36.6	5.77	39.2	6.21	41.8	6.64	46.8	7.56	52.0	8.50
	14	26.4	4.22	31.6	5.02	36.6	5.87	39.2	6.30	41.8	6.76	46.8	7.70	52.0	8.66
	16	26.4	4.28	31.6	5.11	36.6	5.98	39.2	6.44	41.8	6.90	46.8	7.84	52.0	8.82
	18	26.4	4.35	31.6	5.20	36.6	6.09	39.2	6.55	41.8	7.01	46.8	8.00	52.0	9.00
	20	26.4	4.42	31.6	5.29	36.6	6.21	39.2	6.67	41.8	7.15	46.8	8.16	52.0	9.26
	21	26.4	4.47	31.6	5.34	36.6	6.26	39.2	6.74	41.8	7.22	46.8	8.27	52.0	9.58
	23	26.4	4.54	31.6	5.43	36.6	6.39	39.2	6.97	41.8	7.58	46.8	8.87	52.0	10.26
	25	26.4	4.63	31.6	5.66	36.6	6.80	39.2	7.45	41.8	8.09	46.8	9.49	52.0	10.97
	27	26.4	4.90	31.6	6.03	36.6	7.26	39.2	7.93	41.8	8.64	46.8	10.13	52.0	11.73
	29	26.4	5.20	31.6	6.39	36.6	7.72	39.2	8.45	41.8	9.19	46.8	10.79	52.0	12.53
	31	26.4	5.50	31.6	6.78	36.6	8.23	39.2	8.98	41.8	9.78	46.8	11.50	52.0	13.36
	33	26.4	5.84	31.6	7.22	36.6	8.75	39.2	9.55	41.8	10.43	46.8	12.26	52.0	14.25
	35	26.4	6.19	31.6	7.65	36.6	9.28	39.2	10.17	41.8	11.09	46.8	13.06	52.0	15.19
	37	26.4	6.53	31.6	8.11	36.6	9.87	39.2	10.79	41.8	11.80	46.8	13.91	52.0	16.18
	39	26.4	6.92	31.6	8.59	36.6	10.47	39.2	11.48	41.8	12.53	46.8	14.78	52.0	17.23
	41	26.4	7.22	31.6	8.90	36.6	10.78	39.2	11.86	41.8	12.91	46.8	15.39	52.0	17.99
	43	26.4	7.81	31.6	9.51	36.6	11.22	39.2	12.50	41.8	13.30	46.8	15.95	52.0	18.55
	45	26.4	7.99	31.6	9.71	36.6	11.46	39.2	12.70	41.8	13.96	46.8	16.81	52.0	19.26
	48	26.4	8.19	31.6	9.80	36.6	11.57	39.2	12.91	41.8	14.34	46.8	17.57	52.0	19.72
60%	-5	22.6	3.17	27.0	3.67	31.4	4.28	33.6	4.56	35.8	4.93	40.2	5.53	44.6	6.34
	-2	22.6	3.18	27.0	3.73	31.4	4.36	33.6	4.63	35.8	4.98	40.2	5.61	44.6	6.39
	0	22.6	3.23	27.0	3.78	31.4	4.42	33.6	4.69	35.8	5.06	40.2	5.70	44.6	6.47
	2	22.6	3.29	27.0	3.86	31.4	4.50	33.6	4.78	35.8	5.13	40.2	5.81	44.6	6.55
	4	22.6	3.38	27.0	3.94	31.4	4.59	33.6	4.83	35.8	5.20	40.2	5.90	44.6	6.64
	6	22.6	3.42	27.0	4.01	31.4	4.67	33.6	4.94	35.8	5.31	40.2	6.02	44.6	6.80
	8	22.6	3.48	27.0	4.08	31.4	4.76	33.6	5.03	35.8	5.42	40.2	6.14	44.6	6.91
	10	22.6	3.55	27.0	4.17	31.4	4.83	33.6	5.18	35.8	5.52	40.2	6.25	44.6	7.01
	12	22.6	3.62	27.0	4.24	31.4	4.92	33.6	5.27	35.8	5.61	40.2	6.37	44.6	7.12
	14	22.6	3.67	27.0	4.31	31.4	4.99	33.6	5.36	35.8	5.73	40.2	6.48	44.6	7.26
	16	22.6	3.71	27.0	4.38	31.4	5.09	33.6	5.45	35.8	5.82	40.2	6.60	44.6	7.40
	18	22.6	3.78	27.0	4.44	31.4	5.18	33.6	5.54	35.8	5.93	40.2	6.71	44.6	7.54
	20	22.6	3.83	27.0	4.54	31.4	5.27	33.6	5.66	35.8	6.05	40.2	6.85	44.6	7.70
	21	22.6	3.87	27.0	4.56	31.4	5.31	33.6	5.70	35.8	6.09	40.2	6.92	44.6	7.77
	23	22.6	3.92	27.0	4.65	31.4	5.41	33.6	5.82	35.8	6.21	40.2	7.19	44.6	8.27
	25	22.6	3.99	27.0	4.72	31.4	5.61	33.6	6.09	35.8	6.60	40.2	7.67	44.6	8.82
	27	22.6	4.15	27.0	5.02	31.4	5.98	33.6	6.51	35.8	7.03	40.2	8.18	44.6	9.41
	29	22.6	4.38	27.0	5.31	31.4	6.37	33.6	6.92	35.8	7.49	40.2	8.73	44.6	10.06
	31	22.6	4.65	27.0	5.64	31.4	6.76	33.6	7.35	35.8	7.97	40.2	9.28	44.6	10.70
	33	22.6	4.90	27.0	5.98	31.4	7.17	33.6	7.81	35.8	8.48	40.2	9.87	44.6	11.41
	35	22.6	5.20	27.0	6.35	31.4	7.61	33.6	8.29	35.8	9.00	40.2	10.52	44.6	12.14
	37	22.6	5.50	27.0	6.71	31.4	8.06	33.6	8.80	35.8	9.55	40.2	11.18	44.6	12.92
	39	22.6	5.80	27.0	7.10	31.4	8.54	33.6	9.32	35.8	10.15	40.2	11.87	44.6	13.74
	41	22.6	5.98	27.0	7.41	31.4	8.86	33.6	9.70	35.8	10.52	40.2	12.43	44.6	14.37
	43	22.6	6.17	27.0	7.72	31.4	9.17	33.6	9.99	35.8	10.89	40.2	12.95	44.6	14.99
	45	22.6	6.46	27.0	8.11	31.4	9.54	33.6	10.36	35.8	11.43	40.2	13.53	44.6	15.82
	48	22.6	6.70	27.0	8.47	31.4	9.86	33.6	10.63	35.8	11.87	40.2	14.03	44.6	16.56

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-5	18.9	2.75	22.6	3.18	26.2	3.66	28.0	3.83	29.8	4.04	33.4	4.59	37.2	4.95
	-2	18.9	2.77	22.6	3.25	26.2	3.69	28.0	3.88	29.8	4.11	33.4	4.65	37.2	5.01
	0	18.9	2.82	22.6	3.30	26.2	3.76	28.0	3.93	29.8	4.16	33.4	4.73	37.2	5.10
	2	18.9	2.86	22.6	3.34	26.2	3.83	28.0	3.99	29.8	4.23	33.4	4.75	37.2	5.20
	4	18.9	2.89	22.6	3.40	26.2	3.87	28.0	4.04	29.8	4.31	33.4	4.87	37.2	5.33
	6	18.9	2.94	22.6	3.45	26.2	3.93	28.0	4.13	29.8	4.39	33.4	4.94	37.2	5.49
	8	18.9	3.01	22.6	3.51	26.2	3.99	28.0	4.22	29.8	4.45	33.4	5.02	37.2	5.67
	10	18.9	3.07	22.6	3.55	26.2	4.05	28.0	4.29	29.8	4.58	33.4	5.15	37.2	5.75
	12	18.9	3.09	22.6	3.60	26.2	4.12	28.0	4.38	29.8	4.67	33.4	5.25	37.2	5.84
	14	18.9	3.14	22.6	3.64	26.2	4.17	28.0	4.47	29.8	4.74	33.4	5.34	37.2	5.96
	16	18.9	3.18	22.6	3.69	26.2	4.24	28.0	4.54	29.8	4.81	33.4	5.43	37.2	6.05
	18	18.9	3.23	22.6	3.76	26.2	4.31	28.0	4.60	29.8	4.90	33.4	5.52	37.2	6.16
	20	18.9	3.28	22.6	3.80	26.2	4.38	28.0	4.67	29.8	4.99	33.4	5.61	37.2	6.28
	21	18.9	3.30	22.6	3.85	26.2	4.42	28.0	4.72	29.8	5.04	33.4	5.68	37.2	6.35
	23	18.9	3.34	22.6	3.89	26.2	4.49	28.0	4.81	29.8	5.13	33.4	5.77	37.2	6.48
	25	18.9	3.39	22.6	3.96	26.2	4.58	28.0	4.90	29.8	5.29	33.4	6.07	37.2	6.92
	27	18.9	3.46	22.6	4.12	26.2	4.83	28.0	5.22	29.8	5.61	33.4	6.46	37.2	7.38
	29	18.9	3.64	22.6	4.35	26.2	5.13	28.0	5.54	29.8	5.98	33.4	6.87	37.2	7.86
	31	18.9	3.85	22.6	4.60	26.2	5.43	28.0	5.89	29.8	6.35	33.4	7.31	37.2	8.36
	33	18.9	4.08	22.6	4.88	26.2	5.77	28.0	6.23	29.8	6.73	33.4	7.77	37.2	8.89
	35	18.9	4.31	22.6	5.15	26.2	6.09	28.0	6.60	29.8	7.13	33.4	8.25	37.2	9.44
	37	18.9	4.54	22.6	5.45	26.2	6.46	28.0	6.99	29.8	7.56	33.4	8.75	37.2	10.03
	39	18.9	4.79	22.6	5.75	26.2	6.83	28.0	7.40	29.8	8.02	33.4	9.28	37.2	10.65
	41	18.9	4.99	22.6	6.00	26.2	7.07	28.0	7.75	29.8	8.36	33.4	9.77	37.2	11.15
	43	18.9	5.32	22.6	6.41	26.2	7.32	28.0	8.09	29.8	8.58	33.4	10.27	37.2	11.64
	45	18.9	5.44	22.6	6.57	26.2	7.82	28.0	8.72	29.8	8.94	33.4	11.26	37.2	12.63
	48	18.9	5.57	22.6	6.76	26.2	8.28	28.0	9.27	29.8	9.34	33.4	12.16	37.2	13.59

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-5	54.0	7.68	64.4	9.38	74.7	10.06	77.5	10.46	81.3	10.76	83.2	11.70	85.3	11.78
	-2	54.0	7.68	64.4	9.56	74.7	10.06	77.5	10.52	81.3	10.76	83.2	11.85	85.3	11.89
	0	54.0	7.82	64.4	9.73	74.7	10.42	77.5	11.10	81.3	11.39	83.2	11.99	85.3	12.05
	2	54.0	7.96	64.4	9.75	74.7	10.78	77.5	11.73	81.3	11.52	83.2	12.08	85.3	12.23
	4	54.0	8.13	64.4	9.94	74.7	11.15	77.5	11.78	81.3	11.67	83.2	12.07	85.3	12.46
	6	54.0	8.29	64.4	10.14	74.7	11.56	77.5	11.88	80.4	12.03	82.2	12.07	84.4	12.55
	8	54.0	8.49	64.4	10.37	74.7	12.14	77.5	12.46	79.4	12.42	81.3	3.90	83.3	12.68
	10	54.0	8.67	64.4	10.59	74.7	12.59	77.5	12.87	78.4	4.04	80.4	4.06	82.4	13.04
	12	54.0	8.82	64.4	10.79	74.7	12.85	76.4	4.03	77.5	4.06	79.3	4.07	81.3	13.13
	14	54.0	9.00	64.4	11.00	74.5	4.05	75.6	4.06	76.4	4.08	78.4	4.09	80.4	13.42
	16	54.0	9.15	64.4	11.23	73.6	4.06	74.5	4.08	75.3	4.10	77.3	4.12	79.3	13.63
	18	54.0	9.32	64.4	11.45	72.5	13.43	73.4	13.51	74.5	13.58	76.4	13.71	78.4	13.84
	20	54.0	9.53	64.4	12.19	71.4	14.09	72.5	14.16	73.4	14.24	75.3	14.37	77.3	14.52
	21	54.0	9.78	64.4	12.62	70.9	14.42	72.0	14.49	72.9	14.57	74.9	14.72	76.9	14.85
	23	54.0	10.49	64.4	13.53	70.1	15.08	70.9	15.15	71.8	15.23	73.8	15.38	75.8	15.53
	25	54.0	11.20	64.4	14.49	69.0	15.73	69.8	15.81	70.9	15.91	72.9	16.06	74.9	16.22
	27	54.0	11.96	64.4	15.51	68.1	16.39	69.0	16.49	69.8	16.57	71.8	16.75	73.8	16.93
	29	54.0	12.77	64.4	16.57	67.0	17.05	67.9	17.15	69.0	17.26	70.9	17.43	72.9	17.61
	31	54.0	13.63	64.1	17.53	65.9	17.74	67.0	17.84	67.9	17.91	69.8	18.12	71.8	18.32
	33	54.0	14.52	63.0	18.19	65.0	18.40	65.9	18.50	67.0	18.60	69.0	18.80	70.7	19.01
	35	54.0	15.48	61.9	18.85	63.9	19.08	65.0	19.18	65.9	19.28	67.9	19.51	69.8	19.71
	37	54.0	16.47	61.1	19.54	63.0	19.76	63.9	19.87	65.0	19.99	66.8	20.22	68.7	20.45
	39	54.0	17.53	60.0	19.74	61.9	20.42	63.0	20.55	63.9	20.68	65.9	20.90	67.9	21.16
	41	54.0	18.45	59.3	19.93	61.3	20.61	62.4	20.74	63.3	20.87	65.2	20.95	65.3	21.35
	43	54.0	18.92	58.9	20.03	61.0	20.67	62.1	20.84	62.6	20.90	64.1	20.98	64.5	21.40
	45	54.0	19.86	58.5	20.22	60.3	20.86	61.4	20.97	61.7	20.99	62.3	21.06	63.2	21.80
	48	54.0	20.57	60.6	20.87	65.8	21.06	67.0	21.16	67.5	21.23	67.2	21.42	68.4	21.48
120%	-5	49.9	7.42	59.3	8.99	69.0	10.63	73.8	11.59	77.3	12.09	79.1	12.47	80.8	12.80
	-2	49.9	7.50	59.3	9.08	69.0	10.74	73.8	11.66	77.3	12.23	79.1	12.58	80.8	12.85
	0	49.9	7.56	59.3	9.15	69.0	10.86	73.8	11.69	77.3	12.34	79.1	12.65	80.8	12.87
	2	49.9	7.58	59.3	9.24	69.0	10.94	73.8	11.80	77.3	12.38	79.1	12.75	80.8	12.90
	4	49.9	7.66	59.3	9.36	69.0	11.09	73.8	11.91	77.3	12.55	79.1	12.77	80.8	12.94
	6	49.9	7.74	59.3	9.43	69.0	11.22	73.8	12.04	77.3	12.69	79.1	12.88	80.8	12.98
	8	49.9	7.81	59.3	9.53	69.0	11.38	73.8	12.19	77.3	12.81	79.1	12.92	80.8	13.04
	10	49.9	7.91	59.3	9.65	69.0	11.48	73.8	12.42	77.3	12.82	79.1	12.96	80.8	13.10
	12	49.9	8.06	59.3	9.83	69.0	11.70	73.8	12.64	76.2	12.88	78.0	12.88	79.7	13.18
	14	49.9	8.21	59.3	10.03	69.0	11.93	73.8	12.90	75.1	12.96	77.1	13.08	78.8	13.34
	16	49.9	8.36	59.3	10.24	69.0	12.16	73.4	4.10	74.2	13.15	76.0	13.30	77.8	13.54
	18	49.9	8.51	59.3	10.44	69.0	12.57	72.3	13.43	73.1	13.48	74.9	13.61	76.9	13.73
	20	49.9	8.69	59.3	10.84	69.0	13.53	71.4	14.09	72.3	14.14	74.0	14.27	75.8	14.39
	21	49.9	8.77	59.3	11.22	69.0	14.01	70.7	14.42	71.6	14.47	73.6	14.60	75.3	14.75
	23	49.9	9.37	59.3	12.03	69.0	15.00	69.8	15.05	70.7	15.13	72.5	15.28	74.2	15.40
	25	49.9	10.01	59.3	12.87	67.9	15.66	68.7	15.71	69.6	15.79	71.6	15.94	73.4	16.09
	27	49.9	10.69	59.3	13.76	67.0	16.29	67.9	16.39	68.7	16.47	70.5	16.62	72.3	16.77
	29	49.9	11.40	59.3	14.70	65.9	16.95	66.8	17.05	67.7	17.13	69.4	17.30	71.4	17.46
	31	49.9	12.16	59.3	15.68	64.8	17.63	65.9	17.71	66.8	17.81	68.5	17.99	70.3	18.17
	33	49.9	12.95	59.3	16.72	63.9	18.29	64.8	18.39	65.7	18.47	67.4	18.67	69.2	18.85
	35	49.9	13.78	59.3	17.84	62.8	18.95	63.7	19.05	64.8	19.15	66.5	19.36	68.3	19.56
	37	49.9	14.67	59.3	19.00	61.9	19.64	62.8	19.74	63.7	19.84	65.5	20.04	67.2	20.27
	39	49.9	15.61	59.1	20.07	60.8	20.30	61.7	20.42	62.6	20.52	64.6	20.75	66.3	20.95
	41	49.9	16.04	58.6	20.21	60.4	20.44	61.2	20.56	62.1	20.67	64.1	20.81	64.4	21.11
	43	49.9	16.27	58.3	20.35	59.9	20.56	60.8	20.64	61.6	20.74	63.0	20.87	63.4	21.53
	45	49.9	16.46	58.0	20.54	59.3	20.75	60.1	20.84	61.1	20.90	61.7	20.93	62.8	22.00
	48	57.8	16.60	66.6	20.77	67.8	20.94	68.6	20.99	70.0	21.07	70.4	21.01	71.8	22.28

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-5	45.7	6.48	54.5	8.07	63.3	9.63	67.7	10.33	72.0	11.12	77.5	11.55	79.3	11.91
	-2	45.7	6.61	54.5	8.17	63.3	9.71	67.7	10.44	72.0	11.21	77.5	11.66	79.3	11.97
	0	45.7	6.67	54.5	8.22	63.3	9.78	67.7	10.50	72.0	11.33	77.5	11.78	79.3	12.11
	2	45.7	6.82	54.5	8.30	63.3	9.94	67.7	10.62	72.0	11.45	77.5	11.95	79.3	12.27
	4	45.7	6.95	54.5	8.39	63.3	10.03	67.7	10.75	72.0	11.63	77.5	12.11	79.3	12.38
	6	45.7	7.02	54.5	8.49	63.3	10.13	67.7	10.92	72.0	11.76	77.5	12.24	79.3	12.57
	8	45.7	7.09	54.5	8.62	63.3	10.24	67.7	11.03	72.0	11.89	77.5	12.32	79.3	12.70
	10	45.7	7.17	54.5	8.74	63.3	10.39	67.7	11.22	72.0	12.09	77.5	12.41	79.3	12.81
	12	45.7	7.32	54.5	8.92	63.3	10.59	67.7	11.45	72.0	12.31	76.7	12.59	78.2	12.98
	14	45.7	7.45	54.5	9.07	63.3	10.79	67.7	11.66	72.0	12.54	75.6	12.69	77.3	13.07
	16	45.7	7.58	54.5	9.25	63.3	11.00	67.7	11.88	72.0	12.80	74.7	12.85	76.2	13.21
	18	45.7	7.73	54.5	9.43	63.3	11.22	67.7	12.21	72.0	13.40	73.6	13.51	75.3	13.63
	20	45.7	7.88	54.5	9.63	63.3	11.88	67.7	13.12	70.9	14.06	72.7	14.16	74.2	14.29
	21	45.7	7.96	54.5	9.91	63.3	12.31	67.7	13.61	70.5	14.39	72.0	14.49	73.8	14.62
	23	45.7	8.34	54.5	10.62	63.3	13.20	67.7	14.60	69.4	15.02	71.2	15.17	72.7	15.31
	25	45.7	8.89	54.5	11.35	63.3	14.11	67.7	15.63	68.5	15.68	70.1	15.84	71.8	15.96
	27	45.7	9.48	54.5	12.14	63.3	15.10	66.6	16.29	67.4	16.34	69.2	16.50	70.7	16.65
	29	45.7	10.11	54.5	12.95	63.3	16.14	65.7	16.95	66.6	17.03	68.1	17.18	69.9	17.33
	31	45.7	10.77	54.5	13.81	63.3	17.23	64.6	17.61	65.5	17.69	67.2	17.84	68.7	18.02
	33	45.7	11.45	54.5	14.72	62.8	18.17	63.7	18.27	64.6	18.34	66.1	18.52	67.9	18.70
	35	45.7	12.19	54.5	15.68	61.7	18.83	62.6	18.93	63.5	19.03	65.0	19.21	66.8	19.38
	37	45.7	12.97	54.5	16.70	60.8	19.51	61.7	19.59	62.4	19.69	64.1	19.89	65.7	20.07
	39	45.7	13.78	54.5	17.79	59.7	20.17	60.6	20.27	61.5	20.37	63.0	20.57	64.8	20.78
	41	45.7	13.93	54.5	17.93	59.3	20.31	60.2	20.41	61.0	20.51	62.2	20.72	62.8	20.92
	43	45.7	14.07	54.5	18.16	58.8	20.45	59.7	20.56	60.6	20.66	61.7	20.79	61.9	21.34
	45	45.7	14.52	54.5	18.26	58.2	20.64	59.1	20.80	60.0	20.85	61.1	21.36	61.3	21.84
	48	50.0	15.03	59.7	19.81	62.8	20.78	63.6	20.95	65.0	21.06	65.8	21.44	66.3	22.08
100%	-5	41.5	5.90	49.4	7.11	57.5	8.46	61.5	9.06	65.5	9.83	73.6	11.20	77.8	11.69
	-2	41.5	5.97	49.4	7.20	57.5	8.55	61.5	9.23	65.5	9.96	73.6	11.34	77.8	11.77
	0	41.5	6.03	49.4	7.28	57.5	8.65	61.5	9.34	65.5	10.06	73.6	11.52	77.8	11.90
	2	41.5	6.16	49.4	7.38	57.5	8.74	61.5	9.47	65.5	10.17	73.6	11.69	77.8	12.09
	4	41.5	6.20	49.4	7.44	57.5	8.87	61.5	9.61	65.5	10.30	73.6	11.81	77.8	12.22
	6	41.5	6.29	49.4	7.60	57.5	8.99	61.5	9.78	65.5	10.45	73.6	11.98	77.8	12.41
	8	41.5	6.41	49.4	7.71	57.5	9.15	61.5	9.89	65.5	10.62	73.6	12.16	77.8	12.61
	10	41.5	6.49	49.4	7.85	57.5	9.30	61.5	10.06	65.5	10.82	73.6	12.36	77.8	12.80
	12	41.5	6.59	49.4	8.01	57.5	9.48	61.5	10.24	65.5	11.02	73.6	12.59	76.7	12.89
	14	41.5	6.71	49.4	8.16	57.5	9.65	61.5	10.44	65.5	11.22	73.6	12.84	75.8	13.05
	16	41.5	6.84	49.4	8.31	57.5	9.86	61.5	10.64	65.5	11.45	73.1	13.00	74.7	13.20
	18	41.5	6.97	49.4	8.46	57.5	10.03	61.5	10.84	65.5	11.68	72.3	13.43	73.8	13.53
	20	41.5	7.10	49.4	8.64	57.5	10.34	61.5	11.40	65.5	12.52	71.2	14.06	72.7	14.19
	21	41.5	7.17	49.4	8.72	57.5	10.72	61.5	11.81	65.5	12.95	70.7	14.39	72.3	14.52
	23	41.5	7.35	49.4	9.30	57.5	11.48	61.5	12.64	65.5	13.88	69.8	15.05	71.2	15.18
	25	41.5	7.83	49.4	9.93	57.5	12.29	61.5	13.55	65.5	14.87	68.8	15.71	70.3	15.84
	27	41.5	8.36	49.4	10.59	57.5	13.12	61.5	14.49	65.5	15.91	67.7	16.37	69.2	16.52
	29	41.5	8.89	49.4	11.30	57.5	14.01	61.5	15.48	65.2	16.90	66.8	17.05	68.3	17.18
	31	41.5	9.48	49.4	12.06	57.5	14.95	61.5	16.52	64.4	17.56	65.7	17.71	67.2	17.86
	33	41.5	10.06	49.4	12.85	57.5	15.94	61.5	17.63	63.3	18.22	64.8	18.37	66.3	18.55
	35	41.5	10.69	49.4	13.66	57.5	17.00	61.5	18.80	62.2	18.88	63.7	19.05	65.2	19.21
	37	41.5	11.38	49.4	14.54	57.5	18.12	60.4	19.46	61.3	19.56	62.8	19.73	64.1	19.89
	39	41.5	12.08	49.4	15.46	57.5	19.28	59.5	20.12	60.2	20.22	61.7	20.40	63.3	20.60
	41	41.5	12.65	49.4	16.02	57.5	19.99	58.6	20.26	59.7	20.53	60.6	20.88	62.3	21.02
	43	41.5	13.21	49.4	16.58	57.5	20.36	57.7	20.49	59.3	20.73	61.0	21.01	61.2	21.26
	45	41.5	13.96	49.4	17.34	57.5	20.70	56.4	20.78	59.0	21.10	60.5	21.34	60.0	21.54
	48	43.0	14.58	51.2	17.94	59.6	20.74	56.1	21.01	61.0	21.48	58.8	21.56	60.8	21.74

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-5	37.3	5.22	44.6	6.26	51.8	7.39	55.4	8.06	58.9	8.58	66.1	9.86	73.4	11.29
	-2	37.3	5.27	44.6	6.33	51.8	7.49	55.4	8.18	58.9	8.68	66.1	9.96	73.4	11.40
	0	37.3	5.35	44.6	6.41	51.8	7.60	55.4	8.27	58.9	8.79	66.1	10.07	73.4	11.49
	2	37.3	5.43	44.6	6.49	51.8	7.68	55.4	8.40	58.9	8.93	66.1	10.28	73.4	11.66
	4	37.3	5.51	44.6	6.59	51.8	7.81	55.4	8.51	58.9	9.04	66.1	10.44	73.4	11.83
	6	37.3	5.59	44.6	6.71	51.8	7.95	55.4	8.67	58.9	9.20	66.1	10.60	73.4	12.03
	8	37.3	5.69	44.6	6.84	51.8	8.11	55.4	8.79	58.9	9.36	66.1	10.80	73.4	12.14
	10	37.3	5.80	44.6	6.99	51.8	8.26	55.4	8.92	58.9	9.58	66.1	10.94	73.4	12.34
	12	37.3	5.90	44.6	7.12	51.8	8.41	55.4	9.07	58.9	9.75	66.1	11.15	73.4	12.57
	14	37.3	6.00	44.6	7.25	51.8	8.56	55.4	9.25	58.9	9.93	66.1	11.35	73.4	12.79
	16	37.3	6.11	44.6	7.37	51.8	8.74	55.4	9.43	58.9	10.13	66.1	11.58	73.1	13.02
	18	37.3	6.21	44.6	7.53	51.8	8.89	55.4	9.60	58.9	10.34	66.1	11.81	72.3	13.43
	20	37.3	6.33	44.6	7.70	51.8	9.07	55.4	9.80	58.9	10.72	66.1	12.69	71.2	14.06
	21	37.3	6.38	44.6	7.75	51.8	9.22	55.4	10.13	58.9	11.10	66.1	13.15	70.7	14.39
	23	37.3	6.51	44.6	8.06	51.8	9.88	55.4	10.87	58.9	11.91	66.1	14.11	69.6	15.05
	25	37.3	6.87	44.6	8.61	51.8	10.56	55.4	11.63	58.9	12.72	66.1	15.10	68.8	15.71
	27	37.3	7.30	44.6	9.17	51.8	11.27	55.4	12.41	58.9	13.61	66.1	16.16	67.6	16.37
	29	37.3	7.78	44.6	9.78	51.8	12.03	55.4	13.25	58.9	14.54	65.5	16.90	66.8	17.02
	31	37.3	8.26	44.6	10.41	51.8	12.82	55.4	14.14	58.9	15.51	64.4	17.56	65.7	17.71
	33	37.3	8.77	44.6	11.07	51.8	13.68	55.4	15.07	58.9	16.54	63.5	18.24	64.8	18.37
	35	37.3	9.32	44.6	11.78	51.8	14.57	55.4	16.06	58.9	17.63	62.4	18.90	63.7	19.05
	37	37.3	9.88	44.6	12.52	51.8	15.51	55.4	17.10	58.9	18.80	61.3	19.56	62.8	19.71
	39	37.3	10.49	44.6	13.33	51.8	16.49	55.4	18.22	58.9	20.02	60.4	20.24	61.7	20.39
	41	37.3	10.85	44.6	13.93	51.8	17.10	55.4	18.70	58.9	20.14	60.0	20.76	61.3	20.88
	43	37.3	11.37	44.6	14.53	51.8	17.70	55.4	19.18	58.9	20.57	59.7	21.03	60.8	21.20
	45	37.3	12.10	44.6	15.25	51.8	18.42	55.4	19.82	58.9	21.14	59.3	21.25	59.8	21.48
	48	37.3	12.77	44.6	15.96	51.8	19.12	55.4	20.08	58.9	21.32	65.4	21.55	64.7	21.77
80%	-5	33.2	4.60	39.5	5.44	45.9	6.44	49.2	6.85	52.5	7.37	58.9	8.52	65.2	9.73
	-2	33.2	4.67	39.5	5.51	45.9	6.49	49.2	6.95	52.5	7.44	58.9	8.61	65.2	9.82
	0	33.2	4.75	39.5	5.57	45.9	6.58	49.2	7.04	52.5	7.58	58.9	8.73	65.2	9.96
	2	33.2	4.84	39.5	5.66	45.9	6.67	49.2	7.17	52.5	7.71	58.9	8.90	65.2	10.15
	4	33.2	4.93	39.5	5.75	45.9	6.80	49.2	7.33	52.5	7.85	58.9	9.07	65.2	10.28
	6	33.2	5.01	39.5	5.89	45.9	6.90	49.2	7.50	52.5	8.00	58.9	9.20	65.2	10.46
	8	33.2	5.10	39.5	6.02	45.9	7.06	49.2	7.62	52.5	8.17	58.9	9.34	65.2	10.66
	10	33.2	5.14	39.5	6.16	45.9	7.25	49.2	7.80	52.5	8.36	58.9	9.55	65.2	10.77
	12	33.2	5.22	39.5	6.26	45.9	7.37	49.2	7.96	52.5	8.54	58.9	9.73	65.2	10.97
	14	33.2	5.32	39.5	6.38	45.9	7.50	49.2	8.08	52.5	8.69	58.9	9.91	65.2	11.17
	16	33.2	5.40	39.5	6.49	45.9	7.65	49.2	8.23	52.5	8.84	58.9	10.11	65.2	11.38
	18	33.2	5.50	39.5	6.61	45.9	7.80	49.2	8.41	52.5	9.02	58.9	10.31	65.2	11.60
	20	33.2	5.60	39.5	6.74	45.9	7.96	49.2	8.56	52.5	9.20	58.9	10.69	65.2	12.42
	21	33.2	5.65	39.5	6.79	45.9	8.03	49.2	8.66	52.5	9.40	58.9	11.07	65.2	12.87
	23	33.2	5.75	39.5	6.94	45.9	8.41	49.2	9.22	52.5	10.06	58.9	11.86	65.2	13.81
	25	33.2	5.93	39.5	7.37	45.9	8.99	49.2	9.86	52.5	10.74	58.9	12.69	65.2	14.77
	27	33.2	6.31	39.5	7.85	45.9	9.58	49.2	10.52	52.5	11.48	58.9	13.56	65.2	15.81
	29	33.2	6.72	39.5	8.36	45.9	10.21	49.2	11.20	52.5	12.26	58.9	14.47	65.2	16.90
	31	33.2	7.12	39.5	8.89	45.9	10.87	49.2	11.93	52.5	13.07	58.9	15.46	64.1	17.56
	33	33.2	7.58	39.5	9.45	45.9	11.58	49.2	12.72	52.5	13.91	58.9	16.47	63.3	18.22
	35	33.2	8.03	39.5	10.06	45.9	12.31	49.2	13.53	52.5	14.82	58.9	17.56	62.2	18.88
	37	33.2	8.51	39.5	10.67	45.9	13.10	49.2	14.42	52.5	15.79	58.9	18.72	61.3	19.54
	39	33.2	9.02	39.5	11.38	45.9	13.94	49.2	15.33	52.5	16.80	58.9	19.94	60.2	20.22
	41	33.2	9.22	39.5	11.48	45.9	14.14	49.2	15.74	52.5	17.10	58.9	20.45	59.8	20.58
	43	33.2	9.49	39.5	11.58	45.9	14.34	49.2	16.01	52.5	17.34	58.9	20.69	59.4	20.80
	45	33.2	9.76	39.5	11.71	45.9	14.62	49.2	16.34	52.5	17.64	58.9	20.91	58.7	21.14
	48	33.2	10.09	39.5	11.80	51.6	14.85	49.2	16.57	52.5	17.79	58.9	21.12	65.5	21.42

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-5	29.0	4.11	34.7	4.81	40.2	5.46	43.1	5.85	45.9	6.24	51.4	7.14	57.1	8.21
	-2	29.0	4.14	34.7	4.84	40.2	5.49	43.1	5.96	45.9	6.36	51.4	7.26	57.1	8.32
	0	29.0	4.16	34.7	4.90	40.2	5.60	43.1	6.07	45.9	6.47	51.4	7.40	57.1	8.44
	2	29.0	4.18	34.7	4.93	40.2	5.69	43.1	6.19	45.9	6.58	51.4	7.56	57.1	8.57
	4	29.0	4.24	34.7	5.05	40.2	5.82	43.1	6.30	45.9	6.73	51.4	7.68	57.1	8.77
	6	29.0	4.31	34.7	5.14	40.2	5.96	43.1	6.50	45.9	6.88	51.4	7.82	57.1	8.94
	8	29.0	4.39	34.7	5.29	40.2	6.10	43.1	6.60	45.9	7.03	51.4	8.04	57.1	9.11
	10	29.0	4.48	34.7	5.37	40.2	6.26	43.1	6.74	45.9	7.22	51.4	8.21	57.1	9.22
	12	29.0	4.59	34.7	5.45	40.2	6.39	43.1	6.87	45.9	7.35	51.4	8.36	57.1	9.40
	14	29.0	4.66	34.7	5.55	40.2	6.49	43.1	6.97	45.9	7.47	51.4	8.51	57.1	9.58
	16	29.0	4.74	34.7	5.65	40.2	6.61	43.1	7.12	45.9	7.63	51.4	8.67	57.1	9.75
	18	29.0	4.81	34.7	5.75	40.2	6.74	43.1	7.25	45.9	7.75	51.4	8.84	57.1	9.96
	20	29.0	4.89	34.7	5.85	40.2	6.87	43.1	7.37	45.9	7.91	51.4	9.02	57.1	10.24
	21	29.0	4.94	34.7	5.90	40.2	6.92	43.1	7.45	45.9	7.98	51.4	9.15	57.1	10.59
	23	29.0	5.02	34.7	6.01	40.2	7.07	43.1	7.70	45.9	8.39	51.4	9.81	57.1	11.35
	25	29.0	5.12	34.7	6.26	40.2	7.53	43.1	8.23	45.9	8.94	51.4	10.49	57.1	12.14
	27	29.0	5.42	34.7	6.66	40.2	8.03	43.1	8.77	45.9	9.55	51.4	11.20	57.1	12.97
	29	29.0	5.75	34.7	7.07	40.2	8.54	43.1	9.35	45.9	10.16	51.4	11.93	57.1	13.86
	31	29.0	6.08	34.7	7.50	40.2	9.10	43.1	9.93	45.9	10.82	51.4	12.72	57.1	14.77
	33	29.0	6.46	34.7	7.98	40.2	9.68	43.1	10.57	45.9	11.53	51.4	13.56	57.1	15.76
	35	29.0	6.84	34.7	8.46	40.2	10.26	43.1	11.25	45.9	12.26	51.4	14.44	57.1	16.80
	37	29.0	7.22	34.7	8.97	40.2	10.92	43.1	11.93	45.9	13.05	51.4	15.38	57.1	17.89
	39	29.0	7.65	34.7	9.50	40.2	11.58	43.1	12.69	45.9	13.86	51.4	16.34	57.1	19.05
	41	29.0	7.99	34.7	9.84	40.2	11.92	43.1	13.12	45.9	14.28	51.4	17.02	57.1	19.90
	43	29.0	8.64	34.7	10.51	40.2	12.41	43.1	13.82	45.9	14.70	51.4	17.64	57.1	20.52
	45	29.0	8.83	34.7	10.74	40.2	12.67	43.1	14.04	45.9	15.43	51.4	18.59	57.1	21.30
	48	29.0	9.06	34.7	10.84	40.2	12.80	43.1	14.27	45.9	15.86	51.4	19.43	57.1	21.81
60%	-5	24.8	3.50	29.7	4.06	34.5	4.73	36.9	5.04	39.3	5.45	44.1	6.12	49.0	7.02
	-2	24.8	3.52	29.7	4.13	34.5	4.82	36.9	5.12	39.3	5.50	44.1	6.21	49.0	7.06
	0	24.8	3.58	29.7	4.18	34.5	4.88	36.9	5.18	39.3	5.59	44.1	6.30	49.0	7.15
	2	24.8	3.64	29.7	4.27	34.5	4.98	36.9	5.28	39.3	5.67	44.1	6.43	49.0	7.24
	4	24.8	3.74	29.7	4.36	34.5	5.07	36.9	5.35	39.3	5.75	44.1	6.53	49.0	7.35
	6	24.8	3.78	29.7	4.44	34.5	5.17	36.9	5.47	39.3	5.87	44.1	6.66	49.0	7.52
	8	24.8	3.85	29.7	4.51	34.5	5.26	36.9	5.57	39.3	5.99	44.1	6.79	49.0	7.64
	10	24.8	3.93	29.7	4.61	34.5	5.35	36.9	5.73	39.3	6.10	44.1	6.92	49.0	7.75
	12	24.8	4.00	29.7	4.69	34.5	5.45	36.9	5.83	39.3	6.21	44.1	7.04	49.0	7.88
	14	24.8	4.05	29.7	4.76	34.5	5.52	36.9	5.93	39.3	6.33	44.1	7.17	49.0	8.03
	16	24.8	4.10	29.7	4.84	34.5	5.62	36.9	6.03	39.3	6.44	44.1	7.30	49.0	8.18
	18	24.8	4.18	29.7	4.91	34.5	5.73	36.9	6.13	39.3	6.56	44.1	7.42	49.0	8.33
	20	24.8	4.23	29.7	5.02	34.5	5.83	36.9	6.26	39.3	6.69	44.1	7.57	49.0	8.51
	21	24.8	4.28	29.7	5.04	34.5	5.88	36.9	6.31	39.3	6.74	44.1	7.65	49.0	8.59
	23	24.8	4.33	29.7	5.14	34.5	5.98	36.9	6.44	39.3	6.87	44.1	7.95	49.0	9.14
	25	24.8	4.41	29.7	5.22	34.5	6.21	36.9	6.74	39.3	7.30	44.1	8.49	49.0	9.75
	27	24.8	4.59	29.7	5.55	34.5	6.61	36.9	7.19	39.3	7.78	44.1	9.04	49.0	10.41
	29	24.8	4.84	29.7	5.88	34.5	7.04	36.9	7.65	39.3	8.28	44.1	9.65	49.0	11.12
	31	24.8	5.14	29.7	6.23	34.5	7.47	36.9	8.13	39.3	8.82	44.1	10.26	49.0	11.83
	33	24.8	5.42	29.7	6.61	34.5	7.93	36.9	8.64	39.3	9.37	44.1	10.92	49.0	12.62
	35	24.8	5.75	29.7	7.02	34.5	8.41	36.9	9.17	39.3	9.96	44.1	11.63	49.0	13.43
	37	24.8	6.08	29.7	7.42	34.5	8.92	36.9	9.73	39.3	10.56	44.1	12.36	49.0	14.29
	39	24.8	6.41	29.7	7.85	34.5	9.45	36.9	10.31	39.3	11.22	44.1	13.12	49.0	15.20
	41	24.8	6.62	29.7	8.19	34.5	9.79	36.9	10.72	39.3	11.64	44.1	13.74	49.0	15.89
	43	24.8	6.82	29.7	8.54	34.5	10.14	36.9	11.04	39.3	12.04	44.1	14.32	49.0	16.58
	45	24.8	7.14	29.7	8.97	34.5	10.55	36.9	11.46	39.3	12.64	44.1	14.97	49.0	17.49
	48	24.8	7.41	29.7	9.37	34.5	10.91	36.9	11.75	39.3	13.13	44.1	15.51	49.0	18.32

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-5	20.8	3.04	24.8	3.52	28.8	4.04	30.8	4.23	32.7	4.47	36.7	5.08	40.9	5.47
	-2	20.8	3.06	24.8	3.59	28.8	4.09	30.8	4.29	32.7	4.55	36.7	5.14	40.9	5.55
	0	20.8	3.12	24.8	3.65	28.8	4.16	30.8	4.35	32.7	4.60	36.7	5.23	40.9	5.64
	2	20.8	3.16	24.8	3.69	28.8	4.23	30.8	4.41	32.7	4.68	36.7	5.25	40.9	5.75
	4	20.8	3.19	24.8	3.76	28.8	4.28	30.8	4.47	32.7	4.77	36.7	5.38	40.9	5.90
	6	20.8	3.25	24.8	3.82	28.8	4.34	30.8	4.57	32.7	4.86	36.7	5.47	40.9	6.07
	8	20.8	3.33	24.8	3.88	28.8	4.41	30.8	4.67	32.7	4.92	36.7	5.55	40.9	6.27
	10	20.8	3.39	24.8	3.93	28.8	4.48	30.8	4.74	32.7	5.07	36.7	5.70	40.9	6.36
	12	20.8	3.42	24.8	3.98	28.8	4.56	30.8	4.84	32.7	5.17	36.7	5.80	40.9	6.46
	14	20.8	3.47	24.8	4.03	28.8	4.61	30.8	4.94	32.7	5.24	36.7	5.90	40.9	6.59
	16	20.8	3.52	24.8	4.08	28.8	4.69	30.8	5.02	32.7	5.32	36.7	6.00	40.9	6.69
	18	20.8	3.57	24.8	4.15	28.8	4.76	30.8	5.09	32.7	5.42	36.7	6.11	40.9	6.81
	20	20.8	3.62	24.8	4.21	28.8	4.84	30.8	5.17	32.7	5.52	36.7	6.21	40.9	6.94
	21	20.8	3.65	24.8	4.26	28.8	4.89	30.8	5.22	32.7	5.57	36.7	6.28	40.9	7.02
	23	20.8	3.70	24.8	4.31	28.8	4.97	30.8	5.32	32.7	5.68	36.7	6.38	40.9	7.17
	25	20.8	3.75	24.8	4.38	28.8	5.07	30.8	5.42	32.7	5.85	36.7	6.71	40.9	7.65
	27	20.8	3.83	24.8	4.56	28.8	5.35	30.8	5.78	32.7	6.21	36.7	7.14	40.9	8.16
	29	20.8	4.03	24.8	4.81	28.8	5.68	30.8	6.13	32.7	6.61	36.7	7.60	40.9	8.69
	31	20.8	4.26	24.8	5.09	28.8	6.00	30.8	6.51	32.7	7.02	36.7	8.08	40.9	9.25
	33	20.8	4.51	24.8	5.40	28.8	6.38	30.8	6.89	32.7	7.45	36.7	8.59	40.9	9.83
	35	20.8	4.76	24.8	5.70	28.8	6.74	30.8	7.30	32.7	7.88	36.7	9.12	40.9	10.44
	37	20.8	5.02	24.8	6.03	28.8	7.14	30.8	7.73	32.7	8.36	36.7	9.68	40.9	11.10
	39	20.8	5.29	24.8	6.36	28.8	7.55	30.8	8.18	32.7	8.87	36.7	10.26	40.9	11.78
	41	20.8	5.51	24.8	6.63	28.8	7.82	30.8	8.57	32.7	9.25	36.7	10.81	40.9	12.33
	43	20.8	5.88	24.8	7.09	28.8	8.10	30.8	8.95	32.7	9.49	36.7	11.36	40.9	12.88
	45	20.8	6.01	24.8	7.27	28.8	8.64	30.8	9.64	32.7	9.89	36.7	12.45	40.9	13.97
	48	20.8	6.16	24.8	7.47	28.8	9.15	30.8	10.25	32.7	10.33	36.7	13.45	40.9	15.03

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-5	58.9	8.50	70.1	10.38	81.4	11.12	84.5	11.58	88.5	11.91	90.7	12.95	93.0	13.03
	-2	58.9	8.50	70.1	10.58	81.4	11.12	84.5	11.64	88.5	11.91	90.7	13.11	93.0	13.16
	0	58.9	8.65	70.1	10.76	81.4	11.53	84.5	12.28	88.5	12.60	90.7	13.27	93.0	13.33
	2	58.9	8.80	70.1	10.79	81.4	11.93	84.5	12.98	88.5	12.74	90.7	13.37	93.0	13.53
	4	58.9	9.00	70.1	11.00	81.4	12.34	84.5	13.03	88.5	12.91	90.7	13.36	93.0	13.79
	6	58.9	9.17	70.1	11.21	81.4	12.79	84.5	13.14	87.5	13.31	89.6	13.36	91.9	13.89
	8	58.9	9.39	70.1	11.47	81.4	13.44	84.5	13.78	86.5	13.74	88.6	3.90	90.8	14.03
	10	58.9	9.59	70.1	11.72	81.4	13.93	84.5	14.24	85.4	4.04	87.6	4.06	89.7	14.43
	12	58.9	9.76	70.1	11.94	81.4	14.21	83.3	4.03	84.5	4.06	86.4	4.07	88.5	14.52
	14	58.9	9.95	70.1	12.17	81.1	4.05	82.3	4.06	83.3	4.08	85.4	4.09	87.6	14.85
	16	58.9	10.12	70.1	12.42	80.2	4.06	81.1	4.08	82.1	4.10	84.2	4.12	86.4	15.08
	18	58.9	10.32	70.1	12.67	79.0	14.86	79.9	14.94	81.1	15.03	83.3	15.17	85.4	15.31
	20	58.9	10.54	70.1	13.48	77.8	15.59	79.0	15.67	79.9	15.76	82.1	15.90	84.2	16.06
	21	58.9	10.82	70.1	13.96	77.3	15.95	78.5	16.04	79.4	16.12	81.6	16.29	83.7	16.43
	23	58.9	11.61	70.1	14.97	76.3	16.68	77.3	16.76	78.2	16.85	80.4	17.02	82.5	17.19
	25	58.9	12.39	70.1	16.04	75.1	17.41	76.1	17.49	77.3	17.61	79.4	17.77	81.6	17.94
	27	58.9	13.23	70.1	17.16	74.2	18.14	75.1	18.25	76.1	18.33	78.2	18.53	80.4	18.73
	29	58.9	14.13	70.1	18.33	73.0	18.87	73.9	18.98	75.1	19.09	77.3	19.29	79.4	19.48
	31	58.9	15.08	69.9	19.40	71.8	19.62	73.0	19.73	73.9	19.82	76.1	20.04	78.2	20.27
	33	58.9	16.06	68.7	20.13	70.8	20.35	71.8	20.46	73.0	20.58	75.1	20.80	77.0	21.03
	35	58.9	17.13	67.5	20.86	69.6	21.11	70.8	21.22	71.8	21.33	73.9	21.59	76.1	21.81
	37	58.9	18.22	66.5	21.61	68.7	21.87	69.6	21.98	70.8	22.12	72.7	22.37	74.9	22.63
	39	58.9	19.40	65.3	21.84	67.5	22.60	68.7	22.74	69.6	22.88	71.8	23.13	73.9	23.41
	41	58.9	20.42	64.6	22.05	66.8	22.81	68.0	22.95	68.9	23.09	71.1	23.17	71.1	23.62
	43	58.9	20.94	64.2	22.16	66.4	22.87	67.6	23.05	68.2	23.12	69.8	23.22	70.3	23.67
	45	58.9	21.98	63.8	22.37	65.7	23.08	66.9	23.20	67.2	23.23	67.9	23.30	68.9	24.12
	48	58.9	22.76	66.0	23.09	71.6	23.30	73.0	23.41	73.5	23.49	73.2	23.70	74.6	23.76
120%	-5	54.3	8.21	64.6	9.95	75.1	11.76	80.4	12.83	84.2	13.37	86.1	13.80	88.1	14.17
	-2	54.3	8.29	64.6	10.05	75.1	11.88	80.4	12.90	84.2	13.53	86.1	13.91	88.1	14.21
	0	54.3	8.37	64.6	10.12	75.1	12.02	80.4	12.93	84.2	13.65	86.1	14.00	88.1	14.24
	2	54.3	8.39	64.6	10.22	75.1	12.10	80.4	13.06	84.2	13.70	86.1	14.10	88.1	14.27
	4	54.3	8.47	64.6	10.35	75.1	12.27	80.4	13.18	84.2	13.89	86.1	14.13	88.1	14.31
	6	54.3	8.57	64.6	10.43	75.1	12.42	80.4	13.32	84.2	14.04	86.1	14.25	88.1	14.36
	8	54.3	8.64	64.6	10.54	75.1	12.59	80.4	13.49	84.2	14.18	86.1	14.29	88.1	14.43
	10	54.3	8.75	64.6	10.68	75.1	12.70	80.4	13.74	84.2	14.19	86.1	14.33	88.1	14.49
	12	54.3	8.92	64.6	10.88	75.1	12.95	80.4	13.99	83.0	14.25	84.9	14.25	86.9	14.58
	14	54.3	9.08	64.6	11.10	75.1	13.20	80.4	14.27	81.8	14.33	84.0	14.47	85.9	14.76
	16	54.3	9.25	64.6	11.32	75.1	13.46	79.9	4.10	80.9	14.55	82.8	14.71	84.7	14.98
	18	54.3	9.42	64.6	11.55	75.1	13.90	78.7	14.86	79.7	14.91	81.6	15.05	83.7	15.19
	20	54.3	9.61	64.6	12.00	75.1	14.97	77.8	15.59	78.7	15.64	80.6	15.78	82.6	15.92
	21	54.3	9.70	64.6	12.42	75.1	15.50	77.0	15.95	78.0	16.01	80.2	16.15	82.1	16.31
	23	54.3	10.37	64.6	13.31	75.1	16.59	76.1	16.65	77.0	16.74	79.0	16.90	80.9	17.04
	25	54.3	11.07	64.6	14.24	73.9	17.32	74.9	17.38	75.9	17.47	78.0	17.63	79.9	17.80
	27	54.3	11.83	64.6	15.22	73.0	18.03	73.9	18.14	74.9	18.22	76.8	18.39	78.7	18.56
	29	54.3	12.61	64.6	16.26	71.8	18.75	72.7	18.87	73.7	18.95	75.6	19.15	77.8	19.31
	31	54.3	13.46	64.6	17.35	70.6	19.51	71.8	19.59	72.7	19.71	74.7	19.90	76.6	20.10
	33	54.3	14.32	64.6	18.50	69.6	20.24	70.6	20.35	71.5	20.44	73.5	20.66	75.4	20.86
	35	54.3	15.25	64.6	19.74	68.4	20.96	69.4	21.08	70.6	21.19	72.5	21.42	74.4	21.64
	37	54.3	16.23	64.6	21.02	67.5	21.73	68.4	21.84	69.4	21.95	71.3	22.17	73.2	22.43
	39	54.3	17.27	64.4	22.20	66.3	22.46	67.2	22.59	68.2	22.71	70.3	22.96	72.3	23.18
	41	54.3	17.74	63.8	22.36	65.8	22.61	66.7	22.75	67.7	22.86	69.8	23.02	70.2	23.36
	43	54.3	18.01	63.5	22.52	65.2	22.75	66.2	22.84	67.2	22.95	68.6	23.09	69.1	23.83
	45	54.3	18.22	63.2	22.73	64.6	22.96	65.5	23.05	66.6	23.12	67.2	23.16	68.4	24.34
	48	62.9	18.36	72.6	22.98	73.9	23.17	74.7	23.22	76.3	23.31	76.7	23.24	78.2	24.65

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
110%	-5	49.8	7.17	59.3	8.93	68.9	10.65	73.7	11.43	78.5	12.30	84.5	12.78	86.4	13.17
	-2	49.8	7.31	59.3	9.04	68.9	10.74	73.7	11.55	78.5	12.40	84.5	12.90	86.4	13.24
	0	49.8	7.38	59.3	9.09	68.9	10.82	73.7	11.62	78.5	12.54	84.5	13.03	86.4	13.40
	2	49.8	7.54	59.3	9.18	68.9	10.99	73.7	11.75	78.5	12.67	84.5	13.22	86.4	13.57
	4	49.8	7.69	59.3	9.29	68.9	11.10	73.7	11.89	78.5	12.86	84.5	13.40	86.4	13.70
	6	49.8	7.77	59.3	9.39	68.9	11.21	73.7	12.08	78.5	13.01	84.5	13.54	86.4	13.91
	8	49.8	7.84	59.3	9.54	68.9	11.33	73.7	12.21	78.5	13.16	84.5	13.63	86.4	14.05
	10	49.8	7.93	59.3	9.67	68.9	11.49	73.7	12.42	78.5	13.37	84.5	13.73	86.4	14.17
	12	49.8	8.10	59.3	9.87	68.9	11.72	73.7	12.67	78.5	13.62	83.5	13.93	85.2	14.36
	14	49.8	8.24	59.3	10.04	68.9	11.94	73.7	12.90	78.5	13.88	82.3	14.05	84.2	14.46
	16	49.8	8.38	59.3	10.23	68.9	12.17	73.7	13.15	78.5	14.16	81.4	14.21	83.0	14.62
	18	49.8	8.55	59.3	10.43	68.9	12.42	73.7	13.51	78.5	14.83	80.2	14.94	82.1	15.08
	20	49.8	8.72	59.3	10.65	68.9	13.15	73.7	14.52	77.3	15.56	79.2	15.67	80.9	15.81
	21	49.8	8.80	59.3	10.96	68.9	13.62	73.7	15.05	76.8	15.92	78.5	16.03	80.4	16.18
	23	49.8	9.22	59.3	11.75	68.9	14.61	73.7	16.15	75.6	16.62	77.5	16.79	79.2	16.93
	25	49.8	9.84	59.3	12.56	68.9	15.61	73.7	17.30	74.7	17.35	76.3	17.52	78.2	17.66
	27	49.8	10.49	59.3	13.43	68.9	16.71	72.5	18.03	73.5	18.08	75.4	18.25	77.1	18.42
	29	49.8	11.18	59.3	14.33	68.9	17.86	71.5	18.76	72.5	18.84	74.2	19.01	76.1	19.18
	31	49.8	11.91	59.3	15.28	68.9	19.06	70.4	19.48	71.3	19.57	73.2	19.74	74.9	19.93
	33	49.8	12.67	59.3	16.29	68.4	20.10	69.4	20.21	70.4	20.30	72.0	20.49	73.9	20.69
	35	49.8	13.48	59.3	17.35	67.2	20.83	68.2	20.94	69.2	21.05	70.8	21.25	72.7	21.45
	37	49.8	14.35	59.3	18.47	66.3	21.59	67.2	21.67	68.0	21.78	69.9	22.01	71.5	22.20
	39	49.8	15.25	59.3	19.68	65.1	22.32	66.0	22.43	67.0	22.54	68.7	22.76	70.6	22.99
	41	49.8	15.41	59.3	19.84	64.6	22.47	65.5	22.59	66.5	22.70	67.8	22.92	68.5	23.14
	43	49.8	15.56	59.3	20.09	64.1	22.63	65.0	22.74	66.0	22.85	67.2	23.00	67.4	23.62
	45	49.8	16.07	59.3	20.20	63.4	22.84	64.3	23.02	65.4	23.06	66.5	23.63	66.8	24.16
	48	54.5	16.63	65.0	21.92	68.4	22.99	69.3	23.18	70.8	23.31	71.6	23.72	72.2	24.43
100%	-5	45.2	6.53	53.8	7.86	62.7	9.36	67.0	10.03	71.3	10.88	80.2	12.40	84.7	12.94
	-2	45.2	6.61	53.8	7.97	62.7	9.46	67.0	10.21	71.3	11.02	80.2	12.54	84.7	13.02
	0	45.2	6.68	53.8	8.05	62.7	9.57	67.0	10.34	71.3	11.13	80.2	12.75	84.7	13.17
	2	45.2	6.81	53.8	8.16	62.7	9.67	67.0	10.47	71.3	11.25	80.2	12.94	84.7	13.37
	4	45.2	6.86	53.8	8.24	62.7	9.82	67.0	10.63	71.3	11.40	80.2	13.06	84.7	13.52
	6	45.2	6.96	53.8	8.40	62.7	9.94	67.0	10.82	71.3	11.56	80.2	13.25	84.7	13.73
	8	45.2	7.09	53.8	8.53	62.7	10.13	67.0	10.94	71.3	11.75	80.2	13.46	84.7	13.96
	10	45.2	7.18	53.8	8.69	62.7	10.29	67.0	11.13	71.3	11.97	80.2	13.68	84.7	14.16
	12	45.2	7.29	53.8	8.86	62.7	10.48	67.0	11.33	71.3	12.20	80.2	13.93	83.5	14.27
	14	45.2	7.43	53.8	9.03	62.7	10.68	67.0	11.55	71.3	12.42	80.2	14.21	82.6	14.44
	16	45.2	7.57	53.8	9.19	62.7	10.91	67.0	11.77	71.3	12.67	79.7	14.38	81.4	14.61
	18	45.2	7.71	53.8	9.36	62.7	11.10	67.0	12.00	71.3	12.92	78.7	14.86	80.4	14.97
	20	45.2	7.85	53.8	9.56	62.7	11.44	67.0	12.61	71.3	13.85	77.5	15.56	79.2	15.70
	21	45.2	7.93	53.8	9.64	62.7	11.86	67.0	13.06	71.3	14.32	77.1	15.92	78.7	16.06
	23	45.2	8.13	53.8	10.29	62.7	12.70	67.0	13.99	71.3	15.36	76.1	16.65	77.5	16.79
	25	45.2	8.66	53.8	10.99	62.7	13.59	67.0	15.00	71.3	16.45	74.9	17.38	76.6	17.52
	27	45.2	9.25	53.8	11.72	62.7	14.52	67.0	16.03	71.3	17.61	73.7	18.11	75.4	18.28
	29	45.2	9.84	53.8	12.50	62.7	15.50	67.0	17.13	71.1	18.70	72.7	18.87	74.4	19.00
	31	45.2	10.48	53.8	13.34	62.7	16.54	67.0	18.28	70.1	19.43	71.5	19.59	73.2	19.76
	33	45.2	11.13	53.8	14.21	62.7	17.63	67.0	19.51	68.9	20.16	70.6	20.32	72.3	20.52
	35	45.2	11.83	53.8	15.11	62.7	18.81	67.0	20.80	67.7	20.88	69.4	21.08	71.1	21.25
	37	45.2	12.59	53.8	16.09	62.7	20.04	65.8	21.53	66.8	21.64	68.4	21.83	69.9	22.01
	39	45.2	13.37	53.8	17.10	62.7	21.33	64.8	22.26	65.6	22.37	67.2	22.57	68.9	22.79
	41	45.2	13.99	53.8	17.72	62.7	22.11	63.8	22.41	65.1	22.71	66.1	23.10	67.9	23.26
	43	45.2	14.62	53.8	18.35	62.7	22.52	62.8	22.67	64.6	22.93	66.5	23.25	66.7	23.52
	45	45.2	15.45	53.8	19.18	62.7	22.91	61.5	22.99	64.3	23.35	65.9	23.61	65.4	23.83
	48	46.8	16.13	55.8	19.85	64.9	22.94	61.1	23.25	66.4	23.76	64.1	23.85	66.2	24.05

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
90%	-5	40.7	5.78	48.6	6.93	56.5	8.17	60.3	8.92	64.1	9.49	72.0	10.91	79.9	12.50
	-2	40.7	5.83	48.6	7.00	56.5	8.28	60.3	9.05	64.1	9.61	72.0	11.02	79.9	12.62
	0	40.7	5.92	48.6	7.09	56.5	8.41	60.3	9.15	64.1	9.73	72.0	11.14	79.9	12.72
	2	40.7	6.01	48.6	7.18	56.5	8.49	60.3	9.29	64.1	9.88	72.0	11.37	79.9	12.90
	4	40.7	6.10	48.6	7.29	56.5	8.64	60.3	9.42	64.1	10.01	72.0	11.55	79.9	13.09
	6	40.7	6.18	48.6	7.43	56.5	8.80	60.3	9.60	64.1	10.18	72.0	11.73	79.9	13.31
	8	40.7	6.30	48.6	7.57	56.5	8.98	60.3	9.72	64.1	10.36	72.0	11.95	79.9	13.44
	10	40.7	6.42	48.6	7.74	56.5	9.14	60.3	9.87	64.1	10.60	72.0	12.10	79.9	13.65
	12	40.7	6.53	48.6	7.88	56.5	9.31	60.3	10.03	64.1	10.79	72.0	12.33	79.9	13.90
	14	40.7	6.64	48.6	8.02	56.5	9.47	60.3	10.23	64.1	10.99	72.0	12.56	79.9	14.16
	16	40.7	6.75	48.6	8.16	56.5	9.67	60.3	10.43	64.1	11.21	72.0	12.81	79.7	14.41
	18	40.7	6.87	48.6	8.33	56.5	9.84	60.3	10.62	64.1	11.44	72.0	13.06	78.7	14.86
	20	40.7	7.01	48.6	8.52	56.5	10.04	60.3	10.85	64.1	11.86	72.0	14.04	77.5	15.56
	21	40.7	7.06	48.6	8.58	56.5	10.20	60.3	11.21	64.1	12.28	72.0	14.55	77.1	15.92
	23	40.7	7.20	48.6	8.91	56.5	10.93	60.3	12.03	64.1	13.17	72.0	15.61	75.9	16.65
	25	40.7	7.60	48.6	9.53	56.5	11.69	60.3	12.87	64.1	14.07	72.0	16.71	74.9	17.38
	27	40.7	8.07	48.6	10.15	56.5	12.47	60.3	13.74	64.1	15.05	72.0	17.88	73.7	18.11
	29	40.7	8.60	48.6	10.82	56.5	13.31	60.3	14.66	64.1	16.09	71.3	18.70	72.7	18.84
	31	40.7	9.14	48.6	11.52	56.5	14.18	60.3	15.64	64.1	17.15	70.1	19.43	71.5	19.59
	33	40.7	9.70	48.6	12.25	56.5	15.14	60.3	16.68	64.1	18.30	69.2	20.18	70.6	20.32
	35	40.7	10.31	48.6	13.03	56.5	16.12	60.3	17.77	64.1	19.51	68.0	20.91	69.4	21.08
	37	40.7	10.93	48.6	13.85	56.5	17.15	60.3	18.92	64.1	20.80	66.8	21.64	68.4	21.81
	39	40.7	11.60	48.6	14.75	56.5	18.25	60.3	20.15	64.1	22.15	65.8	22.40	67.2	22.56
	41	40.7	12.00	48.6	15.41	56.5	18.91	60.3	20.69	64.1	22.28	65.3	22.97	66.8	23.10
	43	40.7	12.58	48.6	16.08	56.5	19.58	60.3	21.22	64.1	22.75	65.0	23.27	66.2	23.46
	45	40.7	13.38	48.6	16.88	56.5	20.38	60.3	21.93	64.1	23.38	64.6	23.51	65.2	23.77
	48	40.7	14.13	48.6	17.66	56.5	21.15	60.3	22.21	64.1	23.59	71.2	23.84	70.5	24.09
80%	-5	36.1	5.09	43.1	6.02	50.0	7.13	53.6	7.57	57.2	8.16	64.1	9.43	71.1	10.76
	-2	36.1	5.16	43.1	6.09	50.0	7.19	53.6	7.69	57.2	8.23	64.1	9.52	71.1	10.87
	0	36.1	5.25	43.1	6.17	50.0	7.28	53.6	7.78	57.2	8.38	64.1	9.66	71.1	11.02
	2	36.1	5.36	43.1	6.26	50.0	7.38	53.6	7.93	57.2	8.53	64.1	9.85	71.1	11.23
	4	36.1	5.45	43.1	6.36	50.0	7.52	53.6	8.11	57.2	8.68	64.1	10.03	71.1	11.38
	6	36.1	5.54	43.1	6.51	50.0	7.63	53.6	8.29	57.2	8.85	64.1	10.18	71.1	11.57
	8	36.1	5.64	43.1	6.66	50.0	7.81	53.6	8.43	57.2	9.04	64.1	10.33	71.1	11.80
	10	36.1	5.69	43.1	6.81	50.0	8.02	53.6	8.63	57.2	9.25	64.1	10.57	71.1	11.91
	12	36.1	5.78	43.1	6.92	50.0	8.16	53.6	8.80	57.2	9.45	64.1	10.76	71.1	12.14
	14	36.1	5.89	43.1	7.06	50.0	8.30	53.6	8.94	57.2	9.62	64.1	10.96	71.1	12.36
	16	36.1	5.97	43.1	7.18	50.0	8.47	53.6	9.11	57.2	9.78	64.1	11.19	71.1	12.59
	18	36.1	6.08	43.1	7.32	50.0	8.63	53.6	9.31	57.2	9.98	64.1	11.41	71.1	12.84
	20	36.1	6.20	43.1	7.46	50.0	8.80	53.6	9.48	57.2	10.18	64.1	11.83	71.1	13.74
	21	36.1	6.25	43.1	7.51	50.0	8.89	53.6	9.59	57.2	10.40	64.1	12.25	71.1	14.24
	23	36.1	6.36	43.1	7.68	50.0	9.31	53.6	10.20	57.2	11.13	64.1	13.12	71.1	15.28
	25	36.1	6.56	43.1	8.16	50.0	9.95	53.6	10.91	57.2	11.89	64.1	14.04	71.1	16.34
	27	36.1	6.98	43.1	8.69	50.0	10.60	53.6	11.63	57.2	12.70	64.1	15.00	71.1	17.49
	29	36.1	7.43	43.1	9.25	50.0	11.30	53.6	12.39	57.2	13.57	64.1	16.01	71.1	18.70
	31	36.1	7.88	43.1	9.84	50.0	12.03	53.6	13.20	57.2	14.47	64.1	17.10	69.9	19.43
	33	36.1	8.38	43.1	10.46	50.0	12.81	53.6	14.07	57.2	15.39	64.1	18.22	68.9	20.16
	35	36.1	8.89	43.1	11.13	50.0	13.62	53.6	14.97	57.2	16.40	64.1	19.43	67.7	20.88
	37	36.1	9.42	43.1	11.80	50.0	14.49	53.6	15.95	57.2	17.47	64.1	20.72	66.8	21.61
	39	36.1	9.98	43.1	12.59	50.0	15.42	53.6	16.96	57.2	18.59	64.1	22.06	65.6	22.37
	41	36.1	10.20	43.1	12.70	50.0	15.64	53.6	17.41	57.2	18.92	64.1	22.62	65.2	22.76
	43	36.1	10.50	43.1	12.81	50.0	15.87	53.6	17.71	57.2	19.19	64.1	22.89	64.8	23.01
	45	36.1	10.80	43.1	12.96	50.0	16.17	53.6	18.08	57.2	19.52	64.1	23.14	64.0	23.39
	48	36.1	11.16	43.1	13.05	56.3	16.43	53.6	18.33	57.2	19.68	64.1	23.37	71.3	23.70

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-5	31.6	4.54	37.8	5.33	43.8	6.04	46.9	6.47	50.0	6.91	56.0	7.90	62.2	9.09
	-2	31.6	4.58	37.8	5.35	43.8	6.07	46.9	6.60	50.0	7.03	56.0	8.03	62.2	9.21
	0	31.6	4.61	37.8	5.43	43.8	6.20	46.9	6.72	50.0	7.16	56.0	8.19	62.2	9.34
	2	31.6	4.63	37.8	5.45	43.8	6.30	46.9	6.85	50.0	7.28	56.0	8.36	62.2	9.48
	4	31.6	4.69	37.8	5.59	43.8	6.44	46.9	6.97	50.0	7.44	56.0	8.50	62.2	9.71
	6	31.6	4.77	37.8	5.69	43.8	6.60	46.9	7.19	50.0	7.62	56.0	8.65	62.2	9.90
	8	31.6	4.85	37.8	5.85	43.8	6.75	46.9	7.31	50.0	7.78	56.0	8.90	62.2	10.08
	10	31.6	4.95	37.8	5.94	43.8	6.92	46.9	7.46	50.0	7.99	56.0	9.08	62.2	10.20
	12	31.6	5.07	37.8	6.03	43.8	7.06	46.9	7.60	50.0	8.13	56.0	9.25	62.2	10.40
	14	31.6	5.16	37.8	6.14	43.8	7.18	46.9	7.71	50.0	8.27	56.0	9.42	62.2	10.60
	16	31.6	5.24	37.8	6.25	43.8	7.32	46.9	7.88	50.0	8.44	56.0	9.59	62.2	10.79
	18	31.6	5.33	37.8	6.36	43.8	7.46	46.9	8.02	50.0	8.58	56.0	9.78	62.2	11.02
	20	31.6	5.41	37.8	6.48	43.8	7.60	46.9	8.16	50.0	8.75	56.0	9.98	62.2	11.33
	21	31.6	5.47	37.8	6.53	43.8	7.65	46.9	8.24	50.0	8.83	56.0	10.12	62.2	11.72
	23	31.6	5.55	37.8	6.64	43.8	7.82	46.9	8.52	50.0	9.28	56.0	10.85	62.2	12.56
	25	31.6	5.66	37.8	6.92	43.8	8.33	46.9	9.11	50.0	9.90	56.0	11.61	62.2	13.43
	27	31.6	6.00	37.8	7.37	43.8	8.89	46.9	9.70	50.0	10.57	56.0	12.39	62.2	14.35
	29	31.6	6.36	37.8	7.82	43.8	9.45	46.9	10.34	50.0	11.24	56.0	13.20	62.2	15.33
	31	31.6	6.73	37.8	8.30	43.8	10.06	46.9	10.99	50.0	11.97	56.0	14.07	62.2	16.34
	33	31.6	7.15	37.8	8.83	43.8	10.71	46.9	11.69	50.0	12.76	56.0	15.00	62.2	17.44
	35	31.6	7.57	37.8	9.36	43.8	11.35	46.9	12.45	50.0	13.57	56.0	15.98	62.2	18.59
	37	31.6	7.99	37.8	9.92	43.8	12.08	46.9	13.20	50.0	14.44	56.0	17.02	62.2	19.79
	39	31.6	8.47	37.8	10.51	43.8	12.81	46.9	14.04	50.0	15.33	56.0	18.08	62.2	21.08
	41	31.6	8.84	37.8	10.89	43.8	13.18	46.9	14.51	50.0	15.80	56.0	18.83	62.2	22.01
	43	31.6	9.56	37.8	11.63	43.8	13.73	46.9	15.29	50.0	16.27	56.0	19.51	62.2	22.70
	45	31.6	9.77	37.8	11.88	43.8	14.02	46.9	15.54	50.0	17.08	56.0	20.57	62.2	23.57
	48	31.6	10.02	37.8	11.99	43.8	14.16	46.9	15.79	50.0	17.55	56.0	21.49	62.2	24.13
60%	-5	27.0	3.88	32.3	4.49	37.6	5.24	40.2	5.58	42.8	6.03	48.1	6.77	53.4	7.76
	-2	27.0	3.90	32.3	4.57	37.6	5.33	40.2	5.66	42.8	6.09	48.1	6.87	53.4	7.81
	0	27.0	3.96	32.3	4.62	37.6	5.40	40.2	5.73	42.8	6.19	48.1	6.97	53.4	7.91
	2	27.0	4.03	32.3	4.73	37.6	5.50	40.2	5.84	42.8	6.27	48.1	7.11	53.4	8.02
	4	27.0	4.14	32.3	4.82	37.6	5.61	40.2	5.92	42.8	6.36	48.1	7.22	53.4	8.13
	6	27.0	4.18	32.3	4.91	37.6	5.72	40.2	6.05	42.8	6.49	48.1	7.37	53.4	8.32
	8	27.0	4.26	32.3	4.99	37.6	5.82	40.2	6.16	42.8	6.63	48.1	7.51	53.4	8.45
	10	27.0	4.34	32.3	5.10	37.6	5.91	40.2	6.33	42.8	6.75	48.1	7.65	53.4	8.58
	12	27.0	4.43	32.3	5.18	37.6	6.03	40.2	6.45	42.8	6.87	48.1	7.79	53.4	8.72
	14	27.0	4.48	32.3	5.27	37.6	6.11	40.2	6.56	42.8	7.01	48.1	7.93	53.4	8.89
	16	27.0	4.54	32.3	5.35	37.6	6.22	40.2	6.67	42.8	7.12	48.1	8.07	53.4	9.05
	18	27.0	4.62	32.3	5.44	37.6	6.33	40.2	6.78	42.8	7.26	48.1	8.21	53.4	9.22
	20	27.0	4.68	32.3	5.55	37.6	6.45	40.2	6.92	42.8	7.40	48.1	8.38	53.4	9.42
	21	27.0	4.74	32.3	5.58	37.6	6.50	40.2	6.98	42.8	7.46	48.1	8.47	53.4	9.50
	23	27.0	4.79	32.3	5.69	37.6	6.61	40.2	7.12	42.8	7.60	48.1	8.80	53.4	10.12
	25	27.0	4.88	32.3	5.77	37.6	6.87	40.2	7.46	42.8	8.07	48.1	9.39	53.4	10.79
	27	27.0	5.07	32.3	6.14	37.6	7.32	40.2	7.96	42.8	8.61	48.1	10.01	53.4	11.52
	29	27.0	5.35	32.3	6.50	37.6	7.79	40.2	8.47	42.8	9.17	48.1	10.68	53.4	12.30
	31	27.0	5.69	32.3	6.90	37.6	8.27	40.2	9.00	42.8	9.75	48.1	11.35	53.4	13.09
	33	27.0	6.00	32.3	7.32	37.6	8.77	40.2	9.56	42.8	10.37	48.1	12.08	53.4	13.96
	35	27.0	6.36	32.3	7.76	37.6	9.31	40.2	10.15	42.8	11.01	48.1	12.87	53.4	14.86
	37	27.0	6.73	32.3	8.21	37.6	9.87	40.2	10.76	42.8	11.69	48.1	13.68	53.4	15.81
	39	27.0	7.09	32.3	8.69	37.6	10.45	40.2	11.41	42.8	12.42	48.1	14.52	53.4	16.82
	41	27.0	7.32	32.3	9.06	37.6	10.84	40.2	11.86	42.8	12.87	48.1	15.20	53.4	17.58
	43	27.0	7.55	32.3	9.45	37.6	11.22	40.2	12.22	42.8	13.32	48.1	15.85	53.4	18.34
	45	27.0	7.90	32.3	9.93	37.6	11.67	40.2	12.68	42.8	13.98	48.1	16.56	53.4	19.35
	48	27.0	8.20	32.3	10.36	37.6	12.07	40.2	13.01	42.8	14.52	48.1	17.16	53.4	20.27

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor temp. (°C)	Indoor temperature(°C DB/WD)													
		20.8/14		23.3/16		25.8/18		27/19		28.2/20		30.7/22		32/24	
		TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
		kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
50%	-5	22.6	3.37	27.0	3.89	31.3	4.47	33.5	4.68	35.7	4.94	40.0	5.62	44.5	6.05
	-2	22.6	3.39	27.0	3.97	31.3	4.52	33.5	4.75	35.7	5.03	40.0	5.69	44.5	6.14
	0	22.6	3.45	27.0	4.04	31.3	4.60	33.5	4.81	35.7	5.09	40.0	5.79	44.5	6.24
	2	22.6	3.50	27.0	4.09	31.3	4.68	33.5	4.88	35.7	5.17	40.0	5.81	44.5	6.36
	4	22.6	3.53	27.0	4.16	31.3	4.73	33.5	4.94	35.7	5.28	40.0	5.96	44.5	6.52
	6	22.6	3.59	27.0	4.22	31.3	4.80	33.5	5.05	35.7	5.38	40.0	6.05	44.5	6.72
	8	22.6	3.68	27.0	4.30	31.3	4.88	33.5	5.17	35.7	5.45	40.0	6.15	44.5	6.93
	10	22.6	3.76	27.0	4.34	31.3	4.96	33.5	5.25	35.7	5.61	40.0	6.31	44.5	7.04
	12	22.6	3.78	27.0	4.40	31.3	5.05	33.5	5.35	35.7	5.72	40.0	6.42	44.5	7.15
	14	22.6	3.84	27.0	4.46	31.3	5.10	33.5	5.47	35.7	5.80	40.0	6.53	44.5	7.29
	16	22.6	3.90	27.0	4.51	31.3	5.19	33.5	5.55	35.7	5.89	40.0	6.64	44.5	7.40
	18	22.6	3.95	27.0	4.60	31.3	5.27	33.5	5.63	35.7	6.00	40.0	6.76	44.5	7.54
	20	22.6	4.01	27.0	4.65	31.3	5.35	33.5	5.72	35.7	6.11	40.0	6.87	44.5	7.68
	21	22.6	4.04	27.0	4.71	31.3	5.41	33.5	5.77	35.7	6.17	40.0	6.95	44.5	7.76
	23	22.6	4.09	27.0	4.77	31.3	5.49	33.5	5.89	35.7	6.28	40.0	7.06	44.5	7.93
	25	22.6	4.15	27.0	4.85	31.3	5.61	33.5	6.00	35.7	6.47	40.0	7.43	44.5	8.46
	27	22.6	4.23	27.0	5.05	31.3	5.91	33.5	6.39	35.7	6.87	40.0	7.90	44.5	9.03
	29	22.6	4.46	27.0	5.33	31.3	6.28	33.5	6.78	35.7	7.32	40.0	8.41	44.5	9.61
	31	22.6	4.71	27.0	5.63	31.3	6.64	33.5	7.20	35.7	7.76	40.0	8.94	44.5	10.23
	33	22.6	4.99	27.0	5.97	31.3	7.06	33.5	7.62	35.7	8.24	40.0	9.50	44.5	10.88
	35	22.6	5.27	27.0	6.31	31.3	7.46	33.5	8.07	35.7	8.72	40.0	10.09	44.5	11.55
	37	22.6	5.55	27.0	6.67	31.3	7.90	33.5	8.55	35.7	9.25	40.0	10.71	44.5	12.28
	39	22.6	5.86	27.0	7.04	31.3	8.35	33.5	9.05	35.7	9.81	40.0	11.35	44.5	13.03
	41	22.6	6.10	27.0	7.34	31.3	8.66	33.5	9.48	35.7	10.23	40.0	11.96	44.5	13.64
	43	22.6	6.50	27.0	7.84	31.3	8.96	33.5	9.90	35.7	10.50	40.0	12.56	44.5	14.24
	45	22.6	6.65	27.0	8.04	31.3	9.56	33.5	10.67	35.7	10.94	40.0	13.77	44.5	15.46
	48	22.6	6.81	27.0	8.27	31.3	10.13	33.5	11.34	35.7	11.43	40.0	14.88	44.5	16.63

TC: Total Capacity (kW);

PI: Power Input (kW) (Compressor + Outdoor fan motor)

8.2 Heating capacity

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-19.8	-20	40.8	11.30	40.6	12.09	40.4	12.90	40.4	13.30	40.2	13.69	40.2	14.50
	-18.8	-19	41.4	11.55	41.2	12.34	41.2	13.13	41.0	13.53	41.0	13.90	40.8	14.69
	-16.7	-17	43.0	12.09	42.8	12.84	42.6	13.61	42.6	13.98	42.6	14.36	42.4	15.11
	-13.7	-15	44.8	12.65	44.6	13.38	44.4	14.11	44.4	14.46	44.2	14.84	44.2	15.56
	-11.8	-13	46.6	13.22	46.6	13.92	46.4	14.61	46.2	14.96	46.2	15.31	46.0	16.00
	-9.8	-11	48.8	13.80	48.6	14.46	48.4	15.13	48.4	15.46	48.4	15.79	48.2	16.46
	-9.5	-10	50.0	14.09	49.8	14.73	49.6	15.38	49.6	15.71	49.4	16.02	49.4	16.66
	-8.5	-9.1	51.0	14.34	50.8	14.96	50.8	15.61	50.6	15.92	50.6	16.23	50.4	16.87
	-7	-7.6	52.8	14.75	52.8	15.38	52.6	15.98	52.6	16.29	52.4	16.58	52.2	17.20
	-5	-5.6	55.6	15.31	55.4	15.90	55.2	16.48	55.2	16.77	55.0	17.04	55.0	17.62
	-3	-3.7	58.2	15.81	58.0	16.37	58.0	16.91	57.8	17.20	57.8	17.47	57.6	18.02
	0	-0.7	62.8	16.58	62.8	17.10	62.6	17.60	62.6	17.79	62.4	18.12	62.4	18.62
	3	2.2	67.8	17.27	67.6	17.75	67.4	18.22	67.4	18.45	67.4	18.70	67.2	19.16
	5	4.1	71.2	17.70	71.0	18.16	71.0	18.60	70.8	18.83	70.8	19.05	70.6	19.49
	7	6	74.8	18.12	74.6	18.53	74.6	18.97	74.4	19.18	74.4	19.39	71.4	18.62
	9	7.9	78.6	18.49	78.4	18.91	78.4	19.30	78.2	19.51	76.6	19.10	71.4	17.50
	11	9.8	82.6	18.87	82.4	19.24	82.0	19.49	79.2	18.72	76.6	17.95	71.4	16.48
	13	11.8	87.0	19.22	86.8	19.60	82.0	18.27	79.2	17.54	76.6	16.85	71.4	15.46
	15	13.7	91.2	19.55	87.2	18.56	82.0	17.20	79.2	16.54	76.6	15.88	71.4	14.59
120%	-19.8	-20	40.6	12.39	40.4	13.11	40.2	13.86	40.2	14.21	40.2	14.59	40.0	15.33
	-18.8	-19	41.2	12.61	41.0	13.34	41.0	14.07	40.8	14.42	40.8	14.80	40.6	15.52
	-16.7	-17	42.8	13.11	42.6	13.82	42.3	14.50	42.4	14.86	42.4	15.21	42.2	15.90
	-13.7	-15	44.6	13.63	44.4	14.30	44.2	14.96	44.2	15.32	44.2	15.65	44.0	16.31
	-11.8	-13	46.4	14.15	46.4	14.80	46.2	15.44	46.2	15.77	46.0	16.08	46.0	16.73
	-9.8	-11	48.6	14.69	48.4	15.29	48.4	15.92	48.2	16.23	48.2	16.52	48.0	17.14
	-9.5	-10	49.8	14.96	49.6	15.56	49.4	16.14	49.4	16.46	49.4	16.75	49.2	17.35
	-8.5	-9.1	50.8	15.19	50.6	15.77	50.6	16.35	50.4	16.65	50.4	16.96	50.2	17.54
	-7	-7.6	52.6	15.58	52.6	16.14	52.4	16.71	52.4	17.00	52.2	17.27	52.2	17.83
	-5	-5.6	55.4	16.08	55.2	16.62	55.0	17.16	55.0	17.43	55.0	17.70	54.8	18.22
	-3	-3.7	58.0	16.56	58.0	17.08	57.8	17.58	57.8	17.83	57.6	18.10	57.6	18.60
	0	-0.7	62.6	17.27	62.6	17.75	62.4	18.20	62.4	18.45	62.2	18.68	62.2	19.16
	3	2.2	67.6	17.91	67.4	18.35	67.4	18.79	67.2	19.01	67.2	19.22	65.8	19.12
	5	4.1	71.0	18.31	70.8	18.72	70.8	19.14	70.6	19.35	70.6	19.55	65.8	17.95
	7	6	74.6	18.68	74.6	19.08	74.4	19.47	73.2	19.20	70.8	18.41	65.8	16.89
	9	7.9	78.4	19.06	78.2	19.43	75.6	18.79	73.2	18.04	70.8	17.31	65.8	15.90
	11	9.8	82.4	19.39	80.4	19.06	75.6	17.66	73.2	16.98	70.8	16.29	65.8	14.98
	13	11.8	85.4	19.20	80.4	17.87	75.6	16.56	73.2	15.94	70.8	15.32	65.8	14.09
	15	13.7	85.4	18.08	80.4	16.83	75.6	15.63	73.2	15.02	70.8	14.44	65.8	13.30
110%	-19.8	-20	40.4	13.47	40.2	14.13	40.0	14.82	40.0	15.15	40.0	15.48	39.8	16.17
	-18.8	-19	41.0	13.67	40.8	14.34	40.8	15.00	40.8	15.34	40.6	15.67	40.6	16.33
	-16.7	-17	42.6	14.13	42.4	14.77	43.0	15.42	42.2	15.73	42.2	16.06	42.0	16.69
	-13.7	-15	44.4	14.61	44.2	15.23	44.0	15.83	44.0	16.15	44.0	16.46	43.8	17.06
	-11.8	-13	46.2	15.11	46.2	15.69	46.0	16.27	46.0	16.56	45.8	16.85	45.8	17.45
	-9.8	-11	48.4	15.59	48.2	16.15	48.2	16.71	48.0	17.00	48.0	17.27	48.0	17.83
	-9.5	-10	49.6	15.83	49.4	16.37	49.2	16.94	49.2	17.20	49.2	17.48	49.0	18.02
	-8.5	-9.1	50.6	16.04	50.4	16.58	50.4	17.12	50.2	17.39	50.2	17.66	50.2	16.10
	-7	-7.6	52.4	16.42	52.4	16.91	52.2	17.43	52.2	17.70	52.2	17.95	52.0	18.47
	-5	-5.6	55.2	16.87	55.0	17.37	54.8	17.85	54.8	18.10	54.8	18.35	54.6	18.85
	-3	-3.7	57.8	17.31	57.8	17.77	57.6	18.24	57.6	18.47	57.4	18.70	57.4	19.18
	0	-0.7	62.4	17.95	62.4	18.39	62.2	18.83	62.2	19.03	62.2	19.26	60.4	18.89
	3	2.2	67.4	18.56	67.2	18.95	67.2	19.35	67.0	19.53	64.8	18.74	60.4	17.19
	5	4.1	70.8	18.91	70.8	19.30	69.4	19.12	67.0	18.35	64.8	17.62	60.4	16.17
	7	6	74.4	19.26	73.8	19.39	69.4	17.95	67.0	17.25	64.8	16.56	60.4	15.21
	9	7.9	78.2	19.57	73.8	18.22	69.4	16.89	67.0	16.23	64.8	15.59	60.4	14.34
	11	9.8	78.2	18.41	73.8	17.14	69.4	15.90	67.0	15.29	64.8	14.69	60.4	13.53
	13	11.8	78.2	17.27	73.8	16.08	69.4	14.94	67.0	14.38	64.8	13.82	60.4	12.74
	15	13.7	78.2	15.34	73.8	15.17	69.4	14.11	67.0	13.57	64.8	13.07	60.4	12.05

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20	40.2	14.55	40.0	15.15	40.0	15.77	39.8	16.08	39.8	16.37	39.6	17.00
	-18.8	-19	40.8	14.73	40.8	15.33	40.6	15.94	40.6	16.25	40.4	16.56	40.4	17.16
	-16.7	-17	42.4	15.15	42.2	15.73	42.2	16.31	42.0	16.60	42.0	16.89	42.0	17.48
	-13.7	-15	44.2	15.58	44.0	16.15	43.8	16.71	43.8	17.00	43.8	17.27	43.6	17.83
	-11.8	-13	46.0	16.04	46.0	16.56	45.8	17.10	45.8	17.37	45.8	17.64	45.6	18.18
	-9.8	-11	48.2	16.48	48.0	17.00	48.0	17.50	48.0	17.77	47.8	18.02	47.8	18.51
	-9.5	-10	49.4	16.71	49.2	17.20	49.2	17.70	49.0	17.95	49.0	18.20	48.8	18.70
	-8.5	-9.1	50.4	16.89	50.2	17.39	50.2	17.87	50.2	18.12	50.0	18.37	50.0	18.85
	-7	-7.6	52.2	17.23	52.2	17.70	52.0	18.16	52.0	18.41	52.0	18.64	51.8	19.12
	-5	-5.6	55.0	17.66	54.8	18.10	54.8	18.56	54.6	18.76	54.6	18.99	54.4	19.45
	-3	-3.7	57.6	18.06	57.6	16.40	57.4	18.91	57.4	19.12	57.4	19.32	55.0	18.51
	0	-0.7	62.2	18.64	62.2	19.03	62.0	19.43	61.0	19.12	59.0	18.33	55.0	16.81
	3	2.2	67.2	19.18	67.0	19.53	63.0	18.08	61.0	17.37	59.0	16.69	55.0	15.31
	5	4.1	70.6	19.53	67.0	18.35	63.0	17.00	61.0	16.35	59.0	15.71	55.0	14.44
	7	6	71.0	18.53	67.0	17.25	63.0	16.00	61.0	15.40	59.0	14.80	55.0	13.61
	9	7.9	71.0	17.41	67.0	16.23	63.0	15.07	61.0	14.32	59.0	13.94	55.0	12.84
	11	9.8	71.0	16.40	67.0	15.29	63.0	14.21	61.0	13.67	59.0	13.15	55.0	12.13
	13	11.8	71.0	15.40	67.0	14.38	63.0	13.38	61.0	12.88	59.0	12.40	55.0	11.45
	15	13.7	71.0	14.52	67.0	13.57	63.0	12.63	61.0	12.18	59.0	11.72	55.0	10.85
90%	-19.8	-20	39.9	15.63	39.7	16.17	39.7	16.73	39.5	17.00	39.5	17.29	39.5	17.83
	-18.8	-19	40.5	15.79	40.5	16.35	40.3	16.89	40.3	17.16	40.3	17.43	40.1	17.97
	-16.7	-17	42.1	16.19	41.9	16.71	41.9	17.23	41.9	17.50	41.7	17.75	41.7	18.26
	-13.7	-15	43.9	16.58	43.7	17.08	43.7	17.58	43.5	17.83	43.5	18.08	43.5	18.58
	-11.8	-13	45.7	16.98	45.7	17.45	45.5	17.93	45.5	18.18	45.5	18.41	45.3	18.89
	-9.8	-11	47.9	17.37	47.9	17.83	47.7	18.29	47.7	18.51	47.7	18.76	47.5	19.22
	-9.5	-10	49.1	17.58	48.9	18.04	48.9	18.47	48.7	18.70	48.7	18.93	48.7	19.37
	-8.5	-9.1	50.1	17.77	50.1	18.20	49.9	18.64	49.9	18.85	49.9	19.07	49.3	19.26
	-7	-7.6	51.9	18.06	51.9	18.47	51.7	18.91	51.7	19.12	51.7	19.32	49.3	18.39
	-5	-5.6	54.7	18.45	54.5	18.85	54.5	19.24	54.3	19.45	52.9	18.85	49.3	17.29
	-3	-3.7	57.3	18.81	57.3	19.18	56.7	19.26	54.7	18.49	52.9	17.75	49.3	16.29
	0	-0.7	62.1	19.34	60.3	18.87	56.7	17.48	54.7	16.79	52.9	16.12	49.3	14.81
	3	2.2	63.9	18.43	60.3	17.16	56.7	15.92	54.7	15.31	52.9	14.71	49.3	13.55
	5	4.1	63.9	17.33	60.3	16.14	56.7	15.00	54.7	14.42	52.9	13.88	49.3	12.78
	7	6	63.9	16.29	60.3	15.21	56.7	14.13	54.7	13.61	52.9	13.09	49.3	12.07
	9	7.9	63.9	15.36	60.3	14.32	56.7	13.32	54.7	12.84	52.9	12.36	49.3	11.41
	11	9.8	63.9	14.46	60.3	13.51	56.7	12.59	54.7	12.13	52.9	11.68	49.3	10.80
	13	11.8	63.9	13.61	60.3	12.74	56.7	11.86	54.7	11.45	52.9	11.03	49.3	10.20
	15	13.7	63.9	12.86	60.3	12.03	56.7	11.24	54.7	10.85	52.9	10.45	49.3	9.68
80%	-19.8	-20	39.8	16.71	39.6	17.18	39.6	17.68	39.6	17.93	39.4	18.18	39.4	18.66
	-18.8	-19	40.4	16.85	40.4	17.35	40.2	17.83	40.2	18.08	40.2	18.31	40.0	18.80
	-16.7	-17	42.0	17.20	41.8	17.66	41.8	18.14	41.8	18.37	41.8	18.60	41.6	19.05
	-13.7	-15	43.8	17.56	43.6	17.99	43.6	18.45	43.6	18.66	43.4	18.89	43.4	19.34
	-11.8	-13	45.6	17.91	45.6	18.35	45.4	18.76	45.4	18.97	45.4	19.20	44.0	18.68
	-9.8	-11	47.8	18.26	47.8	18.68	47.6	19.09	47.6	19.28	47.2	19.24	44.0	17.64
	-9.5	-10	49.0	18.45	48.8	18.85	48.8	19.24	48.8	19.45	47.2	18.68	44.0	17.12
	-8.5	-9.1	50.0	18.62	46.5	19.01	49.8	19.39	48.8	18.95	47.2	18.18	44.0	16.66
	-7	-7.6	51.8	18.89	51.8	19.26	50.4	18.85	48.8	18.10	47.2	17.37	44.0	15.94
	-5	-5.6	54.6	19.22	53.6	19.12	50.4	17.70	48.8	17.02	47.2	16.33	44.0	15.00
	-3	-3.7	56.8	19.32	53.6	17.99	50.4	16.66	48.8	16.04	47.2	15.40	44.0	14.17
	0	-0.7	56.8	17.54	53.6	16.33	50.4	15.17	48.8	14.61	47.2	14.03	44.0	12.92
	3	2.2	56.8	15.98	53.6	14.90	50.4	13.86	48.8	13.34	47.2	12.84	44.0	11.84
	5	4.1	56.8	15.04	53.6	14.05	50.4	13.07	48.8	12.59	47.2	12.14	44.0	11.20
	7	6	56.8	14.17	53.6	13.26	50.4	12.34	48.8	11.91	47.2	11.47	44.0	10.60
	9	7.9	56.8	13.38	53.6	12.51	50.4	11.66	48.8	11.24	47.2	10.85	44.0	10.04
	11	9.8	56.8	12.63	53.6	11.82	50.4	11.03	48.8	10.64	47.2	10.26	44.0	9.52
	13	11.8	56.8	11.91	53.6	11.16	50.4	10.43	48.8	10.06	47.2	9.70	44.0	9.00
	15	13.7	56.8	11.26	53.6	10.58	50.4	9.89	48.8	9.54	47.2	9.20	44.0	8.56

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-560W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20	39.5	17.79	39.3	18.20	39.3	18.64	39.3	18.85	39.3	19.07	38.3	18.87
	-18.8	-19	40.1	17.93	40.1	18.35	39.9	18.76	39.9	18.97	39.9	19.20	38.3	18.47
	-16.7	-17	41.7	18.22	41.7	18.64	41.5	19.03	41.5	19.24	41.1	17.14	38.3	17.62
	-13.7	-15	43.5	18.53	43.3	18.93	43.3	19.32	42.5	19.03	41.1	18.26	38.3	16.75
	-11.8	-13	45.3	18.85	45.3	19.22	44.1	18.76	42.5	18.04	41.1	17.31	38.3	15.87
	-9.8	-11	47.5	19.16	46.9	19.14	44.1	17.72	42.5	17.04	41.1	16.35	38.3	15.02
	-9.5	-10	48.7	19.32	46.9	18.58	44.1	17.20	42.5	16.54	41.1	15.89	38.3	14.61
	-8.5	-9.1	49.7	19.43	46.9	18.08	44.1	16.75	42.5	16.10	41.1	15.48	38.3	14.23
	-7	-7.6	49.7	18.55	46.9	17.27	44.1	16.02	42.5	15.42	41.1	14.82	38.3	13.63
	-5	-5.6	49.7	17.43	46.9	16.25	44.1	15.09	42.5	14.50	41.1	17.13	38.3	12.86
	-3	-3.7	49.7	16.42	46.9	15.31	44.1	14.23	42.5	13.69	41.1	13.17	38.3	12.16
	0	-0.7	49.7	14.94	46.9	13.96	44.1	12.99	42.5	12.51	41.1	12.05	38.3	11.14
	3	2.2	49.7	13.65	46.9	12.78	44.1	11.91	42.5	11.47	41.1	11.05	38.3	10.22
	5	4.1	49.7	12.88	46.9	12.05	44.1	11.26	42.5	10.85	41.1	10.45	38.3	9.68
	7	6	49.7	12.18	46.9	11.41	44.1	10.64	42.5	10.26	41.1	9.91	38.3	9.18
	9	7.9	49.7	11.51	46.9	10.78	44.1	10.08	42.5	9.72	41.1	9.39	38.3	8.71
	11	9.8	49.7	10.89	46.9	10.20	44.1	9.56	42.5	9.23	41.1	8.91	38.3	8.27
	13	11.8	49.7	10.29	46.9	9.66	44.1	9.04	42.5	8.75	41.1	8.44	38.3	7.85
	15	13.7	49.7	9.74	46.9	9.16	44.1	8.58	42.5	8.31	41.1	8.02	38.3	7.48
60%	-19.8	-20	39.4	18.87	39.2	19.22	37.8	18.49	36.6	17.76	35.4	17.06	33.0	15.65
	-18.8	-19	40.0	18.99	40.0	19.34	37.8	18.10	36.6	17.39	35.4	16.68	33.0	15.31
	-16.7	-17	41.6	19.24	40.2	18.64	37.8	17.27	36.6	16.60	35.4	15.94	33.0	14.65
	-13.7	-15	42.6	19.03	40.2	17.70	37.8	16.41	36.6	15.79	35.4	15.17	33.0	13.94
	-11.8	-13	42.6	18.01	40.2	16.77	37.8	15.56	36.6	14.98	35.4	14.40	33.0	13.32
	-9.8	-11	42.6	17.02	40.2	15.85	37.8	14.73	36.6	14.17	35.4	13.63	33.0	12.57
	-9.5	-10	42.6	16.54	40.2	15.42	37.8	14.32	36.6	13.80	35.4	13.26	33.0	12.22
	-8.5	-9.1	42.6	16.10	40.2	15.02	37.8	13.96	36.6	13.44	35.4	12.92	33.0	11.93
	-7	-7.6	42.6	15.40	40.2	14.38	37.8	13.36	36.6	12.88	35.4	12.38	33.0	11.45
	-5	-5.6	42.6	14.50	40.2	13.55	37.8	12.61	36.6	12.15	35.4	11.70	33.0	10.83
	-3	-3.7	42.6	13.69	40.2	12.80	37.8	11.93	36.6	11.51	35.4	11.07	33.0	10.24
	0	-0.7	42.6	12.51	40.2	11.72	37.8	10.93	36.6	10.56	35.4	10.16	33.0	9.41
	3	2.2	42.6	11.47	40.2	10.76	37.8	10.06	36.6	9.70	35.4	9.37	33.0	8.68
	5	4.1	42.6	10.85	40.2	10.18	37.8	9.52	36.6	9.20	35.4	8.87	33.0	8.25
	7	6	42.6	10.26	40.2	9.64	37.8	9.02	36.6	8.73	35.4	8.44	33.0	7.83
	9	7.9	42.6	9.72	40.2	9.14	37.8	8.56	36.6	8.29	35.4	8.00	33.0	7.46
	11	9.8	42.6	9.23	40.2	8.68	37.8	8.14	36.6	7.88	35.4	7.60	33.0	7.11
	13	11.8	42.6	8.73	40.2	8.23	37.8	7.73	36.6	7.48	35.4	7.23	33.0	6.75
	15	13.7	42.6	8.31	40.2	7.81	37.8	7.36	36.6	7.13	35.4	6.90	33.0	6.44
50%	-19.8	-20	35.5	17.16	33.5	15.98	31.5	14.84	30.3	14.30	29.3	13.73	27.3	12.65
	-18.8	-19	35.5	16.79	33.5	15.65	31.5	14.54	30.3	13.98	29.3	13.44	27.3	12.40
	-16.7	-17	35.5	16.02	33.5	14.94	31.5	13.90	30.3	13.38	29.3	12.88	27.3	11.89
	-13.7	-15	35.5	15.25	33.5	14.23	31.5	13.24	30.3	12.76	29.3	12.28	27.3	11.34
	-11.8	-13	35.5	14.48	33.5	13.53	31.5	12.59	30.3	12.13	29.3	11.68	27.3	10.80
	-9.8	-11	35.5	13.71	33.5	12.82	31.5	11.95	30.3	11.51	29.3	11.10	27.3	10.26
	-9.5	-10	35.5	13.34	33.5	12.47	31.5	11.64	30.3	11.22	29.3	10.80	27.3	9.99
	-8.5	-9.1	35.5	13.01	33.5	12.18	31.5	11.34	30.3	10.95	29.3	10.56	27.3	9.77
	-7	-7.6	35.5	12.47	33.5	11.68	31.5	10.89	30.3	10.51	29.3	10.14	27.3	9.39
	-5	-5.6	35.5	11.76	33.5	11.03	31.5	10.31	30.3	9.95	29.3	9.60	27.3	8.89
	-3	-3.7	35.5	11.14	33.5	10.45	31.5	9.77	30.3	9.43	29.3	9.10	27.3	8.46
	0	-0.7	35.5	10.22	33.5	9.60	31.5	9.00	30.3	8.69	29.3	8.39	27.3	7.81
	3	2.2	35.5	9.41	33.5	8.85	31.5	8.29	30.3	8.02	29.3	7.75	27.3	7.23
	5	4.1	35.5	8.93	33.5	8.39	31.5	7.88	30.3	7.63	29.3	7.38	27.3	6.88
	7	6	35.5	8.48	33.5	7.98	31.5	7.50	30.3	7.25	29.3	7.02	27.3	6.57
	9	7.9	35.5	8.04	33.5	7.58	31.5	7.13	30.3	6.92	29.3	6.69	27.3	6.25
	11	9.8	35.5	7.65	33.5	7.21	31.5	6.79	30.3	6.59	29.3	6.38	27.3	5.96
	13	11.8	35.5	7.27	33.5	6.86	31.5	6.46	30.3	6.28	29.3	6.07	27.3	5.69
	15	13.7	35.5	6.92	33.5	6.55	31.5	6.17	30.3	5.98	29.3	5.80	27.3	5.44

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-19.8	-20	44.7	12.65	44.5	13.53	44.3	14.44	44.3	14.88	44.0	15.32	44.0	16.23
	-18.8	-19	45.3	12.93	45.1	13.81	45.1	14.69	44.9	15.13	44.9	15.55	44.7	16.44
	-16.7	-17	47.1	13.53	46.9	14.37	46.7	15.23	46.7	15.64	46.7	16.06	46.4	16.90
	-13.7	-15	49.1	14.16	48.9	14.97	48.6	15.78	48.6	16.18	48.4	16.60	48.4	17.41
	-11.8	-13	51.0	14.78	51.0	15.57	50.8	16.34	50.6	16.74	50.6	17.13	50.4	17.90
	-9.8	-11	53.5	15.44	53.2	16.18	53.0	16.92	53.0	17.30	53.0	17.67	52.8	18.41
	-9.5	-10	54.8	15.76	54.5	16.48	54.3	17.20	54.3	17.57	54.1	17.92	54.1	18.64
	-8.5	-9.1	55.9	16.04	55.6	16.74	55.6	17.46	55.4	17.81	55.4	18.16	55.2	18.88
	-7	-7.6	57.8	16.51	57.8	17.20	57.6	17.88	57.6	18.23	57.4	18.55	57.2	19.25
	-5	-5.6	60.9	17.13	60.7	17.78	60.5	18.44	60.5	18.76	60.2	19.06	60.2	19.71
	-3	-3.7	63.7	17.69	63.5	18.32	63.5	18.92	63.3	19.25	63.3	19.55	63.1	20.15
	0	-0.7	68.8	18.55	68.8	19.13	68.6	19.69	68.6	19.90	68.3	20.27	68.3	20.83
	3	2.2	74.3	19.32	74.0	19.85	73.8	20.39	73.8	20.64	73.8	20.92	73.6	21.43
	5	4.1	78.0	19.81	77.8	20.32	77.8	20.81	77.5	21.06	77.5	21.32	77.3	21.81
	7	6	81.9	20.27	81.7	20.74	81.7	21.22	81.5	21.46	81.5	21.69	78.2	20.83
	9	7.9	86.1	20.69	85.9	21.15	85.9	21.60	85.6	21.83	83.9	21.37	78.2	19.57
	11	9.8	90.5	21.11	90.2	21.53	89.8	21.81	86.7	20.95	83.9	20.08	78.2	18.44
	13	11.8	95.3	21.50	95.1	21.92	89.8	20.43	86.7	19.62	83.9	18.85	78.2	17.30
	15	13.7	99.9	21.88	95.5	20.76	89.8	19.25	86.7	18.51	83.9	17.76	78.2	16.32
120%	-19.8	-20	44.5	13.86	44.2	14.67	44.0	15.50	44.0	15.90	44.0	16.32	43.8	17.16
	-18.8	-19	45.1	14.11	44.9	14.93	44.9	15.74	44.7	16.13	44.7	16.55	44.5	17.37
	-16.7	-17	46.9	14.67	46.7	15.46	46.4	16.23	46.4	16.62	46.4	17.02	46.2	17.78
	-13.7	-15	48.9	15.25	48.6	15.99	48.4	16.74	48.4	17.13	48.4	17.50	48.2	18.25
	-11.8	-13	50.8	15.83	50.8	16.55	50.6	17.27	50.6	17.64	50.4	17.99	50.4	18.71
	-9.8	-11	53.2	16.43	53.0	17.11	53.0	17.81	52.8	18.16	52.8	18.48	52.6	19.18
	-9.5	-10	54.5	16.74	54.3	17.41	54.1	18.06	54.1	18.41	54.1	18.74	53.9	19.41
	-8.5	-9.1	55.6	16.99	55.4	17.64	55.4	18.30	55.2	18.62	55.2	18.97	55.0	19.62
	-7	-7.6	57.6	17.43	57.6	18.06	57.4	18.69	57.4	19.02	57.2	19.32	57.2	19.95
	-5	-5.6	60.7	17.99	60.5	18.60	60.2	19.20	60.2	19.50	60.2	19.81	60.0	20.39
	-3	-3.7	63.5	18.53	63.5	19.11	63.3	19.67	63.3	19.95	63.1	20.25	63.1	20.81
	0	-0.7	68.6	19.32	68.6	19.85	68.3	20.36	68.3	20.65	68.1	20.90	68.1	21.43
	3	2.2	74.0	20.04	73.8	20.53	73.8	21.02	73.6	21.27	73.6	21.50	72.1	21.39
	5	4.1	77.8	20.48	77.5	20.95	77.5	21.41	77.3	21.64	77.3	21.88	72.1	20.09
	7	6	81.7	20.90	81.7	21.34	81.5	21.78	80.2	21.48	77.5	20.60	72.1	18.90
	9	7.9	85.9	21.32	85.7	21.74	82.8	21.02	80.2	20.18	77.5	19.36	72.1	17.78
	11	9.8	90.2	21.69	88.1	21.32	82.8	19.76	80.2	18.99	77.5	18.23	72.1	16.76
	13	11.8	93.5	21.48	88.1	19.99	82.8	18.53	80.2	17.83	77.5	17.13	72.1	15.76
	15	13.7	93.5	20.23	88.1	18.83	82.8	17.48	80.2	16.81	77.5	16.16	72.1	14.88
110%	-19.8	-20	44.2	15.06	44.0	15.81	43.8	16.57	43.8	16.95	43.8	17.32	43.6	18.09
	-18.8	-19	44.9	15.30	44.7	16.04	44.7	16.78	44.7	17.16	44.5	17.53	44.5	18.27
	-16.7	-17	46.7	15.81	46.4	16.53	47.1	17.25	46.2	17.60	46.2	17.97	46.0	18.67
	-13.7	-15	48.6	16.34	48.4	17.04	48.2	17.71	48.2	18.06	48.2	18.41	48.0	19.09
	-11.8	-13	50.6	16.90	50.6	17.55	50.4	18.20	50.4	18.53	50.2	18.85	50.2	19.53
	-9.8	-11	53.0	17.44	52.8	18.06	52.8	18.69	52.6	19.02	52.6	19.32	52.6	19.95
	-9.5	-10	54.3	17.71	54.1	18.32	53.9	18.95	53.9	19.25	53.9	19.55	53.7	20.16
	-8.5	-9.1	55.4	17.95	55.2	18.55	55.2	19.16	55.0	19.46	55.0	19.76	55.0	18.02
	-7	-7.6	57.4	18.37	57.4	18.92	57.2	19.51	57.2	19.81	57.2	20.09	57.0	20.67
	-5	-5.6	60.5	18.88	60.2	19.43	60.0	19.97	60.0	20.25	60.0	20.53	59.8	21.09
	-3	-3.7	63.3	19.36	63.3	19.88	63.1	20.41	63.1	20.67	62.9	20.92	62.9	21.46
	0	-0.7	68.3	20.09	68.3	20.57	68.1	21.06	68.1	21.29	68.1	21.55	66.2	21.13
	3	2.2	73.8	20.76	73.6	21.20	73.6	21.64	73.4	21.85	71.0	20.97	66.2	19.23
	5	4.1	77.5	21.15	77.5	21.60	76.0	21.39	73.4	20.53	71.0	19.71	66.2	18.09
	7	6	81.5	21.55	80.8	21.69	76.0	20.09	73.4	19.29	71.0	18.53	66.2	17.02
	9	7.9	85.6	21.90	80.8	20.39	76.0	18.90	73.4	18.16	71.0	17.44	66.2	16.04
	11	9.8	85.6	20.60	80.8	19.18	76.0	17.78	73.4	17.11	71.0	16.44	66.2	15.13
	13	11.8	85.6	19.32	80.8	17.99	76.0	16.72	73.4	16.09	71.0	15.46	66.2	14.25
	15	13.7	85.6	17.16	80.8	16.97	76.0	15.79	73.4	15.18	71.0	14.62	66.2	13.48

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20	44.0	16.27	43.8	16.95	43.8	17.64	43.6	17.99	43.6	18.32	43.4	19.02
	-18.8	-19	44.7	16.48	44.7	17.16	44.5	17.83	44.5	18.18	44.2	18.53	44.2	19.20
	-16.7	-17	46.4	16.95	46.2	17.60	46.2	18.25	46.0	18.57	46.0	18.90	46.0	19.55
	-13.7	-15	48.4	17.43	48.2	18.06	48.0	18.69	48.0	19.02	48.0	19.32	47.8	19.94
	-11.8	-13	50.4	17.95	50.4	18.53	50.2	19.13	50.2	19.43	50.2	19.74	49.9	20.34
	-9.8	-11	52.8	18.44	52.6	19.02	52.6	19.57	52.6	19.88	52.4	20.16	52.4	20.71
	-9.5	-10	54.1	18.69	53.9	19.25	53.9	19.81	53.7	20.09	53.7	20.36	53.4	20.92
	-8.5	-9.1	55.2	18.90	55.0	19.46	55.0	19.99	55.0	20.27	54.8	20.55	54.8	21.08
	-7	-7.6	57.2	19.27	57.2	19.81	57.0	20.32	57.0	20.60	57.0	20.85	56.7	21.39
	-5	-5.6	60.2	19.76	60.0	20.25	60.0	20.76	59.8	20.99	59.8	21.25	59.6	21.76
	-3	-3.7	63.1	20.20	63.1	18.34	62.9	21.15	62.9	21.39	62.9	21.62	60.2	20.71
	0	-0.7	68.1	20.85	68.1	21.29	67.9	21.74	66.8	21.39	64.6	20.50	60.2	18.81
	3	2.2	73.6	21.46	73.4	21.85	69.0	20.23	66.8	19.43	64.6	18.67	60.2	17.13
	5	4.1	77.3	21.85	73.4	20.53	69.0	19.02	66.8	18.29	64.6	17.57	60.2	16.16
	7	6	77.8	20.74	73.4	19.29	69.0	17.90	66.8	17.23	64.6	16.55	60.2	15.23
	9	7.9	77.8	19.48	73.4	18.16	69.0	16.85	66.8	16.02	64.6	15.60	60.2	14.37
	11	9.8	77.8	18.34	73.4	17.11	69.0	15.90	66.8	15.30	64.6	14.72	60.2	13.58
	13	11.8	77.8	17.23	73.4	16.09	69.0	14.97	66.8	14.41	64.6	13.88	60.2	12.81
	15	13.7	77.8	16.25	73.4	15.18	69.0	14.13	66.8	13.62	64.6	13.11	60.2	12.13
90%	-19.8	-20	43.7	17.48	43.5	18.09	43.5	18.71	43.3	19.01	43.3	19.34	43.3	19.95
	-18.8	-19	44.4	17.67	44.4	18.29	44.2	18.90	44.2	19.20	44.2	19.50	43.9	20.11
	-16.7	-17	46.1	18.11	45.9	18.69	45.9	19.27	45.9	19.57	45.7	19.85	45.7	20.43
	-13.7	-15	48.1	18.55	47.9	19.11	47.9	19.67	47.7	19.94	47.7	20.22	47.7	20.78
	-11.8	-13	50.1	18.99	50.1	19.53	49.9	20.06	49.9	20.34	49.9	20.60	49.6	21.13
	-9.8	-11	52.5	19.43	52.5	19.95	52.3	20.46	52.3	20.71	52.3	20.99	52.0	21.50
	-9.5	-10	53.8	19.67	53.6	20.18	53.6	20.67	53.4	20.92	53.4	21.18	53.4	21.67
	-8.5	-9.1	54.9	19.88	54.9	20.36	54.7	20.85	54.7	21.08	54.7	21.34	54.0	21.55
	-7	-7.6	56.9	20.20	56.9	20.67	56.6	21.15	56.6	21.39	56.6	21.62	54.0	20.57
	-5	-5.6	59.9	20.64	59.7	21.08	59.7	21.53	59.5	21.76	57.9	21.08	54.0	19.34
	-3	-3.7	62.8	21.04	62.8	21.46	62.1	21.55	59.9	20.69	57.9	19.85	54.0	18.22
	0	-0.7	68.0	21.64	66.0	21.11	62.1	19.55	59.9	18.78	57.9	18.04	54.0	16.57
	3	2.2	70.0	20.62	66.0	19.20	62.1	17.81	59.9	17.13	57.9	16.46	54.0	15.16
	5	4.1	70.0	19.39	66.0	18.06	62.1	16.78	59.9	16.13	57.9	15.53	54.0	14.30
	7	6	70.0	18.22	66.0	17.02	62.1	15.81	59.9	15.23	57.9	14.65	54.0	13.51
	9	7.9	70.0	17.18	66.0	16.02	62.1	14.90	59.9	14.37	57.9	13.83	54.0	12.76
	11	9.8	70.0	16.18	66.0	15.11	62.1	14.09	59.9	13.58	57.9	13.06	54.0	12.09
	13	11.8	70.0	15.23	66.0	14.25	62.1	13.27	59.9	12.81	57.9	12.34	54.0	11.41
	15	13.7	70.0	14.39	66.0	13.46	62.1	12.58	59.9	12.13	57.9	11.69	54.0	10.83
80%	-19.8	-20	43.6	18.69	43.4	19.22	43.4	19.78	43.4	20.06	43.1	20.34	43.1	20.88
	-18.8	-19	44.2	18.85	44.2	19.41	44.0	19.94	44.0	20.22	44.0	20.48	43.8	21.04
	-16.7	-17	46.0	19.25	45.8	19.76	45.8	20.29	45.8	20.55	45.8	20.80	45.6	21.32
	-13.7	-15	48.0	19.64	47.8	20.13	47.8	20.64	47.8	20.88	47.5	21.13	47.5	21.64
	-11.8	-13	49.9	20.04	49.9	20.53	49.7	20.99	49.7	21.22	49.7	21.48	48.2	20.90
	-9.8	-11	52.4	20.43	52.4	20.90	52.1	21.36	52.1	21.57	51.7	21.53	48.2	19.74
	-9.5	-10	53.7	20.64	53.4	21.08	53.5	21.53	53.5	21.76	51.7	20.90	48.2	19.15
	-8.5	-9.1	54.8	20.83	50.9	21.27	54.5	21.69	53.5	21.20	51.7	20.34	48.2	18.64
	-7	-7.6	56.7	21.13	56.7	21.55	55.2	21.08	53.5	20.25	51.7	19.43	48.2	17.83
	-5	-5.6	59.8	21.50	58.7	21.39	55.2	19.80	53.5	19.04	51.7	18.27	48.2	16.78
	-3	-3.7	62.2	21.62	58.7	20.13	55.2	18.64	53.5	17.95	51.7	17.23	48.2	15.85
	0	-0.7	62.2	19.62	58.7	18.27	55.2	16.97	53.5	16.34	51.7	15.69	48.2	14.46
	3	2.2	62.2	17.88	58.7	16.67	55.2	15.51	53.5	14.92	51.7	14.37	48.2	13.25
	5	4.1	62.2	16.83	58.7	15.71	55.2	14.62	53.5	14.09	51.7	13.58	48.2	12.53
	7	6	62.2	15.85	58.7	14.83	55.2	13.81	53.5	13.32	51.7	12.83	48.2	11.86
	9	7.9	62.2	14.97	58.7	13.99	55.2	13.04	53.5	12.58	51.7	12.13	48.2	11.23
	11	9.8	62.2	14.13	58.7	13.23	55.2	12.34	53.5	11.90	51.7	11.48	48.2	10.65
	13	11.8	62.2	13.32	58.7	12.48	55.2	11.67	53.5	11.25	51.7	10.86	48.2	10.07
	15	13.7	62.2	12.60	58.7	11.83	55.2	11.06	53.5	10.67	51.7	10.30	48.2	9.58

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-615W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20	43.3	19.90	43.1	20.36	43.1	20.85	43.1	21.08	43.1	21.34	42.0	21.11
	-18.8	-19	43.9	20.06	43.9	20.53	43.7	20.99	43.7	21.22	43.7	21.48	42.0	20.66
	-16.7	-17	45.7	20.39	45.7	20.85	45.5	21.29	45.5	21.53	45.0	19.18	42.0	19.71
	-13.7	-15	47.6	20.74	47.4	21.18	47.4	21.62	46.6	21.29	45.0	20.43	42.0	18.74
	-11.8	-13	49.6	21.08	49.6	21.50	48.3	20.99	46.6	20.18	45.0	19.36	42.0	17.76
	-9.8	-11	52.0	21.43	51.4	21.41	48.3	19.83	46.6	19.06	45.0	18.29	42.0	16.81
	-9.5	-10	53.3	21.62	51.4	20.78	48.3	19.25	46.6	18.50	45.0	17.78	42.0	16.34
	-8.5	-9.1	54.4	21.73	51.4	20.22	48.3	18.74	46.6	18.02	45.0	17.32	42.0	15.92
	-7	-7.6	54.4	20.76	51.4	19.32	48.3	17.92	46.6	17.25	45.0	16.57	42.0	15.25
	-5	-5.6	54.4	19.50	51.4	18.18	48.3	16.88	46.6	16.23	45.0	19.17	42.0	14.39
	-3	-3.7	54.4	18.36	51.4	17.13	48.3	15.92	46.6	15.32	45.0	14.74	42.0	13.60
	0	-0.7	54.4	16.71	51.4	15.62	48.3	14.53	46.6	13.99	45.0	13.48	42.0	12.46
	3	2.2	54.4	15.27	51.4	14.30	48.3	13.32	46.6	12.83	45.0	12.37	42.0	11.44
	5	4.1	54.4	14.41	51.4	13.48	48.3	12.60	46.6	12.13	45.0	11.69	42.0	10.83
	7	6	54.4	13.62	51.4	12.76	48.3	11.90	46.6	11.48	45.0	11.09	42.0	10.27
	9	7.9	54.4	12.88	51.4	12.06	48.3	11.27	46.6	10.88	45.0	10.51	42.0	9.74
	11	9.8	54.4	12.18	51.4	11.41	48.3	10.69	46.6	10.32	45.0	9.97	42.0	9.25
	13	11.8	54.4	11.51	51.4	10.81	48.3	10.11	46.6	9.79	45.0	9.44	42.0	8.79
	15	13.7	54.4	10.90	51.4	10.25	48.3	9.60	46.6	9.30	45.0	8.97	42.0	8.37
60%	-19.8	-20	43.2	21.11	42.9	21.50	41.4	20.69	40.1	19.87	38.8	19.08	36.1	17.50
	-18.8	-19	43.8	21.25	43.8	21.64	41.4	20.25	40.1	19.46	38.8	18.67	36.1	17.13
	-16.7	-17	45.6	21.52	44.0	20.85	41.4	19.32	40.1	18.57	38.8	17.83	36.1	16.39
	-13.7	-15	46.7	21.29	44.0	19.80	41.4	18.36	40.1	17.67	38.8	16.97	36.1	15.60
	-11.8	-13	46.7	20.15	44.0	18.76	41.4	17.41	40.1	16.76	38.8	16.11	36.1	14.90
	-9.8	-11	46.7	19.04	44.0	17.74	41.4	16.48	40.1	15.85	38.8	15.25	36.1	14.06
	-9.5	-10	46.7	18.50	44.0	17.25	41.4	16.02	40.1	15.44	38.8	14.83	36.1	13.67
	-8.5	-9.1	46.7	18.01	44.0	16.81	41.4	15.62	40.1	15.04	38.8	14.46	36.1	13.34
	-7	-7.6	46.7	17.23	44.0	16.09	41.4	14.95	40.1	14.41	38.8	13.85	36.1	12.81
	-5	-5.6	46.7	16.23	44.0	15.16	41.4	14.11	40.1	13.60	38.8	13.09	36.1	12.11
	-3	-3.7	46.7	15.32	44.0	14.32	41.4	13.34	40.1	12.88	38.8	12.39	36.1	11.46
	0	-0.7	46.7	13.99	44.0	13.11	41.4	12.23	40.1	11.81	38.8	11.37	36.1	10.53
	3	2.2	46.7	12.83	44.0	12.04	41.4	11.25	40.1	10.86	38.8	10.48	36.1	9.72
	5	4.1	46.7	12.13	44.0	11.39	41.4	10.65	40.1	10.30	38.8	9.93	36.1	9.23
	7	6	46.7	11.48	44.0	10.79	41.4	10.09	40.1	9.76	38.8	9.44	36.1	8.76
	9	7.9	46.7	10.88	44.0	10.23	41.4	9.58	40.1	9.28	38.8	8.95	36.1	8.35
	11	9.8	46.7	10.32	44.0	9.72	41.4	9.11	40.1	8.81	38.8	8.51	36.1	7.95
	13	11.8	46.7	9.76	44.0	9.20	41.4	8.65	40.1	8.37	38.8	8.09	36.1	7.55
	15	13.7	46.7	9.30	44.0	8.74	41.4	8.23	40.1	7.97	38.8	7.72	36.1	7.21
50%	-19.8	-20	38.9	19.20	36.7	17.88	34.5	16.60	33.2	15.99	32.1	15.36	29.9	14.16
	-18.8	-19	38.9	18.78	36.7	17.50	34.5	16.27	33.2	15.64	32.1	15.04	29.9	13.88
	-16.7	-17	38.9	17.92	36.7	16.71	34.5	15.55	33.2	14.97	32.1	14.41	29.9	13.30
	-13.7	-15	38.9	17.06	36.7	15.92	34.5	14.81	33.2	14.27	32.1	13.74	29.9	12.69
	-11.8	-13	38.9	16.20	36.7	15.13	34.5	14.09	33.2	13.57	32.1	13.06	29.9	12.09
	-9.8	-11	38.9	15.34	36.7	14.34	34.5	13.37	33.2	12.88	32.1	12.41	29.9	11.48
	-9.5	-10	38.9	14.92	36.7	13.95	34.5	13.02	33.2	12.55	32.1	12.09	29.9	11.18
	-8.5	-9.1	38.9	14.55	36.7	13.62	34.5	12.69	33.2	12.25	32.1	11.81	29.9	10.92
	-7	-7.6	38.9	13.95	36.7	13.06	34.5	12.18	33.2	11.76	32.1	11.34	29.9	10.51
	-5	-5.6	38.9	13.16	36.7	12.34	34.5	11.53	33.2	11.13	32.1	10.74	29.9	9.95
	-3	-3.7	38.9	12.46	36.7	11.69	34.5	10.92	33.2	10.55	32.1	10.18	29.9	9.46
	0	-0.7	38.9	11.44	36.7	10.74	34.5	10.06	33.2	9.72	32.1	9.39	29.9	8.74
	3	2.2	38.9	10.53	36.7	9.90	34.5	9.28	33.2	8.97	32.1	8.67	29.9	8.09
	5	4.1	38.9	10.00	36.7	9.39	34.5	8.81	33.2	8.53	32.1	8.25	29.9	7.69
	7	6	38.9	9.48	36.7	8.93	34.5	8.39	33.2	8.11	32.1	7.86	29.9	7.35
	9	7.9	38.9	9.00	36.7	8.48	34.5	7.97	33.2	7.74	32.1	7.49	29.9	7.00
	11	9.8	38.9	8.55	36.7	8.07	34.5	7.60	33.2	7.37	32.1	7.14	29.9	6.67
	13	11.8	38.9	8.14	36.7	7.67	34.5	7.23	33.2	7.02	32.1	6.79	29.9	6.37
	15	13.7	38.9	7.74	36.7	7.32	34.5	6.90	33.2	6.69	32.1	6.49	29.9	6.09

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
130%	-19.8	-20	48.6	13.99	48.3	14.97	48.1	15.97	48.1	16.46	47.9	16.95	47.9	17.95
	-18.8	-19	49.3	14.30	49.0	15.27	49.0	16.25	48.8	16.74	48.8	17.20	48.6	18.18
	-16.7	-17	51.2	14.97	50.9	15.89	50.7	16.84	50.7	17.30	50.7	17.77	50.5	18.69
	-13.7	-15	53.3	15.66	53.1	16.56	52.9	17.46	52.9	17.90	52.6	18.36	52.6	19.26
	-11.8	-13	55.5	16.35	55.5	17.23	55.2	18.08	55.0	18.51	55.0	18.95	54.8	19.80
	-9.8	-11	58.1	17.07	57.9	17.90	57.6	18.72	57.6	19.13	57.6	19.54	57.4	20.37
	-9.5	-10	59.5	17.43	59.3	18.23	59.0	19.03	59.0	19.44	58.8	19.83	58.8	20.62
	-8.5	-9.1	60.7	17.74	60.5	18.51	60.5	19.31	60.2	19.70	60.2	20.08	60.0	20.88
	-7	-7.6	62.9	18.26	62.9	19.03	62.6	19.77	62.6	20.16	62.4	20.52	62.1	21.29
	-5	-5.6	66.2	18.95	65.9	19.67	65.7	20.39	65.7	20.75	65.5	21.08	65.5	21.81
	-3	-3.7	69.3	19.57	69.0	20.26	69.0	20.93	68.8	21.29	68.8	21.62	68.6	22.29
	0	-0.7	74.8	20.52	74.8	21.16	74.5	21.78	74.5	22.01	74.3	22.42	74.3	23.04
	3	2.2	80.7	21.37	80.5	21.96	80.2	22.55	80.2	22.83	80.2	23.14	80.0	23.71
	5	4.1	84.8	21.91	84.5	22.47	84.5	23.01	84.3	23.30	84.3	23.58	84.0	24.12
	7	6	89.0	22.43	88.8	22.94	88.8	23.48	88.6	23.74	88.6	23.99	85.0	23.04
	9	7.9	93.6	22.89	93.3	23.40	93.3	23.89	93.1	24.15	91.2	23.63	85.0	21.65
	11	9.8	98.3	23.35	98.1	23.81	97.6	24.12	94.3	23.17	91.2	22.22	85.0	20.39
	13	11.8	103.6	23.78	103.3	24.25	97.6	22.60	94.3	21.70	91.2	20.85	85.0	19.13
	15	13.7	108.6	24.20	103.8	22.96	97.6	21.29	94.3	20.47	91.2	19.65	85.0	18.05
120%	-19.8	-20	48.3	15.33	48.1	16.23	47.9	17.15	47.9	17.59	47.9	18.05	47.6	18.98
	-18.8	-19	49.1	15.61	48.8	16.51	48.8	17.41	48.6	17.85	48.6	18.31	48.3	19.21
	-16.7	-17	51.0	16.23	50.7	17.10	50.4	17.95	50.5	18.39	50.5	18.82	50.2	19.67
	-13.7	-15	53.1	16.87	52.9	17.69	52.6	18.51	52.6	18.95	52.6	19.36	52.4	20.19
	-11.8	-13	55.2	17.51	55.2	18.31	55.0	19.11	55.0	19.52	54.8	19.90	54.8	20.70
	-9.8	-11	57.9	18.18	57.6	18.93	57.6	19.70	57.4	20.08	57.4	20.44	57.1	21.22
	-9.5	-10	59.3	18.51	59.1	19.26	58.8	19.98	58.8	20.37	58.8	20.73	58.6	21.47
	-8.5	-9.1	60.5	18.80	60.2	19.52	60.2	20.24	60.0	20.60	60.0	20.98	59.8	21.70
	-7	-7.6	62.6	19.29	62.6	19.98	62.4	20.67	62.4	21.03	62.1	21.37	62.1	22.06
	-5	-5.6	66.0	19.90	65.7	20.57	65.5	21.24	65.5	21.57	65.5	21.91	65.2	22.55
	-3	-3.7	69.1	20.49	69.1	21.14	68.8	21.76	68.8	22.06	68.6	22.40	68.6	23.02
	0	-0.7	74.5	21.37	74.5	21.96	74.3	22.53	74.3	22.84	74.0	23.12	74.0	23.71
	3	2.2	80.5	22.17	80.2	22.71	80.2	23.25	80.0	23.53	80.0	23.79	78.3	23.66
	5	4.1	84.5	22.65	84.3	23.17	84.3	23.68	84.0	23.94	84.0	24.20	78.3	22.22
	7	6	88.8	23.12	88.8	23.61	88.6	24.09	87.1	23.76	84.3	22.78	78.3	20.91
	9	7.9	93.3	23.58	93.1	24.04	90.0	23.25	87.1	22.33	84.3	21.42	78.3	19.67
	11	9.8	98.1	23.99	95.7	23.58	90.0	21.86	87.1	21.01	84.3	20.16	78.3	18.54
	13	11.8	101.7	23.76	95.7	22.11	90.0	20.49	87.1	19.72	84.3	18.95	78.3	17.43
	15	13.7	101.7	22.37	95.7	20.83	90.0	19.34	87.1	18.59	84.3	17.87	78.3	16.46
110%	-19.8	-20	48.1	16.66	47.9	17.49	47.6	18.33	47.6	18.75	47.6	19.16	47.4	20.01
	-18.8	-19	48.8	16.92	48.6	17.74	48.6	18.57	48.6	18.98	48.3	19.39	48.3	20.21
	-16.7	-17	50.7	17.49	50.5	18.28	51.2	19.08	50.2	19.47	50.2	19.88	50.0	20.65
	-13.7	-15	52.9	18.08	52.6	18.85	52.4	19.59	52.4	19.98	52.4	20.37	52.1	21.11
	-11.8	-13	55.0	18.69	55.0	19.41	54.8	20.14	54.8	20.50	54.5	20.86	54.5	21.60
	-9.8	-11	57.6	19.29	57.4	19.98	57.4	20.68	57.1	21.04	57.1	21.37	57.1	22.06
	-9.5	-10	59.0	19.59	58.8	20.26	58.6	20.96	58.6	21.29	58.6	21.63	58.3	22.30
	-8.5	-9.1	60.2	19.85	60.0	20.52	60.0	21.19	59.8	21.52	59.8	21.86	59.8	19.93
	-7	-7.6	62.4	20.32	62.4	20.93	62.1	21.58	62.1	21.91	62.1	22.22	61.9	22.86
	-5	-5.6	65.7	20.88	65.5	21.50	65.2	22.09	65.2	22.40	65.2	22.71	65.0	23.33
	-3	-3.7	68.8	21.42	68.8	21.99	68.6	22.58	68.6	22.86	68.3	23.14	68.3	23.74
	0	-0.7	74.3	22.22	74.3	22.76	74.1	23.30	74.1	23.56	74.1	23.84	71.9	23.37
	3	2.2	80.2	22.96	80.0	23.45	80.0	23.94	79.8	24.17	77.1	23.20	71.9	21.27
	5	4.1	84.3	23.40	84.3	23.89	82.6	23.66	79.8	22.71	77.1	21.81	71.9	20.01
	7	6	88.6	23.84	87.9	23.99	82.6	22.22	79.8	21.34	77.1	20.50	71.9	18.82
	9	7.9	93.1	24.22	87.9	22.55	82.6	20.90	79.8	20.08	77.1	19.29	71.9	17.74
	11	9.8	93.1	22.78	87.9	21.22	82.6	19.67	79.8	18.93	77.1	18.18	71.9	16.74
	13	11.8	93.1	21.37	87.9	19.90	82.6	18.49	79.8	17.79	77.1	17.10	71.9	15.76
	15	13.7	93.1	18.98	87.9	18.77	82.6	17.46	79.8	16.79	77.1	16.17	71.9	14.91

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
100%	-19.8	-20	47.9	18.00	47.6	18.75	47.6	19.52	47.4	19.90	47.4	20.26	47.1	21.03
	-18.8	-19	48.6	18.23	48.6	18.98	48.3	19.72	48.3	20.11	48.1	20.49	48.1	21.24
	-16.7	-17	50.5	18.75	50.2	19.47	50.2	20.19	50.0	20.55	50.0	20.90	50.0	21.63
	-13.7	-15	52.6	19.29	52.4	19.98	52.1	20.68	52.1	21.03	52.1	21.37	51.9	22.06
	-11.8	-13	54.8	19.85	54.8	20.49	54.5	21.16	54.5	21.50	54.5	21.83	54.3	22.50
	-9.8	-11	57.4	20.39	57.1	21.03	57.1	21.65	57.1	21.99	56.9	22.29	56.9	22.91
	-9.5	-10	58.8	20.68	58.6	21.29	58.6	21.91	58.3	22.22	58.3	22.53	58.1	23.14
	-8.5	-9.1	60.0	20.90	59.8	21.52	59.8	22.11	59.8	22.42	59.5	22.73	59.5	23.32
	-7	-7.6	62.1	21.32	62.1	21.91	61.9	22.47	61.9	22.78	61.9	23.07	61.7	23.66
	-5	-5.6	65.5	21.86	65.2	22.40	65.2	22.96	65.0	23.22	65.0	23.50	64.8	24.07
	-3	-3.7	68.6	22.35	68.6	20.29	68.3	23.40	68.3	23.66	68.3	23.91	65.5	22.91
	0	-0.7	74.0	23.07	74.0	23.55	73.8	24.04	72.6	23.66	70.2	22.68	65.5	20.80
	3	2.2	80.0	23.73	79.8	24.17	75.0	22.37	72.6	21.50	70.2	20.65	65.5	18.95
	5	4.1	84.0	24.17	79.8	22.71	75.0	21.03	72.6	20.24	70.2	19.44	65.5	17.87
	7	6	84.5	22.94	79.8	21.34	75.0	19.80	72.6	19.05	70.2	18.31	65.5	16.84
	9	7.9	84.5	21.55	79.8	20.08	75.0	18.64	72.6	17.72	70.2	17.25	65.5	15.89
	11	9.8	84.5	20.29	79.8	18.92	75.0	17.59	72.6	16.92	70.2	16.28	65.5	15.02
	13	11.8	84.5	19.05	79.8	17.79	75.0	16.56	72.6	15.94	70.2	15.35	65.5	14.17
	15	13.7	84.5	17.97	79.8	16.79	75.0	15.63	72.6	15.07	70.2	14.50	65.5	13.42
90%	-19.8	-20	47.5	19.34	47.3	20.01	47.3	20.70	47.1	21.03	47.1	21.39	47.1	22.06
	-18.8	-19	48.2	19.54	48.2	20.24	48.0	20.91	48.0	21.24	48.0	21.57	47.8	22.24
	-16.7	-17	50.2	20.03	49.9	20.67	49.9	21.32	49.9	21.65	49.7	21.96	49.7	22.60
	-13.7	-15	52.3	20.52	52.0	21.14	52.0	21.75	51.8	22.06	51.8	22.37	51.8	22.99
	-11.8	-13	54.4	21.01	54.4	21.60	54.2	22.19	54.2	22.50	54.2	22.78	54.0	23.37
	-9.8	-11	57.0	21.50	57.0	22.06	56.8	22.63	56.8	22.91	56.8	23.22	56.6	23.79
	-9.5	-10	58.5	21.75	58.2	22.32	58.2	22.86	58.0	23.14	58.0	23.43	58.0	23.97
	-8.5	-9.1	59.7	21.99	59.7	22.52	59.4	23.06	59.4	23.32	59.4	23.61	58.7	23.84
	-7	-7.6	61.8	22.35	61.8	22.86	61.6	23.40	61.6	23.66	61.6	23.91	58.7	22.76
	-5	-5.6	65.1	22.83	64.9	23.32	64.9	23.81	64.6	24.07	63.0	23.32	58.7	21.39
	-3	-3.7	68.2	23.27	68.2	23.73	67.5	23.84	65.1	22.88	63.0	21.96	58.7	20.16
	0	-0.7	73.9	23.94	71.8	23.35	67.5	21.63	65.1	20.78	63.0	19.95	58.7	18.33
	3	2.2	76.1	22.81	71.8	21.24	67.5	19.70	65.1	18.95	63.0	18.21	58.7	16.76
	5	4.1	76.1	21.45	71.8	19.98	67.5	18.57	65.1	17.85	63.0	17.18	58.7	15.81
	7	6	76.1	20.16	71.8	18.82	67.5	17.49	65.1	16.84	63.0	16.20	58.7	14.94
	9	7.9	76.1	19.00	71.8	17.72	67.5	16.48	65.1	15.89	63.0	15.30	58.7	14.12
	11	9.8	76.1	17.90	71.8	16.71	67.5	15.58	65.1	15.02	63.0	14.45	58.7	13.37
	13	11.8	76.1	16.84	71.8	15.76	67.5	14.68	65.1	14.17	63.0	13.65	58.7	12.63
	15	13.7	76.1	15.92	71.8	14.89	67.5	13.91	65.1	13.42	63.0	12.93	58.7	11.98
80%	-19.8	-20	47.4	20.67	47.1	21.27	47.1	21.88	47.1	22.19	46.9	22.50	46.9	23.09
	-18.8	-19	48.1	20.85	48.1	21.47	47.9	22.06	47.9	22.37	47.9	22.65	47.6	23.27
	-16.7	-17	50.0	21.29	49.8	21.86	49.8	22.45	49.8	22.73	49.8	23.01	49.5	23.58
	-13.7	-15	52.1	21.73	51.9	22.27	51.9	22.83	51.9	23.09	51.7	23.37	51.7	23.94
	-11.8	-13	54.3	22.17	54.3	22.70	54.0	23.22	54.0	23.48	54.0	23.76	52.4	23.12
	-9.8	-11	56.9	22.60	56.9	23.12	56.7	23.63	56.7	23.86	56.2	23.81	52.4	21.83
	-9.5	-10	58.3	22.83	58.1	23.32	58.1	23.81	58.1	24.07	56.2	23.12	52.4	21.19
	-8.5	-9.1	59.5	23.04	55.3	23.53	59.3	23.99	58.1	23.45	56.2	22.50	52.4	20.62
	-7	-7.6	61.7	23.37	61.7	23.84	60.0	23.32	58.1	22.40	56.2	21.50	52.4	19.72
	-5	-5.6	65.0	23.78	63.8	23.66	60.0	21.91	58.1	21.06	56.2	20.21	52.4	18.57
	-3	-3.7	67.6	23.91	63.8	22.27	60.0	20.62	58.1	19.85	56.2	19.05	52.4	17.54
	0	-0.7	67.6	21.70	63.8	20.21	60.0	18.77	58.1	18.08	56.2	17.36	52.4	15.99
	3	2.2	67.6	19.77	63.8	18.44	60.0	17.15	58.1	16.51	56.2	15.89	52.4	14.66
	5	4.1	67.6	18.62	63.8	17.38	60.0	16.17	58.1	15.58	56.2	15.02	52.4	13.86
	7	6	67.6	17.54	63.8	16.41	60.0	15.27	58.1	14.73	56.2	14.19	52.4	13.11
	9	7.9	67.6	16.56	63.8	15.48	60.0	14.42	58.1	13.91	56.2	13.42	52.4	12.42
	11	9.8	67.6	15.63	63.8	14.63	60.0	13.65	58.1	13.17	56.2	12.70	52.4	11.78
	13	11.8	67.6	14.73	63.8	13.81	60.0	12.91	58.1	12.45	56.2	12.01	52.4	11.13
	15	13.7	67.6	13.94	63.8	13.09	60.0	12.24	58.1	11.80	56.2	11.39	52.4	10.59

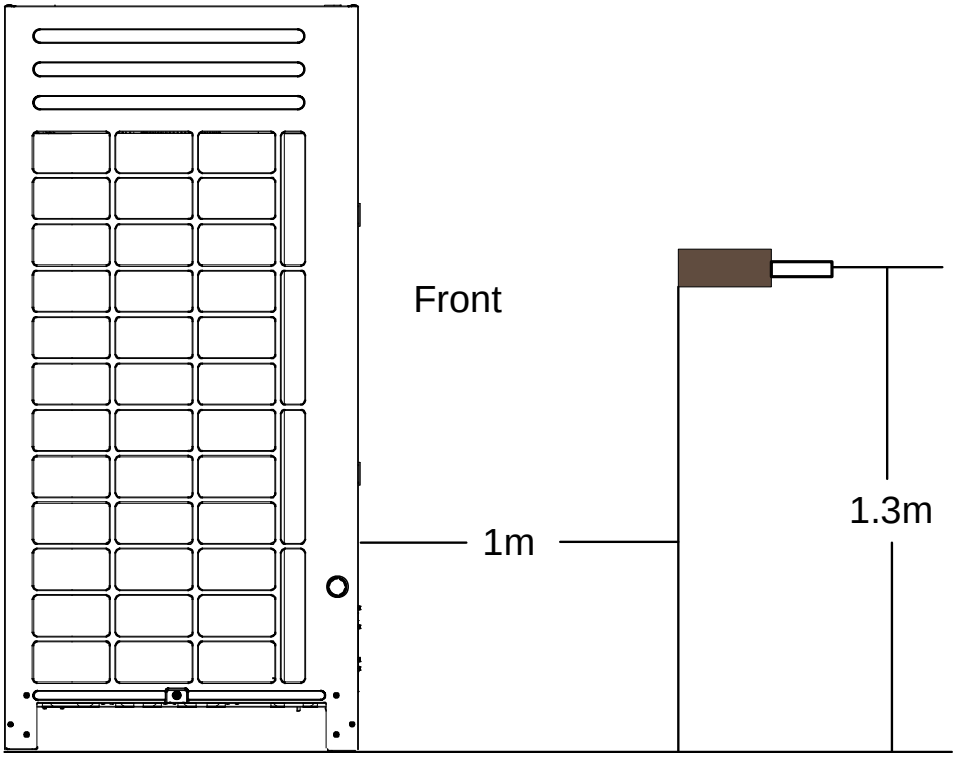
TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

MDV-670W/DRN1-i(C)

Combination (%)	Outdoor Air temperature		Indoor temperature(°C WB)											
			16		18		20		21		22		24	
			TC	PI	TC	PI	TC	PI	TC	PI	TC	PI	TC	PI
	°C DB	°C WB	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW	kW
70%	-19.8	-20	47.0	22.01	46.8	22.52	46.8	23.07	46.8	23.32	46.8	23.60	45.6	23.35
	-18.8	-19	47.7	22.19	47.7	22.70	47.5	23.22	47.5	23.48	47.5	23.76	45.6	22.86
	-16.7	-17	49.6	22.55	49.6	23.07	49.4	23.55	49.4	23.81	48.9	21.21	45.6	21.81
	-13.7	-15	51.8	22.94	51.5	23.42	51.5	23.91	50.6	23.55	48.9	22.60	45.6	20.72
	-11.8	-13	53.9	23.32	53.9	23.78	52.5	23.22	50.6	22.32	48.9	21.42	45.6	19.64
	-9.8	-11	56.5	23.71	55.8	23.68	52.5	21.93	50.6	21.09	48.9	20.24	45.6	18.59
	-9.5	-10	58.0	23.91	55.8	22.99	52.5	21.29	50.6	20.47	48.9	19.67	45.6	18.08
	-8.5	-9.1	59.2	24.04	55.8	22.37	52.5	20.72	50.6	19.93	48.9	19.16	45.6	17.61
	-7	-7.6	59.2	22.96	55.8	21.37	52.5	19.83	50.6	19.08	48.9	18.33	45.6	16.87
	-5	-5.6	59.2	21.57	55.8	20.11	52.5	18.67	50.6	17.95	48.9	21.20	45.6	15.92
	-3	-3.7	59.2	20.31	55.8	18.95	52.5	17.61	50.6	16.94	48.9	16.30	45.6	15.04
	0	-0.7	59.2	18.49	55.8	17.28	52.5	16.07	50.6	15.48	48.9	14.91	45.6	13.78
	3	2.2	59.2	16.89	55.8	15.81	52.5	14.73	50.6	14.19	48.9	13.68	45.6	12.65
	5	4.1	59.2	15.94	55.8	14.91	52.5	13.94	50.6	13.42	48.9	12.93	45.6	11.98
	7	6	59.2	15.07	55.8	14.12	52.5	13.17	50.6	12.70	48.9	12.26	45.6	11.37
	9	7.9	59.2	14.24	55.8	13.35	52.5	12.47	50.6	12.03	48.9	11.62	45.6	10.77
	11	9.8	59.2	13.47	55.8	12.63	52.5	11.83	50.6	11.42	48.9	11.03	45.6	10.23
	13	11.8	59.2	12.73	55.8	11.96	52.5	11.19	50.6	10.83	48.9	10.44	45.6	9.72
	15	13.7	59.2	12.06	55.8	11.34	52.5	10.62	50.6	10.29	48.9	9.93	45.6	9.26
60%	-19.8	-20	46.9	23.35	46.7	23.78	45.0	22.88	43.6	21.98	42.1	21.11	39.3	19.36
	-18.8	-19	47.6	23.50	47.6	23.94	45.0	22.40	43.6	21.52	42.1	20.65	39.3	18.95
	-16.7	-17	49.5	23.81	47.9	23.06	45.0	21.37	43.6	20.54	42.1	19.72	39.3	18.13
	-13.7	-15	50.7	23.55	47.9	21.91	45.0	20.31	43.6	19.54	42.1	18.77	39.3	17.25
	-11.8	-13	50.7	22.29	47.9	20.75	45.0	19.26	43.6	18.54	42.1	17.82	39.3	16.48
	-9.8	-11	50.7	21.06	47.9	19.62	45.0	18.23	43.6	17.54	42.1	16.87	39.3	15.56
	-9.5	-10	50.7	20.47	47.9	19.08	45.0	17.72	43.6	17.07	42.1	16.40	39.3	15.12
	-8.5	-9.1	50.7	19.93	47.9	18.59	45.0	17.28	43.6	16.64	42.1	15.99	39.3	14.76
	-7	-7.6	50.7	19.05	47.9	17.79	45.0	16.53	43.6	15.94	42.1	15.33	39.3	14.17
	-5	-5.6	50.7	17.95	47.9	16.76	45.0	15.61	43.6	15.04	42.1	14.48	39.3	13.40
	-3	-3.7	50.7	16.94	47.9	15.84	45.0	14.76	43.6	14.24	42.1	13.70	39.3	12.68
	0	-0.7	50.7	15.48	47.9	14.50	45.0	13.53	43.6	13.06	42.1	12.57	39.3	11.65
	3	2.2	50.7	14.19	47.9	13.32	45.0	12.44	43.6	12.01	42.1	11.60	39.3	10.75
	5	4.1	50.7	13.42	47.9	12.60	45.0	11.78	43.6	11.39	42.1	10.98	39.3	10.21
	7	6	50.7	12.70	47.9	11.93	45.0	11.16	43.6	10.80	42.1	10.44	39.3	9.69
	9	7.9	50.7	12.03	47.9	11.31	45.0	10.59	43.6	10.26	42.1	9.90	39.3	9.23
	11	9.8	50.7	11.42	47.9	10.75	45.0	10.08	43.6	9.75	42.1	9.41	39.3	8.79
	13	11.8	50.7	10.80	47.9	10.18	45.0	9.56	43.6	9.26	42.1	8.95	39.3	8.36
	15	13.7	50.7	10.29	47.9	9.67	45.0	9.10	43.6	8.82	42.1	8.54	39.3	7.97
50%	-19.8	-20	42.2	21.24	39.9	19.77	37.5	18.36	36.1	17.69	34.9	17.00	32.5	15.66
	-18.8	-19	42.2	20.78	39.9	19.36	37.5	18.00	36.1	17.30	34.9	16.64	32.5	15.35
	-16.7	-17	42.2	19.82	39.9	18.49	37.5	17.20	36.1	16.56	34.9	15.94	32.5	14.71
	-13.7	-15	42.2	18.87	39.9	17.61	37.5	16.38	36.1	15.79	34.9	15.20	32.5	14.04
	-11.8	-13	42.2	17.92	39.9	16.74	37.5	15.58	36.1	15.02	34.9	14.45	32.5	13.37
	-9.8	-11	42.2	16.97	39.9	15.86	37.5	14.78	36.1	14.24	34.9	13.73	32.5	12.70
	-9.5	-10	42.2	16.51	39.9	15.43	37.5	14.40	36.1	13.88	34.9	13.37	32.5	12.37
	-8.5	-9.1	42.2	16.10	39.9	15.07	37.5	14.04	36.1	13.55	34.9	13.06	32.5	12.08
	-7	-7.6	42.2	15.43	39.9	14.45	37.5	13.47	36.1	13.01	34.9	12.55	32.5	11.62
	-5	-5.6	42.2	14.55	39.9	13.65	37.5	12.75	36.1	12.32	34.9	11.88	32.5	11.01
	-3	-3.7	42.2	13.78	39.9	12.93	37.5	12.08	36.1	11.67	34.9	11.26	32.5	10.46
	0	-0.7	42.2	12.65	39.9	11.88	37.5	11.13	36.1	10.75	34.9	10.39	32.5	9.67
	3	2.2	42.2	11.65	39.9	10.95	37.5	10.26	36.1	9.93	34.9	9.59	32.5	8.95
	5	4.1	42.2	11.06	39.9	10.39	37.5	9.75	36.1	9.44	34.9	9.13	32.5	8.51
	7	6	42.2	10.49	39.9	9.87	37.5	9.28	36.1	8.97	34.9	8.69	32.5	8.12
	9	7.9	42.2	9.95	39.9	9.39	37.5	8.82	36.1	8.56	34.9	8.28	32.5	7.74
	11	9.8	42.2	9.46	39.9	8.92	37.5	8.41	36.1	8.15	34.9	7.89	32.5	7.38
	13	11.8	42.2	9.00	39.9	8.48	37.5	8.00	36.1	7.77	34.9	7.51	32.5	7.05
	15	13.7	42.2	8.56	39.9	8.10	37.5	7.64	36.1	7.41	34.9	7.17	32.5	6.74

TC: Total Capacity (kW); **PI:** Power Input (kW) (Compressor + Outdoor fan motor)

9. Sound levels



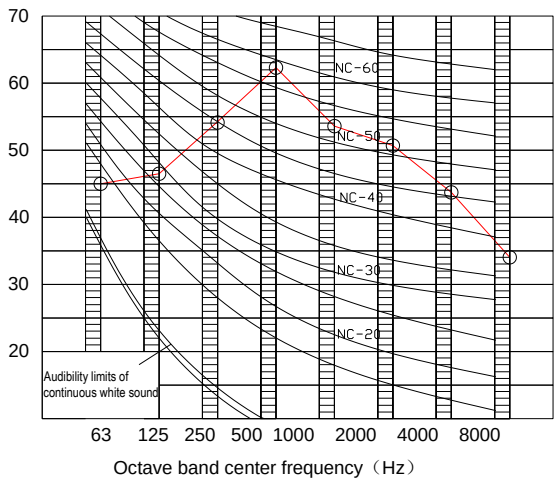
Notes:

- Data is valid at free field condition
- Data is valid at nominal operating condition
- Sound level will vary depending on a range of factors such as the construction (acoustic absorption coefficient) of particular room in which the equipment is installed
- Sound level can be increased in static pressure mode or used air guide.

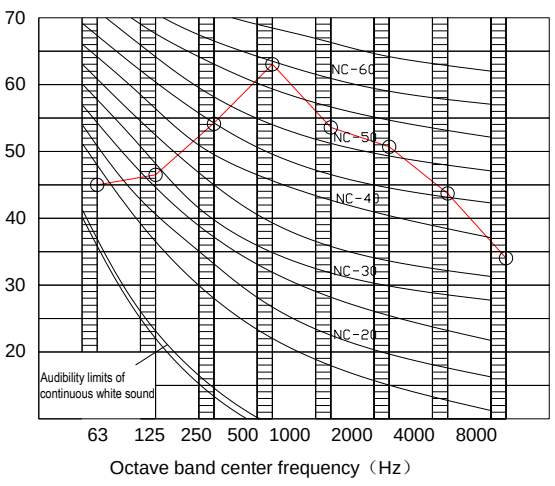
Model	Sound pressure level d(B)A
MDV-560W/DRN1-i(C)	62
MDV-615W/DRN1-i(C)	63
MDV-670W/DRN1-i(C)	63

Sound pressure spectrum

MDV-560W/DRN1-i(C)

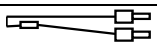
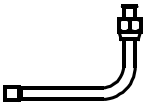


DV-615W/DRN1-i(C); MDV-670W/DRN1-i(C)



10. Accessories

10.1 Standard accessories

Name	Shape	Quantity	Function
Installation manual of outdoor unit		1	/
Operation manual of outdoor unit		1	/
Operation manual of indoor unit		1	/
Guideline of outdoor unit main control board		1	/
Screw bag		1	Be used in maintenance
Straight screwdriver		1	Be used in addressing of indoor and outdoor units
Matched resistance (Network matched wires group)		2	For improving the communication stability
90° mouthing elbow		1	For connecting pipes
Seal plug		4×2	Be used in cleaning pipe
Connection pipe		1	Be connected to liquid pipe side
Connecting pipe		1	Be connected to gas pipe side when need to use

10.2 Optional accessories

Branch joint of outdoor & indoor unit

Optional accessories	Model name	Packing Size (mm)	Gross Weight (kg)	Function
Branch Joint of outdoor unit	FQZHW-02N1C	455×55×185	1.4	Distribute the refrigerant to Indoor Units and balance the resistance between each outdoor unit.
	FQZHW-03N1C	465×85×265	2.7	
	FQZHW-04N1C	465×115×255	4	
Branch Joint of indoor unit	FQZHN-01C	255×50×90	0.48	
	FQZHN-02C	280×50×95	0.6	
	FQZHN-03C	310×70×125	0.87	
	FQZHN-04C	350×70×170	1.3	
	FQZHN-05C	365×110×205	1.6	

Other optional accessories

Optional accessories	Model name	Function
Outdoor controller	MD-CCM02/E	Monitor the outdoor operating parameter
Three phase electricity power protector	DPA51CM44 or HWUA/DPB71CM48	To stop the air-conditioner running in case of bad power supply such as Phase Error, Over-voltage, Under-voltage lose, phase lost and phase sequence inverse. Thus to protect the equipment.
Digital ammeter (WHM)	DTS634/DT636	Electricity Charge monitor

Part 3 Selection Procedure

1. Introduction

1.1 Model selection procedure

Select the model and calculate the capacity for each refrigerant system according to the procedure shown below.

- Calculation of the indoor air-conditioning load, Calculate the maximum air-conditioning load for each room or zone.

Selection of an air conditioning system

- Select the ideal air conditioning system for air conditioning of each room or zone

Design of the control system

- Design a suitable control system for the selected air conditioning system

Preliminary selection of indoor and outdoor units

- Make preliminary selections that are within the allowable range for the system

Check of the tubing length and elevation difference

- Check that the length of refrigerant tubing and the elevation difference are within the allowable ranges

Calculation of the corrected outdoor unit capacity

- Capacity correction coefficient for model, outdoor temperature conditions, tubing length and elevation difference.

Calculation of the actual capacity for each indoor unit

- Calculate the corrected indoor/outdoor capacity ratio, based on the corrected outdoor unit capacity and the total corrected capacity of all indoor units in the same system.

Recheck of the actual capacity for each indoor unit

- If the capacity is inadequate, reexamine the unit combinations.

1.2 Indoor unit selection

Enter INDOOR UNIT CAPACITY TABLES at given indoor and outdoor temperature. Select the unit that the capacity is the nearest to and greater than given load.

Note:

Individual indoor unit capacity is subject to change by the combination. Actual capacity has to be calculated according to the combination by using outdoor unit capacity table.

Calculation of actual capacity of indoor unit

Because the capacity of a multi air-conditioner changes according to the temperature conditions, tubing length, elevation difference and other factors, select the correct model after taking into account the various correction values. When selecting the model, calculate the corrected capacities of the outdoor unit and each indoor unit. Use the corrected outdoor unit capacity and the total corrected capacity of all the indoor units to calculate the actual final capacity of each indoor unit.

Find the indoor unit capacity correction coefficient for the following items:

- Capacity correction for the indoor unit temperature conditions

From the graph of capacity characteristics, use the indoor temperature to find the capacity correction coefficient.

- Capacity distribution ratio based on the indoor unit tubing length and elevation difference.

First, in the same way as for the outdoor unit, use the tubing length and elevation difference for each indoor unit to find the correction coefficient from the graph of capacity change characteristics

Capacity distribution ratio for each indoor unit=Correction coefficient for that indoor unit / Correction coefficient for the outdoor unit

1.3 Outdoor unit selection

Allowable combinations are indicated in INDOOR UNIT COMBINATION TOTAL CAPACITY INDEX TABLE.

In general, outdoor unit can be selected as follows though the location of the unit, zoning and usage of the

rooms may be considered.

The indoor and outdoor unit combination is determined that the sum of indoor unit capacity index is nearest to and smaller than the capacity index at 100% combination ratio of each outdoor unit. Up to 8~16 indoor units can be connected to one outdoor unit. It is recommended to choose a larger outdoor unit if the installation space is large enough.

If the combination ratio is greater than 100%, the indoor unit selection shall be reviewed by using actual capacity of each indoor unit.

INDOOR UNIT COMBINATION TOTAL CAPACITY INDEX TABLE

Outdoor Unit	Indoor Unit Combination Ratio (kW)								
	130%	**120%**	**110%**	**100%**	**90%**	**80%**	**70%**	**60%**	**50%**
20HP	72.8	67.2	61.6	56.0	50.4	44.8	39.2	33.6	28.0
22HP	80.0	73.8	67.7	61.5	55.4	49.2	43.1	36.9	30.8
24HP	87.1	80.4	73.7	67.0	60.3	53.6	46.9	40.2	33.5

INDOOR UNIT CAPACITY INDEX

Unit Size	Model 18	Model 22	Model 28	Model 36	Model 45	Model 56	Model 71	Model 80	Model 90	Model 112
Capacity Index (kW)	1.8	2.2	2.8	3.6	4.5	5.6	7.1	8.0	9.0	11.2
Unit Size	Model 125	Model 140	Model 160	Model 200	Model 250	Model 280	Model 400	Model 450	Model 560	
Capacity Index (kW)	12.5	14.0	16	20	25	28	40	45	56	

1.4 Actual performance date

Use OUTDOOR UNIT CAPACITY TABLES.

Determine correct table according to the outdoor unit model and combination ratio.

Enter the table at given indoor and outdoor temperature and find the outdoor unit capacity and power input. The individual indoor unit capacity (power input) can by calculated as follows.

IUC=OUC × INX/TNX

Where,

IUC: Each indoor unit capacity

OUC: Outdoors unit capacity

INX: Each indoor unit capacity index

TNX: Total capacity index

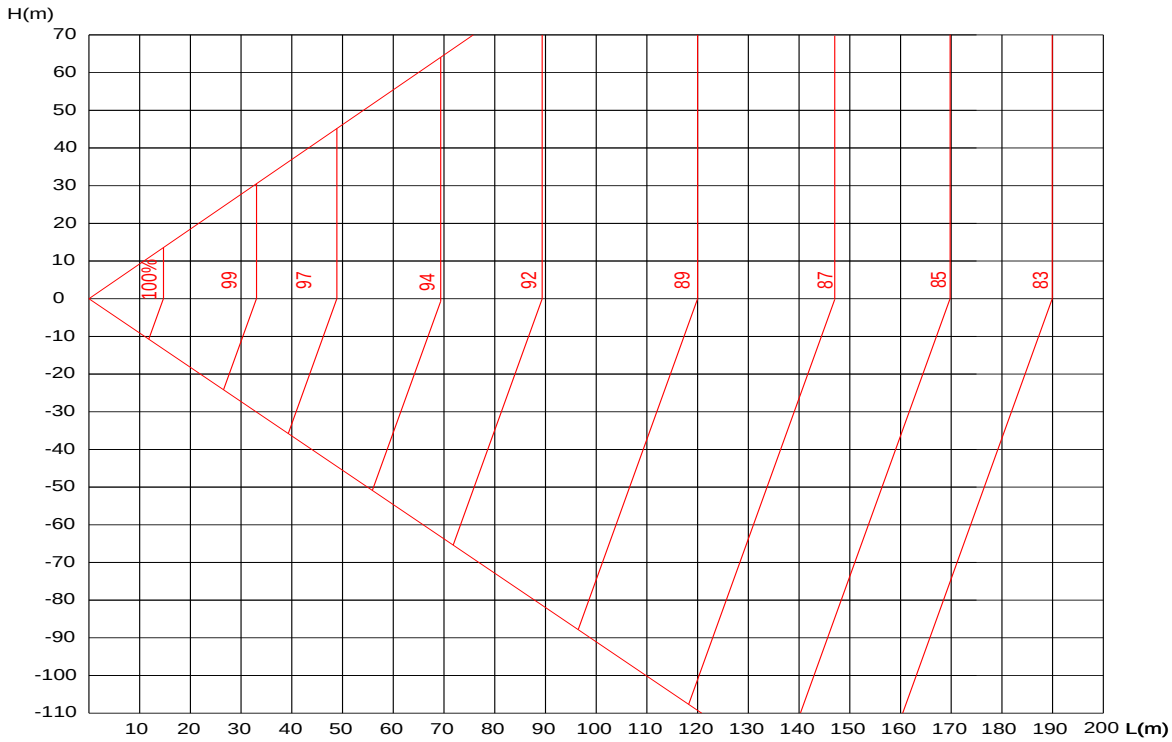
Then, correct the indoor unit capacity according to the piping length.

If the corrected capacity is smaller than the load, the size of indoor unit has to be increased and repeat the same selection procedure.

1.5 Capacity modification in accordance with the length of refrigerant pipe

1.5.1 Cooling capacity modification

Modification coefficient of the length and high difference of refrigerant pipe:

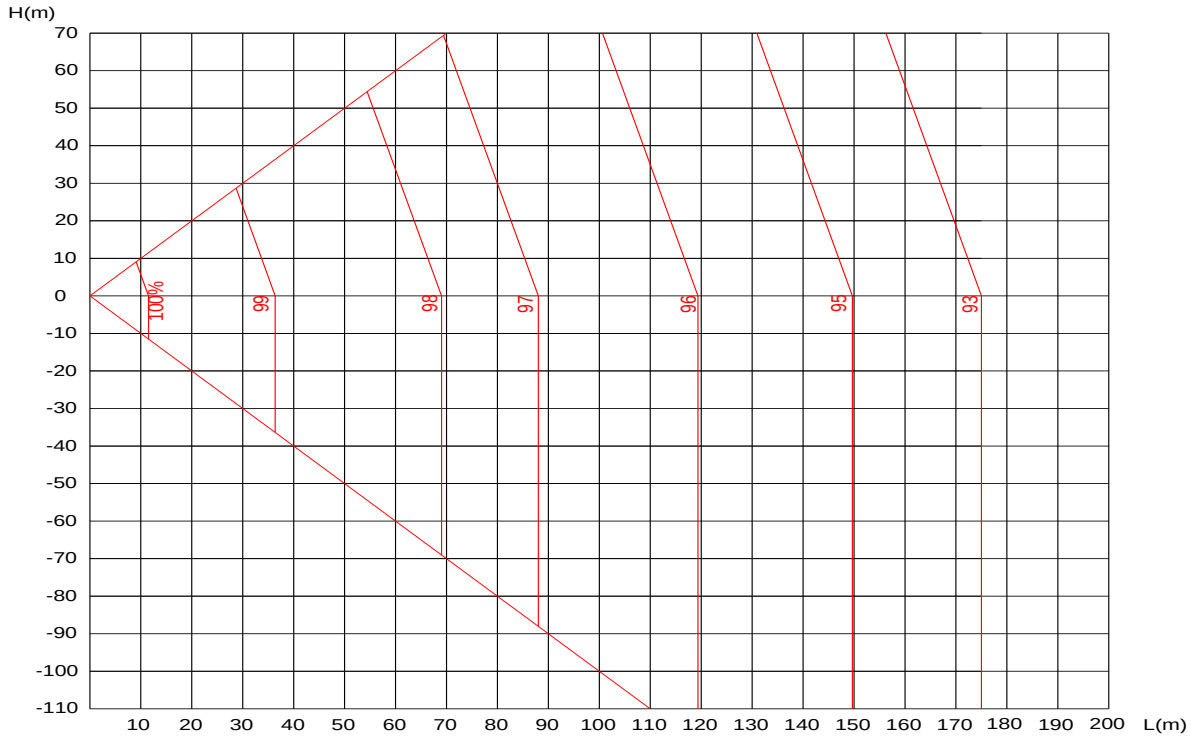


L: Refrigerant pipe equivalent length

H: Height difference between outdoor and indoor unit. Positive data means outdoor unit is top. Negative data means outdoor unit is down.

1.5.2 Heating capacity modification

Modification coefficient of the length and high difference of refrigerant pipe:



L: Refrigerant pipe equivalent length

H: Height difference between outdoor and indoor unit. Positive data means outdoor unit is top. Negative data means outdoor unit is down.

2. Unit selection (based on cooling load)

2.1 Given condition

Condition:

Cooling: indoor temperature 20°CWB, outdoor temperature 35°CDB;

Cooling load

Location	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
Load (kW)	5.9	5.8	7.5	7.3	7.9	5.5	4.5	7.8

Power supply: outdoor 380~415V-3Ph-50Hz, indoor 220~240V-1Ph-50Hz.

Piping length: 50m; Height difference between indoor unit and outdoor unit: 30m

2.2 Indoor unit selection

Select the suitable capacity for condition of 'Indoor 20°C (WB), Outdoor 35°C (DB)' using indoor unit capacity table. The selected result is as follows. (Assuming the indoor unit type is duct)

Location	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
Load (kW)	5.9	5.8	7.5	7.3	7.9	5.5	4.5	7.8
Unit size	56	56	71	71	80	56	45	80
Capacity (kW)	5.9	5.9	7.5	7.5	8.4	5.9	4.8	8.4

2.3 Outdoor unit selection

1) Assume the indoor unit and outdoor unit combination as follows

- Calculate the total nominal capacity of indoor units in the combination according to the above table: 5.6×3+7.1×2+8.0×2+4.5×1=51.5kW
- Select outdoor unit: MDV-560W/DRN1-i(C) which has nominal cooling capacity: 56kW.
  Calculate the proportion between ① and ②: 51.5/56=92%

2) Result: Because the proportion is within 50～130%, it is a right selection.

Real function data with indoor unit combination

- For the 93% combination, calculate the cooling capacity of outdoor unit (MDV-560W/DRN1-i(C)).
  53.6KW←90% (Indoor temperature: WB 20° C, Outdoor temperature: DB 35° C)
  56.6KW←100% (Indoor temperature: WB 20° C, Outdoor temperature: DB 35° C)
  Then calculated the outdoor capacity in 93% combination index:
  Therefore: 53.6+{(56.6-53.6)/ 10}×2= 54.2;
- Outdoor unit (MDV-560W/DRN1-i(C)) cooling temperature: DB 35° C
- Capacity modification coefficient with pipe length (50m) and height difference (30m): 0.958
- Each indoor unit cooling capacity
  Room A: MDV-D56T2 (54.2×56/522×0.958=5.57kW)
  Room B: MDV-D56T2 (54.2×56/522×0.958=5.57kW)
  Room C: MDV-D71T2 (54.2×71/522×0.958=7.06kW)
  Room D: MDV-D71T2 (54.2×71/522×0.958=7.06kW)
  Room E: MDV-D80T2 (54.2×80/522×0.958=7.96kW)
  Room F: MDV-D56T2 (54.2×56/522×0.958=5.57kW)
  Room G: MDV-D45T2 (54.2×45/522×0.958=4.48kW)
  Room H: MDV-D80T2 (54.2×80/522×0.958=7.96kW)

Location	Room A	Room B	Room C	Room D	Room E	Room F	Room G	Room H
Load (kW)	5.9	5.8	7.5	7.3	7.9	5.5	4.5	7.8
Unit size	56	56	71	71	80	56	45	80
Capacity (kW)	5.57	5.57	7.06	7.06	7.96	5.57	4.48	7.96

2.4 Conclusion

Generally, we think this result is acceptable, so we can think we have accomplished the calculation. But if you think this result is not acceptable, you can repeat the above process.

Remark: In this sample, the other capacity modification indexes don't be considered and are assumed as 1.0. For more details about the effect factor such as outside ambient/inside ambient DB/WD, please refer to the performance table of indoor and outdoor units.

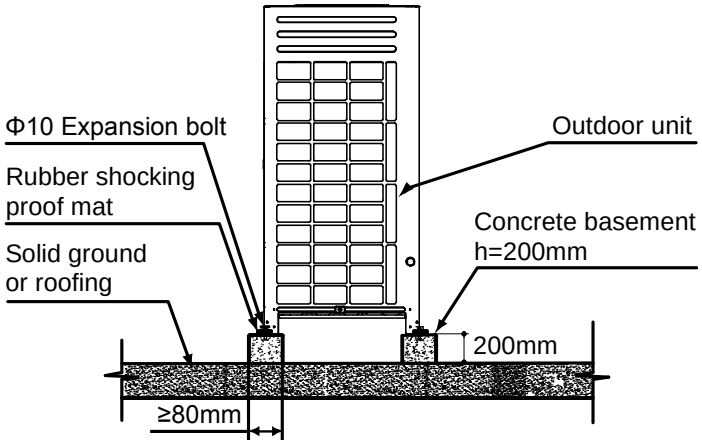
Part 4 Installation

1. Select installation position

- Ensure that the outdoor unit is installed in a dry, well-ventilated place.
- Ensure that the noise and exhaust ventilation of the outdoor unit do not affect the neighbors of the property owner or the surrounding ventilation.
- Ensure that the outdoor unit is installed in a well-ventilated place that is possibly closest to the indoor unit.
- Ensure that the outdoor unit is installed in a cool place without direct sunshine exposure or direct radiation of high-temp heat source.
- Do not install the outdoor unit in a dirty or severely polluted place, so as to avoid blockage of the heat exchanger in the outdoor unit.
- Do not install the outdoor unit in a place with oil pollution or full of harmful gas such as sulfurous gas.
- Do not install the outdoor unit in a place surrounded by salty air. (Except for the models with corrosion-resistant function)

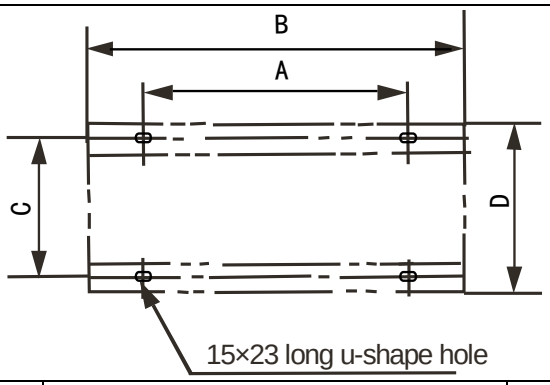
2. Foundation for installation

- A solid, correct base can: Avoid the outdoor unit from sinking and avoid the abnormal noise generated due to base.
- Base types: Steel structure base or concrete base (See the figure below for the general making method)



Note: The key points to make basement:

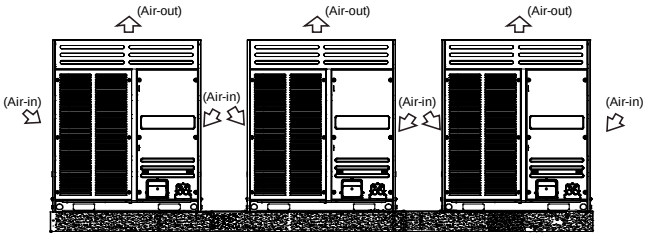
- The master unit's basement must be made on the solid concrete ground . Refer to the structure diagram to make concrete basement in detail, or make after field measurements.
- In order to ensure every point can contact equality, the basement should be on completely level.
- If the basement is placed on the roofing, the detritus layer isn't needed, but the concrete surface must be flat. The standard concrete mixture ratio is cement 1/ sand 2/ carpolite 4, and adds Φ10 strengthen reinforcing steel bar, the surface of the cement and sand plasm must be flat, border of the basement must be chamfer angle.
- Before construct the unit base, please ensure the base is directly supporting the rear and front folding edges of the bottom panel vertically, for the reason of these edges are the actual supported sites to the unit.
- In order to drain off the seeper around the equipment, a discharge ditch must be setup around the basement.
- Please check the affordability of the roofing to ensure the load capacity.
- When piping from the bottom of the unit, the base height should be no less than 200mm.
- Distance between foot screws is shown as follow. The spacing between the two cement piers shall not be exceeded over than 650mm.



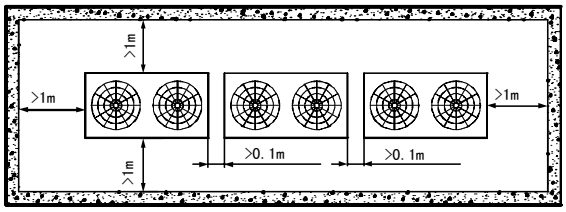
Size (mm)	20HP	22/24HP
A	1260	1455
B	1390	1585
C	736	736
D	765	765

3. Installation space

- Ensure enough space for maintenance. The modules in the same system must be on the same height.
- When installing the unit, leave enough space for maintenance.



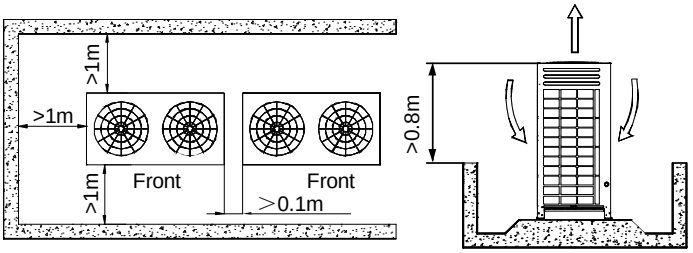
Installation and maintenance surface



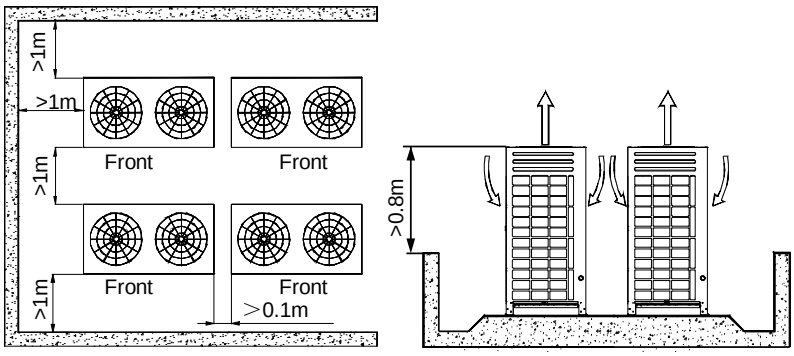
Top view of the outdoor unit

- When the outdoor unit is higher than the surrounding obstacle

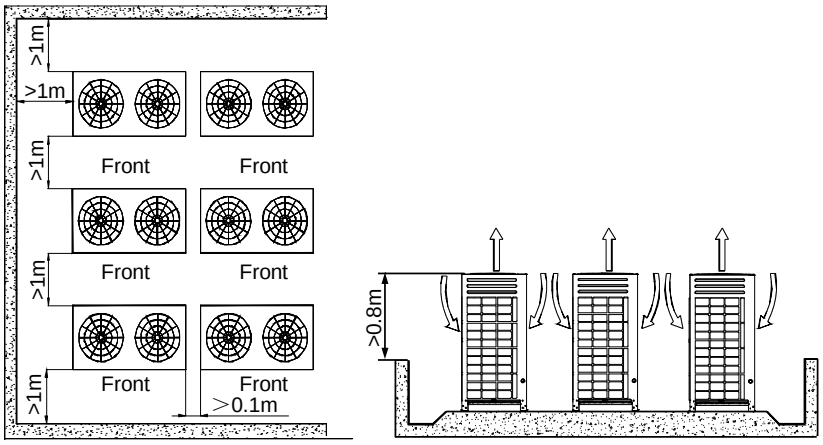
One row



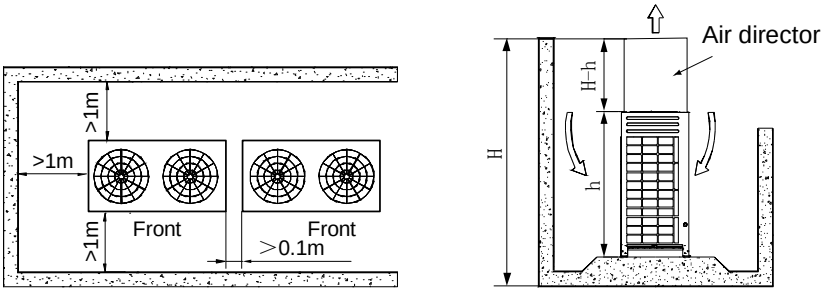
Two rows



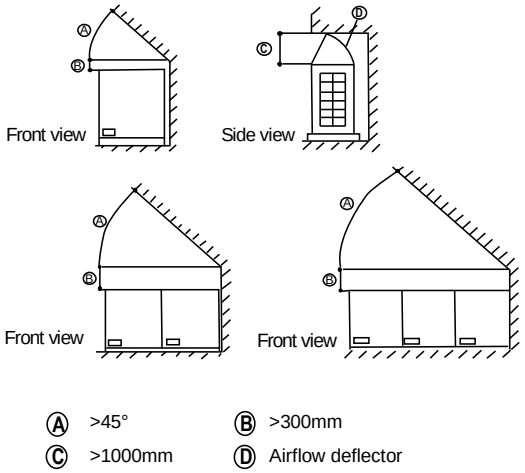
More than two rows



- When the outdoor unit is lower than the surrounding obstacle, to avoid cross connection of the outdoor hot air from affecting the heat exchange effect, please add an air director onto the exhaust hood of the outdoor unit to facilitate heat dissipation. See the figure below. The height of the air director is HD (namely H-h). Please make the air director on site.



- If miscellaneous articles are piled around the outdoor unit, such articles must be 800mm below the top of the outdoor unit. Otherwise, a mechanic exhaust device must be added.

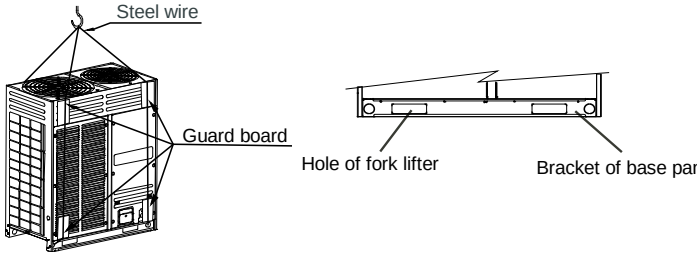


4. Lifting method

- Do not remove any package before the hoisting. Use two ropes to hoist the machine, keep the machine in balance, and then raise it safely and steadily. In case of no package or if the package is damaged, use plates or packing material to protect it.
- When conveying and hoisting the outdoor unit, keep it upright, ensure that the slope does not exceed 30°, and keep safety in mind.
- Steel wire can be used for conveying:

- Use 4 steel wires of the size above Φ6mm to convey the outdoor unit. Pay attention to the gravity center and prevent sliding and tip-over of the outdoor unit.
- In order to prevent scratch and deformity the outdoor unit, apply a guard board to the surface of contact between the steel wire and the air conditioner.
- Remove the cushion for use in the transport after finishing the transport.

Fork lifter can be used for conveying.



5. Set the snow-proof facility

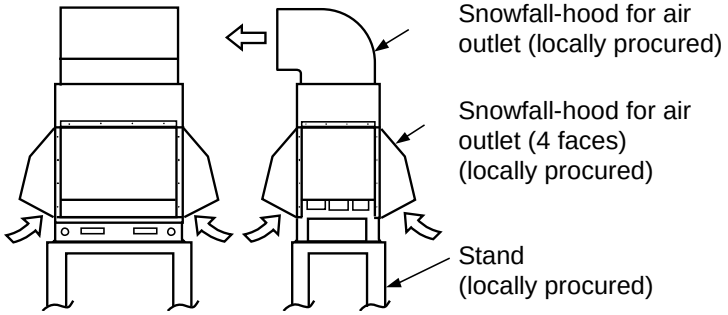
Installation in a snowfall area

1. Install the outdoor unit on a higher foundation than the snowfall or set up a stand to install the unit so that snowfall will not affect the unit.

- Set up a stand higher than the snowfall.
- Apply an angled structure to the stand so that drainage will not be prevented. (Avoid using a stand with a flat surface.)

2. Mount a snowfall-hood onto the air inlet and the air outlet.

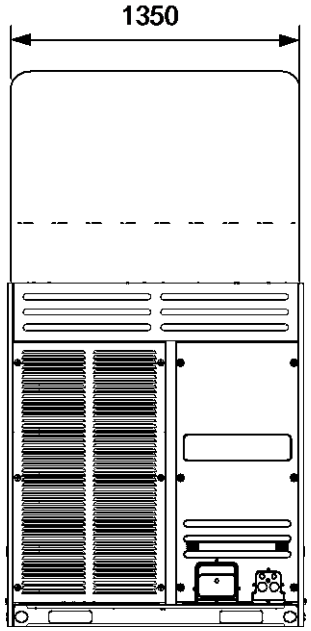
- Leave enough space for the snowfall-hood so that it will not be an obstacle for the air inlet and the air outlet.

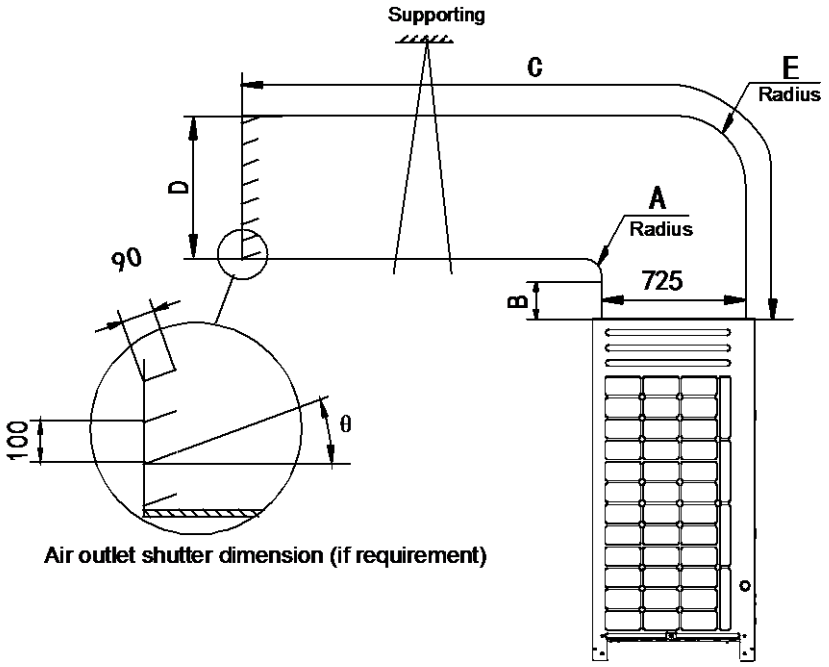


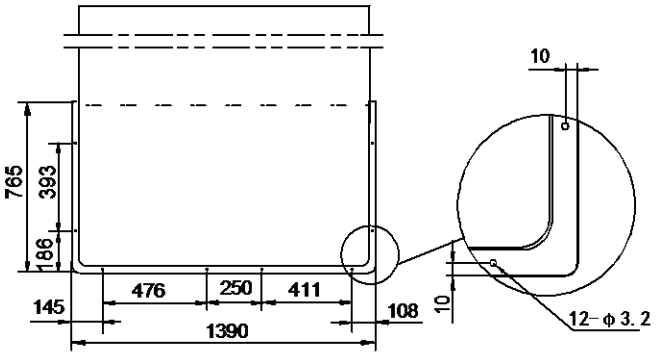
6. Air ventilation assembly installation

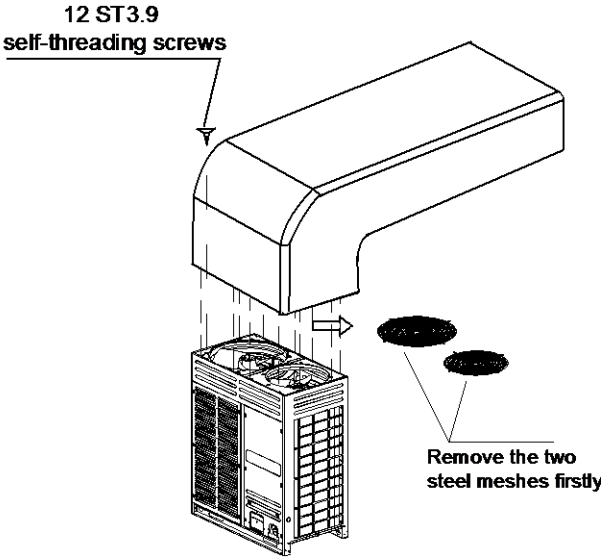
The ventilation assembly is provided at the field installation. When installing, please take off the mesh cover firstly, and then install the unit as the following method.

20HP





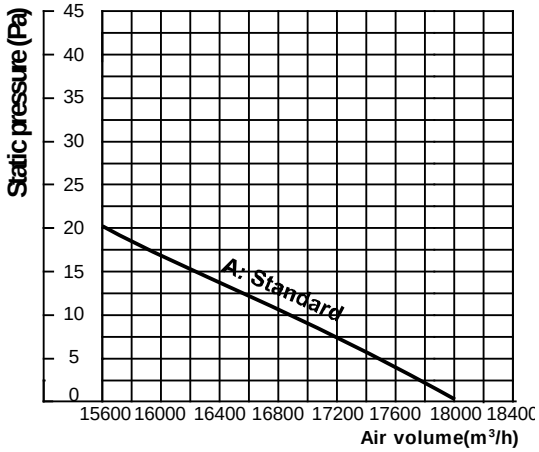




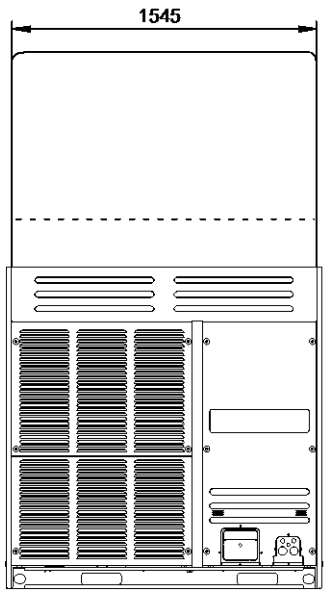
Size (mm)	
A	A≥300
B	B≥250
C	C≤3000
D	725≤D≤760
E	E=A+725
θ	θ≤15°

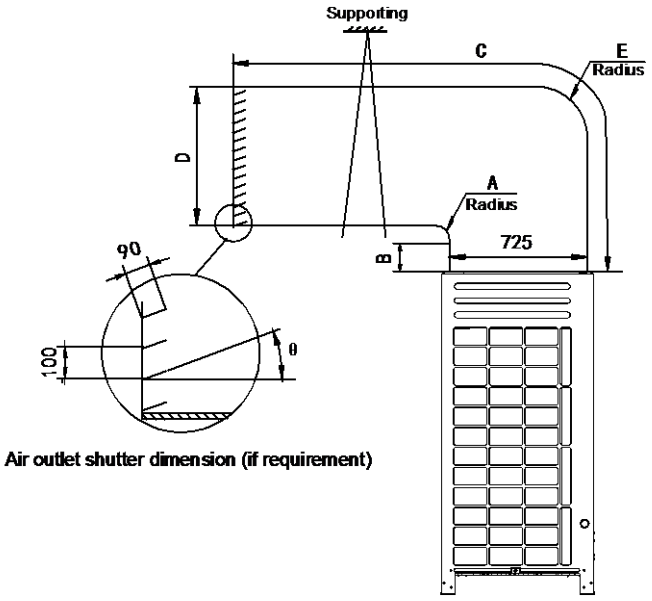
Static pressure	Note
0Pa	Factory default
0~20Pa	Remove the steel meshes, connect the air deflector pipe within 3 meters (length of C)
Over 20Pa	Need to be customized

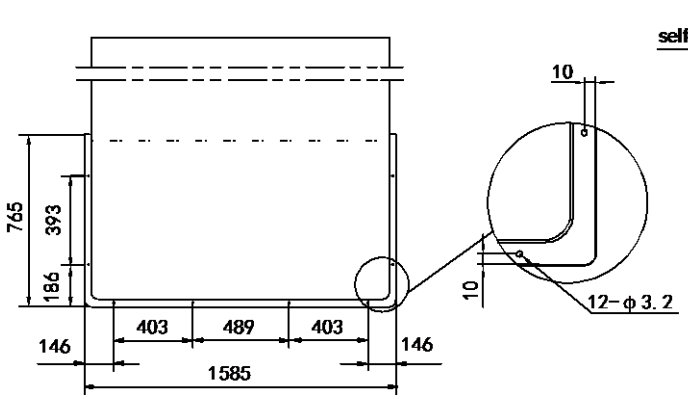
Curve diagram of static pressure & air flow volume.

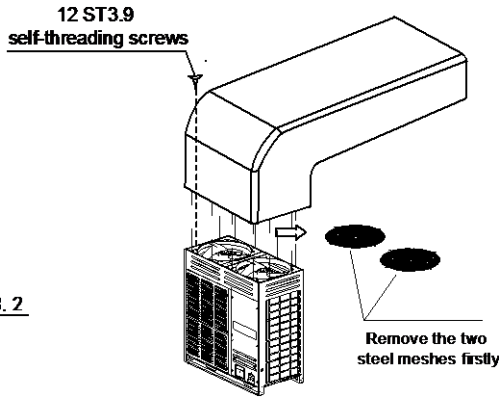


22/24HP





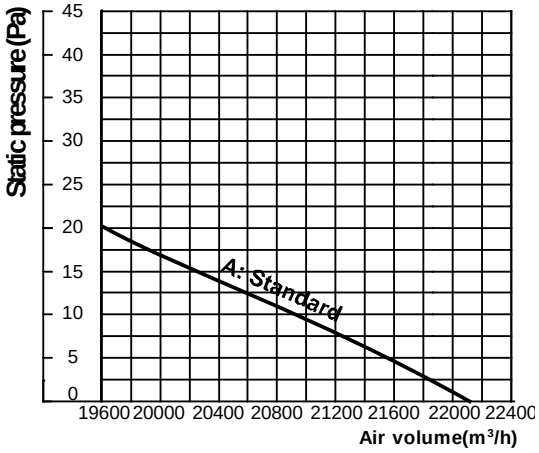




Size (mm)	
A	A≥300
B	B≥250
C	C≤3000
D	725≤D≤760
E	E=A+725
θ	θ≤15°

Static pressure	Note
0Pa	Factory default
0~20Pa	Remove the steel meshes, connect the air deflector pipe within 3 meters (length of C)
Over 20Pa	Need to be customized

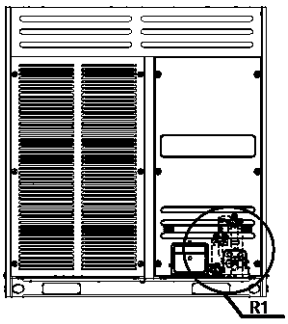
Curve diagram of static pressure & air flow volume.



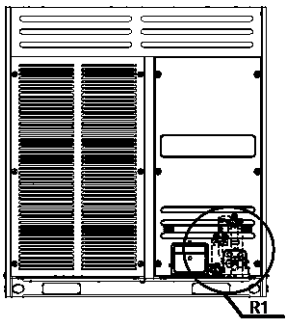
Note:
Before install the ventilation assembly, please remove the steel meshes firstly, otherwise, they would decrease the air supply volume.
1. Increase shutters would decreases the air supply volume, as well as cooling (heating) capacity and energy efficiency would be decreased, the larger angle of the shutter, the more effect to the unit. So we don't recommend to apply shutter, if necessary to apply shutter, please ensuring the angle should not over than 15°.
2. The bending place at ventilated duct should be not more than 1(show in above figure), otherwise, operation malfunction would be caused.
3. Install the flexible connector between the unit and the air deflector pipe to avoid vibration noise.

7. Refrigerant piping installation

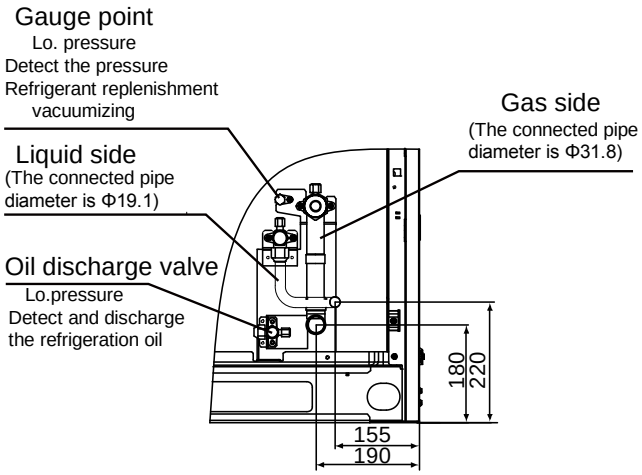
Unit: mm



20HP

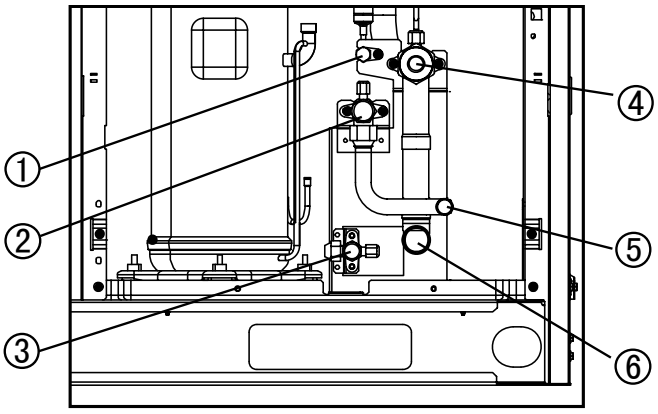


20HP



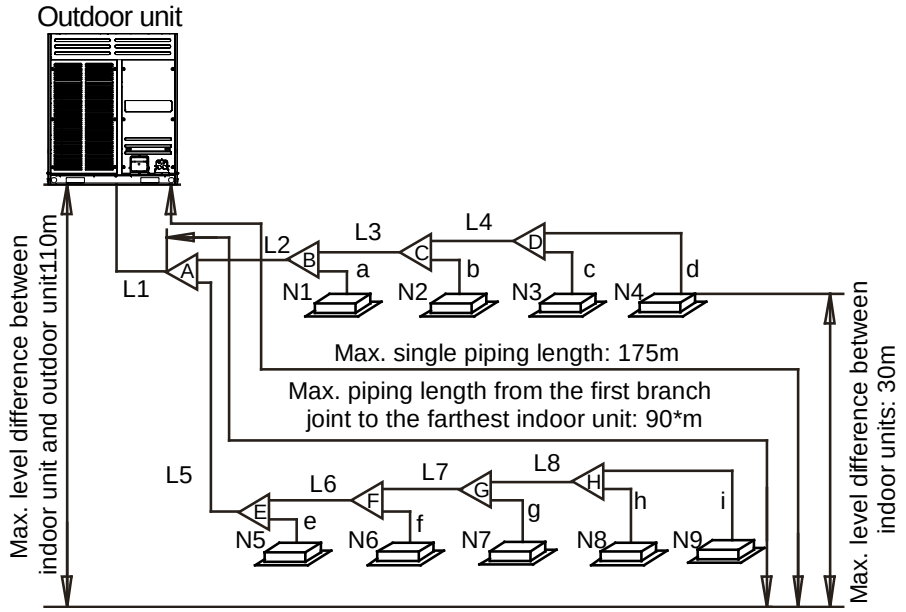
R1,R2 section view

7.1 Valve instructions



1	Gauge point (Low pressure valve, for detecting the pressure/Refrigerant replenishment/vacuuming)
2	Liquid side shut off valve (High pressure valve)
3	Oil discharge valve (Low pressure, for detecting and discharging the refrigeration oil)
4	Gas side shut off valve (Low pressure valve)
5	Connect to liquid pipe (Need to be installed in field)
6	Connect to gas pipe (Need to be installed in field)

7.2 Refrigerant piping length permitted value



Piping length			Permitted value	Piping
Piping length	Actual total piping length		1000m or less (refer to note 1)	L1+(L2+L3+L4+L5+L6+L7+L8)×2 +a+b+c+d+e+f+g+h+i
	Maximum single piping length	Actual length	175m or less	L1+L5+L6+L7+L8+i
		Equivalent length	200m or less (refer to note 2)	
	Maximum piping length from the first branch joint to the farthest indoor unit		40/90*m or less (refer to note 3)	L5+L6+L7+L8+i
Level difference	Level difference between indoor unit and outdoor unit	Outdoor unit up	70m or less (refer to note 4)	/
		Outdoor unit down	110m or less (refer to note 5)	/
	Level difference between indoor units		30m or less	/

Note:

The indoor units should be installed as possible as equal in the both sides of the U-shape branch joint.

1. When counting the total piping length, the actual length of above distribution pipes must be doubled. (Expect the main pipe and the distribution pipes): Total piping length=1+(L2+L3+L4+L5+L6+L7+L8+L9)×2+a+b+c+d+e+f+g+h+i+j≤1000m
2. The equivalent length of each branch pipe is 0.5m.
3. The allowable piping length from the first branch joint to the farthest indoor unit should be equal to or less than 40m, but when the following conditions are all met, the allowable length can be extended to 90m.

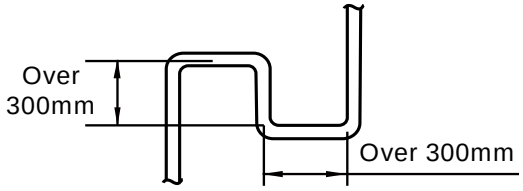
- The piping length from each indoor unit to the nearest branch joint assembly should be less than 40m. (a, b, c, …j≤40m)
- The length difference between (the outdoor unit to the farthest indoor unit) and (the outdo or unit to the nearest indoor unit) ≤ 40m. [(L1+L5+L8+L9+j)-(L1+L2+L3+a)]≤40m
- It needs to increase all the pipe diameters of the main distribution pipes which between the first and the last branch joint assembly. (Please change the pipe diameter at field) If the pipe diameter of the main slave pipe is the same as the main pipe, then it is no need to be increased.

When: 40m＜L5+L8+L9+j≤90m L2,L3,L4,L5,L6,L7,L8,L9 need to increase the pipe diameter of the distribution pipe.

Increasing size as the following:

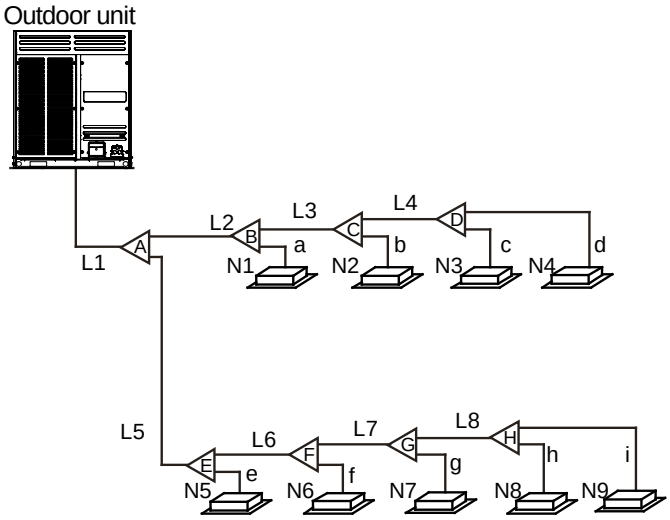
Φ9.5→Φ12.7	Φ12.7→Φ15.9	Φ15.9→Φ19.1	Φ19.1→Φ22.2	Φ22.2→Φ25.4	Φ25.4→Φ28.6
Φ28.6→Φ31.8	Φ31.8→Φ38.1	Φ38.1→Φ41.3	Φ41.3→Φ44.5	Φ44.5→Φ54.0	

4. When the outdoor unit is higher than indoor units and the level difference is over 20m, it is recommended to set an oil return bend every 10m in the gas pipe of the main pipe, the specification of the oil return bend refers to below figure.



5. When the outdoor unit is lower than indoor units and the level difference is more than 40m, the liquid pipe of the main pipe need to increase one size.

7.3 Refrigerant piping selection



- Pipe name

Main pipe	L1
Indoor unit main pipe	L2, L3, L4, L5, L6, L7, L8
Indoor unit branch pipe	a, b, c, d, e, f, g, h, i
Indoor unit branch pipe assembly	A, B, C, D, E, F, G, H

- Table1: Indoor unit branch pipe selection (a~i)

Capacity of indoor unit (A×100W)	Branching pipe length≤10m		Branching pipe length≥10m	
	Gas side	Liquid side	Gas side	Liquid side
A≤50	Φ12.7	Φ6.4	Φ15.9	Φ9.5
A≥56	Φ15.9	Φ9.5	Φ19.1	Φ12.7

- Table 2: Indoor unit main pipe selection (L1~L8)

Capacity of indoor unit (A×100W)	Indoor unit main pipe (mm)		
	Gas side	Liquid side	Available branching pipe
A<166	Φ15.9	Φ9.5	FQZHN-01C
166≤A<230	Φ19.1	Φ9.5	FQZHN-01C
230≤A<330	Φ22.2	Φ9.5	FQZHN-02C
330≤A<460	Φ28.6	Φ12.7	FQZHN-03C
460≤A<660	Φ28.6	Φ15.9	FQZHN-03C
660≤A<920	Φ31.8	Φ19.1	FQZHN-03C
920≤A<1080	Φ38.1	Φ19.1	FQZHN-04C

● Table 3: Main pipe selection (L1)

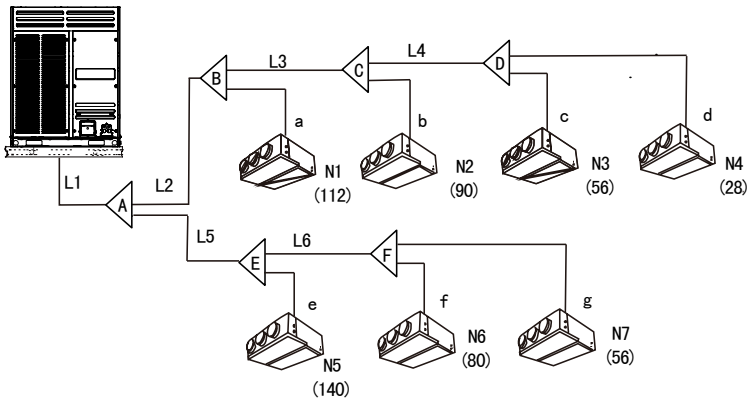
Model	When the equivalent length of all liquid pipes<90m			When the equivalent length of all liquid pipes≥90m		
	Gas side (mm)	Liquid side (mm)	The 1st branching pipe	Gas side (mm)	Liquid side (mm)	The 1st branching pipe
20/22/24HP	Φ28.6	Φ15.9	FQZHN-03C	Φ31.8	Φ19.1	FQZHN-03C

Note: the main pipe L1 can be selected form table2 or table3, the larger size should be finally selected.

7.4 Example

The example is as blow:

(Provided that the capacity of outdoor unit is 20HP, the equivalent length of all pipes in this system is larger than 90m, each indoor unit branch pipe's length is 5m, and the pipe length of each indoor unit branch pipe is less than 10m)



1. Select indoor unit branch pipes: a~g

Refer to table 1, the branch pipes of a,b,c,e,f,g are Φ15.9/Φ9.5 and the branch pipe of d is Φ12.7/Φ6.4.

2. Select indoor unit main pipes: L1~L6

- The downstream indoor units of L6 are N6 and N7, which capacity is 80+56=136＜166. Refer to table 2, the indoor unit main pipe L6 is Φ15.9/Φ9.5, the branch pipe assembly F is FQZHN-01C.
- The downstream indoor units of L5 are N5, N6 and N7, which capacity is 140+80+56=276＜330. Refer to table 2, the indoor unit main pipe L5 is Φ22.2/Φ9.5, the branch pipe assembly E is FQZHN-02C.
- The downstream indoor units of L4 are N3 and N4, which capacity is 28+56=84＜166. Refer to table 2, the indoor unit main pipe L4 is Φ15.9/Φ9.5, the branch pipe assembly D is FQZHN-01C.
- The downstream indoor units of L3 are N2, N3 and N4, which capacity is 90+56+28=174＜230. Refer to table 2, the indoor unit main pipe L3 is Φ19.1/Φ9.5, the branch pipe assembly C is FQZHN-01C.
- The downstream indoor units of L2 are N1, N2, N3 and N4, which capacity is 112+90+56+28=286＜330. Refer to table 2, the indoor unit main pipe L2 is Φ22.2/Φ9.5, the branch pipe assembly B is FQZHN-02C.
- The downstream indoor units of L1 are N1~N7, which capacity is 1140+80+56+112+90+56+28=562＜660. Refer to table 2, the indoor unit main pipe L1 is Φ28.6/Φ15.9, the branch pipe assembly A is FQZHN-03C.

3. Select main pipe: L1

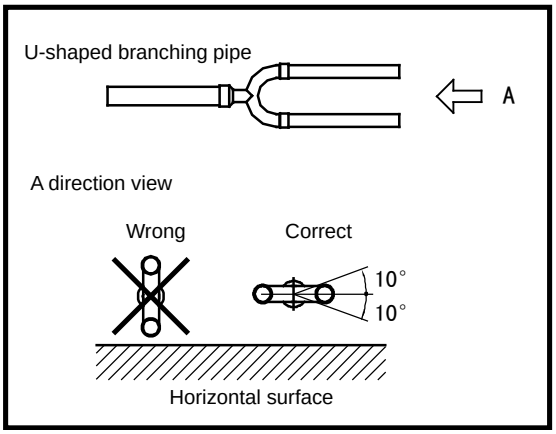
For the capacity of outdoor unit is 20HP, the equivalent length of all pipes in this system is larger than 90m, refer to table 3, the main pipe L1 is Φ31.8/Φ19.1.

As the main pipe L1 is selected as Φ28.6/Φ15.9 from step 2, and Φ31.8/Φ19.1 from step 3, we finally select the larger pipe Φ31.8/Φ19.1 as main pipe L1.

Note: For the detail dimension and installation information pipe, please read the branch pipe installation manual carefully.

8. Branch pipe installation

The branching pipe must be installed horizontally and error angle of it should not be larger than 10°. Otherwise, refrigerant assignment will be uneven and malfunction will be caused.

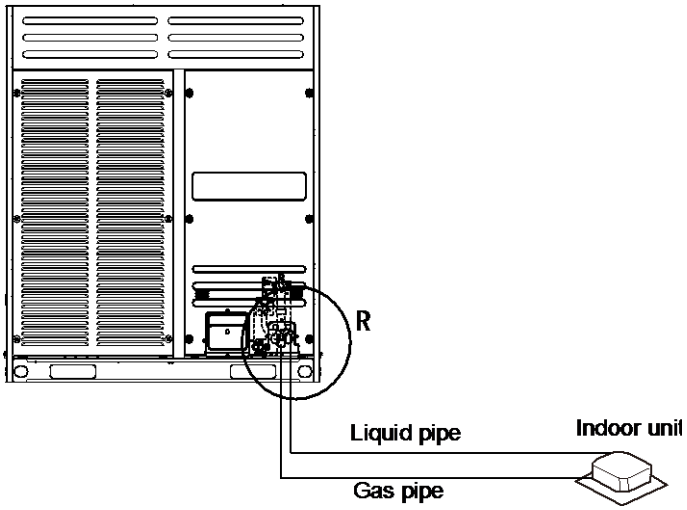


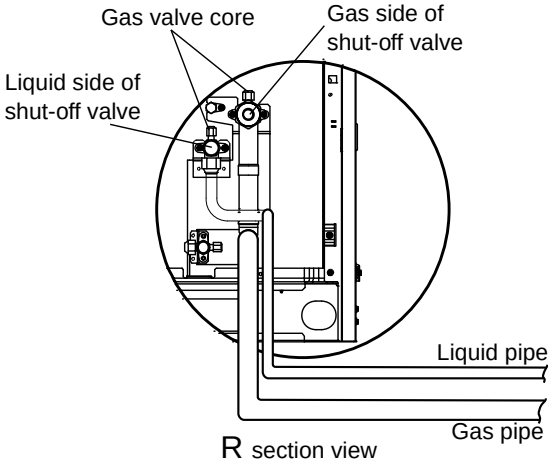
9. Remove dirt or water in the piping

- Make sure there is no any dirt or water in the pipe before connecting the piping to the outdoor u nits.
- Wash the piping with high pressure nitrogen, never use refrigerant of the outdoor unit to do that.

10. Gas tightness test

- Upon set up the indoor unit pipeline, please connect the Hi-pressure pipe with liquid side shut-off valve and connect Lo-pressure pipe with gas side shut off valve firstly.
- Use the vacuum pump discharging air inside the pipe from the two pistons (pistons of liquid side shut off valve and gas side shut off valve) simultaneously, until to the -1kgf/cm2.
- Close the vacuum pump, charge 40kgf/cm^2 nitrogen gas from the pistons of the two shut-off valves simultaneously. Pressure inside should be maintained at there no less than 24 hrs.



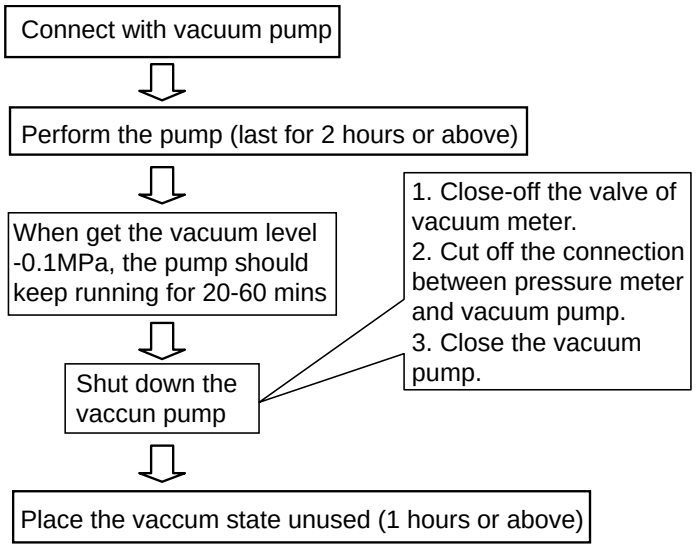


Note:

- Pressurized nitrogen (3.9MPa; 40kgf/cm^2) is used for airtightness test.
- It is not allowed to use oxygen, combustible gas or toxic gas to conduct the airtightness test.
- When welding, please use wet cloth insulating the low pressure valve for protection.
- To avoid the equipment be damaged, the pressure maintained time should not last too long.

11. Vacuum

- Use the vacuum pump which vacuum level lower than -0.1MPa and the air discharge capacity above 40L/min.
- The outdoor unit is not necessary to vacuum, don't open the outdoor unit gas and liquid pipe shut-off valves.
- Make sure the vacuum pump could result as -0.1MPa or below after 2 hours or above operation. If the pump operated 3 hours or above could not achieve to -0.1MPa or below, please check whether water mix or gas leak inside of the pipe.



Caution:

- Don't mix up the different refrigerants or abuse the tools and measurements which directly contact with refrigerants.
- Don't adopt refrigerant gas for air vacuuming.
- If vacuum level could not get to -0.1MPa, please check whether resulted by leakage and confirm the leakage site. If no leakage, please operate the vacuum pump again 1 or 2 hrs.

12. Additional refrigerant charge

Calculate the additional refrigerant charge according to the diameter and the length of the liquid side pipe of the outdoor/indoor unit connection. The refrigerant is R410A.

Pipe size of liquid side	Additional refrigerant charge per meter (kg)
Φ6.4	0.022
Φ9.5	0.057
Φ12.7	0.11
Φ15.9	0.17
Φ19.1	0.26
Φ22.2	0.36
Φ25.4	0.52
Φ28.6	0.68

13. Auto judging system refrigerant volume

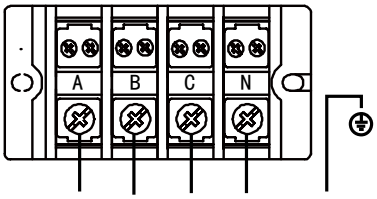
When all the indoor units are in cooling or heating mode, the system will be in refrigerant volume judgment mode automatically. If the system judges that the refrigerant volume is normal, the system will operate normally, no error code will display. If the system judges that the refrigerant volume is abnormal, corresponding error code will display on digital tube.

When only partial indoor units are in cooling or heating mode, the system will not judge the refrigerant volume and the digital tube will reserve the last judging result.

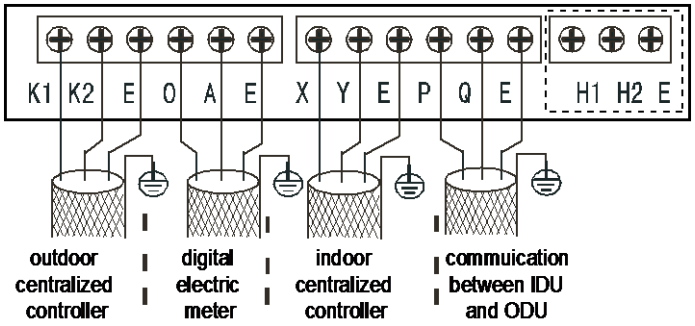
Error code	Content
r1	Lack of refrigerant
r2	Obvious lack of refrigerant
r3	Serious lack of refrigerant
R1	Too much refrigerant
R2	Serious too much refrigerant

14. Electric wiring installation

14.1 Wiring terminals instruction



Three-phase power supply



14.2 Electric wiring installation

Note:

Please select power supply for indoor unit and outdoor unit separately.

The power supply should have specified branch circuit with leakage protector and manual switch.

The power supply, leakage protector and manual of all the indoor units connecting to the same outdoor unit should be universal.

(Please set all the indoor unit power supply of one system into the same circuit. It should turn on or shut down the unit at the same time, otherwise, the service life would affect seriously, even the unit may not turn on.)

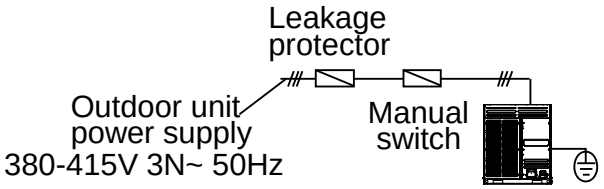
Please put the connective wiring system between indoor unit and outdoor unit with refrigerant piping system together.

It is suggested to use 3-core shielded wire as signal wire between indoor and outdoor units, multi-core wire is unavailable.

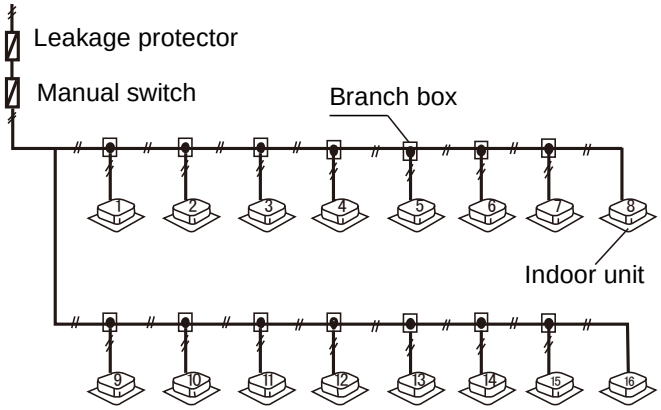
Please comply with relevant National Electric Standard.

Power wiring should be done by professional electrician.

14.2.1 Outdoor unit powering supply wiring



14.2.2 Indoor unit powering supply wiring



Note:

- Set refrigerant piping system, signal wires between indoor units and signal wires between outdoor units into one system.
- Power must unified supply to all indoor units in the one system.
- Please do not put the signal wires and power wires in the same wire tube; keep distance between the two tubes. (Keep distance above 300mm, when current capacity of power supply less than 10A, and Keep distance above 500mm, when current capacity of power supply less than 50A)

14.3 Signal wiring installation

The signal wire should be shielded wire. Using other wiring shall create signal interference, thus leading to error operation.

The shielded nets at the two sides of shielded wires are either grounded to the earth, or connected with each other and jointed to the sheet metal along to the earth.

Signal wire could not be bound together with refrigerant pipeline and power wire. When power wire and signal wire is distributed in parallel form, keep gap between them above 300mm so as to preventing signal interference.

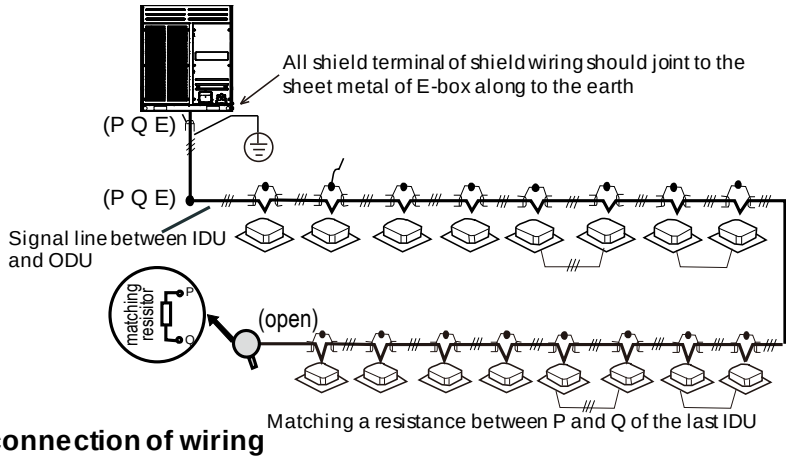
Signal wire could not form closed loop.

Signal wire has polarity, so be careful when connecting.

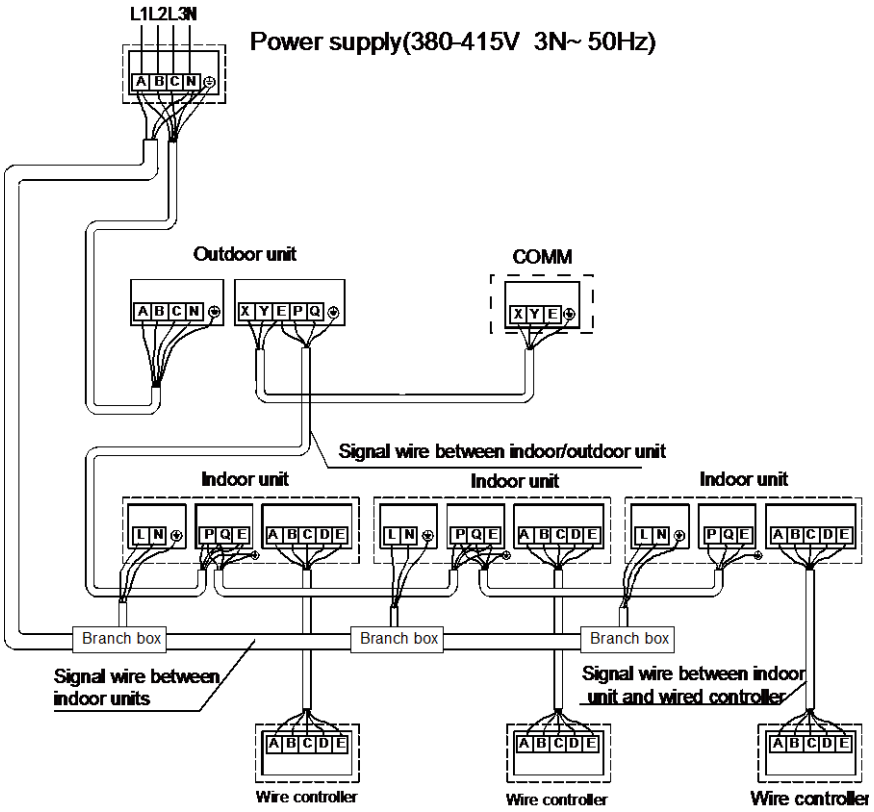
The shield net should be grounded at the wiring terminal of outdoor unit. The inlet and outlet wire net of indoor communication wire should be connected directly and could not be grounded, and form open circuit at the shield net of final indoor unit.

14.3.1 Signal wire between outdoor unit and indoor unit

Signal wire of indoor/outdoor unit adopts 3-core shielded wire ($\geqslant$0.75mm^2) which has polarity, please connect it correctly.



14.3.2 Example connection of wiring

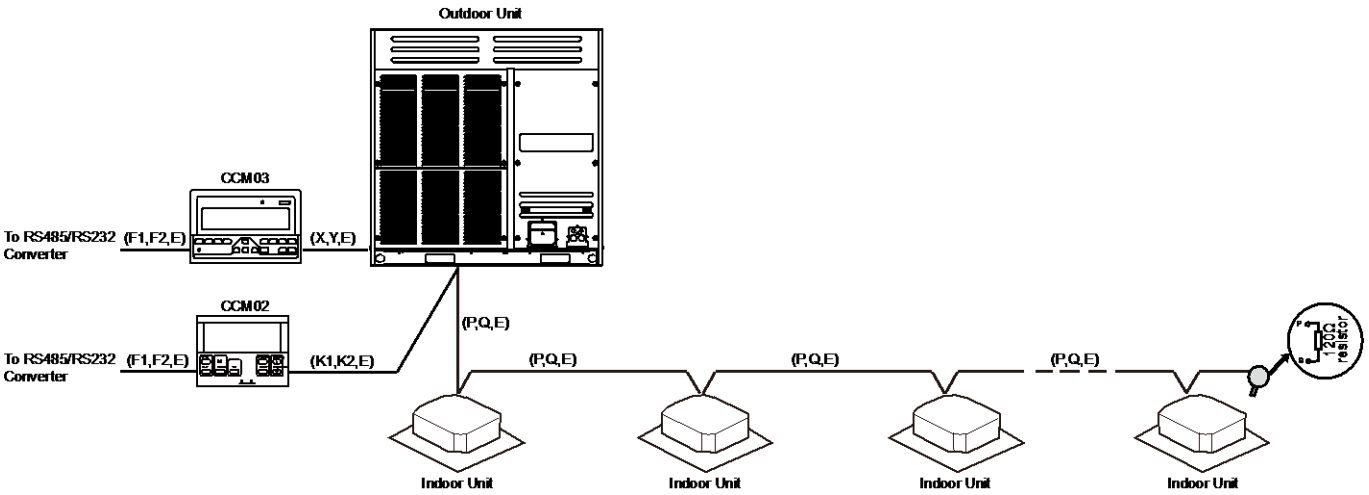


1.4.3.3 Signal wire of centralized control

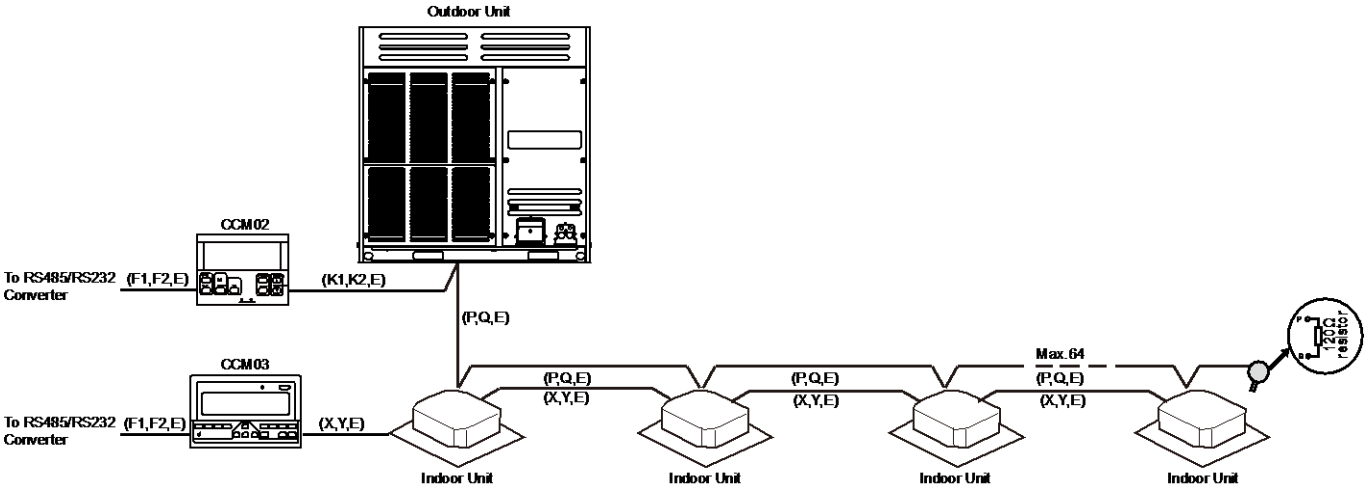
Signal wire of centralized control

When centralized control is needed, one CCM03 (central controller of indoor unit) can only control the indoor units which are in the same refrigerant system **via the port X Y E of outdoor unit.** Outdoor unit will automatically distribute the address to indoor units without any manual setting. Remote controller can enquiry and modify every indoor unit address.

The diagram below shows the connection of signal wire in this case:



Besides, CCM03 can also connect indoor units **via the port X Y E of indoor unit**. However, one more group of wire(X Y E between indoor units) is needed; it is more complex and not suggested. Anyway, the diagram below shows the connection of signal wire in this case:



15. Running test

15.1 Inspection and confirmation before commissioning

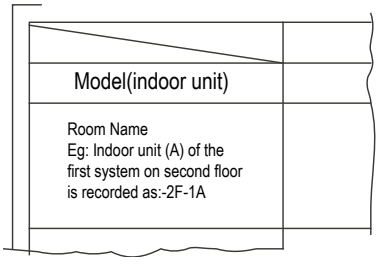
- Check and confirm that refrigeration pipe line and communication wire of indoor and outdoor units have been connected to the same refrigeration system. Otherwise, operation troubles shall happen.
- Power voltage is within ±10% rated voltage.
- Check and confirm that the power wire and control wire are correctly connected.
- Check whether wire controller is properly connected.
- Before powering on, confirm there is no short circuit to each line.
- Check whether all units have passed nitrogen pressure-keeping test for 24 hours with R410A: 40kg/cm^2.
- Confirm whether the system to debugging has been carried out vacuum drying and packed with refrigeration as required.

15.2 Preparation before debugging

- Calculate the additional refrigerant quantity for each set of unit according to the actual length of liquid pipe.
- Keep required refrigerant ready.
- Keep system scheme, system piping diagram and control wiring diagram ready.
- Record the setting address code on the system scheme.
- Turn on power switches of outdoor unit in advance, and keep connected for above 12 hours so that heater heating up refrigerant oil in compressor.
- Turn on gas pipe stop valve, liquid pipe stop valve, oil balance valve and air balance valve totally. If the above valves do not be turned on totally, the unit should be damaged.
- Check whether the power phase sequence of outdoor unit is correct.
- All dial switch of indoor and outdoor units have been set according to the Technical Requirement of Product.

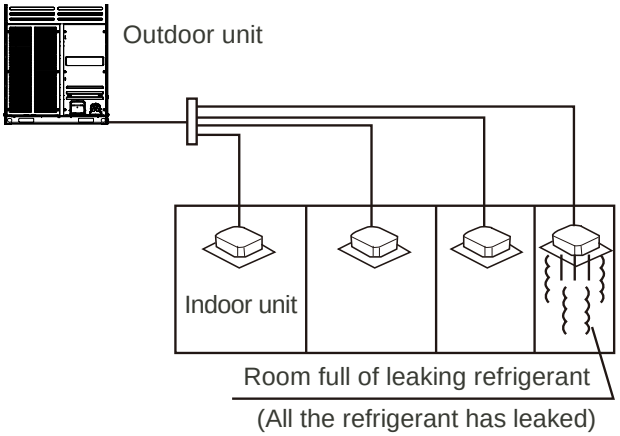
15.3 Fill the name of connected system

To clearly identify the connected systems among two or more indoor units and outdoor units, select names for every system and record them on the nameplate on the outdoor electric control box cover.



15.4 Caution on refrigerant leakage

- This air conditioner adopts R410A as refrigerant, which is safe and noncombustible.
- The room for air conditioner should be big enough that refrigerant leakage cannot reach the critical thickness. Besides this, you can take some action on time.
- R410A critical thickness: 0.3 [kg/m^3], (Critical thickness: the max thickness of Freon without any harm to person)



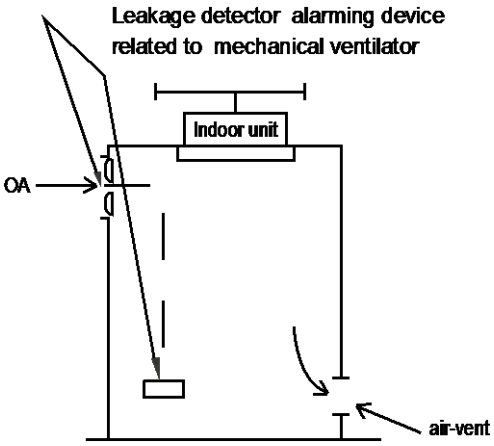
- Calculate the critical thickness through following steps, and take necessary actions.

1. Calculate the refrigerant charge (A [kg])
2. Total refrigerant charge = delivered refrigerant charge (nameplate) + supplemental refrigerant charge
3. Calculate the indoor volume (B [m^3]) (as the minimum volume)
4. Calculate the refrigerant thickness.

$$\frac{\text{A kg}}{\text{B m3}} \leq \text{critical thickness } 0.3\text{kg/m3}$$

- Countermeasure to overhigh refrigerant thickness

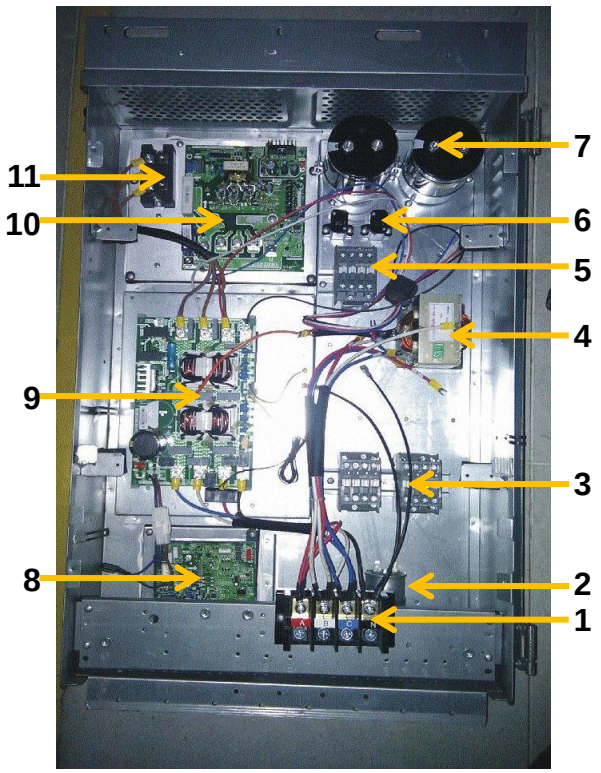
1. Install mechanical ventilator to reduce the refrigerant thickness under critical level. (Ventilate regularly)
2. Install leakage detector alarming device related to mechanical ventilator if you cannot regularly ventilate.



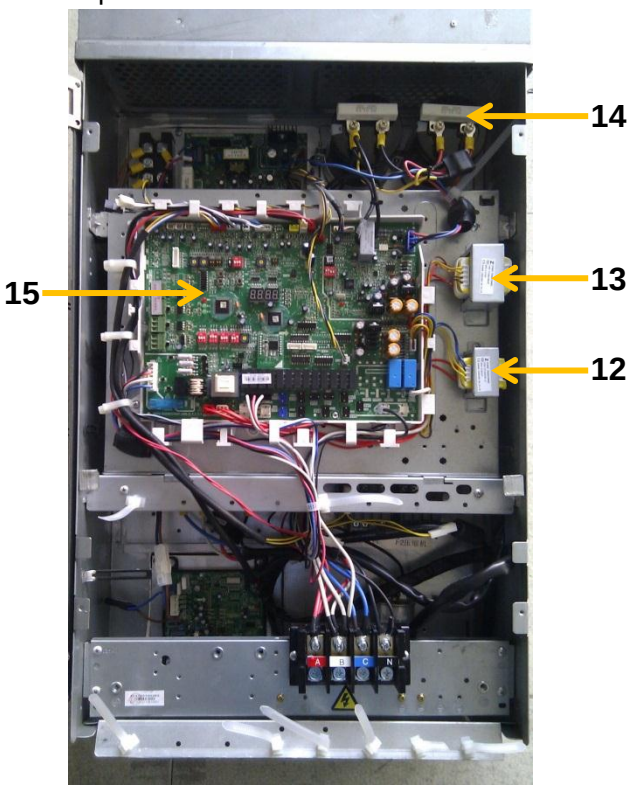
Part 5 Troubleshooting

1. Outdoor electric control box assembly instructions

Top view of lower layer electric control box



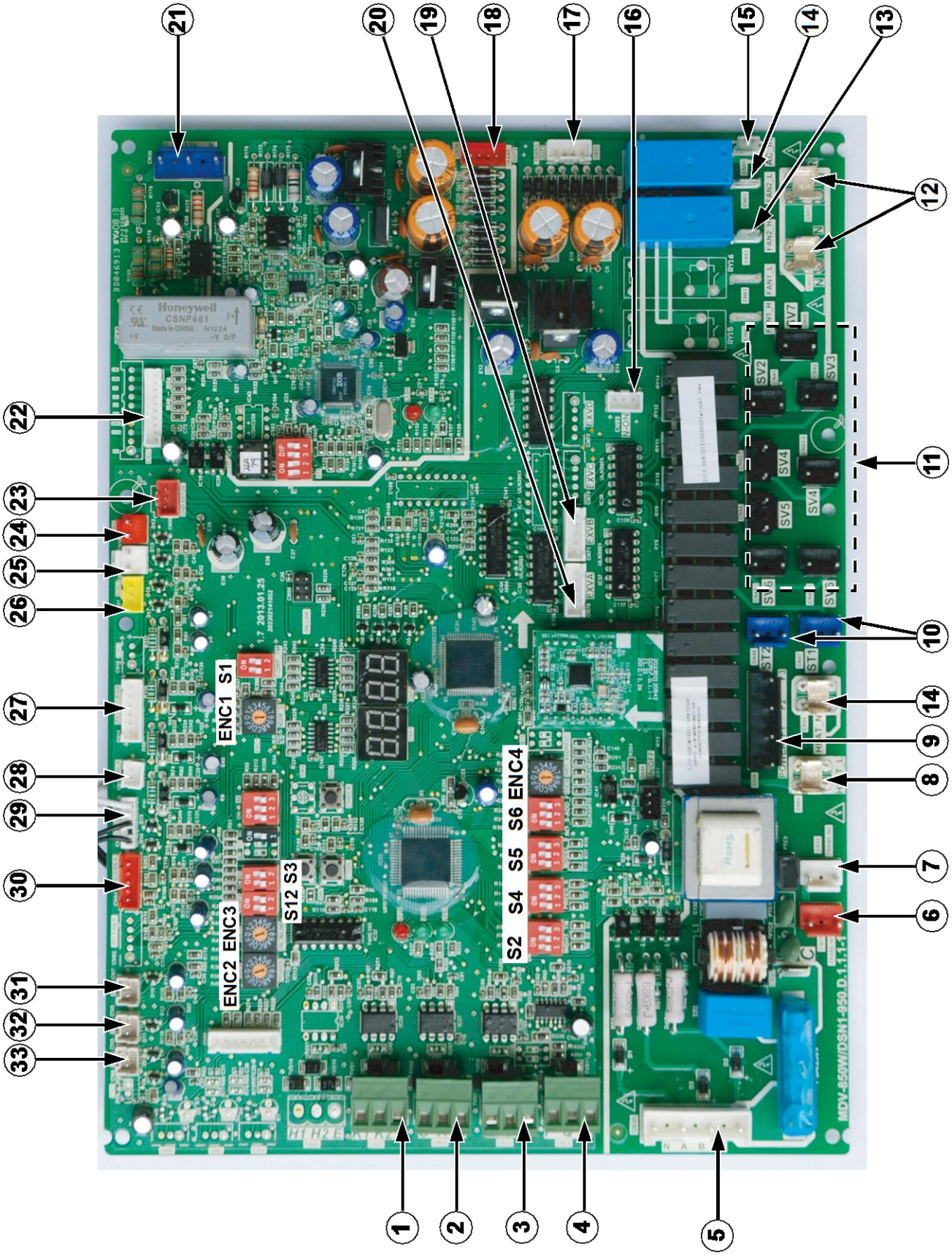
Top view of whole electric control box



No.	Content
1	Terminal, 4P
2	Compressor capacitor
3	Contactor
4	Reactor
5	Contactor
6	Thermistor
7	Aluminum electrolysis capacitor
8	DC fan module
9	Filter board
10	Compressor inverter module
11	Three-phase bridge
12	Transformer
13	Transformer
14	Cement resistor
15	Outdoor main control board

2. Outdoor main control board instructions

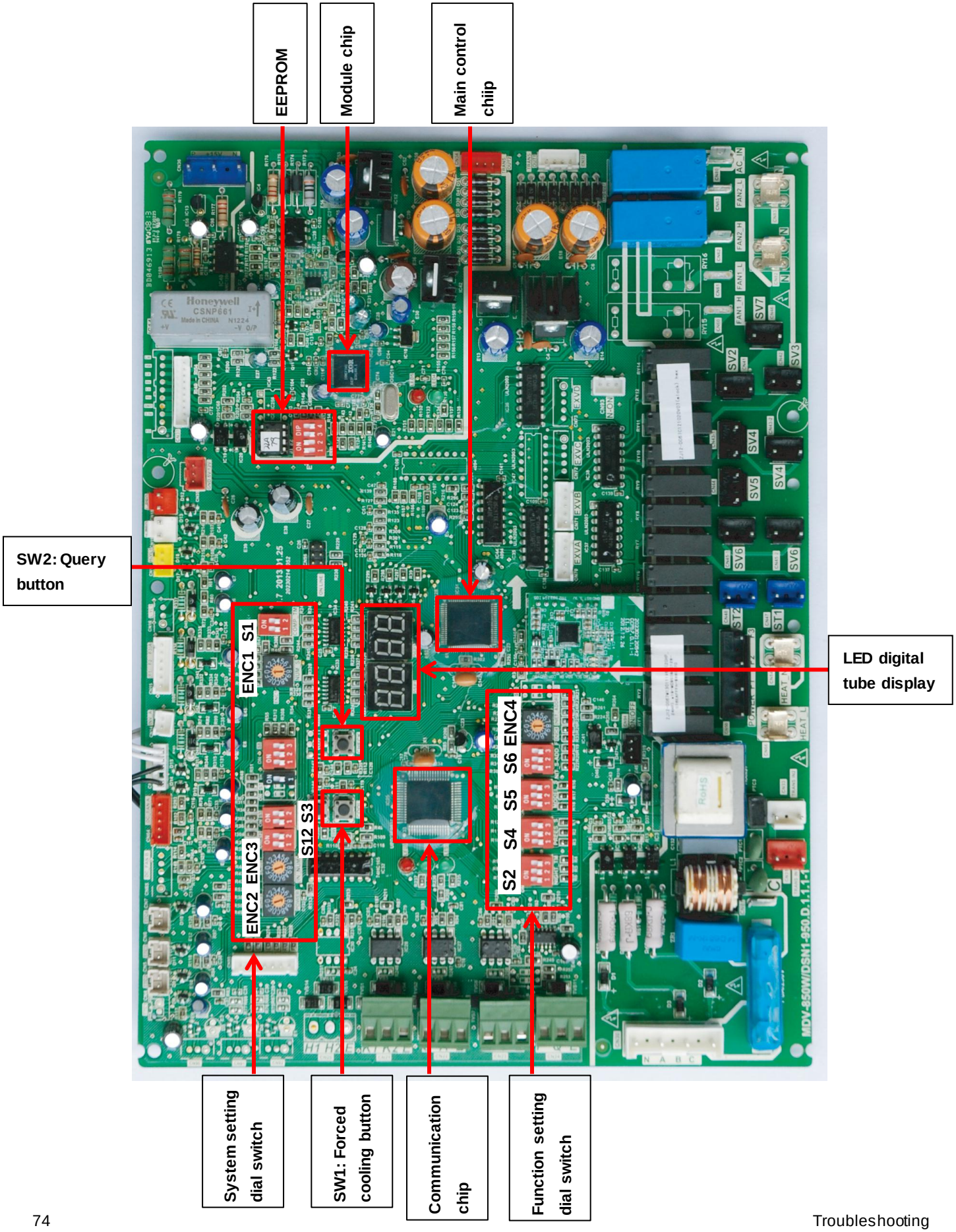
2.1 Main control board ports instructions



Outdoor main control board ports instructions

No.	Port name	Content	Port voltage
1	CN21(K1,K2,E)	Outdoor centralized controller connection port	DC 2.5~2.7V
2	CN22(O,A,E)	Digital electric ammeter connection port	DC 2.5~2.7V
3	CN23(X,Y,E)	Indoor centralized controller connection port	DC 2.5~2.7V
4	CN24(P,Q,E)	Communication port between indoor and outdoor unit	DC 2.5~2.7V
5	CN30(N,A,B,C)	Phase-sequence detection port	380V
6	CN31	Power supply port of No. 1 transformer	220V
7	CN33	Power supply port of No. 2 transformer	220V
8	CN66	Wiring port of inverter compressor heater	220V
9	CN50	Control port of power supply and fixed compressor	220V
10	CN47(ST1)	Output port of four-way valve (ST1)	220V
11	CN41~CN46	Output port of valve (SV2,SV4,SV5,SV6,SV7)	220V
12	CN82,CN83	Zero line connection port	220V
13	CN62	High fan peed control port of AC fan	DC 0~12V
14	CN63	Low fan peed control port of AC fan	DC 0~12V
15	CN80	Power supply port of AC fan	220V
16	CN93	Control port of module power supply	0.3-0.7V (the upper pin) 0.3-0.7V (the medium pin) 12V (the lower pin)
17	CN32	Power output port of No.1 transformer	AC 13.5V (between upper two pins) AC 9V (between under two pins)
18	CN34	Power output port of No.2 transformer	AC 14.5V (between upper two pins) AC 14.5V (between under two pins)
19	CN71	Drive port of EXVB	The first pin on left: DC 12V The other four pins: in dynamic change
20	CN70	Drive port of EXVA	
21	CN36(P,+15V,N)	Voltage detection port of inverter module	DC 540V (between P and N), +DC 15V (between +15V and N)
22	CN37	Drive port of inverter module	The third pin on left: DC 3.3V
23	CN35(GND,5V,12V)	PCB power supply port	+5V(between GND and 5V pins) +12V(between GND and 12V pins)
24	CN18	Signal input port for system low pressure detection switch	DC 0~5V (in dynamic change)
25	CN19	Signal input port for system high pressure detection switch	DC 0~5V (in dynamic change)
26	CN17	System high pressure detection port	DC 0~5V (in dynamic change)
27	CN15	Current detection port of fixed compressor	AC 0~7.8V (in dynamic change)
28	CN14	Current detection port of inverter compressor	AC 0~7.8V (in dynamic change)
29	CN1(T3,T4)	Temperature detection port of ambient temp and condenser temp	DC 0~5V (in dynamic change)
30	CN64	DC fan control port	The first pin on left: DC 5V The other four pins: in dynamic change
31	CN7(T7C4)	Discharge temp detection port of inverter compressor	DC 0~5V (in dynamic change)
32	CN6(T7C3)	Discharge temp detection port of No. 1 fixed compressor	DC 0~5V (in dynamic change)
33	CN5(T7C2)	Discharge temp detection port of No. 2 fixed compressor	DC 0~5V (in dynamic change)

2.2 Main control board parts instructions



2.2.1 Query content instructions

No.	Normal display	Content (present frequency)	Note
1	0.- -	Outdoor unit address	0 (individual type)
2	1.- -	Outdoor unit capacity setting[1]	Refer to note 1
3	2.- -	Outdoor unit quantity	Available for No.0 outdoor unit
4	3.- -	Setting quantity of indoor units	Available for No.0 outdoor unit
5	4.- -	Total capacity of outdoor units	Capacity requirement
6	5.- -	Total capacity requirement of indoor units	Available for No.0 outdoor unit
7	6.- -	Revised total capacity requirements of outdoor unit	Available for No.0 outdoor unit
8	7.- -	Running mode[2]	Refer to note 2
9	8.- -	Actual running capacity of this outdoor unit	Capacity requirement
10	9.- -	No.1 fan speed[3]	Refer to note 3
11	10.- -	No.2 fan speed[3]	Refer to note 3
12	11.- -	T2B/T2 average temperature	Actual value=display value
13	12.- -	T3 pipe temperature	Actual value=display value
14	13.- -	T4 ambient temperature	Actual value=display value
15	14.- -	Discharge temperature of inverter compressor	Actual value=display value
16	15.- -	Discharge temperature of No.1 fixed compressor	Actual value=display value
17	16.- -	Discharge temperature of No.2 fixed compressor	Actual value=display value
18	17.- -	Reserved	/
19	18.- -	Saturation temperature according to discharge pressure	Actual value=display+30
20	19.- -	Inverter compressor current	Actual value=display value
21	20.- -	No.1 fixed compressor current	Actual value=display value
22	21.- -	No.2 fixed compressor current	Actual value=display value
23	22.- -	Reserved	/
24	23.- -	EXVA opening degree	Pulsed value=display value×8
25	24.- -	EXVB opening degree	Pulsed value=display value×8
26	25.- -	High pressure value	Actual value=display value×10
27	26.- -	Indoor units quantity	Actual value=display value
28	27.- -	Running indoor units quantity	Actual value=display value
29	28.- -	Mode priority[4]	Refer to note 4
30	29.- -	Silent mode[5]	Refer to note 5
31	30.- -	Static pressure mode[6]	Refer to note 6
32	31.- -	DC voltage	Actual value=display value
33	32.- -	Reserved	/
34	33.- -	The last error or protection code	Display 888 when there has no error of
35	- -	- -	Over

Note:

When the outdoor unit is in standby, the LED digital tube will display the indoor unit's quantity which can communicate with outdoor unit, and it will display inverter compressor running frequency when there has capacity requirement.

1. Outdoor unit capacity setting: capacity code 6—20HP; capacity code 7—22HP; capacity code 8—24HP.

2. Running mode: 0—closed; 2—cooling mode; 3—heating mode; 4—forced cooling mode.

3. Fan speed: 0—closed; 1~15—fan speed increase in sequence.

4. Mode priority: 0—heating priority; 1—cooling priority; 2—No.63 indoor unit running mode priority when there has No.63 indoor unit or larger capacity requirement priority when there has on No.63 indoor unit; 3—only response to heating; 4—only response to cooling.

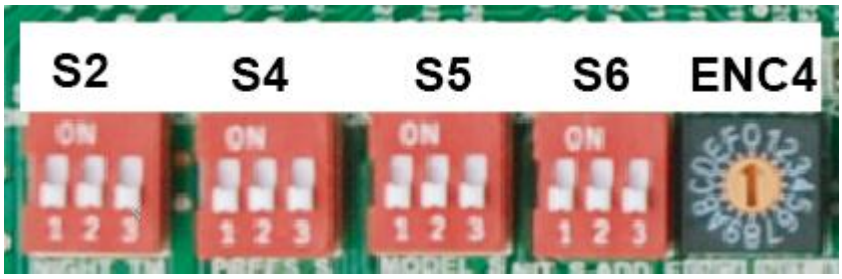
5. Silent mode: 0—nighttime silent mode; 1—silent mode; 2—super silent mode; 3—no silent mode.

6. Static pressure mode: 0—no static pressure; 1—low static pressure; 2—medium static pressure; 3—high static pressure.

2.2.2 System setting dial switches instructions

ENC2: Outdoor unit capacity setting	
ENC2	Outdoor unit capacity setting: 0-8 are available (6-8 stand for 8-24HP)
ENC3+S12: Quantity of indoor units setting	
ENC3 S12 ON	Quantity of indoor units is setting as 0-15
ENC3 S12 ON	Quantity of indoor units is setting as 16-31
ENC3 S12 ON	Quantity of indoor units is setting as 32-47
ENC3 S12 ON	Quantity of indoor units is setting as 48-63
S3: Silent mode selection	
S3 ON 1 2	Nighttime silent mode (factory default)
S3 ON 1 2	Silent mode
S3 ON 1 2	Super silent mode
S3 ON 1 2	No silent mode
ENC1: Outdoor unit address setting	
ENC1	Outdoor units address setting: 0-3 is available. 0—main unit; 1~3—slave units (only 0 is available for individual series)
S1: Starting time setting	
S1 ON 1 2	Starting time is 5 minutes
S1 ON 1 2	Starting time is 12 minutes (factor default)

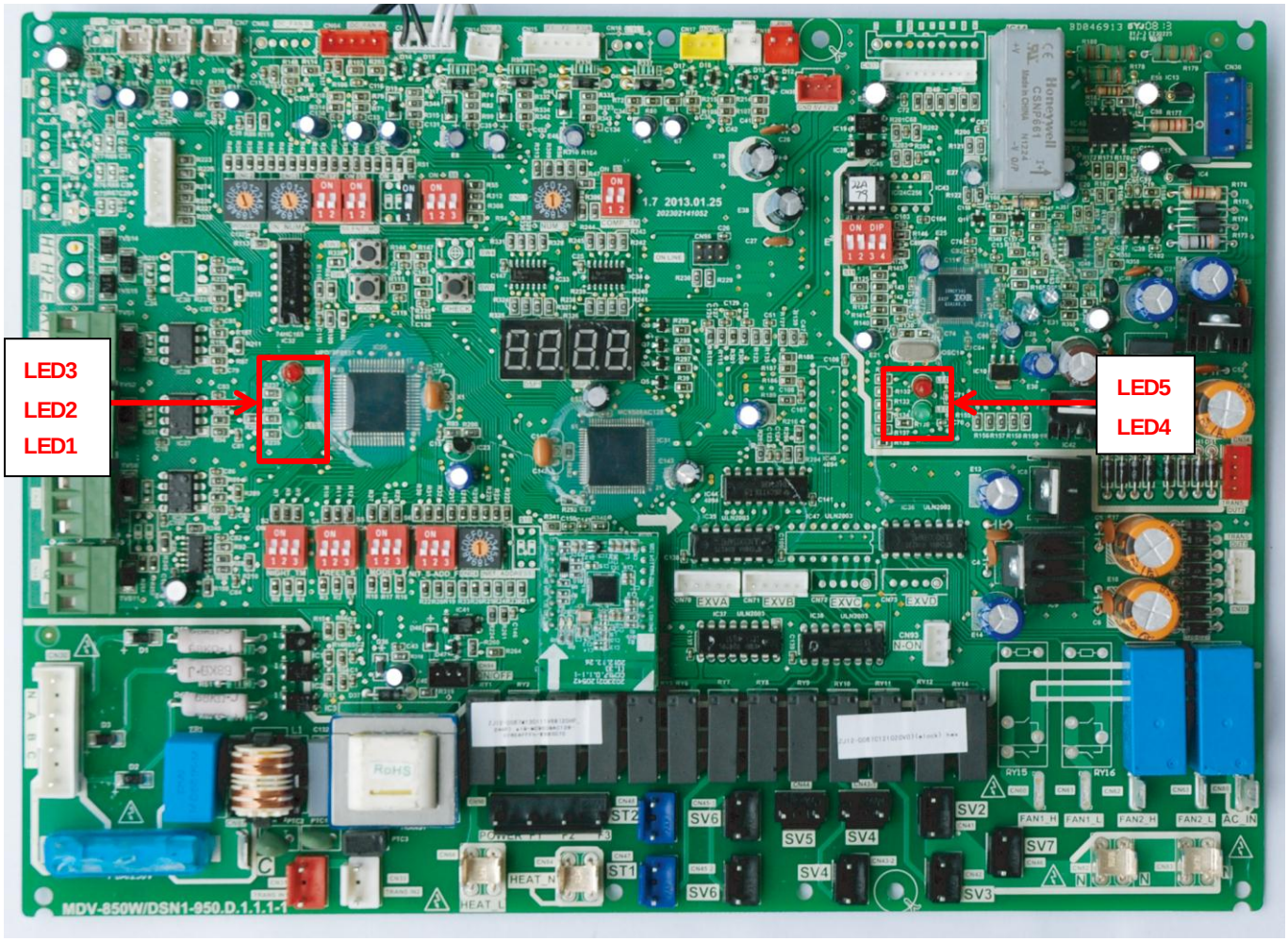
2.2.3 Function setting dial switches instructions



S2: Night silent time selection	
	Nighttime silent time 6h/10h (factory default)
	Nighttime silent time 6h/12h
	Nighttime silent time 8h/10h
	Nighttime silent time 8h/12h
S4: Static pressure mode selection	
	No static pressure mode (factory default)
	Low static pressure mode (should be customized)
	Medium static pressure mode (should be customized)
	High static pressure mode (should be customized)

S5: Locking modes selection	
	Heating priority mode (factory default)
	Cooling priority mode
	No.63 indoor unit running mode priority when there has No.63 indoor unit or larger capacity requirement priority when there has on No.63 indoor unit
	Only response to heating mode
	Only response to cooling mode
S6: Addressing mode selection	
	Auto addressing mode
	Manual addressing mode (factory default)
	Clean the indoor unit address (only available for auto searching new indoor unit)
ENC4: Outdoor unit network address setting	
	Outdoor unit network address setting (0-7 is effective)

2.3 LED on main control board instructions



LED1: Power supply indicator lamp of network centralized control chip. The lamp will be on if the power supply is normal.

LED2: Running indicator lamp of network centralized control chip. The lamp will be on if the system running is normal.

LED3: Malfunction indicator lamp of network centralized control chip. The lamp will flash in Three-phase phase sequence protection.

LED4: Malfunction indicator lamp of inverter module. The lamp will flash if the inverter module is faulty and the error code will display on digital tube.

LED5: Running indicator lamp of inverter module. The lamp will be on if the compressor is running.

3. Error code table

Error code	Content
E0	Outdoor unit address error
E1	Phase sequence error
E2	Indoor units and master unit communication error
E3	Reserved
E4	Pipe temp T3/ambient temp T4 sensor error
E5	Voltage error
E6	Reserved
E7	Discharge temp sensor error
E8	Reserved
H0	Communication error between main control chip and module chip
H1	Communication error between main control chip and communication chip
H4	P6 protection appears three times in 60 minutes
H5	P2 protection appears three times in 60 minutes
H6	P4 protection appears three times in 100 minutes
H7	Quantity of indoor units decrease
H8	High pressure sensor error
H9	P9 protection appears three times in 60 minutes
HC	Outdoor unit capacity setting of dial switch error (only 6,7,8 are available for 20-24HP individual series)
P0	Top temperature protection of inverter compressor
P1	High pressure protection
P2	Low pressure protection
P3	Current protection of inverter compressor
P4	Discharge temperature protection
P5	Pipe temperature protection
P6	Module protection (don't display)
XP7	Current protection of No.X fixed compressor (X refers to fixed compressor sequence number)
P8	Reserved
P9	Module protection of DC fan
L0	Inverter module error
L1	Low voltage protection of DC generatrix
L2	High voltage protection of DC generatrix
L3	Reserved
L4	MCE error/ synchronization/ closed loop
L5	Zero speed protection
L6	Reserved
L7	Phase sequence error
L8	Frequency difference in one second more than 15Hz protection
L9	Frequency difference between the real and the setting frequency more than 15Hz protection

Note: P6, L0~L9 error codes can't display on digital tube automatically, these error codes will display on digital tube only through SW3 button (pressure SW3 ten times, every one second for a time)

The large capacity V4+ individual system (20/22/24HP) have the function of refrigerant volume automatic judgment.

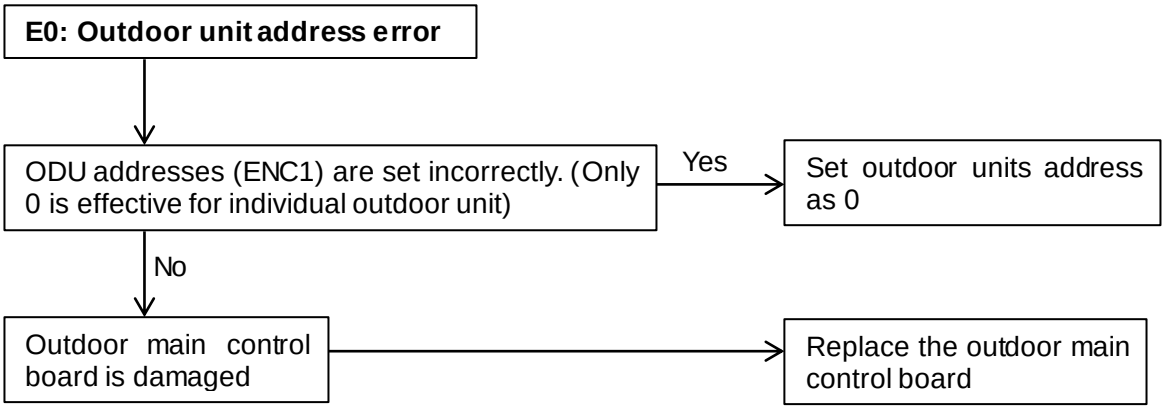
When all the indoor units are in cooling or heating mode, the system will be in refrigerant volume judgment mode automatically. If the system judges that the refrigerant volume is normal, the system will operate normally, no error code will display. If the system judges that the refrigerant volume is abnormal, corresponding error code will display on digital tube.

When only partial indoor units are in cooling or heating mode, the system will not judge the refrigerant volume and the digital tube will reserve the last judging result.

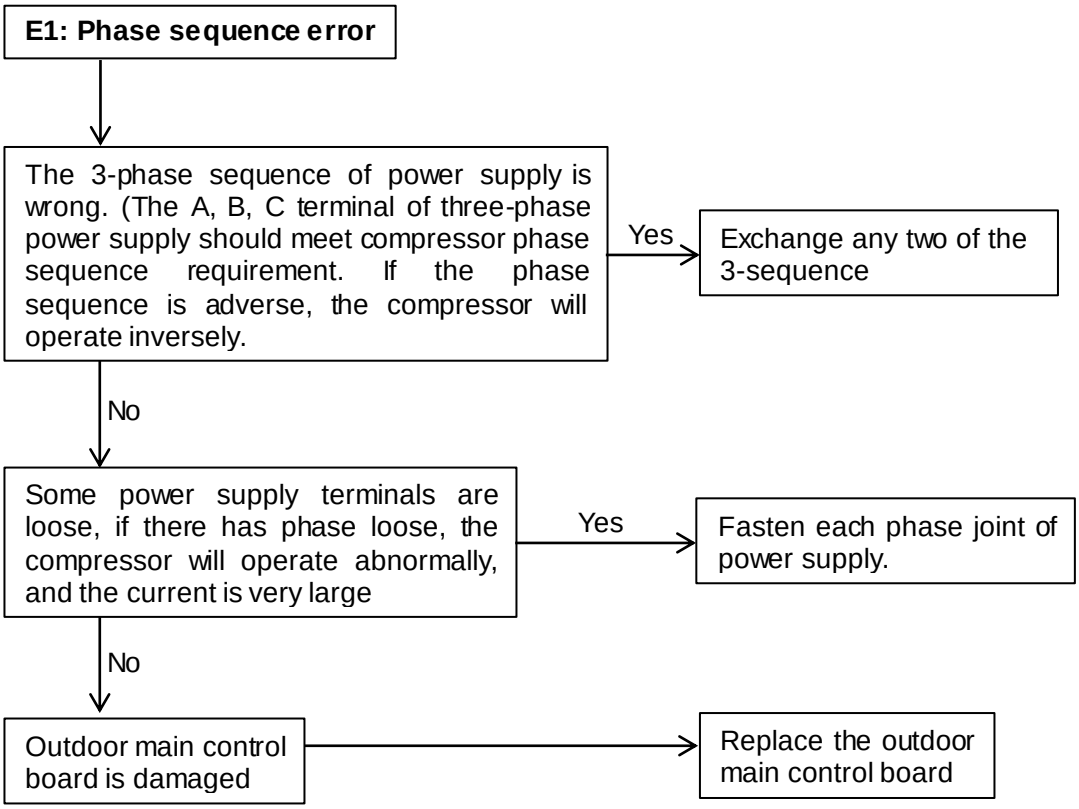
Error code	**Content**
r1	Lack of refrigerant
r2	Obvious lack of refrigerant
r3	Serious lack of refrigerant
R1	Too much refrigerant
R2	Serious too much refrigerant

4. Troubleshooting

4.1 E0: Outdoor unit address error



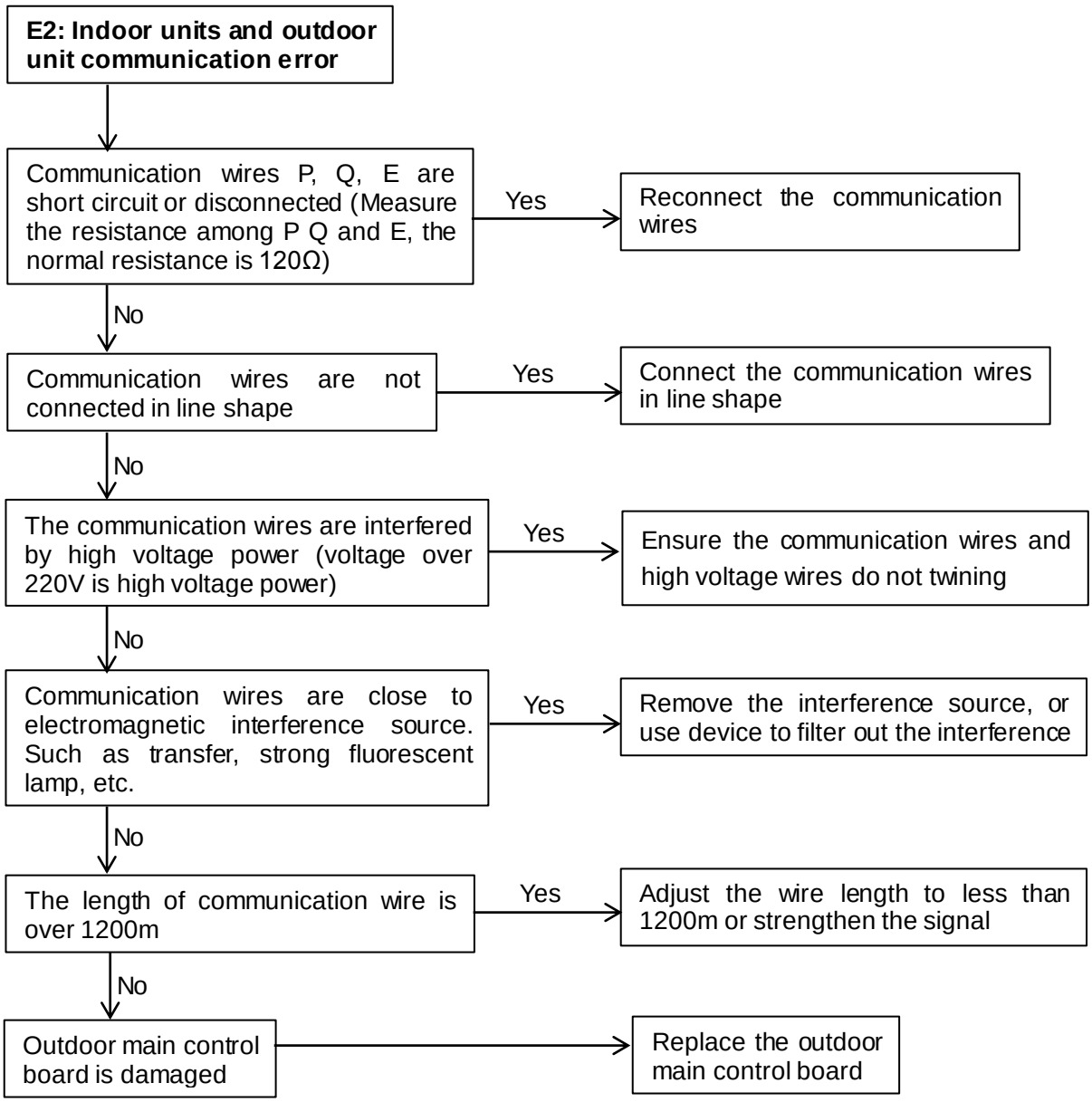
4.2 E1: Phase sequence error



Note:

If the wiring connection of each outdoor unit is according to A, B, C phase sequence, when the quantity of outdoor units is large, the current difference between C phase and A, B phase will be very large for the power supply load of each outdoor unit is on C phase, it is very easy to lead to air switch break and wiring terminal burnout. So when the quantity of outdoor units is large, the phase sequence should be staggered, then the current can be distributed to the three phases equally.

4.3 E2: Indoor units and outdoor unit communication error



Note:

1. Press indoor unit's receiver button for 5 seconds, the indoor unit's communication address code is displayed; press it for 10 seconds, power code is displayed. Check every unit's address code.

Codes are as follows:

Director light	Running	Timer	Fan/defend cold fan	Warning
Code	8	4	2	1

Address	0	1	2	3	4	5	6	7	8	9
Capacity (×100W)	22	28	36	45	56	71	80	90	112	140
HP	0.8	1.0	1.2	1.6	2.0	2.5	3.0	3.2	4.0	5.0

For example:

Press the button for 5 seconds:

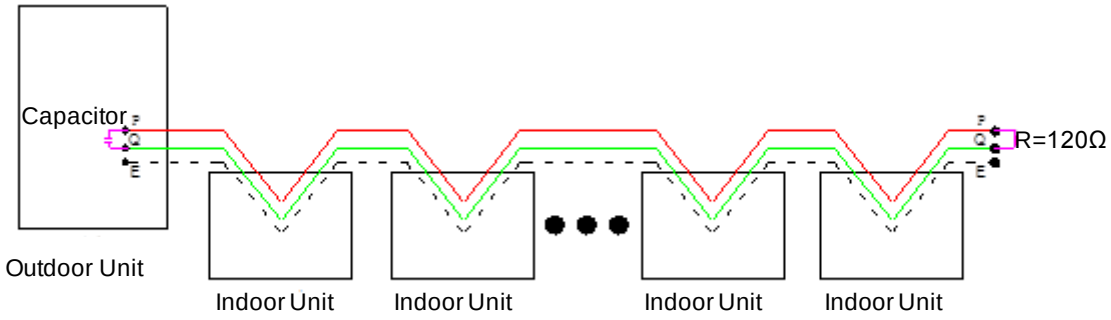
If the "running" and "warning" lights are normally on, that means the address code is 9=(8＋1)

If the lights are blink, the address code should plus 16, so the address code is 25=16＋(8＋1)

Press the button for 10 seconds:

If the "timer" and "warning" lights are normally on, that means the capacity code is 5=(4＋1) and the capacity of indoor unit is 71×100W(2.5HP).

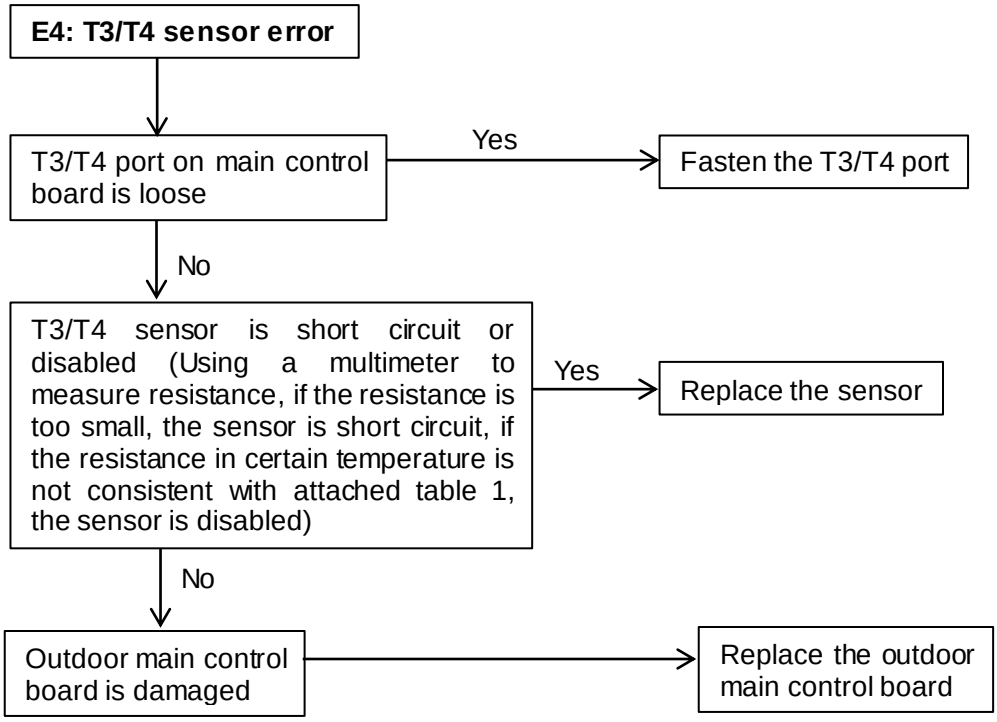
2. If the signal is weak, connect a 120Ω resistor between P and Q of the farthest indoor unit, or connect a 0.5-1.5uF capacitor between P and Q of outdoor unit. Installation refers to the following picture:



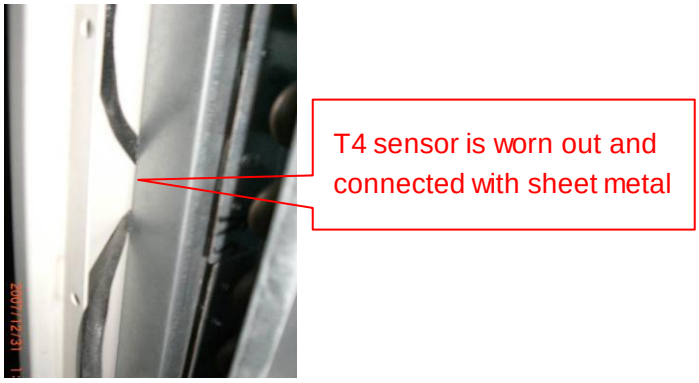
Note:

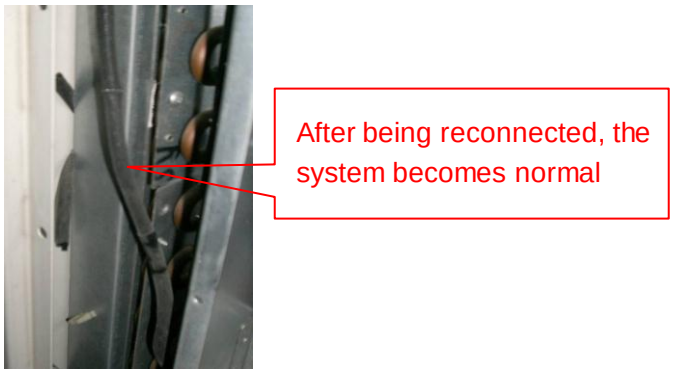
Communication wires should be shield wire and indoor units should be connected in series.

4.4 E4: Pipe temp T3/ambient temp T4 sensor error

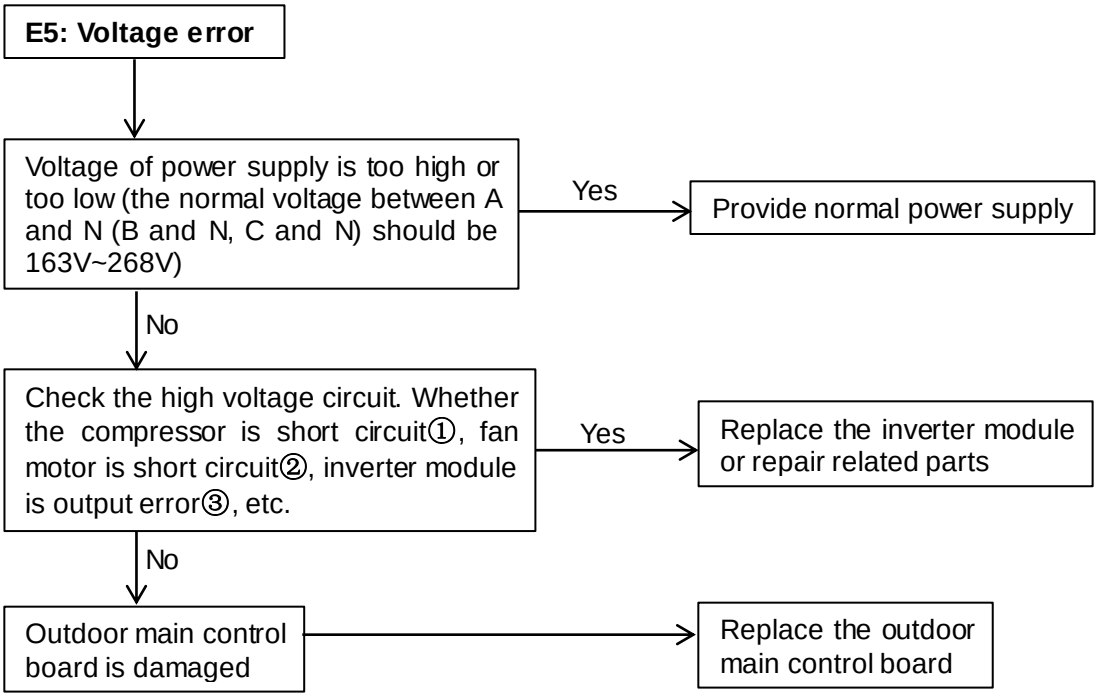


Case: There is no display on main control board, and the problem still exists after replacing main control board. Voltage values on measuring plate (such as 220V, 5V, 12V, etc.) are normal; after measuring resistance value of sensor, find that T4 thermo-bulb is earth-continuity, and further discover that the thermal cable of T4 sensor is punched by bolt, as follows:





4.5 E5: Voltage error



Note:

1. How to check whether the compressor is short circuit①:

The normal resistance value of inverter compressor among U V W is 0.7~1.5Ω, and infinity to earth. If the resistance value is out of the range, the compressor is abnormal.

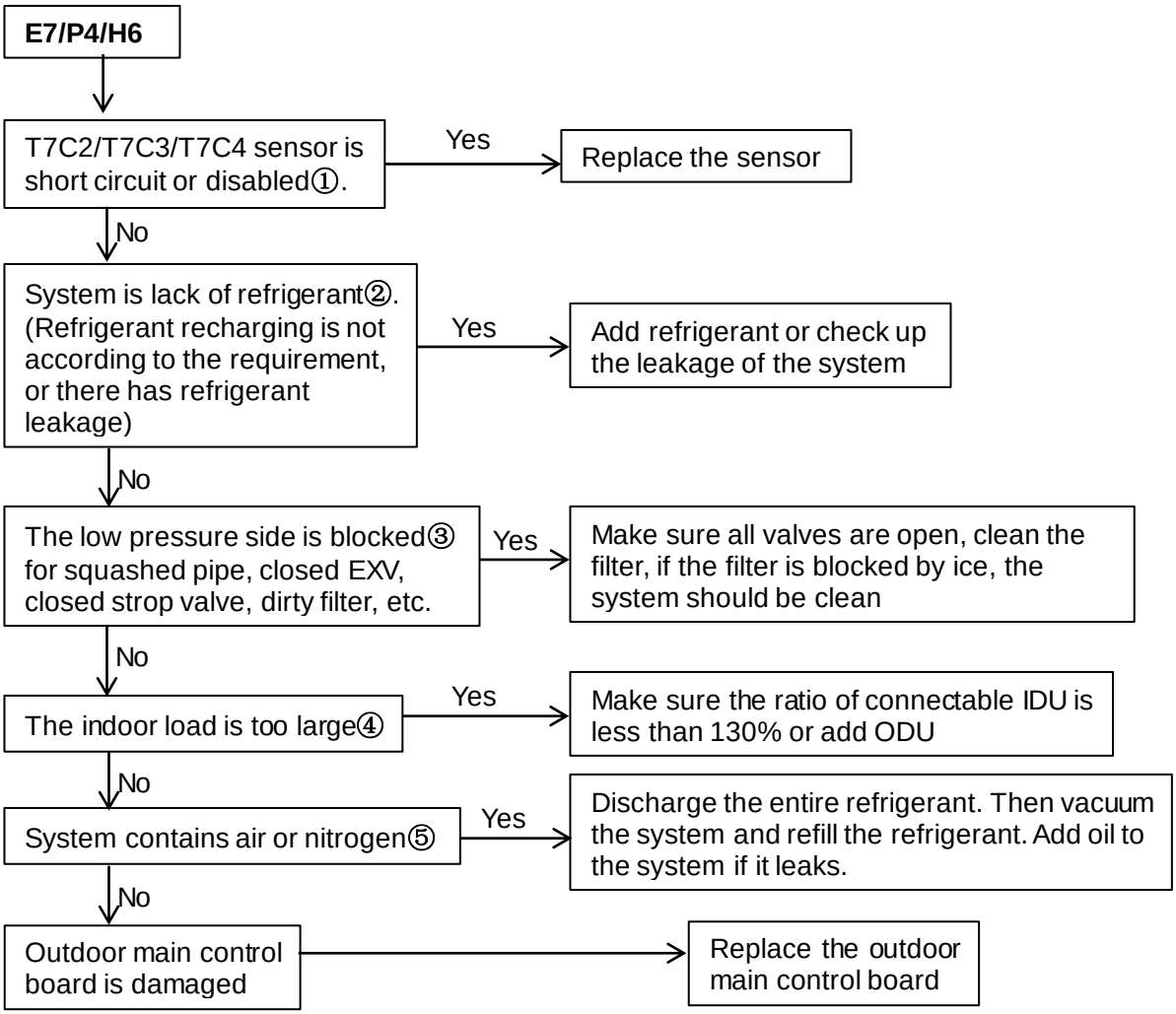
2. How to check whether the fan motor is short circuit②:

The normal value of DC fan motor coil among U V W is less than 10Ω, and the value of AC fan motor coil is from a few ohm to hundreds of ohm for different fan motor model. If the measured value is 0Ω, the fan motor is short circuit.

3. How to check whether the inverter module is output error③:

Let PN and UVM of inverter module short circuit, then dial multimeter to buzzer file, if the multimeter is ring, the inverter module is output error.

4.6 E7: Discharge temp sensor error; P4: Discharge temperature protection; H6: P4 protection appears three times in 100 minutes



Note:

H6 error cannot resume automatically, and it can resume only by restarting the machine.

1. How to check whether the T7C2/T7C3/T7C4 sensor is short circuit or disabled①:

Using a multimeter to measure resistance, if the resistance is too small, the sensor is short circuit, if the resistance in certain temperature is not consistent with attached table 2, the sensor is disabled

2. The phenomenon of lack of refrigerant②:

Top temperature and discharge temperature of all compressors are higher than normal value, discharge pressure and suction pressure are both lower than normal value, current is lower than normal value, suction pipe may be frosting. All the phenomenon will disappear after recharging refrigerant.

3. The phenomenon of the low pressure side is blocked③:

The discharge temperature is higher than normal value*, low pressure is lower than normal value*, current is lower than normal value* and suction pipe may be frosting.

4. The phenomenon of the indoor load is too large④:

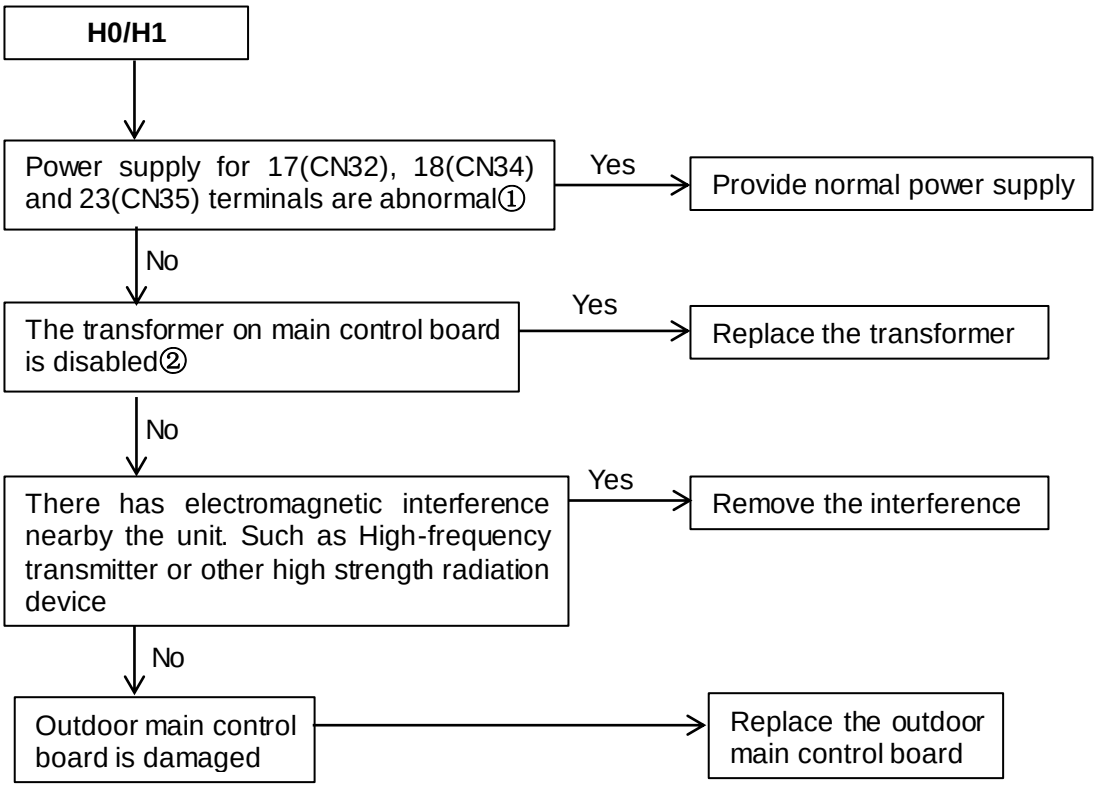
The suction temperature and discharge temperature are both higher than normal value.

5. The phenomenon of the system contains air or nitrogen⑤:

The high pressure is higher than normal value, current is larger than normal value, discharge temperature is higher than normal value, compressor makes noise, pressure meter do not display steady.

*The normal system running parameters please refer to attached table 3.

4.7 H0: Communication error between main control chip and module chip; H1: Communication error between main control chip and communication chip



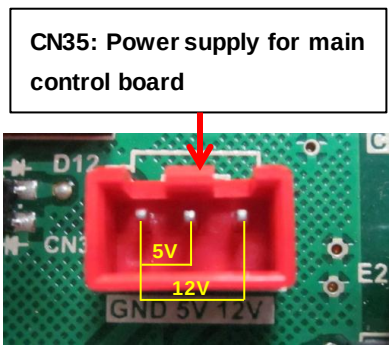
Note:

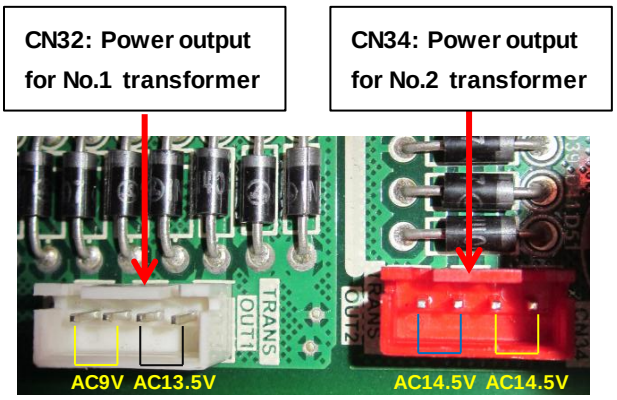
1. How to check whether power supply of 17(CN32), 18(CN34) and 23(CN35) ports are abnormal①

The voltage input for 17(CN32) and 18(CN34) ports are both 220V, the voltage input between "GND" and "+5V" terminals of 23(CN35) port is 5V, and between "GND" and "+12V" terminals of 23(CN35) port is 12V.

2. How to check whether the transformer on main control board is disabled②

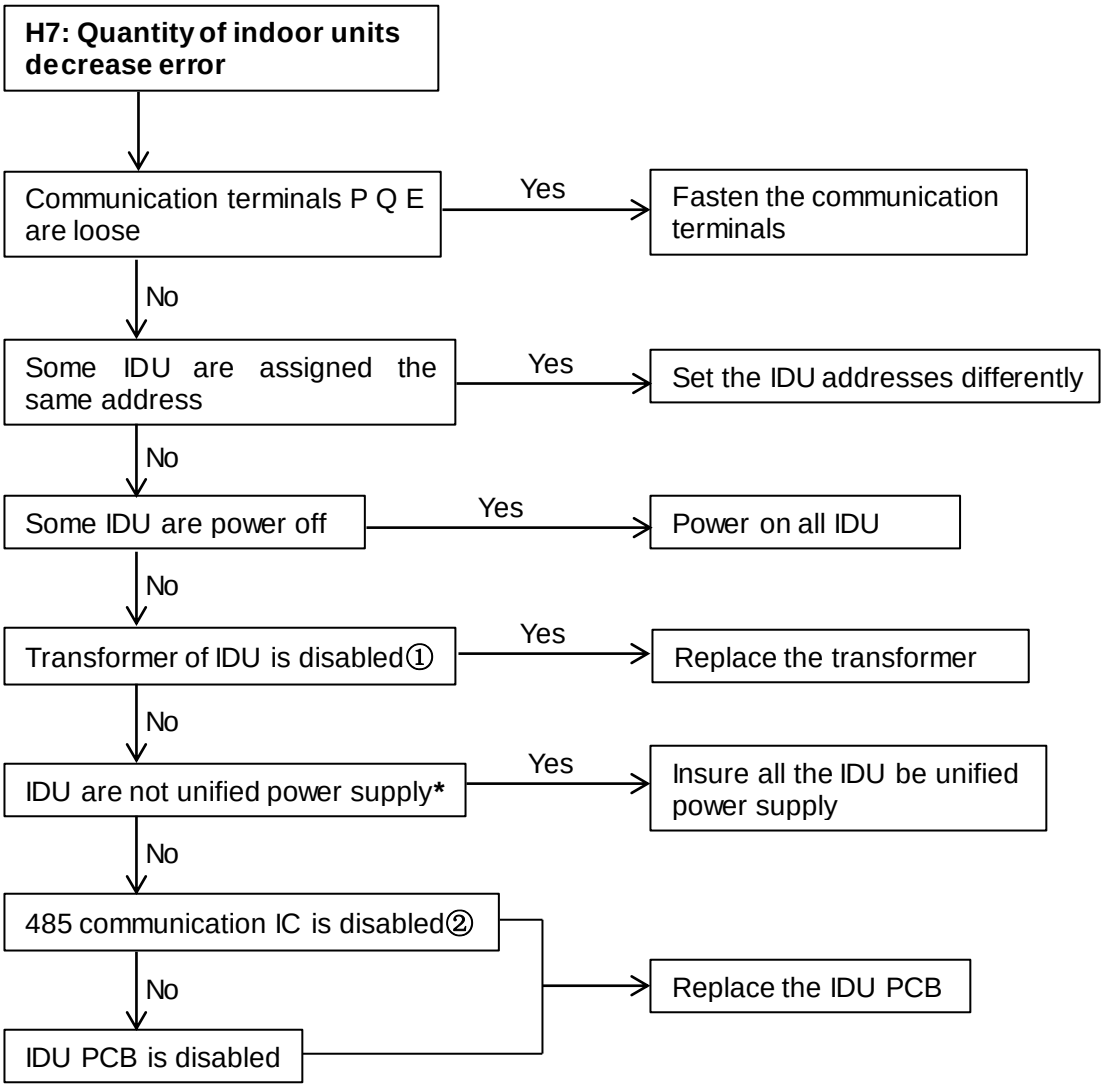
The voltage input of transformers 6(CN31) and 7(CN33) terminals are both 220V, the voltage output of transformer 17(CN32) terminal is AC9V (between left two pins) and AC13.5V (between rights two pins); the voltage output of transformer 18(CN34) terminal is AC14.5V (between left two pins) and AC 14.5V (between rights two pins). If the voltage is out of the range, the transformer is disabled.





4.8 H7: Quantity of indoor units decrease error

H7 error will display when the quantity of indoor units decrease above 3 minutes.



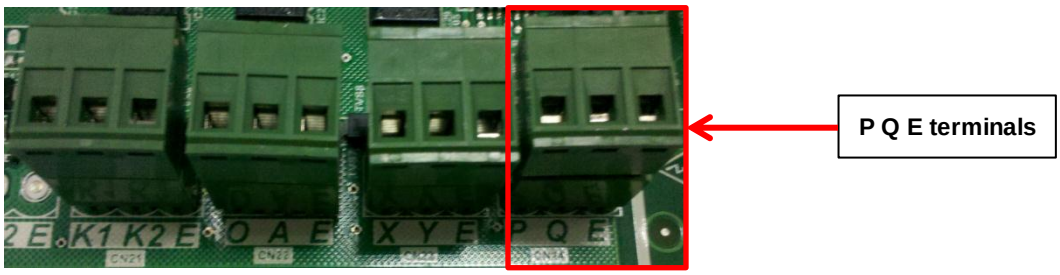
Note:

1. How to check whether the transformer of IDU is disabled①

The voltage input for IDU transformer is 220V, the voltage output of is AC9V (yellow-yellow) and AC13.5V (brown-brown)

2. How to check whether the 485 communication IC is disabled②

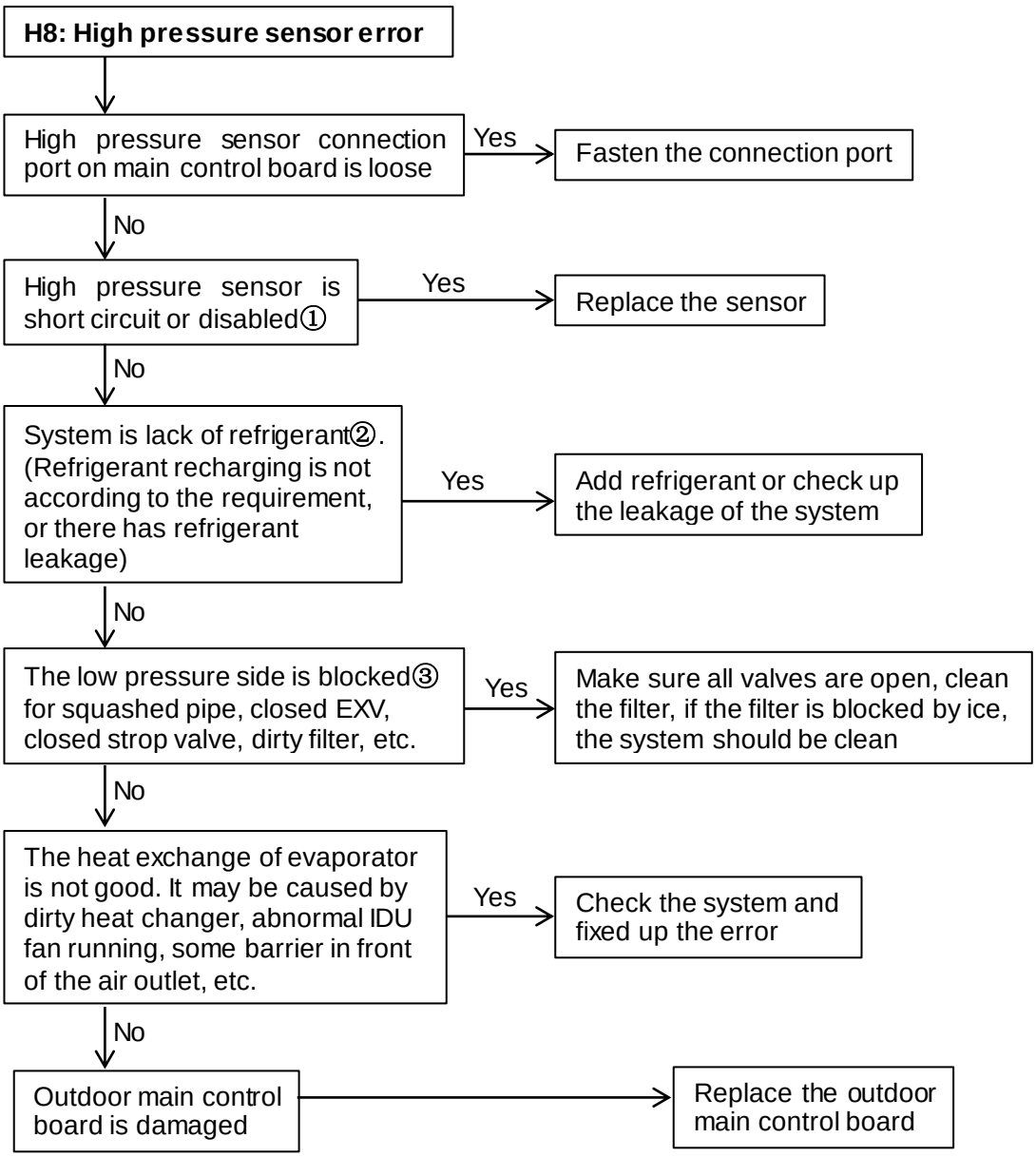
The normal voltage between "P" and "GND" is DC2.5~2.7V, between "Q" and "GND" is DC2.5~2.7V. If the voltage is out of the normal range, the 485 communication IC is disabled.



*Indoor units should be unified power supply, which can prevent compressor from liquid hammer caused by dropped indoor units with EXV unclosed.

4.9 H8: High pressure sensor error

When the discharge pressure is lower than 0.3MPa, the system will display H8 error, the ODU in standby. When the discharge pressure is back to normal, H8 disappears and normal operation resumes.



Note:

1. How to check whether the high pressure sensor is short circuit or disabled①

Measure the resistance among the three terminals of the pressure sensor, if the resistance value is megohm or infinite, the pressure sensor is disabled, otherwise, it may be normal.

2. The phenomenon of lack of refrigerant②:

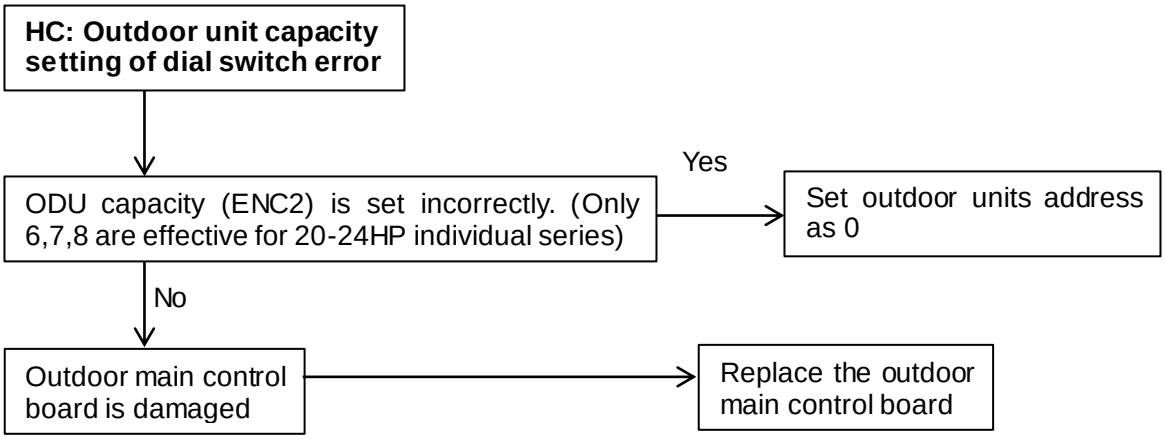
Top temperature and discharge temperature of all compressors are higher than normal value, discharge pressure and suction pressure are both lower than normal value, current is lower than normal value, suction pipe may be frosting. All the phenomenon will disappear after recharging refrigerant.

3. The phenomenon of the low pressure side is blocked③:

The discharge temperature is higher than normal value*, low pressure is lower than normal value*, current is lower than normal value* and suction pipe may be frosting.

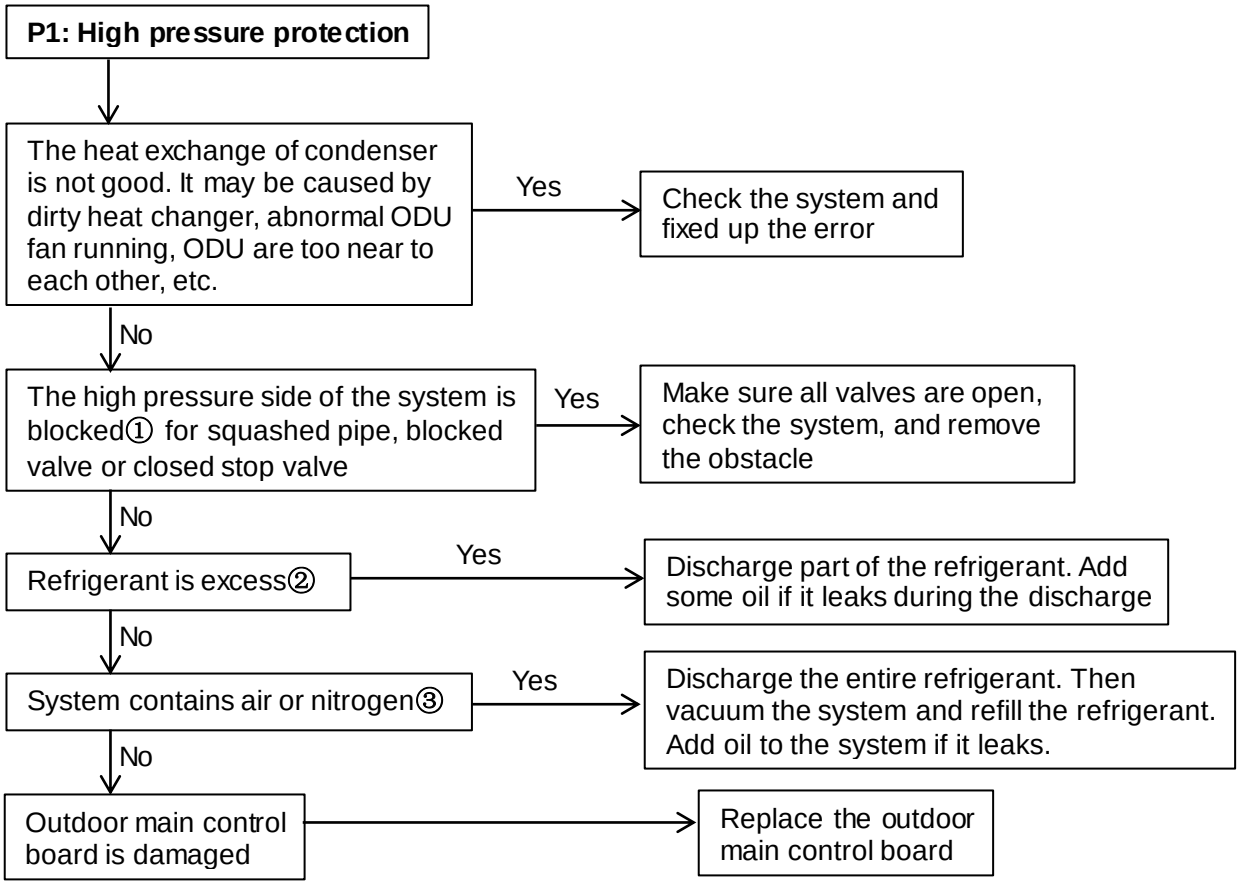
*The normal system running parameters please refer to attached table 3.

4.10 HC: Outdoor unit capacity setting of dial switch error



4.11 P1: High pressure protection

When the pressure is over 4.4MPa, the system will display P1 protection, the ODU in standby. When the pressure is lower than 3.2MPa, P1 disappears and normal operation resumes.



Note:

1. The phenomenon of The high pressure side of the system is blocked①:

The high pressure is higher than normal value, the low pressure is lower than normal value, and the discharge temperature is higher than normal value.

2. The phenomenon of the refrigerant is excess②:

The high pressure is higher than normal value, the low pressure is higher than normal value, and the discharge temperature is lower than normal value.

3. The phenomenon of the system contains air or nitrogen③:

The high pressure is higher than normal value, current is larger than normal value, discharge temperature is higher than normal

value, compressor makes noise, pressure meter do not display steady.

*The normal system running parameters please refer to attached table 3.

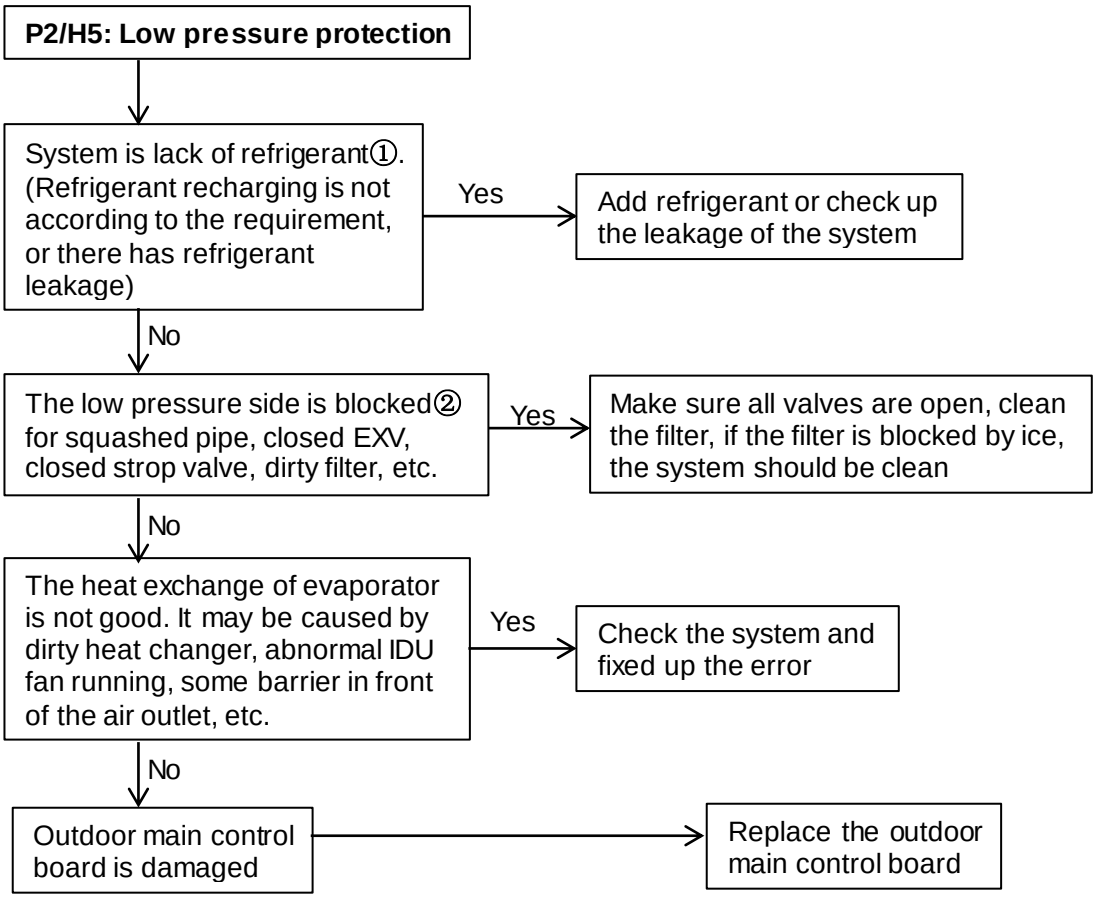
*If the system install three-phase protector, and the three-phase protector connect with high pressure switch in series connection, the system will display P1 protection when fist power on, and P1 protection will disappear after system is steady.

*If the system install three-phase protector, and the three-phase protector connect with low pressure switch in series connection, the system will display P2 protection when fist power on, and P2 protection will disappear after system is steady.

4.12 P2/H5: Low pressure protection

When the pressure is lower than 0.05MPa, the system will display P2 protection, the ODU in standby. When the pressure is higher than 0.15MPa, P2 disappears and resumes normal operation.

H5 error will display when system appear 3 times P2 protection in 60 minutes, it cannot resume automatically, and it can resume only by restarting the machine.



Note:

1. The phenomenon of lack of refrigerant①:

Top temperature and discharge temperature of all compressors are higher than normal value, discharge pressure and suction pressure are both lower than normal value, current is lower than normal value, suction pipe may be frosting. All the phenomenon will disappear after recharging refrigerant.

2. The phenomenon of the low pressure side is blocked②:

The discharge temperature is higher than normal value*, low pressure is lower than normal value*, current is lower than normal value* and suction pipe may be frosting.

*The normal system running parameters please refer to attached table 3.

*If the system install three-phase protector, and the three-phase protector connect with high pressure switch in series connection, the system will display P1 protection when fist power on, and P1 protection will disappear after system is steady.

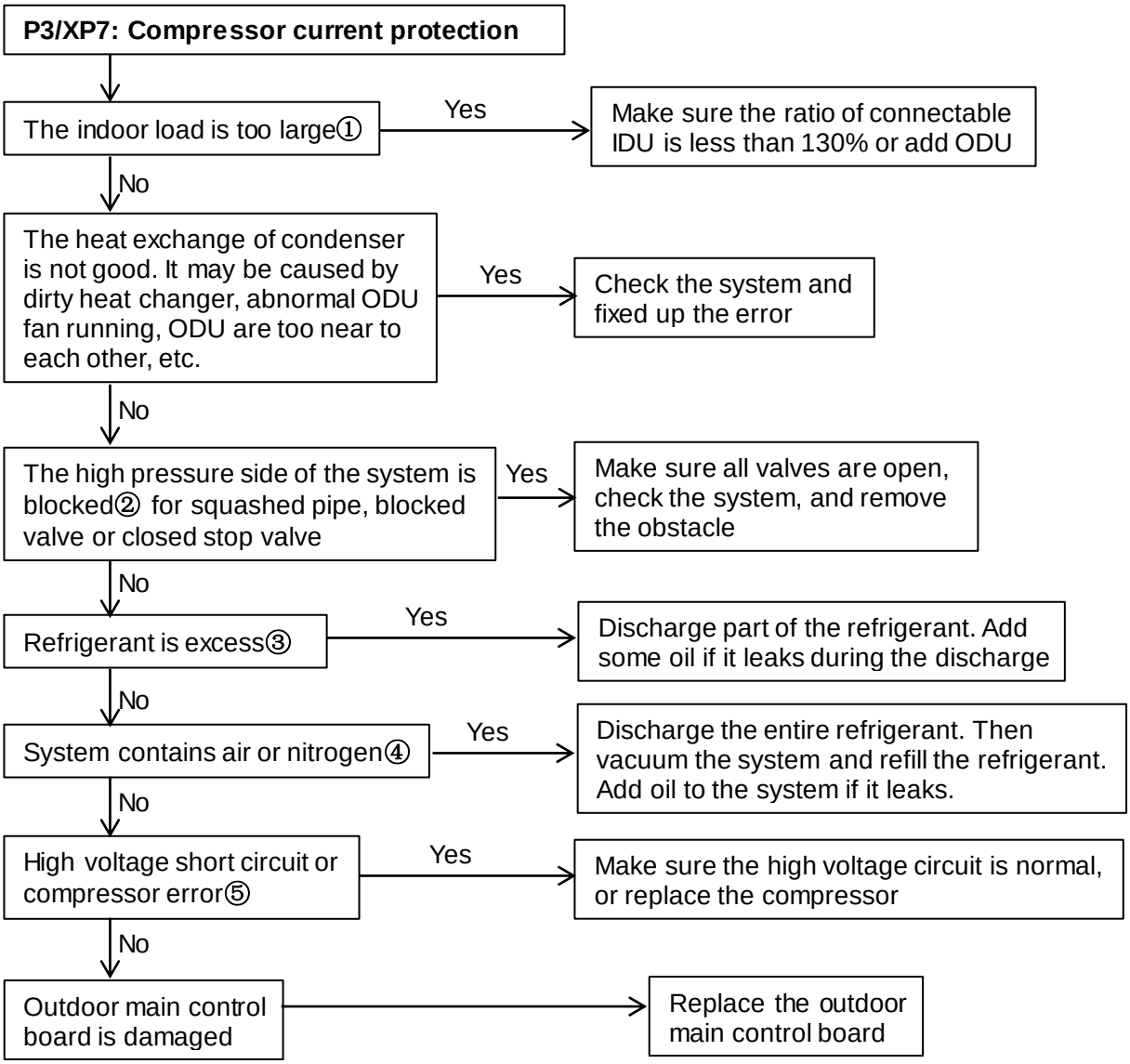
*If the system install three-phase protector, and the three-phase protector connect with low pressure switch in series connection, the system will display P2 protection when fist power on, and P2 protection will disappear after system is steady.

4.13 P3: Current protection of inverter compressor; XP7: Current protection of No.X fixed compressor (X refers to fixed compressor sequence number)

P3: When the current of inverter compressor is over12A, the system will display P3 protection, the ODU in standby. When the current goes back to normal range, P3 disappears and normal operation resumes.

XP7: Current protection of No.1/No.2 fixed compressor

When the current of fixed compressor is over 17A, the system will display P7 protection, the ODU in standby. When the current goes back to normal range, P7 disappear and normal operation resumes.



Note:

1. The phenomenon of the indoor load is too large①:

The suction temperature and discharge temperature are both higher than normal value.

2. The phenomenon of The high pressure side of the system is blocked②:

The high pressure is higher than normal value, the low pressure is lower than normal value, and the discharge temperature is higher than normal value.

3. The phenomenon of the refrigerant is excess③:

The high pressure is higher than normal value, the low pressure is higher than normal value, and the discharge temperature is lower than normal value.

4. The phenomenon of the system contains air or nitrogen④:

The high pressure is higher than normal value, current is larger than normal value, discharge temperature is higher than normal

value, compressor makes noise, pressure meter do not displaysteady.

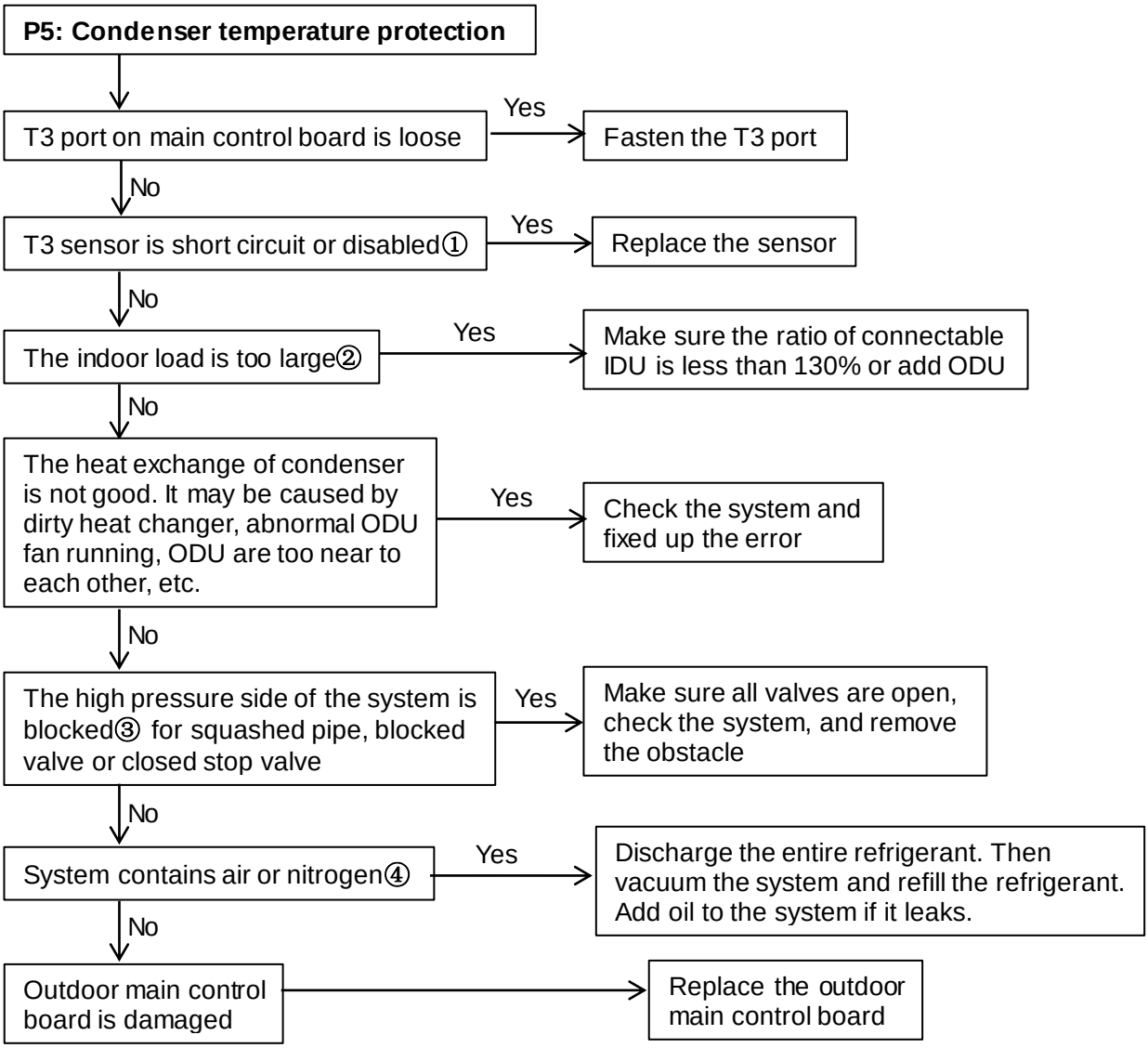
5. How to check whether compressor is error⑤:

Measure the resistance between two terminals among the three terminals of compressor. The resistance between two terminals is 2-5Ω, the resistance between each terminal and ground is infinity, if the resistance is out of the normal range, the compressor is error.

*The normal system running parameters please refer to attached table 3.

4.14 P5: Condenser temperature protection

When condenser temperature is over 65℃, the system will display P5 protection, the ODU in standby. When the temperature goes back to normal range, P5 disappear and normal operation resumes.



Note:

1. How to check whether the T3 sensor is circuit or disabled①:

Using a multimeter to measure resistance, if the resistance is too small, the sensor is short circuit, if the resistance in certain temperature is not consistent with attached table 1, the sensor is disabled

2. The phenomenon of the indoor load is too large②:

The suction temperature and discharge temperature are both higher than normal value.

3. The phenomenon of The high pressure side of the system is blocked③:

The high pressure is higher than normal value, the low pressure is lower than normal value, and the discharge temperature is higher than normal value.

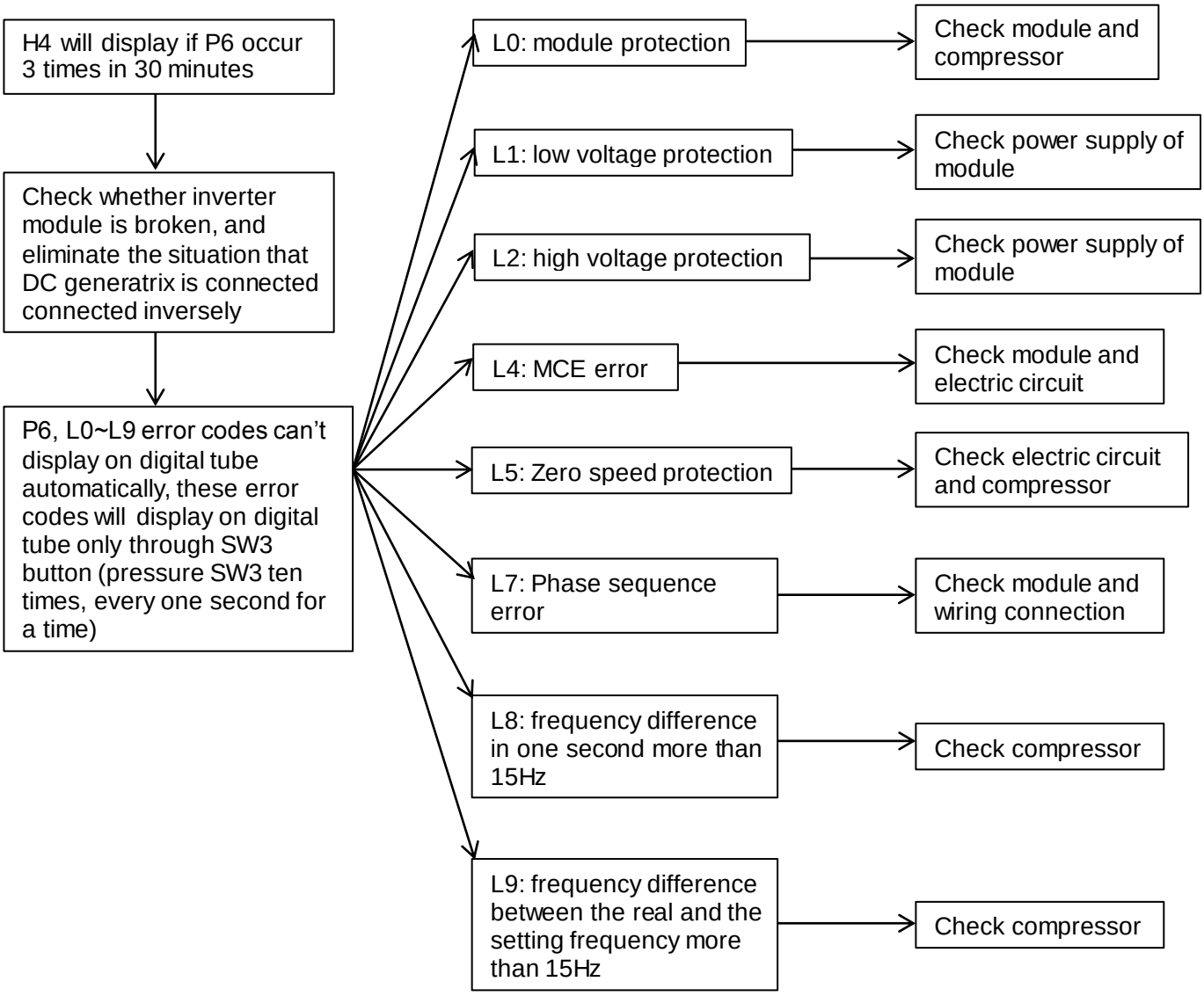
4. The phenomenon of the system contains air or nitrogen④:

The high pressure is higher than normal value, current is larger than normal value, discharge temperature is higher than normal value, compressor makes noise, pressure meter do not displaysteady.

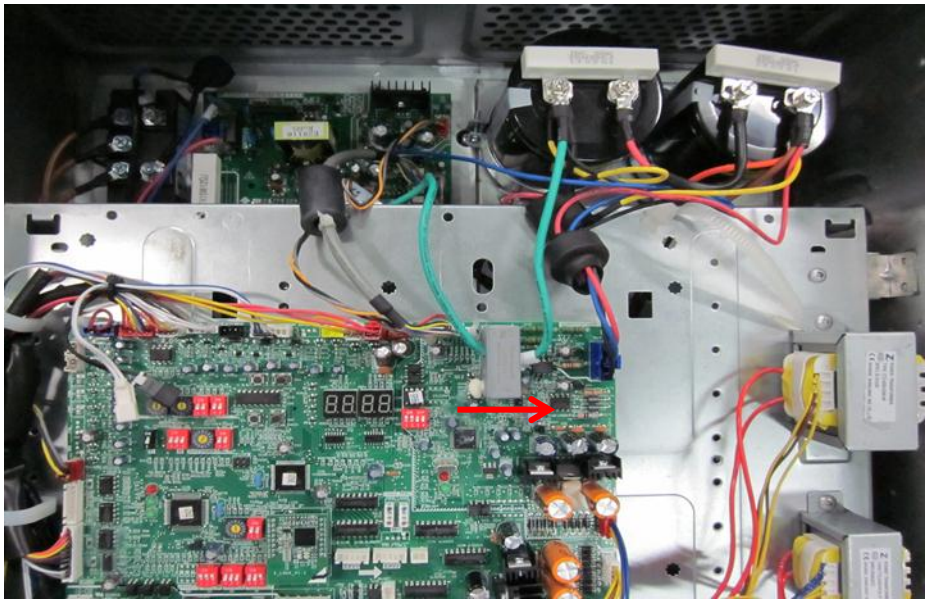
4.15 P6/H4: Module protection

P6, L0~L9 error codes can't display on digital tube automatically, these error codes will display on digital tube only through SW3 button (pressure SW3 ten times, every one second for a time)

If the system display three times P6 protection in 60 minutes, the system will stop and display H4 error code. When the system displays H4 error code, the system can resume only by restarting the machine. At this time, malfunction should be disposed promptly to avoid further damage.



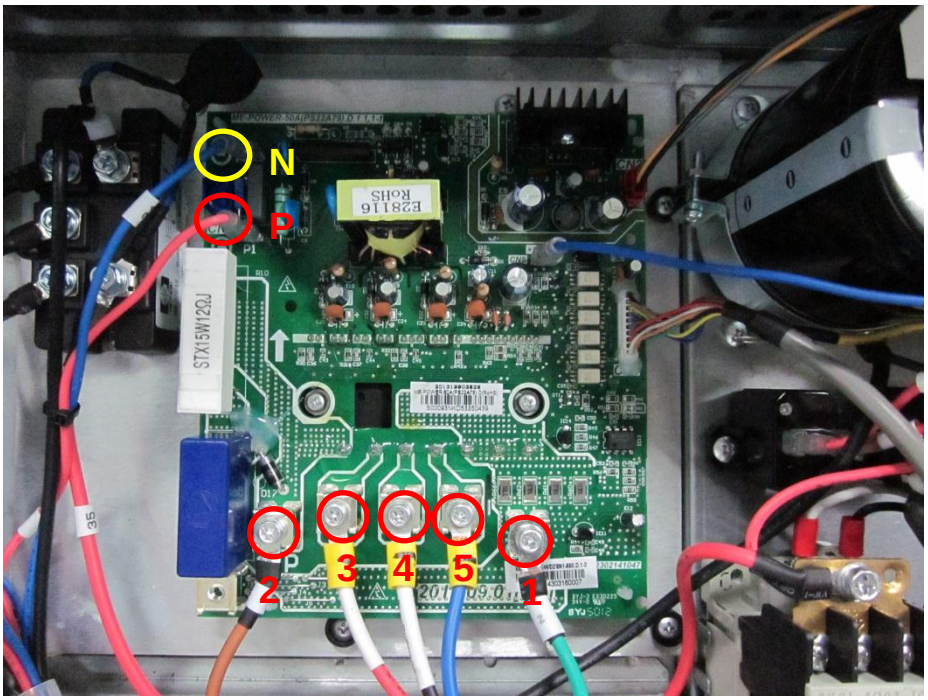
DC generatrix check



Direction of the current in DC supply wire is running through the inductor should be the same as the direction of arrow marked on the inductor

1) Check the voltage of DC generatrix, the normal value should be 510 to 580V. If the value is less than 510V, go to next step.
2) Check the wiring connection of rectifier circuit, find out any loose in the circuit, and check the filter board, single-phase rectifier stack, and three-phase rectifier stack. Note DC and AC switch in the measurement.
3) If none of the above works, replace the main control board.

Module check



1) DC voltage between P and N should be 296V to 324V.
2) DC voltage between 1 and 2 should be 510V to 580V.
3) First adjust multi -meter to diode position, put the red pen on the 1 point (N terminal), put black pen on the 3 or 4 or 5 point, the value should be approximate 0.378, if the value is 0, the IPM is broken. And then change the red pen to the 2 point (P terminal), the value should be infinity, if the value is 0, the IPM is broken.

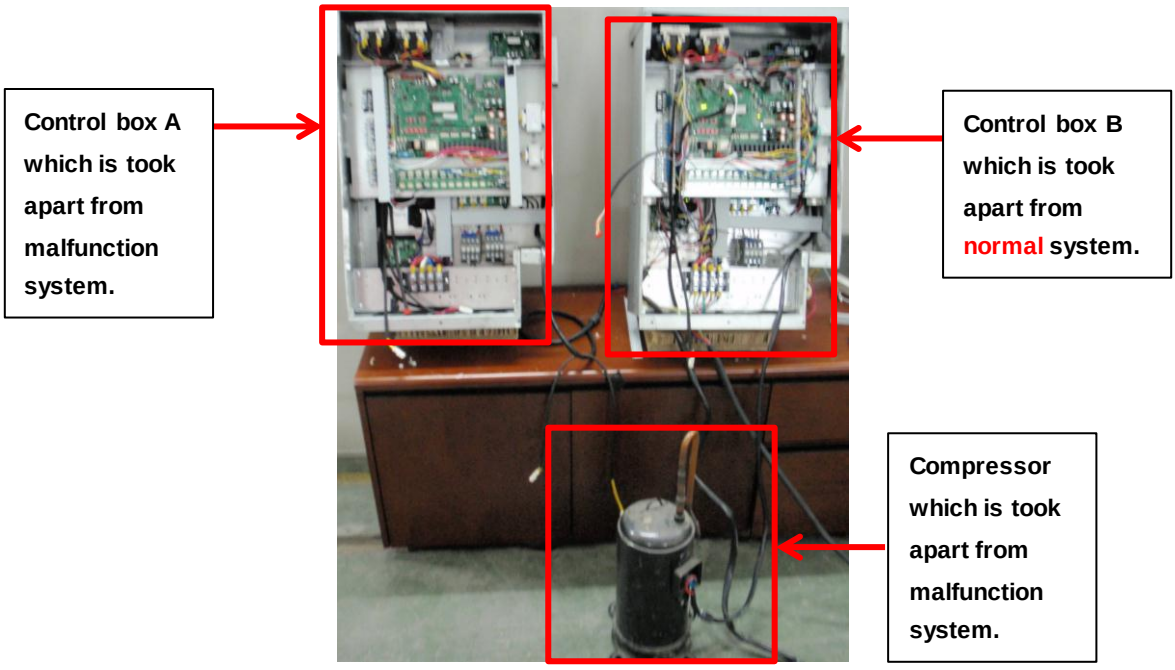
4.15.1 L0/L8/L9 troubleshooting

Step 1: Replace the modular with correctly wire connection and start the system, if system is still malfunction, then go to step2 to check the compressor.

Step 2: Take out the compressor from the malfunction system, short-circuit the suction and the discharge, vacuum dry and charge 0.3kg~0.4kg R410A, and then connect the U,V,W terminals to control box B which is took apart from normal system.

If the compressor start normally, that means compressor is OK, control box A is malfunction, then check the inverter module.

If the compressor could not start normally, that means the compressor is malfunction, the go to step 3 to check the compressor.



Step 3: Check the compressor

Measure the resistance between each two of U, V, W terminals, all the resistance should be the same and equal to 0.9~5 Ohms. (Fig. A and Fig. B)

Measure the resistance between each of U, V, W terminals to ground (Fig. C), all the resistance should be the same and trend to be infinity (Fig. D), otherwise the compressor has been malfunction, needs to be replaced.

Fig. A

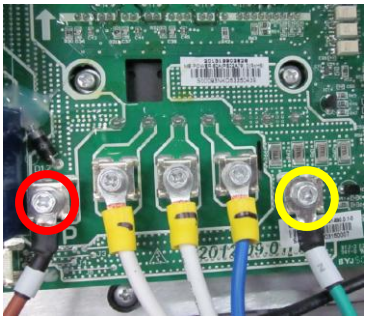
Fig. B

Fig. C

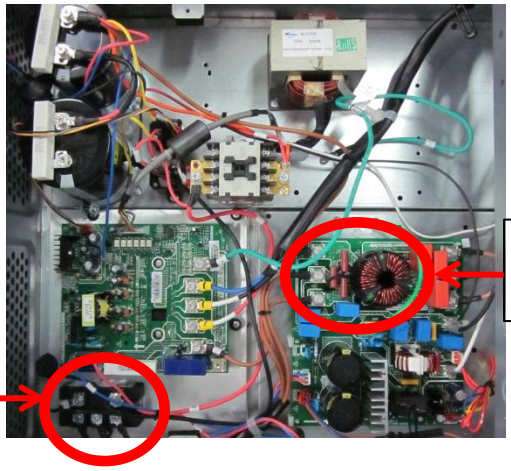
Fig. D

4.15.2 L1/L4 troubleshooting

Step 1: Check the DC voltage between P and N terminal, the normal value should be 510V~580V, if the voltage is lower than 510V, go to step 2.

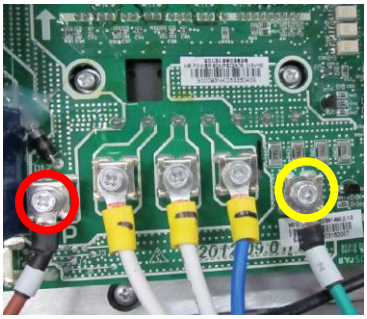


Step 2: Check whether the wires of rectifier circuit are loose or not. If wires are loosen, fasten the wires. If wires are OK, replace the main control board.

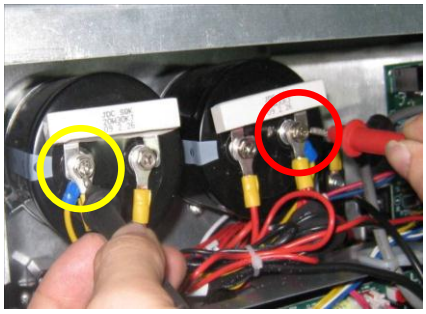


4.15.3 L2 troubleshooting

Step 1: Check the DC voltage between P and N terminal, the normal value should be 510V~580V, if the voltage is higher than 580V, go to step 2.



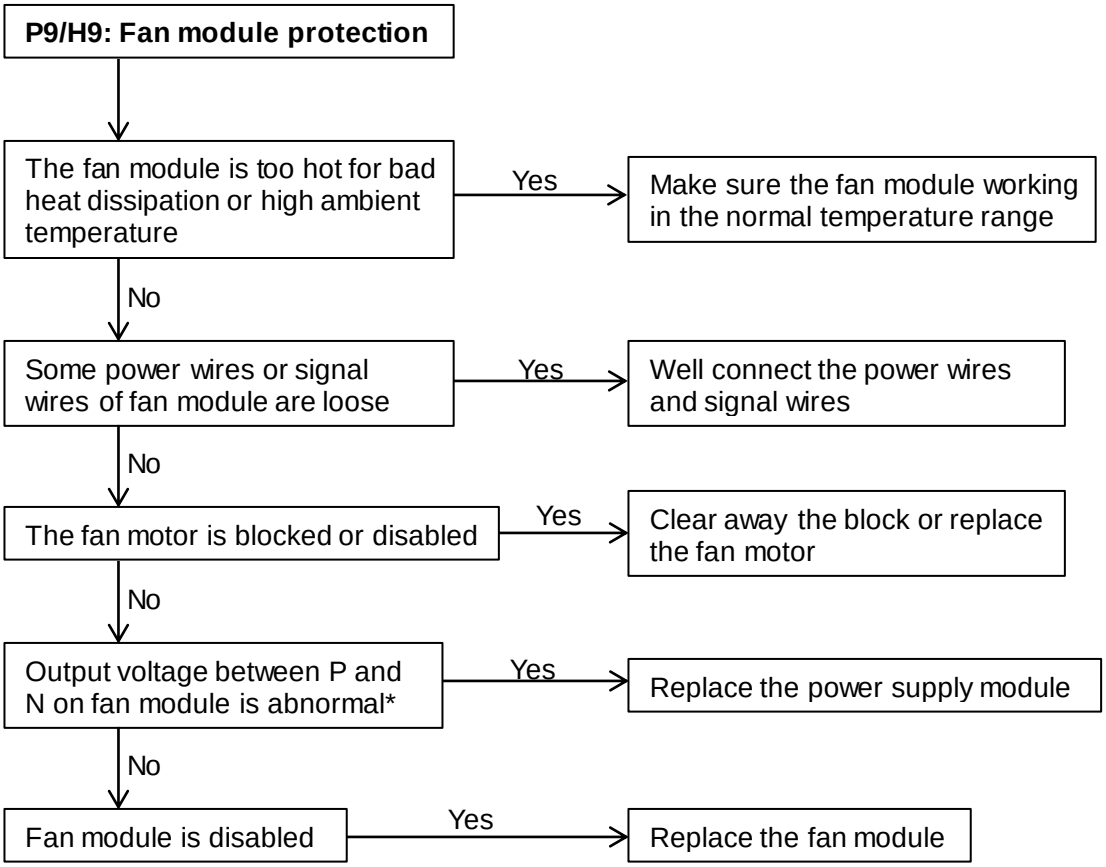
Step 2: Check the voltage between two electrolytic capacitors, the normal value should be 510V±30V or 310V±30V, if not in the range then the main control board has malfunction, it needs to be replaced.



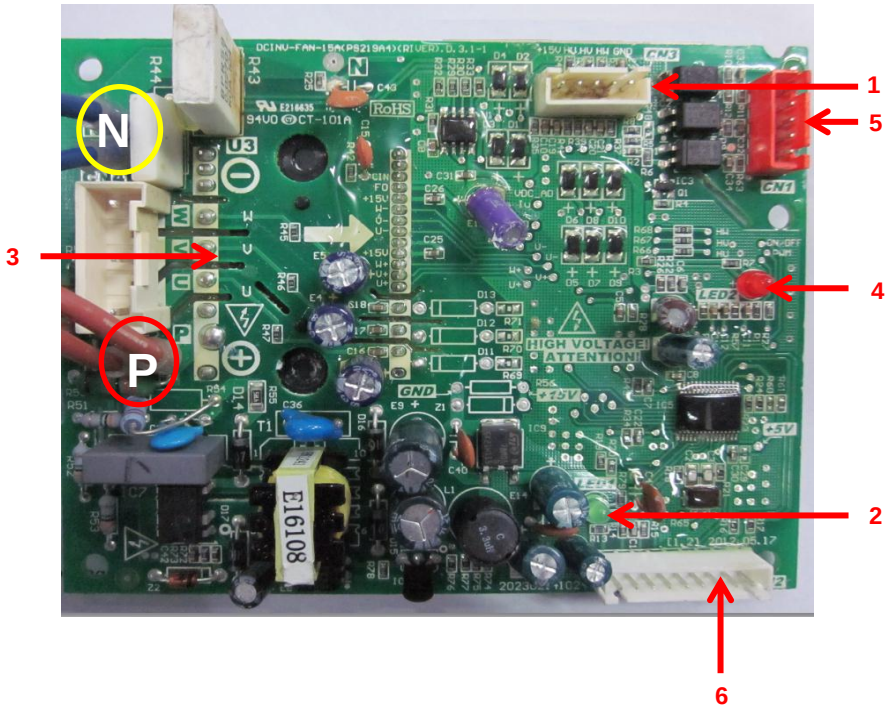
Turn the measure range of the meter to 1kV and measure the voltage between two electrolytic capacitors

4.16 P9/H9: DC fan module protection

If the system display three times P9 protection in 60 minutes, the system will stop and display H9 error code. When the system displays H9 error code, the system can resume only by restarting the machine. At this time, malfunction should be disposed promptly to avoid further damage.



Fan module instruction



1 Program input port
2 Power supply indicator lamp
3 Fan motor U, V, W output port
4 Fault indicator lamp
5 PCB control signal input port
6 Signal feedback port

*** The normal value of output voltage between P and N on fan module is DC 310V**

P9 protection analysis

Conditions	Fault indicator lamp of fan module	Power supply indicator lamp of fan module	Digital tube display	Malfunction analysis
Power on	Off	Off	Quantity of IDU or "0"	Check the power supply circuit for fan module. Check whether there has power supply for lightning protection plate, whether the protective tube is broken, whether the voltage after rectification is normal, whether the bridge rectifier is broken.
Power on	Off	Flicker	Quantity of IDU or "0"	Power supply of fan module has problem, needs to replace the fan module.
When fan motor start	At first the lamp is on then the lamp is off	On	P9/H9	Check whether the drive port and signal feedback port is loose, whether the fan module and fan motor is installed firmly. If above conditions are all OK, it needs to replace the fan module.
When fan motor start	At first the lamp is on then the lamp flicker	On	P9/H9	Check whether the transformer in lightning protection plate Is open circuit, whether the relay is broken. If occurs above problem, it needs to replace the lightning protection plate.
Fan motor running several minutes	On	On	P9/H9	Check whether the capacity setting from dial switch is accordance with actual ODU capacity, whether the capacity from spot check is accordance with actual ODU capacity. If occurs above problem, it needs to adjust the capacity setting. If above conditions are both OK, it needs to replace the main control board.

Attached table 1: Resistance value of ambient temperature and pipe temperature sensor

Temperature (℃)	Resistance value (kΩ)	Temperature (℃)	Resistance value (kΩ)	Temperature (℃)	Resistance value (kΩ)	Temperature (℃)	Resistance value (kΩ)
-20	115.266	**20**	12.6431	**60**	2.35774	**100**	0.62973
-19	108.146	**21**	12.0561	**61**	2.27249	**101**	0.61148
-18	101.517	**22**	11.5	**62**	2.19073	**102**	0.59386
-17	96.3423	**23**	10.9731	**63**	2.11241	**103**	0.57683
-16	89.5865	**24**	10.4736	**64**	2.03732	**104**	0.56038
-15	84.219	**25**	10	**65**	1.96532	**105**	0.54448
-14	79.311	**26**	9.55074	**66**	1.89627	**106**	0.52912
-13	74.536	**27**	9.12445	**67**	1.83003	**107**	0.51426
-12	70.1698	**28**	8.71983	**68**	1.76647	**108**	0.49989
-11	66.0898	**29**	8.33566	**69**	1.70547	**109**	0.486
-10	62.2756	**30**	7.97078	**70**	1.64691	**110**	0.47256
-9	58.7079	**31**	7.62411	**71**	1.59068	**111**	0.45957
-8	56.3694	**32**	7.29464	**72**	1.53668	**112**	0.44699
-7	52.2438	**33**	6.98142	**73**	1.48481	**113**	0.43482
-6	49.3161	**34**	6.68355	**74**	1.43498	**114**	0.42304
-5	46.5725	**35**	6.40021	**75**	1.38703	**115**	0.41164
-4	44	**36**	6.13059	**76**	1.34105	**116**	0.4006
-3	41.5878	**37**	5.87359	**77**	1.29078	**117**	0.38991
-2	39.8239	**38**	5.62961	**78**	1.25423	**118**	0.37956
-1	37.1988	**39**	5.39689	**79**	1.2133	**119**	0.36954
0	35.2024	**40**	5.17519	**80**	1.17393	**120**	0.35982
1	33.3269	**41**	4.96392	**81**	1.13604	**121**	0.35042
2	31.5635	**42**	4.76253	**82**	1.09958	**122**	0.3413
3	29.9058	**43**	4.5705	**83**	1.06448	**123**	0.33246
4	28.3459	**44**	4.38736	**84**	1.03069	**124**	0.3239
5	26.8778	**45**	4.21263	**85**	0.99815	**125**	0.31559
6	25.4954	**46**	4.04589	**86**	0.96681	**126**	0.30754
7	24.1932	**47**	3.88673	**87**	0.93662	**127**	0.29974
8	22.5662	**48**	3.73476	**88**	0.90753	**128**	0.29216
9	21.8094	**49**	3.58962	**89**	0.8795	**129**	0.28482
10	20.7184	**50**	3.45097	**90**	0.85248	**130**	0.2777
11	19.6891	**51**	3.31847	**91**	0.82643	**131**	0.27078
12	18.7177	**52**	3.19183	**92**	0.80132	**132**	0.26408
13	17.8005	**53**	3.07075	**93**	0.77709	**133**	0.25757
14	16.9341	**54**	2.95896	**94**	0.75373	**134**	0.25125
15	16.1156	**55**	2.84421	**95**	0.73119	**135**	0.24512
16	15.3418	**56**	2.73823	**96**	0.70944	**136**	0.23916
17	14.6181	**57**	2.63682	**97**	0.68844	**137**	0.23338
18	13.918	**58**	2.53973	**98**	0.66818	**138**	0.22776
19	13.2631	**59**	2.44677	**99**	0.64862	**139**	0.22231

Attached table 2: Resistance value of compressor discharge temperature sensor

Temperature (℃)	Resistance value (kΩ)	Temperature (℃)	Resistance value (kΩ)	Temperature (℃)	Resistance value (kΩ)	Temperature (℃)	Resistance value (kΩ)
-20	542.7	**20**	68.66	**60**	13.59	**100**	3.702
-19	511.9	**21**	65.62	**61**	13.11	**101**	3.595
-18	483	**22**	62.73	**62**	12.65	**102**	3.492
-17	455.9	**23**	59.98	**63**	12.21	**103**	3.392
-16	430.5	**24**	57.37	**64**	11.79	**104**	3.296
-15	406.7	**25**	54.89	**65**	11.38	**105**	3.203
-14	384.3	**26**	52.53	**66**	10.99	**106**	3.113
-13	363.3	**27**	50.28	**67**	10.61	**107**	3.025
-12	343.6	**28**	48.14	**68**	10.25	**108**	2.941
-11	325.1	**29**	46.11	**69**	9.902	**109**	2.86
-10	307.7	**30**	44.17	**70**	9.569	**110**	2.781
-9	291.3	**31**	42.33	**71**	9.248	**111**	2.704
-8	275.9	**32**	40.57	**72**	8.94	**112**	2.63
-7	261.4	**33**	38.89	**73**	8.643	**113**	2.559
-6	247.8	**34**	37.3	**74**	8.358	**114**	2.489
-5	234.9	**35**	35.78	**75**	8.084	**115**	2.422
-4	222.8	**36**	34.32	**76**	7.82	**116**	2.357
-3	211.4	**37**	32.94	**77**	7.566	**117**	2.294
-2	200.7	**38**	31.62	**78**	7.321	**118**	2.233
-1	190.5	**39**	30.36	**79**	7.086	**119**	2.174
0	180.9	**40**	29.15	**80**	6.859	**120**	2.117
1	171.9	**41**	28	**81**	6.641	**121**	2.061
2	163.3	**42**	26.9	**82**	6.43	**122**	2.007
3	155.2	**43**	25.86	**83**	6.228	**123**	1.955
4	147.6	**44**	24.85	**84**	6.033	**124**	1.905
5	140.4	**45**	23.89	**85**	5.844	**125**	1.856
6	133.5	**46**	22.89	**86**	5.663	**126**	1.808
7	127.1	**47**	22.1	**87**	5.488	**127**	1.762
8	121	**48**	21.26	**88**	5.32	**128**	1.717
9	115.2	**49**	20.46	**89**	5.157	**129**	1.674
10	109.8	**50**	19.69	**90**	5	**130**	1.632
11	104.6	**51**	18.96	**91**	4.849		
12	99.69	**52**	18.26	**92**	4.703		
13	95.05	**53**	17.58	**93**	4.562		
14	90.66	**54**	16.94	**94**	4.426		
15	86.49	**55**	16.32	**95**	4.294	B(25/50)=3950K	
16	82.54	**56**	15.73	**96**	4.167		
17	78.79	**57**	15.16	**97**	4.045	R(90℃)=5KΩ+-3%	
18	75.24	**58**	14.62	**98**	3.927		
19	71.86	**59**	14.09	**99**	3.812		

Attached table 3: Commissioning and operating parameters of refrigerant system

Conditions 1: Make sure outdoor unit can detect all the indoor units, the quantity of indoor units display steadily and be equal to actual quantity of installed indoor units.

Conditions 2: Make sure all the valves in outdoor unit are open, indoor units EXV have connected to indoor PCB.

Conditions 3: The ratio of connectable indoor units is 100%. When ambient temperature is high, operate the system in cooling mode and set the temperature 17℃. When ambient temperature is low, operate the system in heating mode and set the temperature 30℃. Then get the parameters after system running normally more than 30 minutes.

Outdoor unit cooling parameters table

Ambient temperature (T4)	℃	20-27	27-33	33-38	38-45
Discharge pressure (spot check)	MPa	2.1-2.3	2.8-3.1	3.3-3.5	3.7-3.9
Pressure of high pressure valve	MPa	1.8-2.0	2.4-2.7	2.8-3.0	3.2-3.5
Pressure of low pressure valve	MPa	0.7-0.9	0.8-1.0	1.0-1.2	1.2-1.4
Discharge temperature (spot check)	℃	50-65	70-85	70-90	80-90
DC Inverter compressor current (spot check)	A	4-5	6-7	7-8	9-11
Fixed compressor current (spot check)	A	6-7	8-9	9-11	11-12
Average temperature of evaporator outlet T2B	℃	8-9	12-15	16-17	20

Outdoor unit heating parameters table

Ambient temperature (T4)	℃	-15--5	-5-5	5-12	12-18
Discharge pressure (spot check)	MPa	2.0-2.2	2.2-2.7	3.0-3.1	2.6-2.7
Pressure of high pressure valve	MPa	1.7-1.8	1.8-2.4	2.6-2.8	2.1-2.4
Pressure of low pressure valve	MPa	2.0-2.2	2.2-2.6	3.0-3.1	2.5-2.7
Discharge temperature (spot check)	℃	50-70	60-70	60-85	60-70
DC Inverter compressor current (spot check)	A	5	5-6	6-8	5-6
Fixed compressor current (spot check)	A	6	6-7	9-10	8-9
Average temperature of condenser outlet T2	℃	33	33-40	46-50	39-41