



Free Match

Technical & Service Manual

EUROPE R32 T1 SERIES
DC INVERTER



Technology Leads Intelligent Life

Version 27 (07.2026)

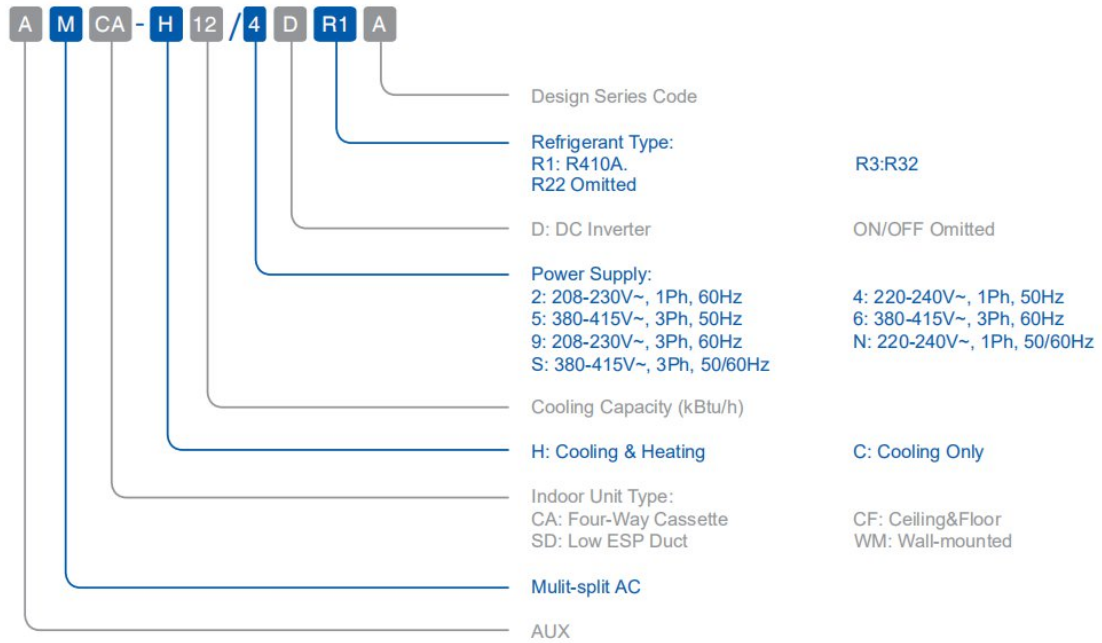
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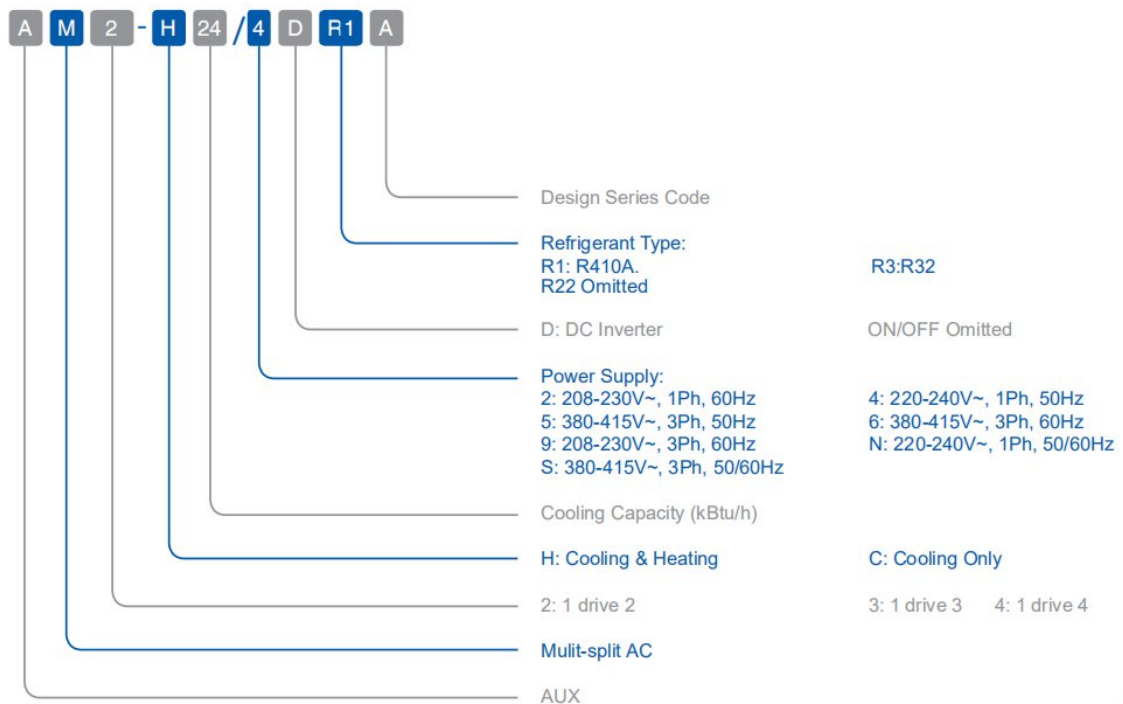
Part1 General Information

1. Nomenclature

Indoor Unit



Outdoor Unit:



2. Functions overview

 Standard  Optional  Invalid

Functions overview													
Category	Functions	Wall Mounted					Duct		One-way cassette	Cassette		Console	Details refer to
		C	M	J	Q	F	Y	M		Y	Q		
Basic function	On/Off												Part9.1
	Fan Mode												Part9.1
	Dry Mode												Part9.1
	Cooling Mode												Part9.1
	Heating Mode												Part9.1
	Auto-Mode												Part9.1
	Auto-Restart												Part9.1
	Fan speed												Part9.1
	°F/°C												Part9.1
Anti-Cold Air												/	
Comfort health & energy saving	Eco												/
	Silent												Part9.1
	Sleep												Part9.1
	Self-Cleaning												/
	Heating Only function												Part9.1
	Fresh Air Intake												/
	8°C Heating												Part 2
	PM2.5												/
	I-Feel												Part9.1
	Child lock												Part9.1
	Display												Part9.1
	up & down swing												Part9.1
	left & right swing												Part9.1
	Auto-Constant Air Volume												/
	Manual Constant Air Volume												/
Controller	Independent Swing Control												/
	Sterilizing Filter												/
	Room Card												Part9.3
	24-Hour Timer												Part9.1
	Weekly Timer												Part9.1
	Centralized Control												/
	WIFI Control												

3. Unit Appearance

3.1 Wall - Mounted

M series

Picture	Launch Time	Capacity Range / Mode	
	2024.03	07K Btu/h	AMWM-H07/4R3A(M*)
		09K Btu/h	AMWM-H09/4R3A(M*)
		12K Btu/h	AMWM-H12/4R3A(M*)
		18K Btu/h	AMWM-H18/4R3A(M*)
		24K Btu/h	AMWM-H24/4R3A(M*)

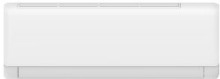
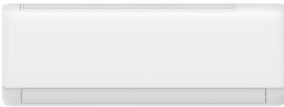
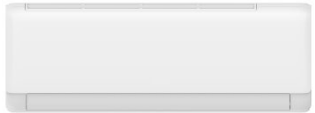
C series

Picture	Launch Time	Capacity Range / Mode	
	2024.05	07K Btu/h	AMWM-H07/4R3A(C*)
		09K Btu/h	AMWM-H09/4R3A(C*)
		12K Btu/h	AMWM-H12/4R3A(C*)
		18K Btu/h	AMWM-H18/4R3A(C*)
		24K Btu/h	AMWM-H24/4R3A(C*)

J series

Picture	Launch Time	Capacity Range / Mode	
	2023.06	07 K Btu/h	AMWM-H07/4R3C(J*)
		09 K Btu/h	AMWM-H09/4R3C(J*)
	2026.07	12 K Btu/h	AMWM-H12/4R3D(J*)
	2023.06	18 K Btu/h	AMWM-H18/4R3C(J*)
	2026.07	24K Btu/h	AMWM-H24/4R3B(J*)

Q series

Picture	Launch Time	Capacity Range / Mode	
	2023.01	07 K Btu/h	AMWM-H07/4R3B(Q*)
		09 K Btu/h	AMWM-H09/4R3B(Q*)
	2022.11	12 K Btu/h	AMWM-H12/4R3A(Q*)
		18 K Btu/h	AMWM-H18/4R3A(Q*)
	2026.07	24K Btu/h	AMWM-H24/4R3B(Q*)

F series

Picture	Launch Time	Capacity Range / Mode	
	2023.06	07 K Btu/h	AMWM-H07/4R3C(F*)
	2026.03	09 K Btu/h	AMWM-H09/4R3D(F*)
		12 K Btu/h	AMWM-H12/4R3D(F*)
	2023.06	18 K Btu/h	AMWM-H18/4R3C(F*)
	2026.07	24K Btu/h	AMWM-H24/4R3B(F*)

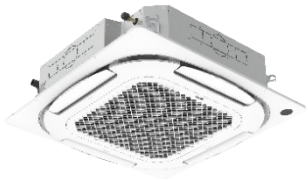
3.2 Cassette Compact Y

Picture	Launch Time	Capacity Range / Mode	
	2022.11	09 K Btu/h	AUCA-H09/4DR3HYAA (Four way)
			AUCA-H09/4DR3HYAB (Round way)
	2025.09	12 K Btu/h	AUCA-H12/4DR3HA2 (Four way)
			AUCA-H12/4DR3HB2 (Round way)
		18 K Btu/h	AUCA-H18/4DR3HA2 (Four way)
			AUCA-H18/4DR3HB2 (Round way)

Remark: The new 12/18K Cassette are compatible with light commercial outdoor units.

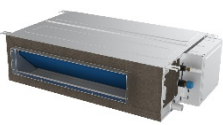
Four-way panel (Optional)	Round way panel (Optional)
 	 
	 

3.3 Cassette Q

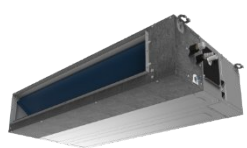
Picture	Launch Time	Capacity Range / Mode	
	2025.09	24 K Btu/h	AUCA-H24/4DR3HB2

Remark: The new 24K Q Cassette is compatible with 24K light commercial outdoor unit.

3.5 Slim duct Y

Picture	Launch Time	Capacity Range / Mode	
	2019.12	07 K Btu/h	AMSD-H07/4R3AA
		09 K Btu/h	AMSD-H09/4R3AA

3.6 Medium duct M

Picture	Launch Time	Capacity Range / Mode	
	2025.09	12 K Btu/h	AUMD-H12/4DR3HB2
		18 K Btu/h	AUMD-H18/4DR3HB2
		24 K Btu/h	AUMD-H24/4DR3HB2

Remark: The new M-series ducts are compatible with light commercial outdoor units.

3.7 Console

Picture	Launch Time	Capacity Range / Mode	
	2022.10	09 K Btu/h	AUCO-H09/4DR3HA
		12 K Btu/h	AUCO-H12/4DR3HA
		18 K Btu/h	AUCO-H18/4DR3HA

3.8 One-way cassette

Picture	Launch Time	Capacity Range / Mode	
	2026.01	09 K Btu/h	AMC1-H09/4R3DSA
		12 K Btu/h	AMC1-H12/4R3DSA
		18 K Btu/h	AMC1-H18/4R3DSA
		24 K Btu/h	AMC1-H24/4R3DSA

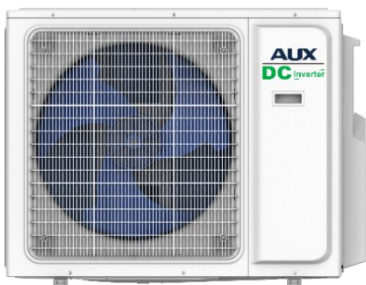
panel	Picture
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One-way cassette panel



3.9 Outdoor Unit

Capacity (Btu/h)	1 drive 2 : 14k/18k		1 drive 3 : 21k/27k	
	AM2-H14/4DR3C AM2-H14/4DR3C-U	AM2-H18/4DR3D AM2-H18/4DR3D-U	AM3-H21/4DR3C AM3-H21/4DR3C-U	AM3-H27/4DR3D AM3-H27/4DR3D-U
Launch time	2022.08	2025.03	2022.08	2025.03
Picture				

Capacity (Btu/h)	1 drive 4: 28K/36k		1 drive 5: 42k
	AM4-H28/4DR3D AM4-H28/4DR3D-U	AM4-H36/4DR3B AM4-H36/4DR3B-U	AM5-H42/4DR3 AM5-H42/4DR3A
Launch time	2025.04	2025.07	2018.12
Picture			

A or -U : optional electric heater on chassis

4. Combination Table

14K :

	Suggested Combination	
1 drive 2	Two Units	
	7+7	9+12
	7+9	—
	7+12	—
	9+9	—

18K :

	Suggested Combination	
1 drive 2	Two Units	
	7+7	9+9
	7+9	9+12
	7+12	9+18
	7+18	12+12

21K :

	Suggested Combination			
1 drive 3	Two Units		Three Units	
	7+7	9+12	7+7+7	7+12+12
	7+9	9+18	7+7+9	9+9+9
	7+12	12+12	7+7+12	9+9+12
	7+18	12+18	7+9+9	—
	9+9	—	7+9+12	—

27K :

	Suggested Combination				
1 drive3	Two Units		Three Units		
	7+7	9+12	7+7+7	7+9+18	9+12+12
	7+9	9+18	7+7+9	7+12+12	9+12+18
	7+12	12+12	7+7+12	7+12+18	12+12+12
	7+18	12+18	7+7+18	9+9+9	—
	7+24	18+18	7+9+9	9+9+12	—
	9+9	—	7+9+12	9+9+18	—

28K :

	Suggested Combination				
1 drive4	Two Units		Three Units		
	7+7	9+18	7+7+7	7+12+12	12+12+12
	7+9	9+24	7+7+9	7+12+18	12+12+18
	7+12	12+12	7+7+12	9+9+9	—
	7+18	12+18	7+7+18	9+9+12	—
	7+24	12+24	7+9+9	9+9+18	—
	9+9	18+18	7+9+12	9+12+12	—
	9+12	—	7+9+18	9+12+18	—

	Suggested Combination	
1 drive4	Four Units	
	7+7+7+7	7+7+12+12
	7+7+7+9	7+9+9+9
	7+7+7+12	7+9+9+12
	7+7+7+18	7+9+12+12
	7+7+9+9	9+9+9+9
	7+7+9+12	9+9+9+12
	7+7+9+18	9+9+12+12

36K :

	Suggested Combination							
1 drive4	Two Units			Three Units				
	7+7	9+18	24+24	7+7+7	7+9+18	9+9+9	9+18+18	18+18+18
	7+9	9+24	—	7+7+9	7+9+24	9+9+12	9+18+24	—
	7+12	12+12	—	7+7+12	7+12+12	9+9+18	12+12+12	—
	7+18	12+18	—	7+7+18	7+12+18	9+9+24	12+12+18	—
	7+24	12+24	—	7+7+24	7+12+24	9+12+12	12+12+24	—
	9+9	18+18	—	7+9+9	7+18+18	9+12+18	12+18+18	—
	9+12	18+24	—	7+9+12	7+18+24	9+12+24	12+18+24	—

	Suggested Combination				
1 drive4	Four Units				
	7+7+7+7	7+7+9+18	7+9+9+12	7+12+12+12	9+9+12+18
	7+7+7+9	7+7+9+24	7+9+9+18	7+12+12+18	9+9+12+24
	7+7+7+12	7+7+12+12	7+9+9+24	9+9+9+9	9+9+18+18
	7+7+7+18	7+7+12+18	7+9+12+12	9+9+9+12	9+12+12+12
	7+7+7+24	7+7+12+24	7+9+12+18	9+9+9+18	9+12+12+18

	7+7+9+9	7+7+18+18	7+9+12+24	9+9+9+24	12+12+12+12
	7+7+9+12	7+9+9+9	7+9+18+18	9+9+12+12	12+12+12+18

42K :

	Suggested Combination	
1 drive5	Two Units	
	7+7	9+24
	7+9	12+12
	7+12	12+18
	7+18	12+24
	7+24	18+18
	9+9	18+24
	9+12	24+24
	9+18	—

	Suggested Combination				
1 drive5	Three Units				
	7+7+7	7+9+24	9+9+12	9+24+24	18+18+24
	7+7+9	7+12+12	9+9+18	12+12+12	—
	7+7+12	7+12+18	9+9+24	12+12+18	—
	7+7+18	7+12+24	9+12+12	12+12+24	—
	7+7+24	7+18+18	9+12+18	12+18+18	—
	7+9+9	7+18+24	9+12+24	12+18+24	—
	7+9+12	7+24+24	9+18+18	12+24+24	—
	7+9+18	9+9+9	9+18+24	18+18+18	—

	Suggested Combination				
1 drive5	Four Units				
	7+7+7+7	7+7+12+18	7+9+12+18	9+9+9+9	9+12+12+18
	7+7+7+9	7+7+12+24	7+9+12+24	9+9+9+12	9+12+12+24
	7+7+7+12	7+7+18+18	7+9+18+18	9+9+9+18	9+12+18+18
	7+7+7+18	7+7+18+24	7+9+18+24	9+9+9+24	9+12+18+24
	7+7+7+24	7+7+24+24	7+12+12+12	9+9+12+12	9+18+18+18
	7+7+9+9	7+9+9+9	7+12+12+18	9+9+12+18	12+12+12+12

	7+7+9+12	7+9+9+12	7+12+12+24	9+9+12+24	12+12+12+18
	7+7+9+18	7+9+9+18	7+12+18+18	9+9+18+18	12+12+12+24
	7+7+9+24	7+9+9+24	7+12+18+24	9+9+18+24	12+12+18+18
	7+7+12+12	7+9+12+12	7+18+18+18	9+12+12+12	—

	Suggested Combination			
1 drive5	Five Units			
	7+7+7+7+7	7+7+7+9+24	7+7+9+9+18	7+7+12+12+24
	7+7+7+7+9	7+7+7+12+12	7+7+9+9+24	7+7+12+18+18
	7+7+7+7+12	7+7+7+12+18	7+7+9+12+12	7+9+9+9+9
	7+7+7+7+18	7+7+7+12+24	7+7+9+12+18	7+9+9+9+12
	7+7+7+7+24	7+7+7+18+18	7+7+9+12+24	7+9+9+9+18
	7+7+7+9+9	7+7+7+18+24	7+7+9+18+18	7+9+9+9+24
	7+7+7+9+12	7+7+9+9+9	7+7+12+12+12	7+9+9+12+12
	7+7+7+9+18	7+7+9+9+12	7+7+12+12+18	7+9+9+12+18

	Suggested Combination		
1 drive5	Five Units		
	7+9+9+12+24	9+9+9+9+18	9+12+12+12+12
	7+9+9+18+18	9+9+9+9+24	9+12+12+12+18
	7+9+12+12+12	9+9+9+12+12	12+12+12+12+12
	7+9+12+12+18	9+9+9+12+18	—
	7+12+12+12+12	9+9+9+12+24	—
	7+12+12+12+18	9+9+9+18+18	—
	9+9+9+9+9	9+9+12+12+12	—
	9+9+9+9+12	9+9+12+12+18	—

Note : All above indoor units can be freely matched and combined but must be installed strictly according to the above table or the cooling capacity and stability would be decreased.

5. Accessories Included

5.1 Outdoor Units

No.	Name	QUANTITY						
		14K	18K	21K	27K	28K	36K	42K
1	Installer manual	1	1	1	1	1	1	1
2	Drainage connector	1	1	1	1	1	1	1
3	Pipe adaptor	0	0	0	0	0	0	0
4	Copper nuts	8	8	12	12	16	16	20

5.2 Indoor Units

No.	Name	QUANTITY				
		Wall Mounted	Duct	Cassette	One-way cassette	Console
1	User manual	1	1	1	1	1
2	Remote control	1	0	1	1	1
3	Batteries for Remote Control	2	0	2	2	2
4	Touch screen wired Control	0	1	0	0	0
5	Panel screw	0	0	4	7	0
6	Drainage tube	0	1	1	1	1
7	Pipe adaptor	0	1	1	1	0
8	Thermal insulation pipe	0	2	2	2	2

Part2 Features

1.1 Easy for installation

There are multiple valves on outdoor units, no need for branch pipes and welding between indoor and outdoor units, no need to set the IDU address. Power supply to ODU, multi-terminal board be designed on ODU to connect to multi IDUs.

1.2 Wide operation range

No matter when it is as high as 52°C in hot summer or -25°C(for 18/27/28/36K ODU) in cold winter, the unit could operate perfectly, making you feel like spring all year around.

1.3 High energy efficiency

More energy saving, cooling mode A++, heating mode A+, for 18/27/28K outdoor unit heating mode can meet A++.

1.4 Restart function

Recover the former operation state when power is restored, no need to restart the unit manually

1.5 Main components

DC inverter compressor & DC Fan motor have good efficiency in part load condition, more energy saving; EXV can precisely control refrigerant flow, ensure quickly cooling and heating, less temperature fluctuation

1.6 Independent EXV control

Each IDU adjusted by an EXV, whole unit could achieve quick cooling/heating. EXV was designed in outdoor unit, decreased throttling noise of indoor unit

1.7 Chassis electric heater

Chassis electric heater will work when environment Tao < 1°C or during defrosting process , so can avoid freeze on the chassis

1.8 Heating at 8°C

In winter, keep the indoor temperature at 8°C to prevent the pipes and equipment in unoccupied rooms from being damaged by freezing due to low temperatures. At the same time, it is more energy-efficient than the normal heating mode.

Entry method:

In the heating mode when the device is turned on, press the 【Mode】 and 【+】 keys on the remote controller simultaneously for 3s or more to activate the 8°C heating function.

Exit method:

- (1) Press the 【Mode】 and 【+】 keys simultaneously for 3s to exit the 8°C heating function
- (2) Switch to the non-heating mode

Logic:

when 8°C heating is activated, the compressor starts at an indoor temperature $\leq 7.5^{\circ}\text{C}$ and stops when it exceeds 10°C , and the compressor frequency is gradually decreasing.

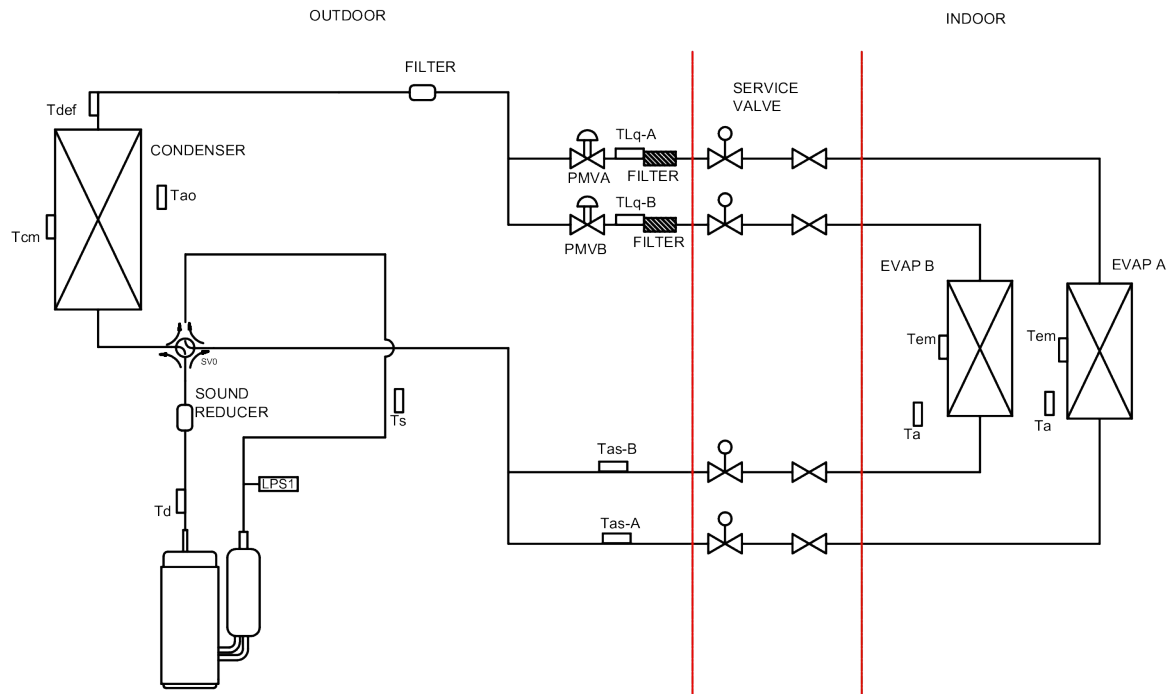
Note:

- (1) Products manufactured after April 2025 will have this function.
- (2) Only some remotes can set this function, such as the T021, T121, M101, etc.
- (3) If using a wired controller for configuration, only the XK06 model has this function.
- (4) After enabling the 8°C heating function, the heating mode will be displayed at 8°C, with auto wind speed by default.

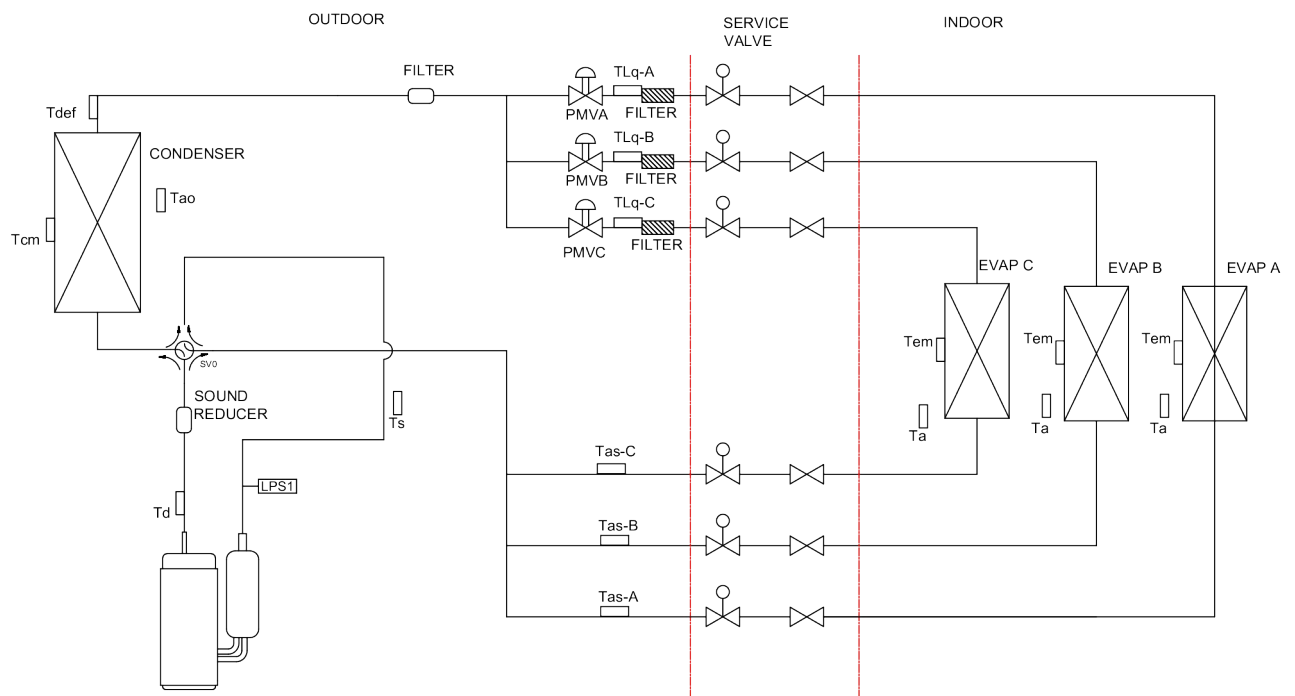
Note: Please refer to the **brochure for more information** on product features

Part3 Piping System

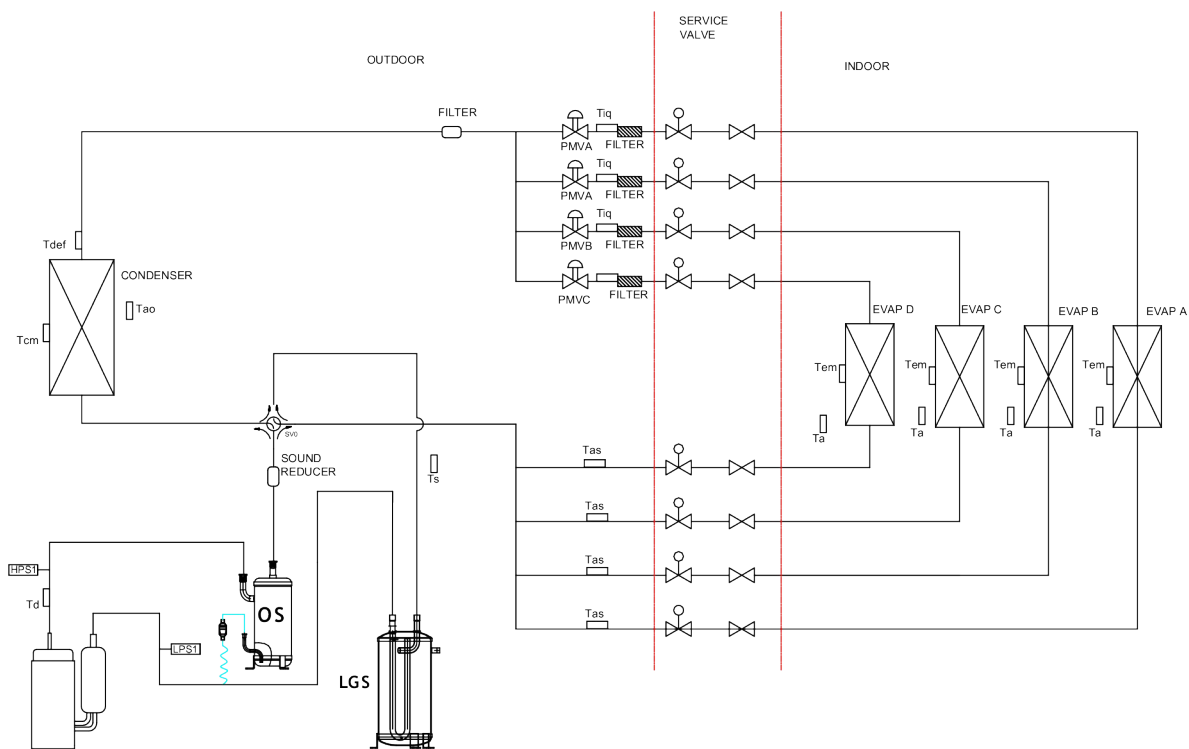
1. 14K,18K



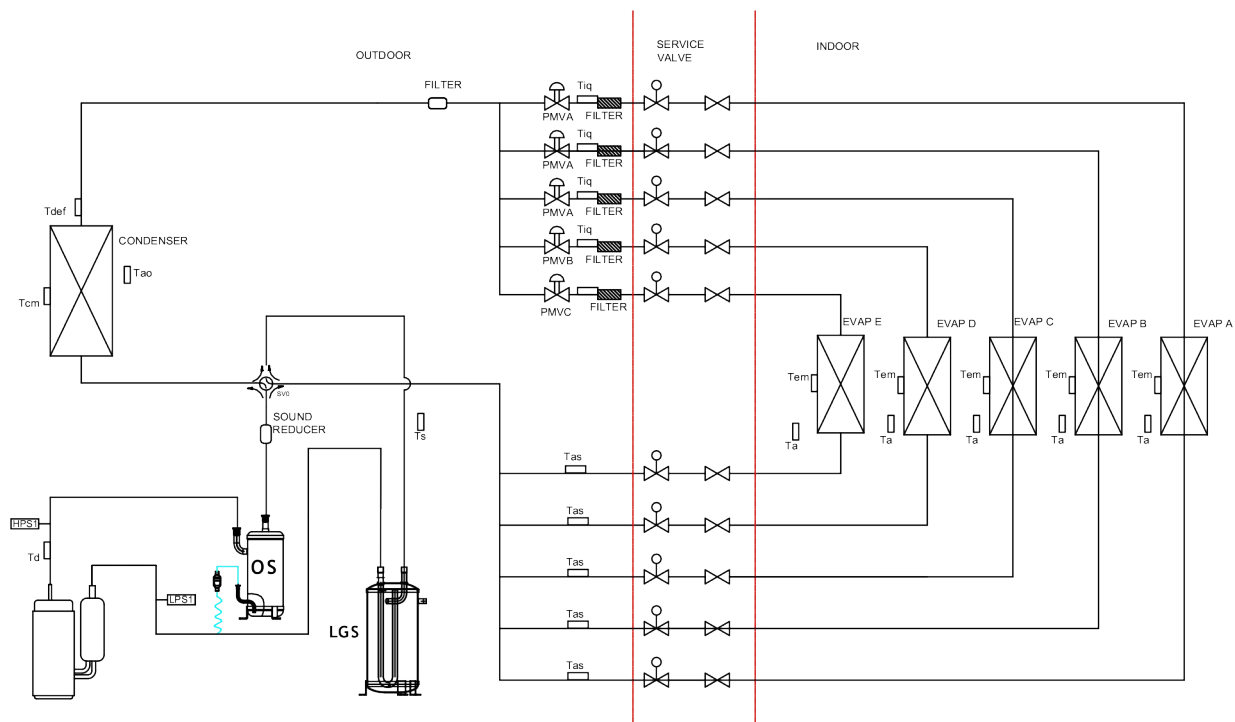
2. 21K,27K



3. 28K, 36K



4. 42K

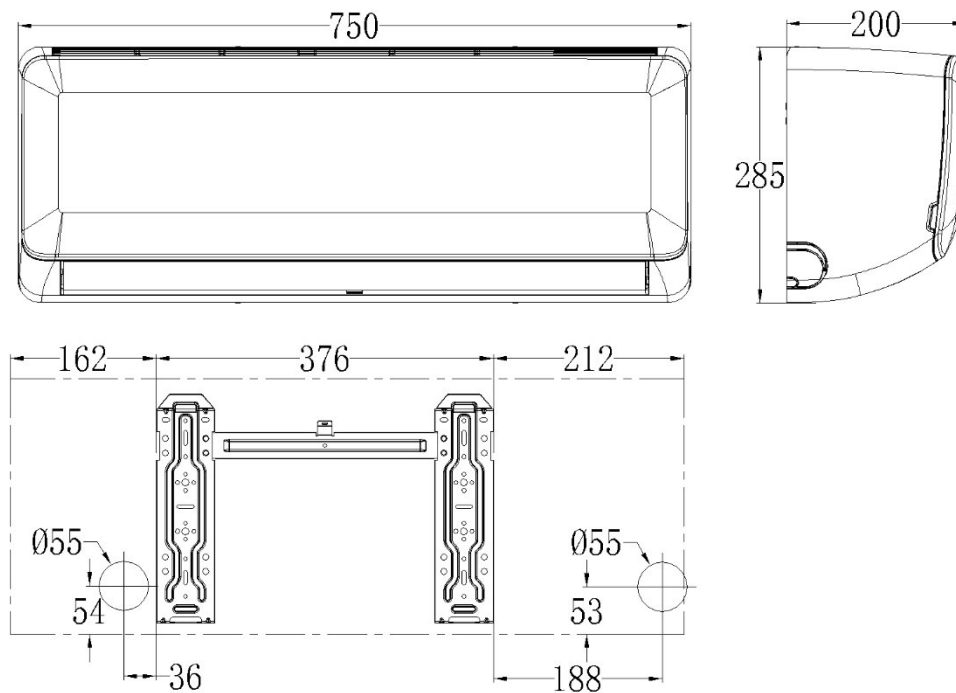


Part4 Dimension

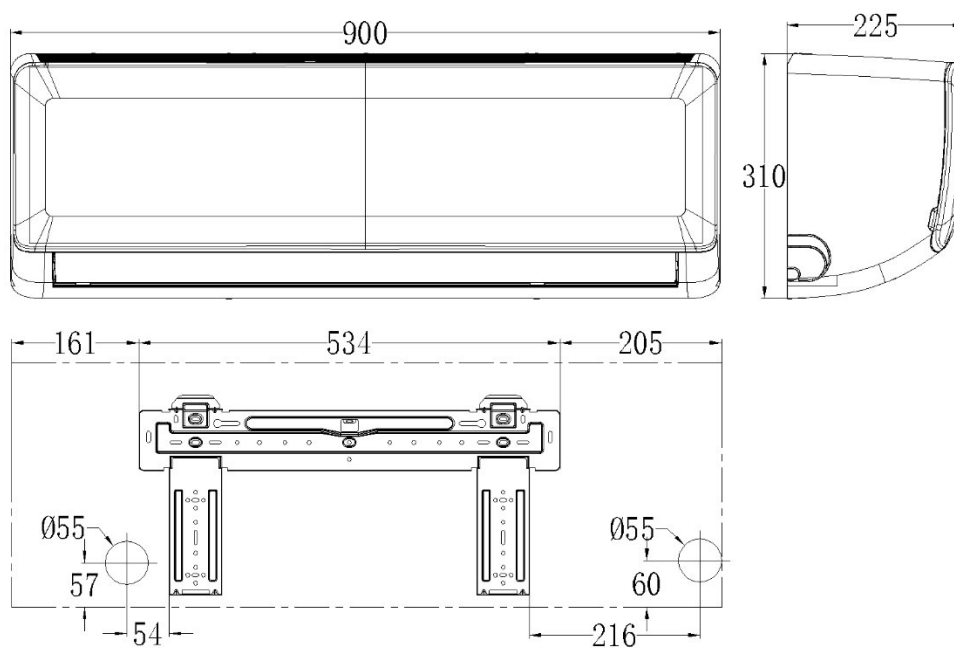
1. Wall Mounted

1.1 F type

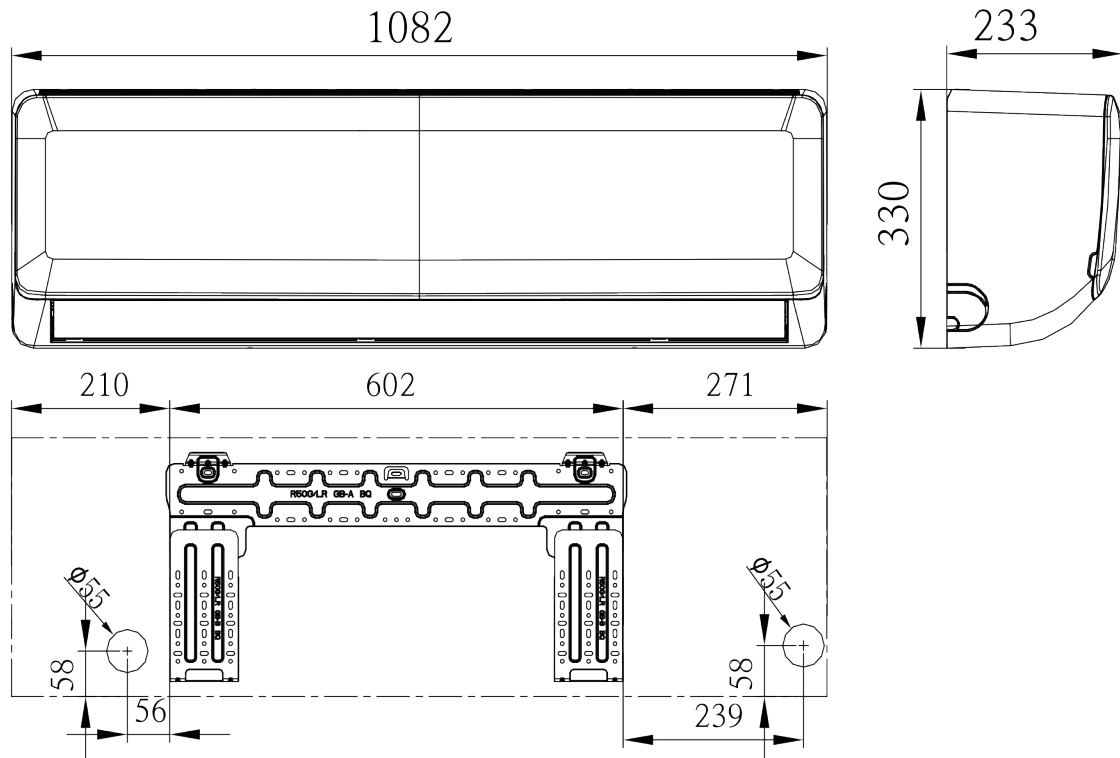
AMWM-H07/4R3C(F*) AMWM-H09/4R3D(F*) AMWM-H12/4R3D(F*)



AMWM-H18/4R3C(F*)



AMWM-H24/4R3B(F*)

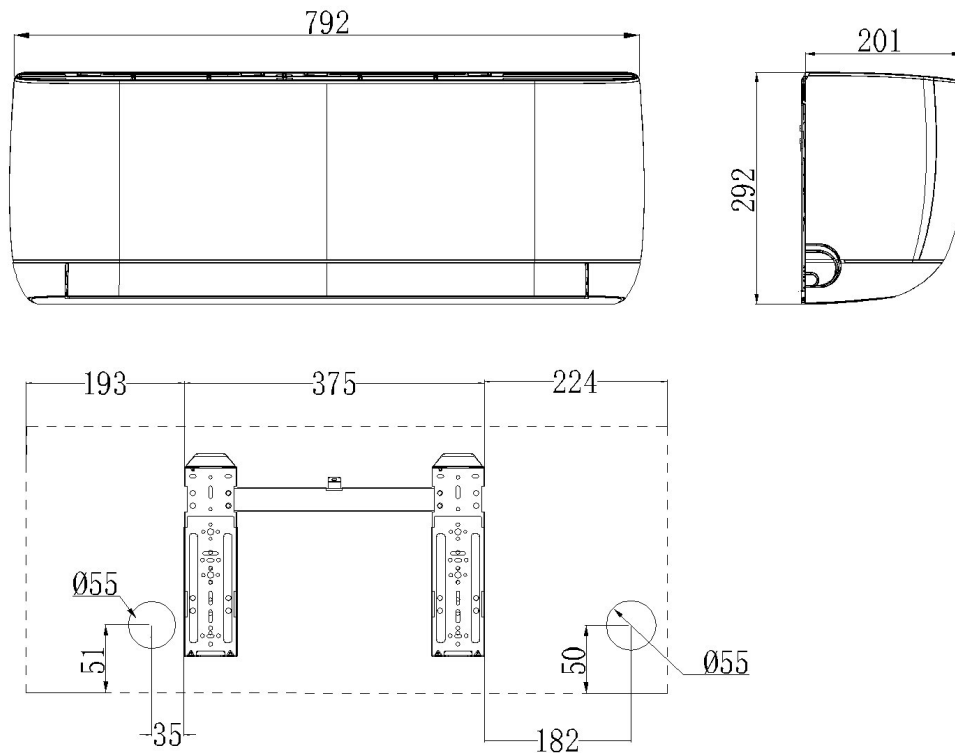


1.2 J type

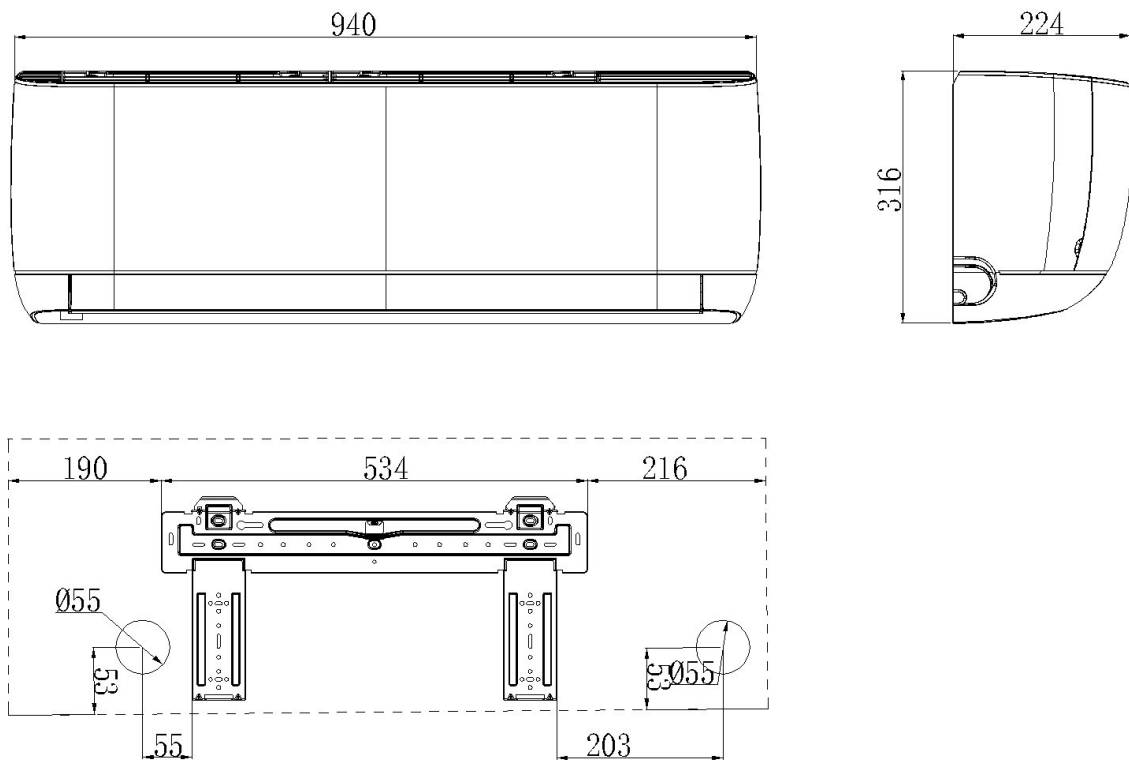
AMWM-H07/4R3C(J*)

AMWM-H09/4R3C(J*)

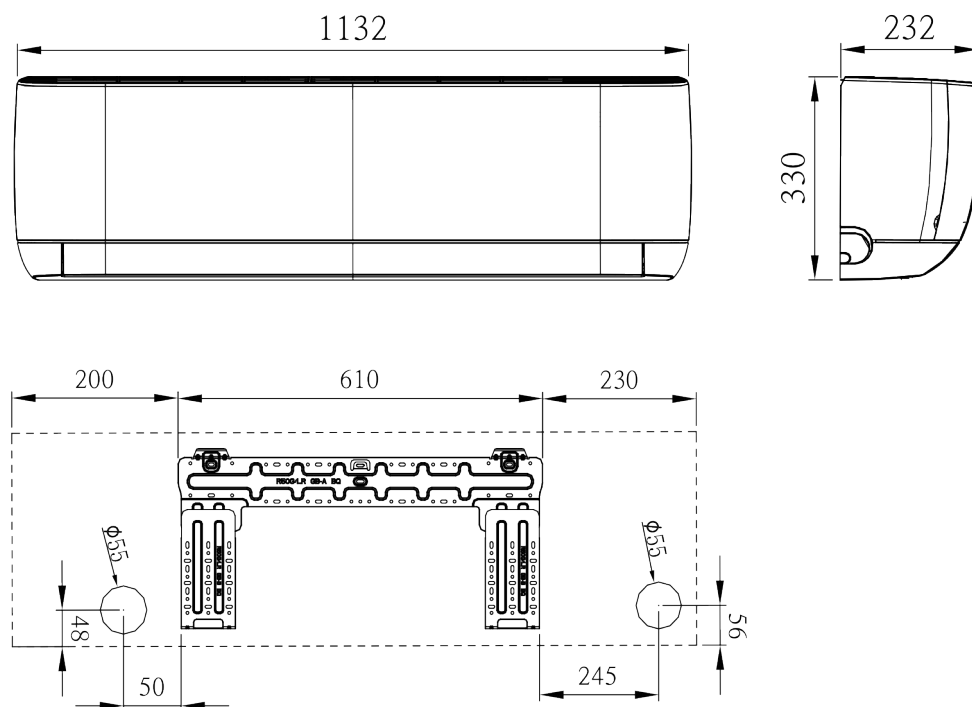
AMWM-H12/4R3D(J*)



AMWM-H18/4R3C(J*)

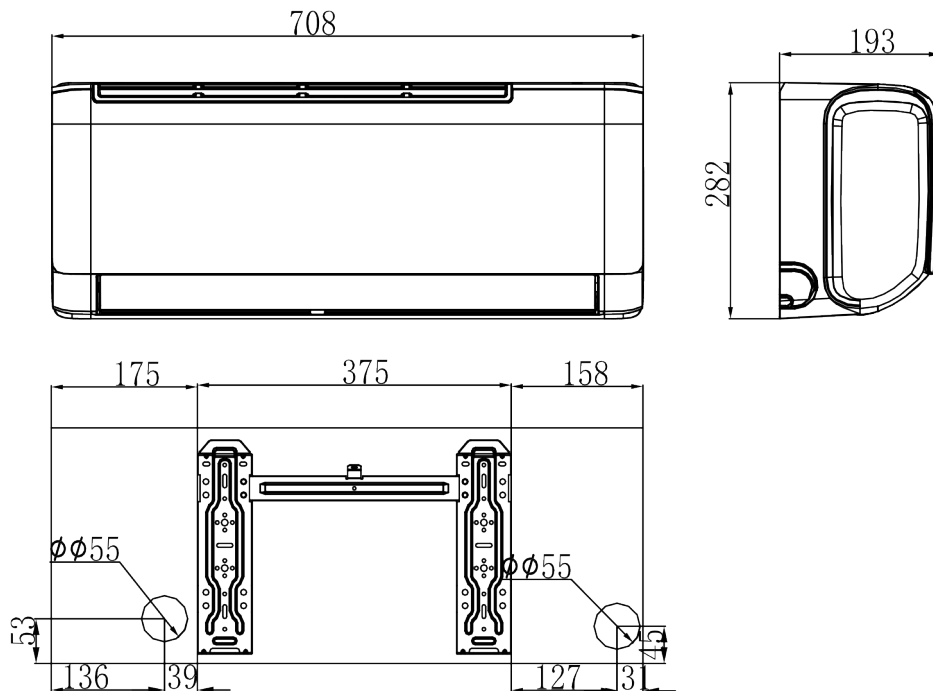


AMWM-H24/4R3B(J*)

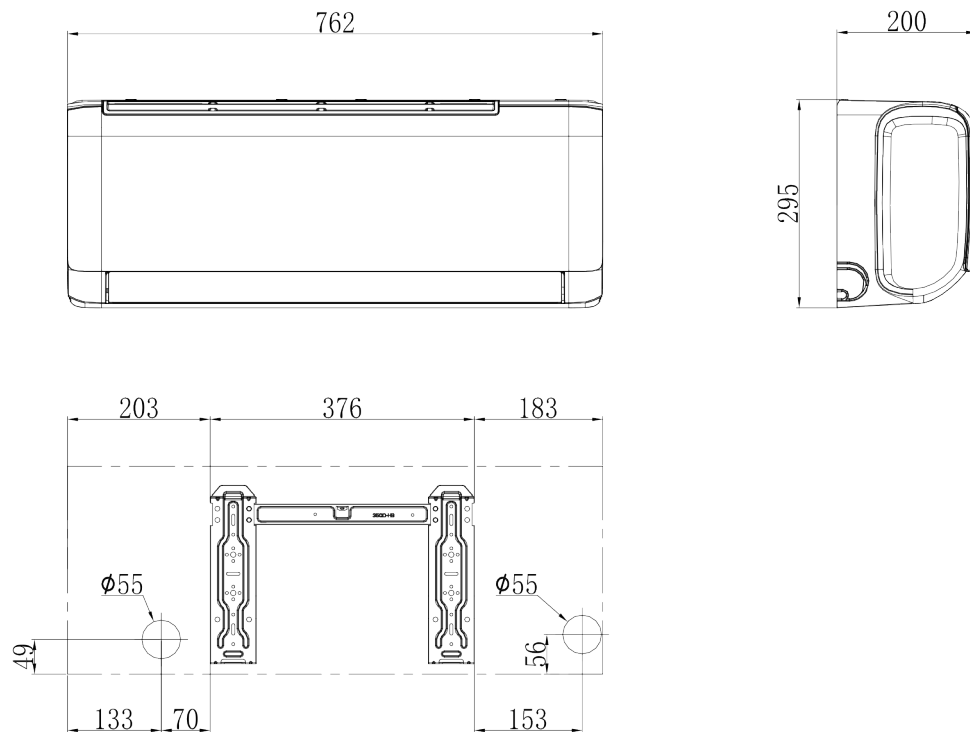


1.3 Q type

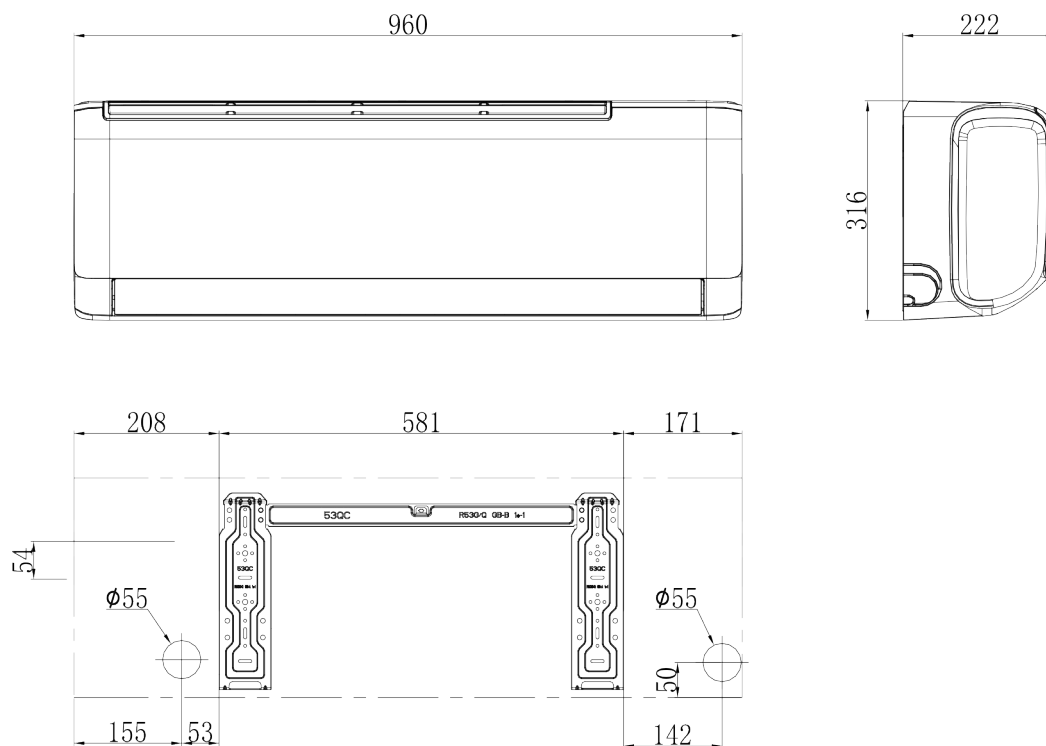
AMWM-H07/4R3B(Q*) AMWM-H09/4R3B(Q*)



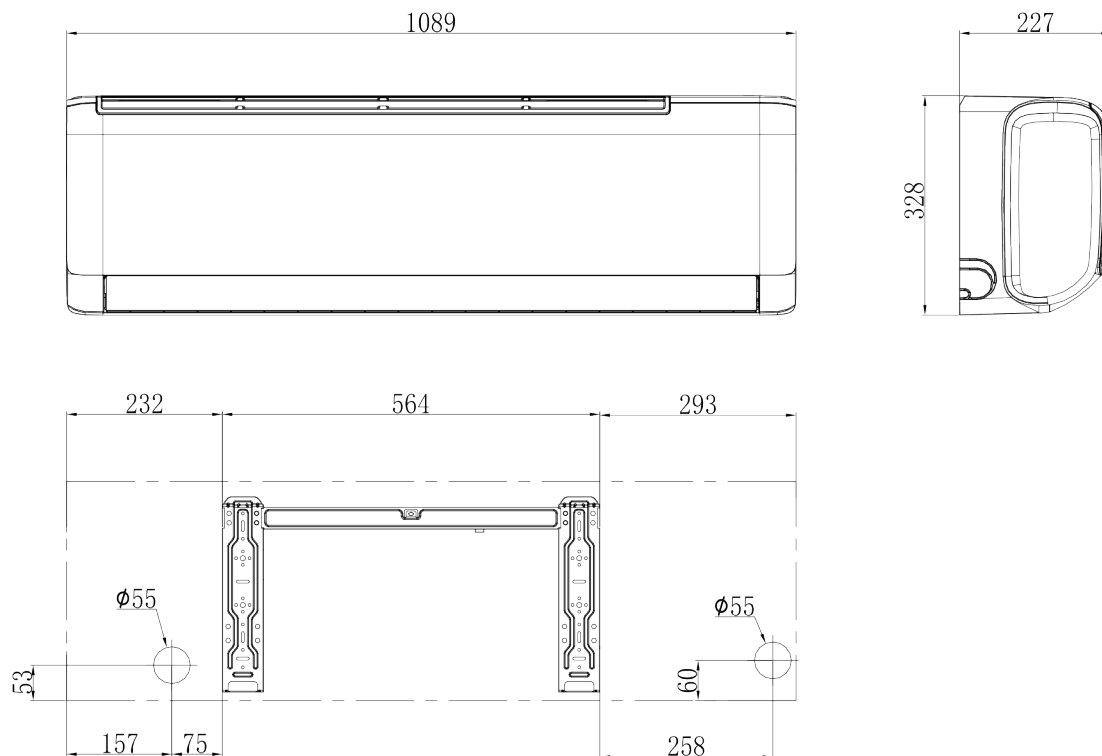
AMWM-H12/4R3A(Q*)



AMWM-H18/4R3A(Q*)

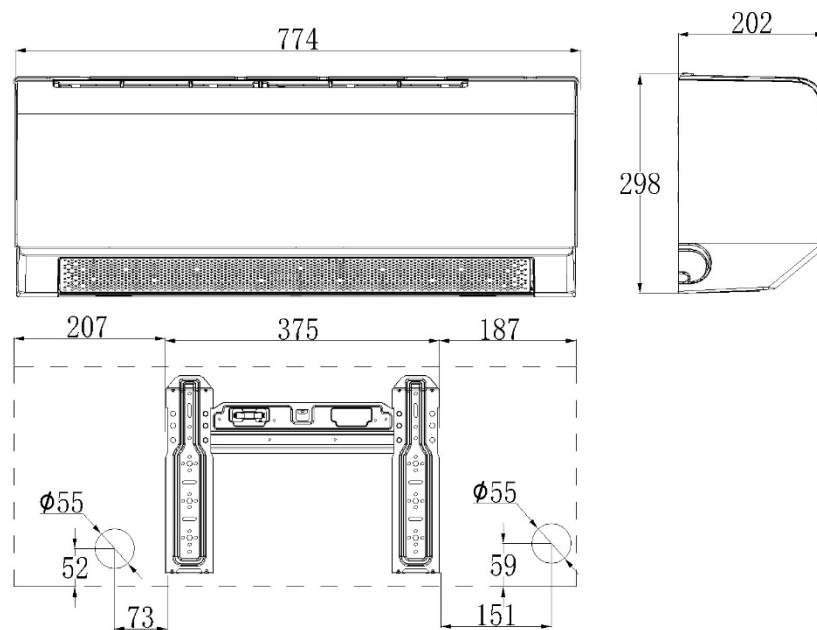


AMWM-H24/4R3B(Q*)

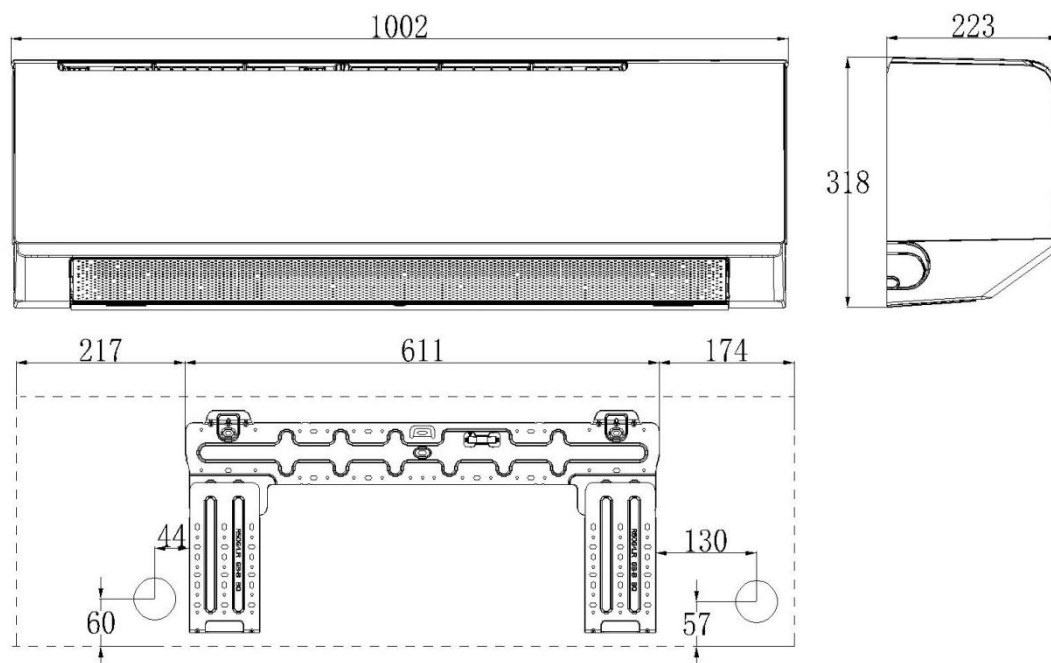


1.4 C type

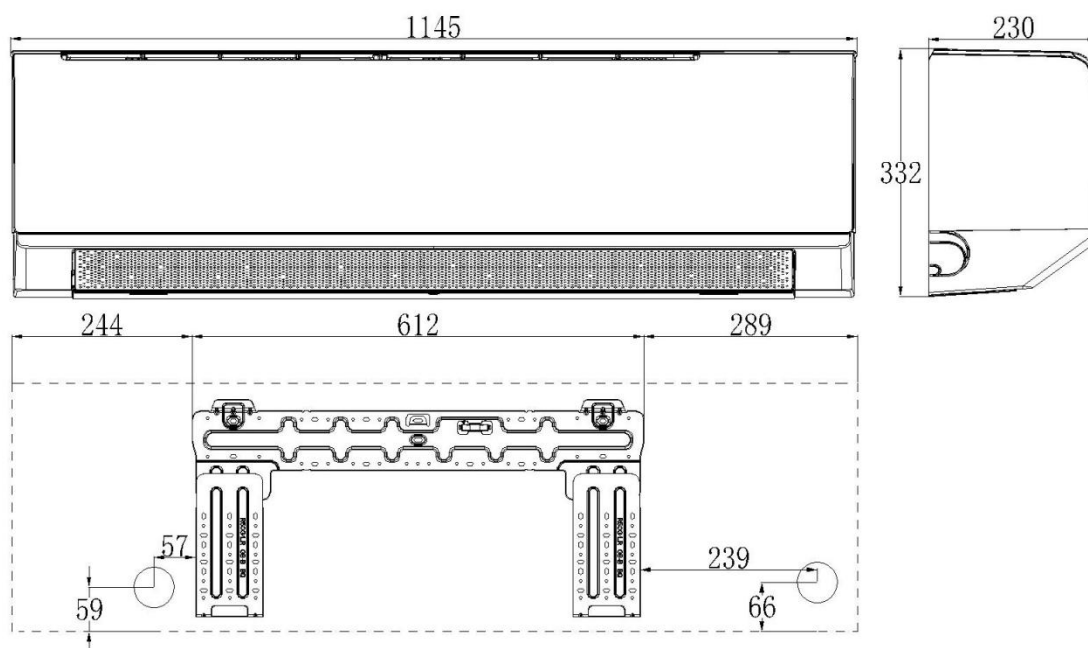
AMWM-H07/4R3A(C*) AMWM-H09/4R3A(C*) AMWM-H12/4R3A(C*)



AMWM-H18/4R3A(C*)



AMWM-H24/4R3A(C*)

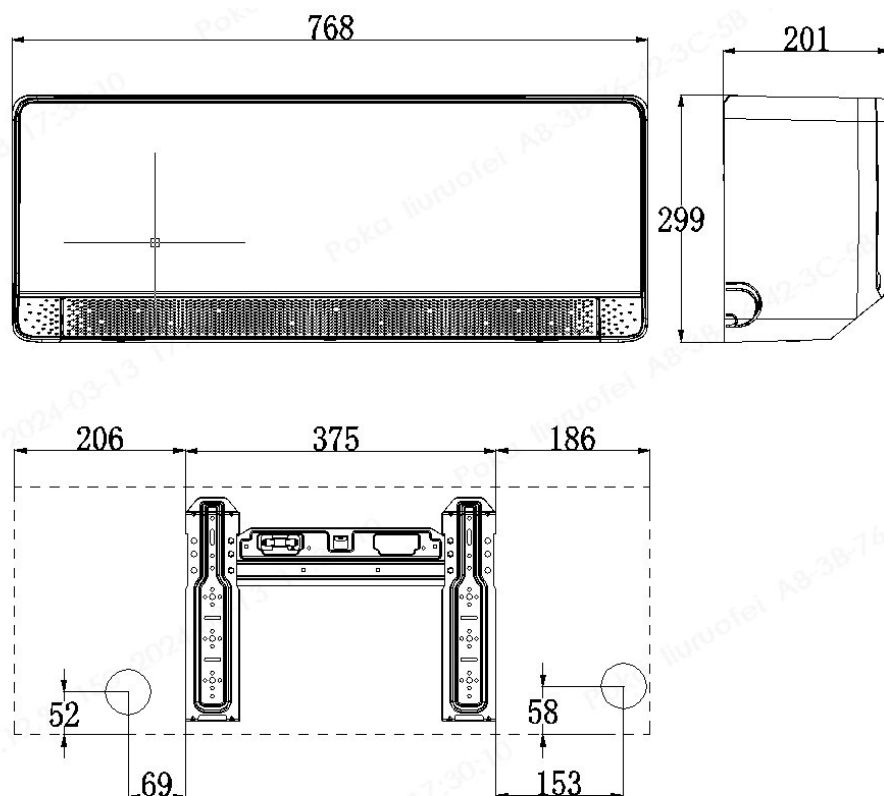


1.5 M type

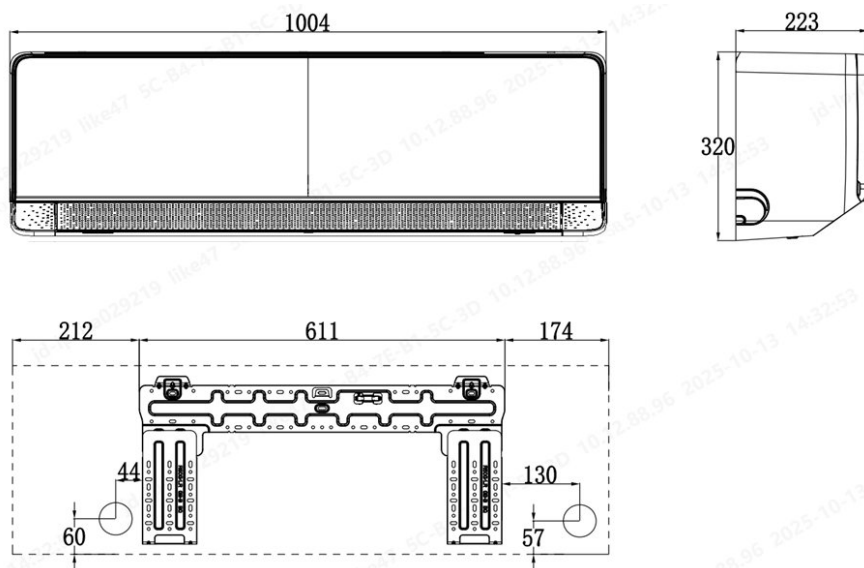
AMWM-H07/4R3A(M*)

AMWM-H09/4R3A(M*)

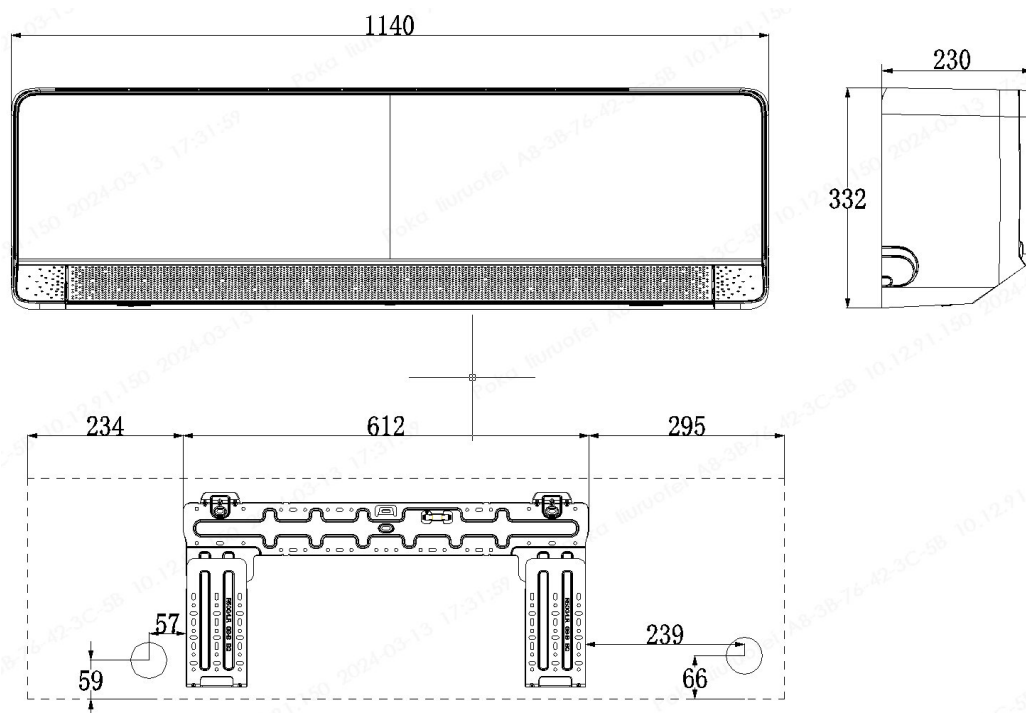
AMWM-H12/4R3A(M*)



AMWM-H18/4R3A(M*)



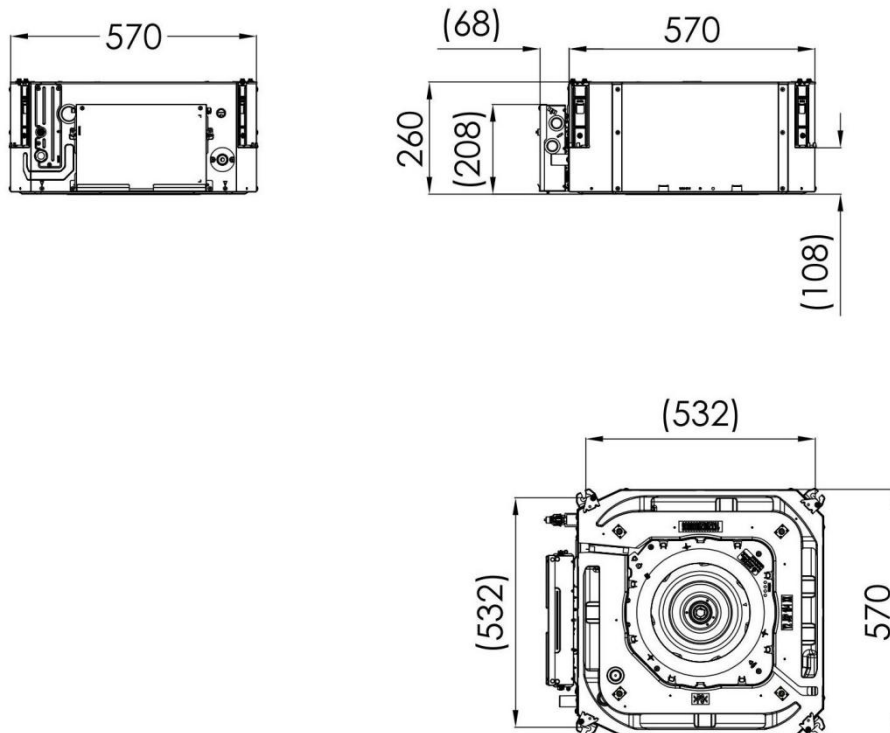
AMWM-H24/4R3A(M*)



2. Cassette

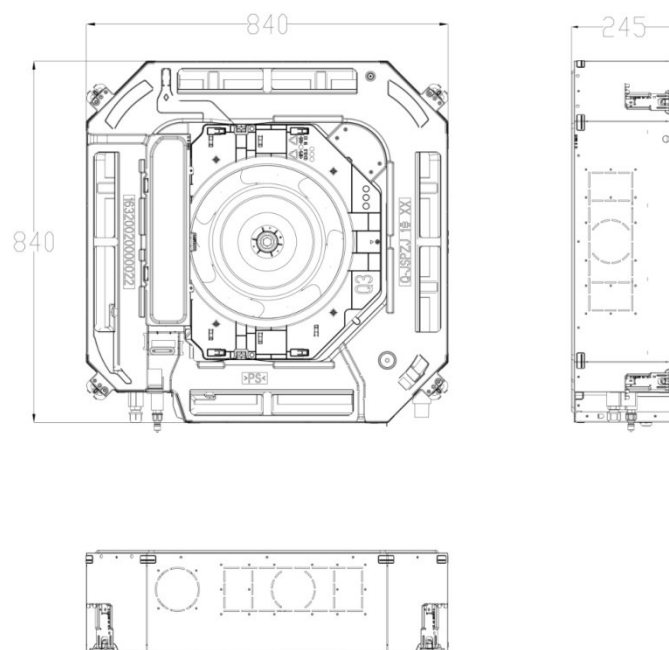
2.1 Compact Cassette Y

09K 12K 18K



2.2 Cassette Q

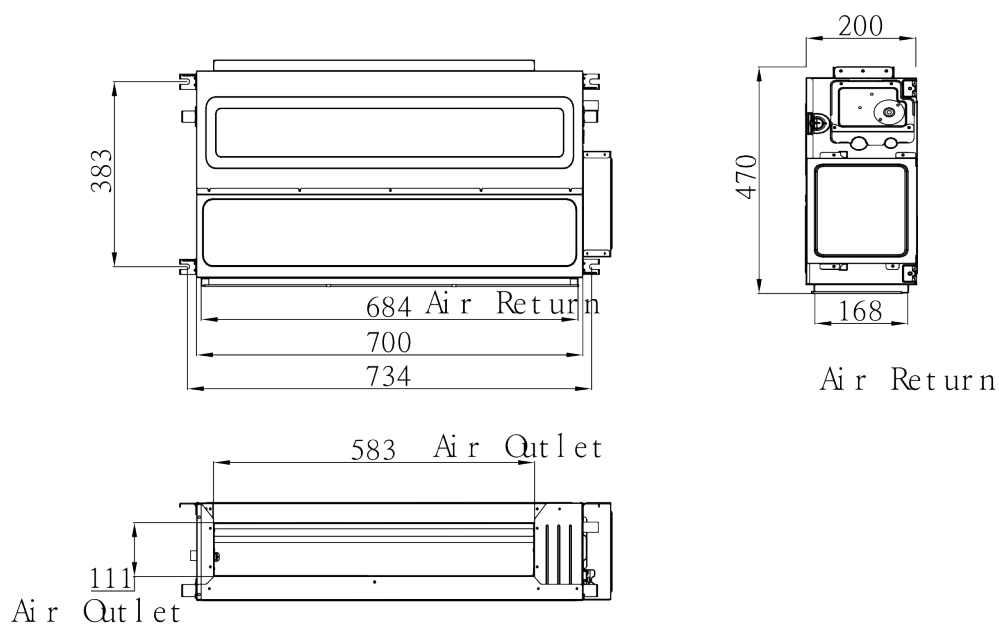
24K



3. Duct

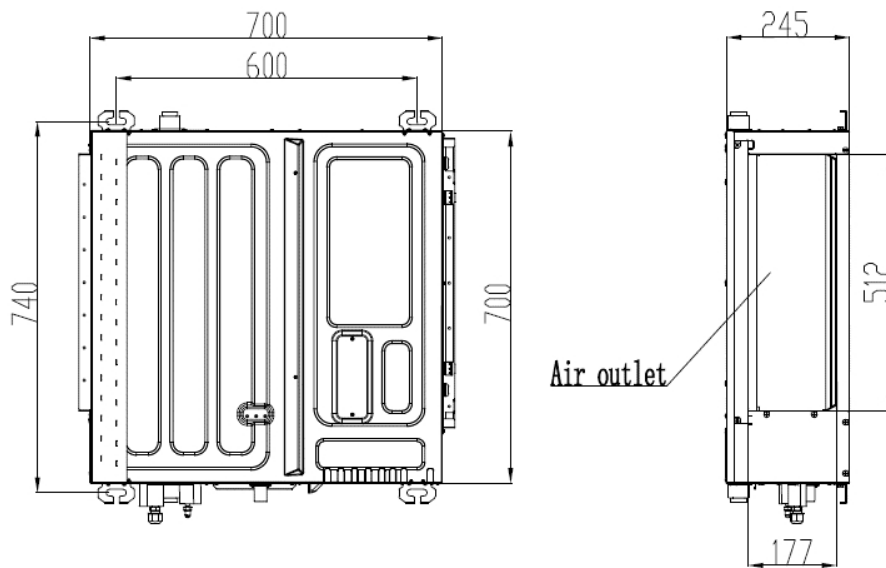
3.1 Slim duct Y

07K 09K

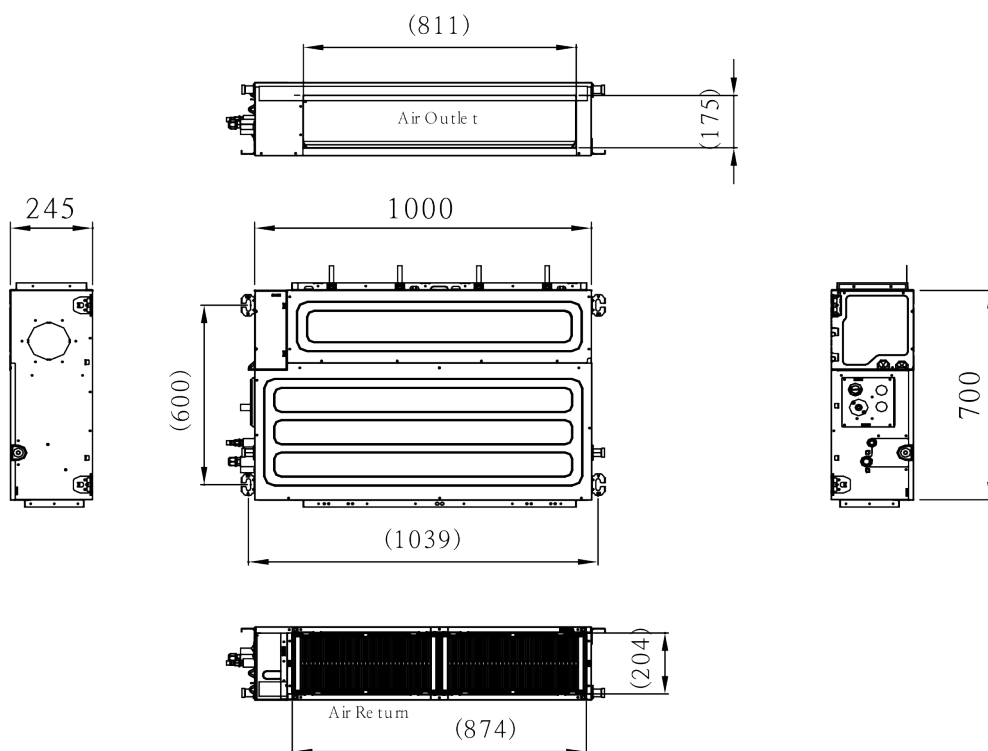


3.2 Medium duct M

12K 18K

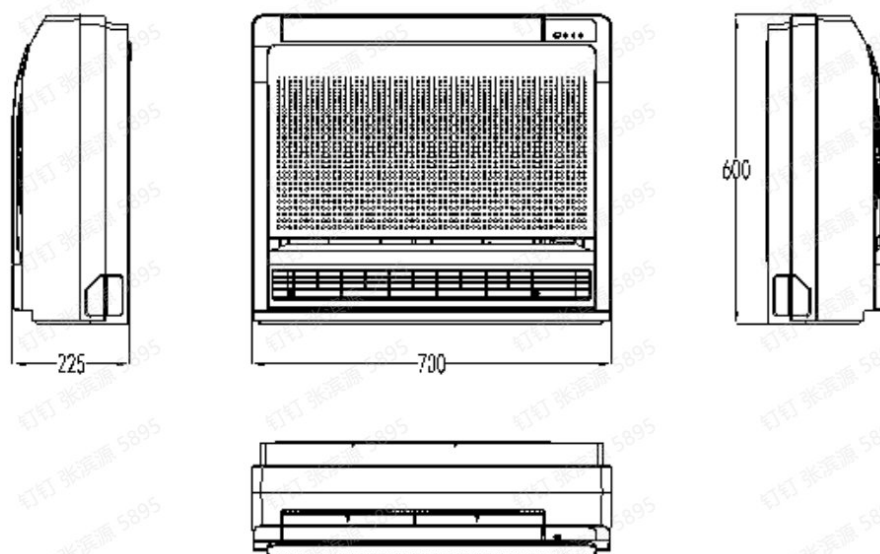


24K



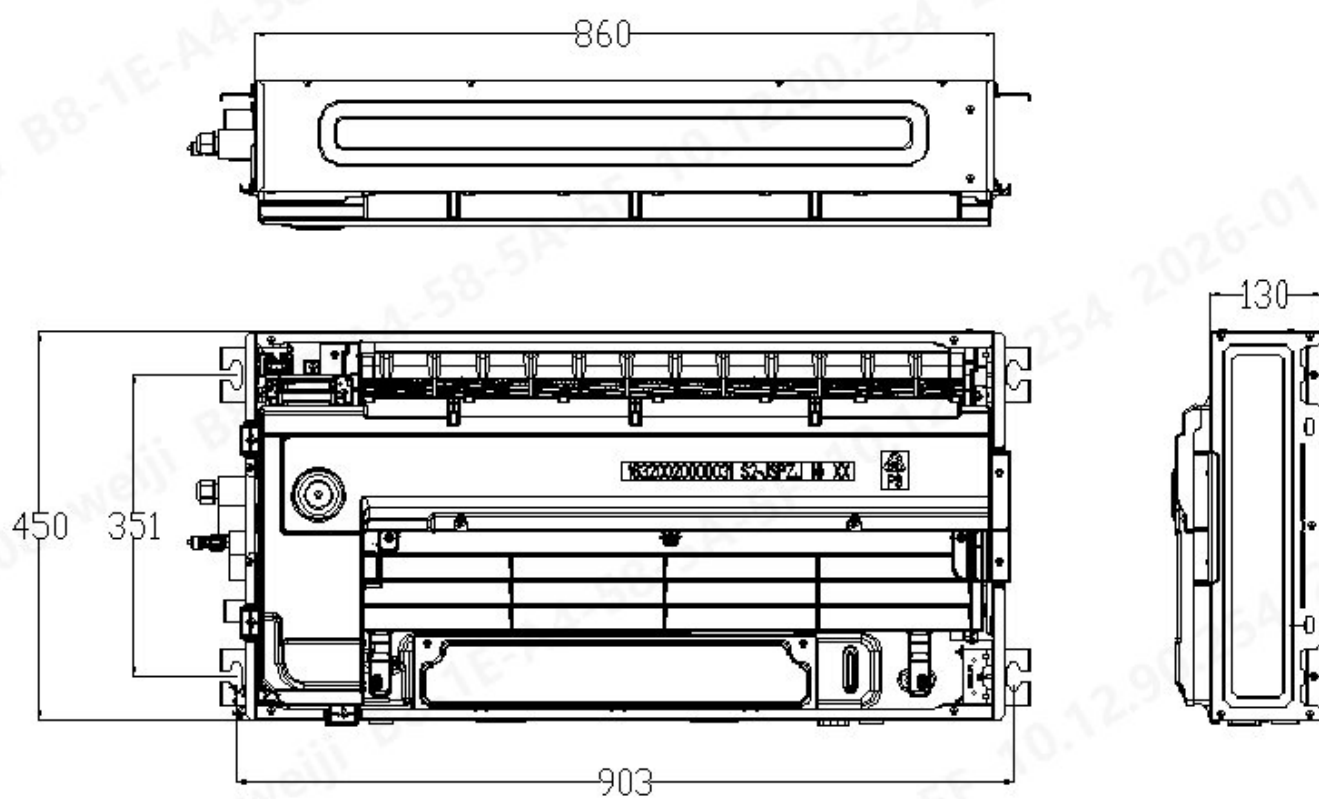
4. Console

9K 12K 18K

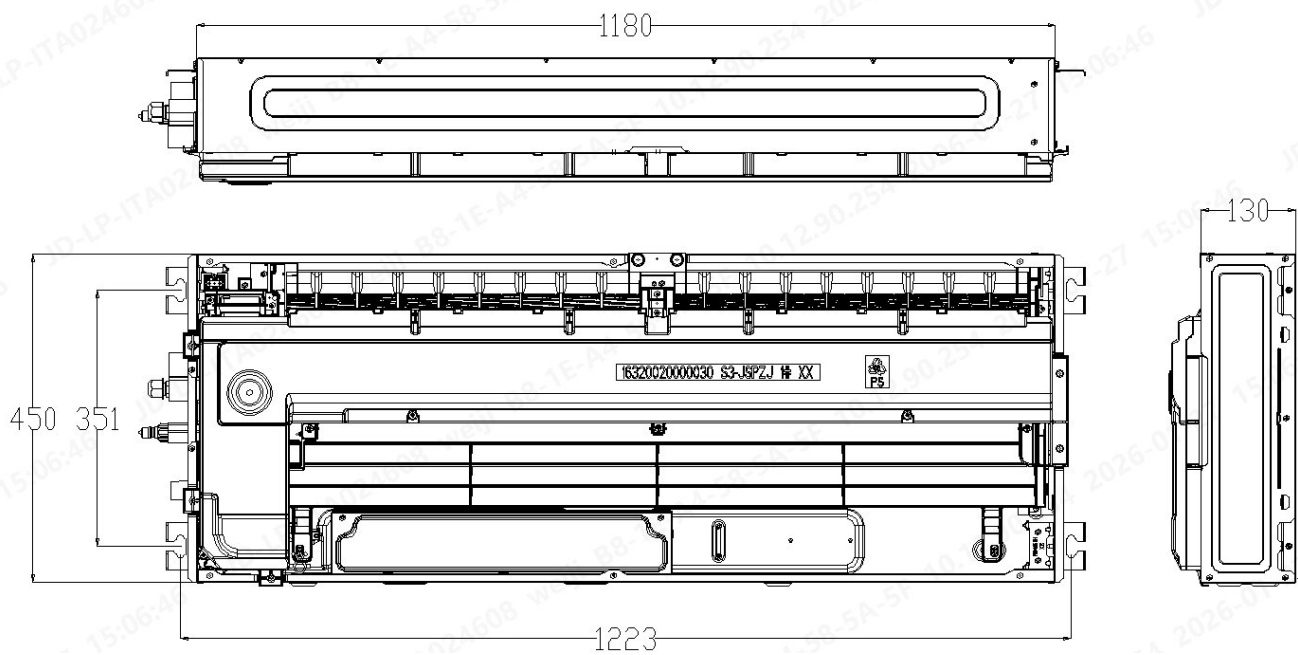


5. One-way cassette

9K 12K

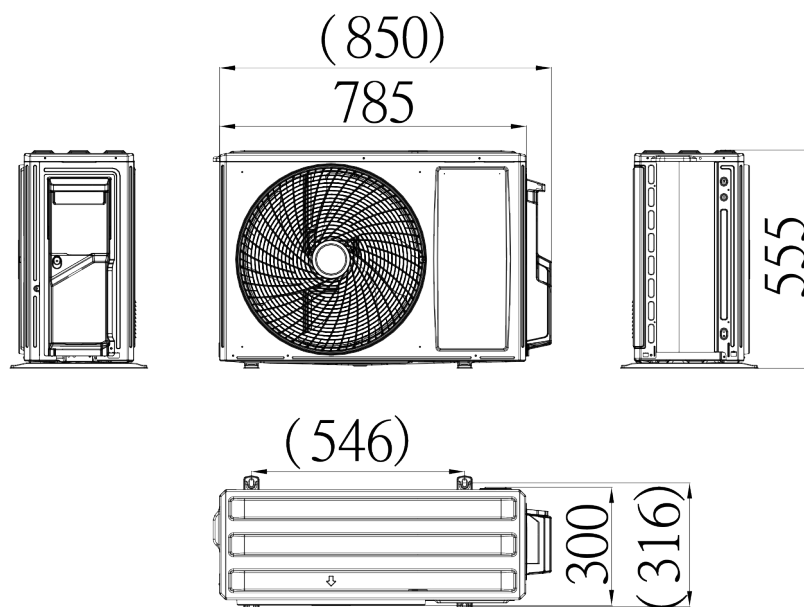


18K 24K

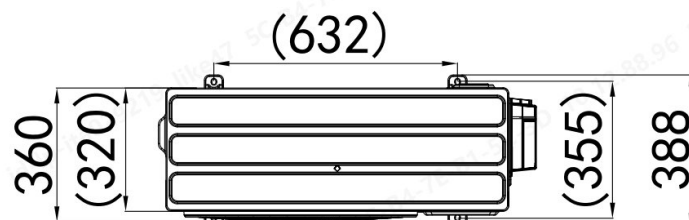
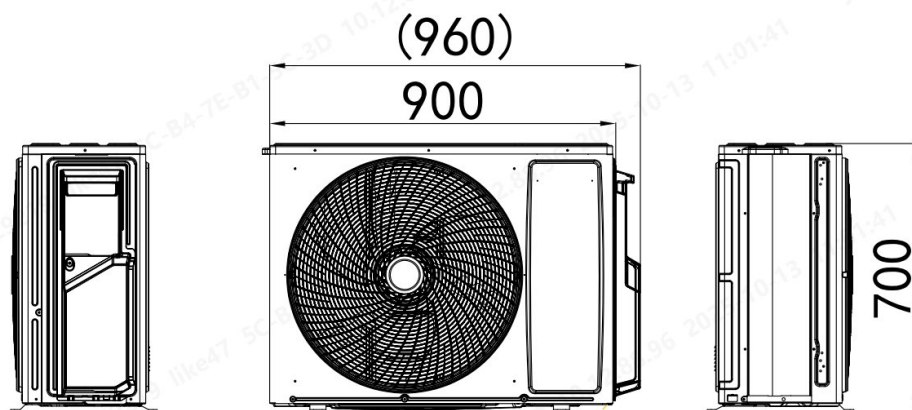


6. Outdoor Unit

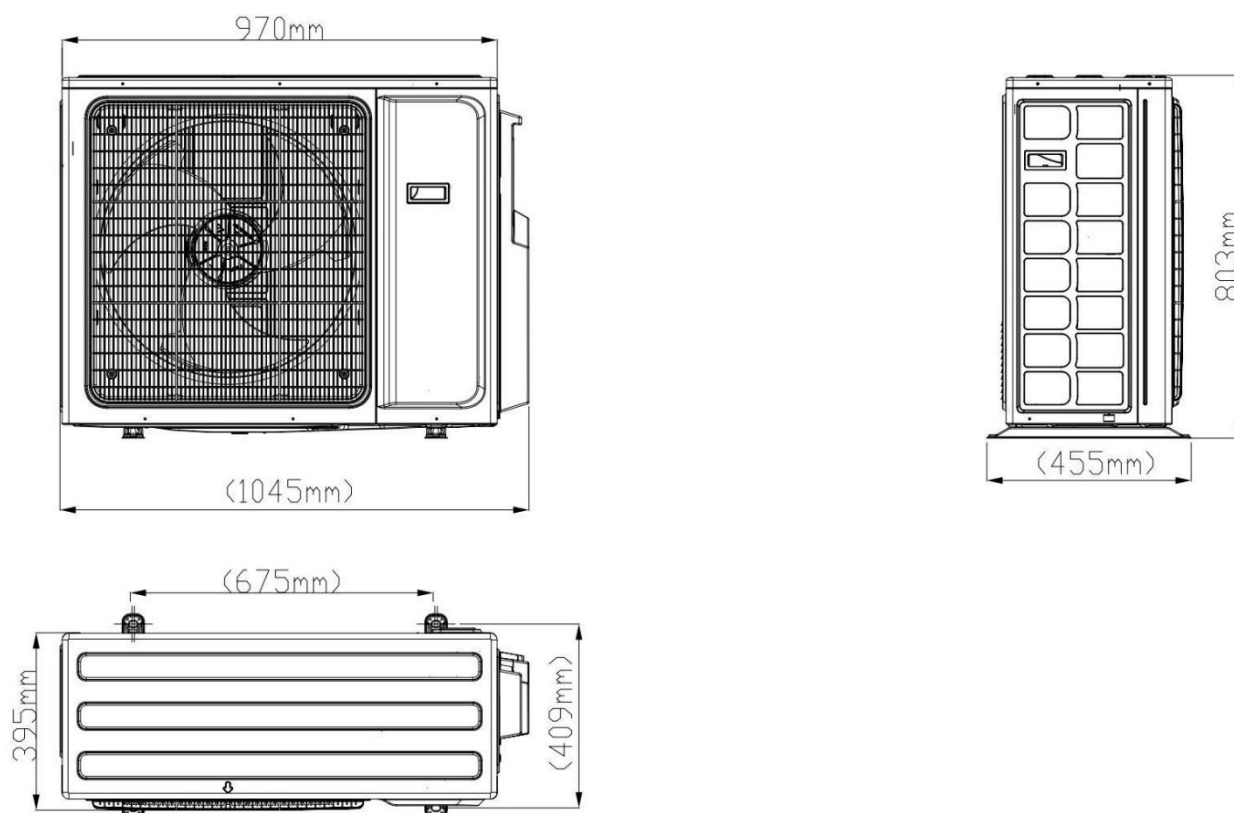
14K(AM2-H14/4DR3C) 18K(AM2-H18/4DR3D)



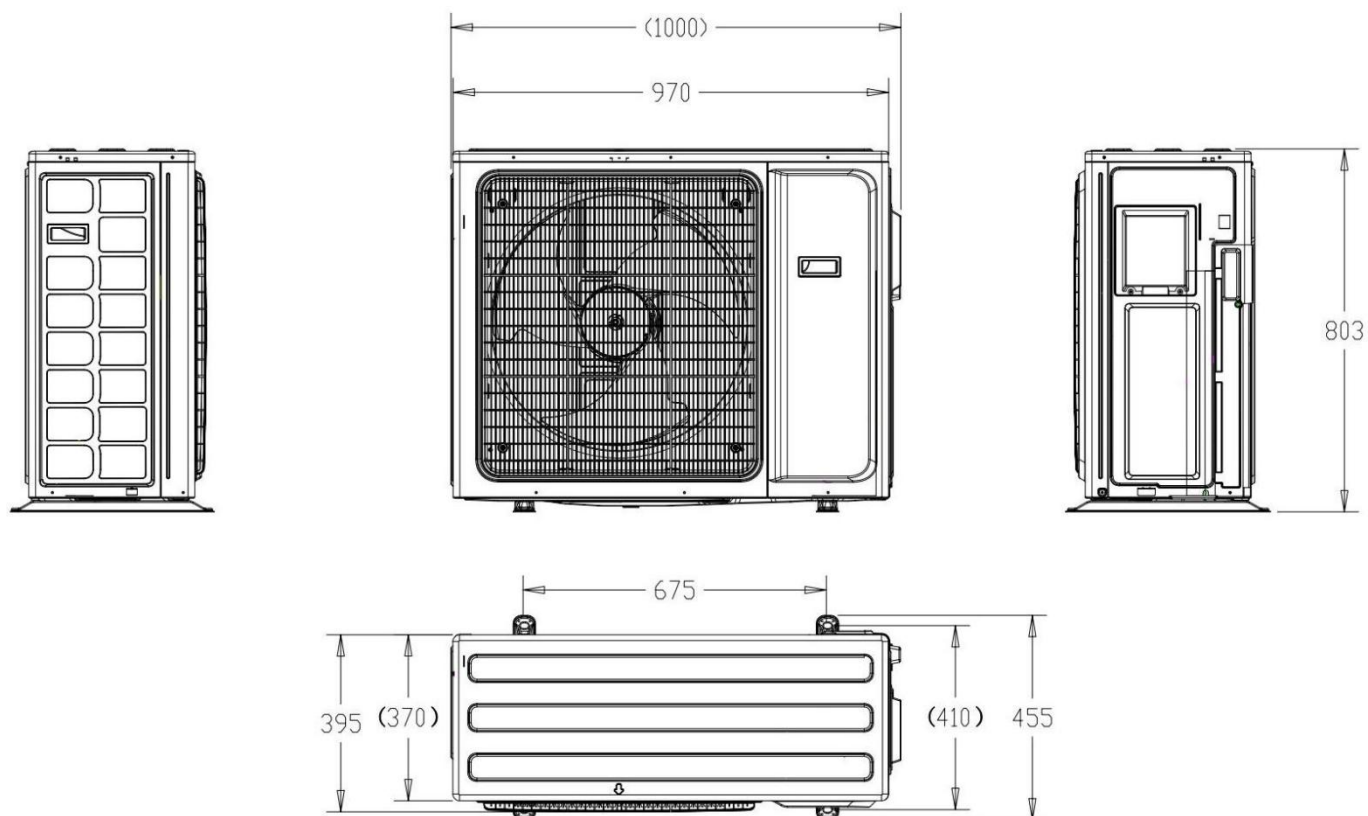
21K(AM3-H21/4DR3C) 27K(AM3-H27/4DR3D)



28K(AM4-H28/4DR3D) 36K(AM4-H36/4DR3B)



42K(AM5-H42/4DR3)



Part5 Electrical Principle Diagram

1. Wall Mounted

1.1 J Type& F Type& Q Type

J Type: 07K: AMWM-H07/4R3C(J*) 09K: AMWM-H09/4R3C(J*)

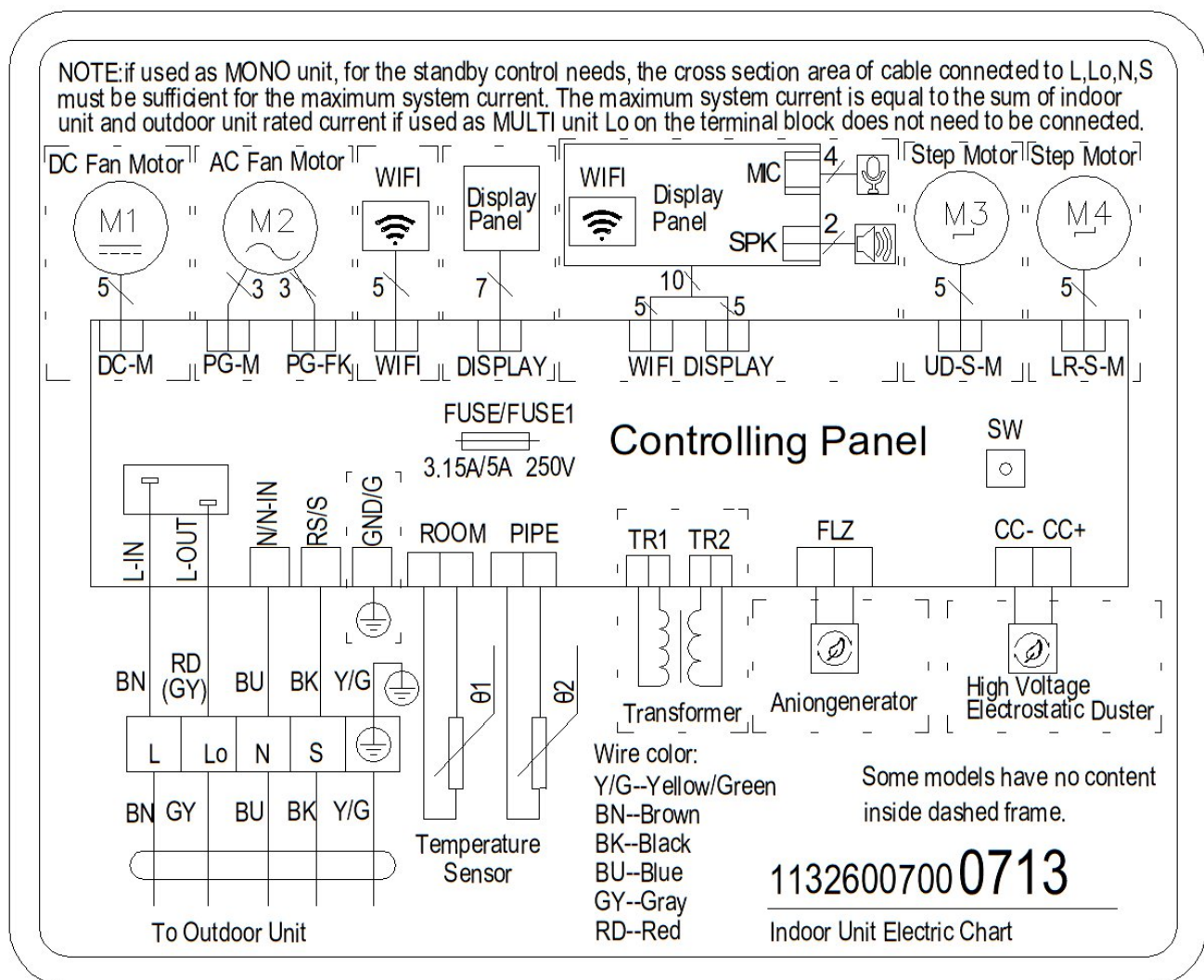
12K: AMWM-H12/4R3D(J*) 18K: AMWM-H18/4R3C(J*) 24K: AMWM-H24/4R3B(J*)

F Type: 07K: AMWM-H07/4R3C(F*) 09K: AMWM-H09/4R3D(F*)

12K: AMWM-H12/4R3D(F*) 18K: AMWM-H18/4R3C(F*) 24K: AMWM-H24/4R3B(F*)

Q Type: 07K: AMWM-H07/4R3B(Q*) 09K: AMWM-H09/4R3B(Q*)

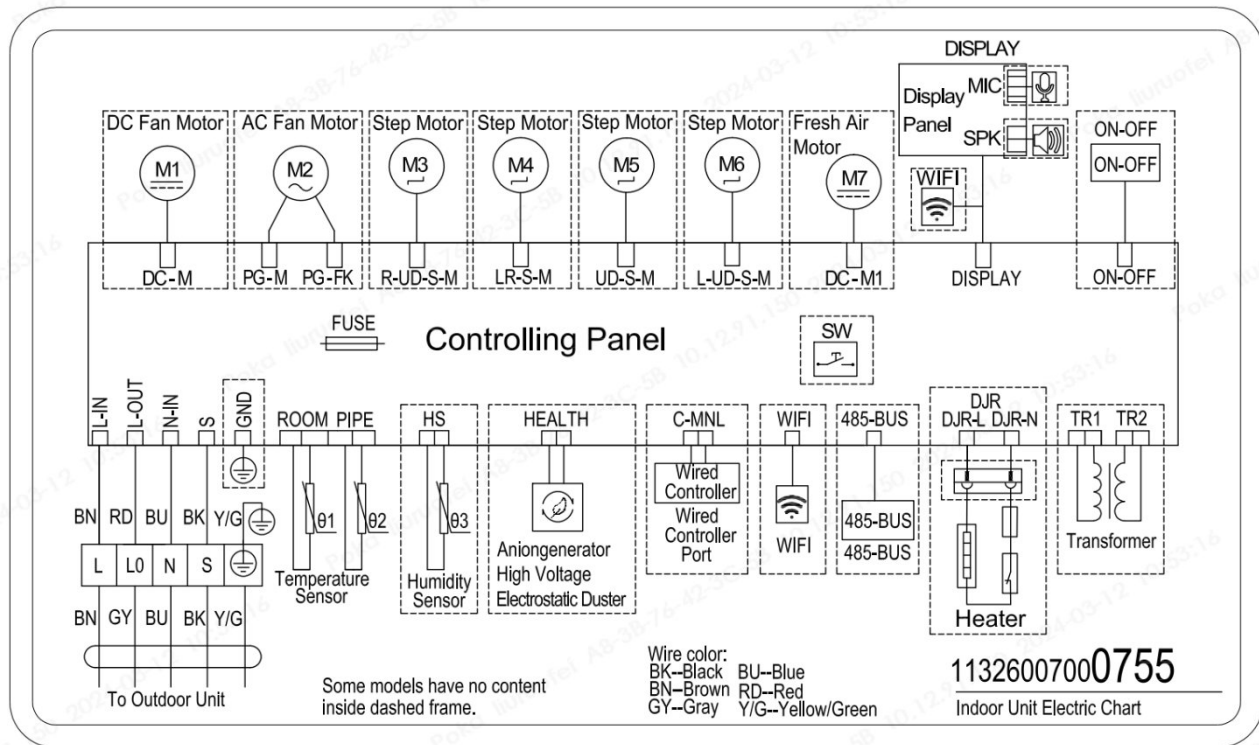
12K: AMWM-H12/4R3A(Q*) 18K: AMWM-H18/4R3A(Q*) 24K: AMWM-H24/4R3B(Q*)



1.2 C Type& M Type

C Type: 07K: AMWM-H07/4R3A(C*) 09K: AMWM-H09/4R3A(C*) 12K: AMWM-H12/4R3A(C*)
18K: AMWM-H18/4R3A(C*) 24K: AMWM-H24/4R3A(C*)

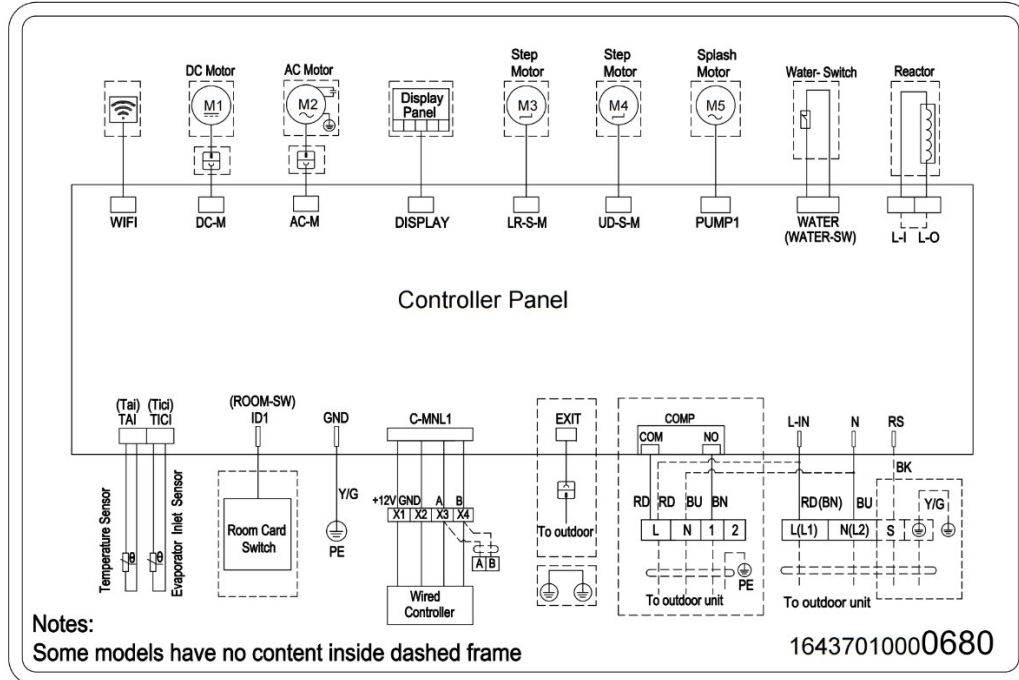
M Type: 07K: AMWM-H07/4R3A(M*) 09K: AMWM-H09/4R3A(M*) 12K: AMWM-H12/4R3A(M*)
18K: AMWM-H18/4R3A(M*) 24K: AMWM-H24/4R3A(M*)



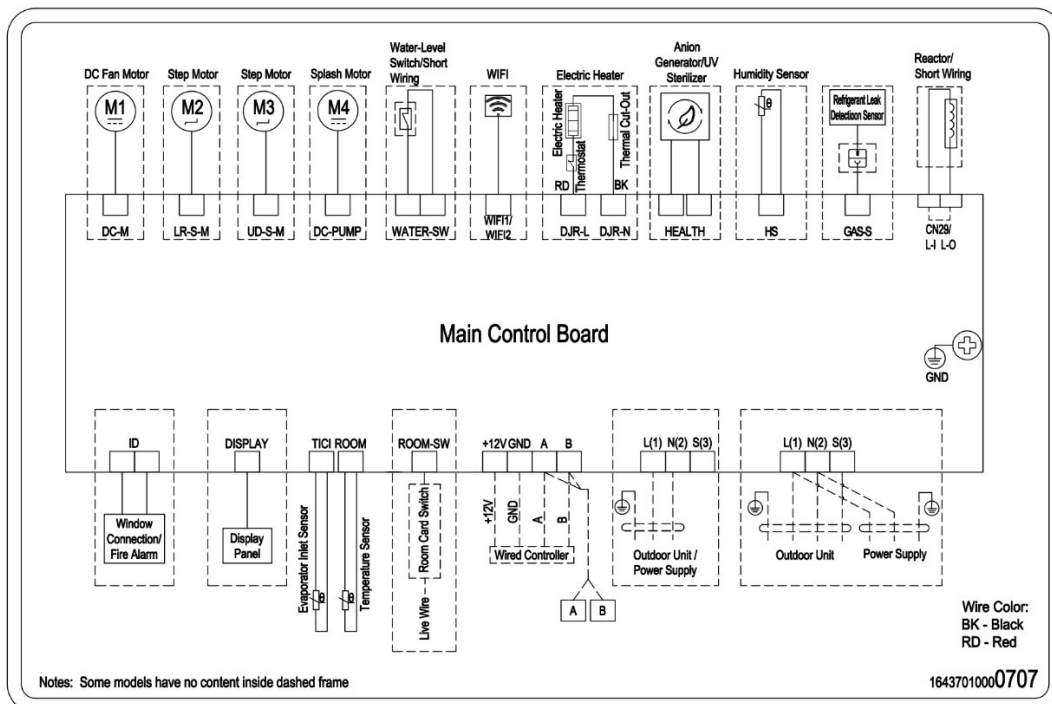
2. Cassette

2.1 Compact Cassette Y

09K: AUCA-H09/4DR3HYAB

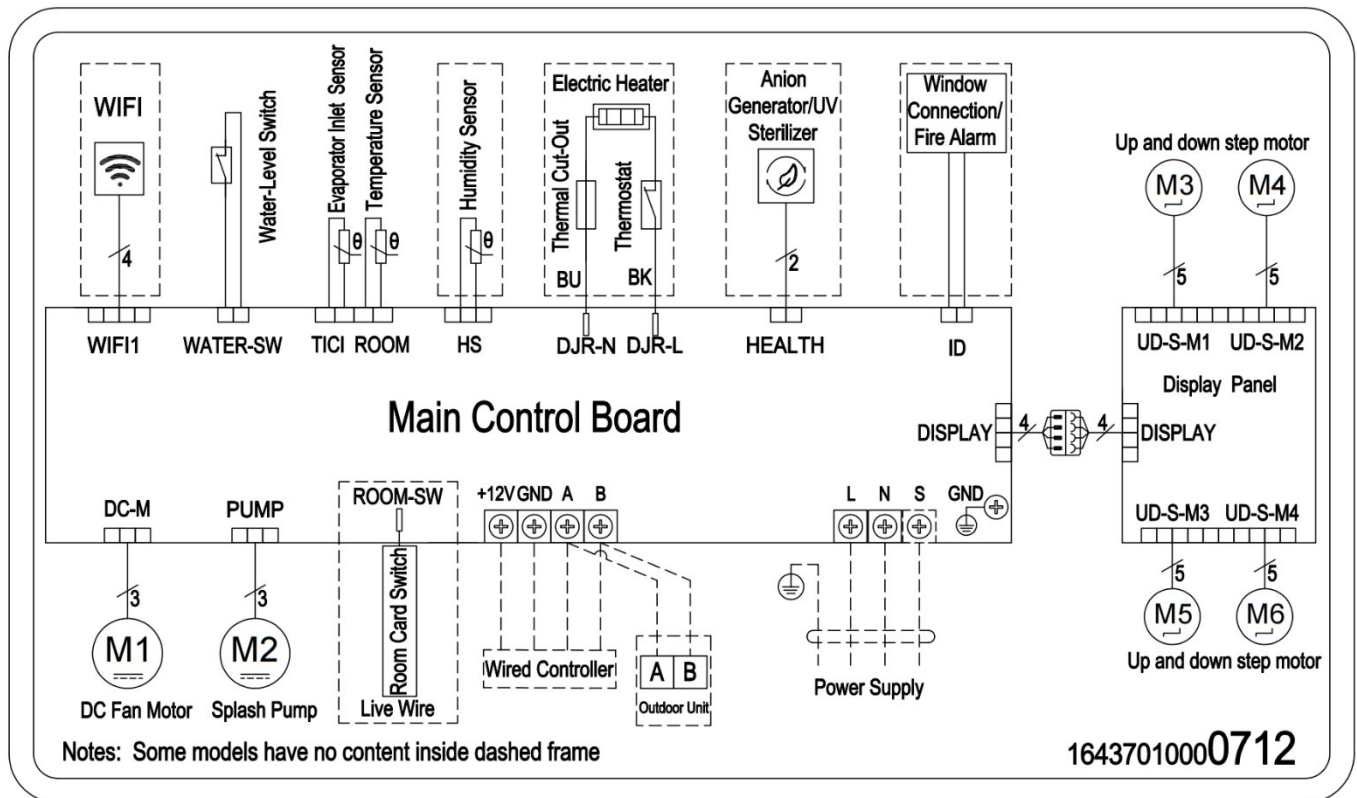


12K: AUCA-H12/4DR3HB2; 18K: AUCA-H18/4DR3HB2



2.2 Cassette Q

24K: AUCA-H24/4DR3HB2

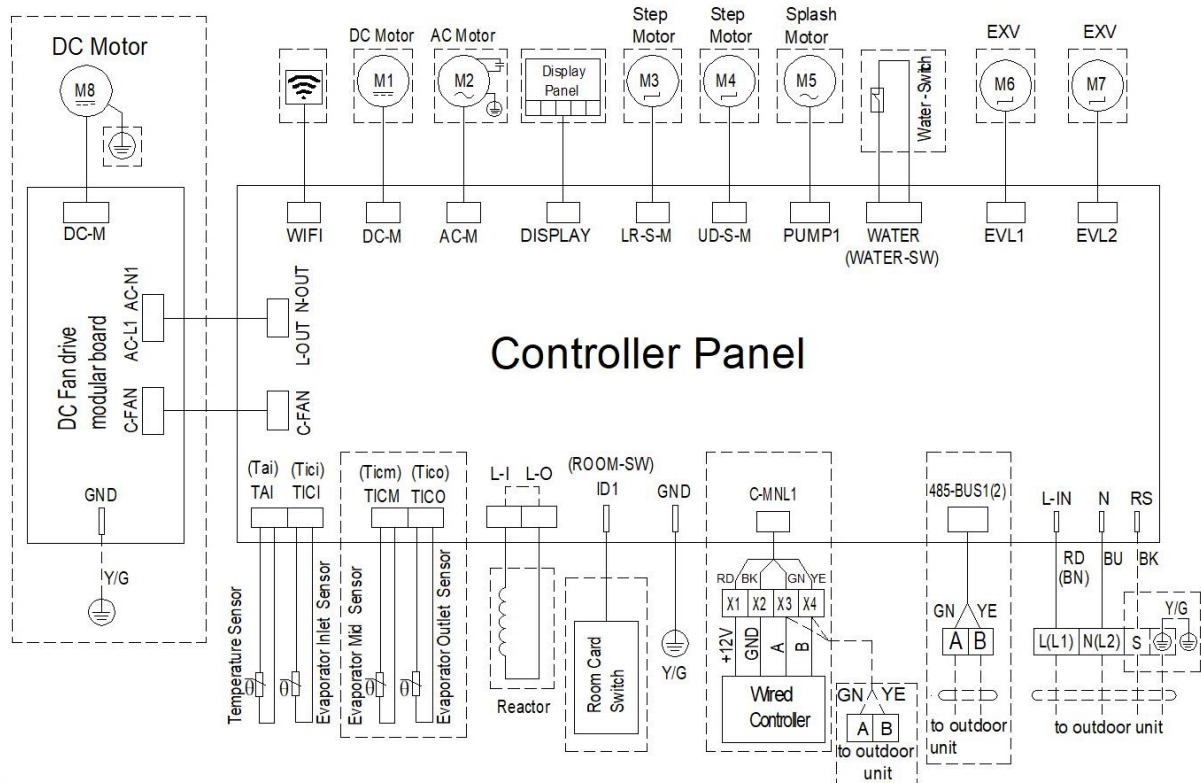


3. Duct

3.1 Slim Duct Y

07K: AMSD-H07/4R3AA

09K: AMSD-H09/4R3AA



Notes:

Some models have no content inside dashed frame;

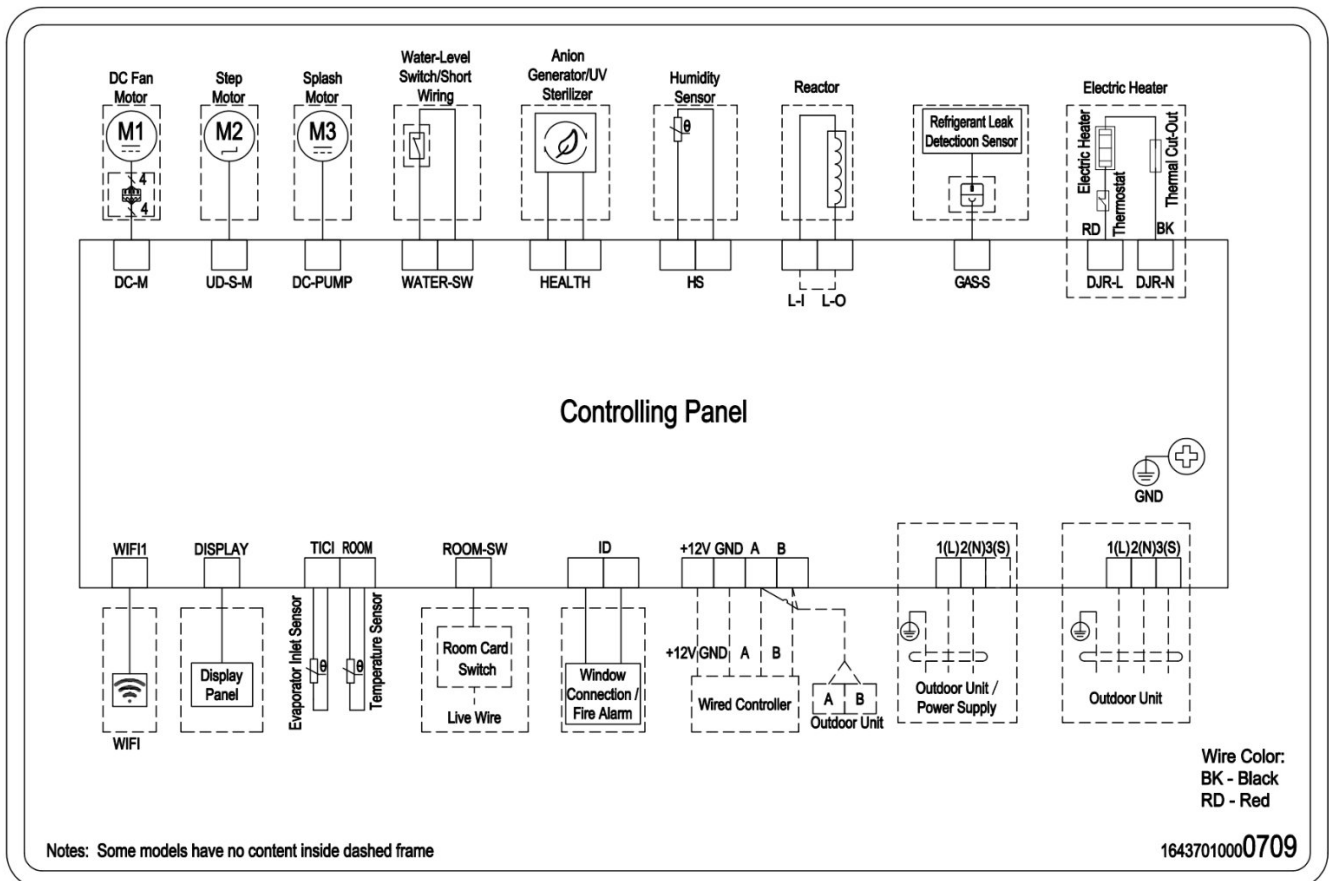
16437010000609

3.2 Medium Duct

12K: AUMD-H12/4DR3HB2

18K: AUMD-H18/4DR3HB2

24K: AUMD-H24/4DR3HB2

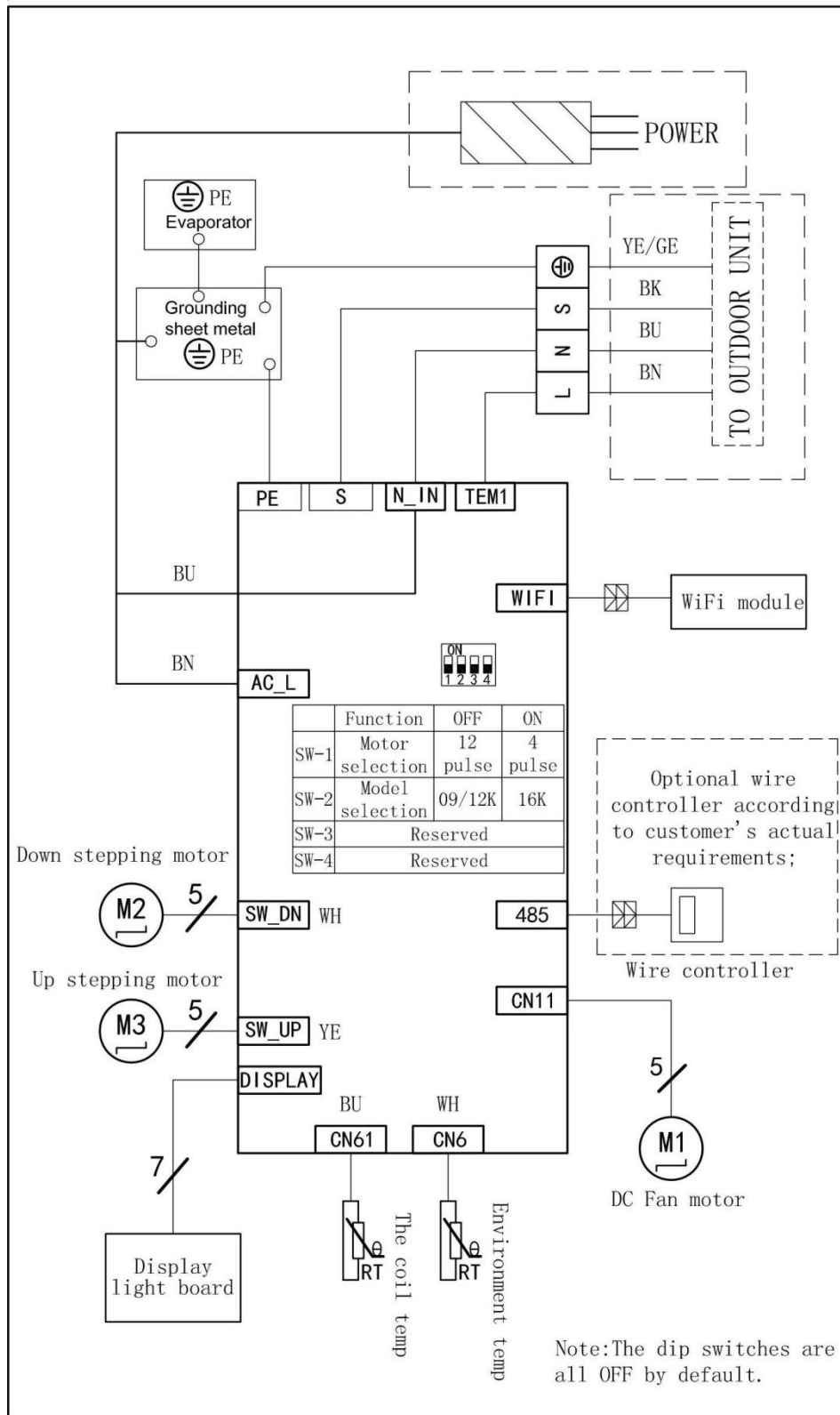


4. Console

AUCO-H09/4DR3HA

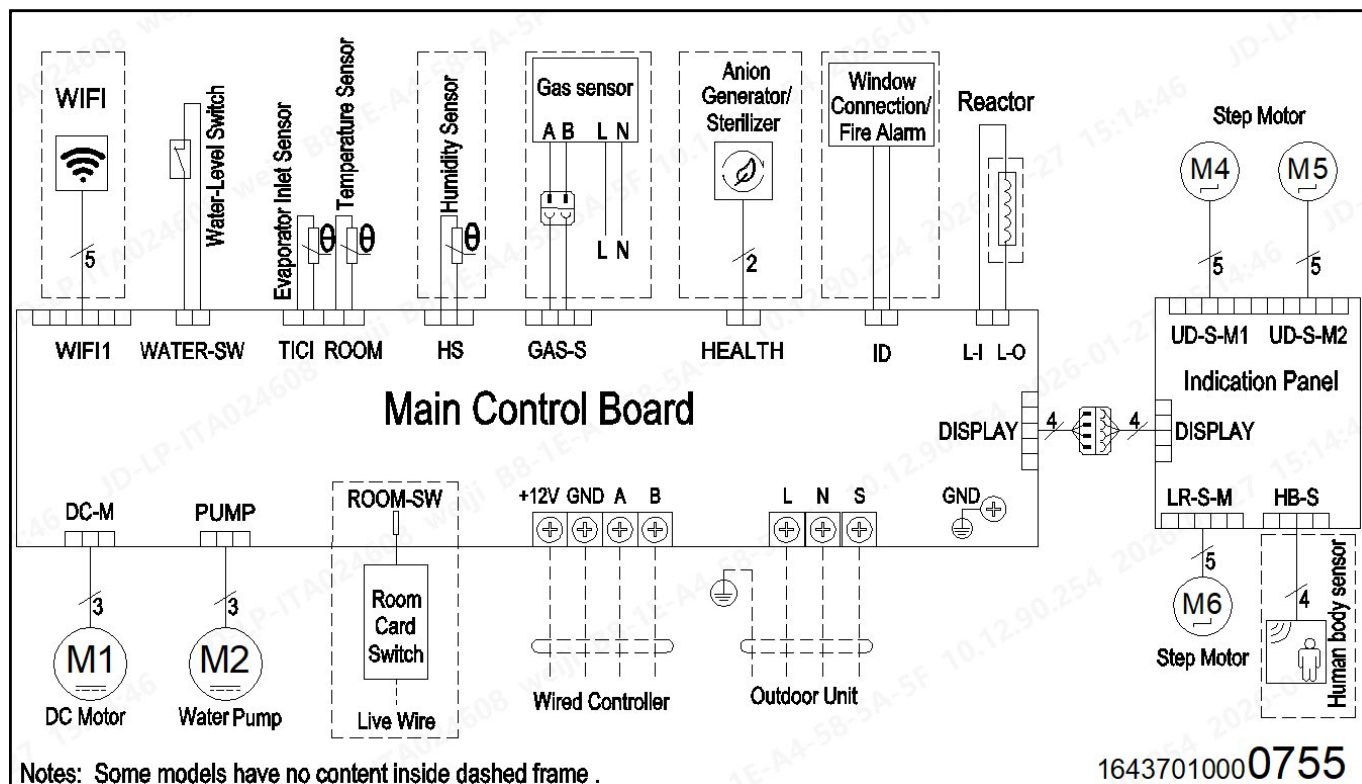
AUCO-H12/4DR3HA

AUCO-H18/4DR3HA



5. One-way cassette

AMC1-H09/4R3DSA; AMC1-H12/4R3DSA; AMC1-H18/4R3DSA; AMC1-H24/4R3DSA



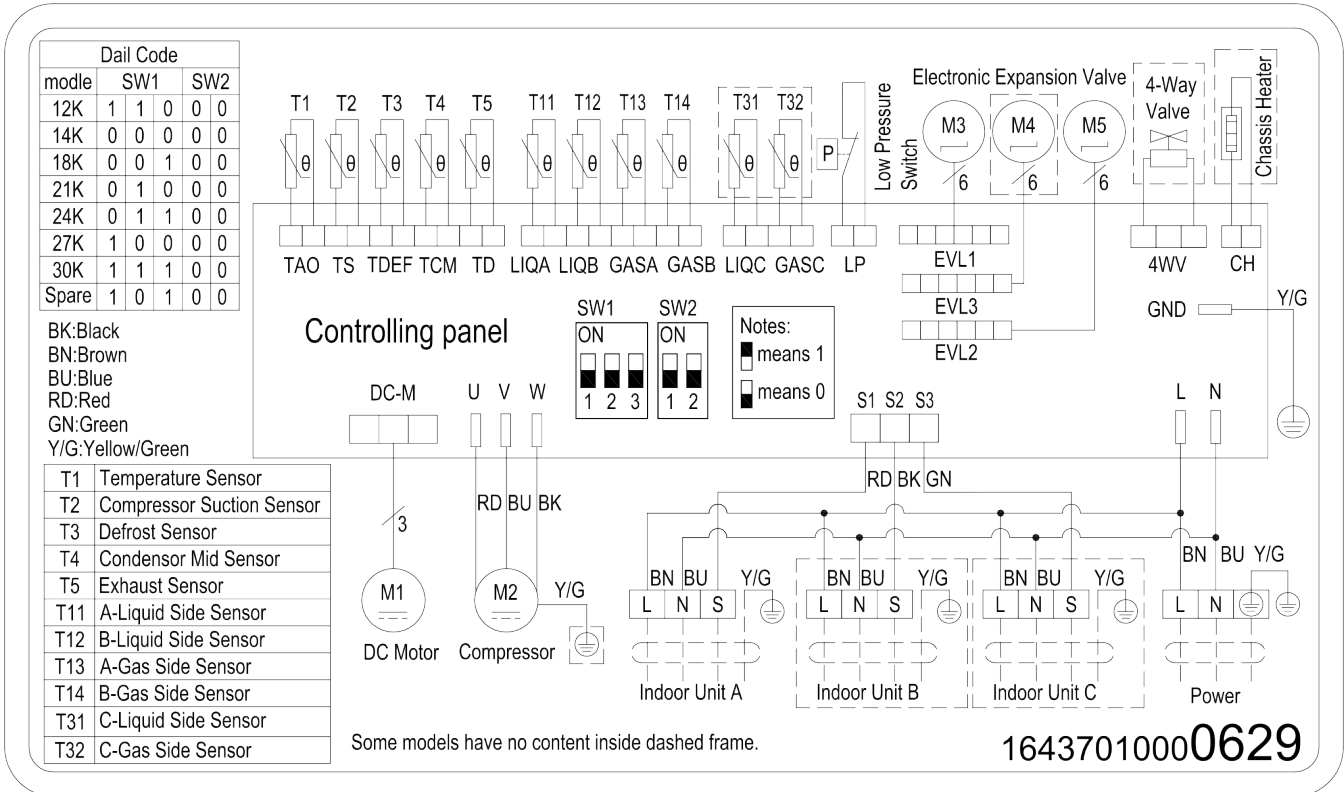
6. Outdoor Unit

14K: AM2-H14/4DR3C

18K: AM2-H18/4DR3D

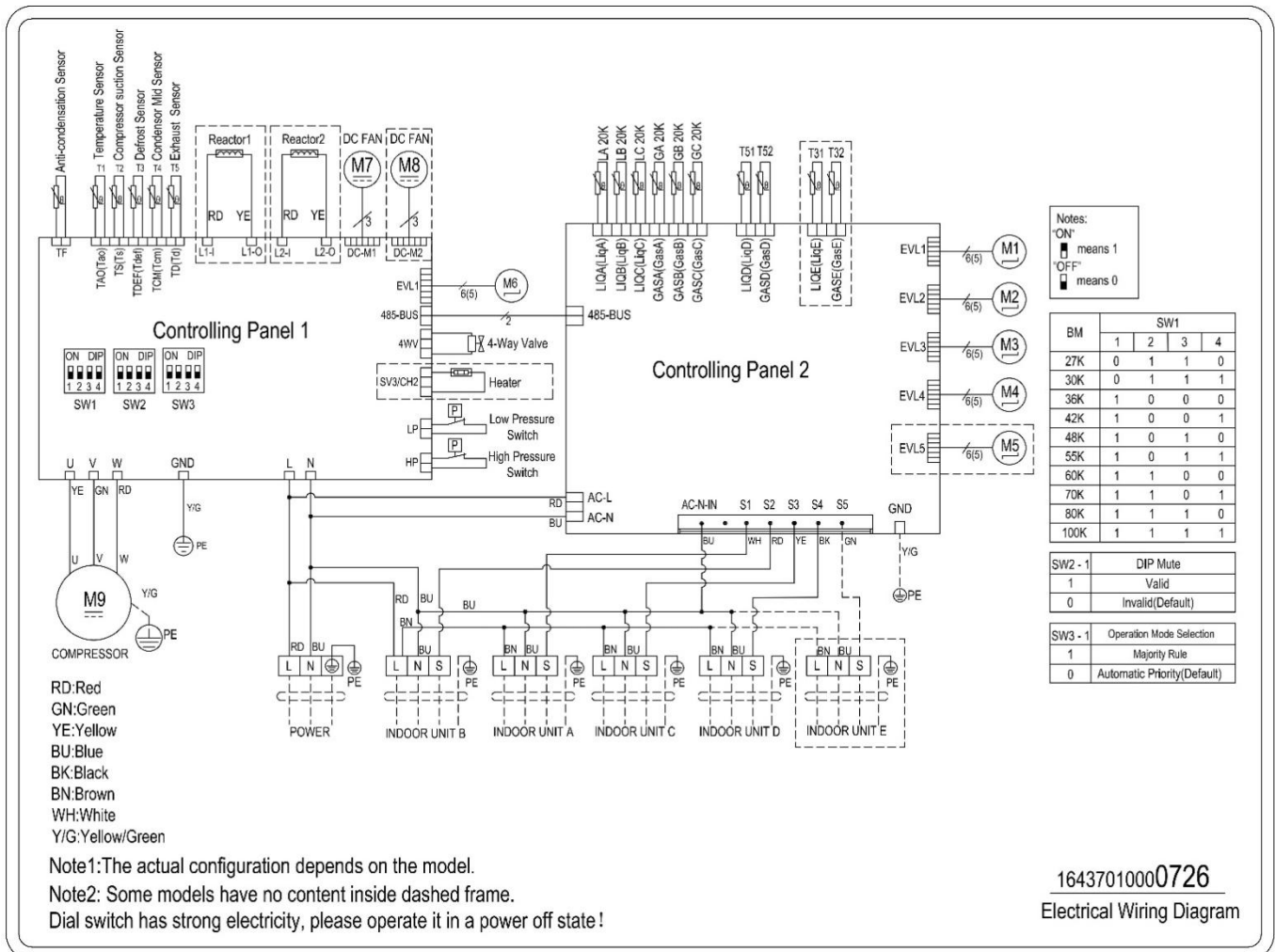
21K: AM3-H21/4DR3C

27K: AM3-H27/4DR3D

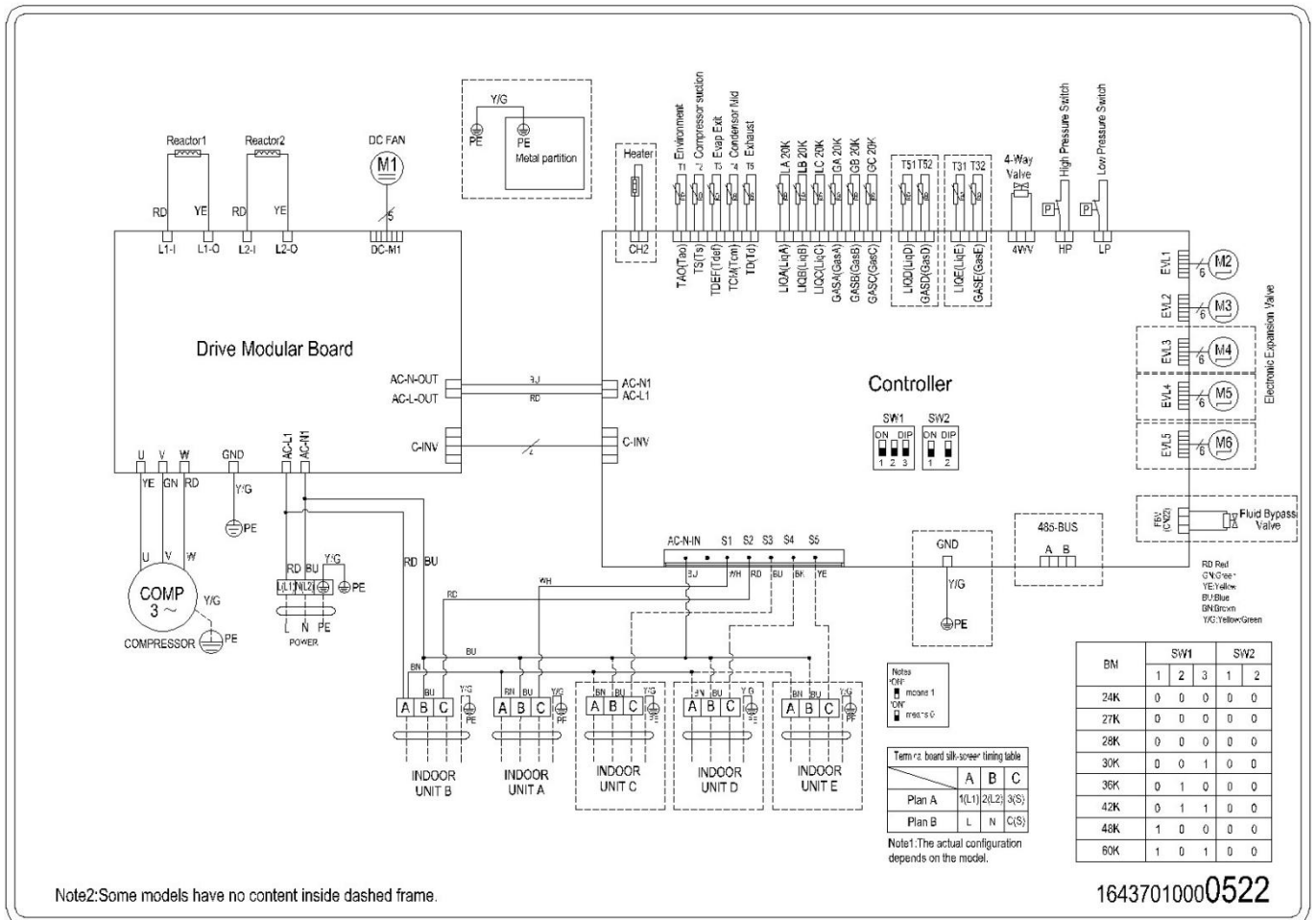


28K: AM4-H28/4DR3D

36K: AM4-H36/4DR3B



42K: AM5-H42/4DR3



Part6 Capacity Amendment

1. Operation range

Cooling capacity (K Btu/h)		14K	21K	42K	18K	27K	28K	36K
Power supply		220-240V~/50Hz						
Voltage		187~253V						
Ambient temperature	Cooling	-10~52°C			-15~52°C			
	Heating	-15~24°C			-25~24°C			

2. Capacity amendment of different ambient temperature

Please check the capacity table on the CSS platform.

3. Long piping length

Cooling capacity (K Btu/h)		14K	18K	21K	27K	28K	36K	42K
Connection Pipe(mm)	Liquid pipe	Φ6.35*2		Φ6.35*3		Φ6.35*4		Φ6.35*5
	Gas pipe	Φ9.52*2		Φ9.52*3		Φ9.52*4		Φ9.52*5
Max. length for all rooms (m)		40		60		80		
Max. length for one IU (m)		25		30		35		
Max. height difference between IU and OU (m)		15						
Max. height difference between IUs (m)		10						
Refrigerant adjustment per meter(g/m)		25	15	25	15			25

Refrigerant adjustment rules for the 25g/m model

Term		Value	Refrigerant	Calculation
1	The number of IDUs connected VS the number of ODU liquid stop valves	equal	/	0
		different	Release	The indoor unit has a capacity of 18/24K Btu/h. A=150g*T T: Number of ODU liquid stop valves not connected to the IDUs
				No indoor unit has a capacity of 18/24K Btu/h. A=350g*T T: Number of ODU liquid stop valves not connected to the IDUs
2	Average liquid pipe length of connected IDUs	5-7.5m	/	0
		< 5m or > 7.5m	Release or Add	B= (Total liquid pipe length - N*7.5m) *25g/m N: The number of IDUs connected
Z: The amount of refrigerant adjusted before installation and use Negative values indicate removal; positive values indicate addition.				Z=B-A

Refrigerant adjustment rules for the 15g/m model				
Term		Value	Refrigerant	Calculation
1	The number of IDUs connected VS the number of ODU liquid stop valves	equal	/	0
		different	Release	The indoor unit has a capacity of 18/24K Btu/h. A=250g*T T: Number of ODU liquid stop valves not connected to the IDUs
				No indoor unit has a capacity of 18/24K Btu/h. A=450g*T T: Number of ODU liquid stop valves not connected to the IDUs
2	Average liquid pipe length of connected IDUs	5-7.5m	/	0
		< 5m or > 7.5m	Release or Add	B= (Total liquid pipe length - N*7.5m) *15g/m N: The number of IDUs connected
Z: The amount of refrigerant adjusted before installation and use Negative values indicate removal; positive values indicate addition				Z=B-A

Caution:

1. The average liquid pipe length of connected IDUs is 7.5m, if the pipe length is less than this then no additional charging is necessary. If the pipe length is more than this then you should charge more refrigerant into the system according to the above charging data.
2. When the average liquid pipe length of connected IDUs is less than 5m, or when the number of IDUs connected is less than the number of ODU stop valves, some refrigerant must be removed. Contact the AUX R&D technical team to confirm.
3. The thickness of the pipe is 0.6-1.0, bearing pressure is 4.2MPa.
4. If the connection pipe is too long, the cooling capacity and stability would be decreased. And the more bend quantity, the resistance in the piping system would be bigger, then the cooling and heating capacity would be decreased even lead to compressor broken. We suggest you use the shortest connection pipe according to the pipe length parameter in this manual. If the height difference between outdoor and indoor units is more than 7m, an oil trap should be installed in the gas pipe for every 3 meters.

4. Equivalent pipe length conversion

Equivalent pipe length means converting pipe elbow to straight pipe length after considering the pressure loss.

Bend and Oil Loop conversion table

Pipe Dia.(mm)	Type	Bend (m)	Oil Loop(m)
6.35		0.10	0.7
9.52		0.18	1.3
12.70		0.20	1.5
15.88		0.25	2.0
19.05		0.35	2.4
22.02		0.40	3.0

Equivalent pipe length $L = \text{Actual pipe length } L + \text{Bend Qty} \times \text{Equivalent pipe bend length} + \text{Oil Loop Qty} \times \text{Equivalent Oil Loop length}$

Note:

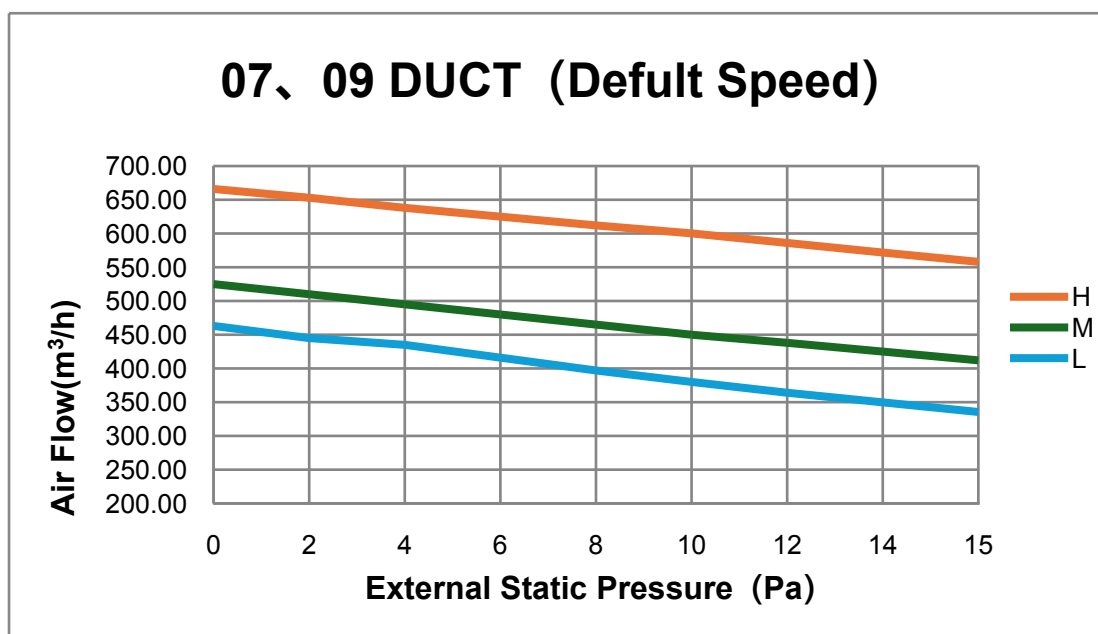
If there is a relatively level difference of indoor and outdoor unit, S-shaped oil trap must be installed every 3 m for vertical pipe.

Part7 Static Pressure Curve

1. Default & optional ESP

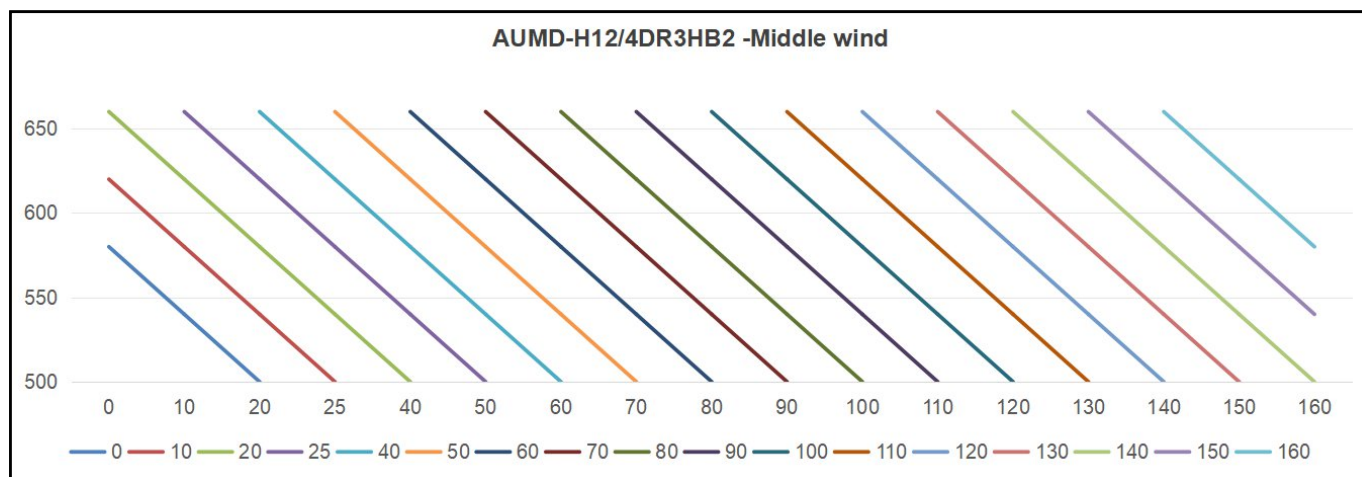
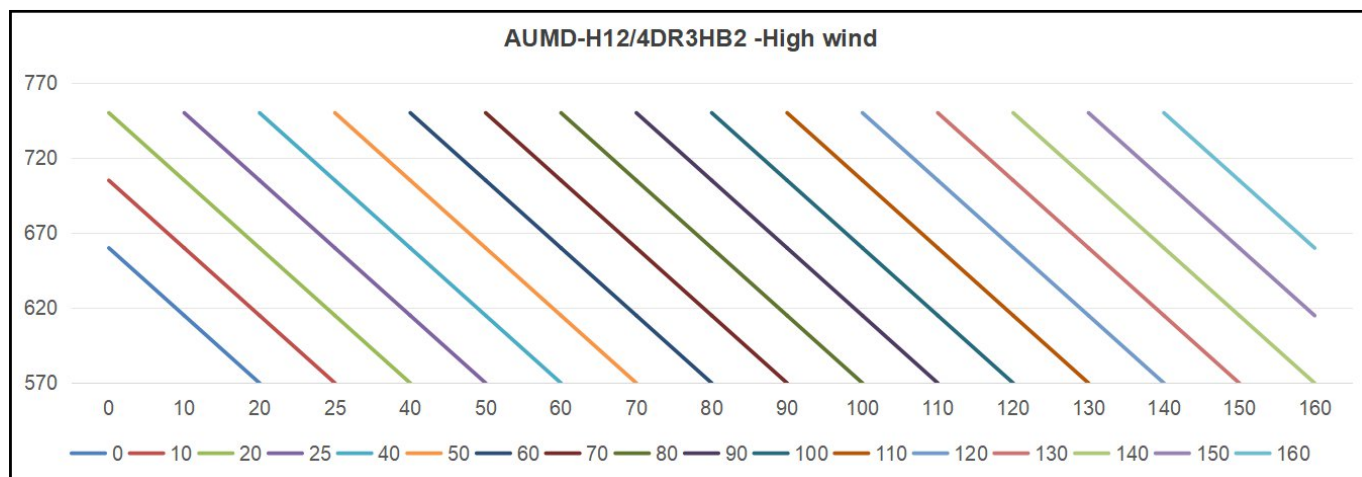
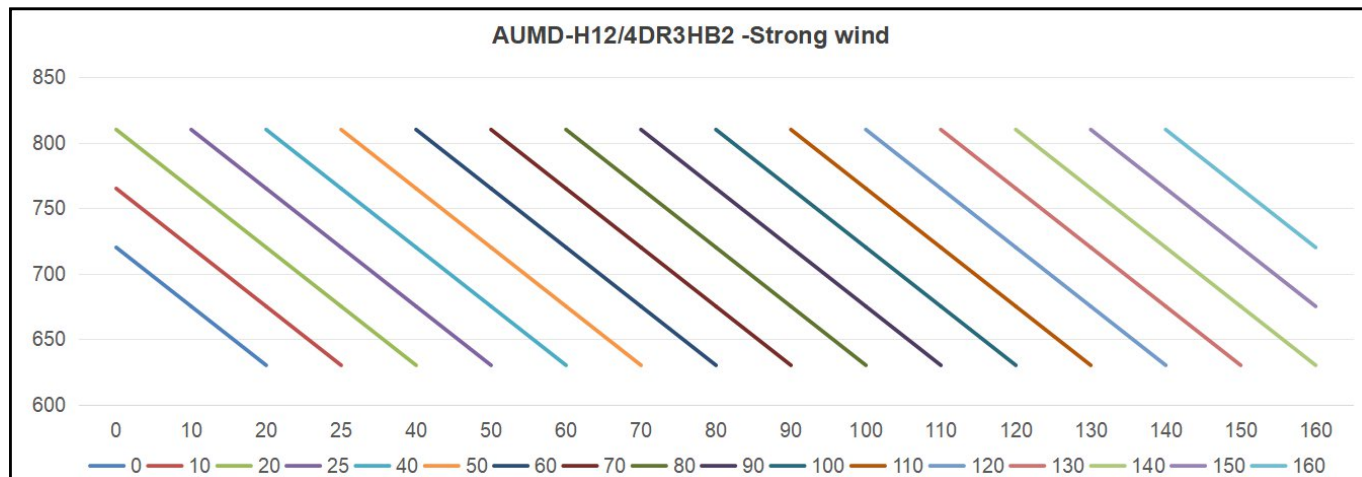
Models	Default ESP		Optional ESP	
	Value	Remark	Value	Remark
AMSD-H07/4R3AA	10Pa	Parameter0602	30Pa	Parameter0606
AMSD-H09/4R3AA	10Pa	Parameter0603	30Pa	Parameter0607

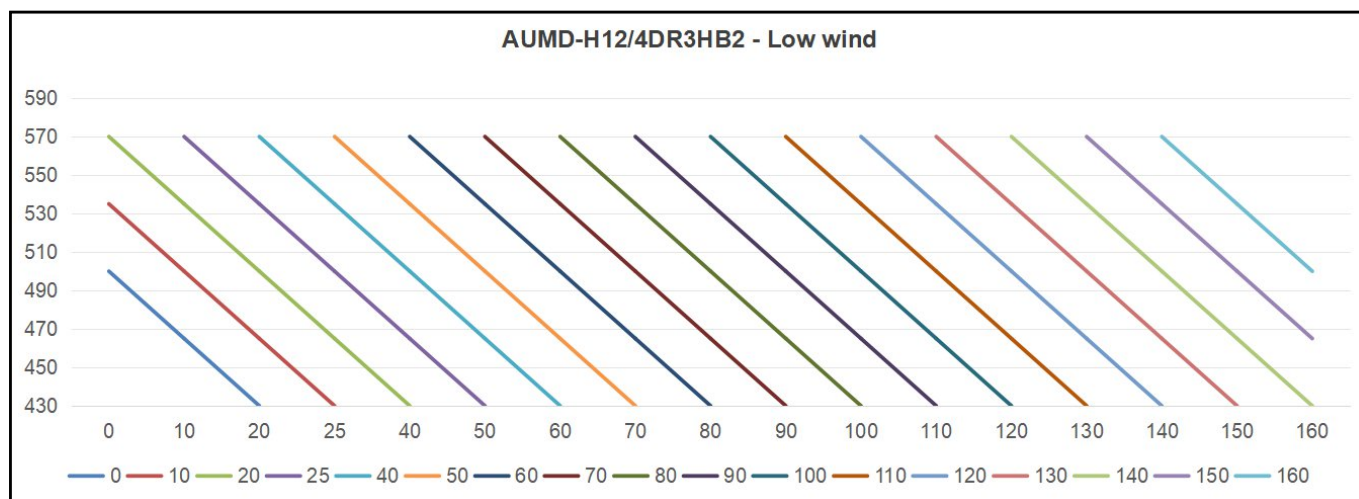
2. 07K,09K(Y-TYPE)



3. 12K(M-TYPE)

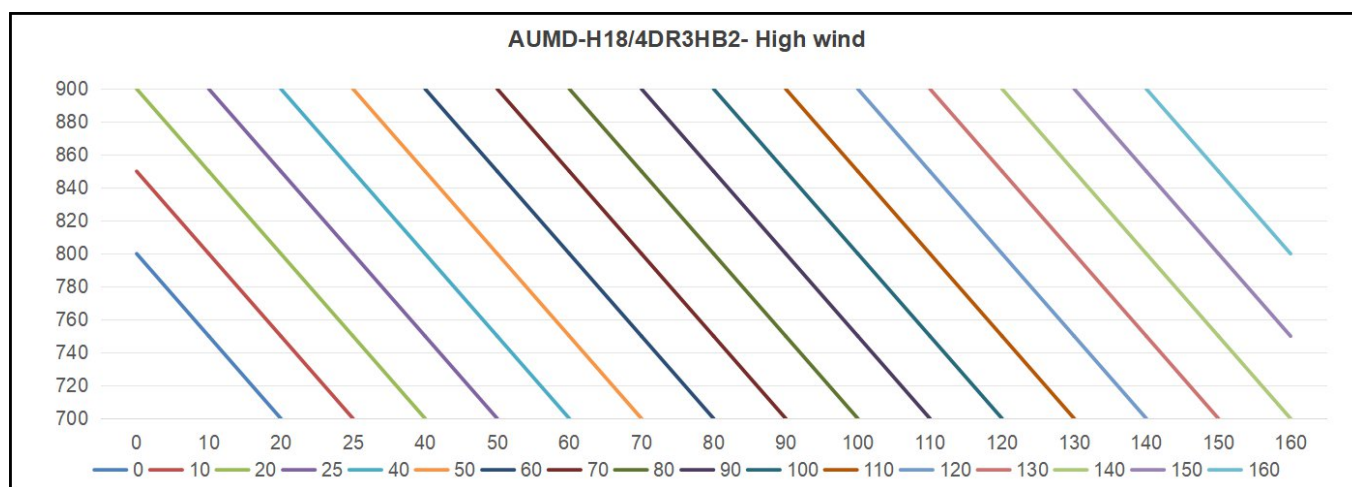
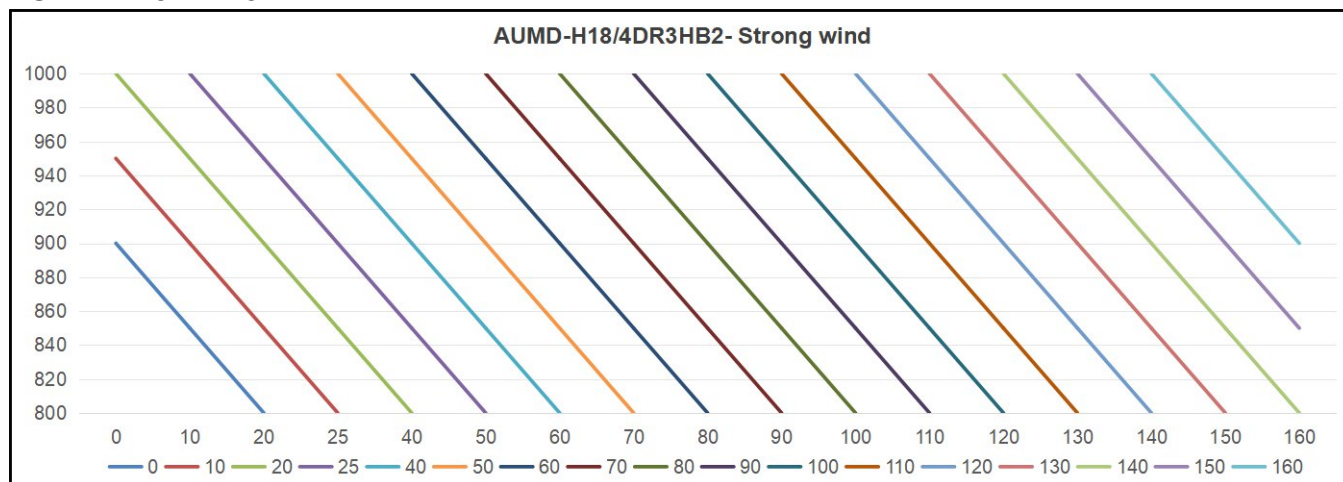
AUMD-H12/4DR3HB2

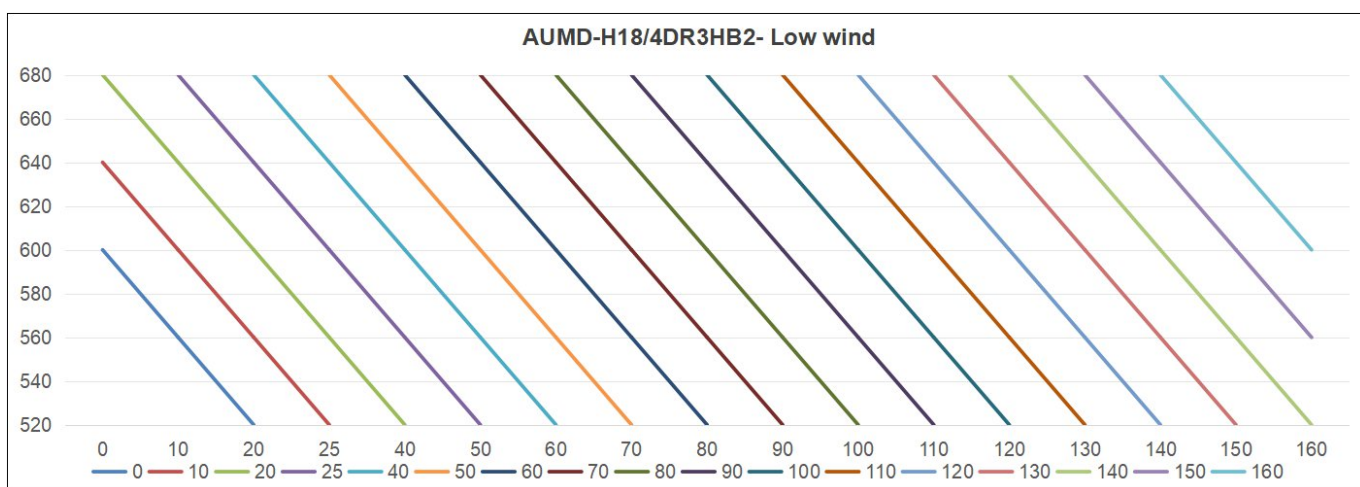
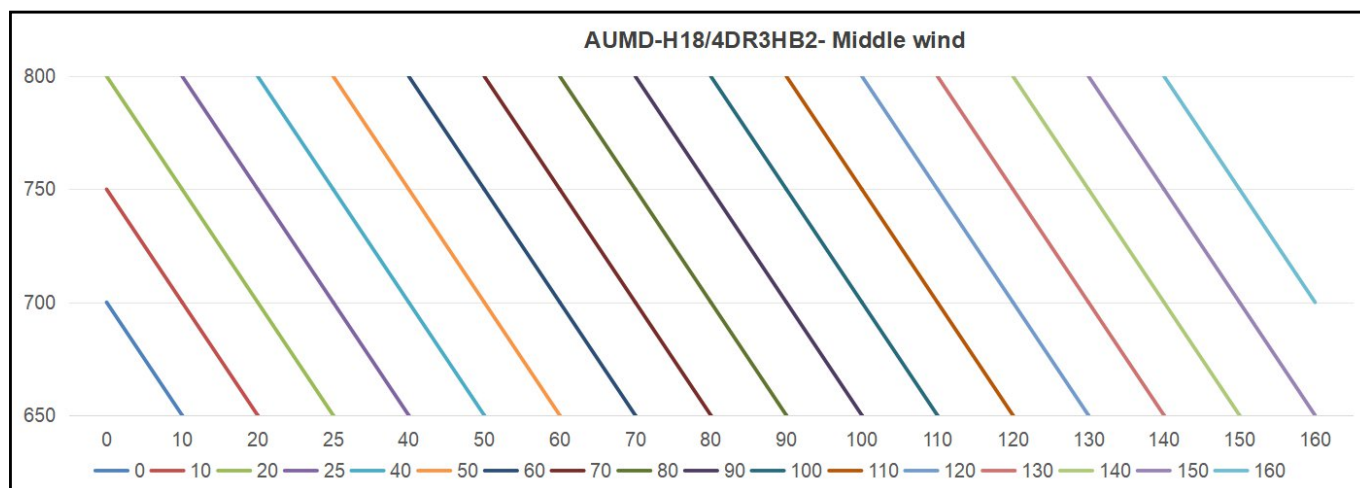




4. 18K(M-TYPE)

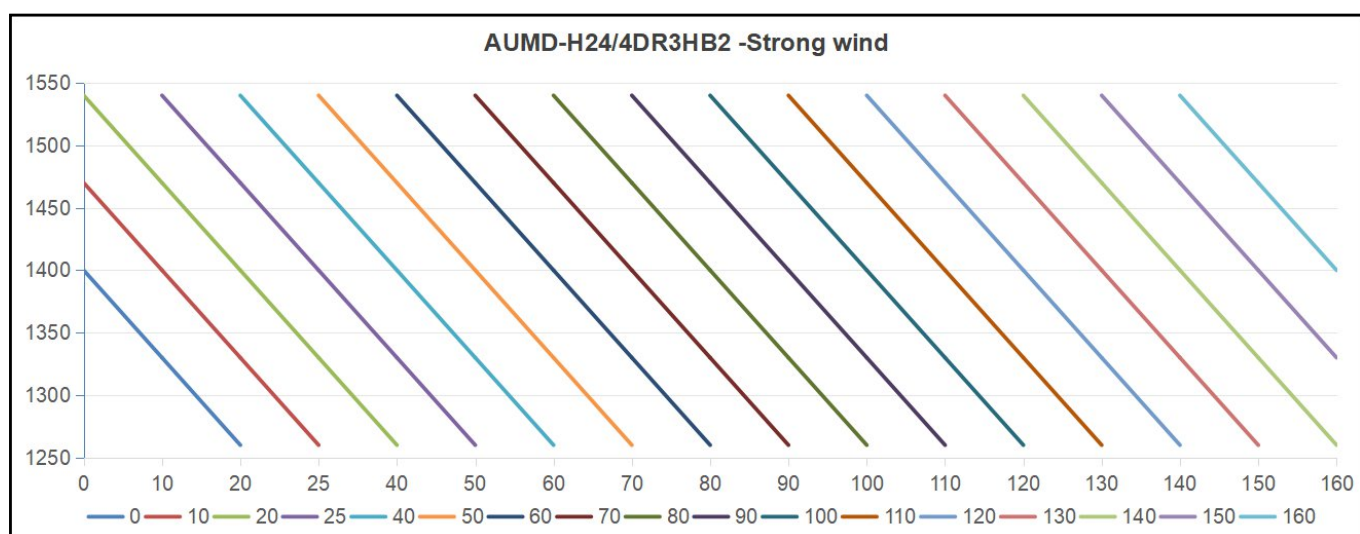
AUMD-H18/4DR3HB2

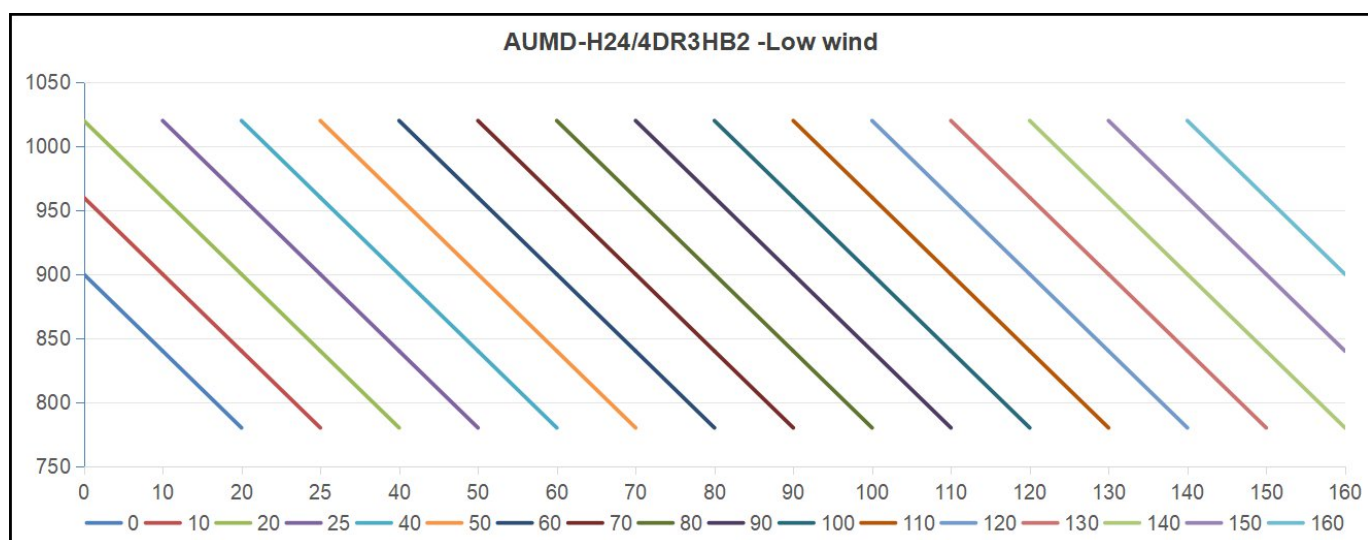
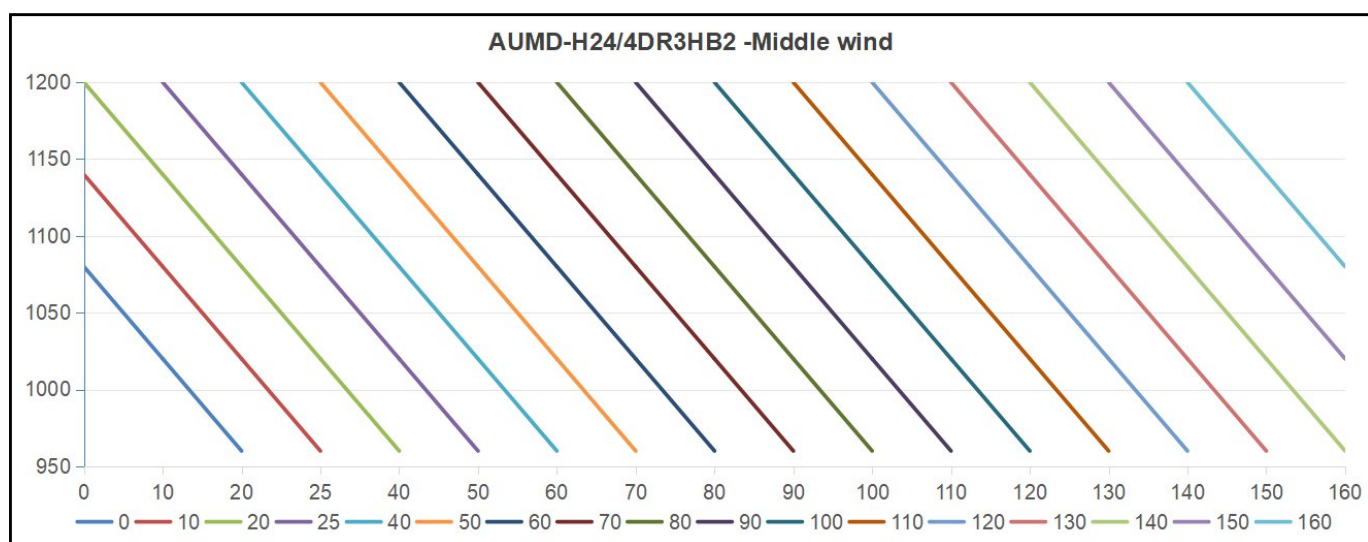
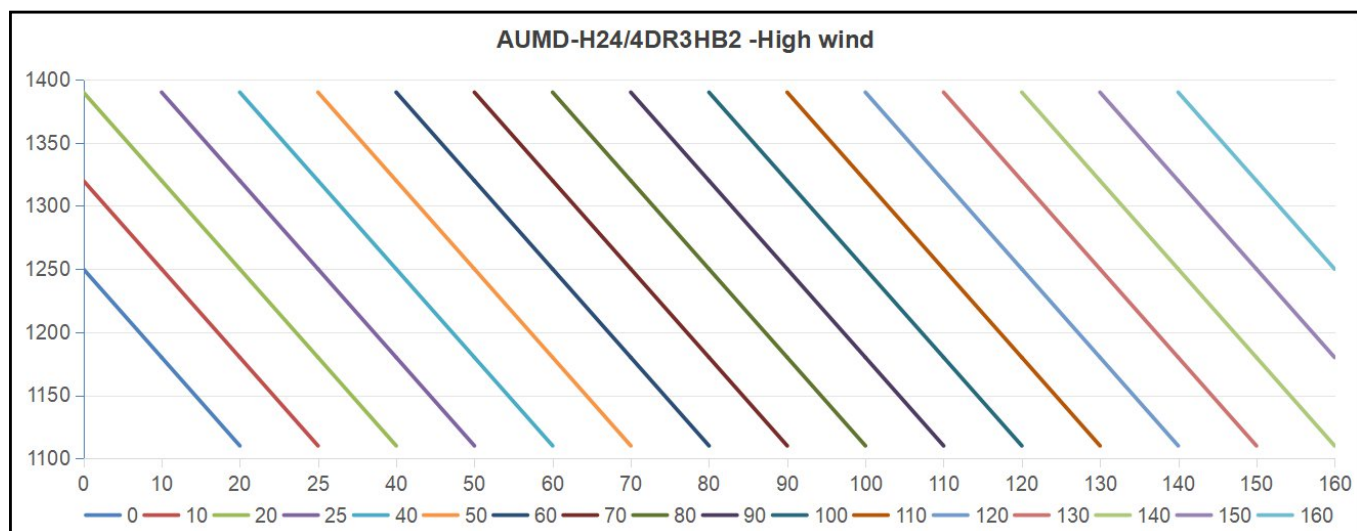




5. 24K(M-TYPE)

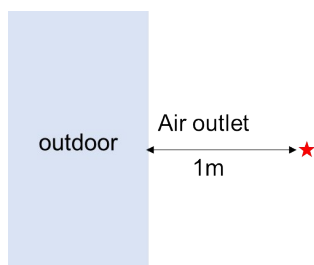
AUMD-H24/4DR3HB2





Part8 Sound Level

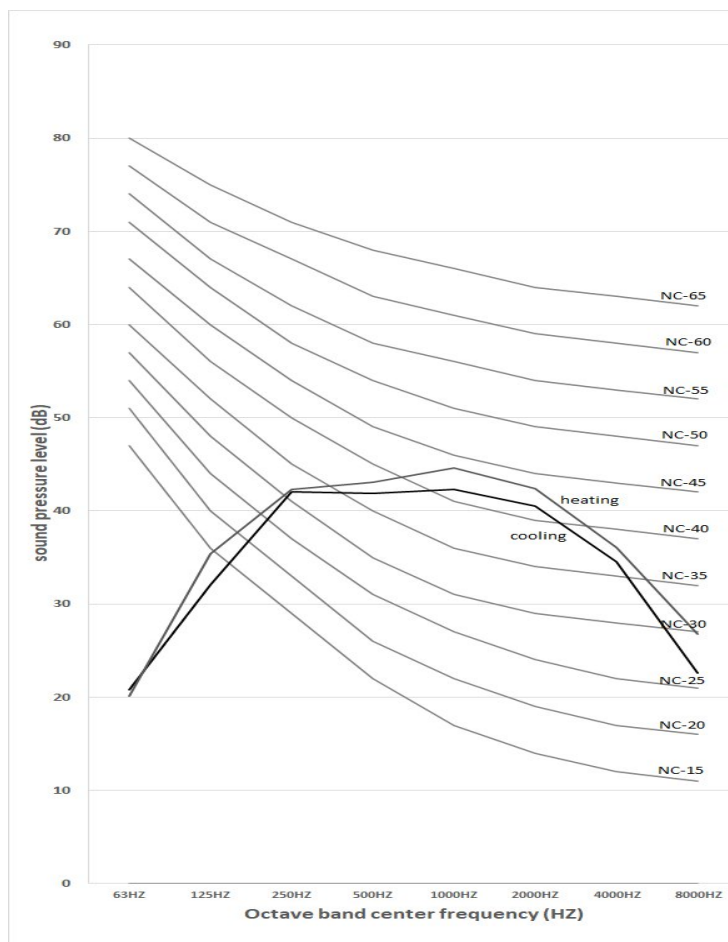
1. Outdoor Unit



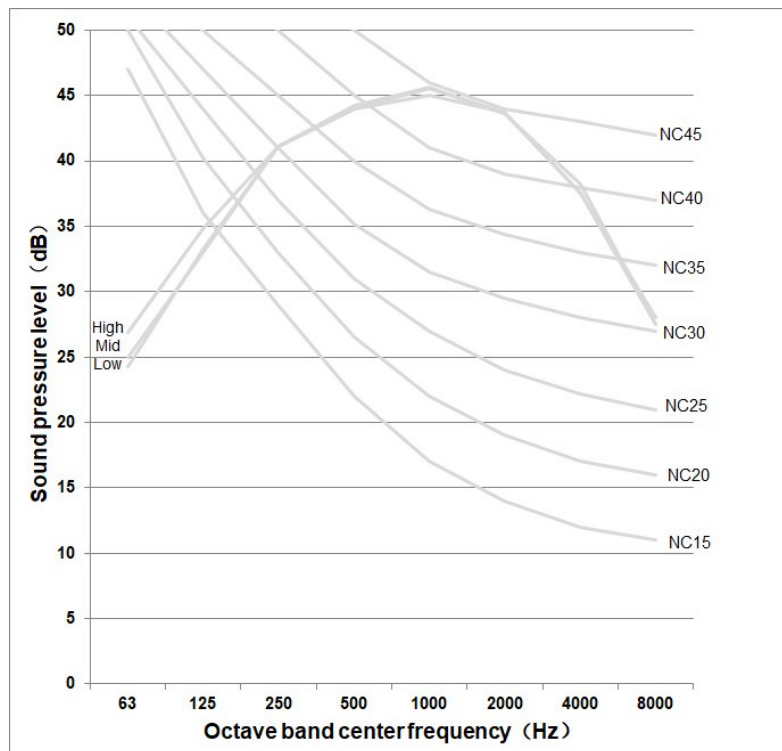
Test site : 1m directly in front of the center of the air outlet

Model	Sound pressure(dB(A))	Model	Sound pressure(dB(A))
AM2-H14/4DR3C	53	AM4-H28/4DR3D	59
AM2-H18/4DR3D	54	AM4-H36/4DR3B	60
AM3-H21/4DR3C	56	AM5-H42/4DR3	61
AM3-H27/4DR3D	57		

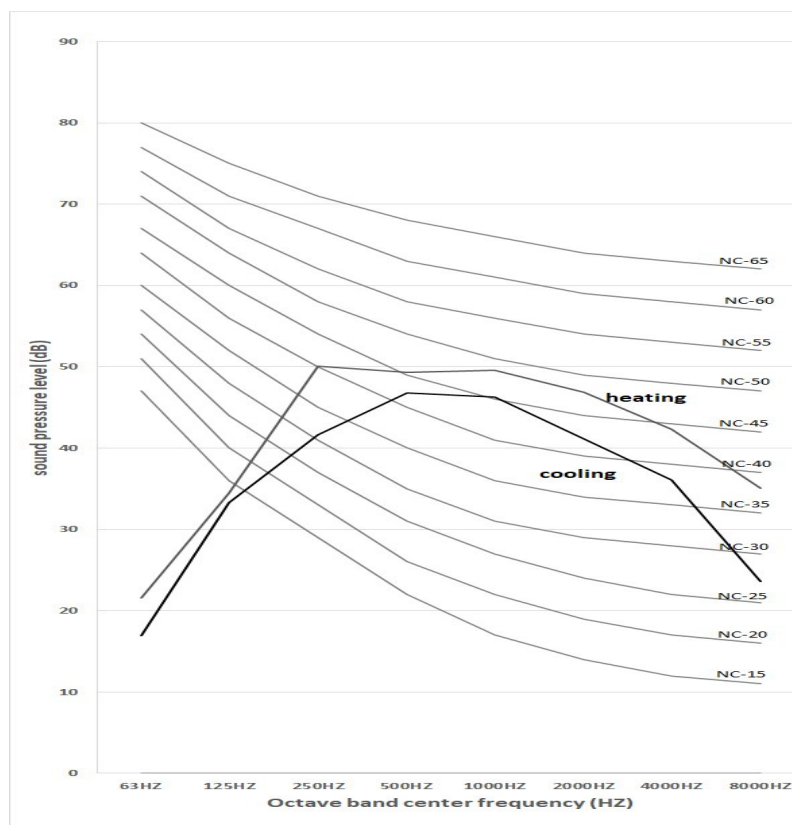
1.1 14K (AM2-H14/4DR3C) NC curve



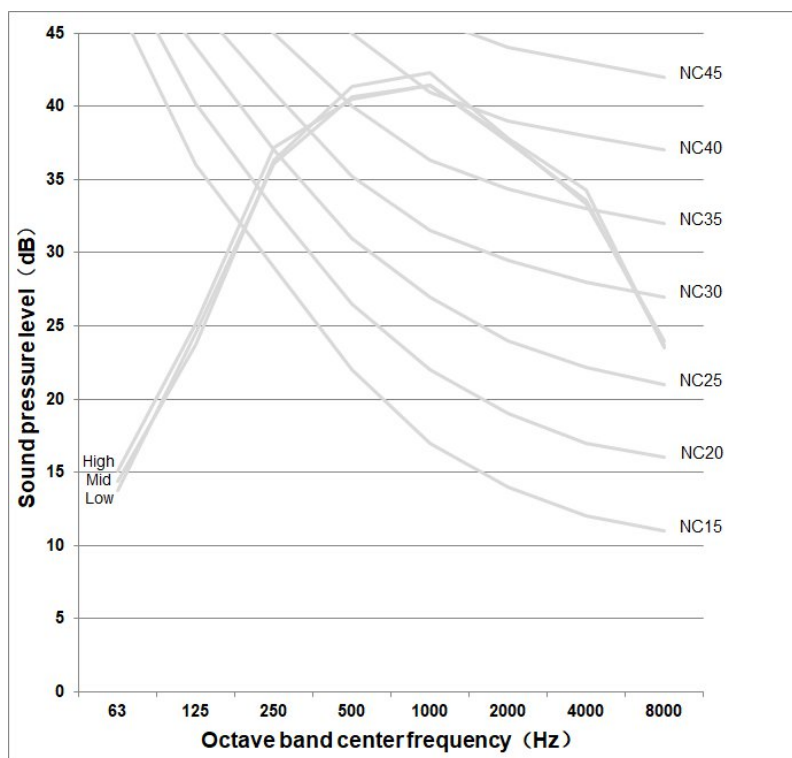
1.2 18K (AM2-H18/4DR3D) NC curve



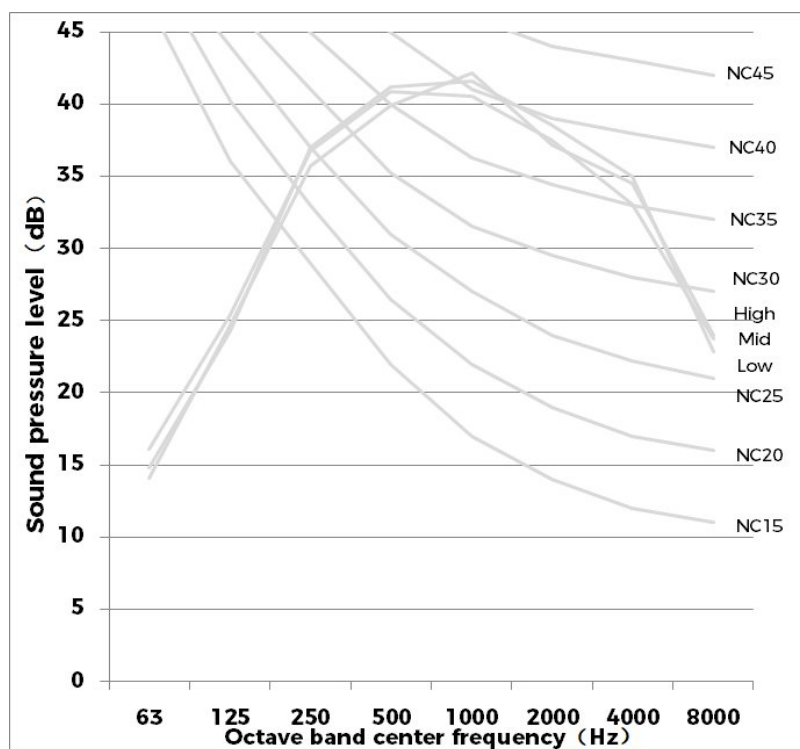
1.3 21K (AM3-H21/4DR3C) NC curve



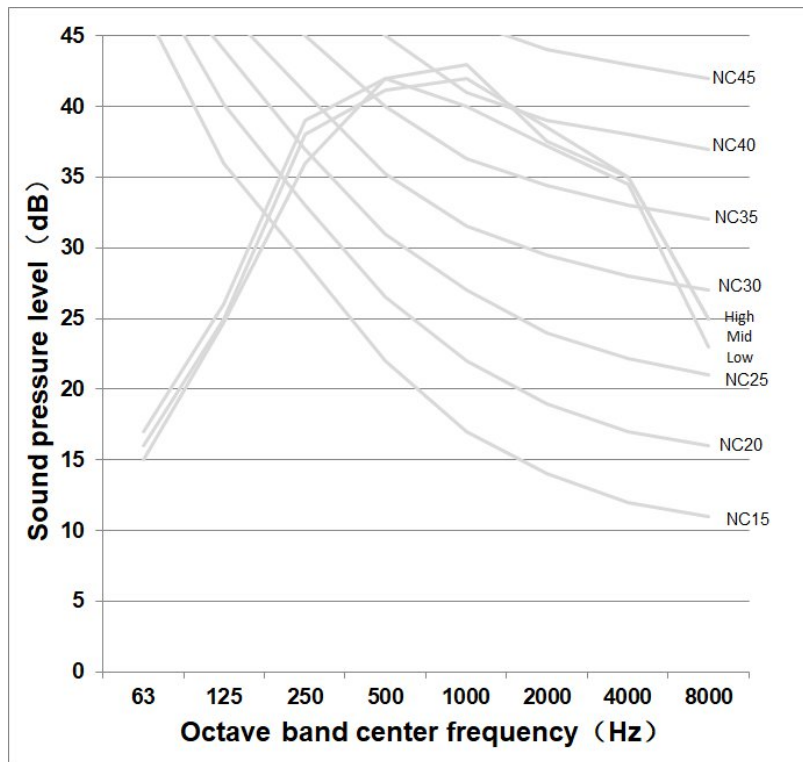
1.4 27K (AM3-H27/4DR3D) NC curve



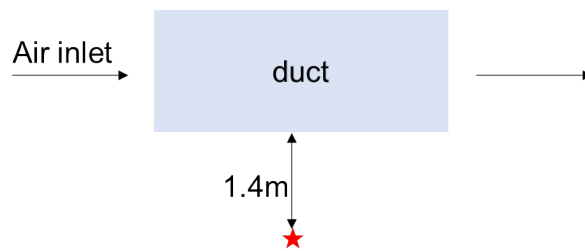
1.5 28K (AM4-H28/4DR3D) NC curve



1.6 36K (AM4-H36/4DR3B) NC curve



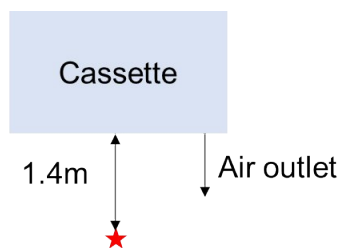
2. Duct



Test site : 1.4m directly below the center of the duct

Model	Sound power (dB(A))	Model	Sound power (dB(A))
AMSD-H07/4R3AA	53	AUMD-H12/4DR3HB2	52
AMSD-H09/4R3AA	53	AUMD-H18/4DR3HB2	54
		AUMD-H24/4DR3HB2	56

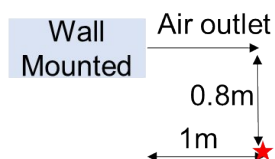
3. Cassette



Test site : 1.4m directly below the center of the duct

Model	Sound power (dB(A))	Model	Sound power (dB(A))
AUCA-H09/4DR3HYAB	52	AUCA-H18/4DR3HB2	58
AUCA-H12/4DR3HB2	55	AUCA-H24/4DR3HB2	58

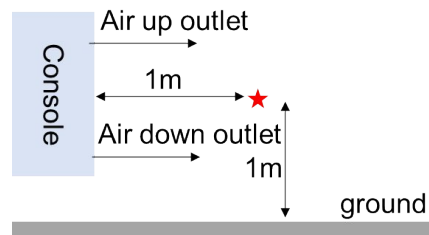
4. Wall Mounted



Test site : 1m directly in front of the air outlet and 0.8m below the air outlet

Model	Sound power (dB(A))
F series	
AMWM-H07/4R3C(F*)	57
AMWM-H09/4R3D(F*)	54
AMWM-H12/4R3D(F*)	54
AMWM-H18/4R3C(F*)	60
AMWM-H24/4R3B(F*)	64
Q series	
AMWM-H07/4R3B(Q*)	53
AMWM-H09/4R3B(Q*)	53
AMWM-H12/4R3A(Q*)	54
AMWM-H18/4R3A(Q*)	58
AMWM-H24/4R3B(Q*)	64
J series	
AMWM-H07/4R3C(J*)	57
AMWM-H09/4R3C(J*)	57
AMWM-H12/4R3D(J*)	53
AMWM-H18/4R3C(J*)	60
AMWM-H24/4R3B(J*)	64
C series	
AMWM-H07/4R3A(C*)	53
AMWM-H09/4R3A(C*)	53
AMWM-H12/4R3A(C*)	53
AMWM-H18/4R3A(C*)	58
AMWM-H24/4R3A(C*)	63
M series	
AMWM-H07/4R3A(M*)	57
AMWM-H09/4R3A(M*)	57
AMWM-H12/4R3A(M*)	57
AMWM-H18/4R3A(M*)	60
AMWM-H24/4R3A(M*)	60

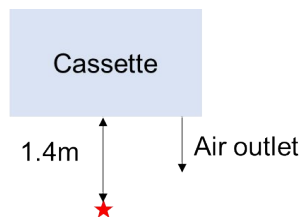
5. Console



Test site : 1m directly in front of the center of the up and down air outlets

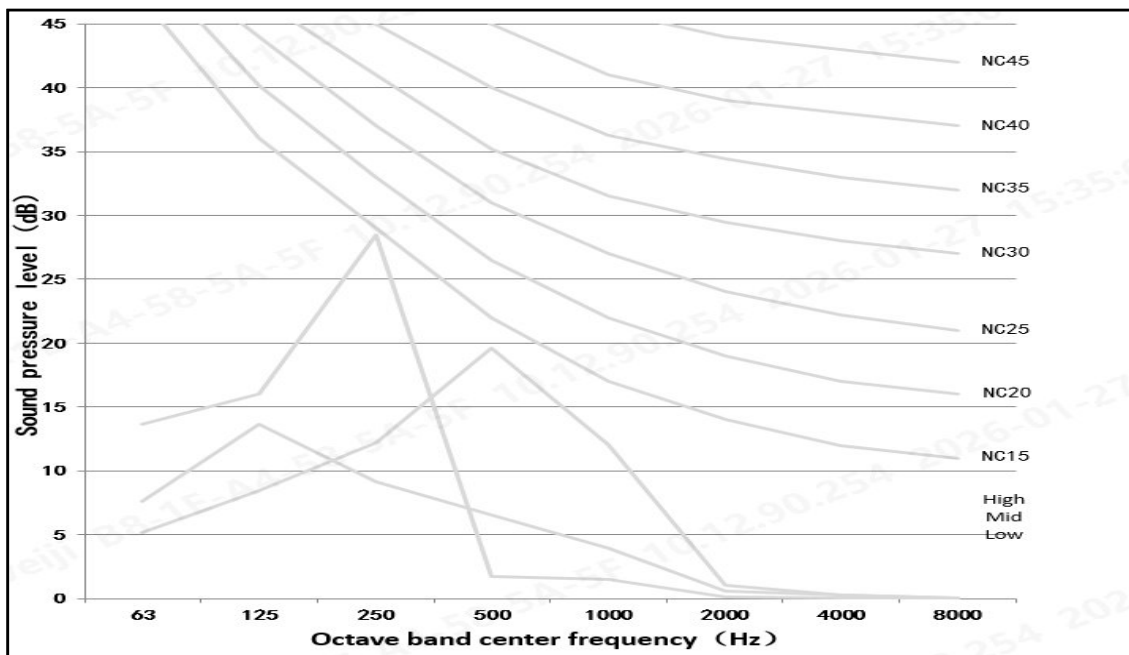
Model	Sound power (dB(A))
AUCO-H09/4DR3HA	52
AUCO-H12/4DR3HA	52
AUCO-H18/4DR3HA	54

6. One-way cassette

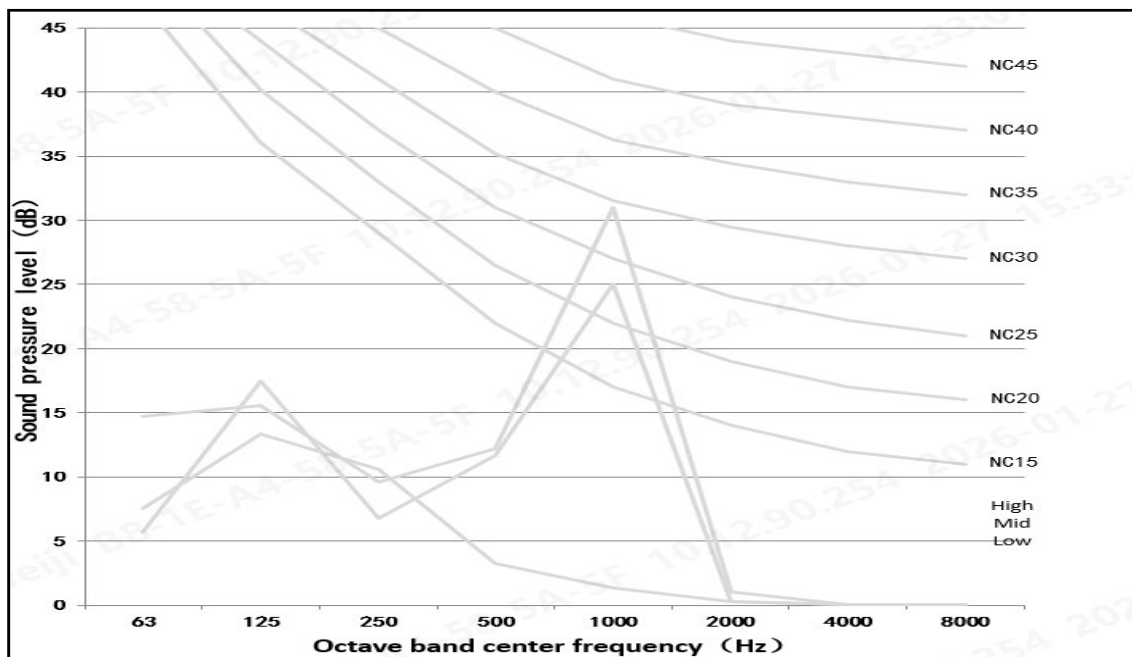


Test site : 1.4m directly below the center of the duct

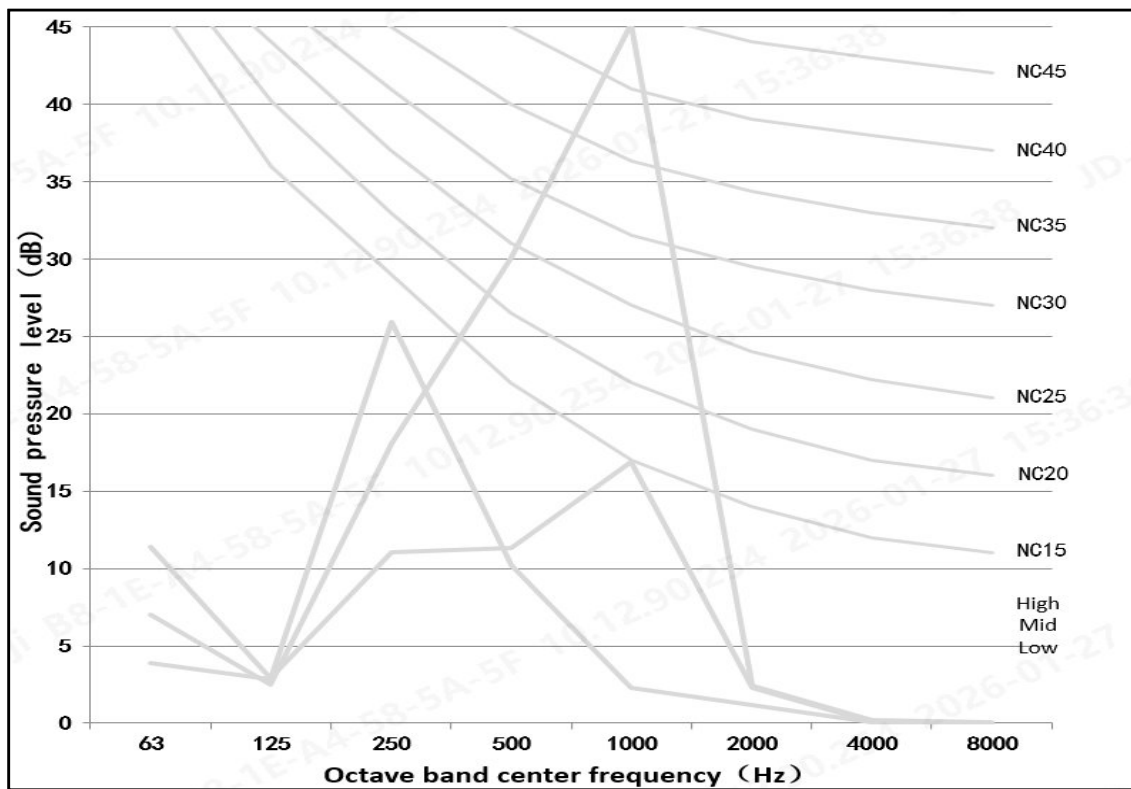
09K



12K



18K;24K



Part9 Controller

1. Controller

IDU type	Controller	
	Standard	Optional
Wall Mounted		    
	YK-H	YK-T YK-L YK-M YK-K XK-06-GJ
Cassette; O n e - w a y Cassette		      
	YK-H	YK-T YK-L YK-M YK-K XK-05 XK-06 XK-10
Console		   
	YK-L	YK-T YK-K XK-05 XK-06
Duct		     
	XK05-DY	YK-T YK-K YK-H YK-L XK-05 XK-06

Please scan the code to download the manuals for the remote controller and the wired controller

			
YKR-H/009E	YKR-L/101E	YKR-K/001E	YKR-T/021E YKR-T/121E YKR-T/131E
			
YKR-T/301E	YKR-M/101E YKR-C/101E YKR-C/111E	YKR-M/111E	YKR-K/231E
			
YKR-L/300E	XK-05 DY	XK-06 DY	XK-06 GJ (For wall-mounted)

2. Parameters Setting

Some functions of the indoor unit require setting the EE parameters of the indoor unit to be used. For an introduction to the EE parameters of the indoor unit and the setting methods, please scan the QR code below to view.



Engineer manual- Free match

3. Room Card Function

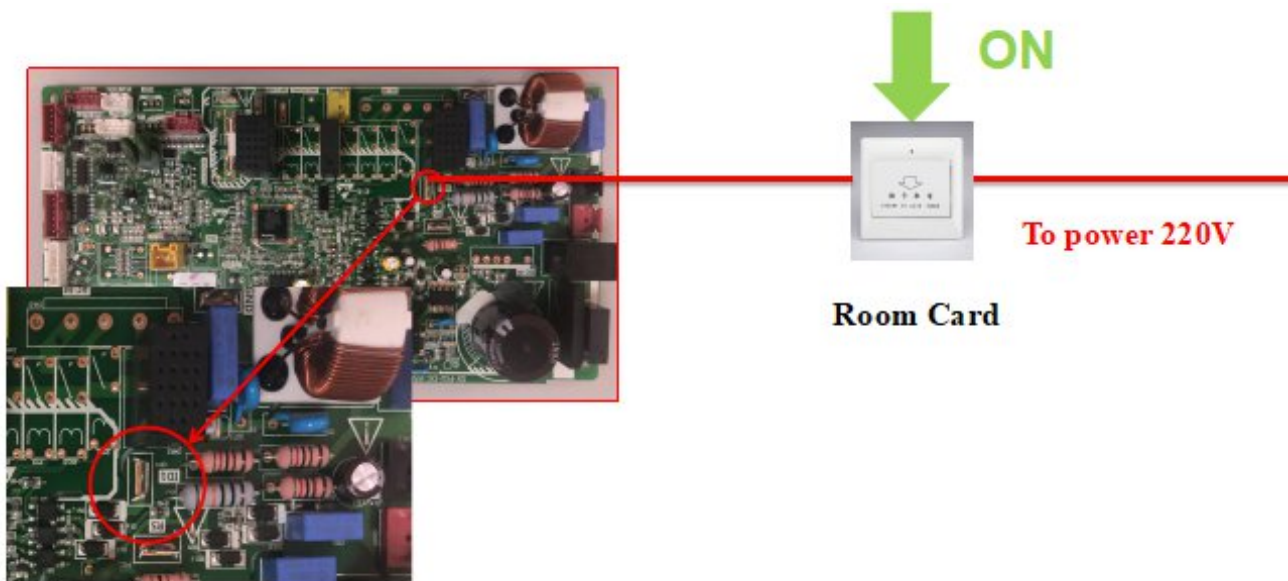
3.1 Function setting

Parameter	Insert key card	Remove key card
0900	If the status before inserting the room card is OFF, the indoor unit will start in automatic mode, and the wind speed will be automatic. Otherwise, the operating status of the indoor unit will not change.	The indoor unit turns off immediately and the indoor unit can receive commands from the controller.
0901	The indoor unit is in the OFF state.	The indoor unit turns off immediately and the indoor unit cannot receive command from the controller.
0902	The operating status of the indoor unit will not change.	The indoor unit turns off immediately and the indoor unit can receive commands from the controller for control.
0903	The operating status of the indoor unit will not change.	If the current mode is non-heating and non-auto , it will be turned into fan mode and low wind speed. Otherwise, the IDU turns off ; In this state, the indoor unit can receive command from the controller.
0904	The operating status of the indoor unit will not change.	1. If the indoor ambient temperature $T_a < 10^{\circ}\text{C}$, operate in the 16°C heating mode with a low wind. After 0.5H, if $T_a > 12^{\circ}\text{C}$, turn off the unit; otherwise, continue to heat at 16°C with low wind. 2. If $10^{\circ}\text{C} \leq T_a \leq 12^{\circ}\text{C}$, maintain the previous control. 3. If $12^{\circ}\text{C} < T_a < 28^{\circ}\text{C}$, turn off. 4. If $28^{\circ}\text{C} \leq T_a \leq 30^{\circ}\text{C}$, maintain the previous control. 5. If $T_a > 30^{\circ}\text{C}$, operate in the 26°C cooling mode with a low wind. After 0.5H, if $T_a < 28^{\circ}\text{C}$, turn off; otherwise, continue to cool at 16°C with low wind. The indoor unit can receive command from the controller.
0905	Restore the working state before the room card was removed	Turn off. The air conditioner cannot be controlled.

3.2 Wiring diagram

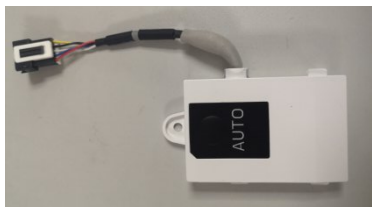
When the room card is inserted, the air conditioning can be controlled, when you leave the room, the AC will standby, can't be controlled

【DUCT TYPE】 and 【CEILING & FLOOR】



4. WIFI Module

4.1 WIFI module model

Code	Photo	Model	Function and Remark
11222062000047		Slim duct/Medium duct, Cassette and console, one-way cassette	Function: Through smart devices such as mobile phones, air conditioning can be remotely turned on/off in places with internet, and operating parameters such as temperature, wind speed, and mode can be adjusted.
11222062000046		F series wall mounted	
11222062000044		C/M/J/H/Q type wall mounted	

4.2 WIFI configuration

For the installation of WIFI and network connection, please scan the QR code below to view.

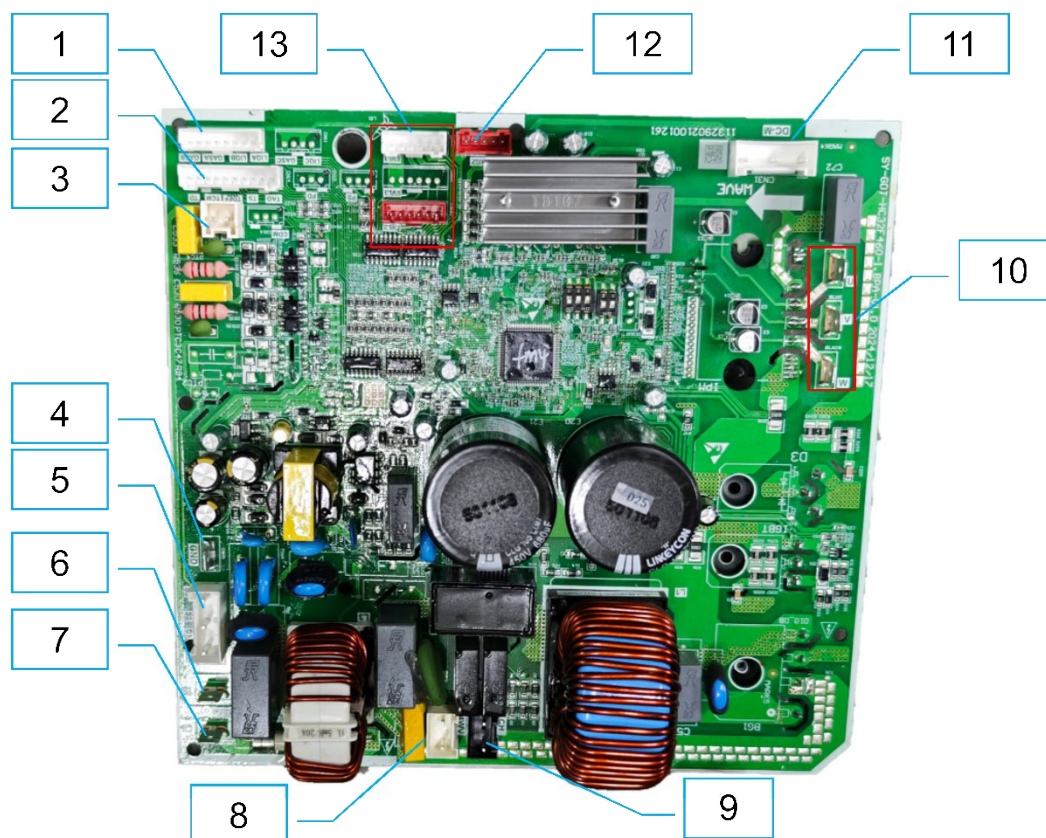


[WIFI Connection Guide](#)

Part10 PCB Instruction

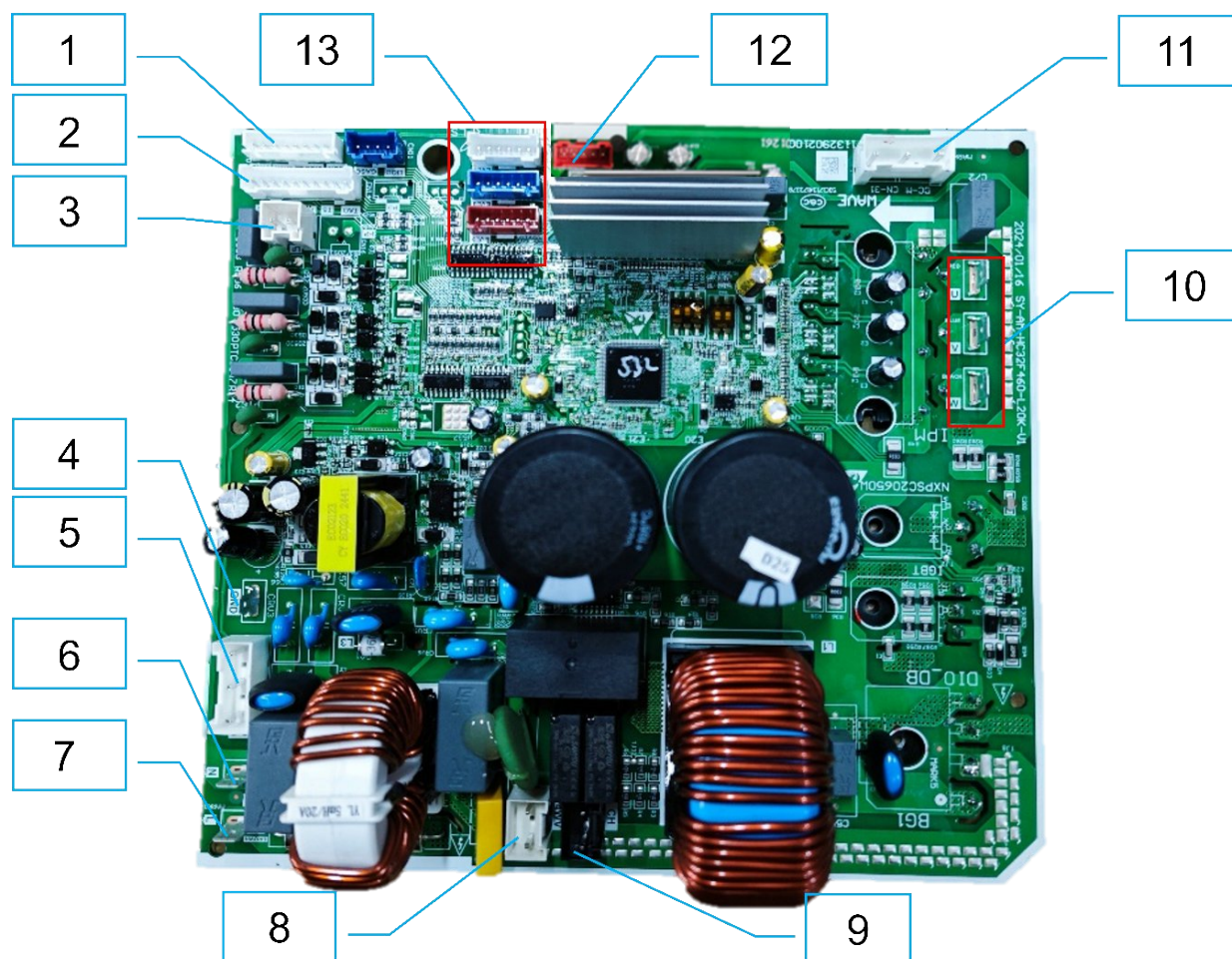
1. Outdoor Unit PCB

1.1 14K (AM2-H14/4DR3C) 18K (AM2-H18/4DR3D)



Comp.	Component description	Comp.	Component description
1	Temperature sensor	8	4-way valve
2	Temperature sensor	9	Chassis heater
3	Pressure switch	10	Compressor U V W
4	PCB GND wire (Yellow/Green)	11	Fan motor
5	Single wire (white)	12	Monitoring tool
6	N wire (blue)	13	Electronic expansion valve
7	L wire (brown)		

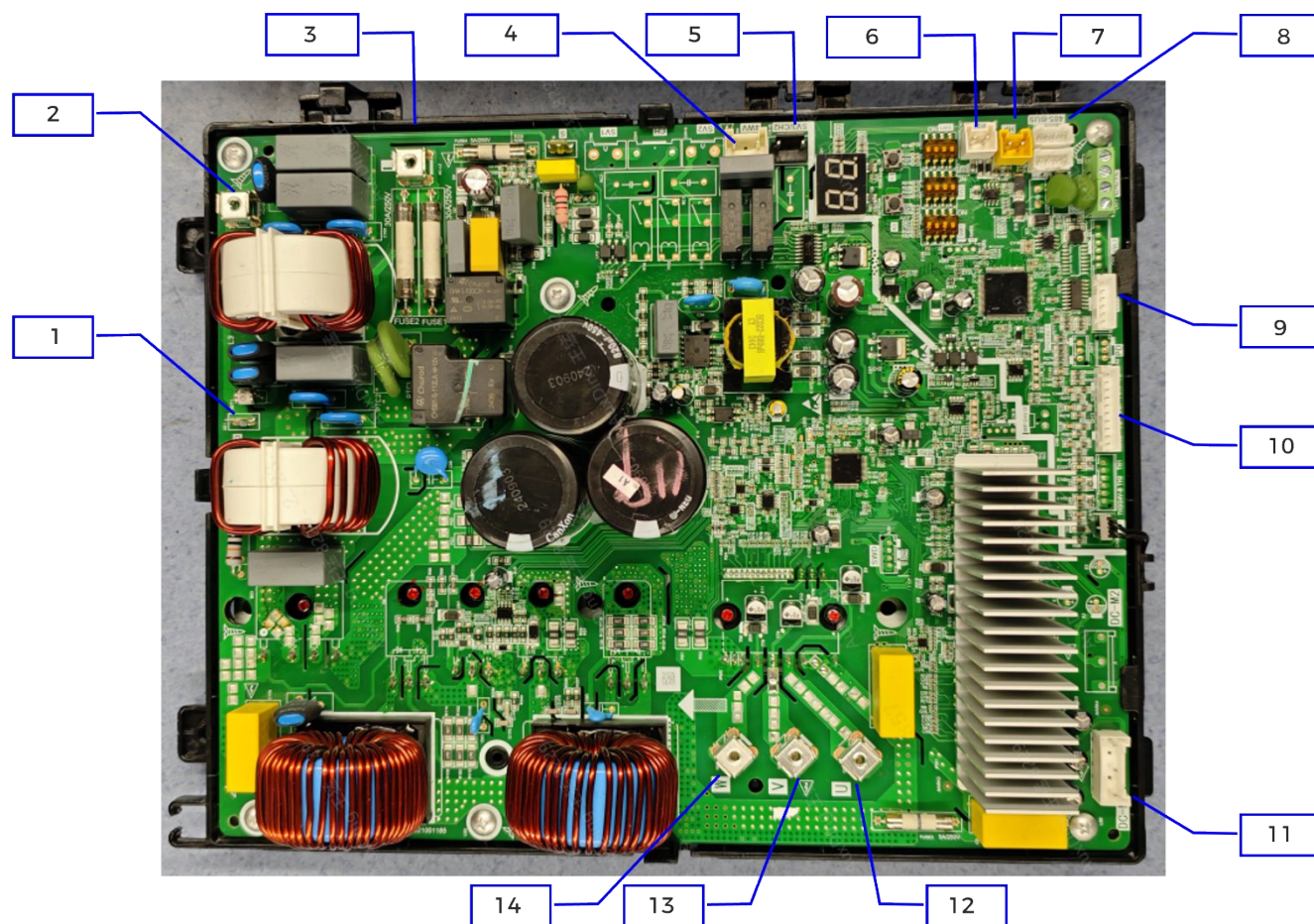
1.2 21K (AM3-H21/4DR3C) 27K (AM3-H27/4DR3D)



Comp.	Component description	Comp.	Component description
1	Temperature sensor	8	4-way valve
2	Temperature sensor	9	Chassis heater
3	Pressure switch	10	Compressor U V W
4	PCB GND wire (Yellow/Green)	11	Fan motor
5	Single wire (white)	12	Monitoring tool
6	N wire (blue)	13	Electronic expansion valve
7	L wire (brown)		

1.3 28K (AM4-H28/4DR3D)

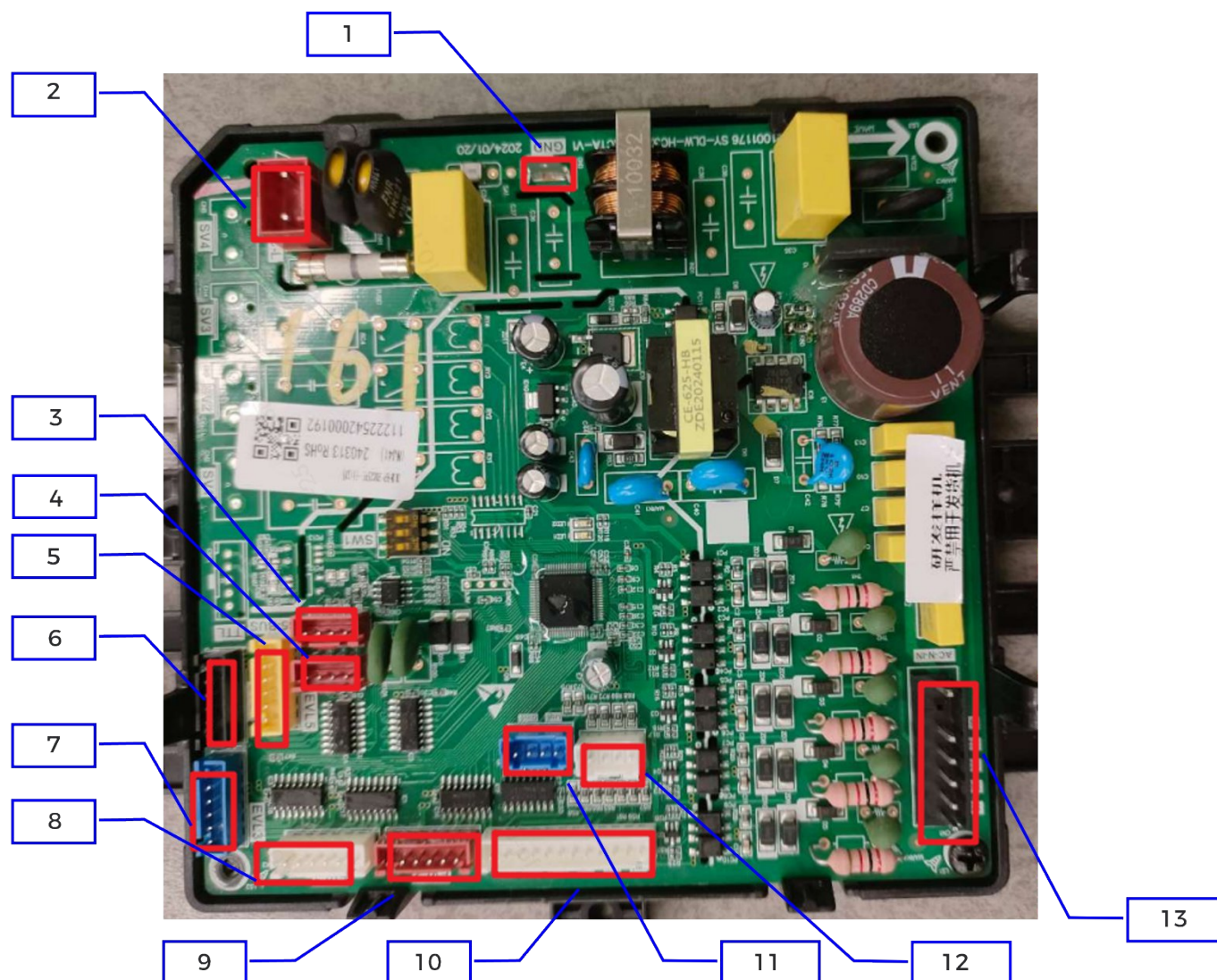
Main PCB



Comp.	Component description	Comp.	Component description
1	GND	8	485 communication / monitoring tool
2	L	9	Electronic expansion valve
3	N	10	Temperature sensor
4	4-way valve	11	DC fan motor
5	Electric heating of the chassis	12	Compressor-U
6	Low pressure switch	13	Compressor-V
7	High pressure switch	14	Compressor-W

When using monitoring software, you need to prepare DuPont wires by yourself to connect the monitoring tooling.

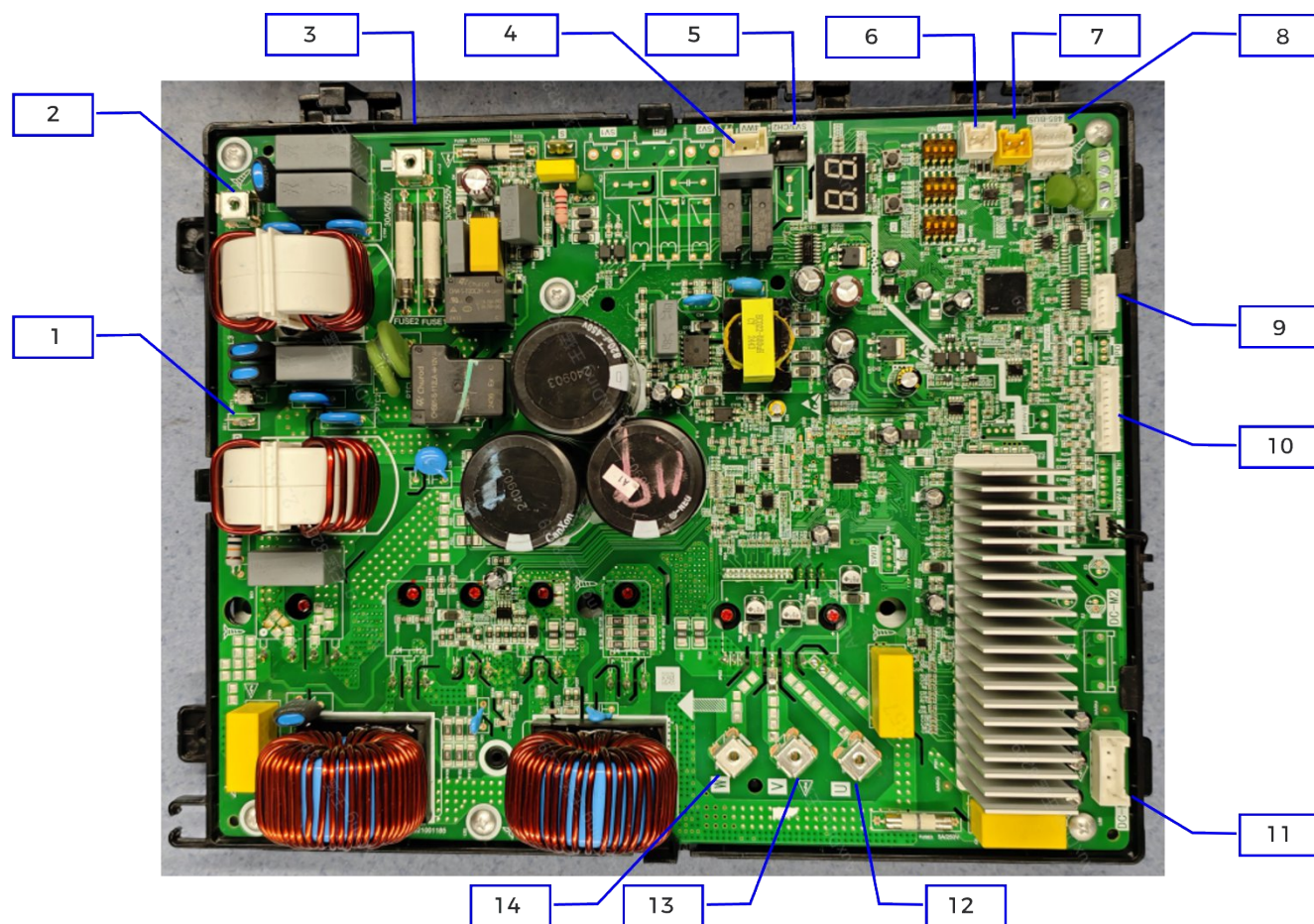
Expansion PCB



Comp.	Component description	Comp.	Component description
1	GND	8	EXV 1
2	L-N	9	EXV 2
3	485 communication	10	Temperature sensor
4	485 communication	11	Temperature sensor
5	EXV 5	12	Temperature sensor
6	EXV 4	13	Signal terminal
7	EXV 3		

1.4 36K (AM4-H36/4DR3B)

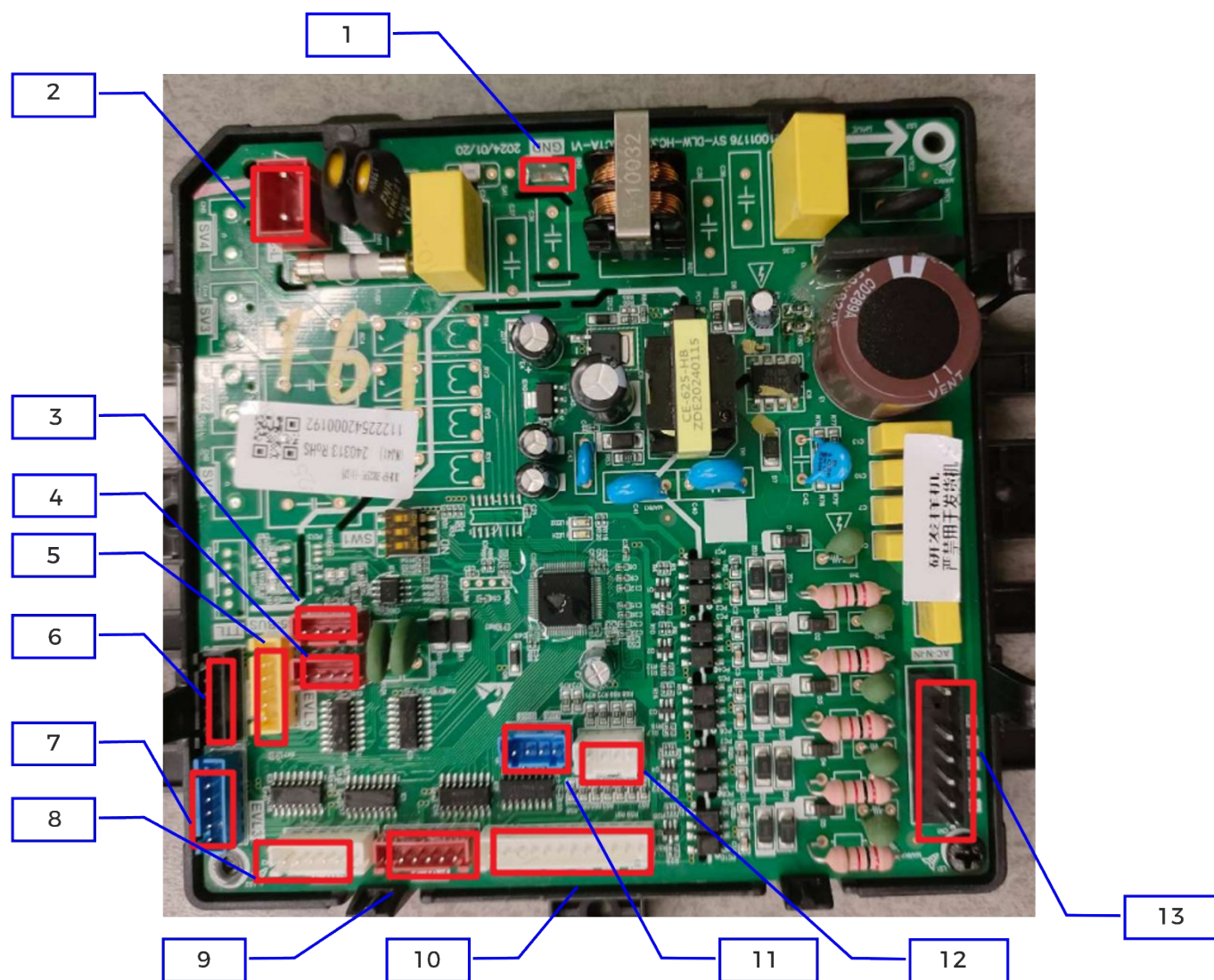
Main PCB



Comp.	Component description	Comp.	Component description
1	GND	8	485 communication / monitoring tool
2	Power live wire	9	Electronic expansion valve
3	Power neutral wire	10	Temperature sensor
4	4-way valve	11	DC fan motor
5	Electric heating of the chassis	12	Compressor-U
6	Low pressure switch	13	Compressor-V
7	High pressure switch	14	Compressor-W

When using monitoring software, you need to prepare DuPont wires by yourself to connect the monitoring tooling.

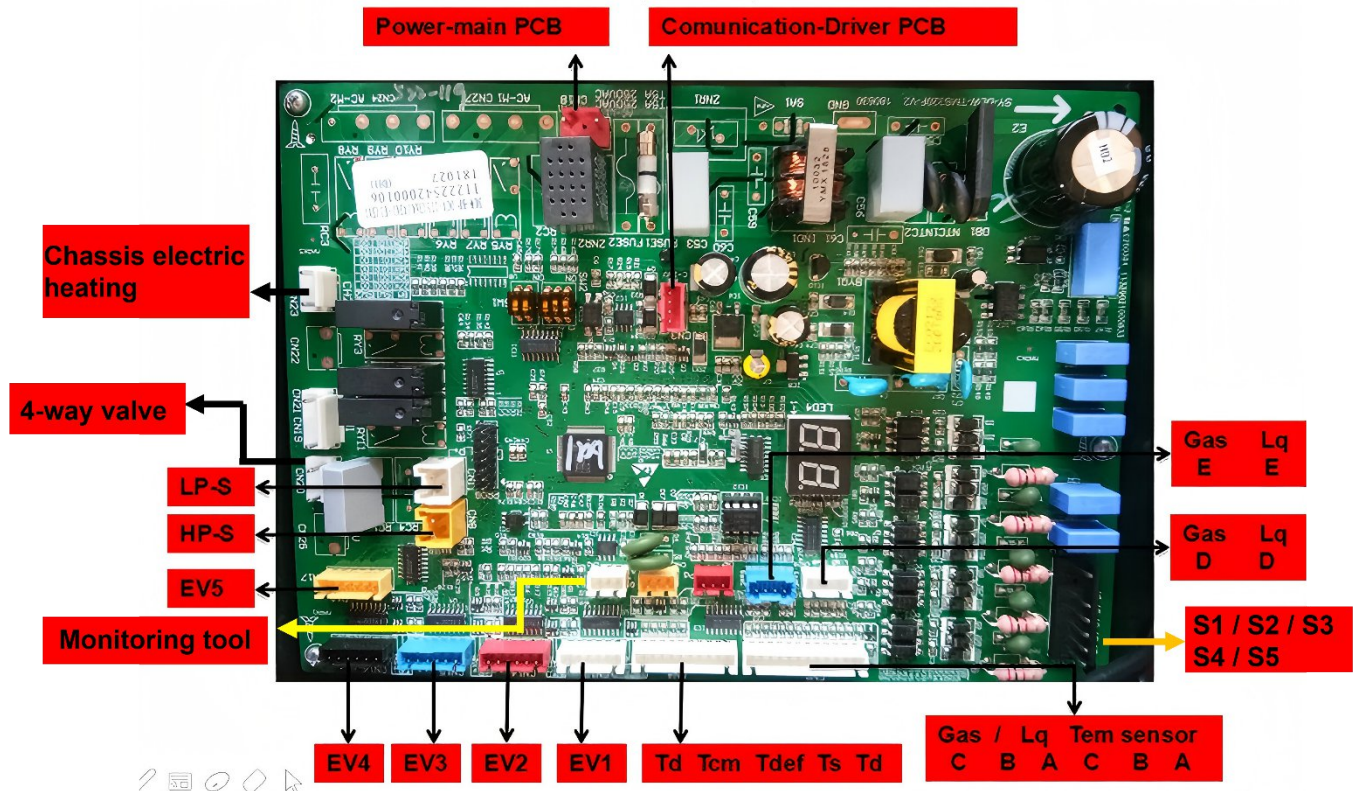
Expansion PCB



Comp.	Component description	Comp.	Component description
1	GND	8	EXV 1
2	L-N	9	EXV 2
3	485 communication	10	Temperature sensor
4	485 communication	11	Temperature sensor
5	EXV 5	12	Temperature sensor
6	EXV 4	13	Signal terminal
7	EXV 3		

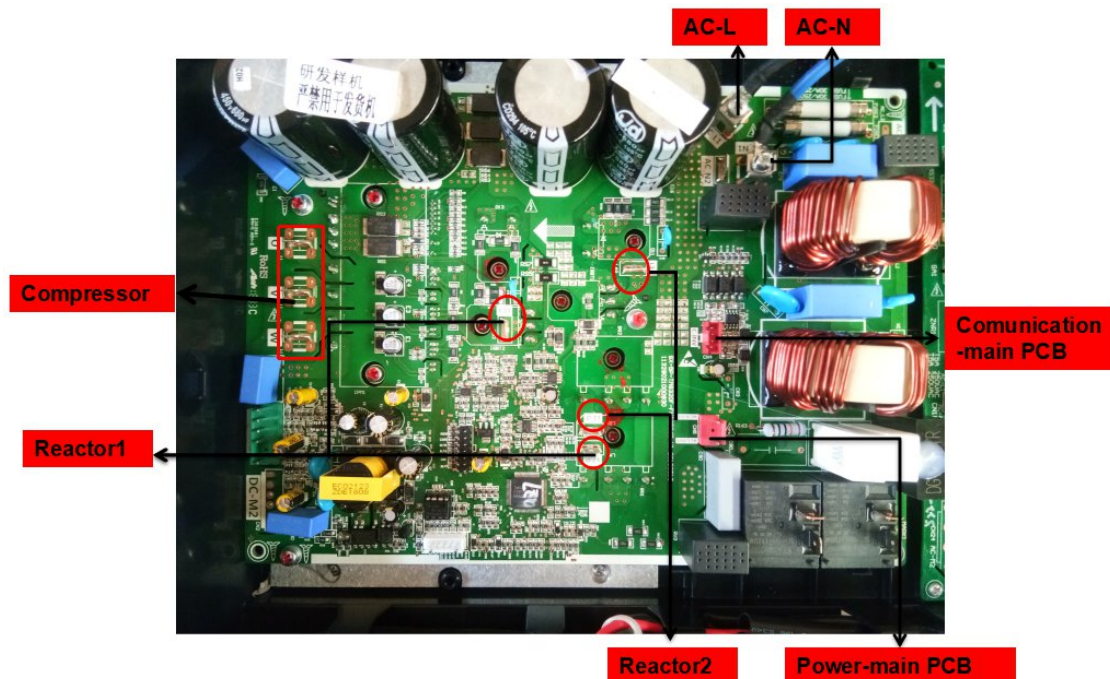
1.5 42K(AM5-H42/4DR3)

Main PCB



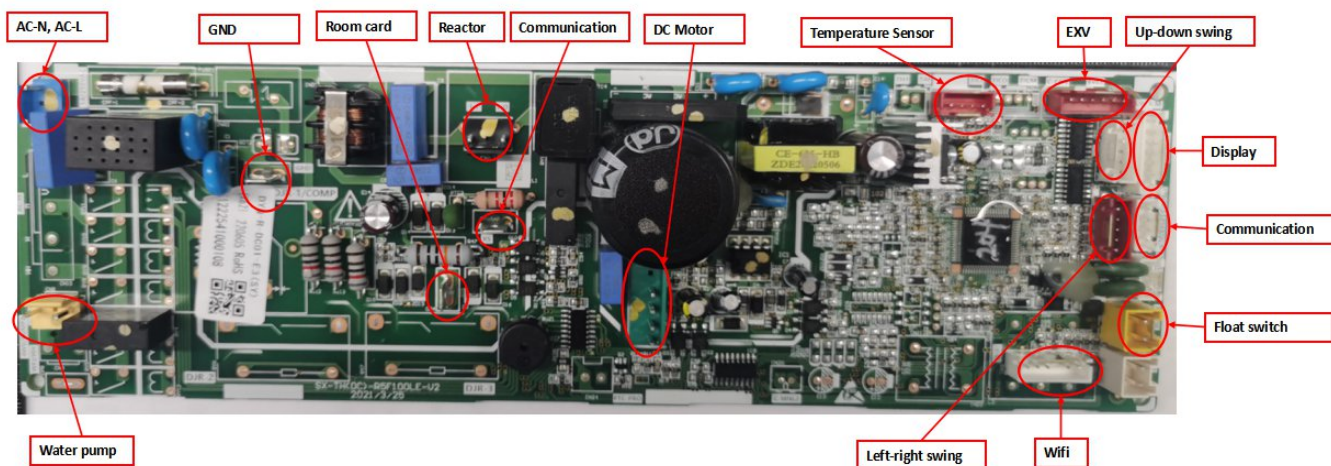
When connecting the monitoring software, the connection wire of the ports on the PCB need to be cut open and connected to the monitoring tooling.

Drive modular board

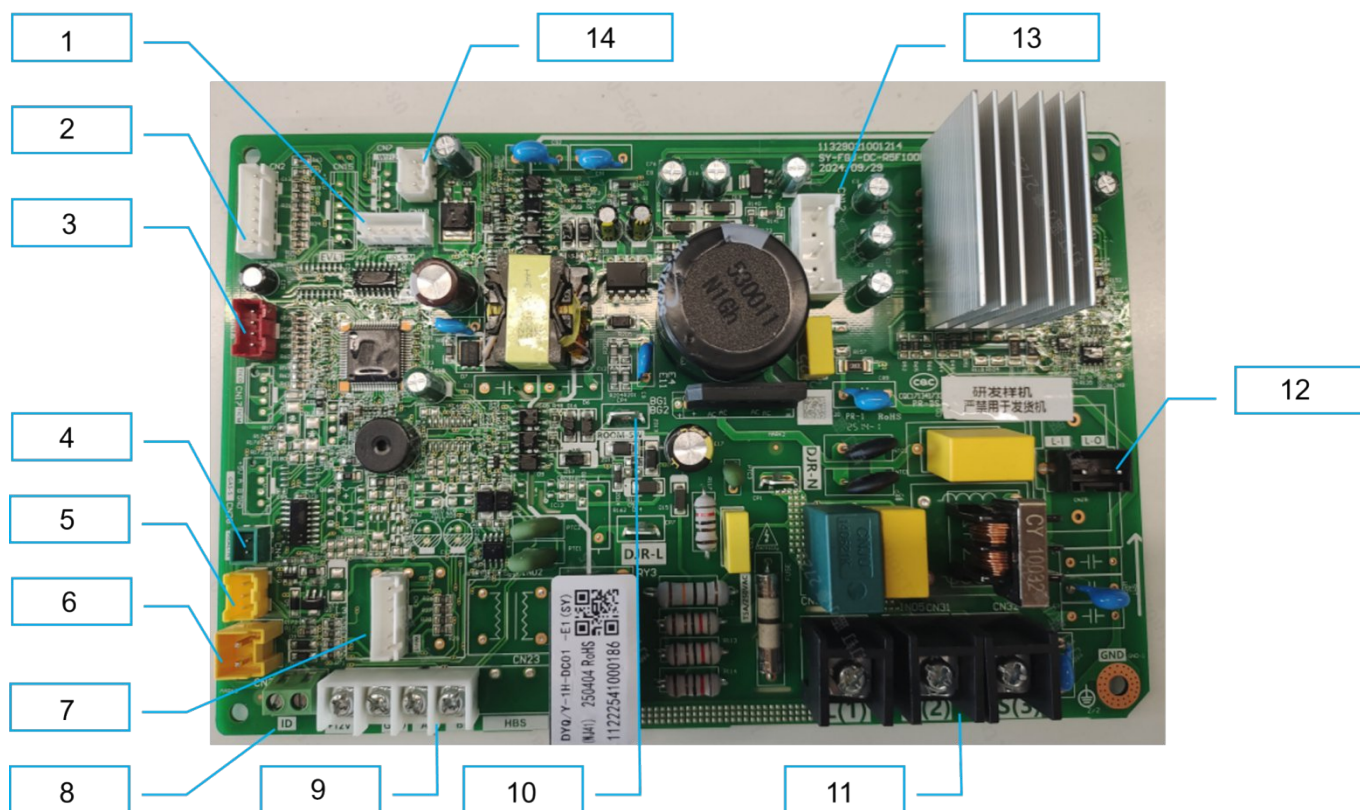


2. Indoor Unit PCB

2.1 09K (Compact Cassette Y)

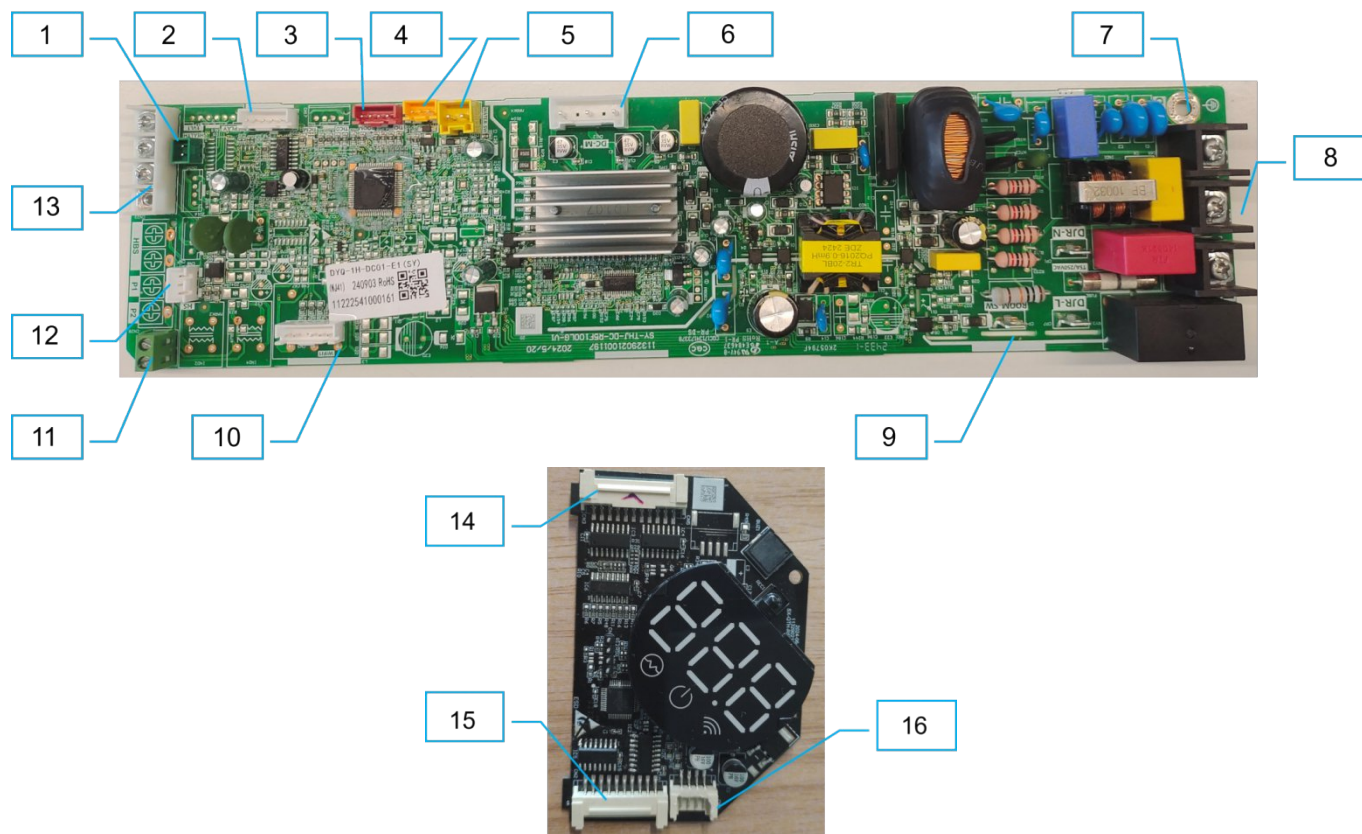


12,18K(Compact Cassette Y)



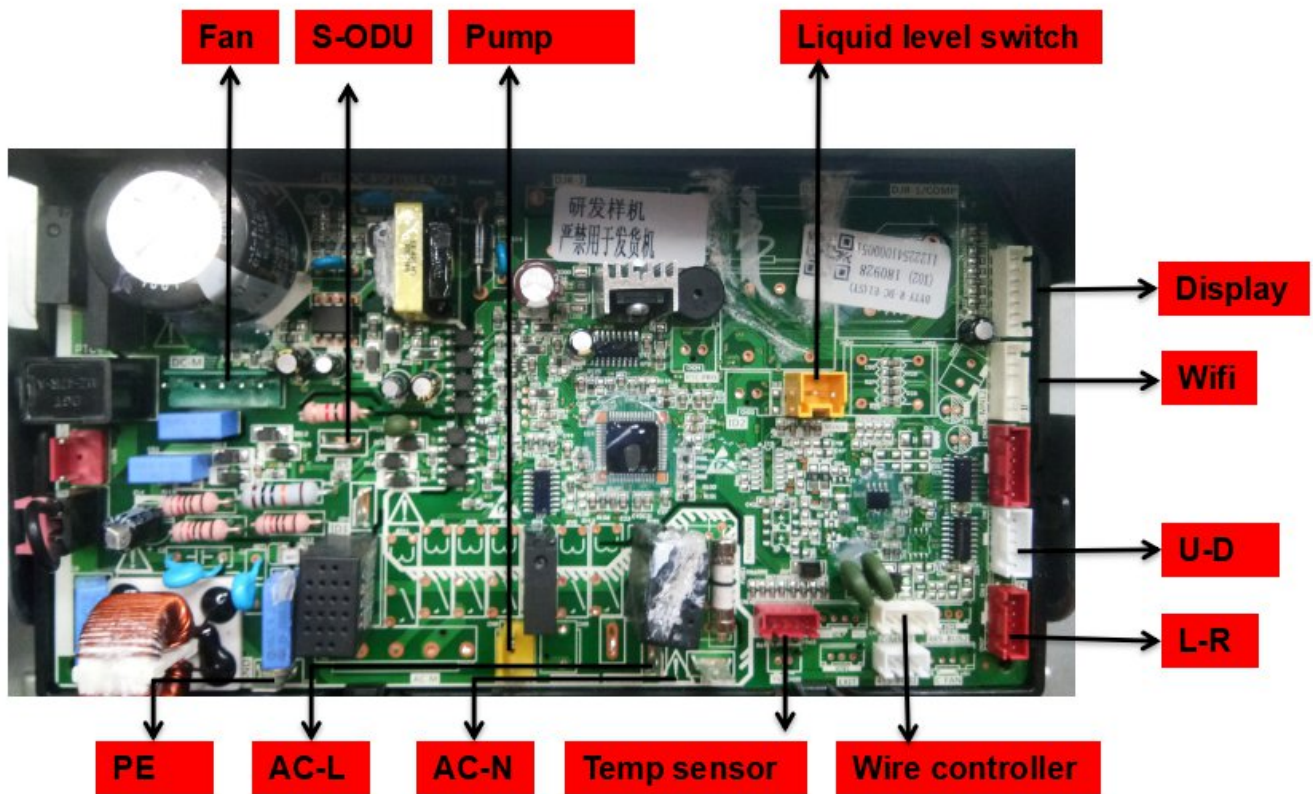
Comp.	Component description	Comp.	Component description
1	Up/Down swing motor	8	Dry contact
2	Display	9	12V、 GND、 A、 B
3	Temperature sensor	10	Room card
4	Health (Reserve)	11	L、 N、 S
5	Condensate water pump	12	Reactor
6	Float switch	13	DC fan motor
7	WIFI	14	Humidity sensor (Reserve)

2.2 24K (Cassette Q)

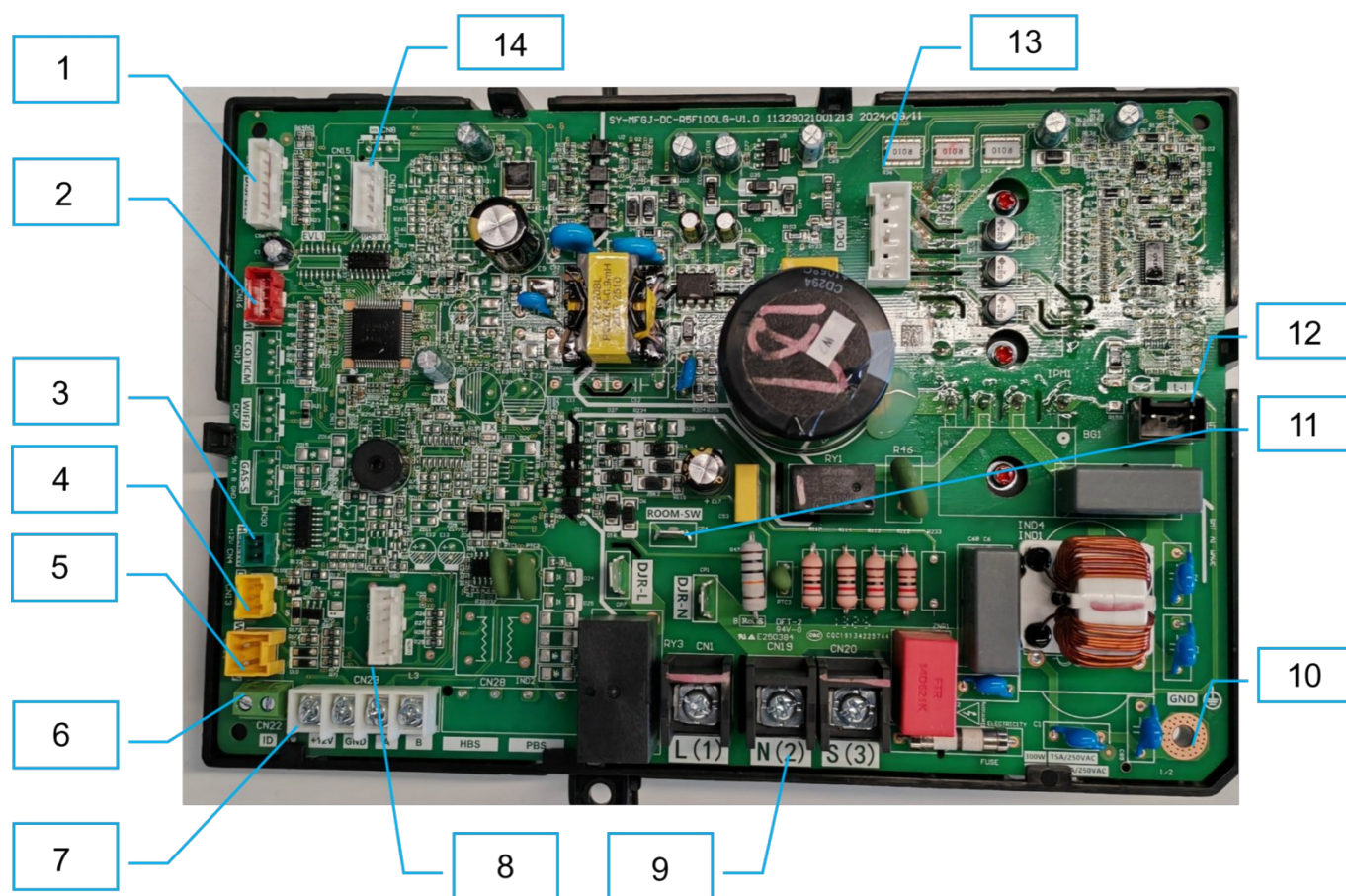


Comp.	Component description	Comp.	Component description
1	Health (Reserve)	9	Room card
2	Display	10	WIFI
3	Temperature sensor	11	Dry contact
4	Condensate water pump	12	Humidity sensor (Reserve)
5	Float switch	13	12V、 GND、 A、 B
6	DC fan motor	14	Louver step motor 1&2
7	GND	15	Louver step motor 3&4
8	L、 N、 S	16	Communication port (with PCB)

2.3 07K,09K (Y-Duct)

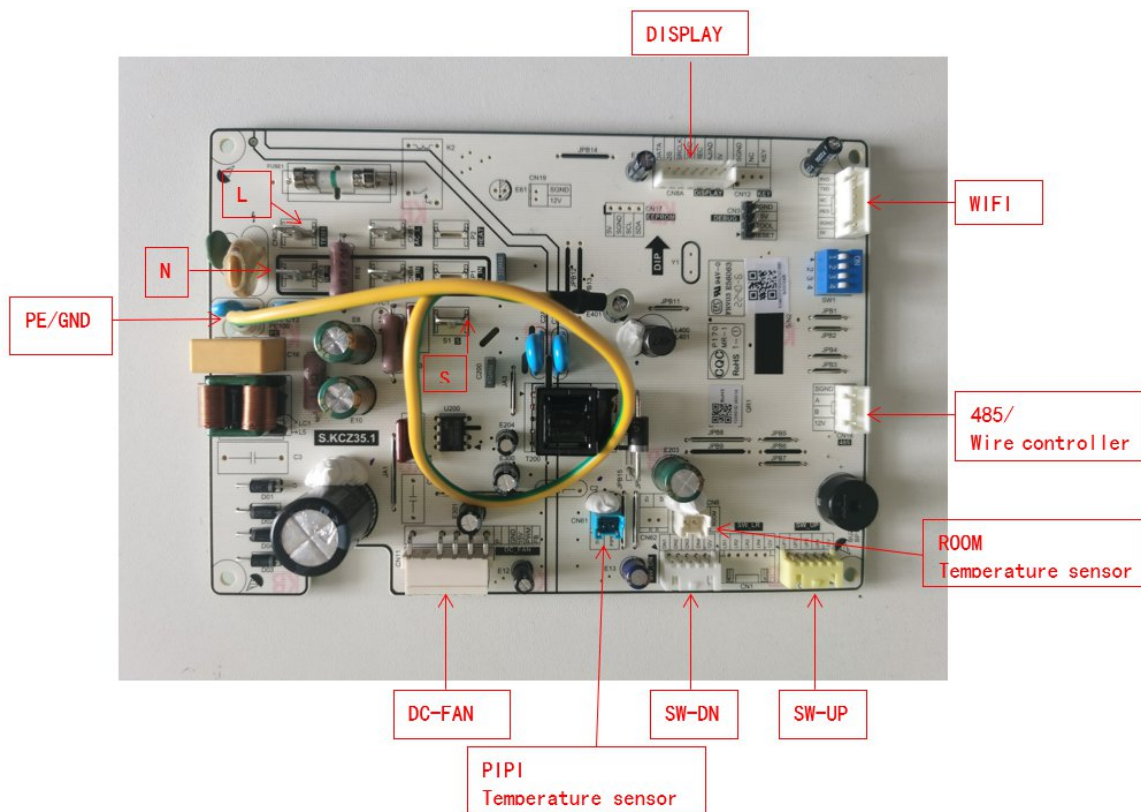


2.4 12K,18K,24K(M-Duct)

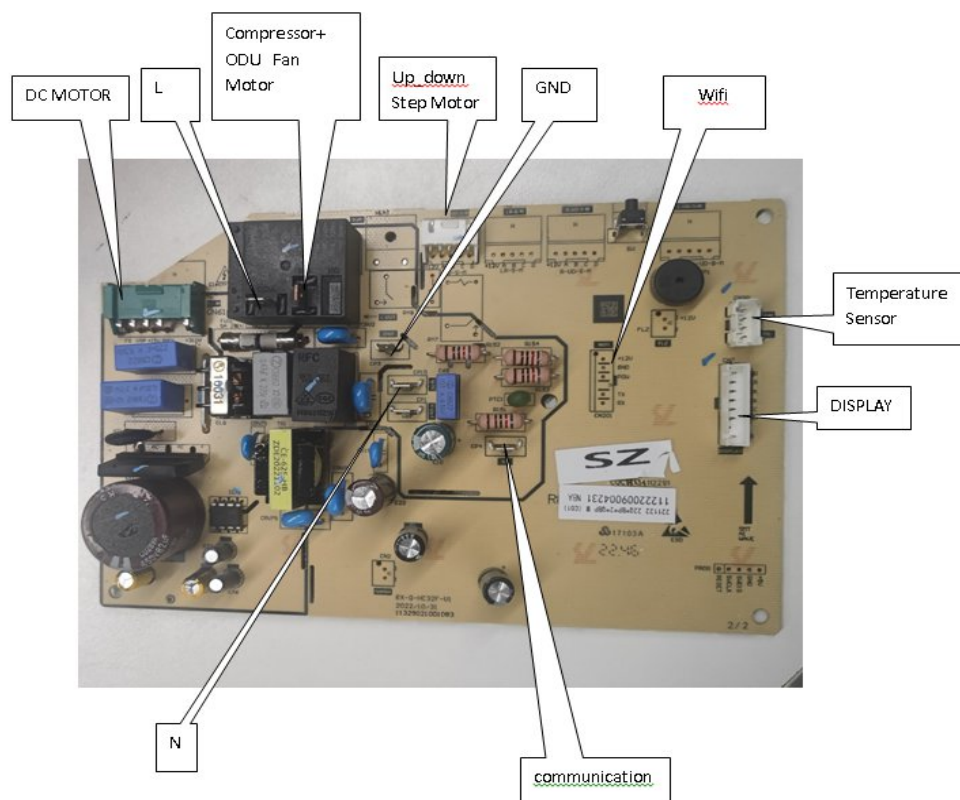


Comp.	Component description	Comp.	Component description
1	Display	8	WIFI
2	Temperature sensor	9	L、N、S
3	Health (Reserve)	10	GND
4	Condensate water pump	11	Room card
5	Float switch	12	Reactor
6	Dry contact	13	DC fan motor
7	12V、GND、A、B	14	UP/DOWN swing motor

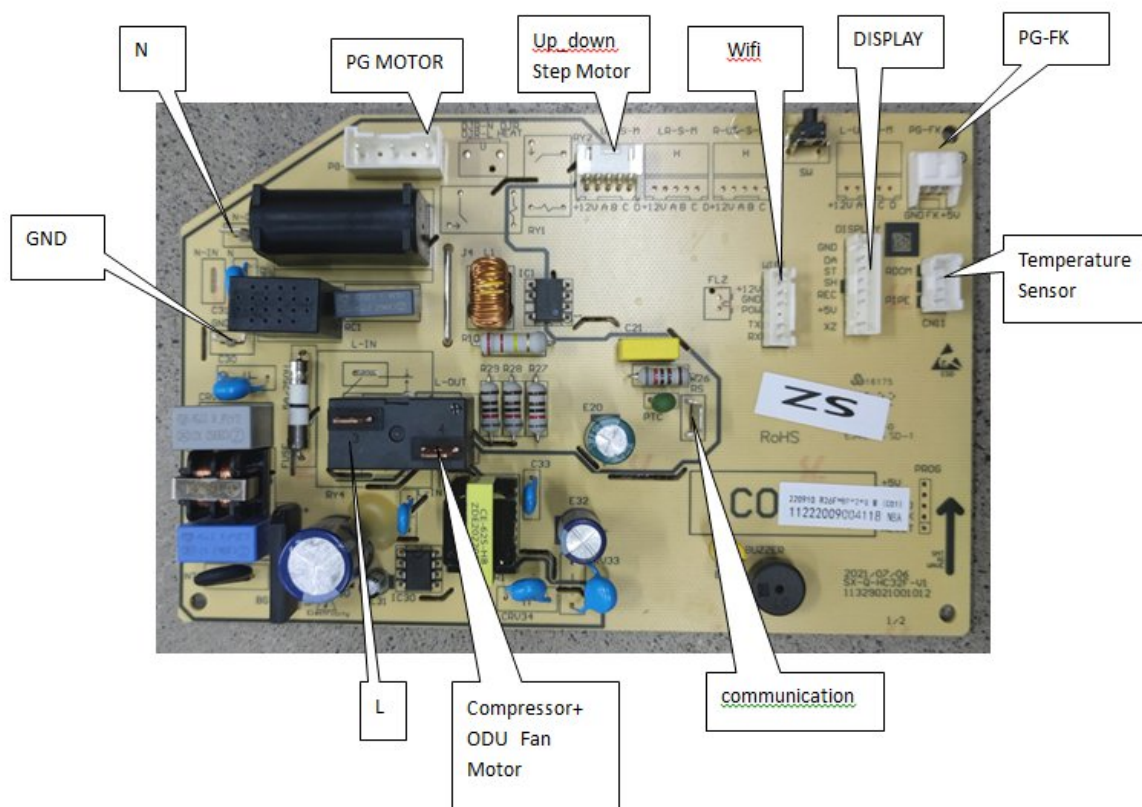
2.5 09K,12K,18K(Console)



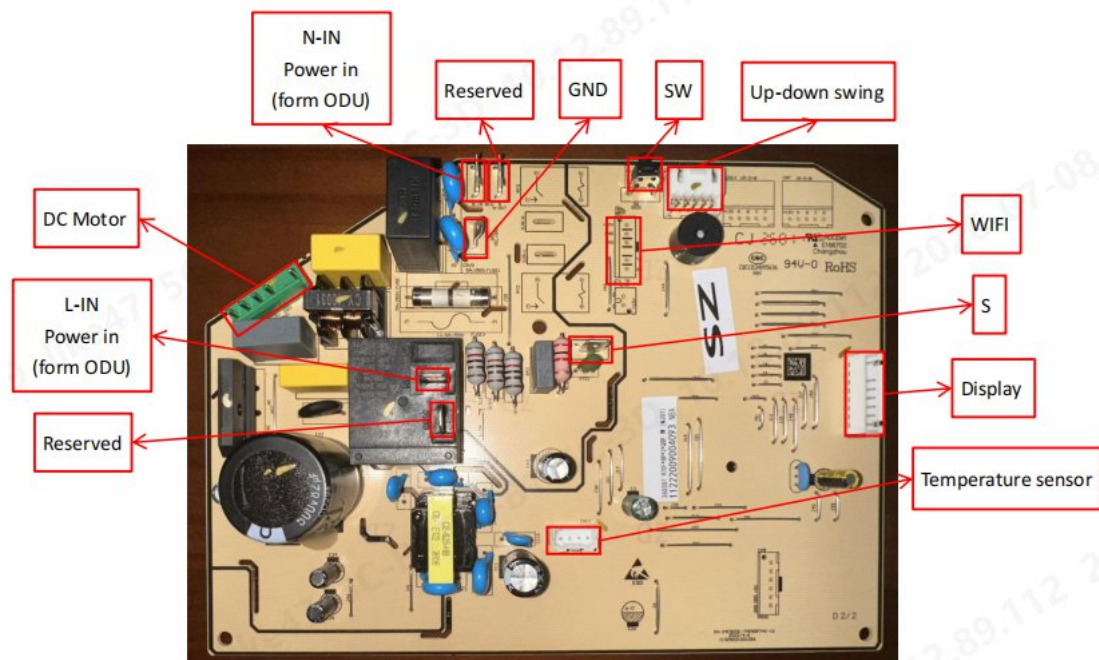
2.6 AMWM-H07/4R3B(Q*),AMWM-H09/4R3B(Q*)



AMWM-H12/4R3A(Q*)

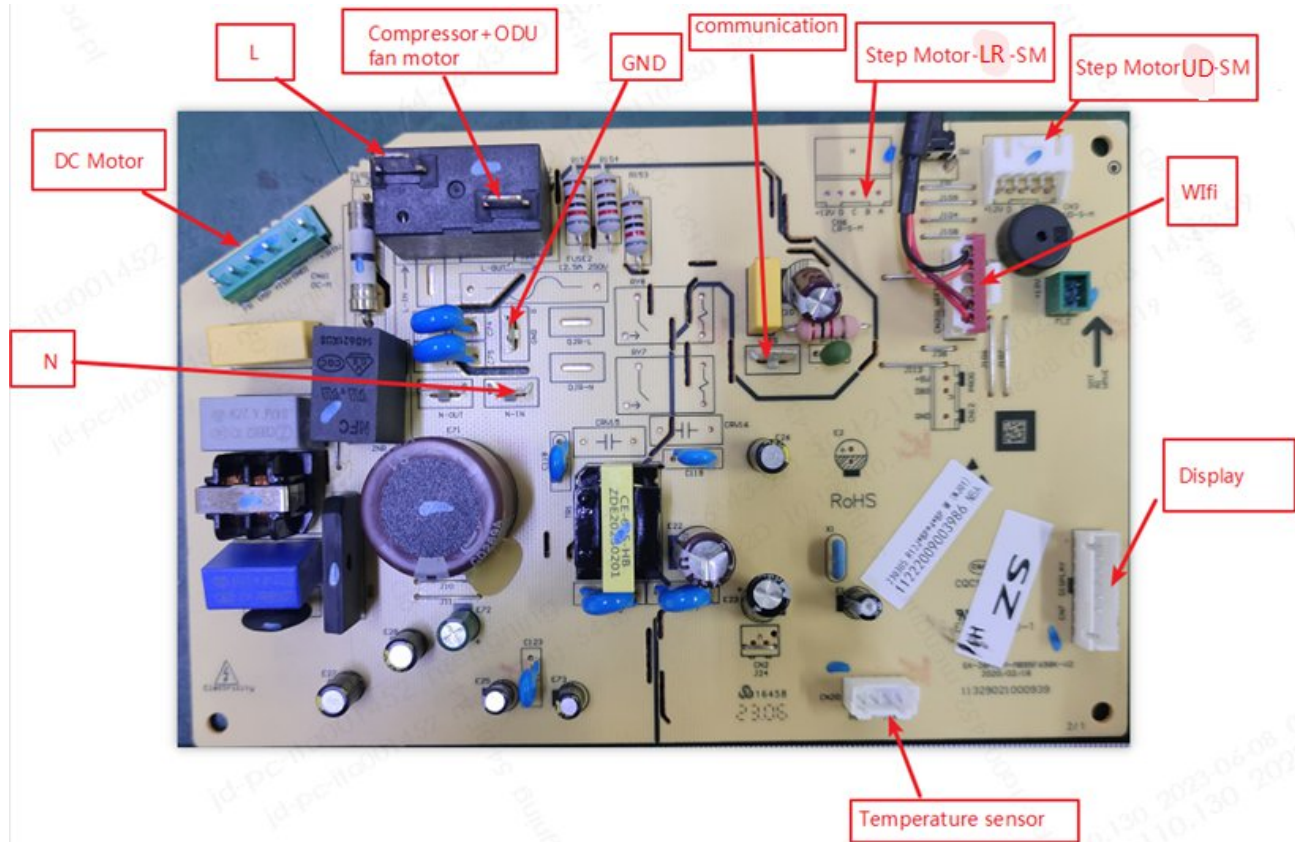


AMWM-H18/4R3A(Q*), AMWM-H24/4R3B(Q*)

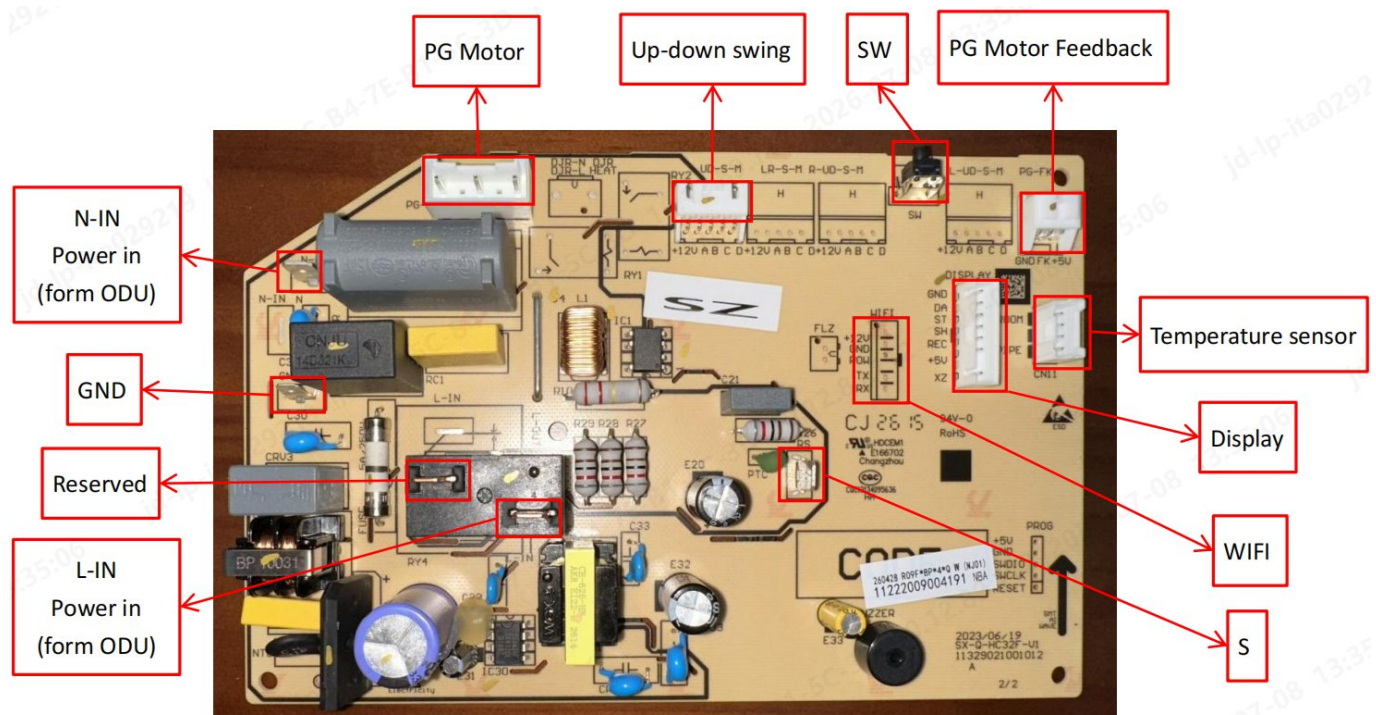


2.7 AMWM-H07/4R3C(J*), AMWM-H09/4R3C(J*), AMWM-H18/4R3C(J*)

AMWM-H07/4R3C(F*), AMWM-H09/4R3D(F*), AMWM-H12/4R3D(F*), AMWM-H18/4R3C(F*)

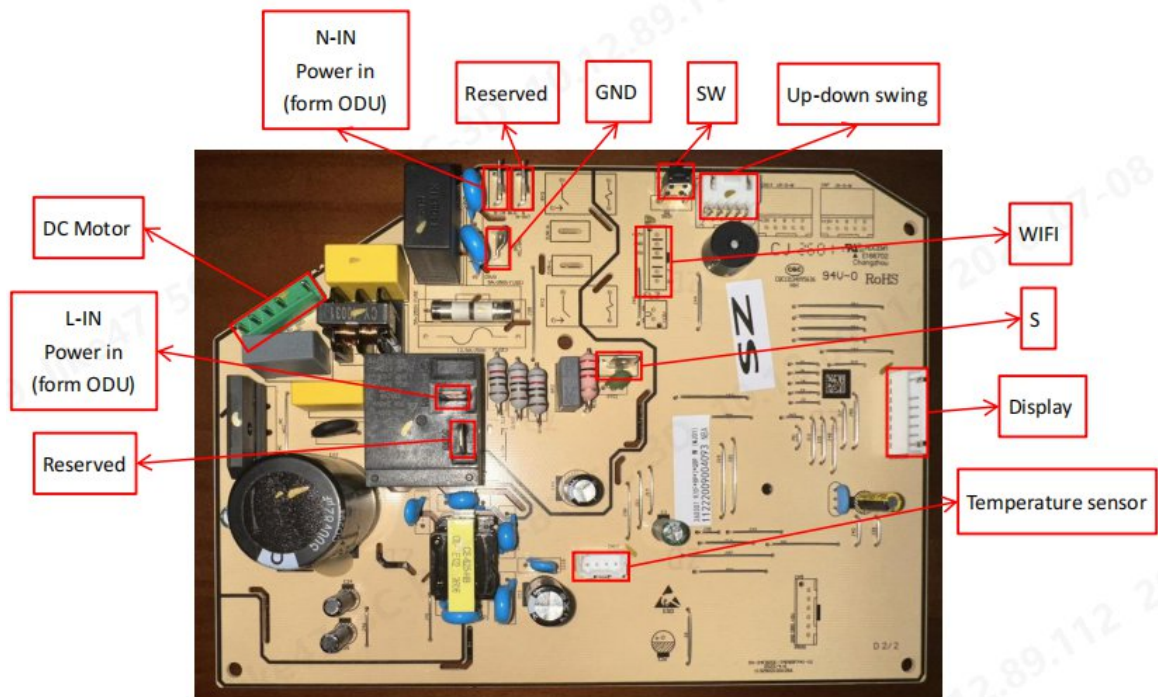


AMWM-H12/4R3D(J*)



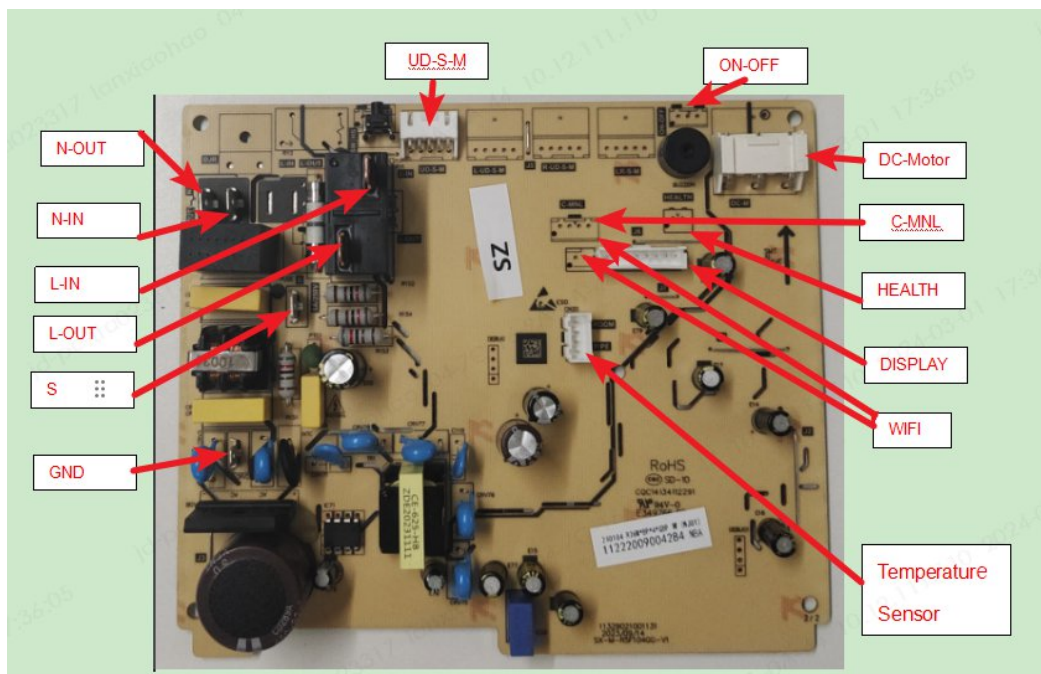
AMWM-H24/4R3B(J*)

AMWM-H24/4R3B(F*)



2.8 AMWM-H07/4R3A(C*) AMWM-H09/4R3A(C*) AMWM-H12/4R3A(C*)

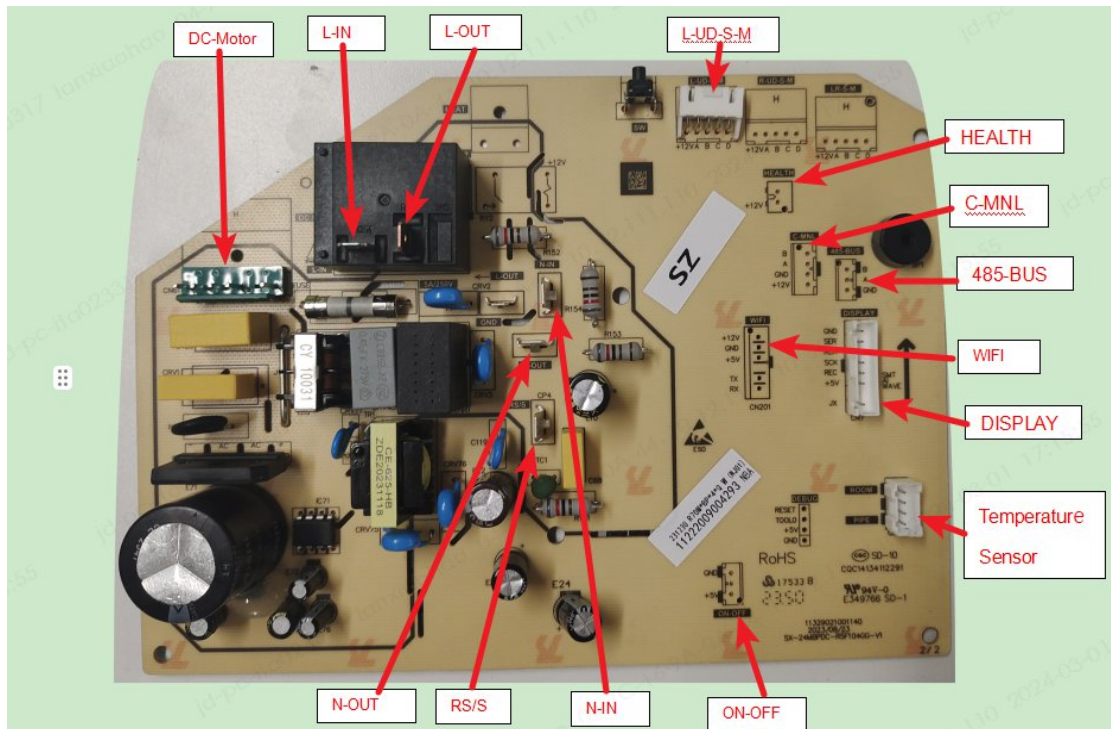
AMWM-H07/4R3A(M*) AMWM-H09/4R3A(M*) AMWM-H12/4R3A(M*)



The wired controller and WIFI functions cannot be met simultaneously

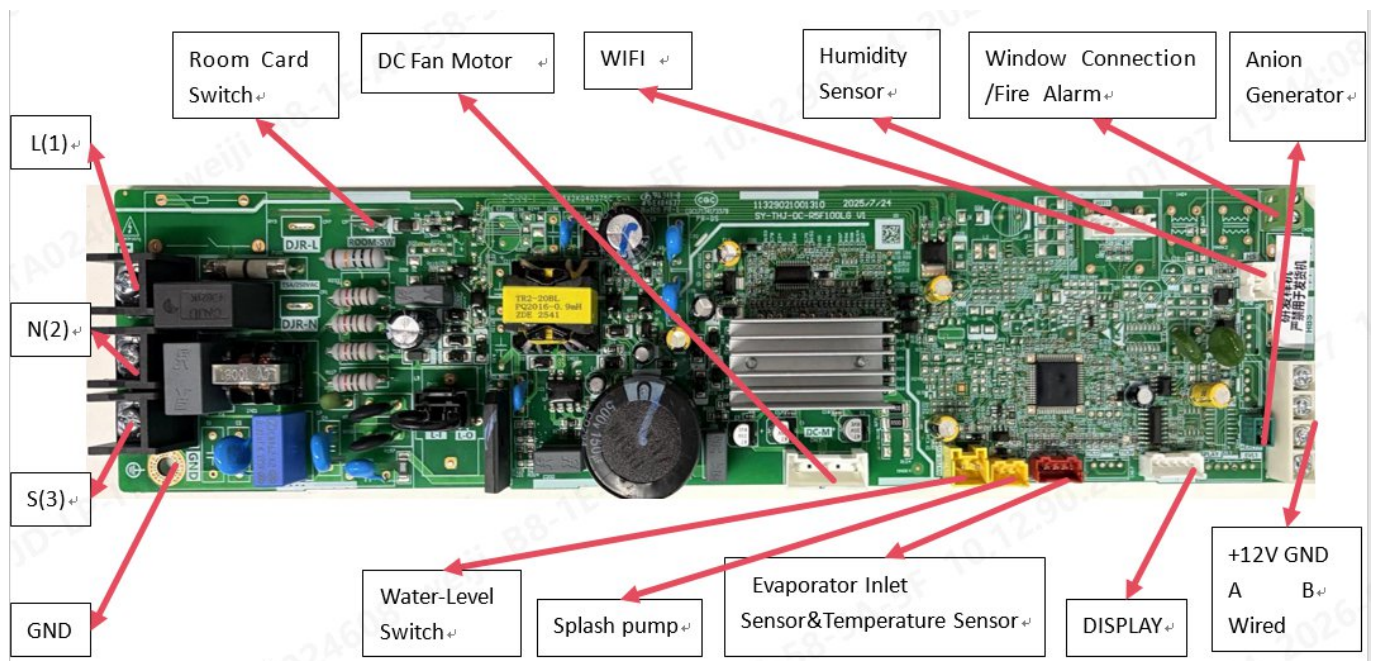
AMWM-H18/4R3A(C*) AMWM-H24/4R3A(C*)

AMWM-H18/4R3A(M*) AMWM-H24/4R3A(M*)



The wired controller and WIFI functions can be met simultaneously

2.9 AMC1-H09/4R3DSA; AMC1-H12/4R3DSA; AMC1-H18/4R3DSA; AMC1-H24/4R3DSA



Part11 Electric Characteristic

Model	Power supply		Voltage range		Running current		
	Hz	Voltage	Min	Max	Cooling	Heating	Max current
AM2-H14/4DR3C AM2-H14/4DR3C-U	50	220-240	187	253	5.39	5.00	12.0
AM2-H18/4DR3D AM2-H18/4DR3D-U	50	220-240	187	253	6.92	6.39	13.0
AM3-H21/4DR3C AM3-H21/4DR3C-U	50	220-240	187	253	8.35	7.74	14.0
AM3-H27/4DR3D AM3-H27/4DR3D-U	50	220-240	187	253	10.60	9.58	16.5
AM4-H28/4DR3D AM4-H28/4DR3D-U	50	220-240	187	253	8.87	9.13	19.0
AM4-H36/4DR3B AM4-H36/4DR3B-U	50	220-240	187	253	14.50	13.10	22.6
AM5-H42/4DR3A AM5-H42/4DR3A	50	220-240	187	253	19.72	16.62	24.5

A or -U : optional electric heater on chassis

Part12 Trouble Shooting

CF/ CA/ Duct /Co: Ceiling floor /Cassette/Duct/Console unit; WM: wall mounted unit

For troubleshooting, you can directly click the link below to view.

https://smarthomelink.aux-home.com/aux_work/views/breakdown/v3.html

1. Indoor unit error code display

1.1 Error code display by wired controller

	Press “Function” & “Up” button at the same time to enter the error code check “E0A1” means the first error code “A1”, through the “IDU Fault code table” to check error code definition. “E2A3” means the second error code is “A3”.
--	---

1.2 Error code display by display panel



2. Fault Code List

2.1 Temp. sensor fault (CA/ CF/ Duct / Co NO.9; WM NO.8)

Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
A1	E1	Fault with the room temperature sensor on the N # indoor unit	Damage of the room temperature sensor on the indoor unit Poor contact of the room temperature sensor on the indoor unit Damage of wiring of the room temperature sensor on the indoor unit Damage of the main PCB on the indoor unit
A2	E3	Fault with the temperature Sensor in the Middle of N # indoor evaporator	Damage of the temperature sensor on the indoor unit Poor contact of the temperature sensor on the indoor unit Damage of wiring of the temperature sensor on the indoor unit Damage of the main PCB on the indoor unit
A3	H3	Fault with the liquid pipe temperature sensor on the N# indoor unit	Damage of the liquid pipe temperature sensor on the indoor unit Poor contact of the liquid pipe temperature sensor on the indoor unit Damage of wiring of the liquid pipe temperature sensor on the indoor unit Damage of the main PCB on the indoor unit
A4	H4	Fault with the gas pipe temperature sensor on the N# indoor unit	Damage of the gas pipe temperature sensor on the indoor unit Poor contact of the gas pipe temperature sensor on the indoor unit Damage of wiring of the gas pipe temperature sensor on the indoor unit Damage of the main PCB on the indoor unit
C1	F6	Fault with the environmental temperature sensor on the outdoor unit	Damage of the Environmental temperature sensor on the outdoor unit Poor contact of the Environmental temperature sensor on the outdoor unit Damage of wiring of the Environmental temperature sensor on the outdoor unit

Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
			Damage of the main PCB on the outdoor unit
C3	F4	Fault with the discharge temperature sensor	Damage of the discharge temperature sensor on the outdoor unit Poor contact of the discharge temperature sensor on the outdoor unit Damage of wiring of the discharge temperature sensor on the outdoor unit Damage of the main PCB on the outdoor unit
C6	FA	Fault with the suction temperature sensor	Damage of the suction temperature sensor on the outdoor unit Poor contact of the suction temperature sensor on the outdoor unit Damage of wiring of the suction temperature sensor on the outdoor unit Damage of the main PCB on the outdoor unit
C8	E2	Fault with the temperature sensor in the middle of Outdoor condenser	Damage of the temperature sensor on the outdoor unit Poor contact of the temperature sensor on the outdoor unit Damage of wiring of the temperature sensor on the outdoor unit Damage of the main PCB on the outdoor unit
C2		Fault with the defrosting temperature sensor on outdoor	

2.2 Communication fault (CA/ CF/ Duct / Co NO.3; WM NO.5)

Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
A9	5E/E5	Communication error between the outdoor unit and the N # indoor unit	Damage of the main PCB on the indoor unit Damage of the main PCB on the outdoor unit poor wiring
AA	E8/H2	Communication error between the wired controller and main PCB of the N# indoor unit	poor wiring Damage of the wired controller Damage of the main PCB on the indoor unit
D3(J3)	F8	Communication error between the driver PCB and main PCB of the outdoor unit	Damage of the driver PCB on the outdoor unit Damage of the main PCB on the outdoor unit poor wiring

2.3 IDU fault (CA/ CF/ Duct / Co NO.3; WM NO.3)

Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
A5	H1	Fault with the drainage on N# Indoor unit	Float switch disconnected or poor wiring Error setting of model parameters Drain plug Damage of the pump
A6	E4	Fault with the fan motor of N # indoor unit	Low voltage Poor wiring Damage of the main PCB on the indoor unit Damage of the motor
AD	P7	Indoor anti-freezing protection	Dirty Blockage of evaporator Indoor fan abnormal

2.4 Refrigerant circuit fault (CA/ CF/ Duct / Co NO.6; WM NO.6)

Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
E3	P5	High discharge temperature Protection	Lack of the refrigerant Stop valve unopened Damage of the main PCB on the outdoor unit
E8	P4/P6	Cooling: high temperature Protection of outdoor unit Heating: high temperature Protection of indoor unit	Cooling: Poor condenser heat exchange Heating: Poor evaporator heat exchange
F6/H4	H7	Low pressure protection	Lack of the refrigerant Heat exchanger viscera
FH	H5	Lower discharge temperature protection	Temperature sensor shedding Damage of the main PCB on the outdoor unit
(B5) H5	P3	Lack of refrigerant	Lack of the refrigerant Stop valve unopened

2.5 ODU components fault (CA/ CF/ Duct / Co NO.7; WM NO.12)

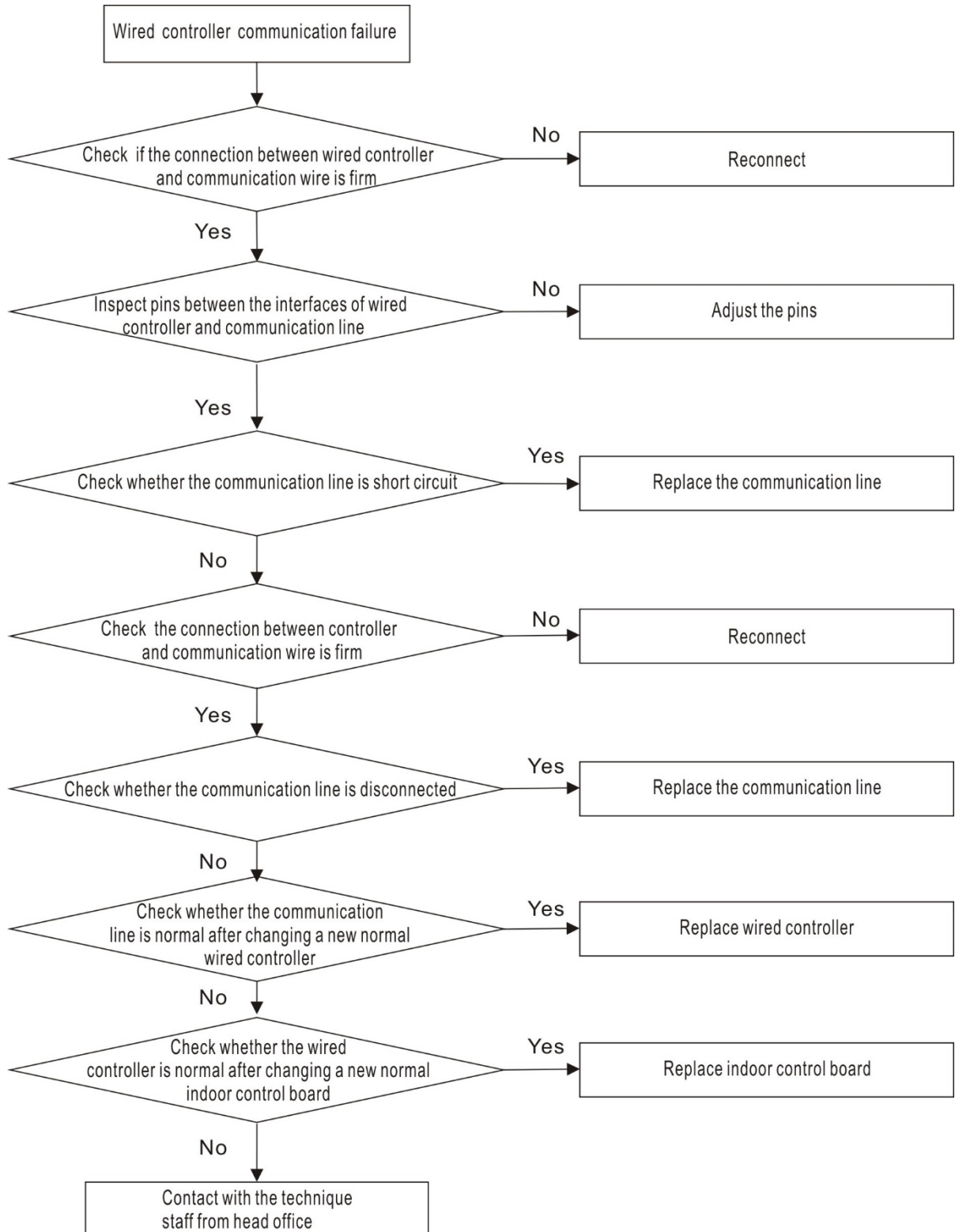
Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
(B1) H1	P2	High pressure switch protection	System dirty blocking Damage of high voltage pressure switch
H4	H6	Low pressure switch protection	Lack of the refrigerant Stop valve unopened Damage of low press switch
E1	H8	Fault of four-way valve	Damage of four-way valve Damage to coil of four-way valve
34	F3/LA/L2 /L3	Compressor failed to start	Compressor power line not connected Compressor sequence connection error Damage of compressor
3E			
3B(3H)	F0/LD/LE/LF	Fault with the fan motor of outdoor unit	Damage of motor
3C	LF	Outdoor DC Fan out-of-step protection & over current protection	DC motor failure High Speed of DC Fan System dirty blocking

2.6 ODU electeic control fault (CA/ CF/ Duct / Co NO.10; WM NO.19)

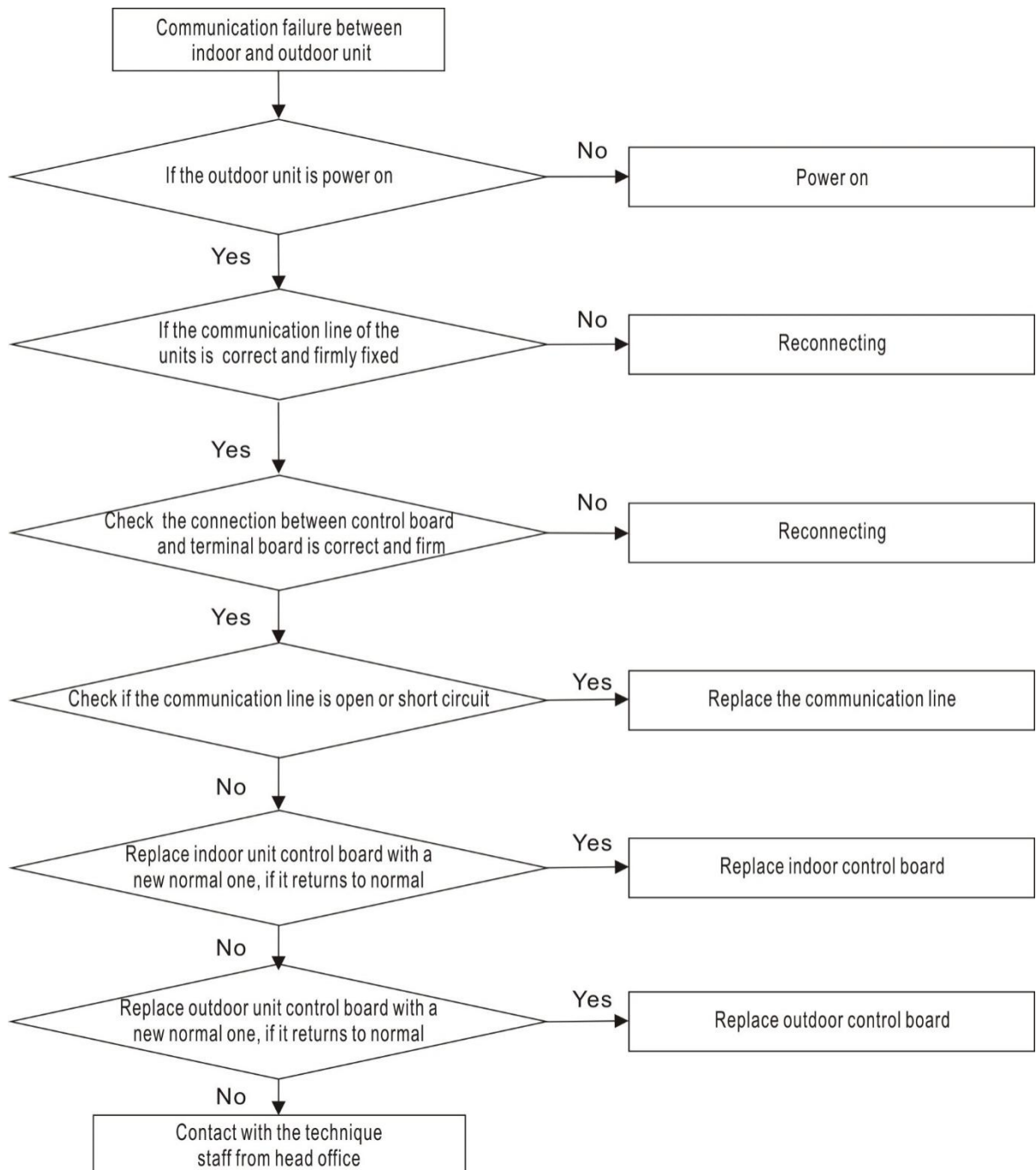
Code display in IDU		Fault code description	Possible reason
CA/CF/Duct/Co	WM		
31	F1/L1/L4 /L7/L8	IPM module failure protection	Compressor damage Compressor IPM module damage System blockage
32	F9	Compressor drive hardware protection & Fault with the outdoor unit EEPROM	Chip damage
D7 (J7)			
35	P8/J8	Over-current protection of the compressor drive modular	Excessive running current of the unit Voltage drops abruptly during operation
36	F7/L0	Over-voltage protection of the compressor drive modular	Excessive input voltage Lower input voltage
37	HE/HF	Abnormal temperature sensor in IPM/PFC module	Driver board IPM/PFC module device is broken
39	L9	Temperature of compressor drive modular too high protection	Compressor IPM module sensor damage Poor contact between compressor IPM module and radiator
3J	LD	AD abnormal protection for Outdoor DC Fan current Detection	Abnormal component of the fan driver modular
3F	F2/L5/ L6/LC	Compressor drive PFC protection	Damage of the PFC circuit components Reactor damage
41	LH	IPM protection of outdoor DC Fan drive modular	The IPM device of DC motor is bad

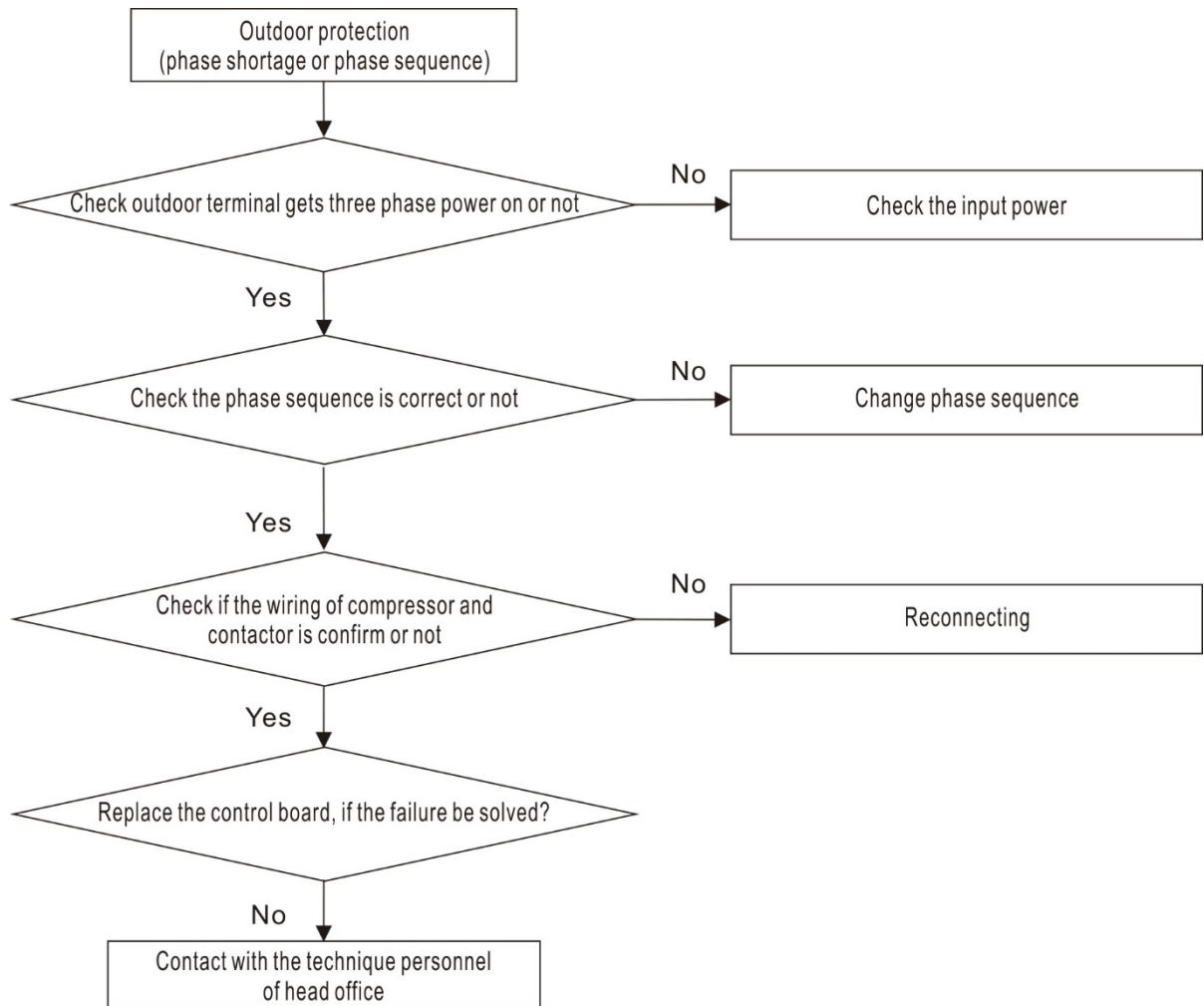
3. Failure Analysis

3.1 【H2】 Wired controller communication failure



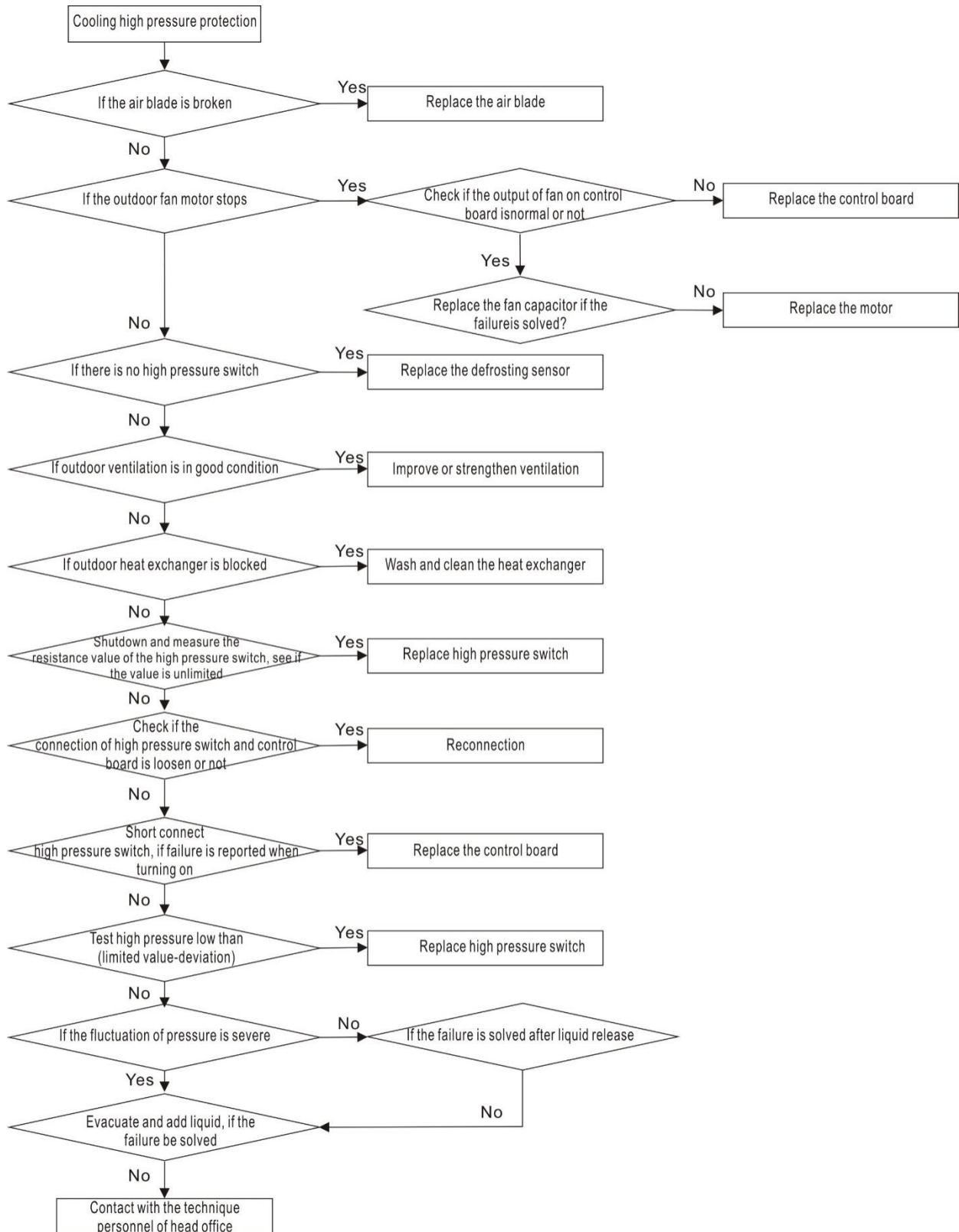
3.2 【E5】 Communication failure between indoor and outdoor unit



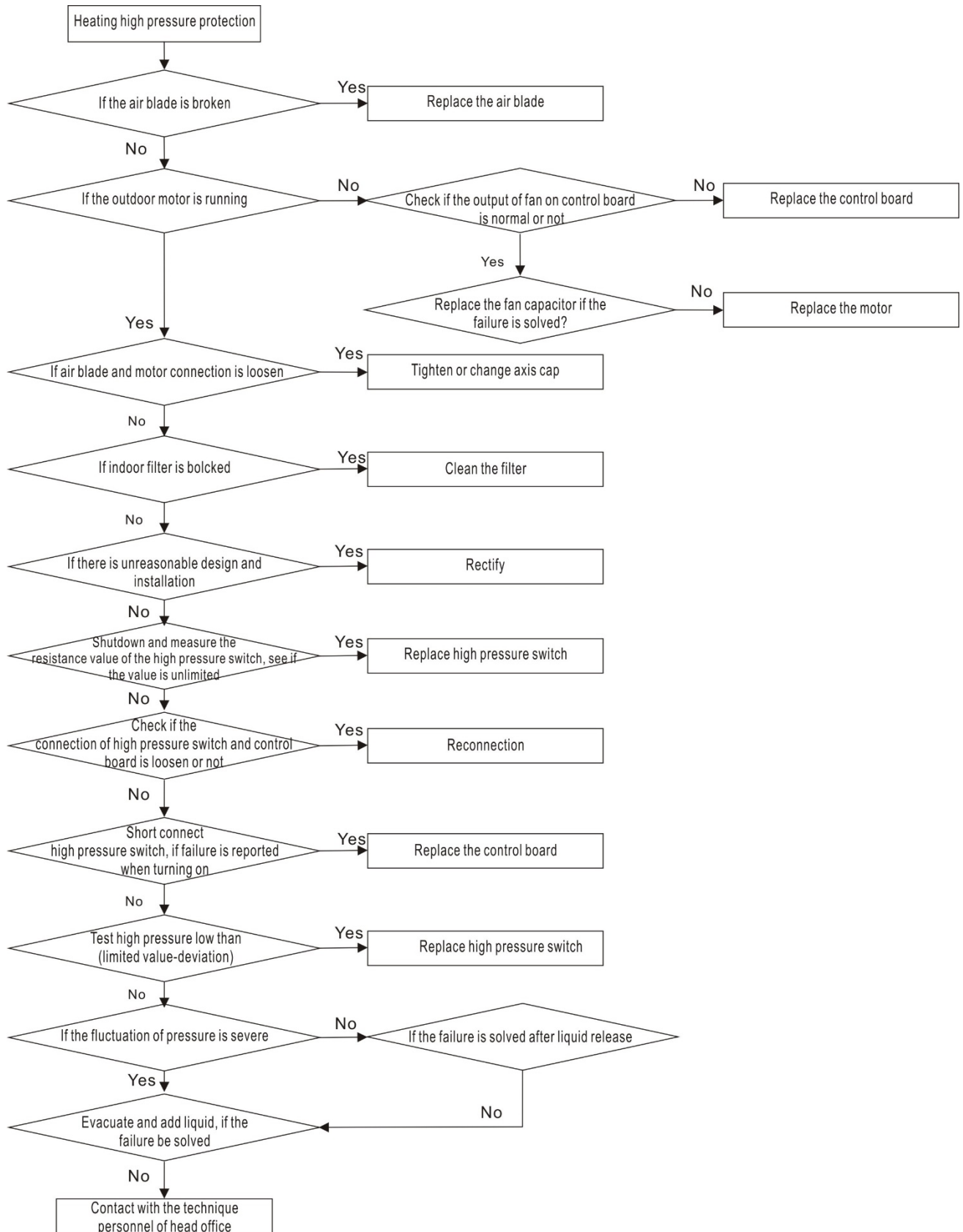
Outdoor protection (phase sequence)

3.3 【P2】 High pressure protection

Cooling high pressure protection

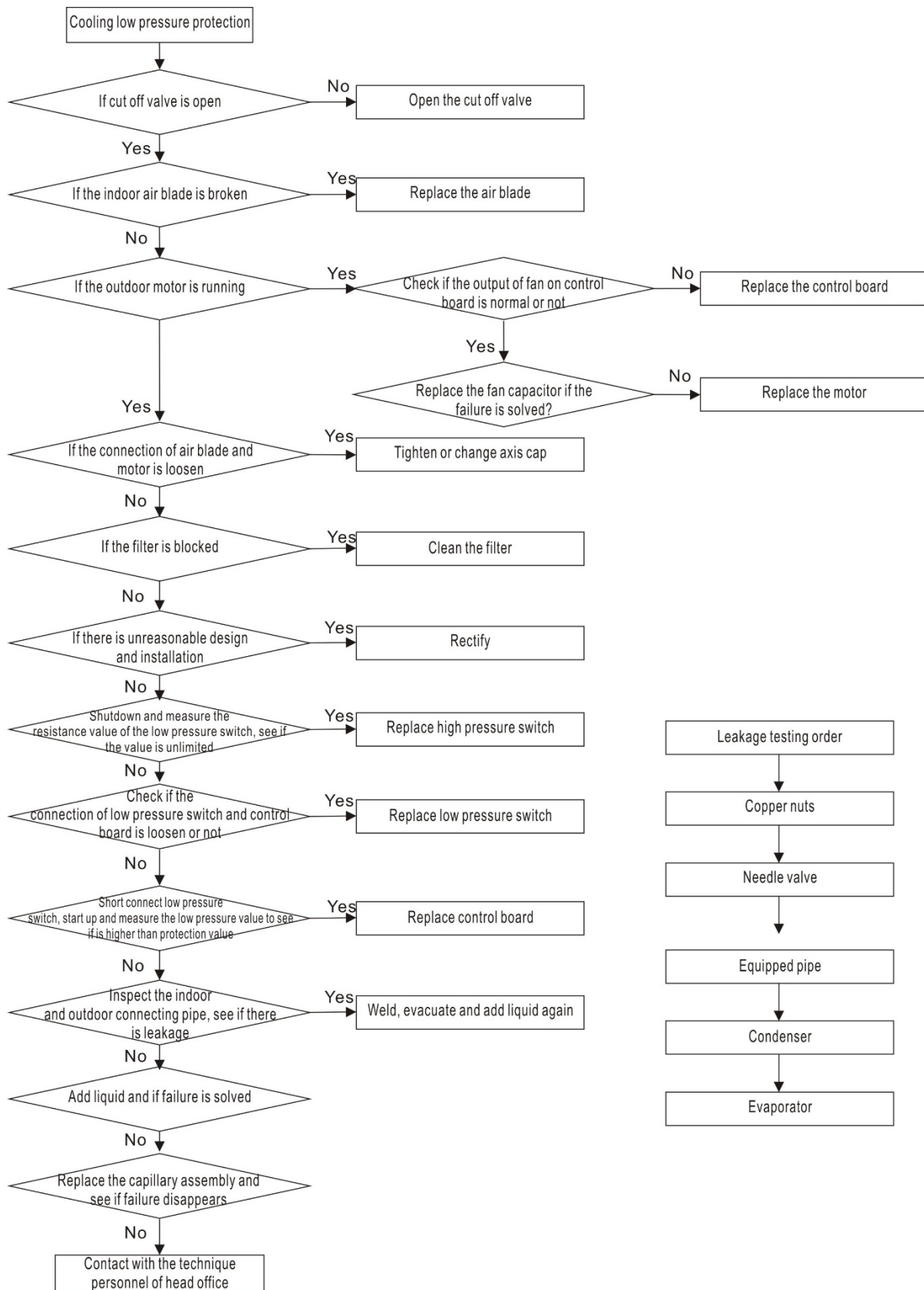


Heating high pressure protection

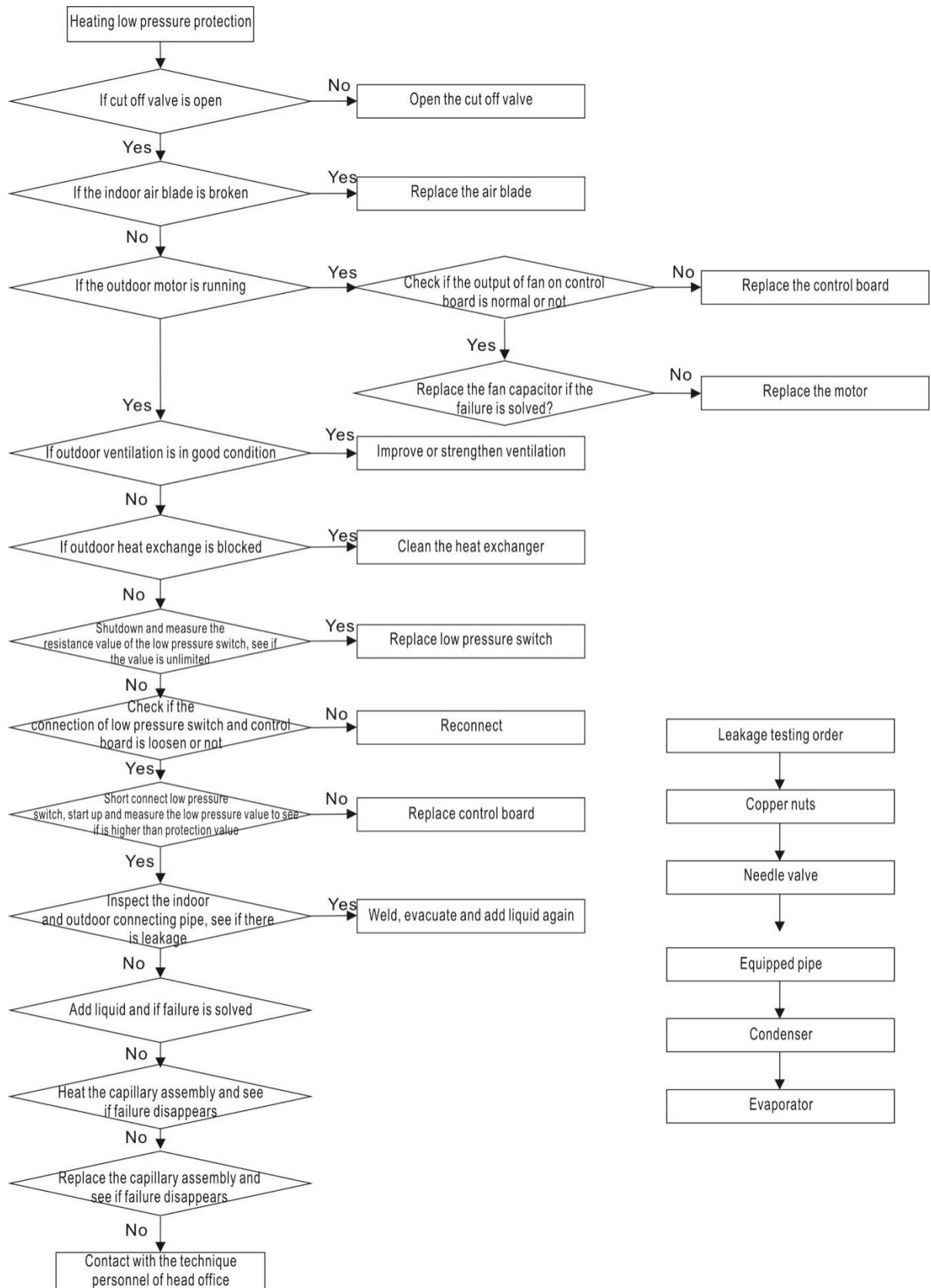


3.4 【H6】 Low pressure protection

Cooling low pressure protection

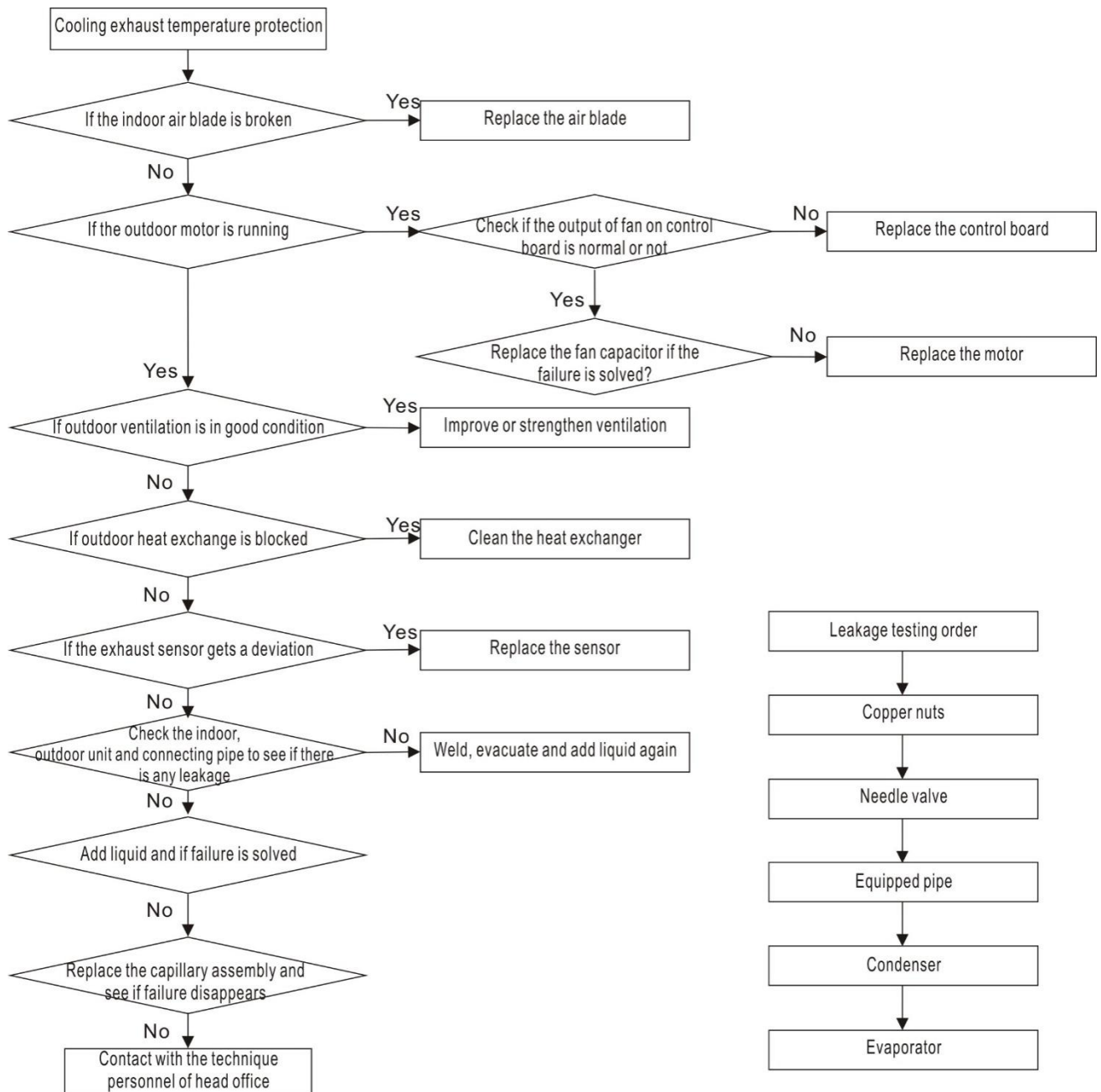


Heating low pressure protection

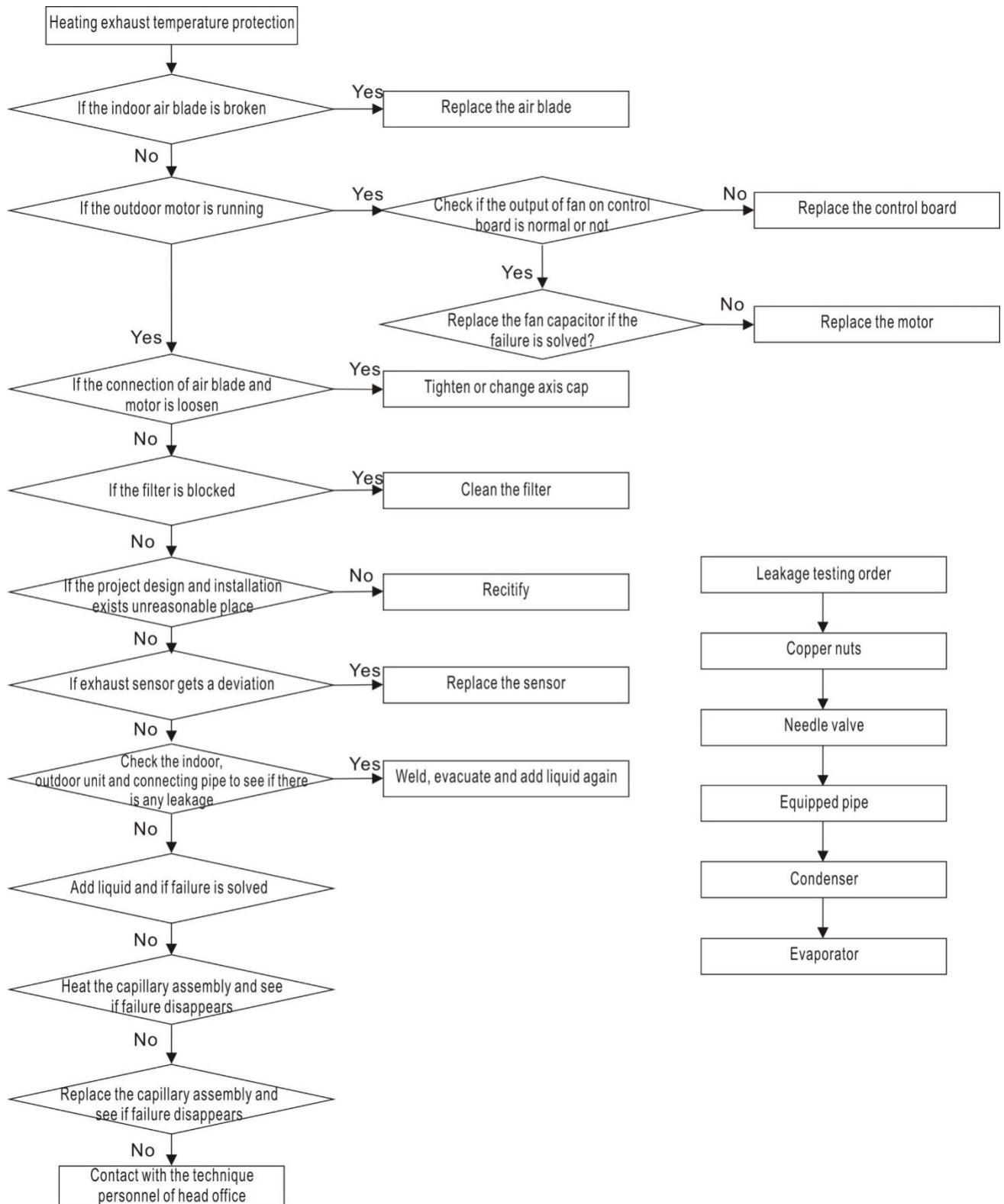


3.5 【P5】 High exhaust temperature protection

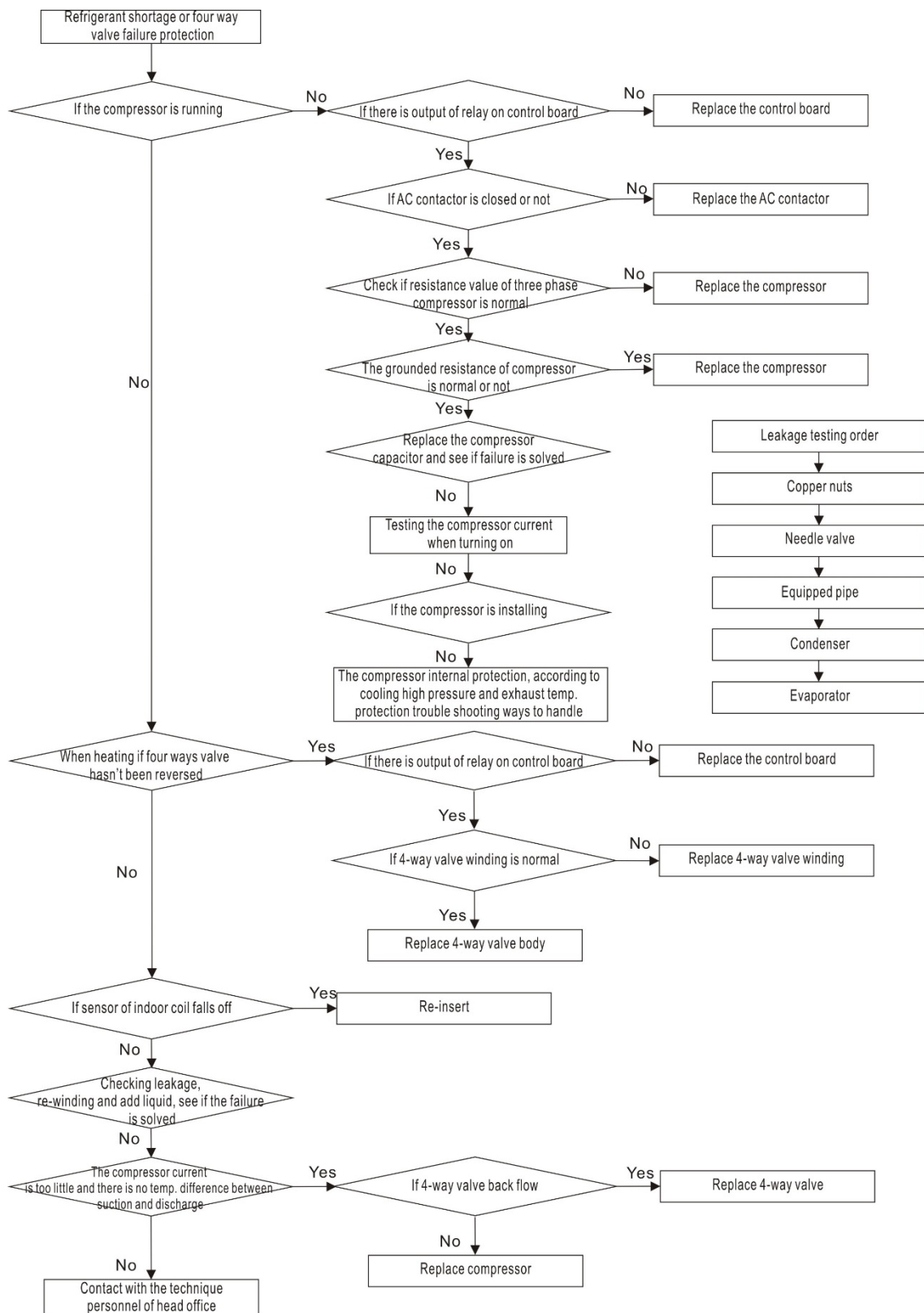
Cooling exhaust temperature protection



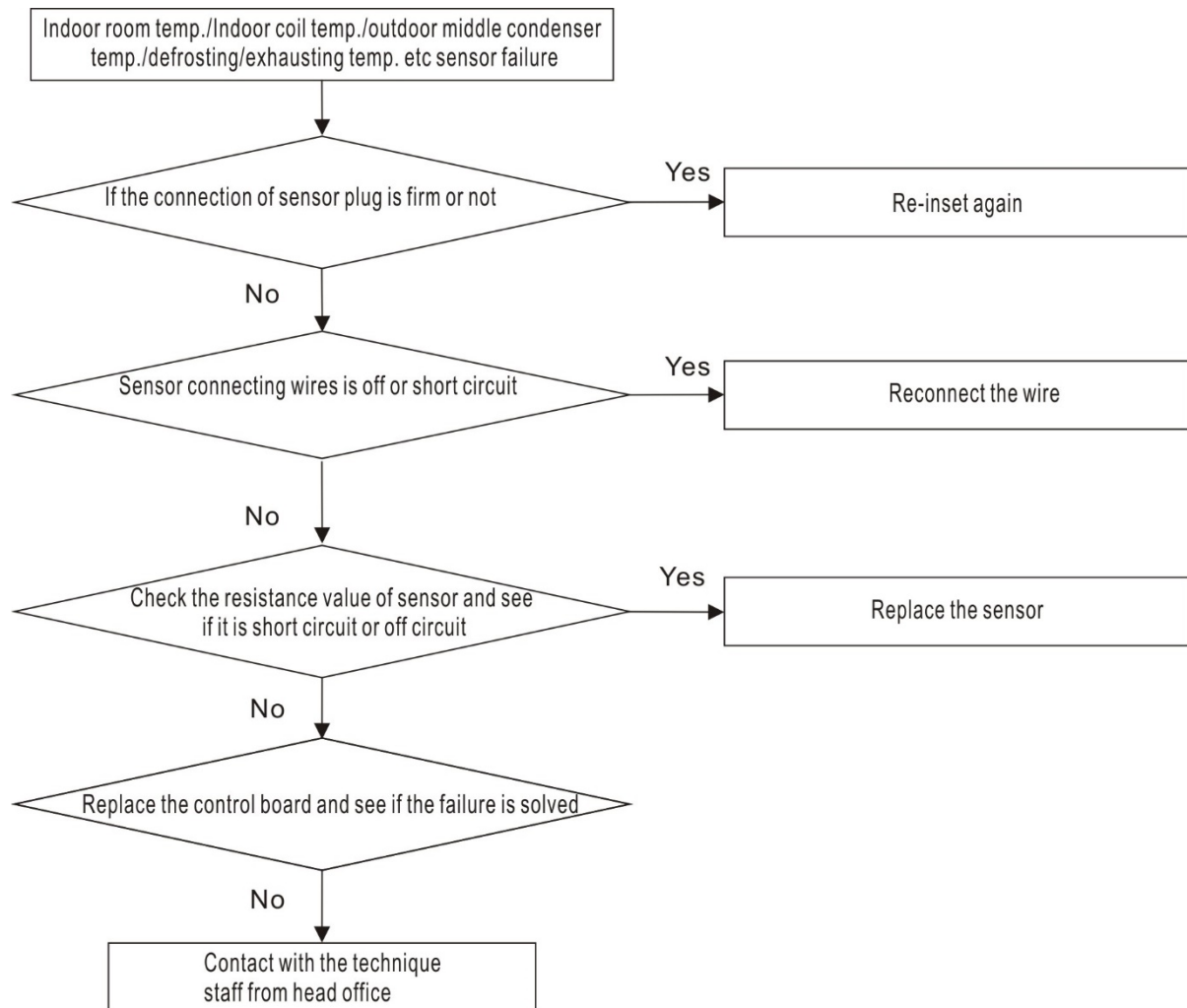
Heating exhaust temperature protection



3.6 【H8】 Four way valve failure protection



3.7 Sensor failure protection



Part13 Installation Information

1. Installation Guide

Please scan the QR code below to view the installation manual.

For 18K/27K/28K/36K, please check installation manual A

For 14K/21K/42K, please check installation manual B



Installation manual A

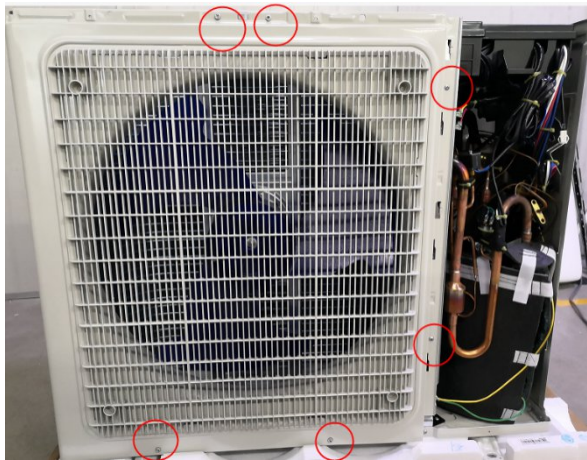


Installation manual B

2. Disassemble

Outdoor unit : example: AM4-H36/4DR3

NO	Procedure	Remark
1	Remove 8 screws from the cabinet (Use screw driver)	

2	Remove 2 screws from the frontal cabinet to pull down the right small one (Use screw driver)	
3	Remove 6 screws from the frontal cabinet to pull down the left bigger cabinet	

NO	Procedure	Remark
4	Remove 3 screws from left cabinet (Use screw driver)	

5	Remove 2 screws from the small electrical cover	
6	Remove 9 screws from right cabinet to make compressor exposed, 6 screws have been remarked, and 3 ones else are at the edge of condenser	
7	Remove 3 screws from electronic box cover and the electronic cord will be exposed.	  

NO	Procedure	Remark
8	Remove the insulation cotton from the periphery of compressor	

Update record

Time	Version	Name	Content
/	1	Steven	1. Split the OBM product technical manual. 2. Add C series wall-mounted products.
250115	2	Clay	1.Add Combination table. 2.Add M series wall-mounted products. 3.Add function one page. 4.Modifying controller content.
250323	3	Steven	Updated 18K/27K ODU, heating mode A++
250807	4	Steven	36K outdoor unit update
251013	5	Clay	12-24K Cassette and Duct unit update
251128	6	Steven	Add 28-42K outdoor unit monitoring tool port mark Update QR code
260127	24	Vikey	Add one-way cassette unit content, Version23 updated to Version24 Page4-5; P12; P18; P34-35; P46; 64-65; P88; P112
260331	25	Tyron Ruan	Add a refrigerant adjustment rule, Version24 updated to Version25
260401	26	Clay	1. Ceiling floor is being phased out, delete related content. 2. 09/12K F series wall-mounted unit update
260708	27	Clay	12/24K J, 24K Q, 24K F series wall-mounted unit update