



Service manual  
COMPETENZA  
ONOFF Series  
(LCAC ON/OFF 50Hz **R410A**)

2021.07



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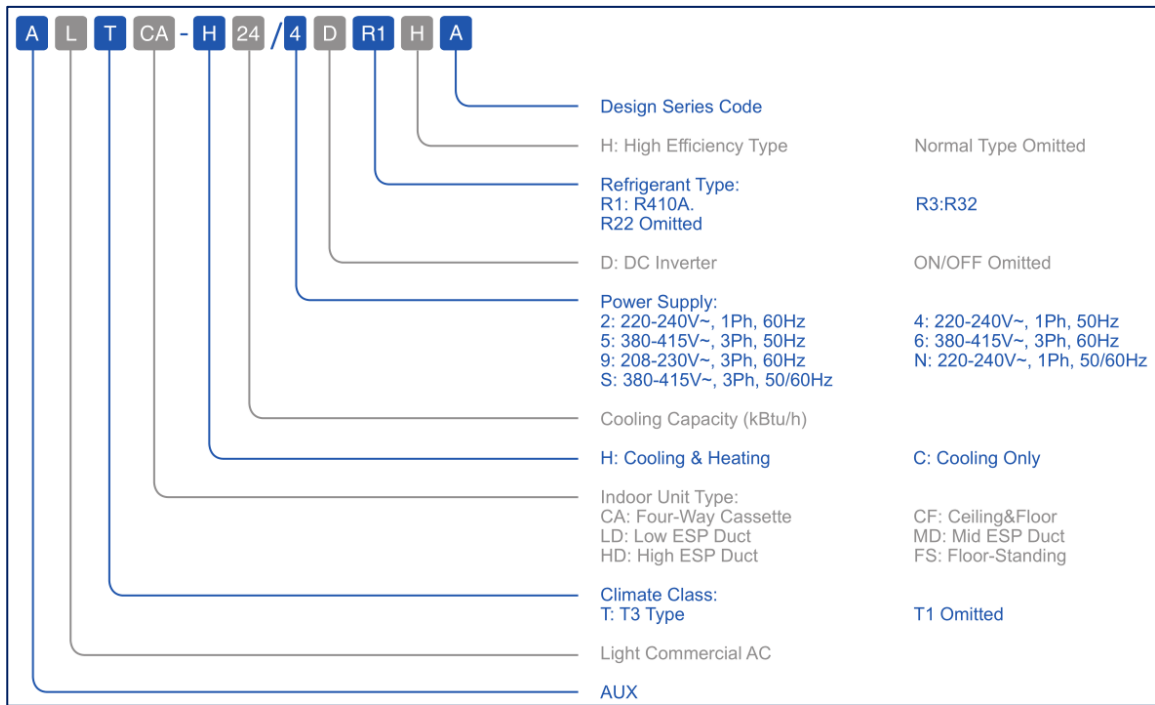
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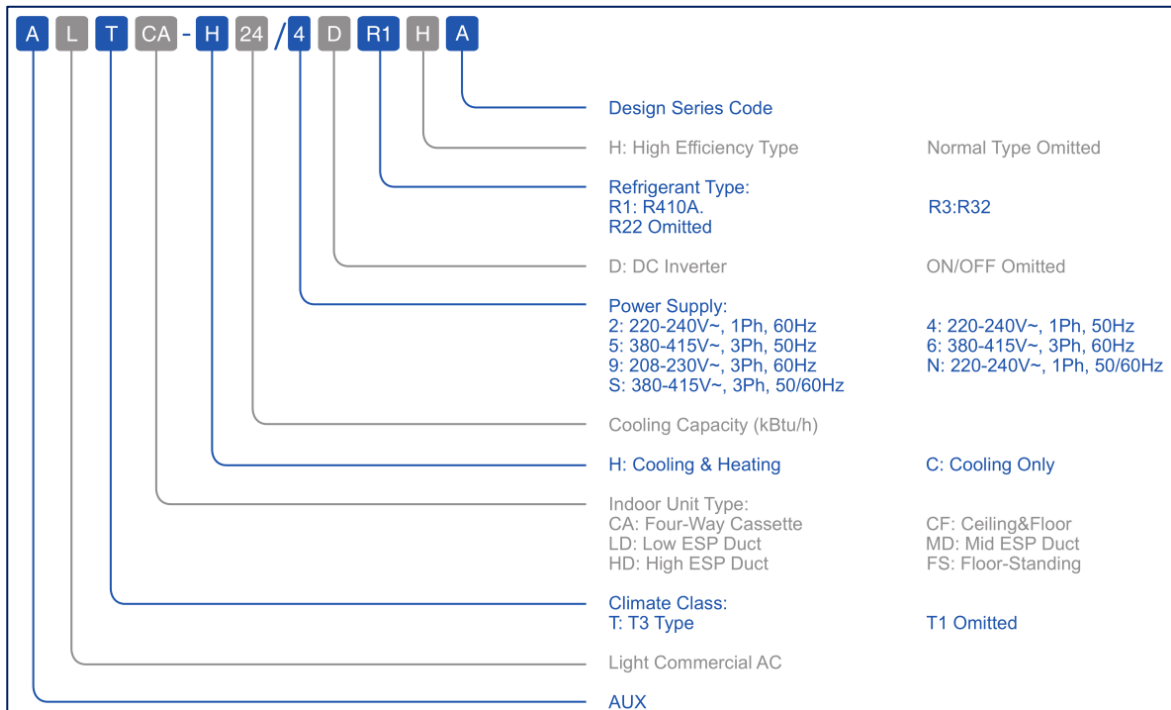
# Part1 General information

## 1. Nomenclature

### Indoor Unit








### Outdoor Unit






## 2. Unit appearance

### 2.1 Cassette

Cassette Body	Model	PANEL
		Optional
	CO-4C 12HNX	 CO-4C/pan 8D1
	CO-4C 18HNX	
	CO-4C 24HNX	 CO-4C/pan 8D2
	CO-4C 36HNX	
	CO-4C 48HNX	
	CO-4C 60HNX	

### 2.3 Duct

PICTURE	Capacity	Model
	18k/Btu	CO-D 18HNX
	24k/Btu	CO-D 24HNX
	36k/Btu	CO-D 36HNX
	48k/Btu	CO-D 48HNX
	60k/Btu	CO-D 60HNX





### 2.4 Ceiling floor(F)

PICTURE	Capacity	Model
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**R410A T1 ON/OFF LCAC B7 Series**

	18k/Btu	CO-F 18HNX
	24k/Btu	CO-F 24HNX
	36k/Btu	CO-F 36HNX
	48k/Btu	CO-F 48HNX
	60k/Btu	CO-F 60HNX

**2.5 Outdoor Units**

Capacity (BTU)	Picture	Capacity (BTU)	Picture
12K		18K	
24K		36K	

**R410A T1 ON/OFF LCAC B7 Series**

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<p><b>48K、60k</b></p>	 A vertical, light grey outdoor air conditioning unit with two large circular fans stacked vertically. The brand name 'AUX' is printed in blue on the right side of the unit. The unit is mounted on four small feet.		
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# Part2 Features

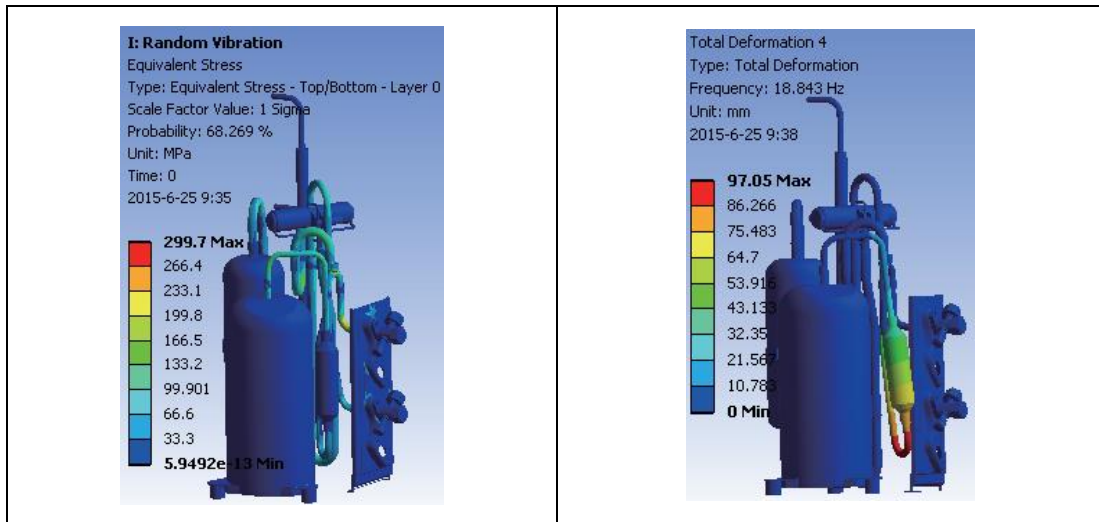
## 1. Outdoor Units

### Optimized Pipeline Design

The design ensures the sub-cooling and enhances the cooling capacity by separating the refrigerant inlet and outlet.

### Simulation Technology

Via analysing piping stress distribution, piping amplitude and displacement in transportation and operation, the reliability has been improved greatly.

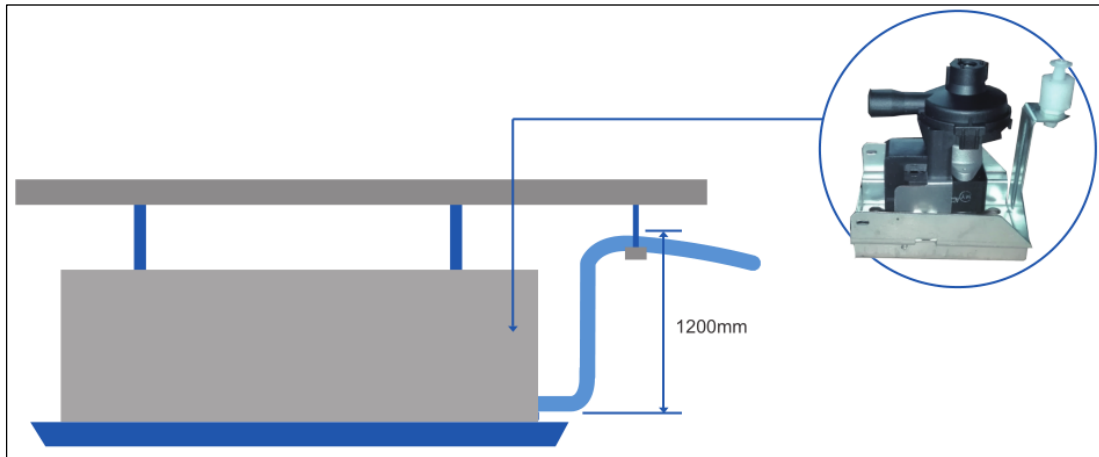


## 2. Four-way Cassette

Four-way cassette type A/C is installed under the ceiling, compared with Floor & Standing type A/C, it has following advantages: Ceiling installation combining with the decoration, makes the room more elegant; Flexible installation in anywhere in the ceiling and 4-direction blowing, makes you feel more comfortable.

### **Built-in Drain Pump**

The built-in drain pump can lift condensing water up to 1200mm high from the drainage pan.



### **Fresh Air Intake**

Fresh air makes indoor air healthy and comfortable.

### **Optimized Electric Box**

Better fire-proof and easy to maintenance.

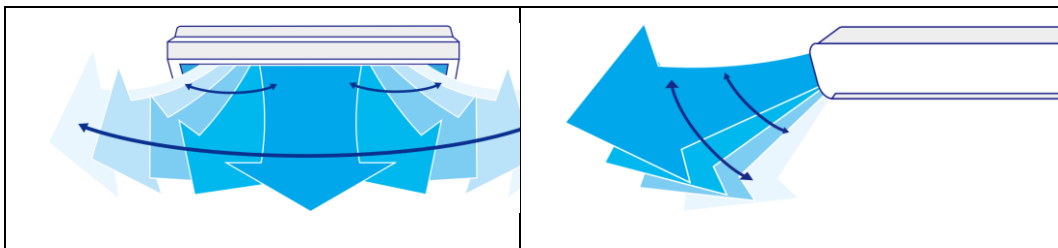
### 3. Ceiling Floor

#### 3.1 Ceiling Floor C5 Type

Ceiling & Floor type A/C can be installed under the ceiling and also on the floor. Compared with normal Floor & Standing type A/C, it can be hoisted under the ceiling, saving room space, it is also the updating Product for Floor & Standing type A/C.

##### 3D Air Swing

Vertical and horizontal swing makes air below to every corner of the room.



##### Ultra Slim Design

The thickness is only 205mm, save installation space.



##### Innovative Centrifugal Fan

Innovative centrifugal fan provides larger air volume but lower noise, making the air supply more quietly and smoothly.

##### Flexible Installation

Can be vertically installed against the wall or horizontally installed under the ceiling.



## 3.2 Ceiling Floor F Type

### 3.2.1 Comfortable

#### **prevent gel**

Unique air outlet insulation and wind guide bar arc design (Kangda effect), no condensation time from 4h to 6h, higher than the industry level.



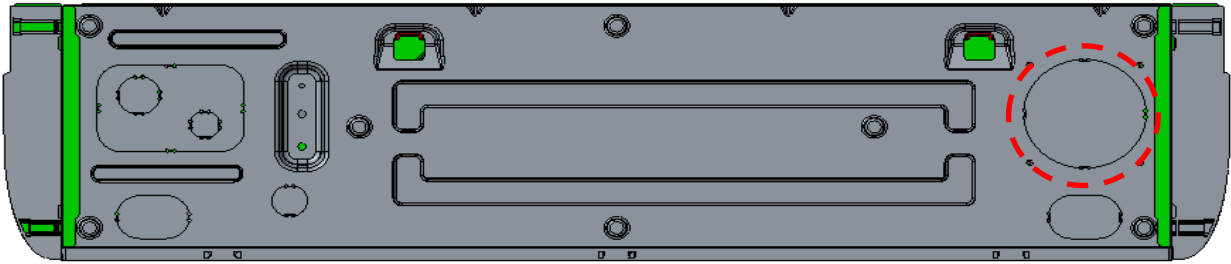
#### **Strong air supply**

Super air supply distance, up to 15m, the air supply volume is higher than the industry level to meet the circulation air supply of the whole room.



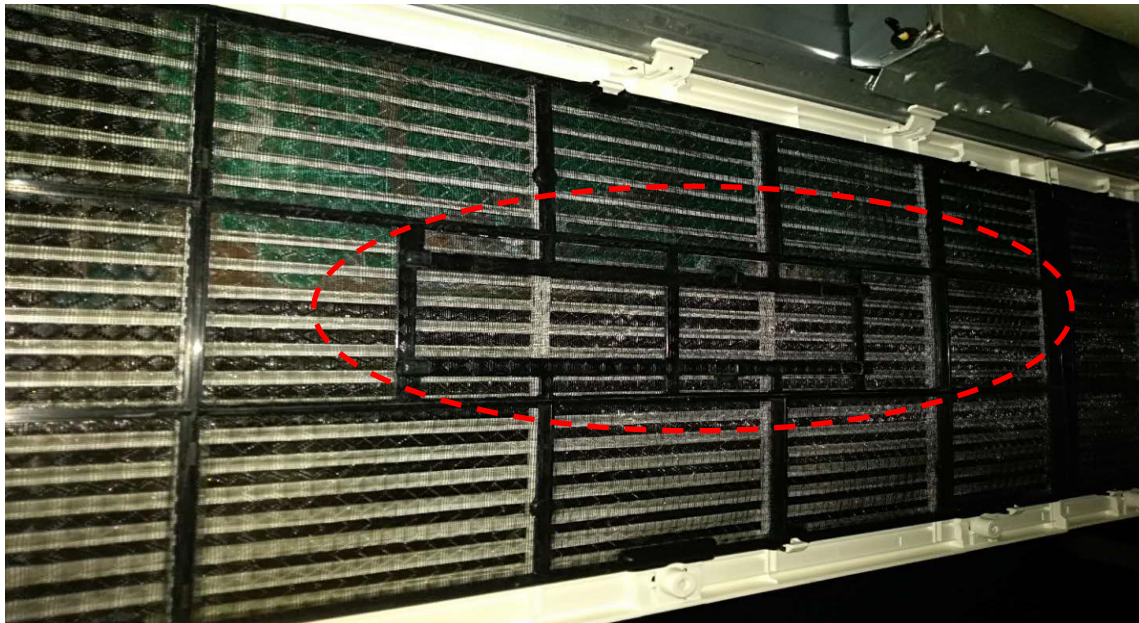
**Bring fresh air**

Fresh air inlet design can bring fresh air into the room to ensure fresh air in the room.



**degradation of formaldehyde**

The filter screen can be equipped with a formaldehyde removal module to ensure fresh air in the room.



**low noise**

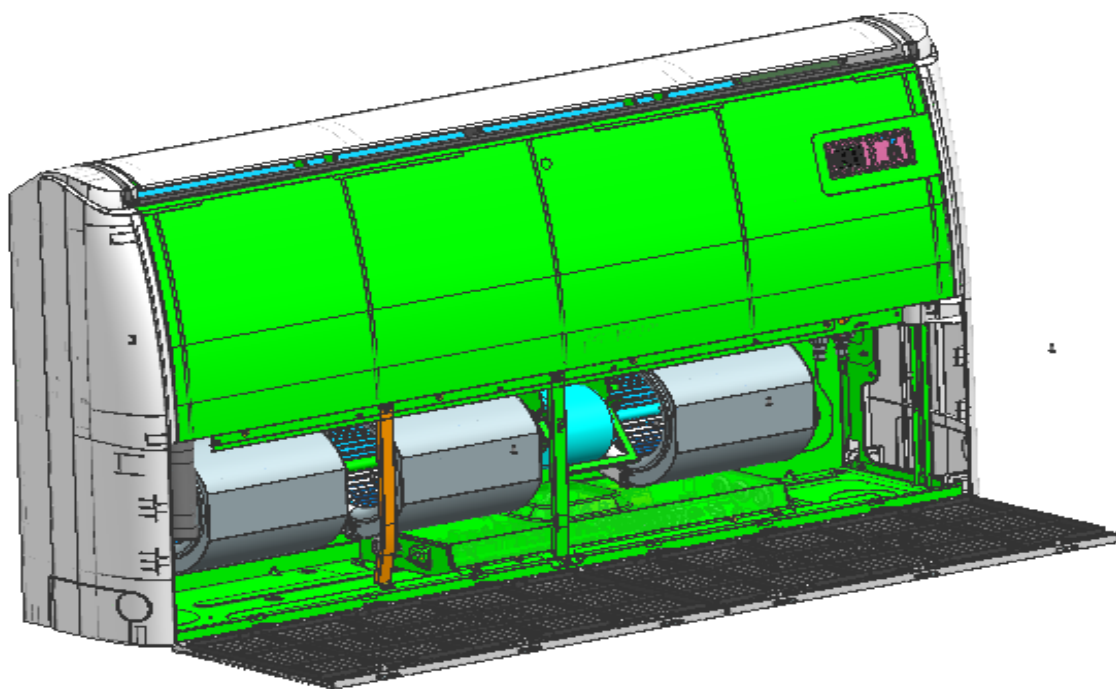
High quality wind wheel/turbine selection, using simulation design, the lowest noise than the industry level.



**3.2.2 Convenient and efficient**

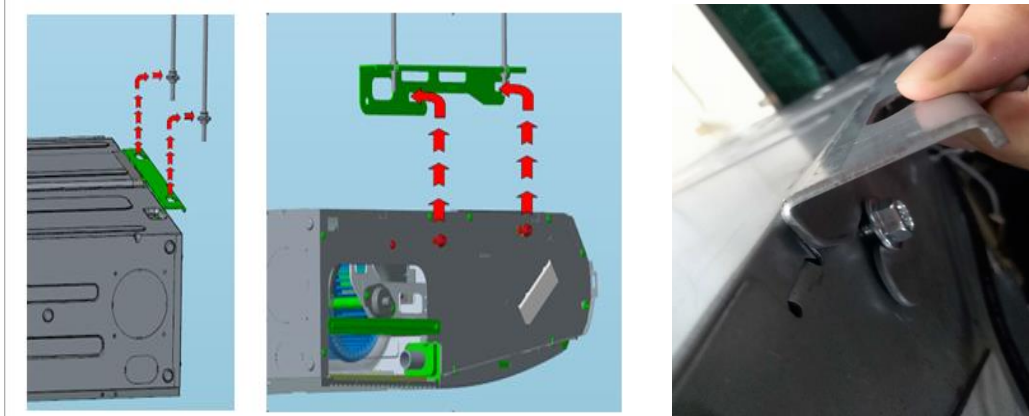
**Easy unpick and wash**

Return air grille, filter netease remove and wash.



**Easy Installation**

Can be hoisted, can be mounted;Removable load-bearing rod can be installed flexibly, and the rod can be fine-tuned up and down to adjust the horizontal Angle of machine hoisting



**Easy drainage**

The left and right water outlet design of the receiving tray is flexible to adapt to the installation site



**Easy maintenance**

Easy to repair, screw two screws, do not need to remove, left and right end cover 1 screw quickly remove, step motor 2 screws have been repaired, the bottom space is easy to repair



### 3.2.3 Stable And Reliable

**The face plate is elegant, the display board is beautiful**

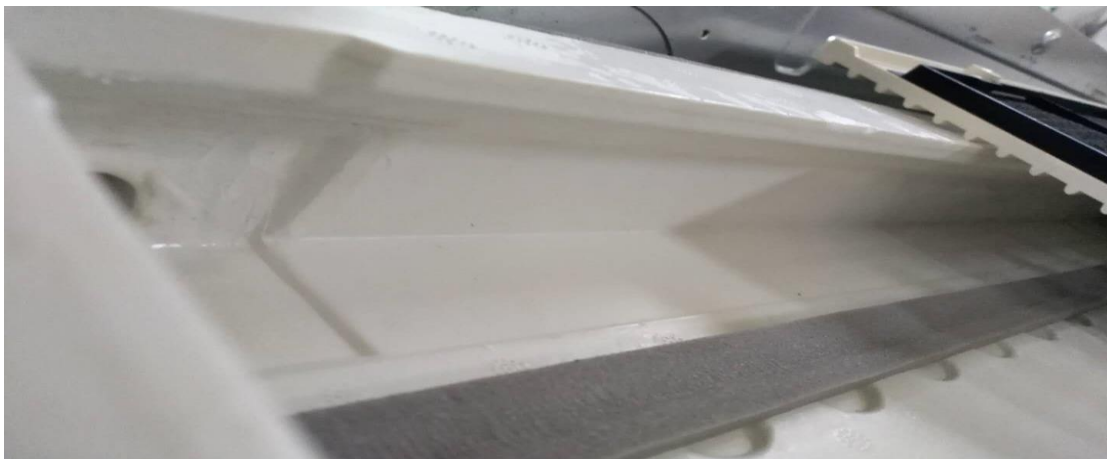
Matte white panel design, high-end elegant

Lamp board design beautiful, and good sealing, moistureproof, long reliable life



**Strong catchment**

Excellent water collection structure design, whether in lifting or upright installation can well collect condensed water to the water tray, avoid leakage



**Safe and reliable**

Strong and weak electric connection terminals are separated to ensure safe and reliable use of electricity



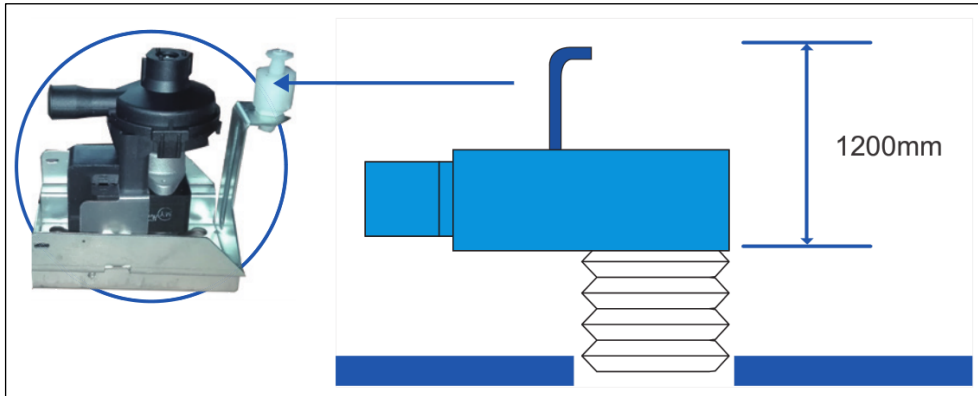


#### 4. Duct

Duct type A/C can be installed under the ceiling and also on the floor. Compared with normal Floor & Standing type A/C, it can be hoisted under the ceiling, saving room space, it is also the updating Product for Floor & Standing type A/C.

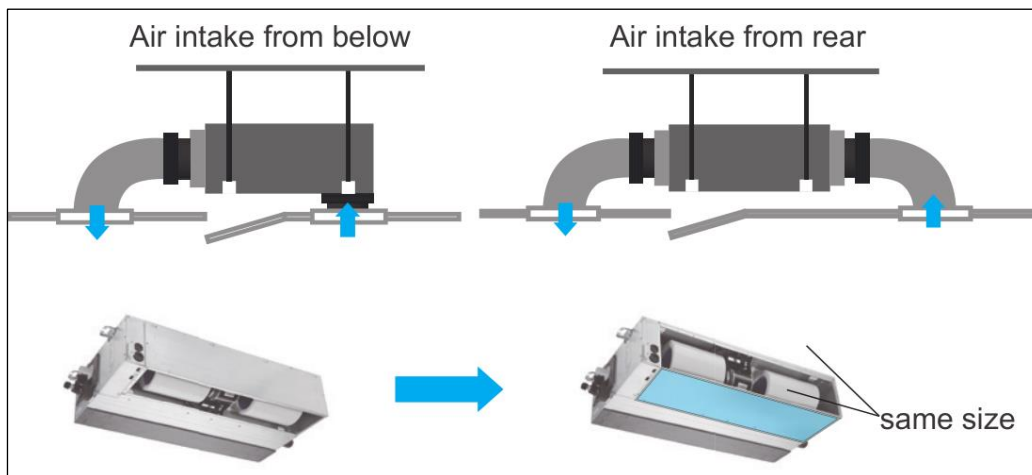
##### **Built-in Water Pump (Optional)**

The built-in pump can lift condensing water up to 1200mm high from the drainage pan.



##### **Flexible Air Intake Options**

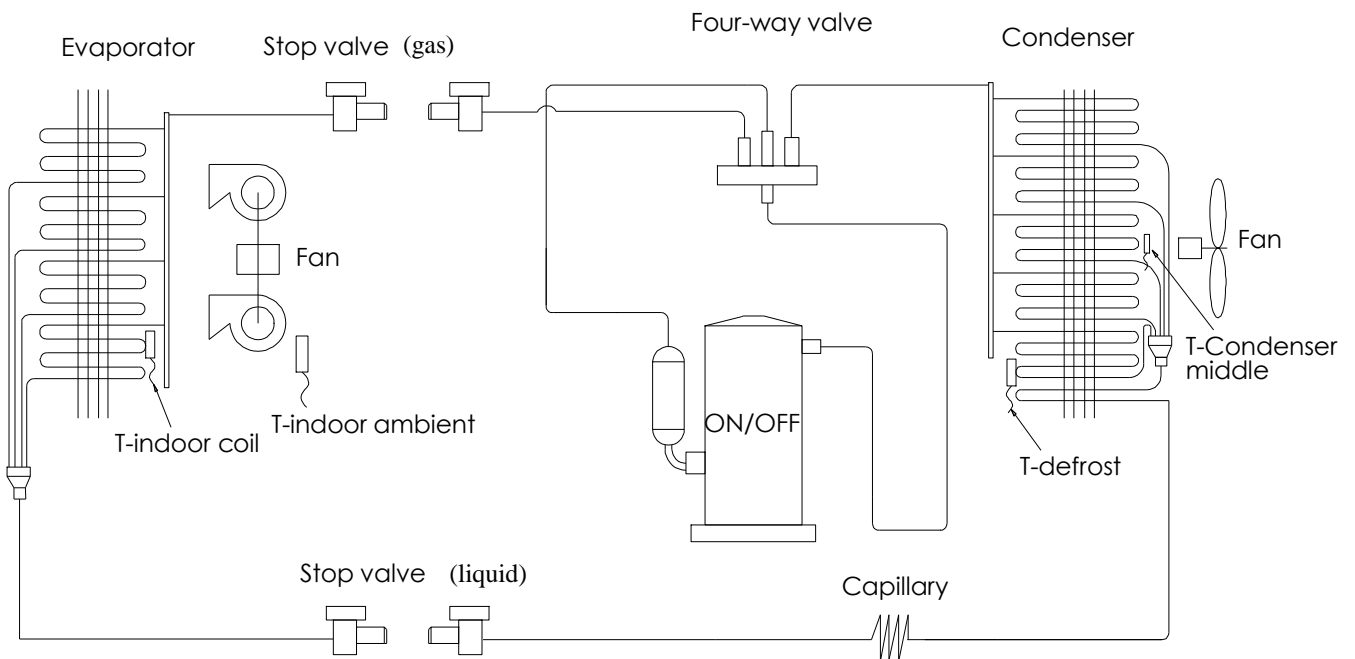
Air intake from rear as standard, from bottom is optional. The size of the plate from bottom is the same as the flange from back, which makes it convenient to change installation style due to different decoration requirements.



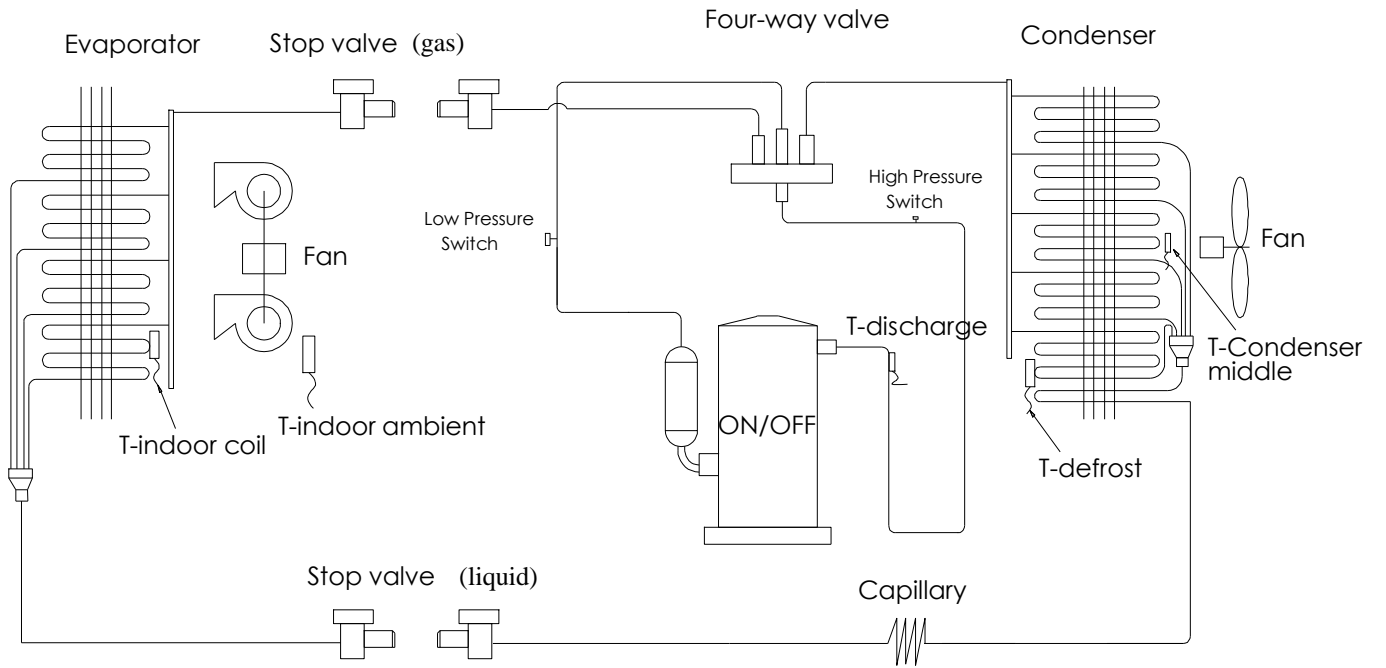
# Part3 Piping System

The compressor inhales the low-temperature and low-pressure refrigerant vapor from the evaporator, and vapor be turned into high-temperature and high-pressure gas then enters into condenser, the high-temperature and high-pressure refrigerant gas and outdoor air make heat exchange in the condenser, the compressed vapor is then cooled by heat exchange with the outside air, so that the vapor condenses to be a high-temperature and high-pressure fluid, and then through capillary throttling to cooled, low pressure, then the liquid enters into the evaporator and two-phase of gas and liquid refrigerant in the evaporator completely evaporate, thereby cooling the indoor air; from evaporator the vapor is inhaled into compressor again, so it runs continuously cycle to cycle, cooled air is continuous supplied to the air-conditioned area though duct by fan motor.

## 1. 12K,18K,24K,36K (1Ph~)



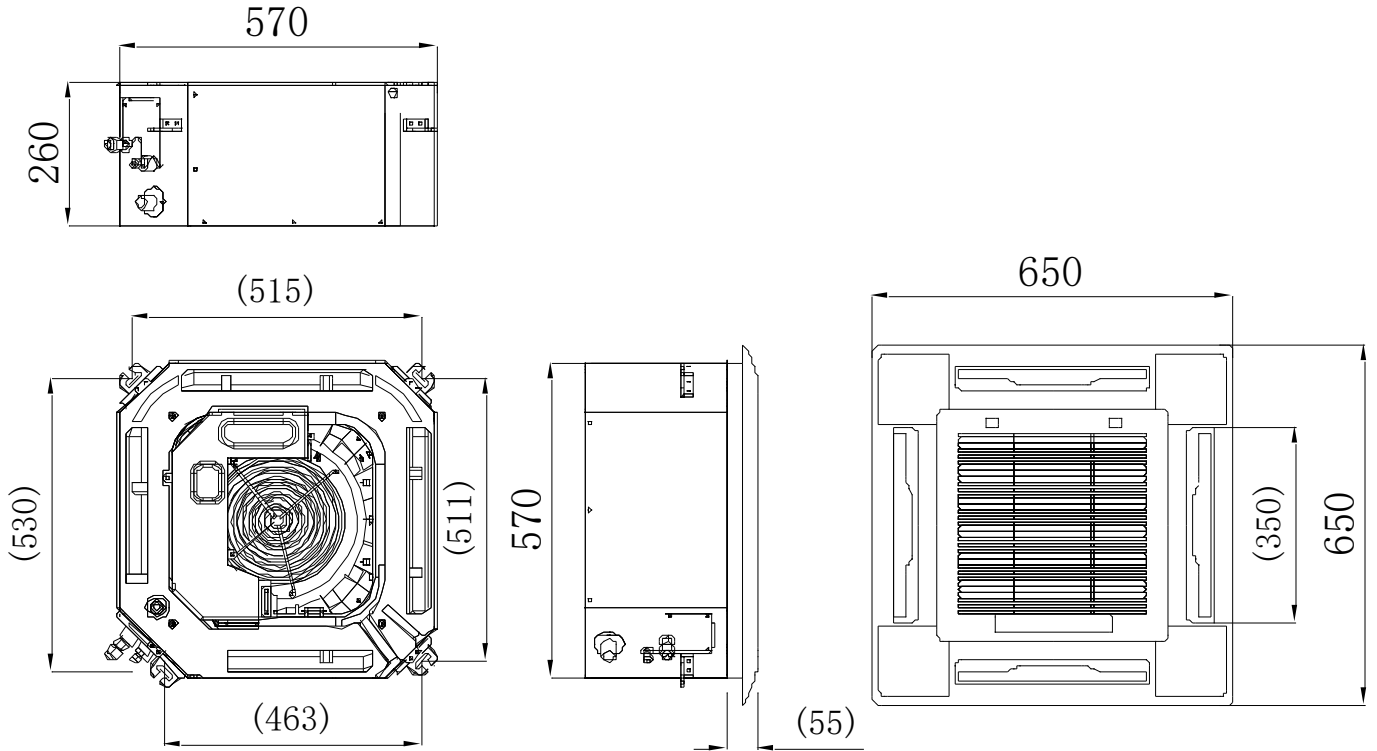
2. 36K,48K, 60K (3Ph~)



# Part4 Dimension

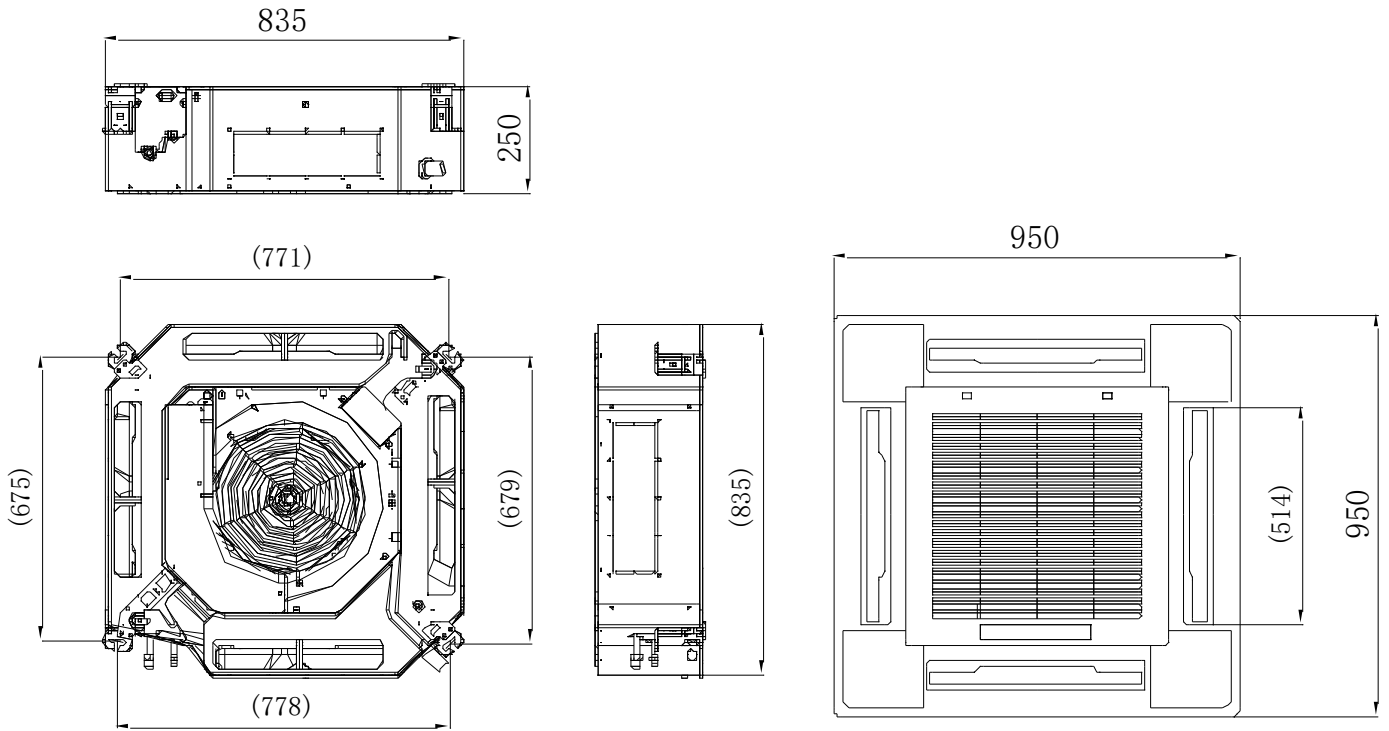
## 1. Cassette

### 1.1 CO-4C 12HNX, CO-4C 18HNX

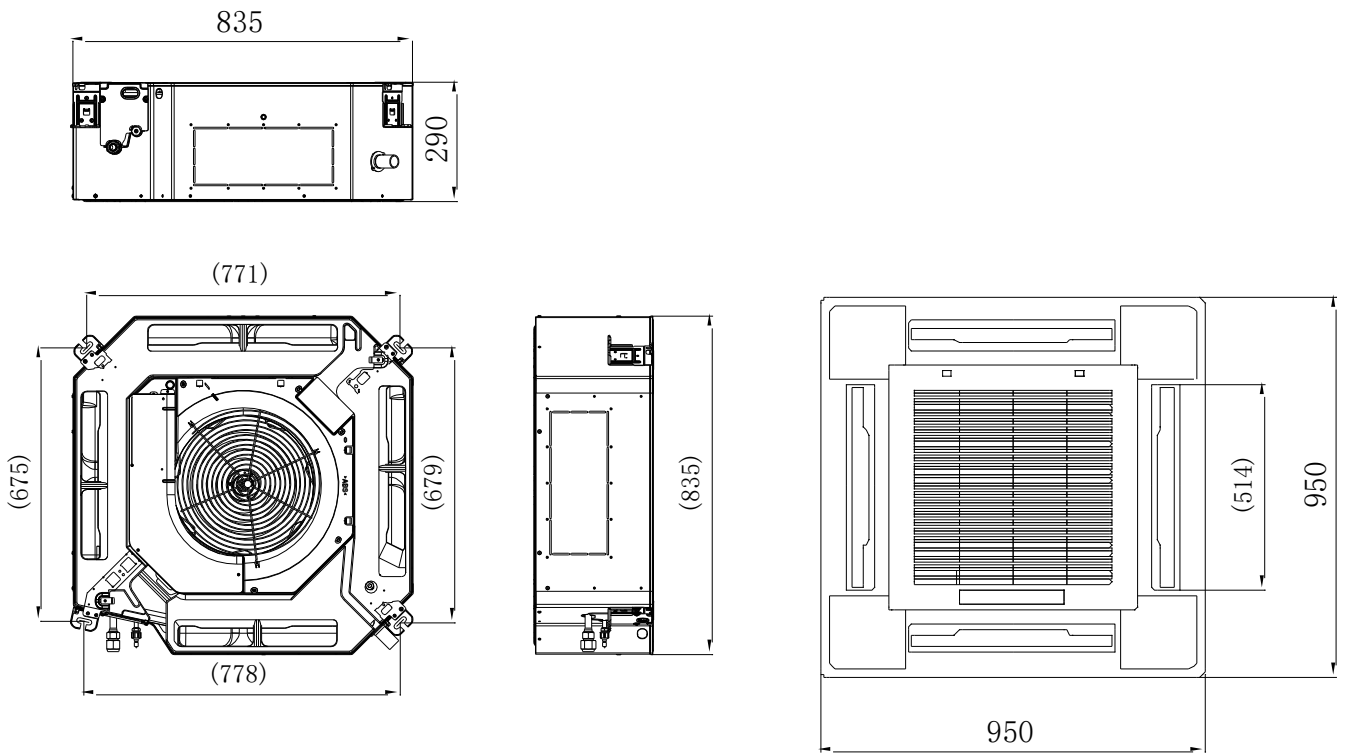


**R410A T1 ON/OFF LCAC B7 Series**

**1.2 CO-4C 24HNX, CO-4C 36HNX**

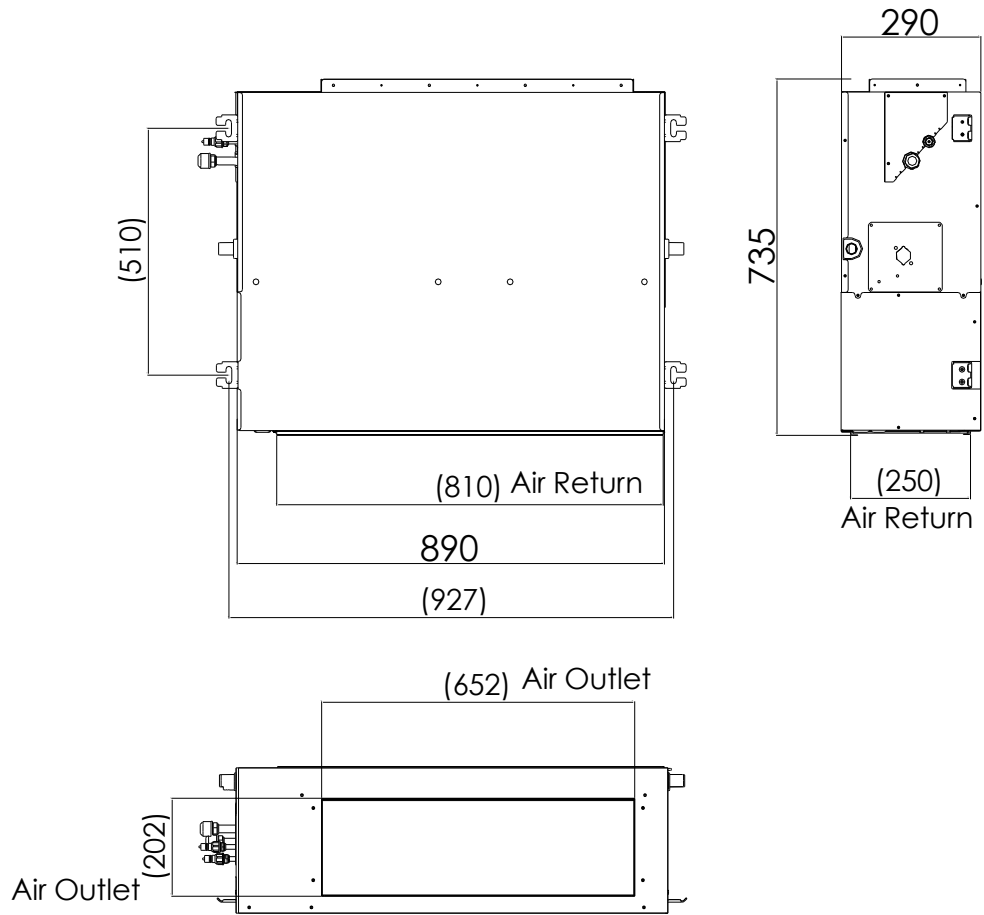


**1.3 CO-4C 48HNX, CO-4C 60HNX**

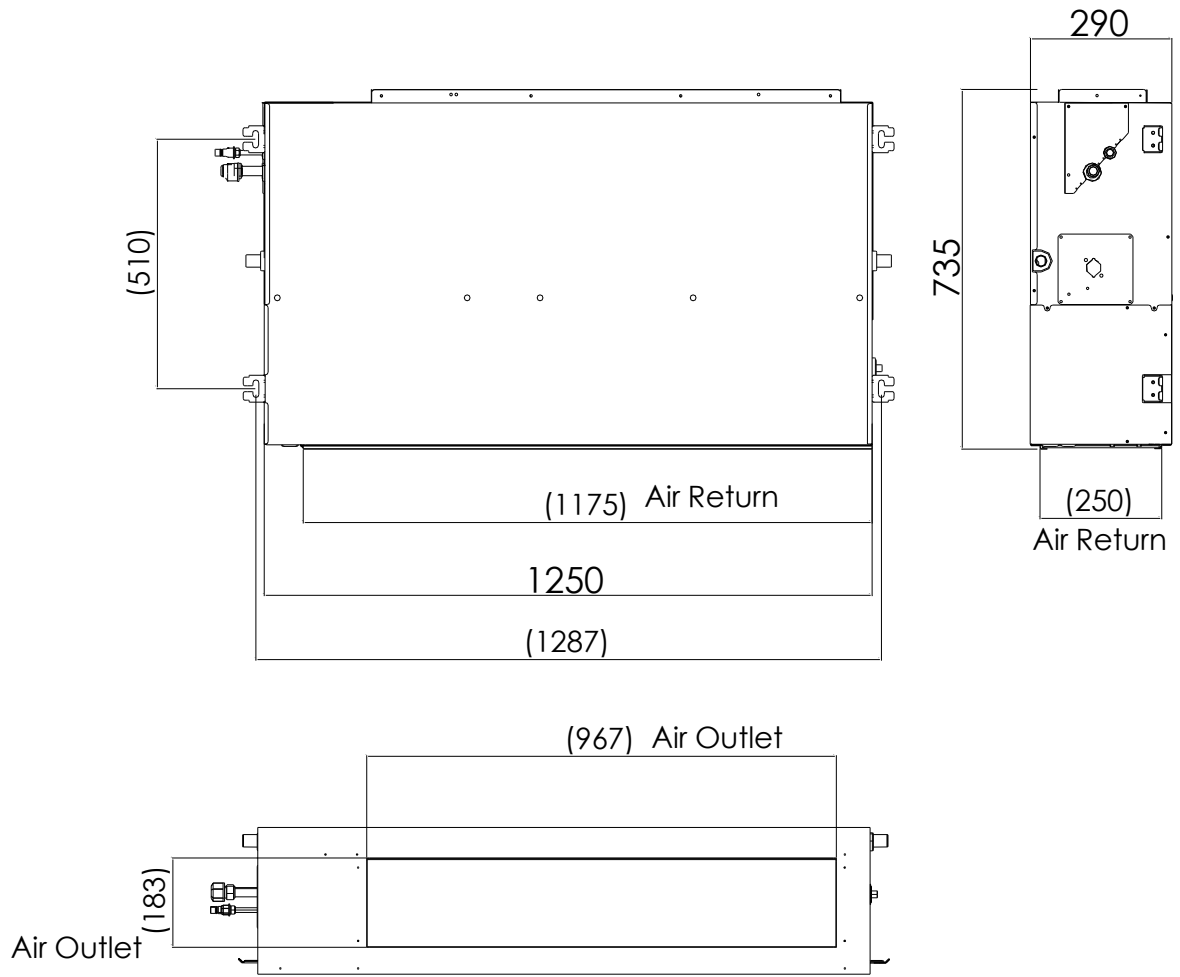


## 2. Duct

### 2.1 CO-D 18HNX, CO-D 24HNX, CO-D 36HNX

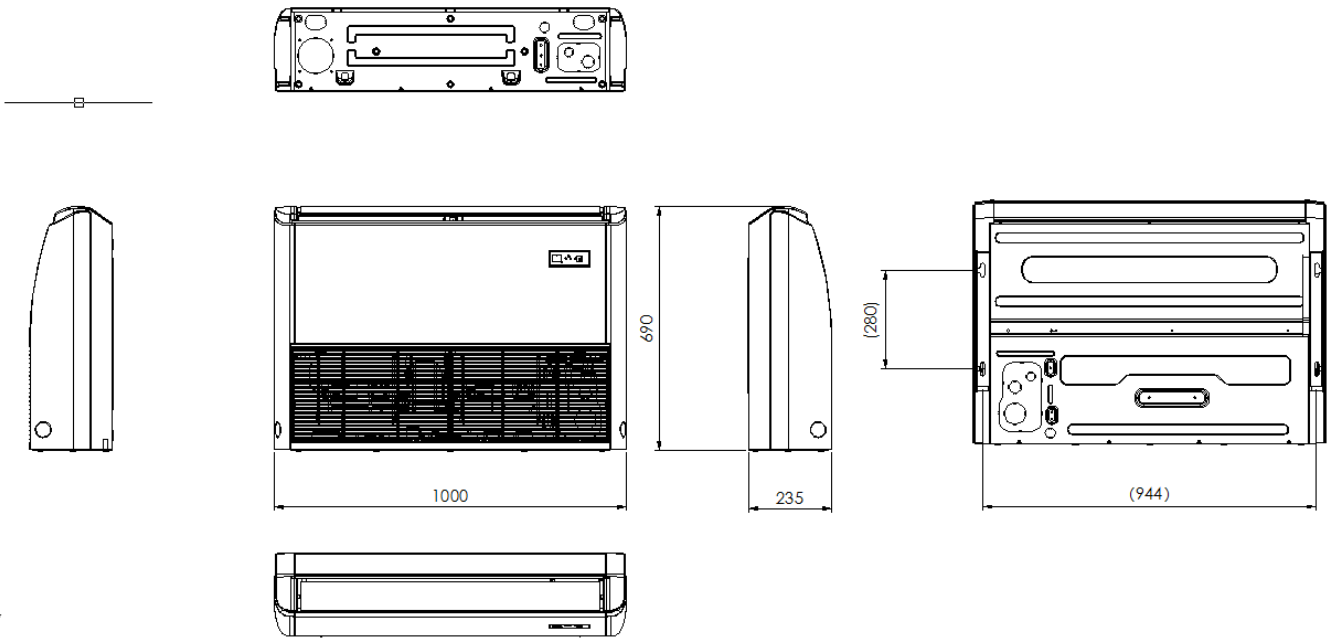


2.2 CO-D 48HNX, CO-D 60HNX

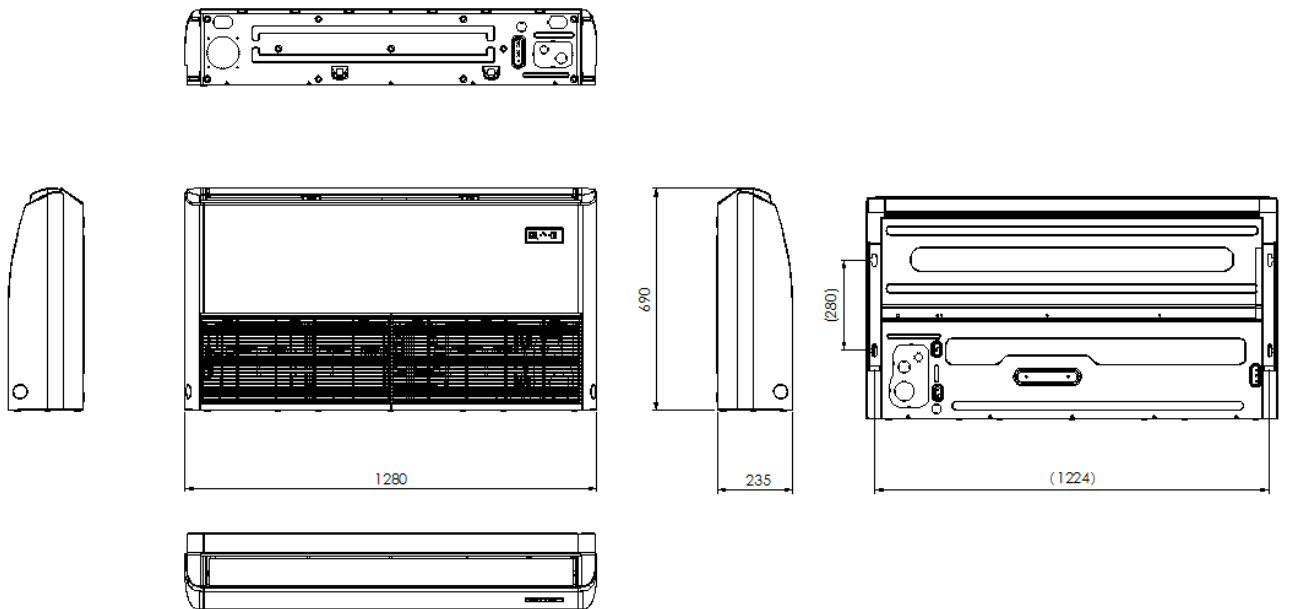


### 3. Ceiling Floor (F)

#### 3.1 CO-F 18HNX

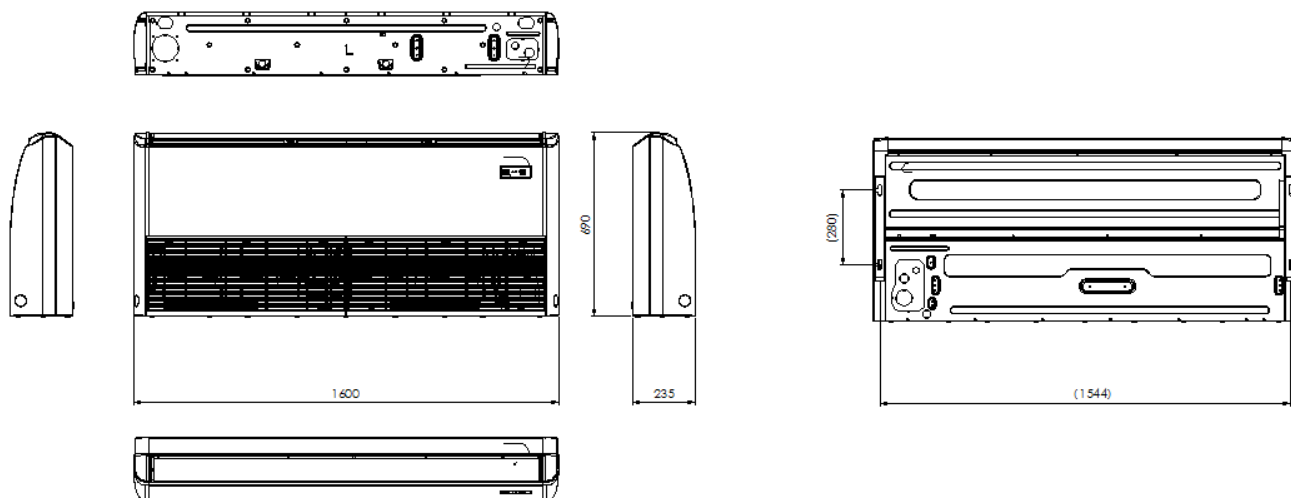


#### 3.2 CO-F 24HNX, CO-F 36HNX



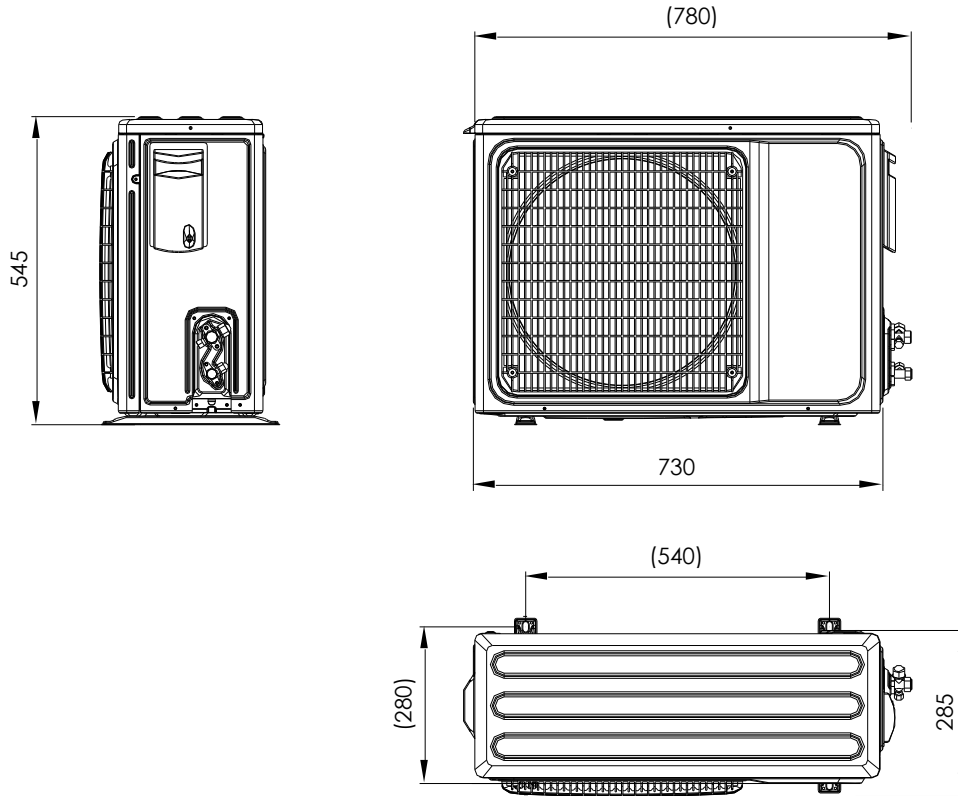


3.3 CO-F 48HNX, CO-F 60HNX

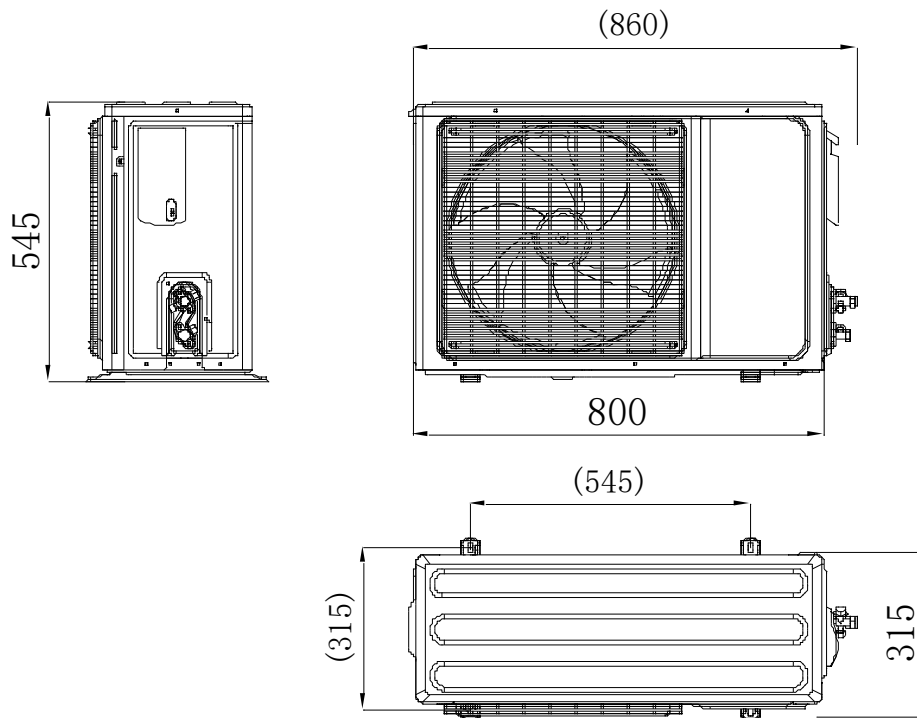


## 4. Outdoor Unit

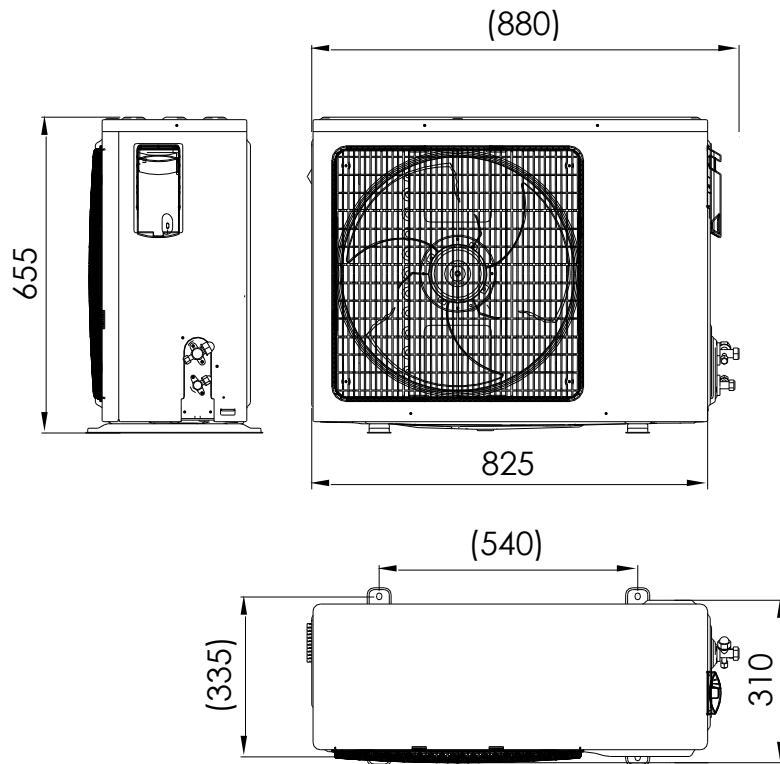
### 4.1 CO-E 12HNX



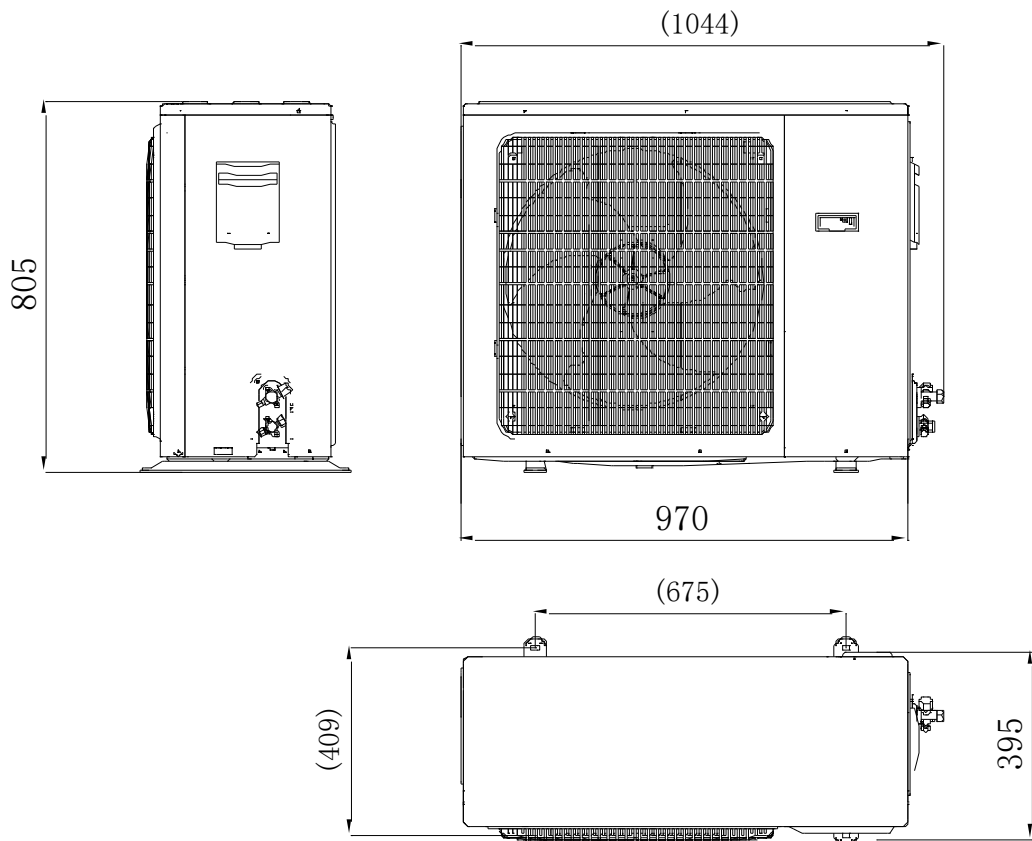
### 4.2 CO-E 18HNX



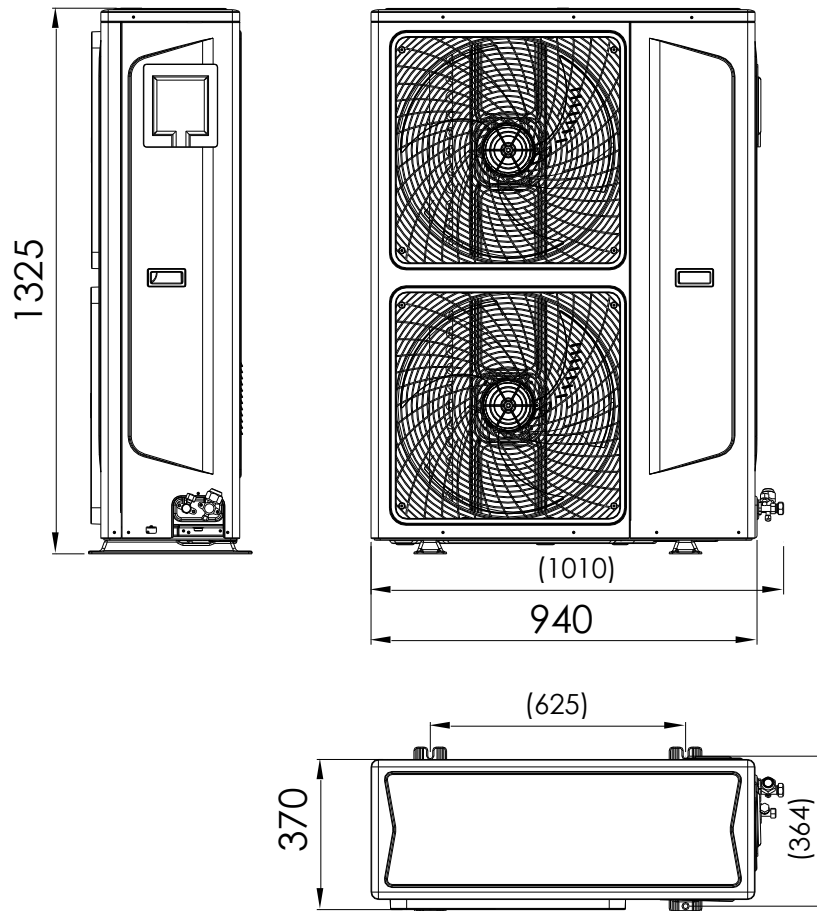
4.3 CO-E 24HNX



4.4 CO-E 36HNX



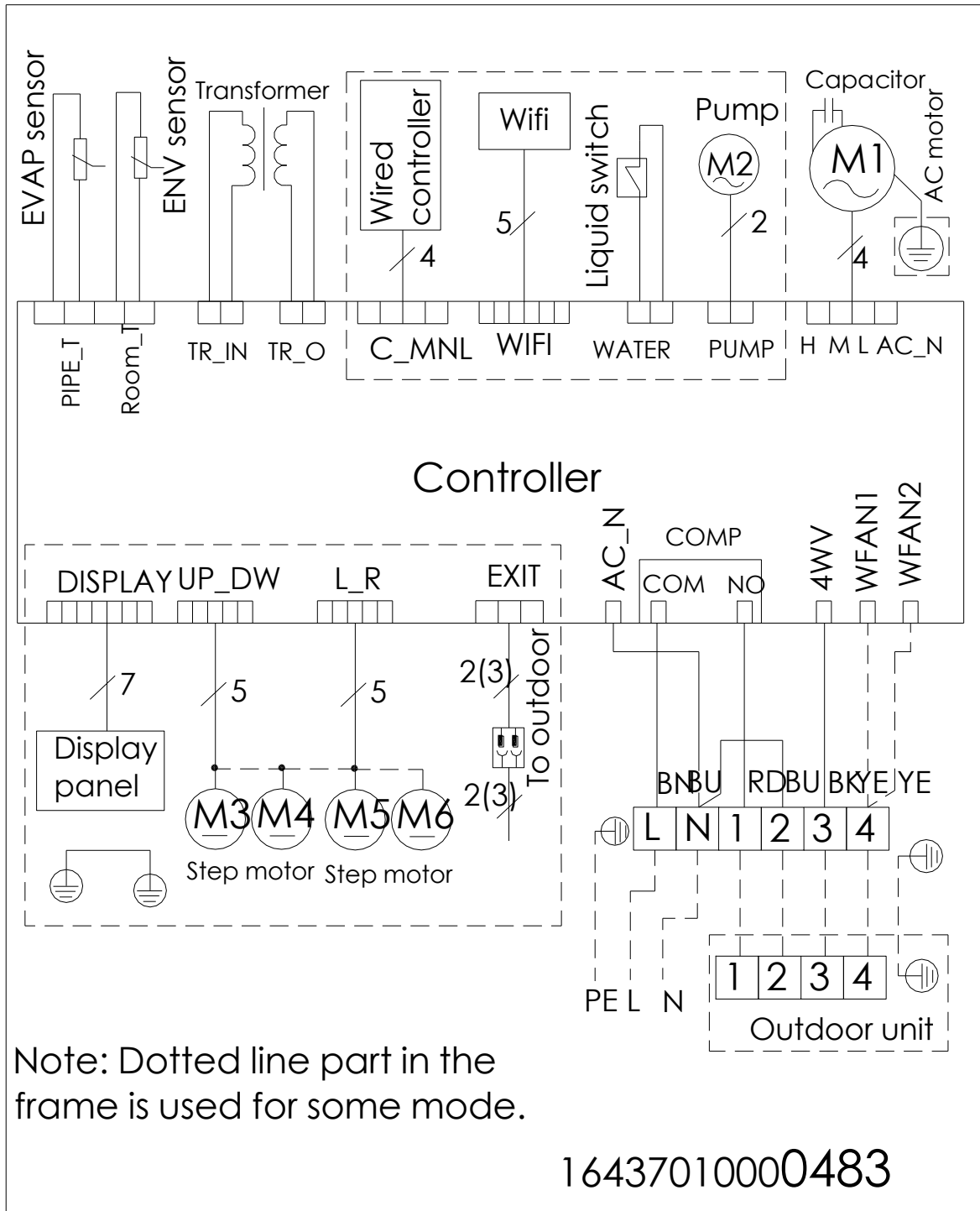
4.5 CO-E 48HNX, CO-E 60HNX



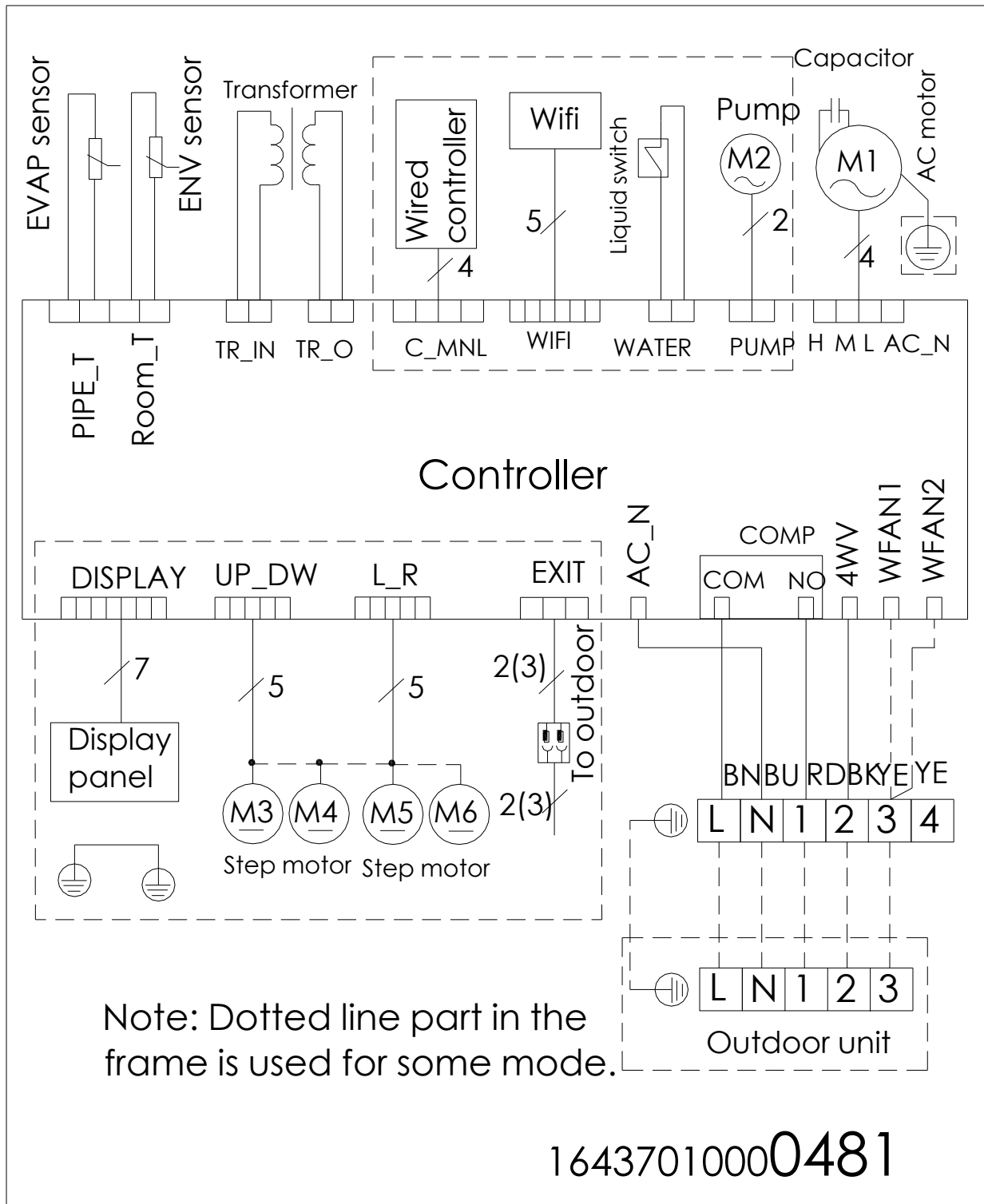
# Part5 Electrical Principle Diagram

## 1. IDU

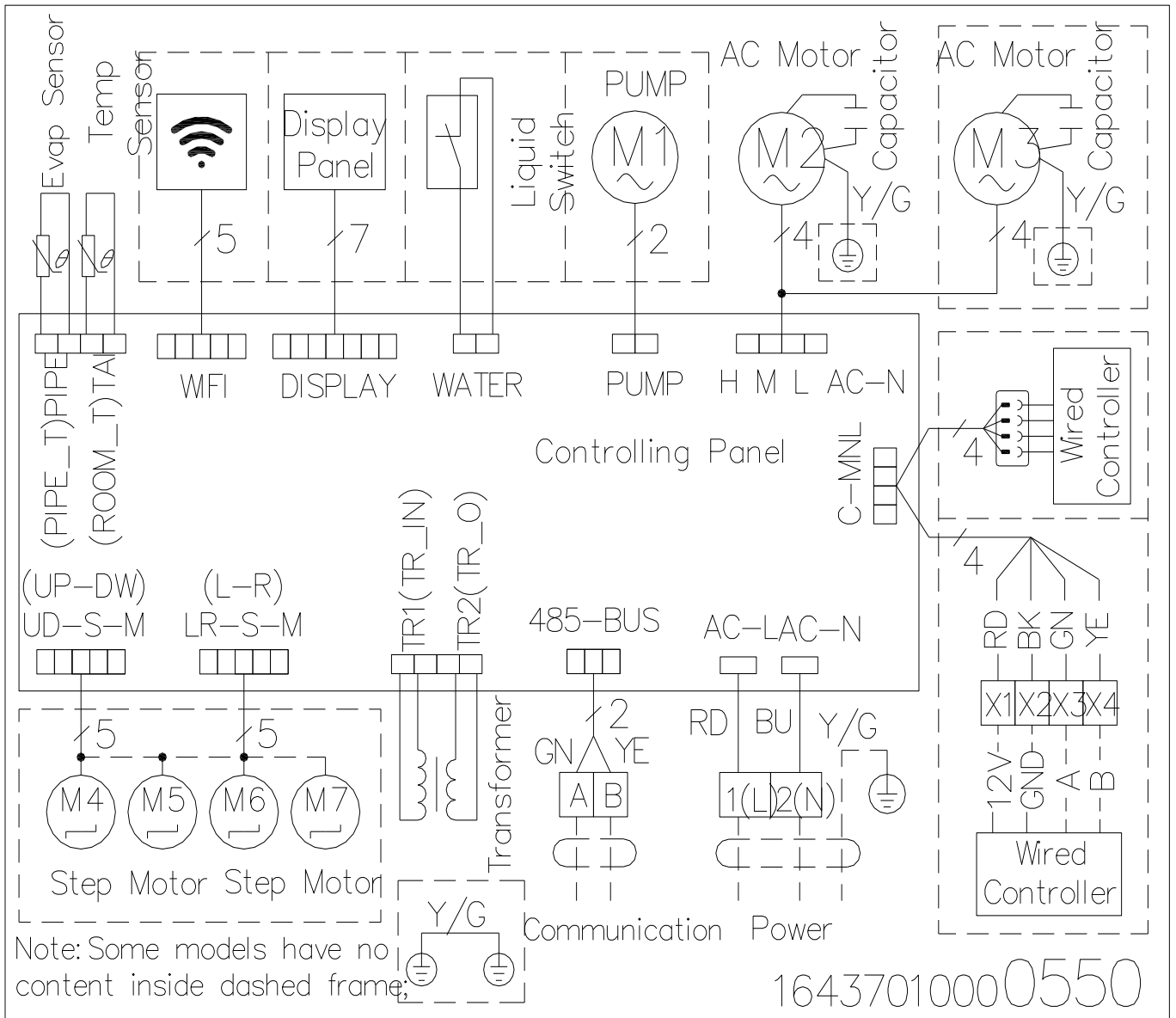
### 1.1 Cassette(12,18K),Ceiling Floor (18K),Duct(12,18K)



1.2 24,36K(1Ph~)Cassette, Ceiling Floor, Duct

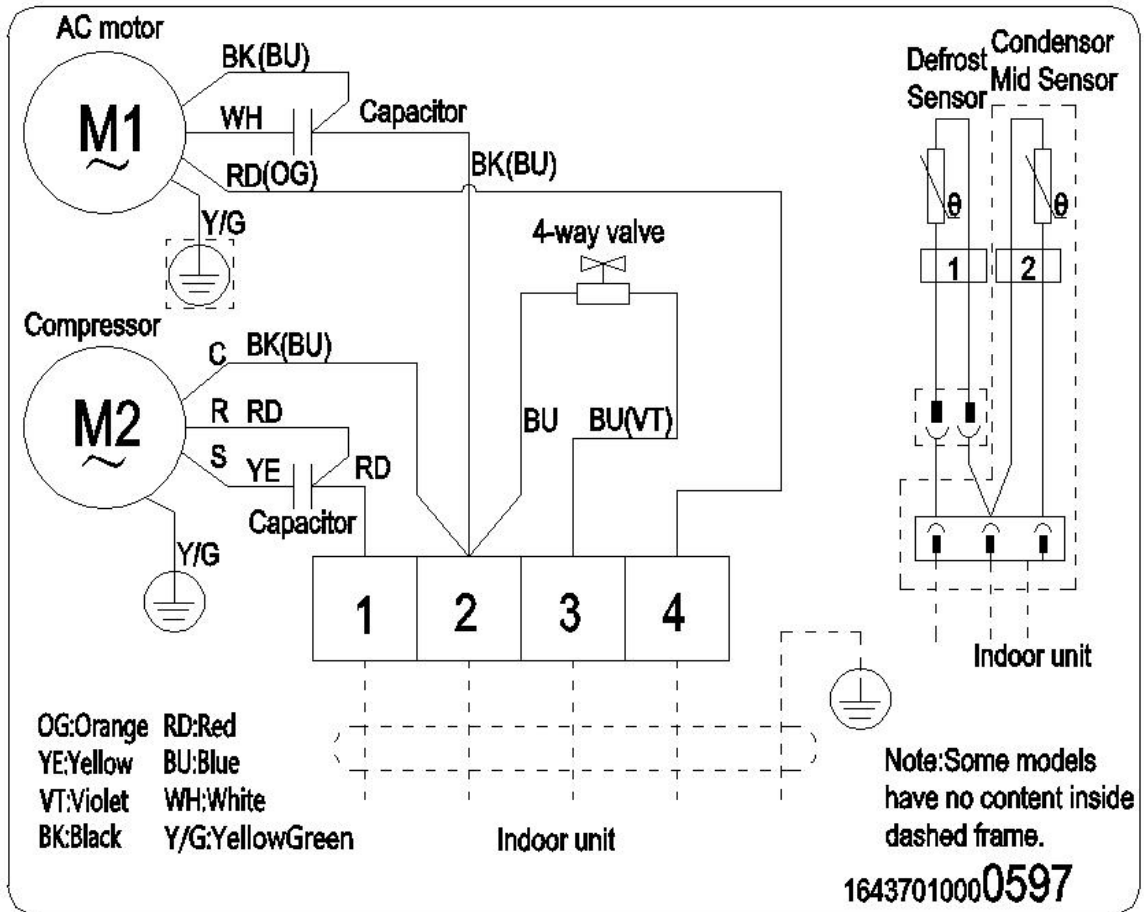


1.3 36K,48K,60K Cassette ,Ceiling Floor (FType) ,MID Duct, High DUCT



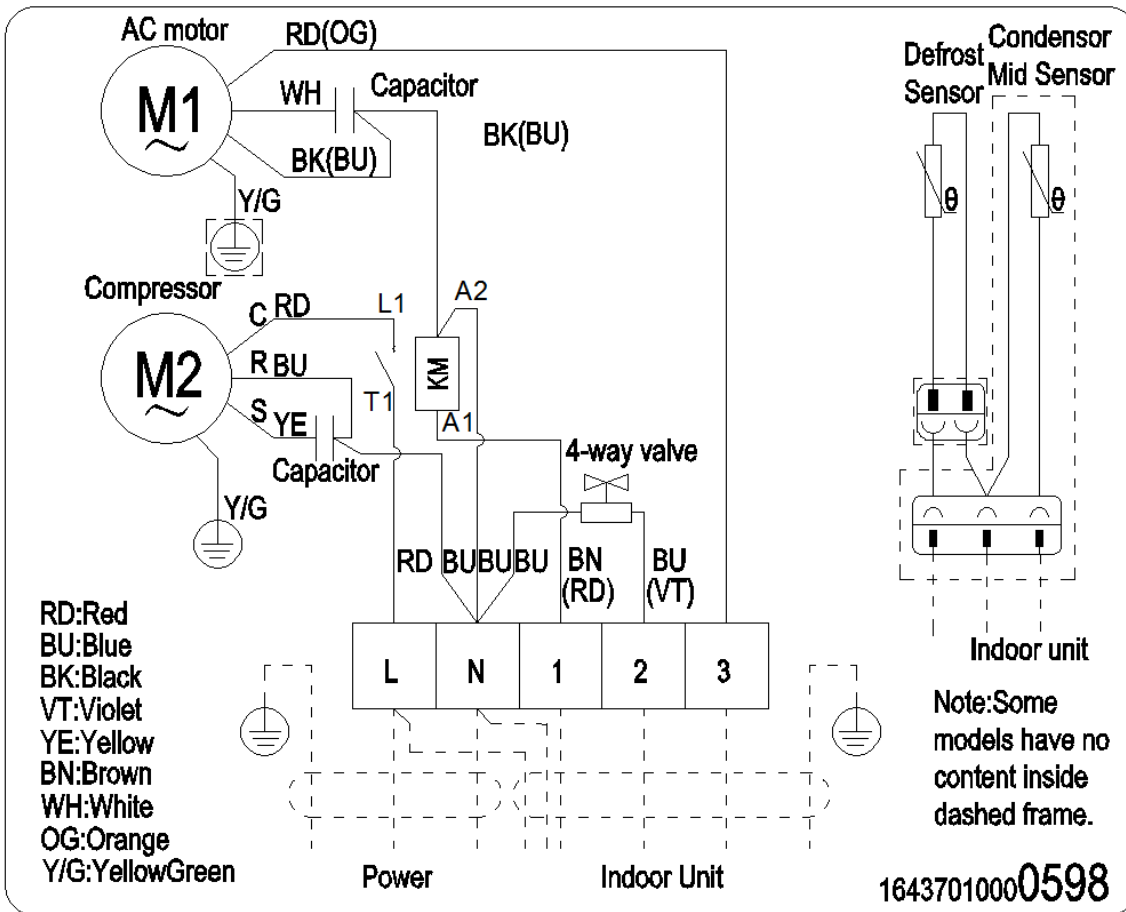
2. ODU

2.1 CO-E 12HNX, CO-E 18HNX

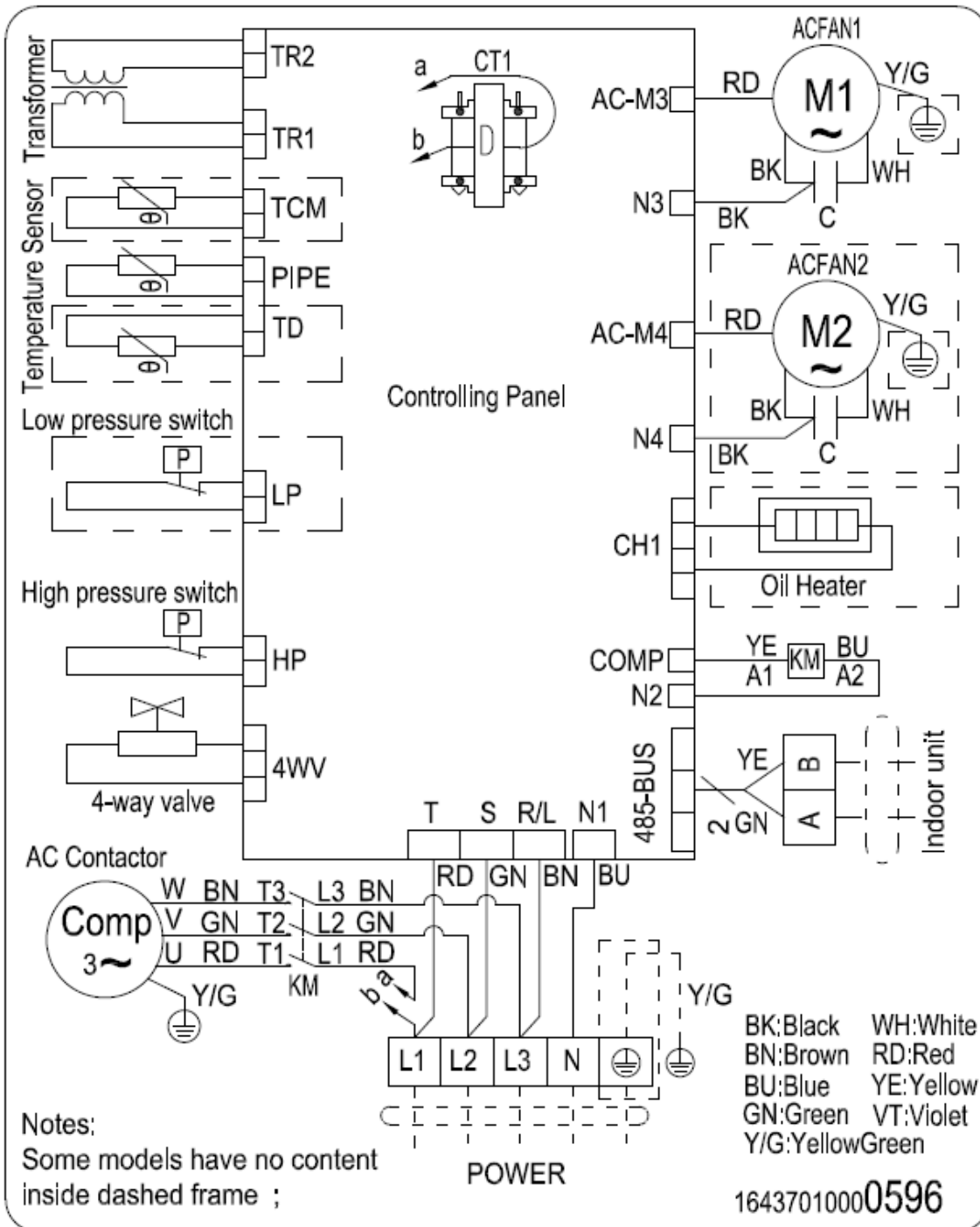




2.2 CO-E 24HNX



2.4 CO-E 36HNX, CO-E 48HNX, CO-E 60HNX



## Part6 Capacity Amendment

### 1. Operation range

Cooling capacity (KBtu/h)		12K	18K	24K	36K	36K	48K	60K
Power supply		220-240V~/50Hz/1Ph				380-415V~/50Hz/3Ph		
Ambient temperature	Cooling	-15~49℃						
	Heating	-15~24℃						

### 2. Long piping length

Cooling capacity (KBtu/h)		12K	18K	24K	36K	36K	48K	60K
Connection Pipe(mm)	Liquid pipe	Φ6.35		Φ9.52			Φ9.52	
	Gas pipe	Φ12.7		Φ15.88			Φ19.05	
Max.piping length(m)		15	20		30		50	
Max.piping height(m)		10	15		20		30	
Max.Bend Qty		3	4	4	6		8	

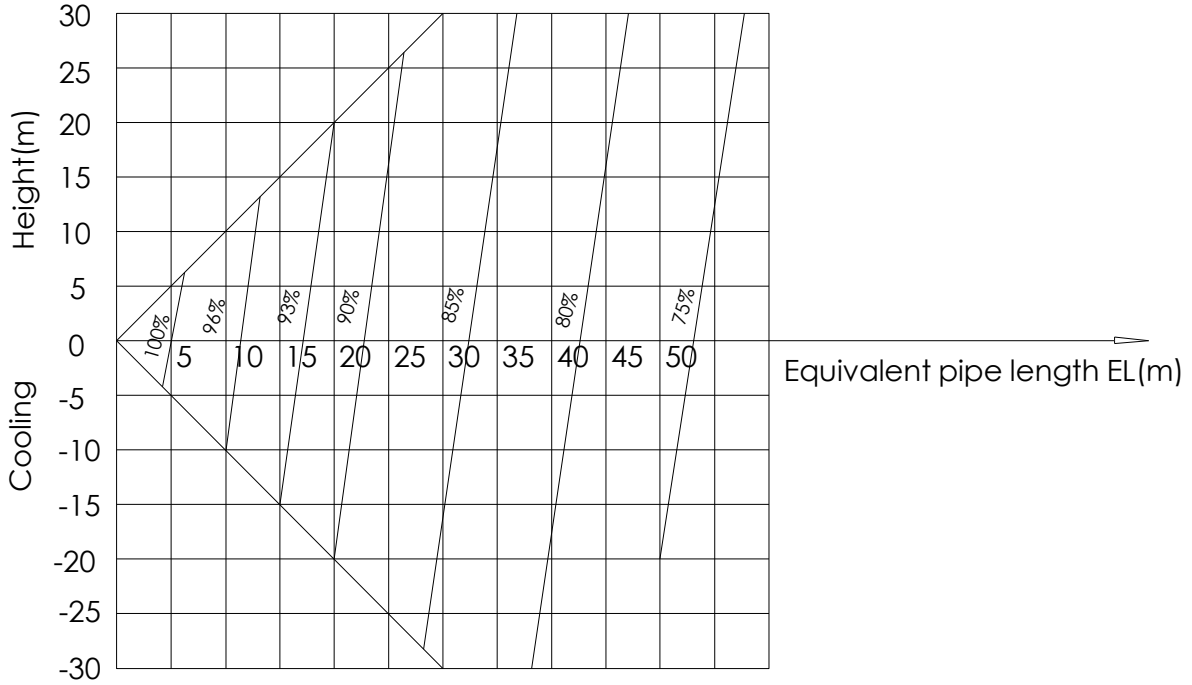
#### Caution:

1. The standard Pipe length is 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. The thickness of the pipe is 0.6-1.0, bearing pressure is 4.2MPa;
3. 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 to use the shortest connection pipe according to the pipe length parameter in this manual. If the height difference between outdoor and indoor unit is more than 5m, an oil trap should be installed in the gas pipe for every 10 meters.

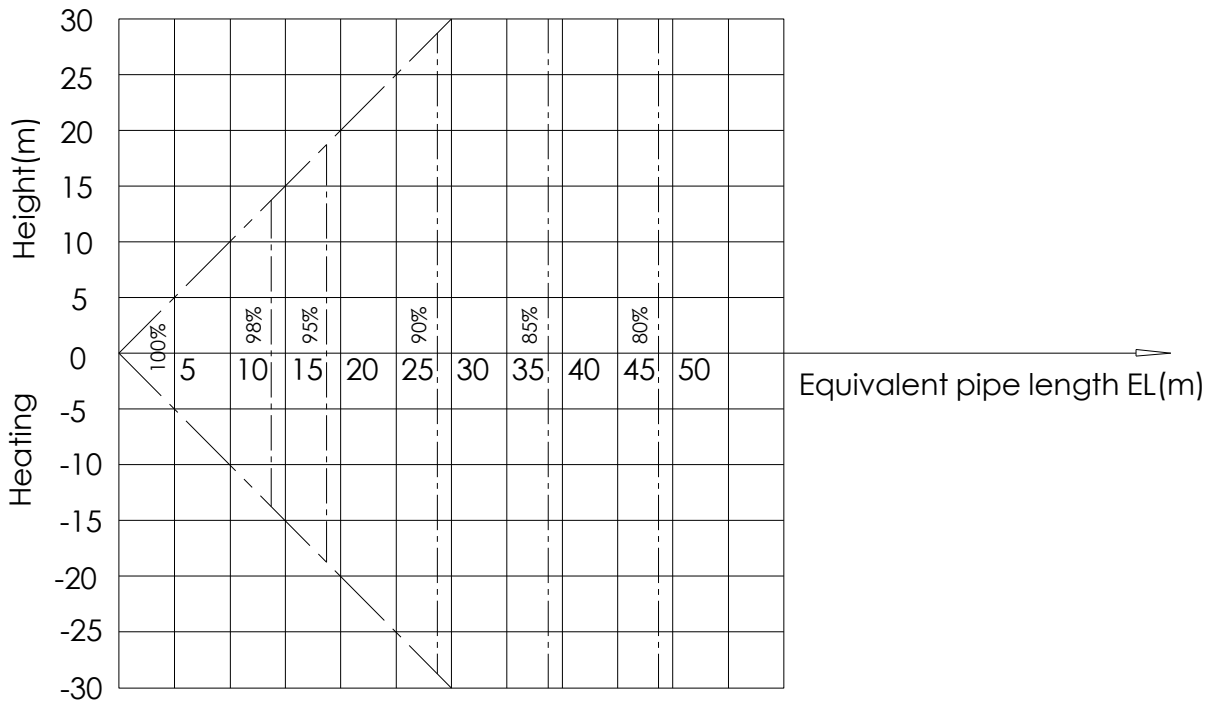
### 3. Capacity amendment of different piping length

#### 3.1 Amendment coefficients of heating and cooling capacity under different height drop K3

##### Different Cooling Capacity modified coefficients at different height:



##### Different Heating Capacity modified coefficients at different height:



**Note:**

H = Height of Outdoor Unit — Height of Indoor Unit

**3.2 Correction capability**

Cooling capacity = Rated cooling capacity xK1xK3

Heating capacity = Rated heating capacity xK2xK3

**4. Equivalent Pipe length conversion**

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

**Bend and Oil Loop Conversion tablet**

Type Pipe Dia.(mm)	Bend	Oil Loop
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  $L = \text{Actual Pipe length } L + \text{Bend Qty} \times \text{Equivalent pipe bend length} + \text{Oil Loop Qty} \times \text{Equivalent Oil Loop length}$

**Sample:**

ALCA-H42/5 Actual Pipe length is 25 meters, Gas pipe diameter is 15.88mm. If there's 5 bends and 2 oil loops during the installation, then the equivalent pipe length should be:

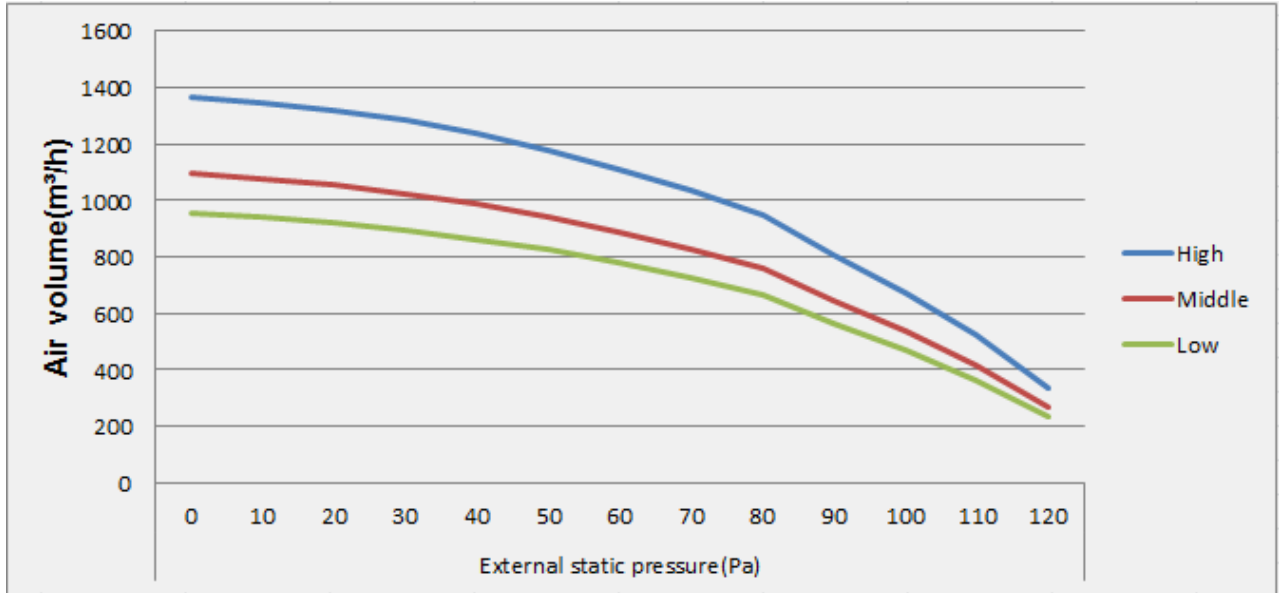
$$L = 25 + 0.25 \times 5 + 2.0 \times 2 = 30.25(m)$$

**Note:**

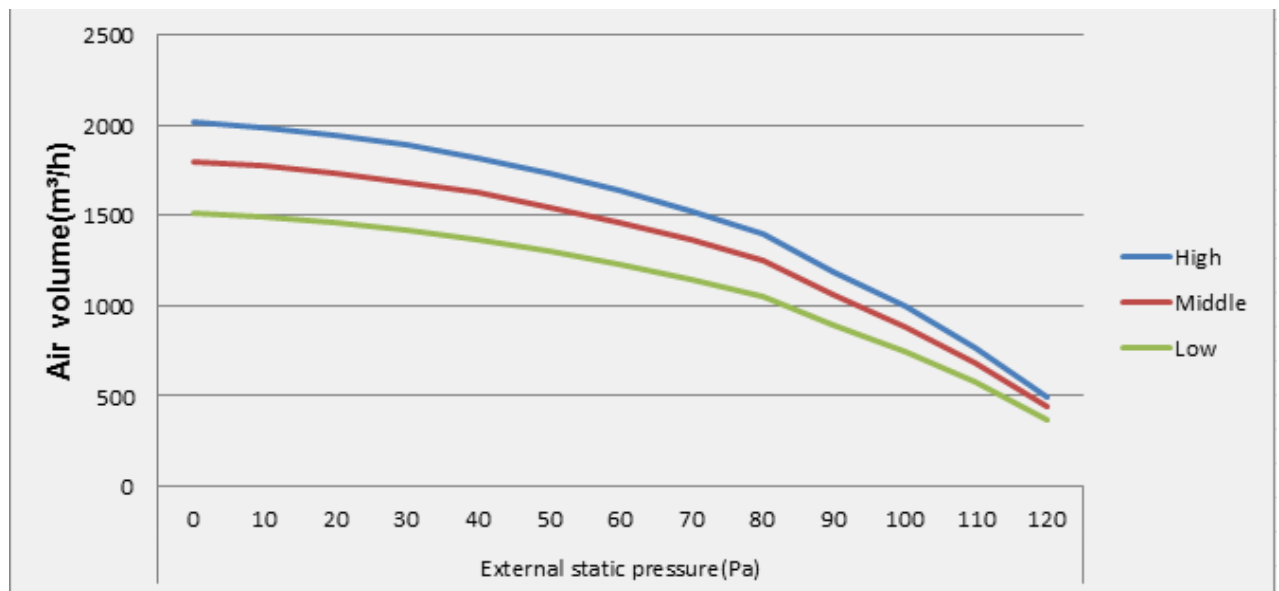
If there is relatively level difference of indoor and outdoor unit, S-shaped oil trap must be installed every 8~10m for vertical pipe.

## Part7 Static pressure curve

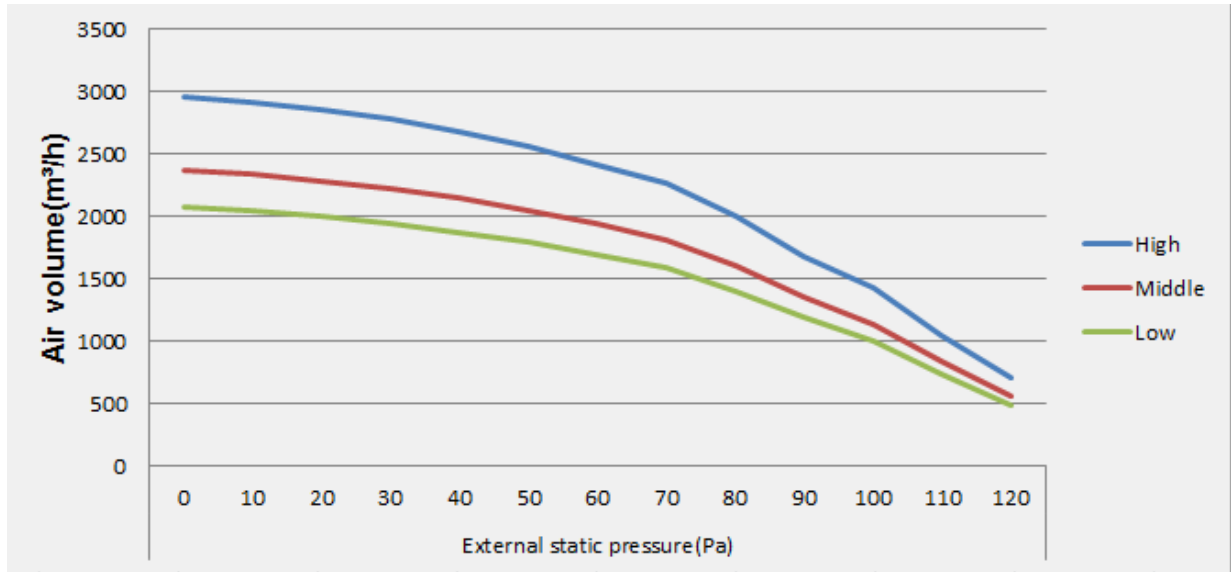
### 1. CO-D 18HNX



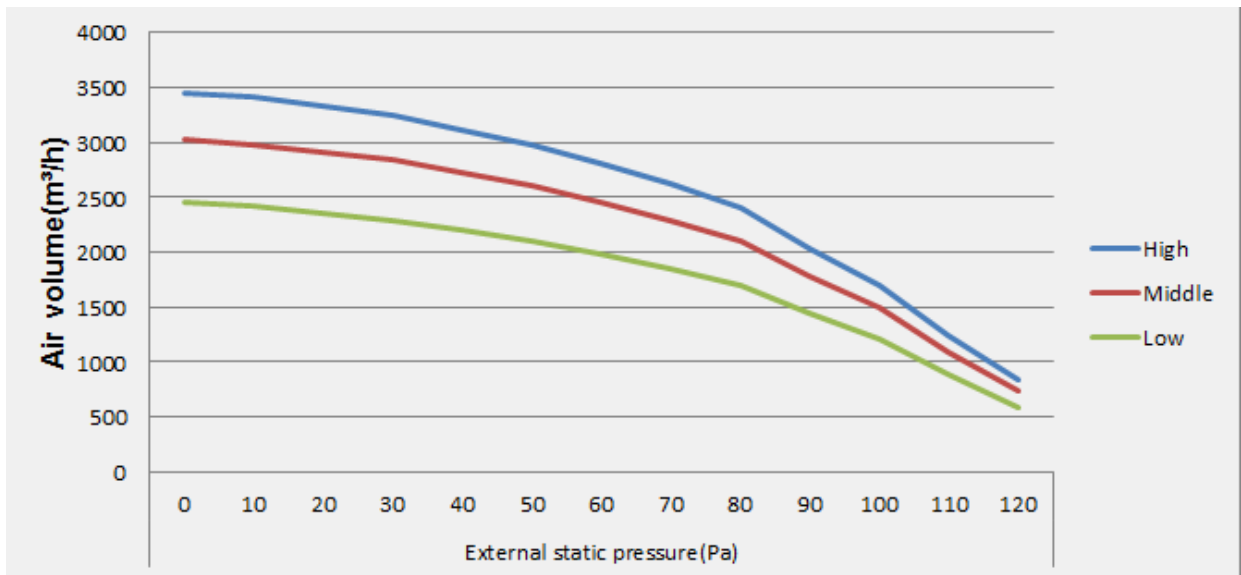
### 2. CO-D 24HNX



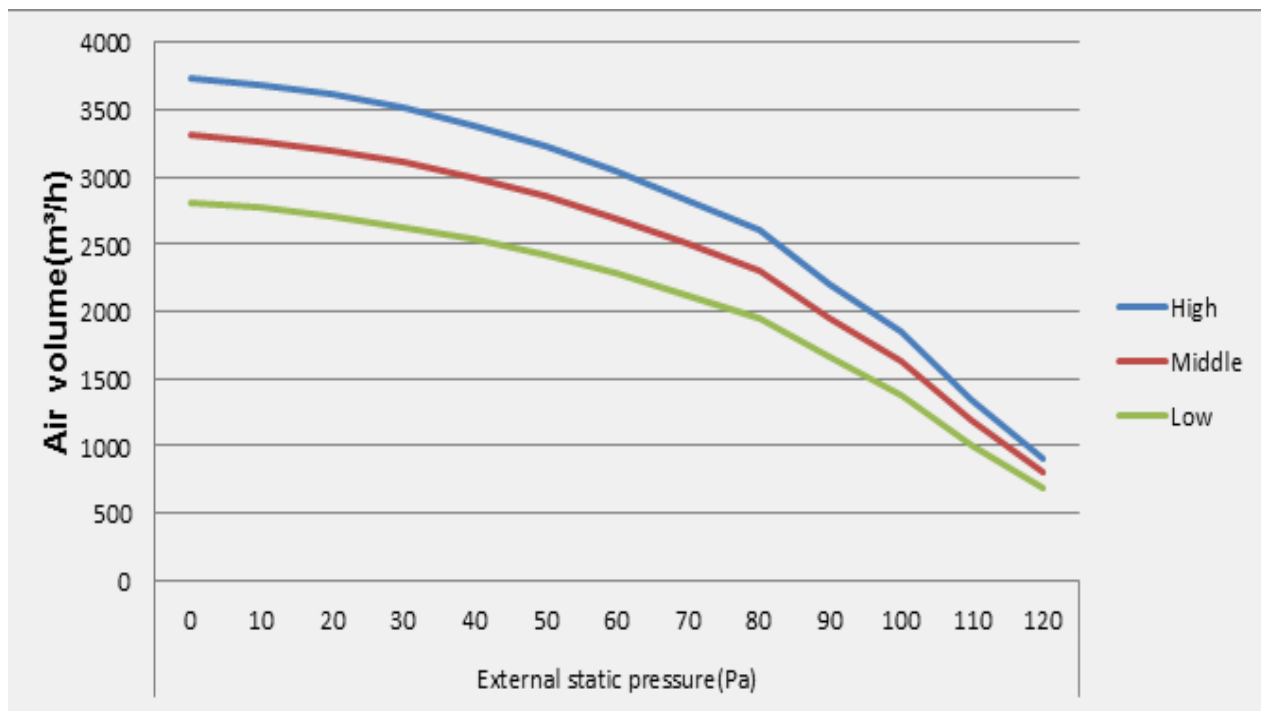
### 3. CO-D 36HNX



### 4. CO-D 48HNX



### 5. CO-D 60HNX





## Part8 Control

### 1. Parameters Setting

Indoor unit's parameters can be set by remote controller (YK-L) and wired remote controller—For after-sales (In indoor side ,After a new PCB was replaced, indoor parameters set is necessary).

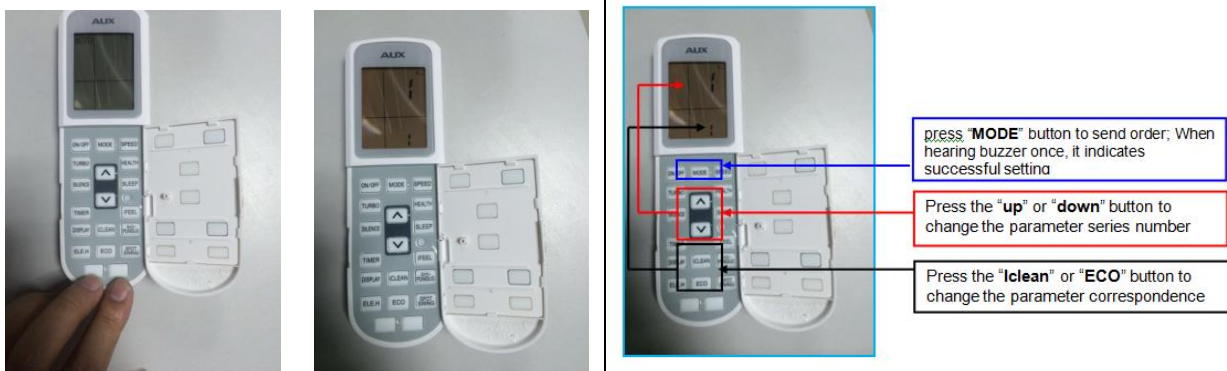
#### 1.1 Parameter Setting by YK-L

##### Enter the setting interface

- ① Make sure the remote controller is **off**
- ② Press the **two white buttons** at the down side simultaneously **more than 10s** to enter the address setting mode.

##### Parameter Setting

- ③ Press the [**^**] or [**v**] button to change the parameter series number
- ④ Press the [**IClean**] or [**ECO**] button to change the parameter correspondence
- ⑤ Press the [**MODE**] button to send order (Send signal to display panels or receivers), Then can hear buzzer once



## 1.2 Parameter Setting by XK-04/ XK-05

### Parameter checking

Press the “FUNCTION” button for 5 seconds, enter into the parameter checking interface .  
the wired controller’s address will be displayed in the temperature zone of LED screen  
( press “FUNCTION” button, the wired controller’s address will flash, the wired controller ‘s  
address can be changed through press the “^” or “v” , then press “FUNCTION” buton to  
confirm);

In the timing setting zone :**HH** means seires NO. **MM** means parameter value. After  
Entering into IDU parameter checking , via pressing the “^” or “v” buton ,you can check  
the parameter value of seires NO. 【04】 【05】 【1】 .



**HH:** means seires NO.  
**MM:** means parameter value.

2. Press “^”or“v” , change the parameter value of seires NO.

1. Press “FUNCTION” for 5S , enter parmater checking model

### Parameter setting

**Only in parameter checking model** ,press the “FUNCTION” button for 5 seconds,  
Enter into parameter setting model.

The corresponding parameter valve”**MM**” begain to flash,changing it throuth pressing  
the “^” or “v” buton,after finished ,press the “FUNCTION” button to confirm.When finishing  
parameter setting,it will automatically go back to parameter checking model.

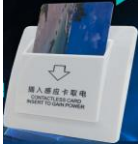



2. Press “^”or“v” , change the parameter value.

1. Only in checking model, Press “FUNCTION” for 5S , enter parmater checking model

## 2. Room Card Function

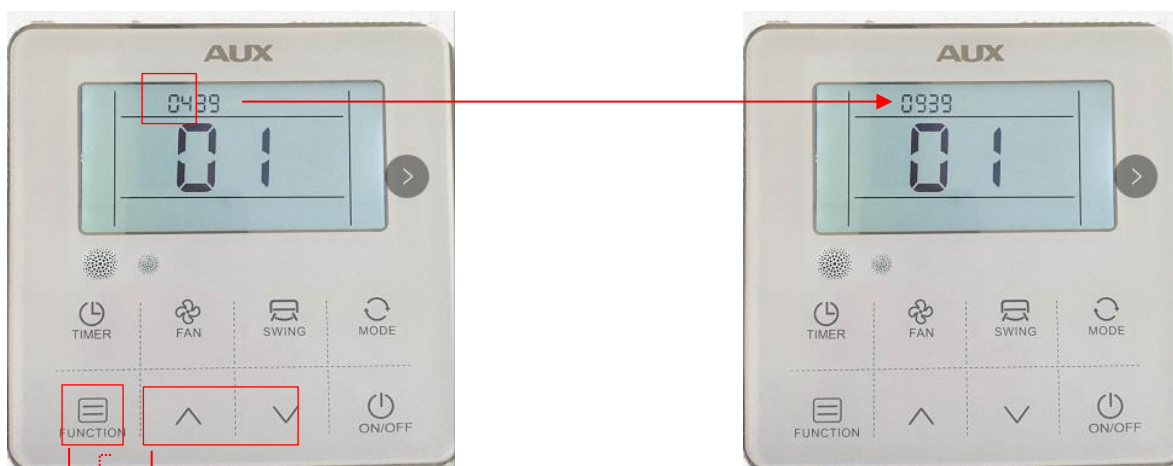
### 2.1 Function setting

Parameter setting	Model	Contact State	Operation model specification
0900	Normal (default)		Stand
0901	Room Card (optional)		the IDU Will be into standby mode, can be controlled by controller
			the IDU Will be into standby mode, <b>can't be controlled by controller</b>

※ How to set the room card function ( Set method same as the above 【Part 9 →2.1 Parameter Setting by YK-L or 2.3 Parameter Setting by XK-04/XK-05 】

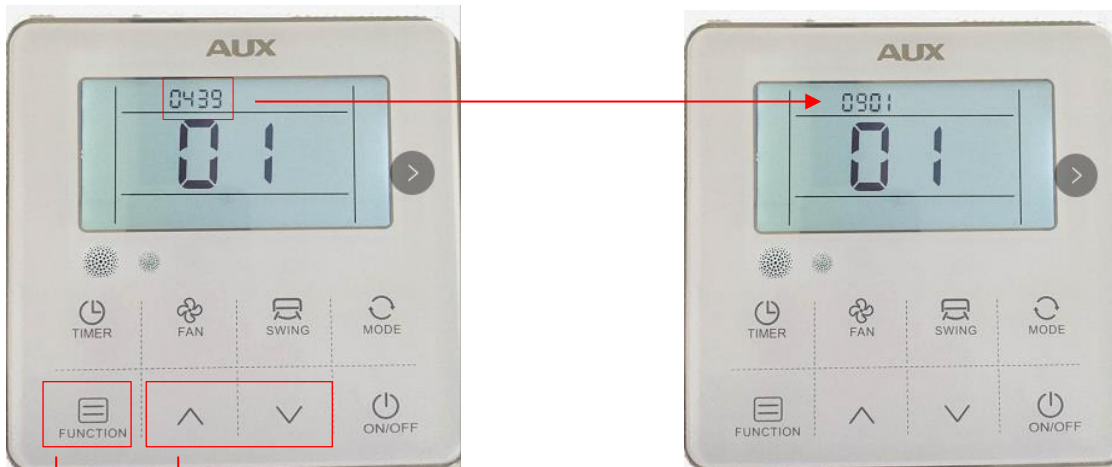
For example ( XK-05)

#### Step 1



- ③ Press "FUNCTION" for 5S again, enter parmater setting model;
- ② Press the "^" or "v" button to get "09 39"
- ① Press "FUNCTION" for 5S, enter parmater check model;

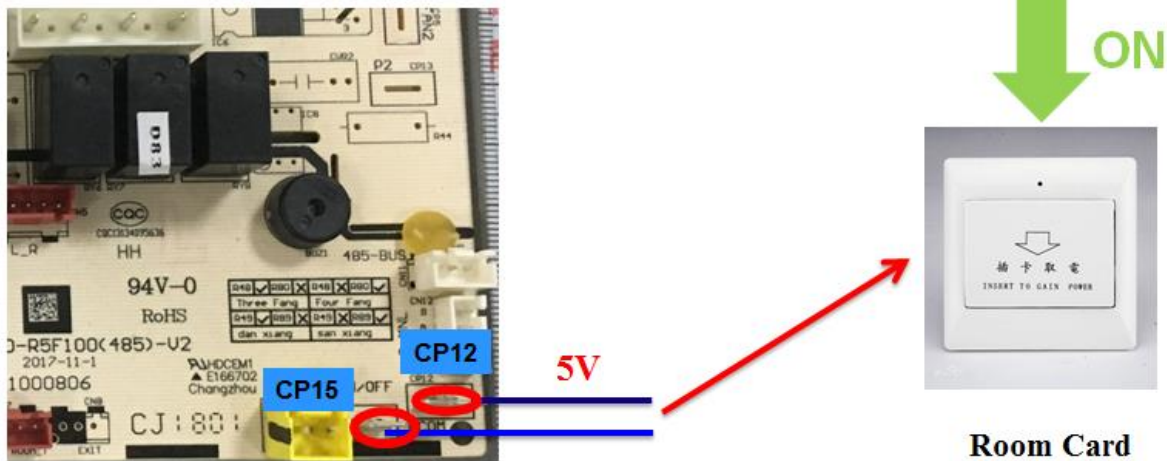
**Step 2**



- ④ Press the “^” or “v” button to get “09 01”
- ⑤ after finishing setting , press “FUNCTION” to confirm

**2.2 Wiring diagram**

When the room card is inserted, the air conditioning can be controlled ; when you leave the room, the AC will standby, can not be controlled .



### 3. Wifi Module

#### 3.1 WiFi Module Configuration

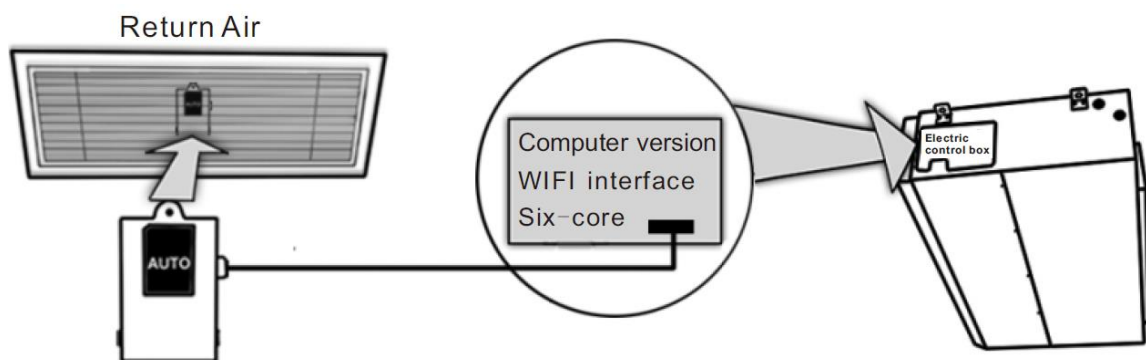
##### ① APP Download

Mobile terminal scan the following dimensional code to download APP, or search “AC Freedom” in APPSTORE and Google store



##### ② Light Commercial WiFi Module Installation

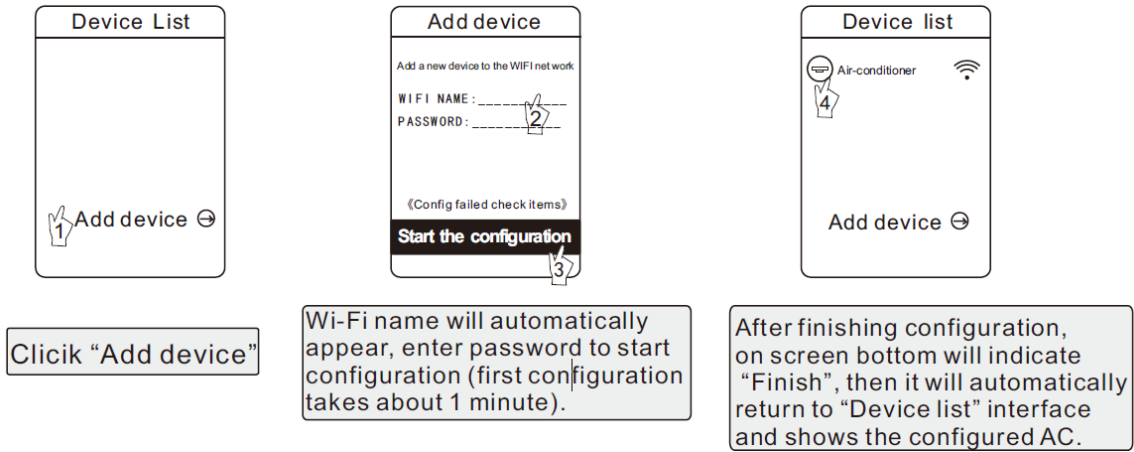
Connect the WiFi module communication wire to WiFi interfaces of main PCB, as shown below:



The WiFi module should be placed in the return air or some other place in WiFi area. (customers buy the wireless router)

##### ③ APP Configuration

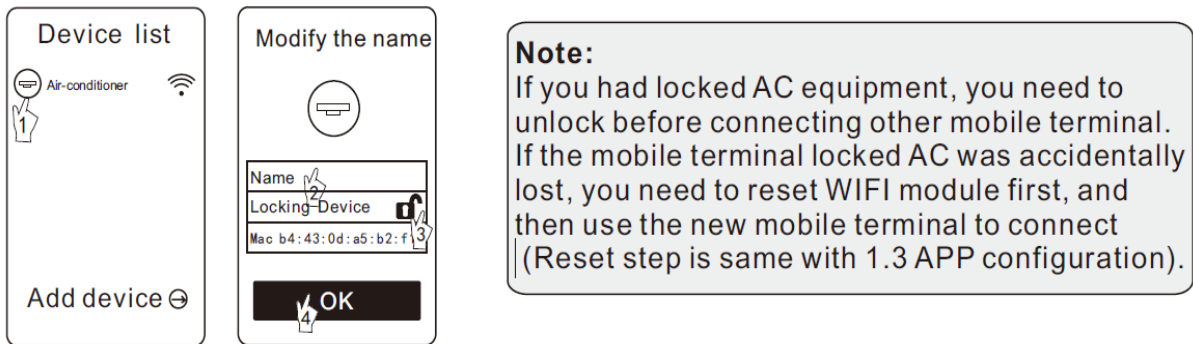
- Press "healthy" button 8 times consecutive, and buzzer even ring two sound then into the configuration
- Connect mobile terminals to WiFi, open APP “AC Freedom”, and then operate following the steps below:



**Note:** If the configuration fails or you change the password of wireless router, you need to reset the WIFI module to reconnect: Turn on the power of the module, then repeat the steps above for APP configuration.

### 3.2 AC management

#### ① Modify AC name and locking function



#### ② For other instructions, please refer to "HELP" in APP.

#### ③ Remote-control device

Connect the wireless router to internet, then open the GPRS. It means the remote control device, voice control function only effective after connected to the Internet

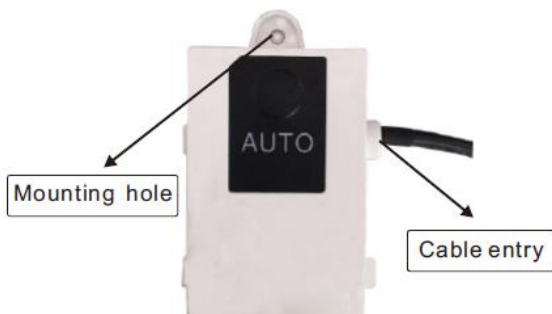
### 3.3 TroubleShooting

#### If unable to properly configured or connect the WIFI box:

- Make sure the WIFI box for wiring is properly connected.
- Long press WIFI box 8 seconds to reconfigure the positive button. If the problem can't be solved, please contact after sales person.

### 3.4 Technical Parameters

- Working temperature : 0~50°C ;
- Working environment humidity : 20~90%RH ;
- Dimensions : 78 X 52 X 15.5
- Configuration cable wire length : 1500mm

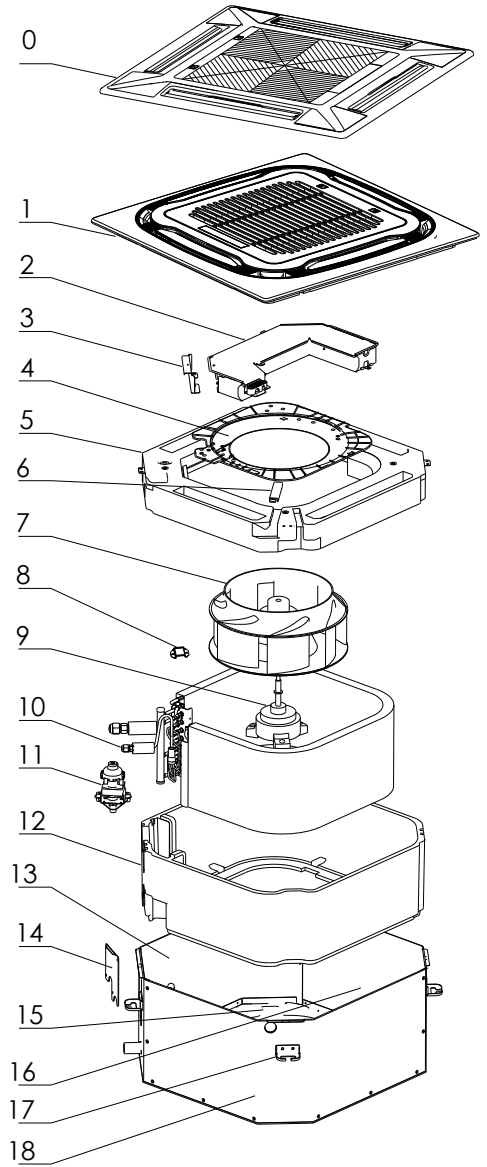
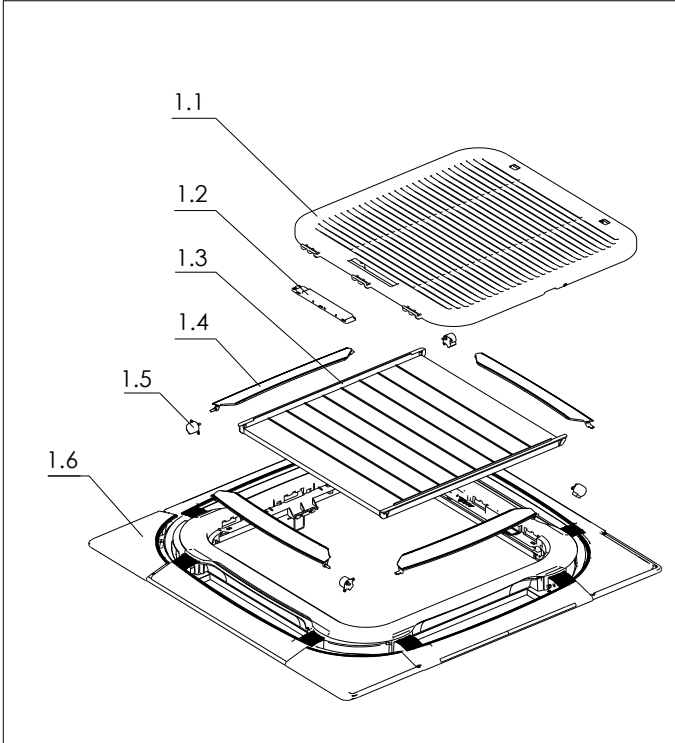
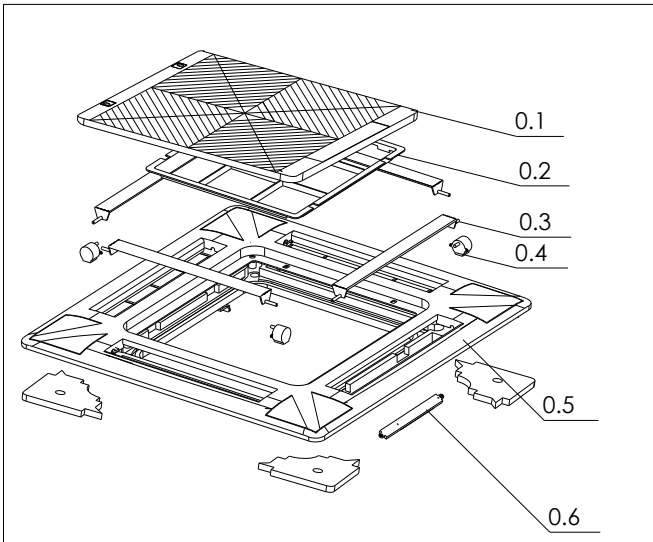




# Part9 Explosive View

## 1. Cassette

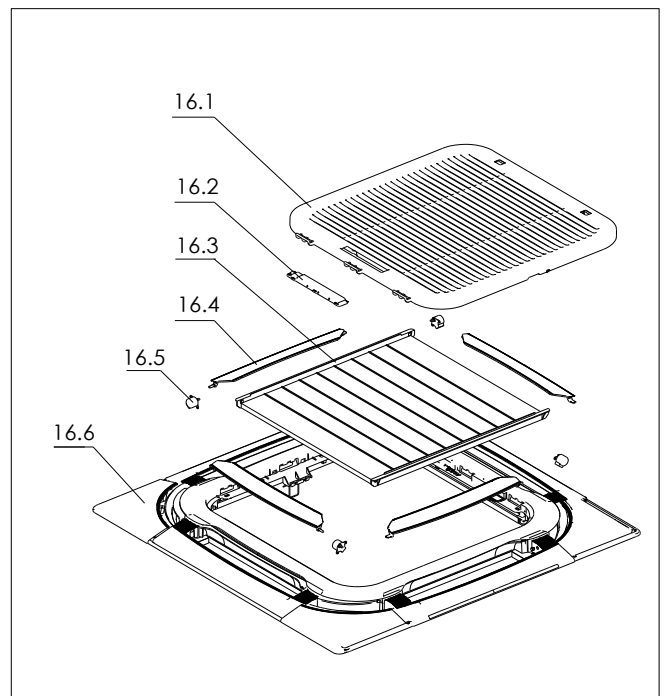
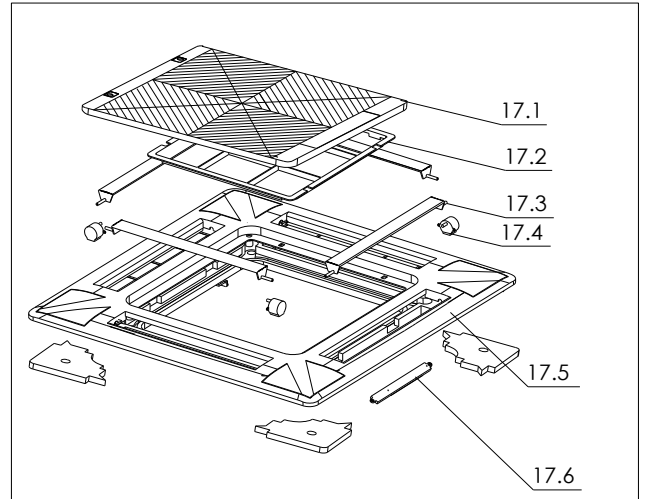
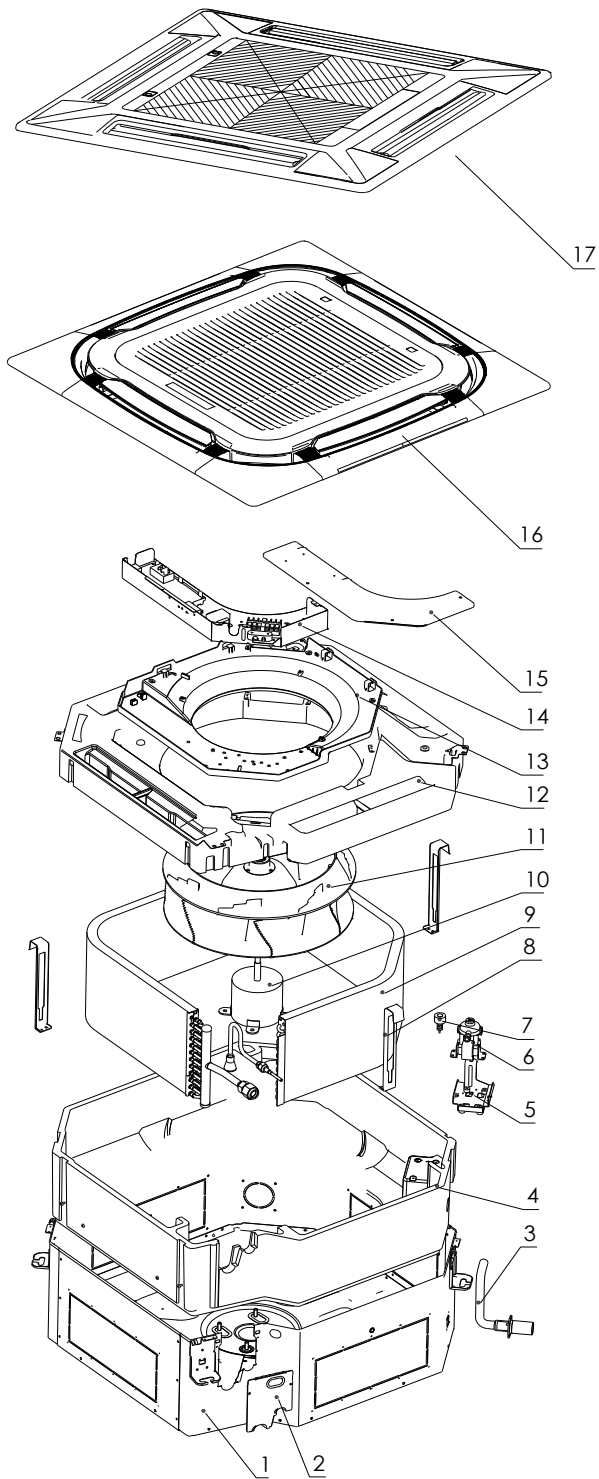
### 1.1 CO-4C 12HNX, CO-4C 18HNX



**R410A T1 ON/OFF LCAC B7 Series**

No.	Chinese Name	Part Name	Part Code	Qty
0.	面板 MB13/W-Y1	Panel MB13/W-Y1	16108022000016	1
0.1	回风格栅	Return air grille	16420010000015	1
0.2	过滤网 PP	fliter screen	16420012000012	1
0.3	导风叶片	Guide the wind vane	16420007000023	4
0.4	步进电机	Step motor	16430001000133	4
0.5	面板围框 HIPS	Panel box around	16420014000035	1
0.6	R 显示灯板组件	The led panel	16422015000007	1
1	面板 09A	Panel MB09A	16108022000017	1
1.1	回风格栅	Return air grille	16420010000033	1
1.2	R 显示灯板组件	The led panel	11222014000718	1
1.3	过滤网 PP	fliter screen	16420012000012	1
1.4	导风叶片	Guide the wind vane	16420007000035	4
1.5	步进电机	Step motor	16430001000133	4
1.6	面板围框 HIPS	Panel box around	16420013000072	1
2	电控盒组件	Electric box assembly	16321005000024	1
3	电控盒 C	Electric box C	16421038000328	1
4	导风圈	Air guide ring	16420004000008	1
5	接水盘组件	Drain pan assembly	16320005000039	1
6	过线夹	Wire clip	16420021000010	1
7	风轮	Wind wheel	16444001000037	1
8	压线扣	Wire clamp	16427018000007	1
9	电机(三速) XD30B	Fan motor XD30B	<b>16430001000638</b>	1
10	蒸发器总成	Evaporator assembly	16324005000087 (12K)	1
			16324005000081 (18K)	1
11	排水泵	Drain pump	16440001000020	1
12	底盘泡沫组件	Chassis foam assembly	16320005000038	1
13	围板 B	Baffle B	16421010000072	1
14	出管口阀板	Valve plate	<b>16421014000089</b>	1
15	底盘组件	Chassis assembly	<b>16321001000071</b>	1
16	围板 C	Baffle C	16421010000073	1
17	挂耳	Hook	16421040000042	4
18	围板 A	Baffle A	16421010000071	1

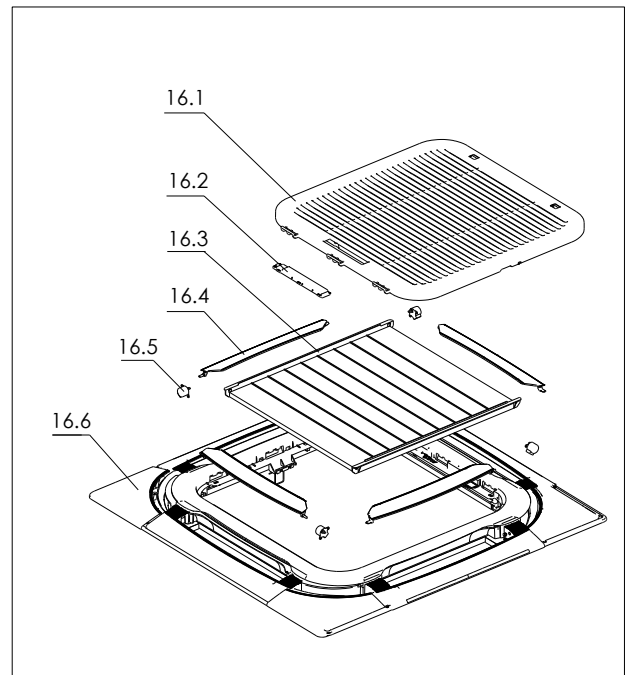
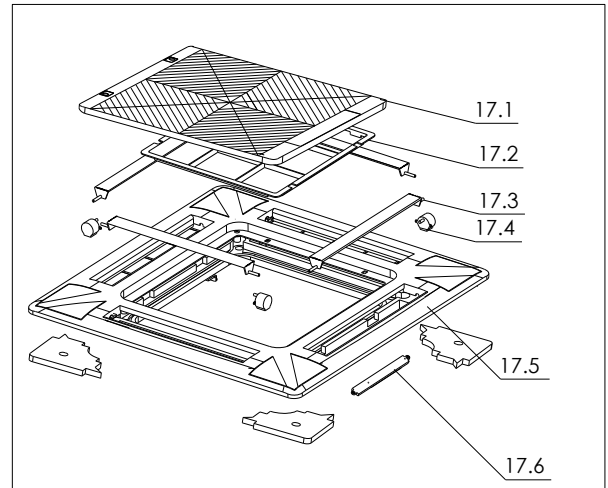
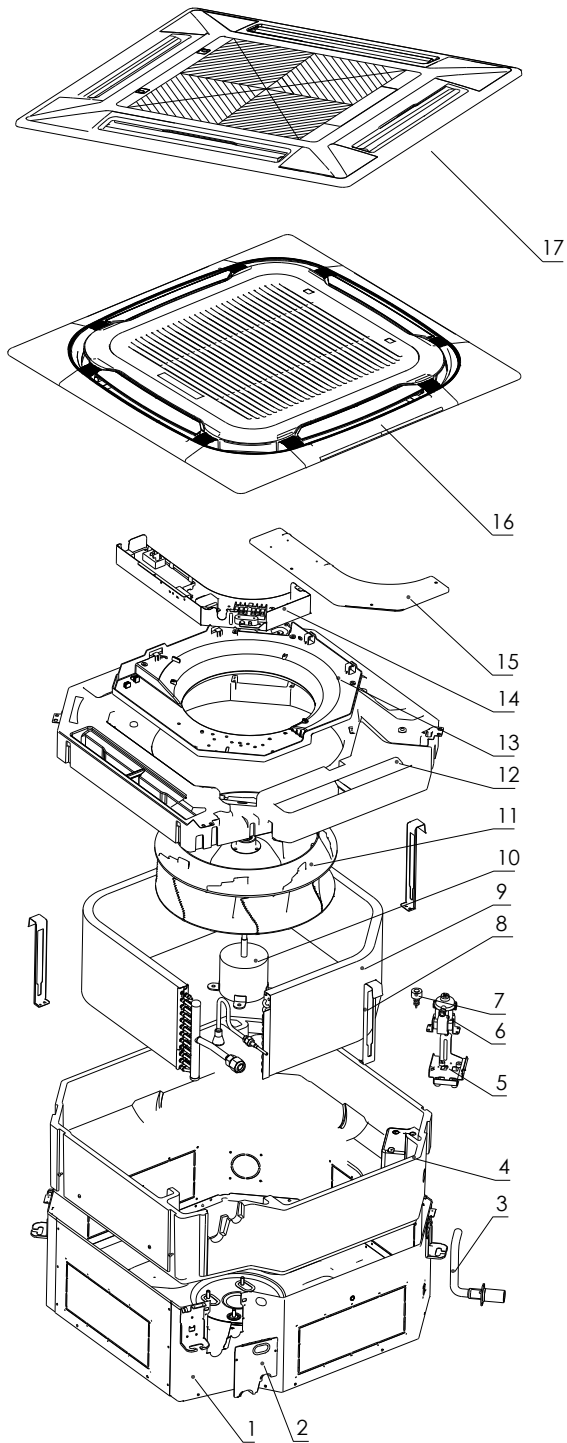
1.2 CO-4C 24HXX, CO-4C 36HXX



## R410A T1 ON/OFF LCAC B7 Series

NO.	Code	Chinese	EN	Quantity
1	16421010000034	QRD-72N/D 围板 A	BaffleA	1
	16421010000035	QRD-72N/D 围板 B	Baffle B	1
	16421010000036	QRD-72N/D 围板 C	Baffle C	1
2	16420014000031	(ROHS)QRD-120N/E 阀板(改进)	Valve plate	1
3	16432019000023	塑料排水软管 φ25(内径)×φ32(内径)×350(外贸)	Drain pipe assembly	1
4	16320005000045	(ROHS)QRD-72N/EC 底盘泡沫组件(台阶)	Chassis foam assembly	1
5	16421026000254	QRD-120N/D 水泵支架	Drain pump holder	1
6	16440001000016	(ROHS)排水泵 PLD-1200(新天花)	Drain pump	1
7	16445034000010	(ROHS)浮子开关 GMF-31(带锁线扣)	Float switch	1
8	16421040000047	QR-72N/E 蒸发器挂钩(喷涂)	Evaporator hook	2
9	16324005000060	ALCa-H36A4/R1DCE-B6 蒸发器总成(片距 1.4)	Evaporator assembly	1
	16430001000529	电机(三速) YDK45-6Q(长轴)	DC motor	1
11	16444001000027	风轮 φ470×147(ABS 新料)(白色)(3PC7 款)	Wind wheel	1
12	16320005000047	(ROHS)QRD-120N/EB 接水盘泡沫组件(台阶)	Drain pan assembly	1
13	16420004000007	(ROHS)QRD-120N/ES 导风圈	Air guide ring	1
14	16421038000323	QRD-120N/EAS 电控盒组件(加隔板)	Electric box assembly	1
15	16421038000326	QRD-120N/EAS 电控盒盖(铆接)	Electric box cover	1
16	16108022000026	面板 08A	Panel MB08A	1
16.1	16420010000032	回风格栅	Return air grille	1
16.2	11222014000718	R 显示灯板组件	The led panel	1
16.3	16420012000001	过滤网	fliter screen	1
16.4	16420007000034	导风叶片	Guide the wind vane	4
16.5	16430001000133	步进电机	Step motor	4
16.6	16420013000070	围框	Panel box around	1
17	16108002000007	面板 12	Panel MB12	1
17.1	16420010000004	回风格栅	Return air grille	1
17.2	16420012000001	过滤网	fliter screen	1
17.3	16420007000009	导风叶片	Guide the wind vane	4
17.4	16430001000133	步进电机	Step motor	4
17.5	16420014000010	围框	Panel box around	1
17.6	11222014000704	显示灯板组件	The led panel	1

1.3 CO-4C 48HNX, CO-4C 60HNX

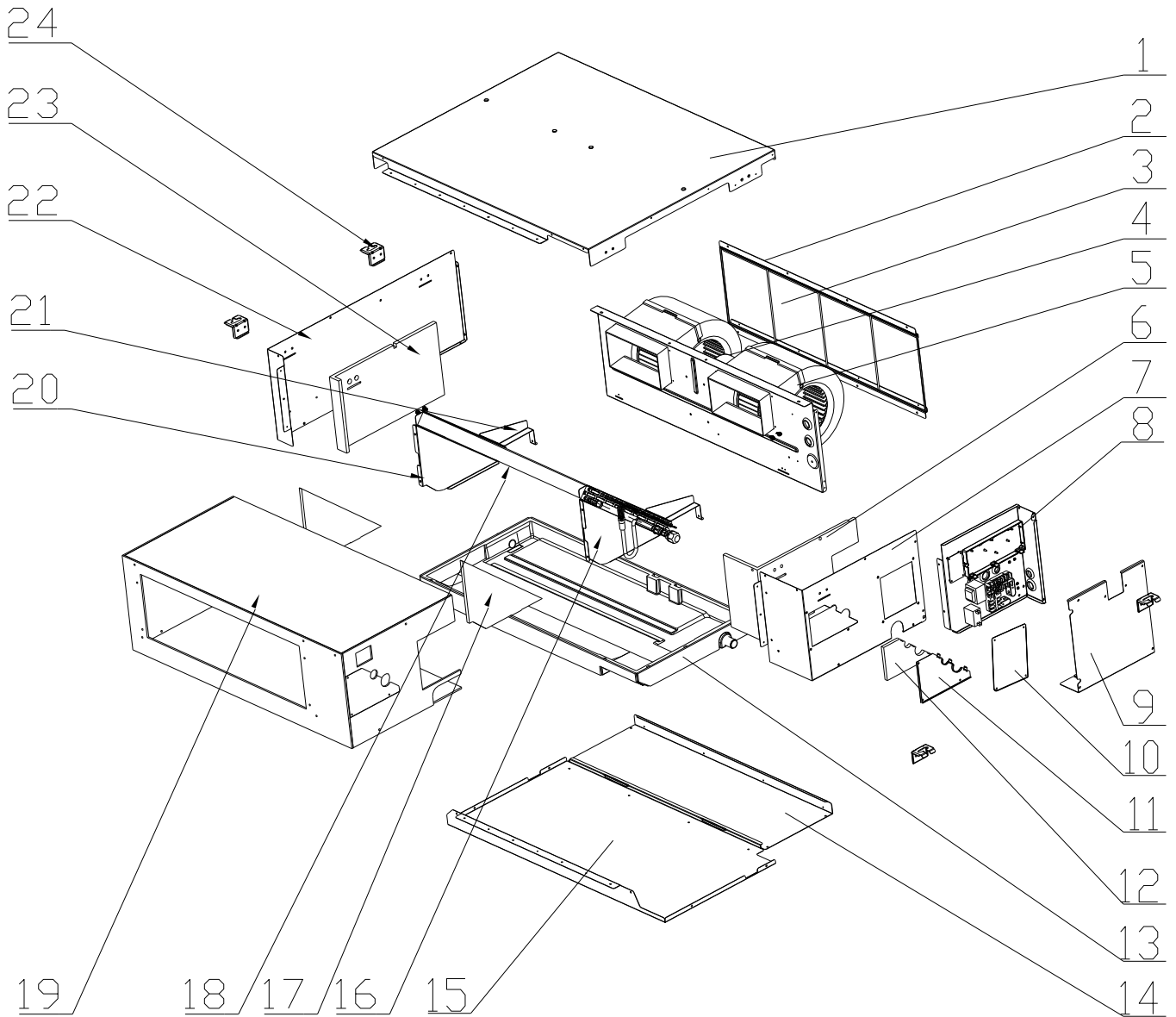


## R410A T1 ON/OFF LCAC B7 Series

NO.	Code	Chinese	EN	Quantity
1	16421010000031	QRD-120N/D 围板 A	BaffleA	1
	16421010000032	QRD-120N/D 围板 B	Baffle B	1
	16421010000033	QRD-120N/D 围板 C	Baffle C	1
2	16420014000031	(ROHS)QRD-120N/E 阀板(改进)	Valve plate	1
3	16320005000036	QRD-120N/E 排水管组件	Drain pipe assembly	1
4	16433009000057	底座包装泡沫 QRD-120N/D	Chassis foam assembly	1
5	16421026000254	QRD-120N/D 水泵支架	Drain pump holder	1
6	16440001000016	(ROHS)排水泵 PLD-1200(新天花)	Drain pump	1
7	16445034000010	(ROHS)浮子开关 GMF-31(带锁线扣)	Float switch	1
8	16421040000046	QR-120N/E 蒸发器挂钩(喷涂)	Evaporator hook	2
9	16324005000056	QRD-120N/D 蒸发器总成	Evaporator assembly	1
10	16430001000516	电机(三速) XD80A	DC motor	1
11	16444001000028	风轮 $\phi 470 \times 170$ (ABS 新料)(白色)	Wind wheel	1
12	16320005000047	(ROHS)QRD-120N/EB 接水盘泡沫组件(台阶)	Drain pan assembly	1
13	16420004000007	(ROHS)QRD-120N/ES 导风圈	Air guide ring	1
14	16421038000323	QRD-120N/EAS 电控盒组件(加隔板)	Electric box assembly	1
15	16421038000326	QRD-120N/EAS 电控盒盖(铆接)	Electric box cover	1
16	16108022000026	面板 08A	Panel MB08A	1
16.1	16420010000032	回风格栅	Return air grille	1
16.2	11222014000718	R 显示灯板组件	The led panel	1
16.3	16420012000001	过滤网	fliter screen	1
16.4	16420007000034	导风叶片	Guide the wind vane	4
16.5	16430001000133	步进电机	Step motor	4
16.6	16420013000070	围框	Panel box around	1
17	16108002000007	面板 12	Panel MB12	1
17.1	16420010000004	回风格栅	Return air grille	1
17.2	16420012000001	过滤网	fliter screen	1
17.3	16420007000009	导风叶片	Guide the wind vane	4
17.4	16430001000133	步进电机	Step motor	4
17.5	16420014000010	围框	Panel box around	1
17.6	11222014000704	显示灯板组件	The led panel	1

## 2. Duct

### 2.1 CO-D 18HNX, CO-D 24HNX, CO-D 36HNX



#### CO-D 18HNX

NO	Chinese name	Part name	Part code	Qty
1	顶盖板组件	Top cover	1632100900028 5	1
2	过滤网法兰	Flange	1642103000020 9	2
3	缝制过滤网 810×245×4	Air filter	1644401300010 4	1
4	电机(三速) YSK100-4	Fan motor	1643000100054 2	1
5	蜗壳固定板组件	Fixing plate of scroll case	1632100900030 1	1

**R410A T1 ON/OFF LCAC B7 Series**

6	右侧板泡沫	Foam board of right side panel	1642800100005 7	1
7	右侧板	Right side panel	1642101000006 2	1
8	控制器总成	Electrical assembly	/	
8.1	CJ 控制板	PCB	1122254100002 9	1
8.2	(ROHS) 变压器	Transformer	1642200500001 7	1
8.3	风机电容	Fan motor capacitor	1133001000010 5	1
8.4	端子板	Power terminal	1642700100005 5	1
9	电控盒盖	E-parts box cover	1642103800029 1	1
10	检修板	Service port cover	1642101300002 0	1
11	阀板 B	Valve plate B	1642101400006 9	1
12	出管阀板泡沫	Foam board of valve plate	1642800100005 9	1
13	接水盘组件(吸塑)	Water pan assembly	1633100100012 5	1
14	回风盖板	Lower cover	1642100500056 4	1
15	下盖板	Lower cover	1642100500056 3	1
16	蒸发器右连接板	Right connection plate	1642100700013 2	1
17	蒸发器挡板泡沫	Foam board of connection plate	1642800100005 6	2
18	蒸发器总成	Evaporator assembly	1632400900023 5	1
19	保温棉套件	Insulation cotton kit	/	
19.1	PE 保温棉板 顶盖板 A	Thermal insulation board(inside the top cover A)	1643400100046 3	1
19.2	PE-X 保温棉板 顶盖板外	Thermal insulation board(outside the top cover)	1643400200012 5	2
19.3	PE-X 保温棉板 阀板 B	Thermal insulation board(outside the valve plate)	1643400200007 6	1
19.4	PE-X 保温棉板 左侧板外	Thermal insulation board(outside the left-side panel)	1643400200012 7	1
19.5	PE-X 保温棉板 右侧板外	Thermal insulation board(outside the right-side panel)	1643400200012 8	1
19.6	(ROHS)PE-X 保温棉板 检修板	Thermal insulation board(outside the service port cover)	1643400200010 0	1
20	蒸发器左连接板	Left connection plate	1642100700013 1	1



**R410A T1 ON/OFF LCAC B7 Series**

21	蒸发器固定板	Fixing plate of evaporator	1642100200043 3	2
22	左侧板	Left side panel	1642101000006 1	1
23	左侧板泡沫	Foam board of left side panel	1642800100005 8	1
24	挂耳	Hanger	1642102900004 0	4

**CO-D 24HNX**

NO	Chinese name	Part name	Part code	Qty
1	顶盖板组件	Top cover	16321009000285	1
2	过滤网法兰	Flange	16421030000209	2
3	缝制过滤网	Air filter	16444013000104	1
4	电机(三速) YSK160-4	Fan motor	16430001000541	1
5	蜗壳固定板组件	Fixing plate of scroll case	16321009000302	1
6	右侧板泡沫	Foam board of right side panel	16428001000057	1
7	右侧板	Right side panel	16421010000062	1
8	控制器总成	Electrical assembly	/	
8.1	CJ 控制板	PCB	11222541000029	1
8.2	(ROHS) 变压器	Transformer	16422005000017	1
8.3	风机电容	Fan motor capacitor	11330010000105	1
8.4	端子板 6 位	Power terminal	16427001000055	1
9	电控盒盖	E-parts box cover	16421038000291	1
10	检修板	Service port cover	16421013000020	1
11	阀板 B	Valve plate B	16421014000069	1
12	出管阀板泡沫	Foam board of valve plate	16428001000059	1
13	接水盘组件(吸塑)	Water pan assembly	16331001000125	1
14	回风盖板	Lower cover	16421005000564	1
15	下盖板	Lower cover	16421005000563	1
16	蒸发器右连接板	Right connection plate	16421007000132	1
17	蒸发器挡板泡沫	Foam board of connection plate	16428001000056	1
18	蒸发器总成	Evaporator assembly	16324009000222	1
19	保温棉套件	Insulation cotton kit	/	1
19.1	PE 保温棉板 24K 顶盖板 A	Thermal insulation board(inside the top cover A)	16434001000463	2
19.2	PE-X 保温棉板 24K 顶盖板外	Thermal insulation board(outside the top cover)	16434002000125	1
19.3	PE 保温棉板	Thermal insulation board	16434001000442	1

**R410A T1 ON/OFF LCAC B7 Series**

19.4	PE-X 保温棉板 阀板 B	Thermal insulation board(outside the valve plate)	16434002000076	1
19.5	PE-X 保温棉板 左侧板外	Thermal insulation board(outside left-side panel)	16434002000127	1
19.6	PE-X 保温棉板 右侧板外	Thermal insulation board(outside the right-side panel)	16434002000128	1
19.7	PE-X 保温棉 检修板	Thermal insulation board(outside the service port cover)	16434002000100	1
20	蒸发器左连接板	Left connection plate	16421007000131	1
21	蒸发器右固定板	Fixing plate of evaporator	16421002000433	2
22	左侧板	Left side panel	16421010000061	1
23	左侧板泡沫	Foam board of left side panel	16428001000058	1
24	挂耳	Hanger	16421029000040	4

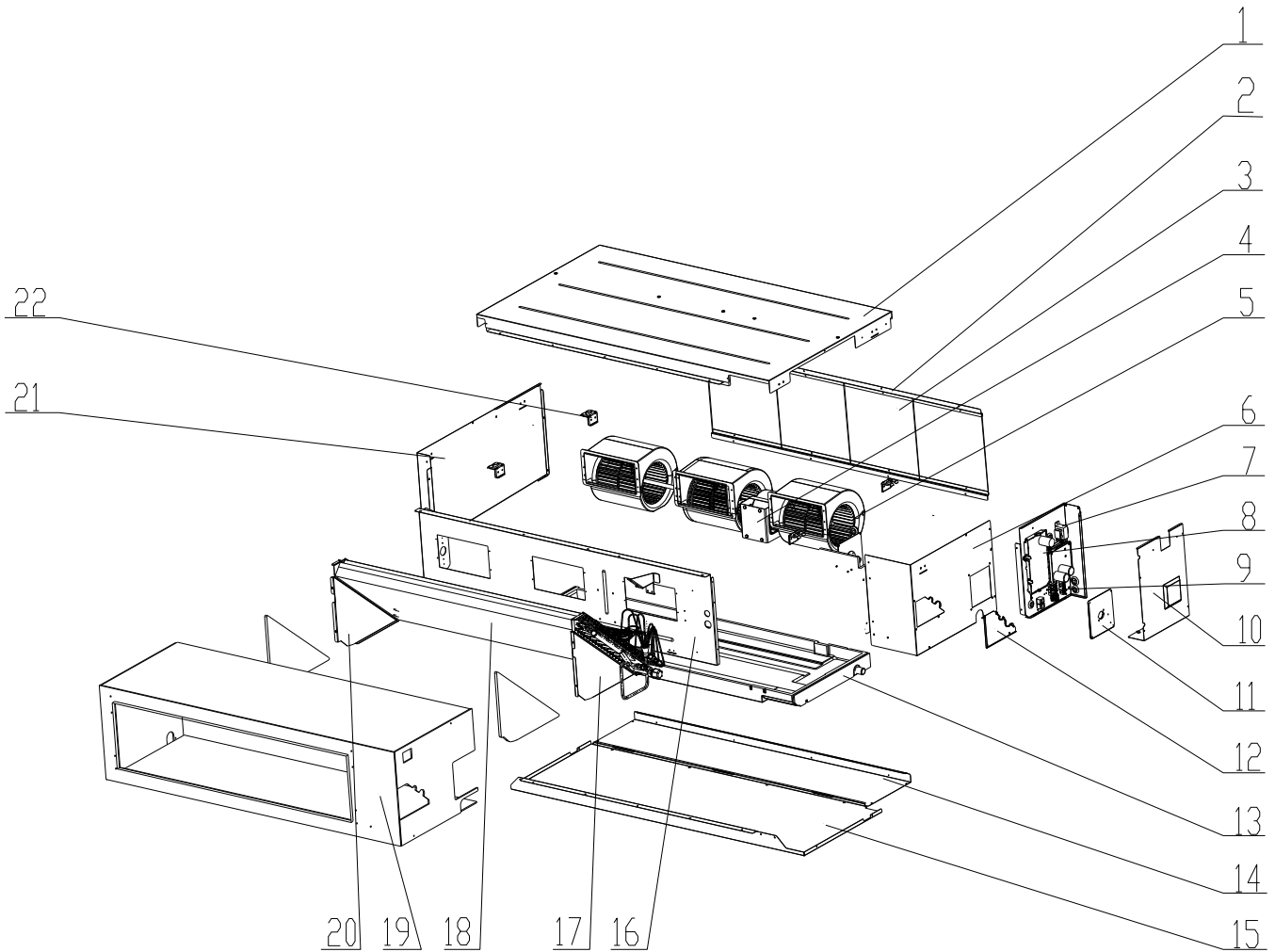
**CO-D 36HNX (single phase)**

NO	Chinese name	Part name	Part code	Qty
1	顶盖板组件	Top cover	16321009000285	1
2	过滤网法兰	Flange	16421030000209	2
3	缝制过滤网	Air filter	16444013000104	1
4	电机(三速) YSK180-4	Fan motor	16430001000519	1
5	蜗壳固定板总成	Fixing plate of scroll case	16321009000317	1
6	右侧板泡沫	Foam board of right side panel	16428001000057	1
7	右侧板	Right side panel	16421010000062	1
8	控制器总成	Electrical assembly	/	1
8.1	CJ 控制板	PCB	11222541000029	1
8.2	(ROHS) 变压器	Transformer	16422005000017	1
8.3	风机电容	Fan motor capacitor	11330010000096	1
8.4	端子板 6 位	Power terminal	16427001000055	1
9	电控盒盖	E-parts box cover	16421038000291	1
10	检修板	Service port cover	16421013000020	1
11	阀板 B	Valve plate B	16421014000069	1
12	出管阀板泡沫	Foam board of valve plate	16428001000059	1
13	接水盘组件(吸塑)	Water pan assembly	16331001000125	1
14	回风盖板	Lower cover	16421005000564	1

**R410A T1 ON/OFF LCAC B7 Series**

15	下盖板	Lower cover	16421005000563	1
16	蒸发器右连接板	Right connection plate	16421007000132	1
17	蒸发器挡板泡沫	Foam board of connection plate	16428001000056	2
18	蒸发器总成	Evaporator assembly	16324009000222	1
19	保温棉套件	Insulation cotton kit	/	1
19.1	PE 保温棉板 顶盖板 A	Thermal insulation board(inside the top cover A)	16434001000463	1
19.2	PE-X 保温棉板 顶盖板外	Thermal insulation board(outside the top cover)	16434002000125	2
19.3	PE 保温棉板	Thermal insulation board	16434001000442	1
19.4	PE-X 保温棉板 阀板 B	Thermal insulation board(outside the valve plate)	16434002000076	1
19.5	PE-X 保温棉板左侧板外	Thermal insulation board(outside left-side panel)	16434002000127	1
19.6	PE-X 保温棉板右侧板外	Thermal insulation board(outside the right-side panel)	16434002000128	1
19.7	PE-X 保温棉板 检修板	Thermal insulation board(outside the service port cover)	16434002000100	1
20	蒸发器左连接板	Left connection plate	16421007000131	1
21	蒸发器右固定板	Fixing plate of evaporator	16421002000433	2
22	左侧板	Left side panel	16421010000061	1
23	左侧板泡沫	Foam board of left side panel	16428001000058	1
24	挂耳	Hanger	16421029000040	4

2.3 CO-D 48HNX, CO-D 60HNX



CO-D 48HNX

NO	Chinese name	Part name	Part code	Qty
1	上盖板组件	Top cover	16321009000277	1
2	过滤网法兰	Flange	16421030000206	2
3	缝制过滤网	Air filter	16444013000103	1
4	电机(三速)	Fan motor	16430001000635	1
5	风轮 φ185x170	Centrifugal fan	16444001000005	1
6	右侧板	Right panel	16421001000696	1
7	(ROHS)变压器	Transformer	16422005000017	1
8	CJ 控制板	PCB	11222541000035	1

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9	端子板 4 位	Terminal	16427001000062	1
10	电控盒盖	E-parts box cover	16421038000291	1
11	检修板	Service port cover	16421013000020	1
12	阀板 B	Vlave plate B	16421014000069	1
13	接水盘组件(吸塑)	Water pan assembly	16331001000123	1
14	回风盖板	Lower cover	16421005000556	1
15	下盖板	Lower cover	16421005000555	1
16	蜗壳固定板总成	Fixing plate of scroll case	16321009000318	1
17	蒸发器右支撑板	Right support of evaporator	16421007000140	1
18	蒸发器总成	Evaporator assembly	16324009000227	1
19	PE-X 保温棉板 出风口外	Insulation board(near the air outlet)	16434002000122	1
20	蒸发器左支撑板	Left support of evaporator	16421007000141	1
21	左侧板	Left panel	16421001000697	1
22	挂耳	Hanger	16421029000040	4

**CO-D 60HNX**

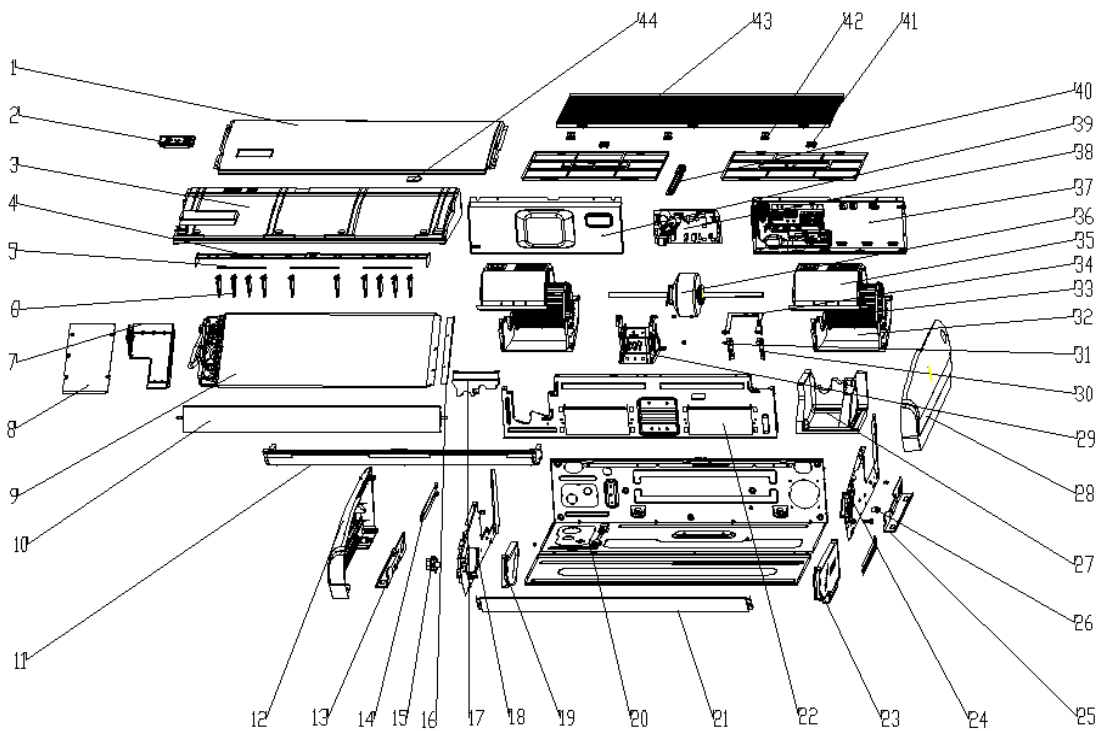
NO	Chinese name	Part name	Part code	Qty
1	上盖板组件	Top cover	16321009000277	1
2	过滤网法兰	Flange	16421030000206	2
3	缝制过滤网	Air filter	16444013000103	1
4	电机(三速)	Fan motor	16430001000635	1
5	风轮 φ185x170	Centrifugal fan	16444001000005	1
6	右侧板	Right panel	16421001000697	1
7	(ROHS)变压器	Transformer	16422005000017	1
8	CJ 控制板	PCB	11222541000035	1
9	端子板 4 位	Terminal	16427001000062	1
10	电控盒盖	E-parts box cover	16421038000291	1
11	检修板	Service port cover	16421013000020	1
12	阀板 B	Vlave plate B	16421014000069	1
13	接水盘组件(吸塑)	Water pan assembly	16331001000123	1
14	回风盖板	Lower cover	16421005000556	1
15	下盖板	Lower cover	16421005000555	1
16	蜗壳固定板总成	Fixing plate of scroll case	16321009000318	1
17	蒸发器右支撑板	Right support of evaporator	16421007000140	1

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18	蒸发器总成	Evaporator assembly	16324009000227	1
19	PE-X 保温棉板 出风口外	Insulation board(near the air outlet)	16434002000122	1
20	蒸发器左支撑板	Left support of evaporator	16421007000141	1
21	左侧板	Left panel	16421001000697	1
22	挂耳	Hanger	16421029000040	4

## 3. Ceiling Floor(F)

### 3.1 CO-F 18HNX



**R410A T1 ON/OFF LCAC B7 Series**

**CO-F 18HNX**

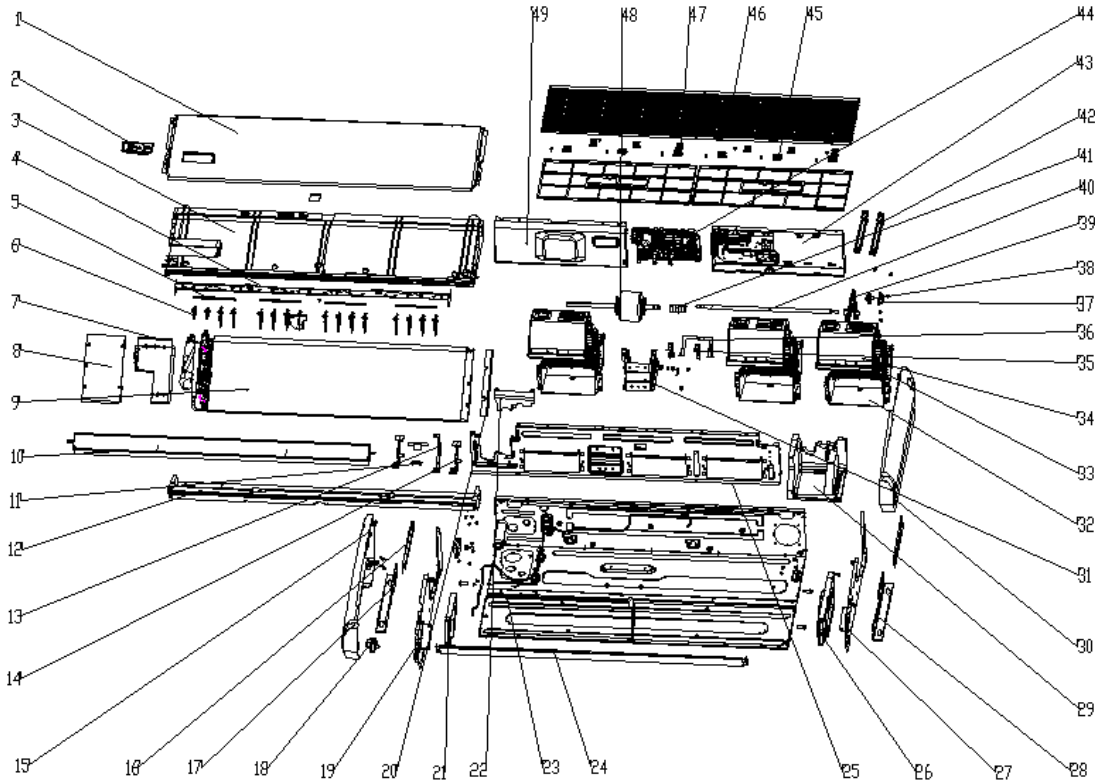
NO	Part code	Chinese name	Part name	Qty
1	16421004000399	F2 座吊机面板(喷涂)	Main mental panel (spraying)	1
2	11222023000610	显示板组件 XZ-SMG01-E1(SY)	LED Display Panel assy	1
3	16320020000001	(ROHS)F2 座吊机接水盘组件(吸塑)	Water tray assembly for F2 crane (blister)	1
4	16421002000526	2P 座吊机 F 导风架	wind guide for 2P crane	1
5	16420008000016	F 座吊机导风叶片连接杆(PP,黑色)	Connecting rod for air guide vane of crane	3
6	16420007000038	F 座吊机导风叶片 A(HIPS,底座灰)	Air guide blade A(HIPS, base ash) of crane	8
7	16321072000002	ALCF-H24A4F3/R3VDS1-C2 右导水板组件(F 坐吊机)	Right Water guide Plate Assembly	1
8	16321027000022	ALCF-H24A4F3/R3VDS1-C2 右盖板组件(F 座吊机)	Right Cover Assembly	1
9	16324018000057	ALCF-H18A4F2/R3VDS1-C2 蒸发器总成(3 排 7)1.5 蓝	Evaporator Assembly (Row 3, Row 7)1.5 blue	1
10	16320027000001	2P 座吊机 F 导风架组件	F wind guide assembly for 2P crane	1
11	16428001000099	F2 座吊机 顶泡沫组件	Top foam assembly of crane F2	1
12	16420050000001	F 座吊机右端盖(HIPS,云釉白)	HIPS (cloud glaze white)	1
13	16421040000071	F 座吊机安装挂架(右)	Installation hanger of Block F crane (right)	1
14	16421003000222	(ROHS)F 座吊机侧支撑板	Side support plate of crane in Block F	2
15	16320033000002	F 座吊机运动组件 35BYJ46*1550	F block crane motion assembly 35BYJ46*1550	1
16	16421017000025	(ROHS)F 座吊机蒸发器左导水板	Left water guide plate of F block crane evaporator	1
17	16321054000002	ALCF-H24A4F3/R3VDS1-C2 阀板组件 (F 座吊机)	Valve Plate Assembly	1
18	16421001000776	F 座吊机右侧板	F crane right side plate	1
19	16428001000097	F 座吊机 右泡沫(植绒+贴棉)	F block crane right foam (flocking + cotton sticking)	1
20	16421018000009	(ROHS)2P 座吊机 F 背板	backplane of 2P crane	1
21	16421068000009	F2 座吊机顶盖板(喷涂)	Ceiling plate of F2 crane (spraying)	1
22	16421088000008	2P 座吊机 F 蜗壳固定板	F volute mounting plate for 2P crane	1

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23	16428001000098	F 座吊机 左泡沫(植绒+贴棉)	F block crane left foam (flocking + cotton sticking)	1
24	16421001000777	F 座吊机左侧板	Left side panel of F block crane	1
25	16421040000070	F 座吊机安装挂架(左)	Installation hanger of Block F crane (left)	1
26	16420044000002	F 座吊机导风门轴套(POM,本色)	Shaft sleeve for air inlet door of crane (POM, natural color)	1
27	16428001000094	F 座吊机 阀板泡沫	F block crane valve plate foam	1
28	16420050000002	F 座吊机左端盖(HIPS,云釉白)	HIPS (cloud glaze white)	1
29	16421035000082	(ROHS)F 座吊机电机架(100,φ65)	Fan motor bracket (100, φ65)	1
30	16421029000067	(ROHS)F 座吊机电机抱攀(L)(φ65)	F block crane motor lock pan (L)	1
31	16421029000066	(ROHS)F 座吊机电机抱攀(R)(φ65)	F block crane motor lock pan	1
32	16420027000002	蜗壳(下)F 座吊机(ABS,白色)(ROHS)	Volute (bottom)F Crane (ABS, white)	2
33	16420018000001	F 座吊机风轮 158*180(ABS+GF10,本色)	Fan wheel 158*180(ABS+GF10)	2
34	16421007000183	(ROHS)F 座吊机电机连接板(交流)	(ROHS) Motor Connecting plate of Crane F block (AC)	1
35	16420027000001	蜗壳(上)F 座吊机(ABS,白色)(ROHS)	Volute (top)F Crane (ABS, white)(ROHS)	2
36	16421035000084	单相室内电机(三速)FP40F 50/60Hz	Fan motor FP40F	1
37	16421038000387	F 座吊机电控盒	F block crane electric control box	1
38	16322006000042	(ROHS)F 座吊机电控盒组件(TOX)	TOX for Block F crane	1
39	16421042000021	F 座吊机电控盒盖	Electric control box cover of crane block F	1
40	16421002000529	F 座吊机后支撑板	F block crane rear support plate	1
41	16420049000001	F 座吊机格栅固定销(HIPS,月光白)	F block crane grid fixed pin (HIPS, moonlight white)	3
42	16420051000001	F 座吊机格栅铰链(HIPS,月光白)	F block crane grid hinge (HIPS, moonlight white)	3
43	16420010000042	F2 座吊机进风格栅((HIPS),云釉白)	F2 crane air inlet grille (HIPS, cloud glaze white)	1
44	16421083000001	F 座吊机集水盘固定板	Fixed plate for collecting tray of block F crane	1



3.2 CO-F 24HNX, CO-F 36HNX



NO	Part Code	Chinese Name	Part Name	Qty
1	16421004000400	F3 座吊机面板(喷涂)	Main mental pane(spraying)	1
2	11222023000610	显示板组件 XZ-SMG01-E1 (SY)	LED Display Panel assy	1
3	16320020000002	(ROHS) F3 座吊机接水盘组件(吸塑)	(ROHS) Water tray assembly for F3 crane (blister)	1
4	16320027000002	3P 座吊机 F 导风架组件	F wind guide assembly for 3P crane	1
5	16420008000016	F 座吊机导风叶片连接杆(PP, 黑色)	Connecting rod for air guide vane of crane (PP, black)	4
6	16420007000039	F 座吊机导风叶片 B(HIPS, 底座灰)	Air guide blade B(HIPS, base ash)	2
7	16321072000002	ALCF-H24A4F3/R3VDS1-C2 右导水板组件(F 坐吊机)	Right Water guide Plate Assembly (F crane)	1
8	16321027000022	ALCF-H24A4F3/R3VDS1-C2 右盖板组件(F 座吊机)	Right Cover Assembly (F block crane)	1
9	16324018000058	ALCF-H24A4F3/R3VDS1-C2 蒸发器总成(3 排 7)1.5 蓝	evaporator Assembly (Row 3, Row 7)1.5 blue	1
10	16320028000002	3P 座吊机 F 导风门组件	F damper assembly for 3P crane	1
11	16421002000525	F 座吊机前固定板	F block crane front fixing plate	1

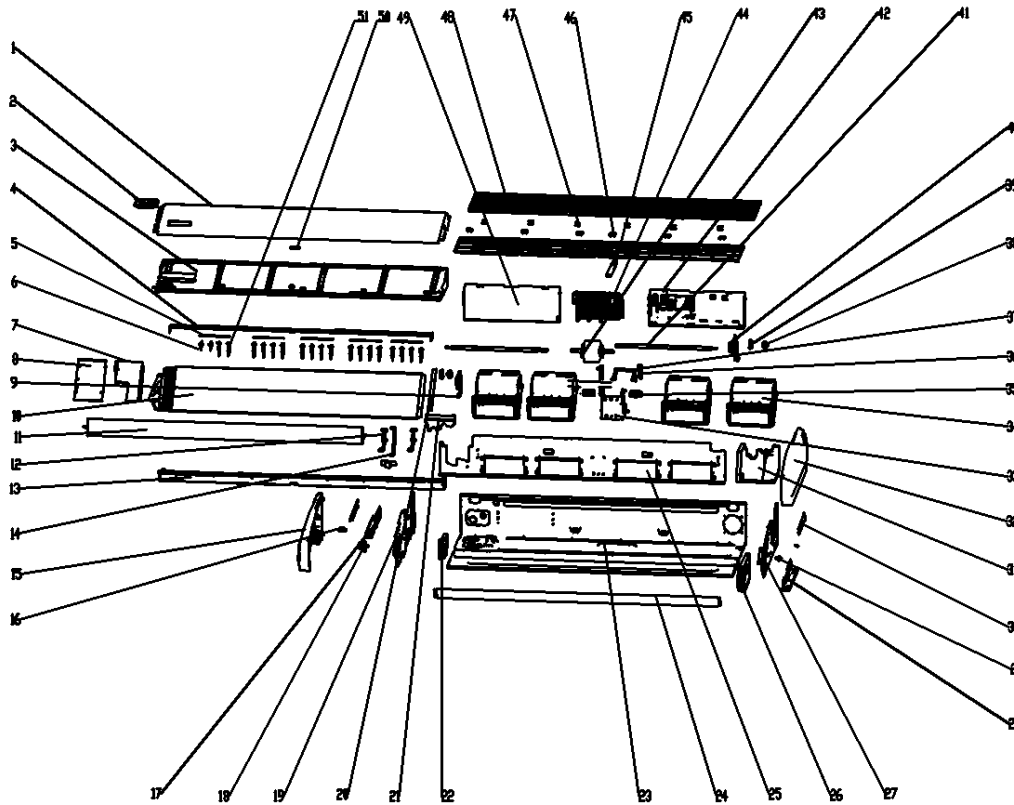
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12	16428001000100	F3 座吊机 顶泡沫组件	F3-seat crane top foam assembly	1
13	16321047000003	ALCF-H24A4F3/R3VDS1-C2 前支撑板组件 (F 座吊机)	Front Support Plate Assembly (F block crane)	1
14	16420006000011	F 座吊机导风门支架 (POM, 底座灰)	Air damper bracket for Crane with Block F (POM)	2
15	16420050000001	F 座吊机右端盖 (HIPS, 云釉白)	HIPS (cloud glaze white)	1
16	16421003000222	(ROHS) F 座吊机侧支撑板	(ROHS) Side support plate of crane	2
17	16421040000071	F 座吊机安装挂架 (右)	Installation hanger of Block F crane (right)	1
18	16320033000002	F 座吊机运动组件 35BYJ46*1550	F block crane motion assembly 35BYJ46*1550	1
19	16421001000776	F 座吊机右侧板	F crane right side plate	1
20	16421017000025	(ROHS) F 座吊机蒸发器左导水板	Left water guide plate of F block crane evaporator	1
21	16428001000097	F 座吊机 右泡沫 (植绒+贴棉)	F block crane right foam (flocking + cotton sticking)	1
22	16321054000002	ALCF-H24A4F3/R3VDS1-C2 阀板组件 (F 座吊机)	Valve Plate Assembly (F block crane)	1
23	16421018000010	(ROHS) 3P 座吊机 F 背板	(ROHS) F backplane of 3P crane	1
24	16421068000010	F3 座吊机顶盖板 (喷涂)	F3 crane roof cover (spraying)	1
25	16421088000009	3P 座吊机 F 蜗壳固定板	F volute mounting plate for 3P crane	1
26	16428001000098	F 座吊机 左泡沫 (植绒+贴棉)	F block crane left foam (flocking + cotton sticking)	1
27	16421001000777	F 座吊机左侧板	Left side panel of F block crane	1
28	16421040000070	F 座吊机安装挂架 (左)	Installation hanger of Block F crane (left)	1
29	16428001000094	F 座吊机 阀板泡沫	F block crane valve plate foam	1
30	16420050000002	F 座吊机左端盖 (HIPS, 云釉白)	HIPS (cloud glaze white)	1
31	16421035000084	(ROHS) F 座吊机电机架 (118, $\phi$ 65)	(ROHS) Electric rack of F block Crane (118, 65)	1
32	16420027000002	蜗壳 (下) F 座吊机 (ABS, 白色) (ROHS)	Volute (bottom) F Crane (ABS, white) (ROHS)	3
33	16420018000001	F 座吊机风轮 158*180 (ABS+GF10, 本色)	Fan wheel 158*180 (ABS+GF10)	3
34	16420027000001	蜗壳 (上) F 座吊机 (ABS, 白色) (ROHS)	Volute (top) F Crane (ABS, white) (ROHS)	3
35	16421029000067	(ROHS) F 座吊机电机抱攀 (L) ( $\phi$ 65)	(ROHS) F block crane motor lock pan (L) (65)	1
36	16421007000183	(ROHS) F 座吊机电机连接板 (交流)	(ROHS) Motor Connecting plate of Crane F block (AC)	1
37	16432016000075	橡胶轴承 GR-75D/DL	Rubber bearing GR-75D/DL	2
38	16421002000467	GR-51D/DHE 轴承压板	Gr-51d /DHE bearing press plate	2
39	16421082000001	F 座吊机轴承固定座 (L)	F block crane bearing fixed block (L)	1

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40	16421080000002	(ROHS) 加长轴(空心) $\phi$ 15*507.5	(ROHS) extended axis (hollow) 15*507.5	1
41	16444007000036	(ROHS) 联轴器 $\phi$ 14*57.5 (18 款)	ROHS coupling 14*57.5(18 types)	1
42	16421002000529	F 座吊机后支撑板	F block crane rear support plate	2
43	16421038000387	F 座吊机电控盒	F block crane electric control box	1
44	16322006000042	(ROHS) F 座吊机电控盒组件 (TOX)	TOX for Block F crane	1
45	16420049000001	F 座吊机格栅固定销 (HIPS, 月光白)	F block crane grid fixed pin (HIPS, moonlight white)	3
46	16420010000043	F3 座吊机进风格栅 ((HIPS), 云釉白)	F3-seat crane air inlet grille (CLOUD glaze white)	1
47	16420051000001	F 座吊机格栅铰链 (HIPS, 月光白)	F block crane grid hinge (HIPS, moonlight white)	3
48	16430001000663	单相室内电机 (三速) FP100F 50/60Hz	Fan motor FP100F	1
49	16421042000021	F 座吊机电控盒盖	Electric control box cover of crane block F	1

3.3 CO-F 48HNX, CO-F 60HNX



NO.	Part Code	Chinese Name	Part Name	Qty
1	16421004000401	F5 座吊机面板(喷涂)	Main mental panel (spraying)	1
2	11222023000610	显示板组件 XZ-SMG01-E1(SY)	LED Display Panel assy	1
3	16320020000003	(ROHS)F5 座吊机接水盘组件(吸塑)	(ROHS) Water tray assembly for F5 crane (blister)	1
4	16321039000006	5P 座吊机 F 导风架组件(翻边自铆)	5P crane F air Guide assembly (flanging self-riveting)	1
5	16420008000016	F 座吊机导风叶片连接杆(PP,黑色)	Connecting rod for air guide vane of crane with Block F (PP, black)	5
6	16420007000039	F 座吊机导风叶片 B(HIPS,底座灰)	Air guide blade B(HIPS, base ash)	2
7	16321072000002	ALCF-H24A4F3/R3VDS1-C2 右导水板组件(F 坐吊机)	Alcf-h24a4f3 /R3VDS1-C2 Right Water guide Plate Assembly (F crane)	1
8	16421071000001	ALCF-H24A4F3/R3VDS1-C2 右盖板组件(F 座吊机)	Alcf-h24a4f3 /R3VDS1-C2 Right Cover	1

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			Assembly (F block crane)	
9	16421082000002	F 座吊机轴承固定座(R)	F block crane Bearing fixed block (R)	1
10	16324018000059	ALCF-H48A5F5/R3VDS1-C2 蒸发器总成(3排 7)1.5 蓝	Alcf-h48a5f5 /R3VDS1-C2 evaporator Assembly (Row 3, Row 7)1.5 blue	1
11	16320028000003	5P 座吊机 F 导风门组件	5P crane F damper assembly	2
12	16420006000011	F 座吊机导风门支架(POM,底座灰)	Air damper bracket for Crane with Block F (POM, base ash)	1
13	16428001000101	F5 座吊机 顶泡沫组件	F5-seat crane top foam assembly	1
14	16321047000003	ALCF-H24A4F3/R3VDS1-C2 前支撑板组件(F 座吊机)	Alcf-h24a4f3 /R3VDS1-C2 Front Support Plate Assembly (F block crane)	1
15	16420050000001	F 座吊机右端盖(HIPS,云釉白)	HIPS (cloud glaze white)	1
16	16421002000525	F 座吊机前固定板	F block crane front fixing plate	1
17	16421040000071	F 座吊机安装挂架(右)	Installation hanger of Block F crane (right)	1
18	16320033000003	5P 座吊机 F 运动组件 35BYJ46*2000	F motion assembly of 5P crane 35BYJ46*2000	1
19	16421001000776	F 座吊机右侧板	F crane right side plate	1
20	16421017000025	(ROHS)F 座吊机蒸发器左导水板	(ROHS) Left water guide plate of F block crane evaporator	1
21	16321054000002	ALCF-H24A4F3/R3VDS1-C2 阀板组件(F 座吊机)	Alcf-h24a4f3 /R3VDS1-C2 Valve Plate Assembly (F block crane)	1
22	16428001000097	F 座吊机 右泡沫(植绒+贴棉)	F block crane right foam (flocking + cotton sticking)	1
23	16421018000011	(ROHS)5P 座吊机 F 背板	(ROHS) F backplane of crane with 5P seat	1
24	16421068000011	F5 座吊机顶盖板(喷涂)	F5 crane roof cover (spraying)	1
25	16421088000010	5P 座吊机 F 蜗壳固定板	5P crane F volute fixing plate	1

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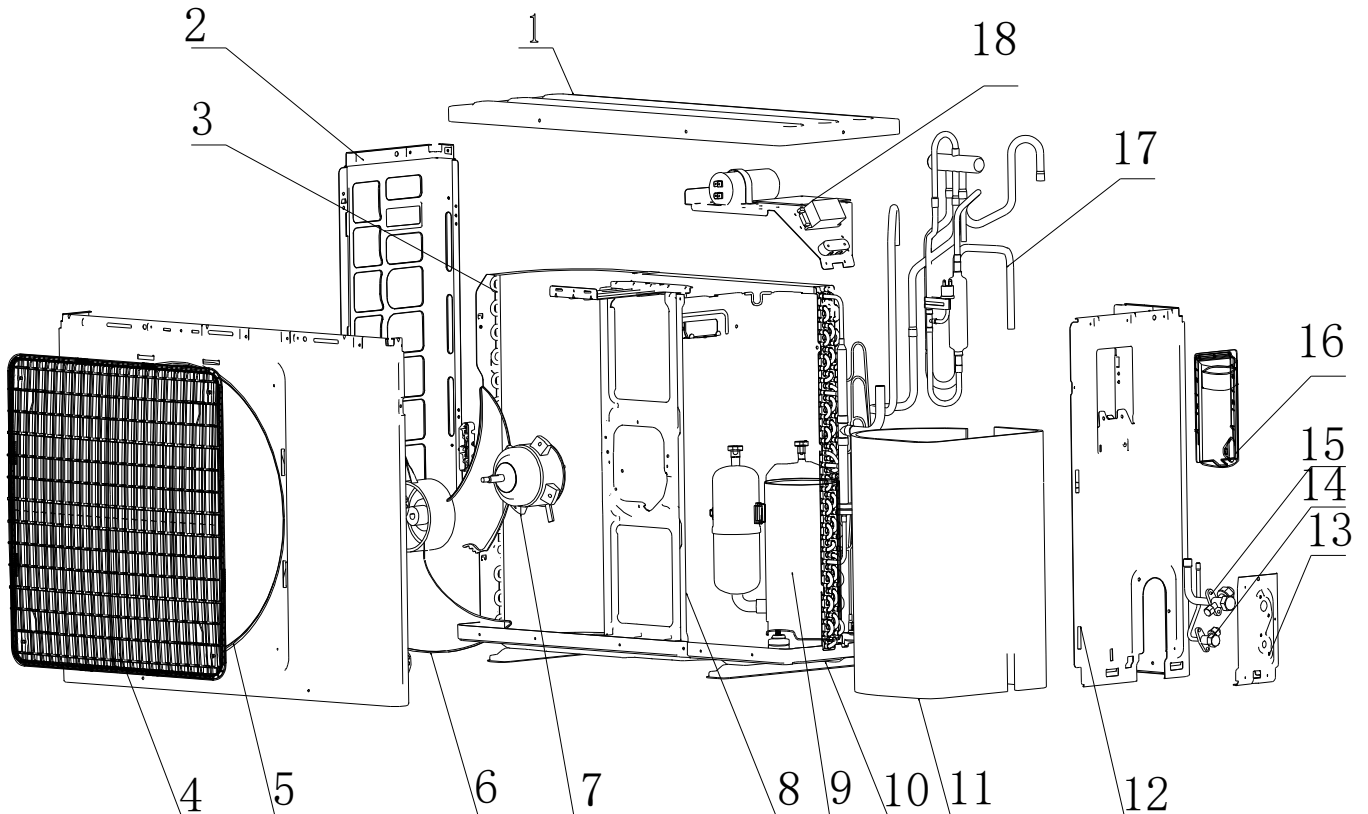
26	16428001000098	F 座吊机 左泡沫(植绒+贴棉)	F block crane left foam (flocking + cotton sticking)	1
27	16421001000777	F 座吊机左侧板	Left side panel of F block crane	1
28	16421040000070	F 座吊机安装挂架(左)	Installation hanger of Block F crane (left)	1
29	16420044000002	F 座吊机导风门轴套(POM,本色)	Shaft sleeve for air inlet door of crane with Block F (POM, natural color)	1
30	16421003000222	(ROHS)F 座吊机侧支撑板	(ROHS) Side support plate of crane in Block F	2
31	16428001000094	F 座吊机 阀板泡沫	F block crane valve plate foam	1
32	16420050000002	F 座吊机左端盖(HIPS,云釉白)	HIPS (cloud glaze white)	1
33	16421035000084	(ROHS)F 座吊机电机架(118, φ 65)	(ROHS) Electric rack of F block Crane (118, 65)	1
34	16420027000002	蜗壳(下)F 座吊机(ABS,白色)(ROHS)	Volute (bottom)F Crane (ABS, white)(ROHS)	
35	16420018000001	F 座吊机风轮 158*180(ABS+GF10,本色)	F block crane wind wheel 158*180(ABS+GF10, natural color)	
36	16420027000001	蜗壳(上)F 座吊机(ABS,白色)(ROHS)	Volute (top) Crane with F seat (ABS, white)(ROHS)	4
37	16444007000036	(ROHS)联轴器 φ 14*57.5(18 款)	ROHS coupling 14*57.5(18 types)	2
38	16421029000067	(ROHS)F 座吊机电机抱攀(L)(φ 65)	(ROHS)F block crane motor lock pan (L)(65)	1
39	16421007000180	(ROHS)F 座吊机电机连接板(直流)	(ROHS) Motor Connecting plate of Crane F block (DC)	1
40	16432016000075	橡胶轴承 GR-75D/DL	Rubber bearing GR-75D/DL	2
41	16421002000467	GR-51D/DHE 轴承压板	Gr-51d /DHE bearing press plate	2
42	16421082000001	F 座吊机轴承固定座(L)	F block crane bearing fixed block (L)	1
43	16421080000002	(ROHS)加长轴(空心) φ 15*507.5	(ROHS) extended axis (hollow) 15*507.5	2
44	16421038000387	F 座吊机电控盒	F block crane electric control box	1
45	16430001000664	单相室内电机(三速)FP140F 50/60Hz	Fan motor FP140F	1
46	16321019000021	F 座吊机电控总成	Electric control	1

**R410A T1 ON/OFF LCAC B7 Series**

			assembly for block F crane	
47	16421002000529	F 座吊机后支撑板	F block crane rear support plate	2
48	16420049000001	F 座吊机格栅固定销(HIPS,月光白)	F block crane grid fixed pin (HIPS, moonlight white)	3
49	16420051000001	F 座吊机格栅铰链(HIPS,月光白)	F block crane grid hinge (HIPS, moonlight white)	3
50	16420010000044	F5 座吊机进风格栅((HIPS),月光白)	F5 crane air inlet grille (Moonlight white)	1
51	16421042000021	F 座吊机电控盒盖	Electric control box cover of crane block F	1
52	16421083000001	F 座吊机集水盘固定板	Fixed plate for collecting tray of block F crane	1

4. Outdoor Unit

4.1 CO-E 12HNX



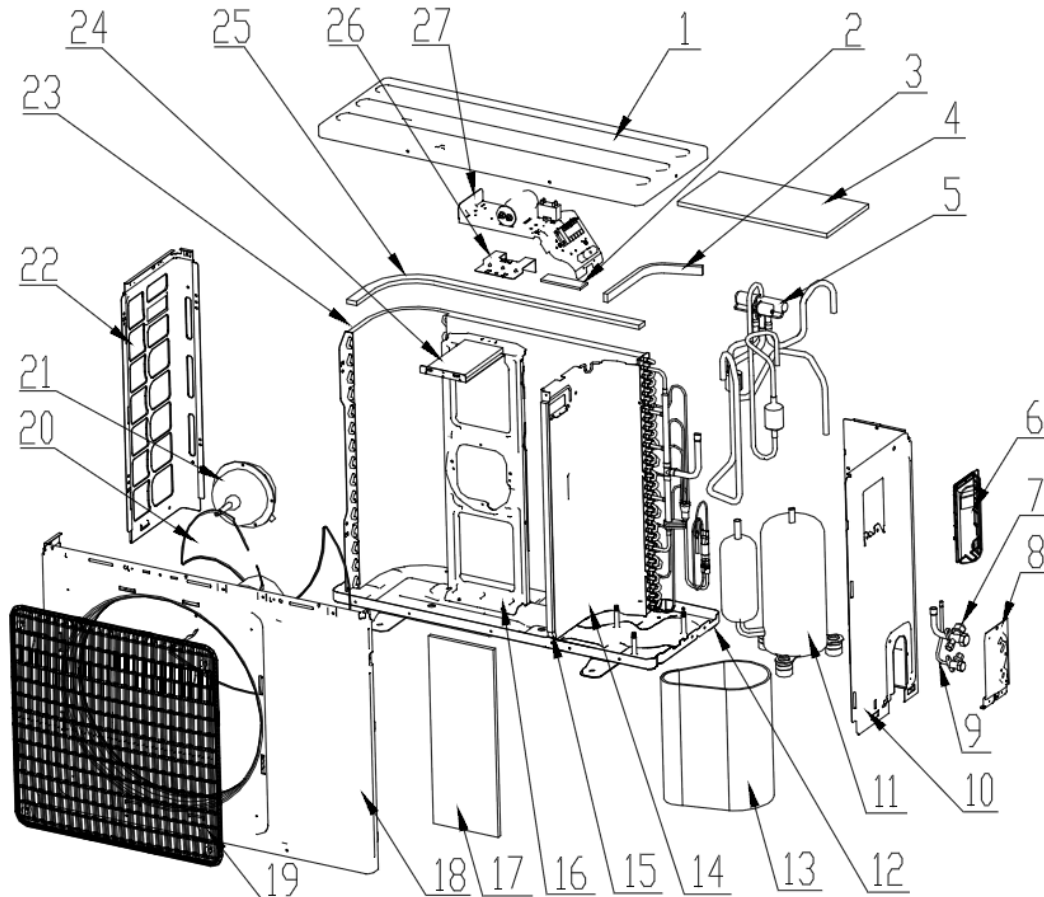
NO.	Chinese name	Part name	Part code	Qty
1	R26W/L 顶盖板	Top cover	16421005000604	1
2	R26W/L 左侧板	Left panel	16421001000726	1
3	冷凝器总成	Condenser assembly	16324004000599	1
4	面板塑料网罩	Wind net	11320026000038	1
5	面板	Front panel	16421004000348	1
6	轴流风叶	Propeller fan	11320009000049	1
7	外电机 YDK25-6	Outdoor unit motor	11230004000394	1
8	电机架	Motor bracket	11321002000039	1
9	压缩机	Compressor	11223016000011	1
10	底盘组件	Chassis assembly	11221502000447	1
11	压缩机消音棉	Silencing cotton for compressor	11327002000020	1
12	右侧板	Right panel	16421001000725	1
13	阀板	Valve plate	16421014000090	1
14	截止阀 (φ6.35)	Stop valve(φ6.35)	11325041000004	1
15	截止阀 (φ12.7)	Stop valve(φ12.7)	16441004000077	1
16	电器盖板	E-parts cover	11320068000009	1



## R410A T1 ON/OFF LCAC B7 Series

17	四通阀管路组件	4-way valve assembly	11225516001019	1
18	电器架	Support for electrical assembly	11321015000033	1

### 4.2 CO-E 18HNX



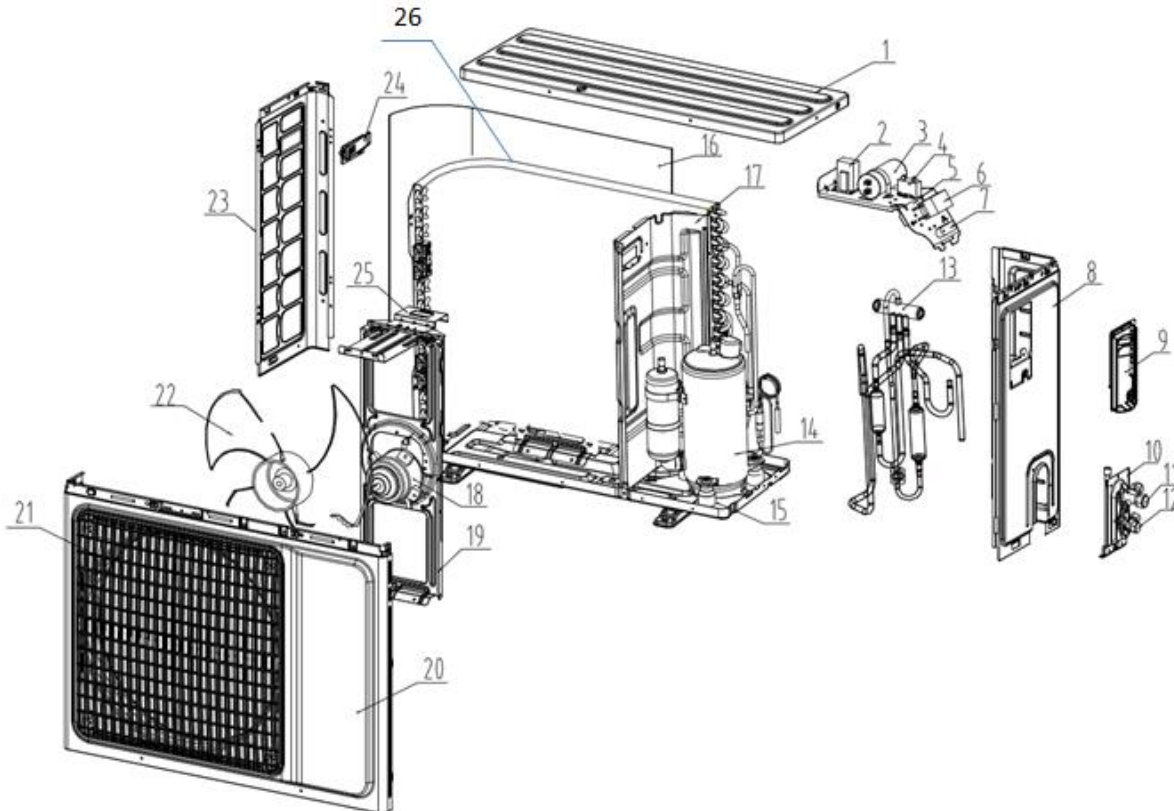
N0.	Materiel No.	Chinese name	Part Name	Quantity
1	16421005000607	顶盖板	Top cover board	1
2	16434004000123	闭孔橡塑保温棉板	PU sponge	2
3	16434001000046	PE 保温棉板	PE sponge	1
4	16434001000378	PE 保温棉板	PE sponge	1
5	16325004001699	四通阀组件	Four-way valve assembly	1
6	11320068000009	电器盖板	Cover for electric components	1
7	16441004000046	截止阀	Stop valve	1
8	16421014000090	阀板	Stop valve board	1
9	16441004000077	截止阀	Stop valve	1
10	16421001000728	右侧板	Right-hand board	1
11	11223015000163	压缩机	Compressor	1
12	16321004000207	底盘组件	Chassis assembly	1
13	11327002000029	压缩机保温棉	Compressor sound absorber	1
14	11321025000049	隔风立板	Wind-defending vertical board	1

**R410A T1 ON/OFF LCAC B7 Series**

15	16434001000330	PE 保温棉板	PE sponge	1
16	11321002000031	电机架	Motor bracket assembly	1
17	16434003000048	聚氨酯消音绵板	PU sponge	1
18	16421004000350	面板	Panel	1
19	11320026000039	面板网罩	Net for panel	1
20	11320009000063	轴流风叶	Axial-flow wind leaves	1
21	11230004000405	电机	Outdoor Motor	1
22	16421001000729	左侧板	Left-hand board	1
23	16324004000460	冷凝器总成	Condenser assembly	1
24	16434001000332	PE 保温棉板	PE sponge	1
25	16434003000116	聚氨酯消音棉板	PU sponge	1
26	11321029000007	冷凝器挂耳	condenser hanging earing	1
27	16330004000039	电气总成	Electric bracket assembly	1

**R410A T1 ON/OFF LCAC B7 Series**

**CO-E 24HNX**

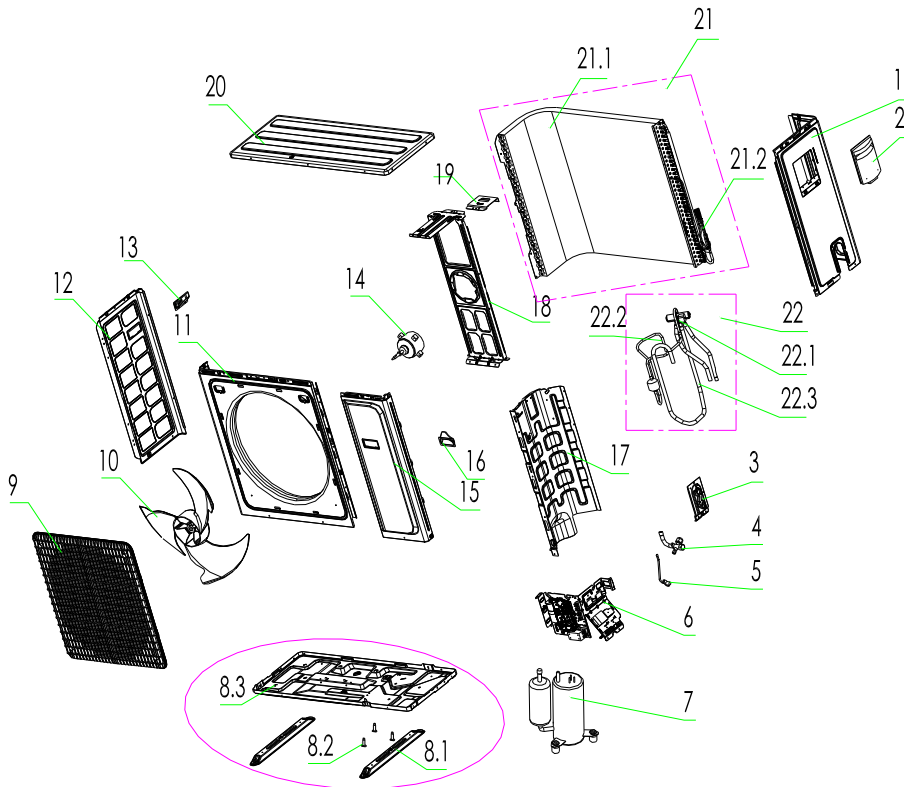


No.	Part No.	Chinese Name	Part Name	Quantity
1	11321009000052	顶盖板	Top Cover	1
2	11330015000014	交流接触器	Relay contact	1
3	11330009000088	压缩机电容	Capacitor	1
4	11330010000105	风机电容	Capacitor(Motor)	1
5	16330004000040	电气总成	Control assembly	1
6	16427001000081	端子板	Terminal block	1
7	11220544000008	双联压线座	Clamp	1
8	11321157000002	右侧板	Right panel	1
9	11320068000009	电器盖板	E-parts cover	1
10	11321031000027	阀板	Valve board	1
11	11225517000011	截止阀 5/8in	Stop Valve(5/8)	1
12	16441004000080	截止阀 3/8in	Stop Valve(3/8)	1
13	11225516001165	四通阀管路组件	Four-way valve assembly	1
14	11223003000396	压缩机 (美芝 KSG240V1VMP)	Compressorassembly	1
15	11221502000529	底盘组件	Chassis	1
17	11321025000063	隔风立板	Barrier	1
18	11230004000385	R 外电机 YDK69-6A	ODU fan motor	1
19	11321002000036	电机架	Motor Bracket	1
20	11321005000092	面板	Front Panel (Big)	1
21	11320026000052	方形面板塑料网罩	Plastic Grille	1

### R410A T1 ON/OFF LCAC B7 Series

22	11320009000064	R 轴流风叶新 2P 470*140AS 全新料	Axial-flow Fan	1
23	11321156000002	左侧板	Left side panel	1
24	11320097000011	左挖手	Left hanger	1
25	11321029000009	冷凝器挂耳	Condenser connector	1
26	16324020000102	冷凝器总成	Condenser assembly	1

### 4.3 CO-E 36HNX

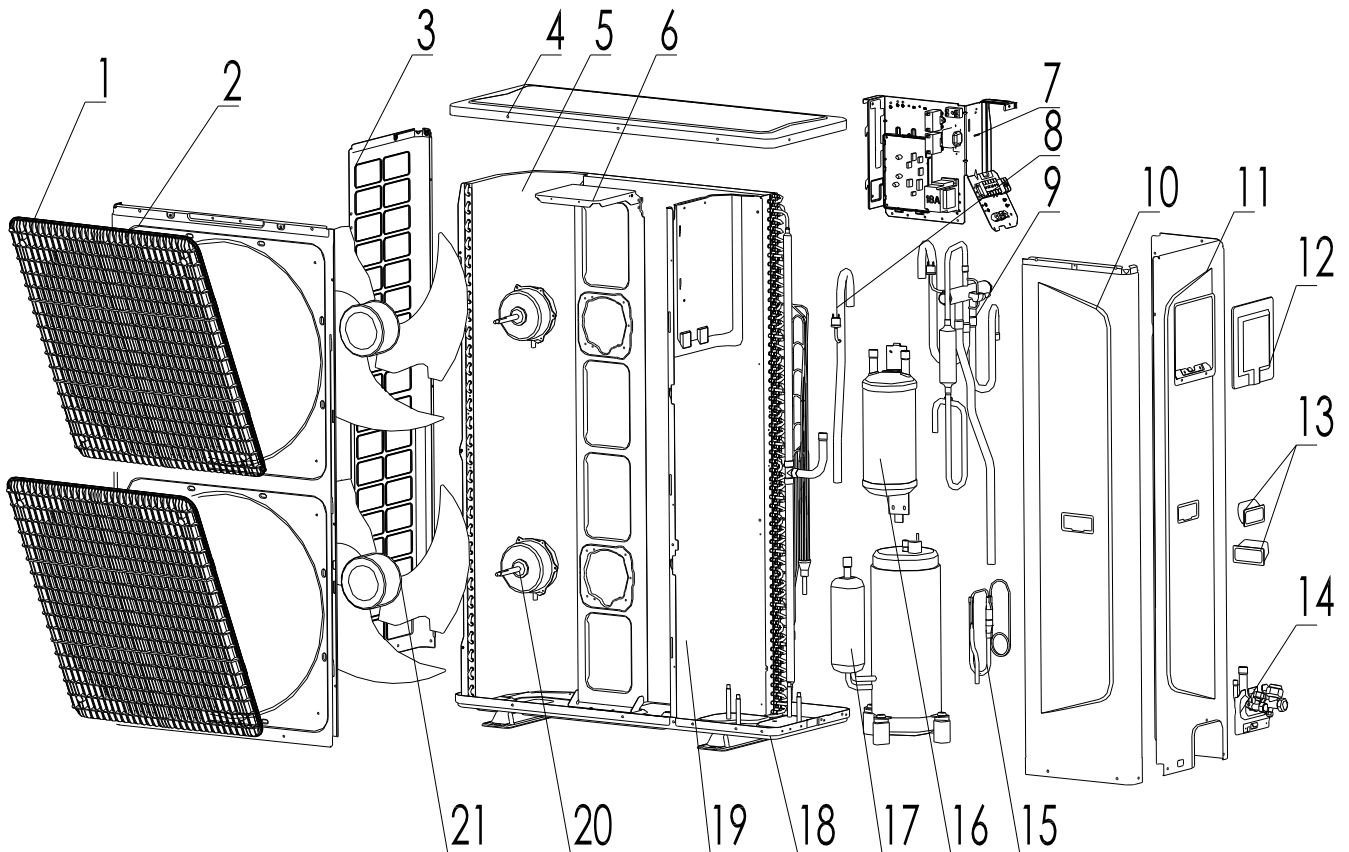


序号	物料编码	物料描述	数量
1	11321157000027	右侧板	1
2	11320068000006	电器盖板	1
3	16421014000090	阀板	1
4	11225517000037	A 截止阀组件 Dg13	1
5	16441004000080	截止阀 3/8in 针阀	1
6	11321015000069	电器架	1
7	16438004000133	压缩机 QXFS-F41sN050	1
8	16321004000216	底盘组	1
8.1	11321023000018	底脚	2
8.2	14731005000044	泵脚螺栓	3
8.3	11321014000143	底盘	1
9	11320026000057	面板塑料网罩	1
10	11320009000061	R 轴流风叶	1
11	11321005000099	大面板	1
12	11321156000010	左侧板	1

### R410A T1 ON/OFF LCAC B7 Series

13	11320097000010	挖手	1
14	11230004000046	R 外电机	1
15	11321005000100	小面板	1
16	11320097000010	左侧板挖手	1
17	11321025000072	隔风立板	1
18	11321002000038	电机架	1
19	11321029000038	冷凝器挂耳	1
20	11321009000054	顶盖板	1
21	16324020000101	冷凝器总成	1
21.1	16324004000603	冷凝器组件	1
21.2	16325019000083	出液管组件	1
22	16325020000084	四通阀组件	1
22.1	16426088000003	四通换向阀	1
22.2	16325017000080	排气管组件	1

### 4.4 CO-E 60HNX

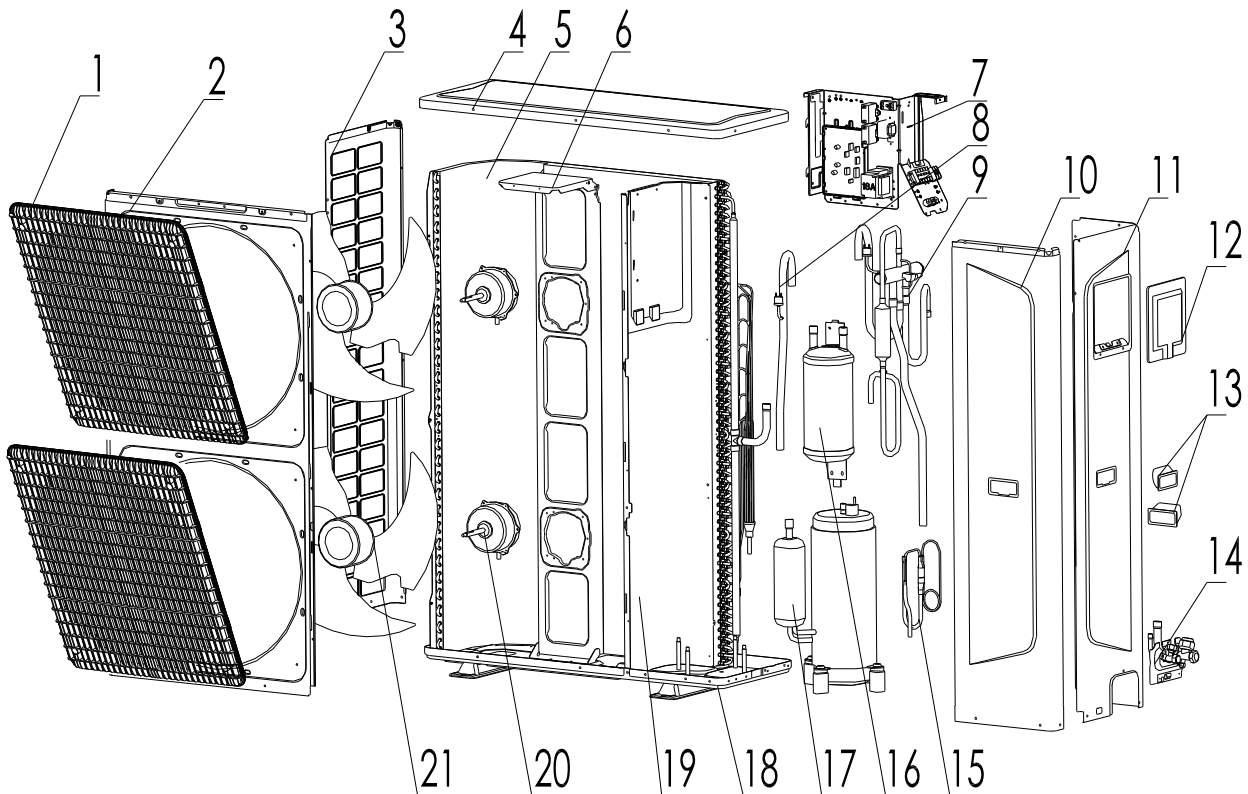


No.	Chinese Name	Part Name	Part Code	Qty
1	面板塑料网罩	Screen	11320026000049	2
2	大面板	Big Board	16421004000360	1
3	左侧板	Left-side plate	16421004000362	1
4	顶盖板	Lamina tecti	16421004000364	1
5	冷凝器总成	Condenser assy	16324020000098	1

### R410A T1 ON/OFF LCAC B7 Series

6	双排冷凝器卡板	Condenser snap-gauge	11321065000005	1
7	CJ 控制板	Control Board	11222542000085	1
8	回气管组件	muffler assembly	16325018000055	1
9	四通阀管路组件	Four-way valve assembly	16325020000082	1
10	左侧板	Left-side plate	16421004000362	1
11	右侧板	Right-side plate	16421001000747	1
12	电控盒	Control Box	16420016000027	1
13	小挖手	Dig hand	11320097000003	2
14	阀板	Valve plate	16421014000099	1
15	节流组件	orifice union	16325021000064	1
16	气液分离器	gas-liquid separator	16442023000048	1
17	压缩机及配件	Compressor and accessories	16438004000131	1
18	底盘组件	chassis assembly	16421028000197	1
19	电机支架(组件)	Motor frame	16321002000155	1
20	室外电机	Motor	16430001000640	2
21	R 轴流风叶	Axial-flow fan	11320009000065	2

### 4.5 CO-E 48HNX



序号	物料编码	物料描述	数量
1	11320026000049	面板塑料网罩	2

**R410A T1 ON/OFF LCAC B7 Series**

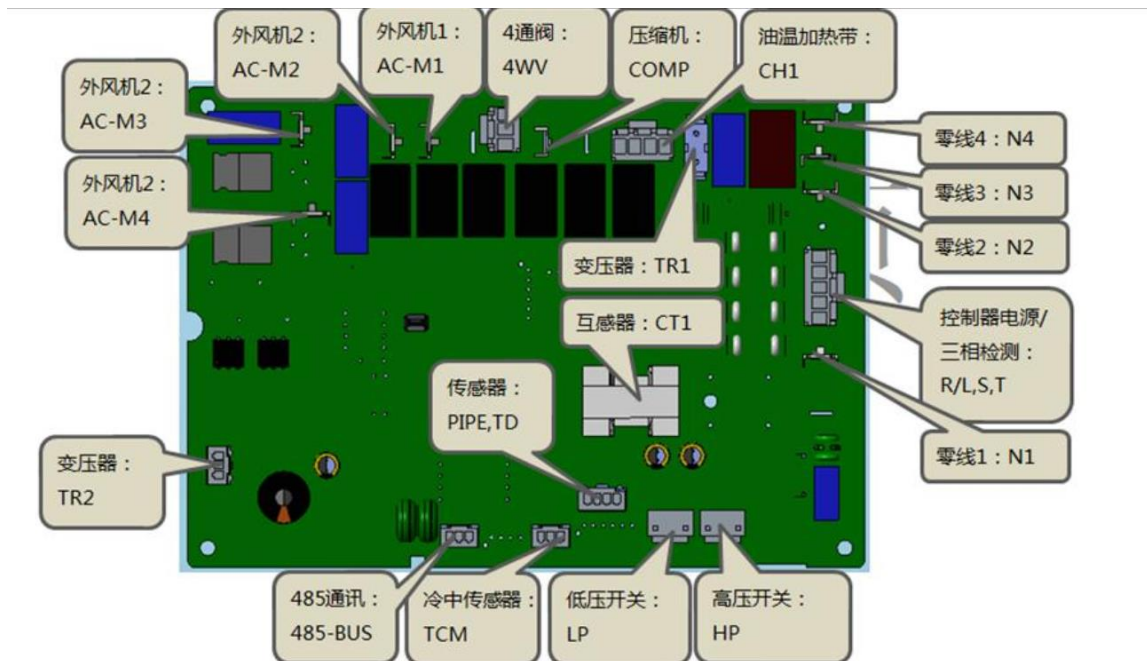
2	16421004000360	大面板	1
3	16421004000362	左侧板	1
4	16421004000364	顶盖板	1
5	16324020000099	冷凝器总成	1
6	11321065000005	双排冷凝器卡板	1
7	11222542000085	CJ 控制板	1
8	16325018000069	回气管组件	1
9	16325020000090	四通阀管路组件	1
10	16421004000362	左侧板	1
11	16421001000747	右侧板	1
12	16421038000342	电控盒	1
13	11320097000003	小挖手	2
14	16421014000099	阀板	1
15	16325021000069	节流组件	1
16	16426074000003	气液分离器	1
17	16438004000130	压缩机及配件	1
18	16321018000071	底盘组件	1
19	16321002000155	电机支架(组件)	1
20	16430001000640	室外电机	2
21	11320009000065	R 轴流风叶	2

# Part10 PCB Instruction

## 1. Outdoor Unit PCB

### 1.1 CO-E 36HNX, CO-E 48HNX, CO-E 60HNX

11222542000142

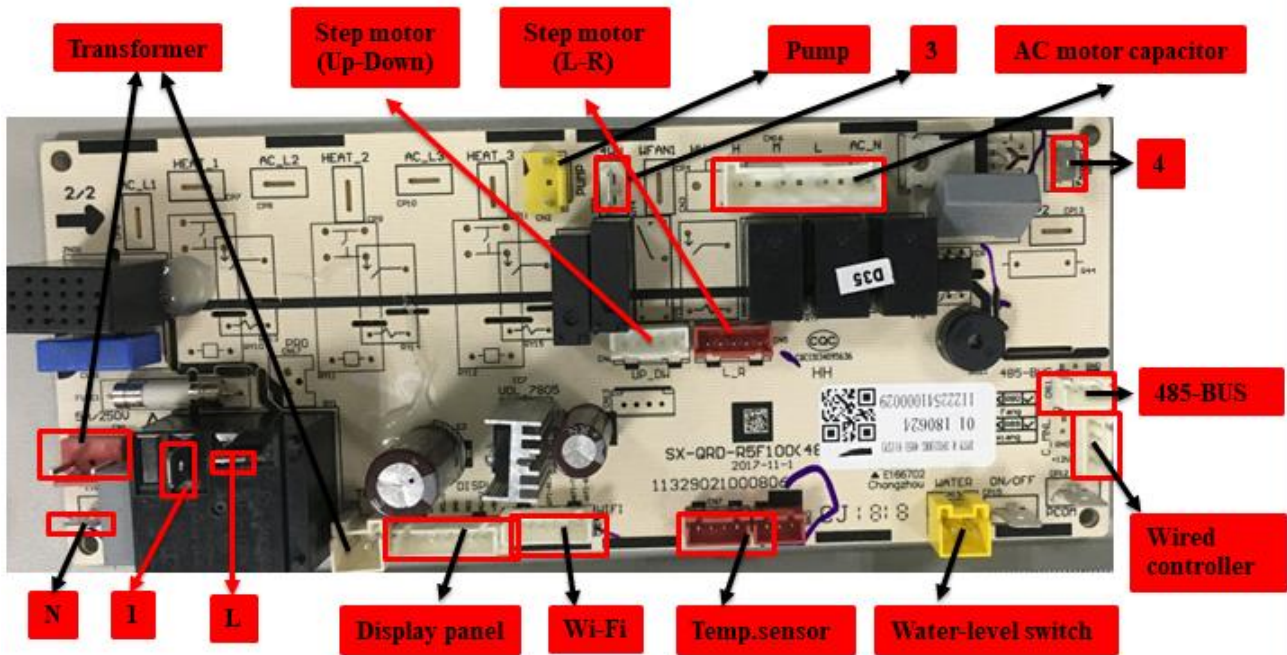




## 2. Indoor Unit PCB

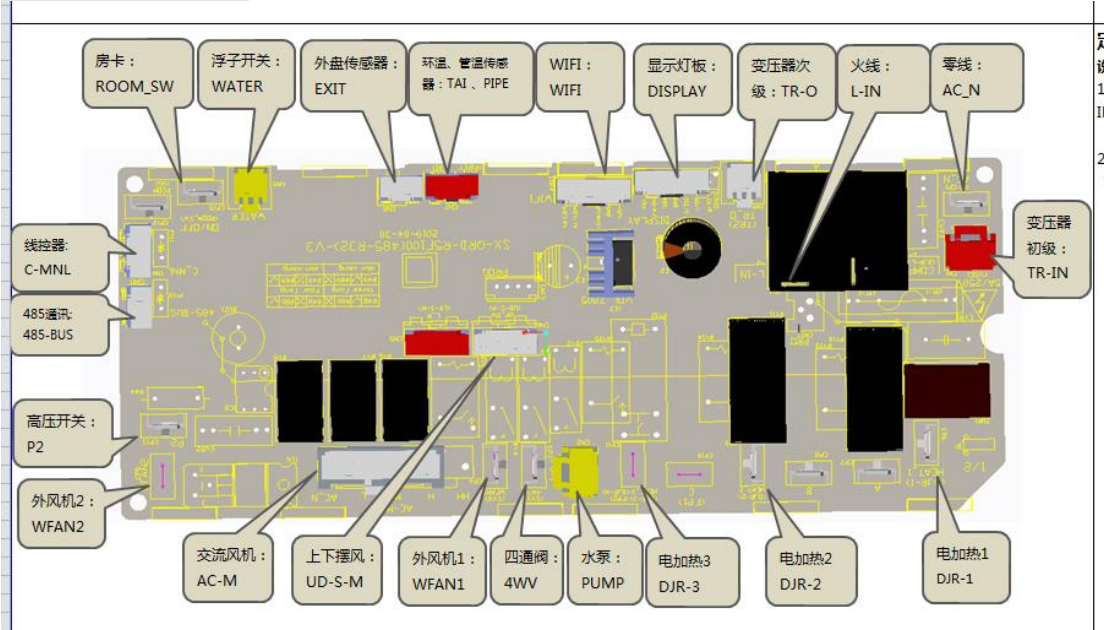
### 2.1 12K(Cassette),18K/24K/36K(1Ph~) Cassette,Ceiling Floor,Duct

11222541000029



### 2.2 36K,48K,60K(3Ph~) Cassette,Ceiling Floor,Duct

11222541000072



# Part11 Trouble Shooting

## 1. Failure code display

When AC has failure, indoor display board and wire controller will show error codes

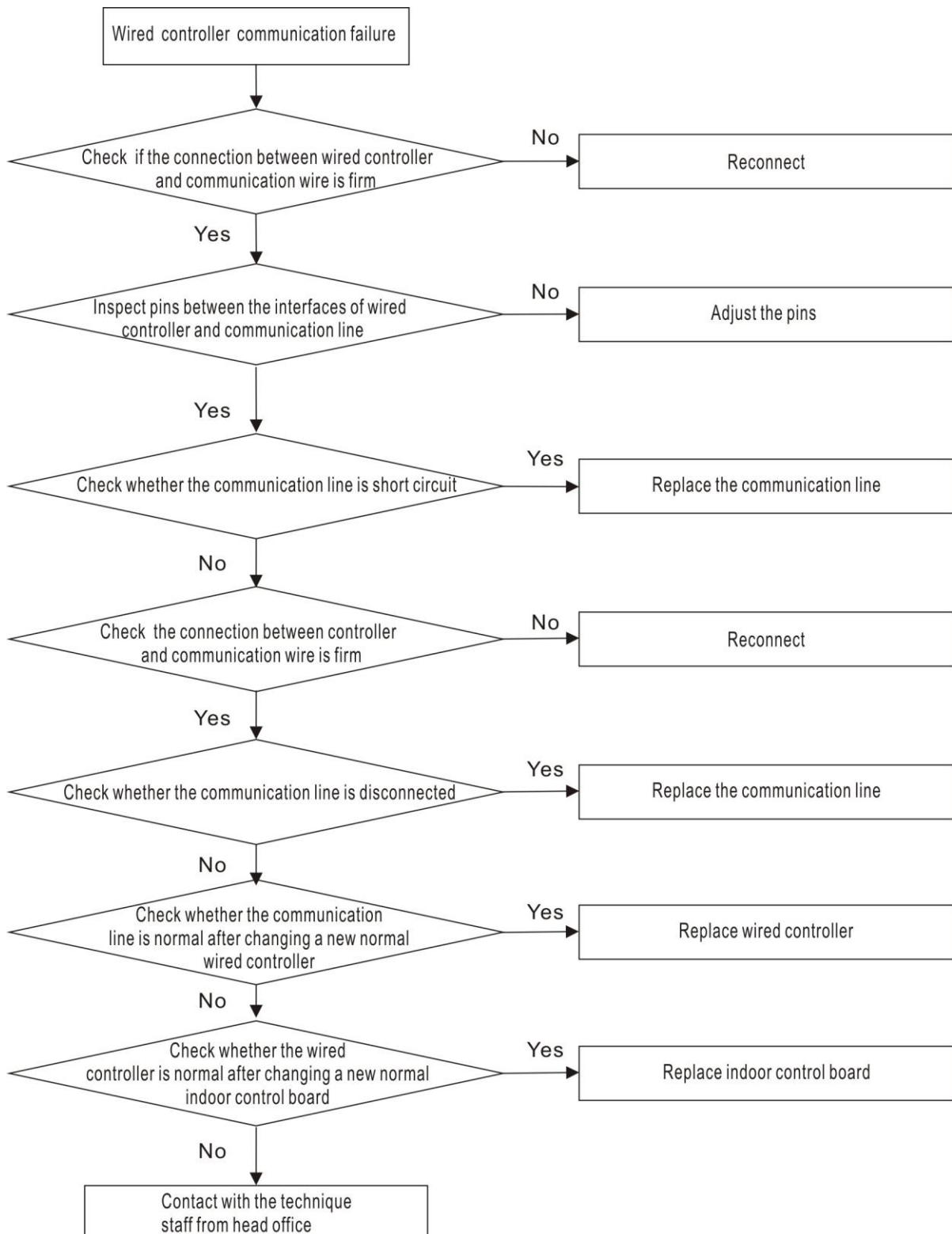
Error code	Error code definition	Recovery or not	Problem possible reasons
E0	Lack of refrigerant	No	Compressor internal protection
			System is short of refrigerant
			Reversing failure of 4 way valve
E1	TA (Indoor temperature sensor) is abnormal	Yes	Sensor damage
			Poor contact of sensor
E2	TW(Defrosting temperature sensor) is abnormal	Yes	Sensor damage
			Poor contact of sensor
E3	TE(Indoor coil sensor) is abnormal	Yes	Sensor damage
			Poor contact of sensor
E4	Drainage system failure	Yes	Damage of water pump
			Damage of water level switch
			Water level switch is locked
E5	Communication failure of wired controller	Yes	Communication wire sequence error
			Poor contact of communication wire
E6	Outdoor unit protection(phase sequence)	No	The power cable phase is missing
			Power cable phase sequence error
E7	TL(Outdoor condensing temperature sensor) is abnormal	Yes	Sensor damage
			Poor contact of sensor
E8	TP(Discharge temperature sensor) is abnormal	Yes	Sensor damage
			Poor contact of sensor
E9	Low pressure protection	Yes	System is short of refrigerant
EA	Outdoor unit protection (Discharge temperature is too high)	No	External protection device action
F1	Communication failure between indoor unit and outdoor unit	Yes	Communication wire sequence error

**R410A T1 ON/OFF LCAC B7 Series**

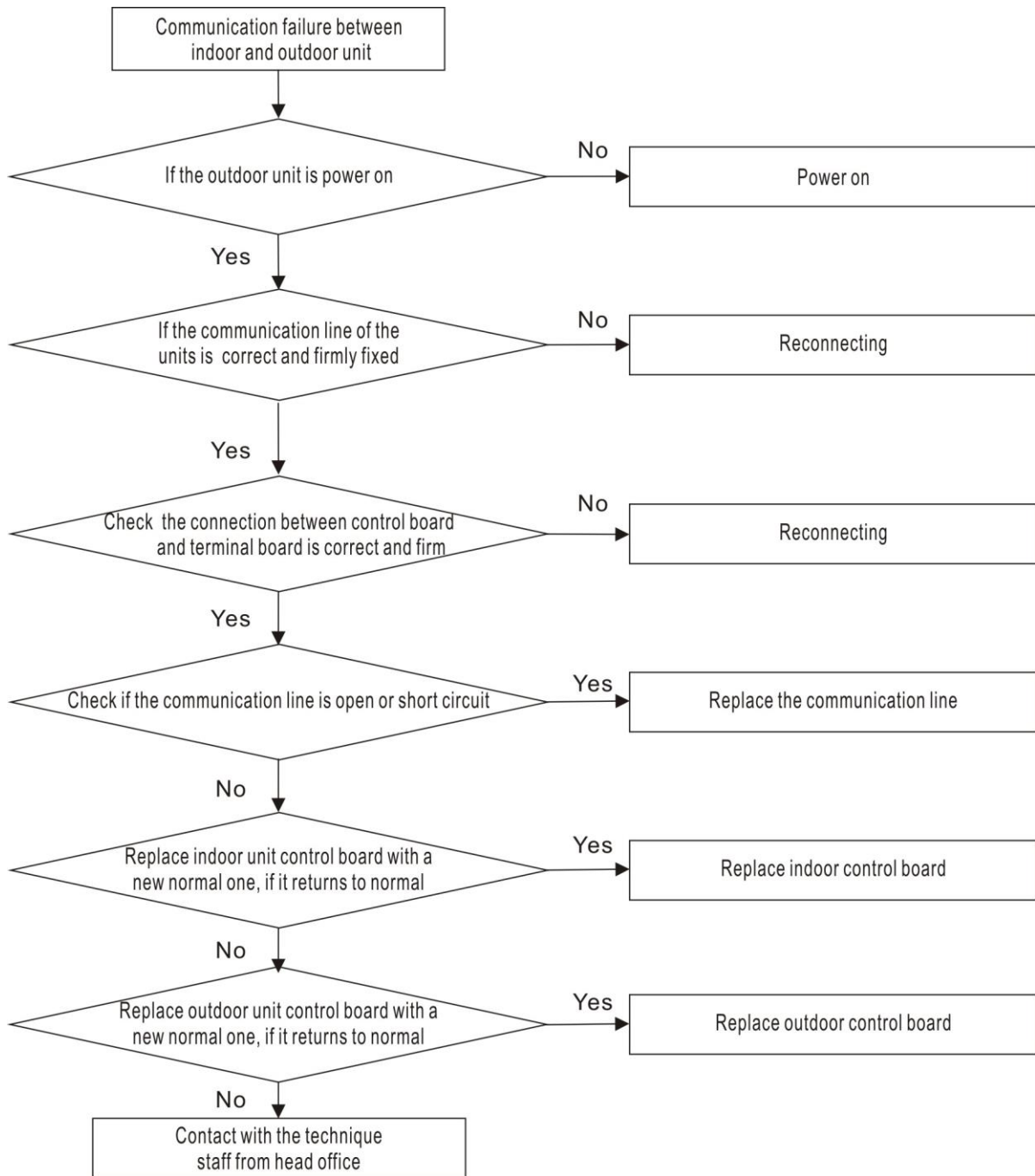
			Poor contact of communication wire
F2	Exhaust overtemperature protection	Yes	System is blocked or fault of the outdoor fan
F3	Outdoor fan is abnormal	Yes	Poor contact of outdoor motor
			Motor is broken
F4	Indoor fan is abnormal	Yes	Poor contact of indoor motor
			Motor is broken
F5	Outdoor temperature sensor is abnormal	Yes	Sensor damage
			Poor contact of sensor
F6	Compressor overcurrent protection	No	Compressor is blocked
			Low voltage
F7	Dial switch is abnormal	Yes	Wrong position of dial switch
FB	Indoor power protection	Yes	Wrong wiring
F9	High pressure protection	Yes	Condenser is blocked
			Abnormal operation of the outdoor fan
			System pipe is blocked

## 2. Failure analysis

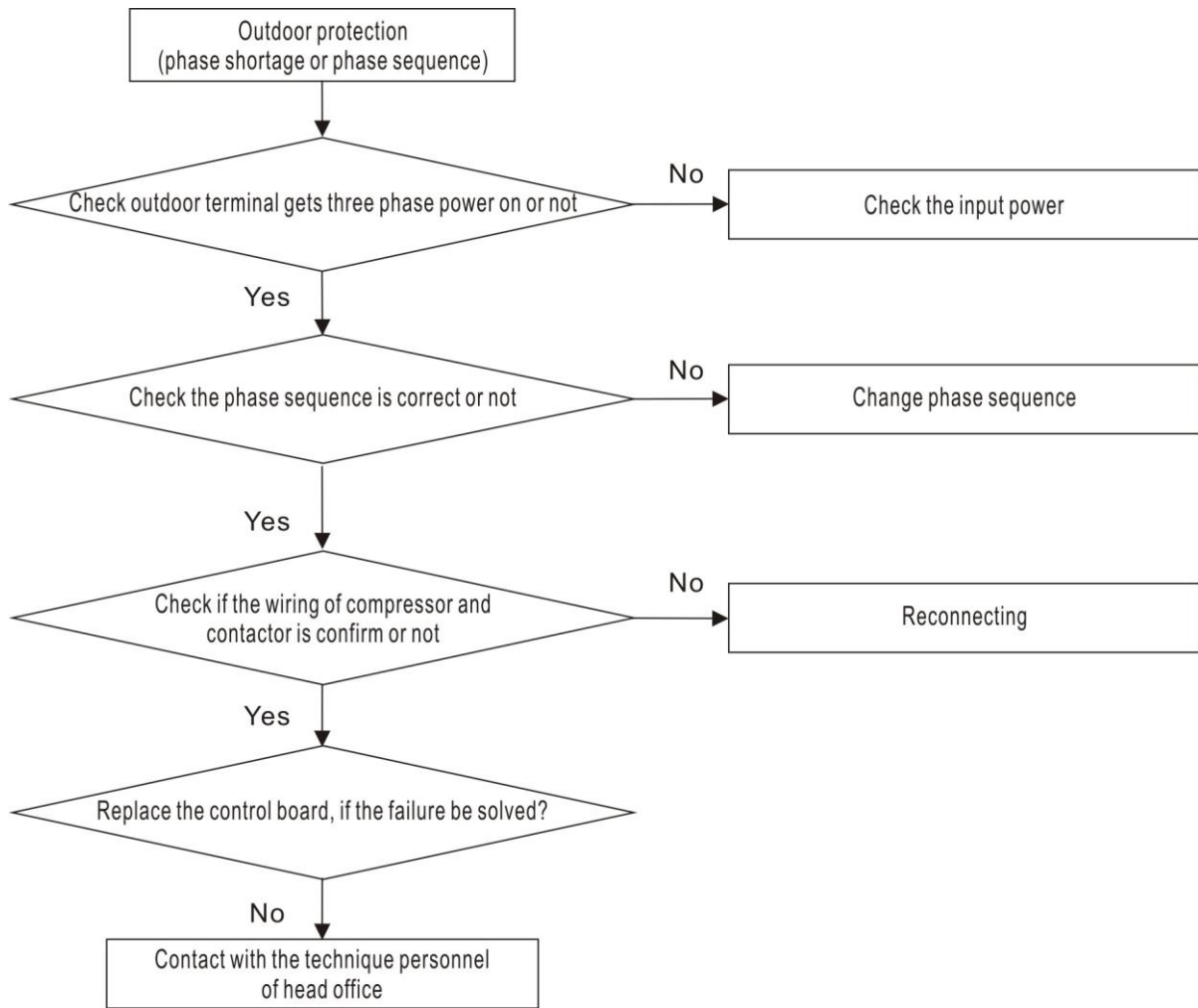
### 2.1 [H2] Wired controller communication failure



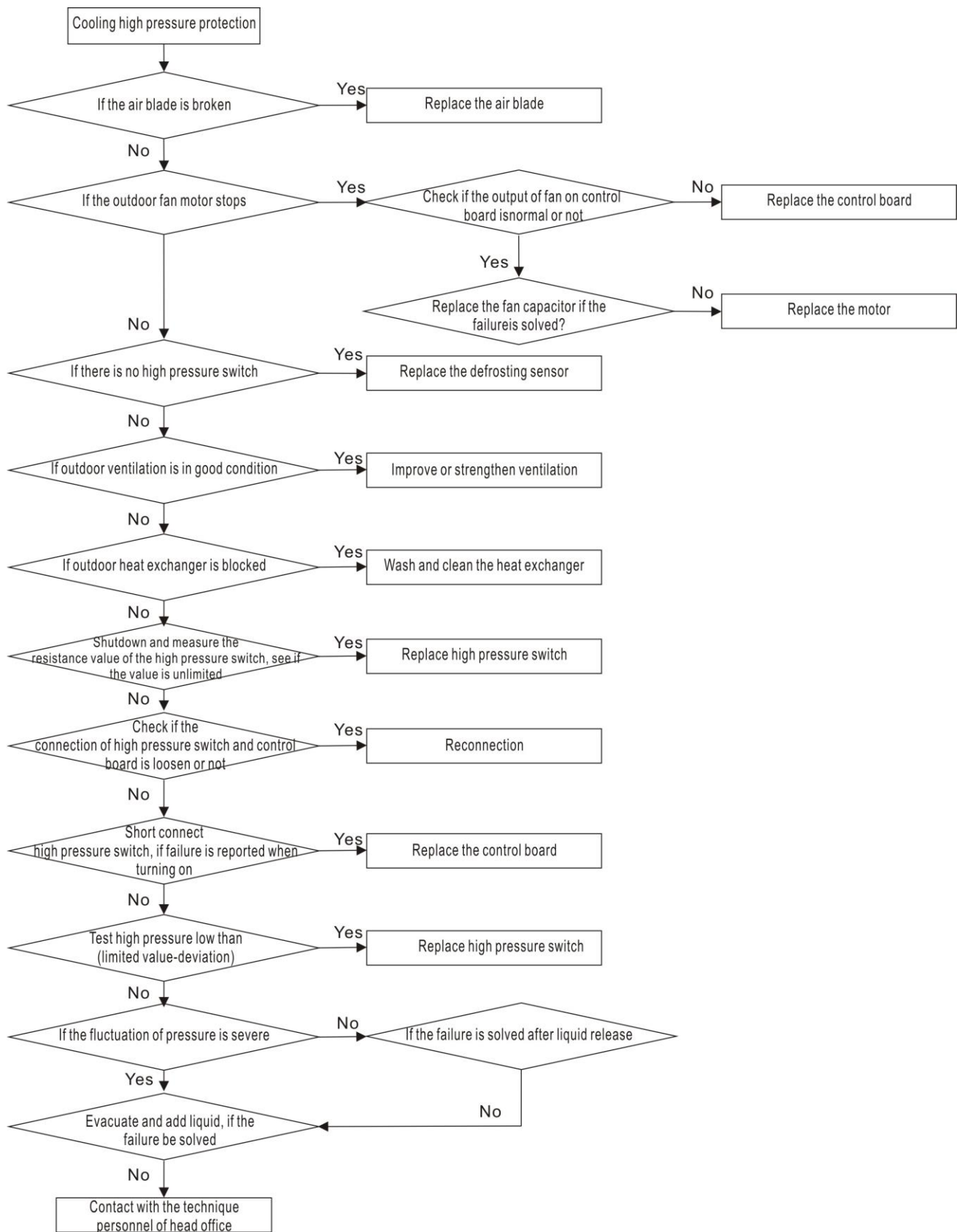
2.2 【E5/5E】 Communication failure between indoor and outdoor unit



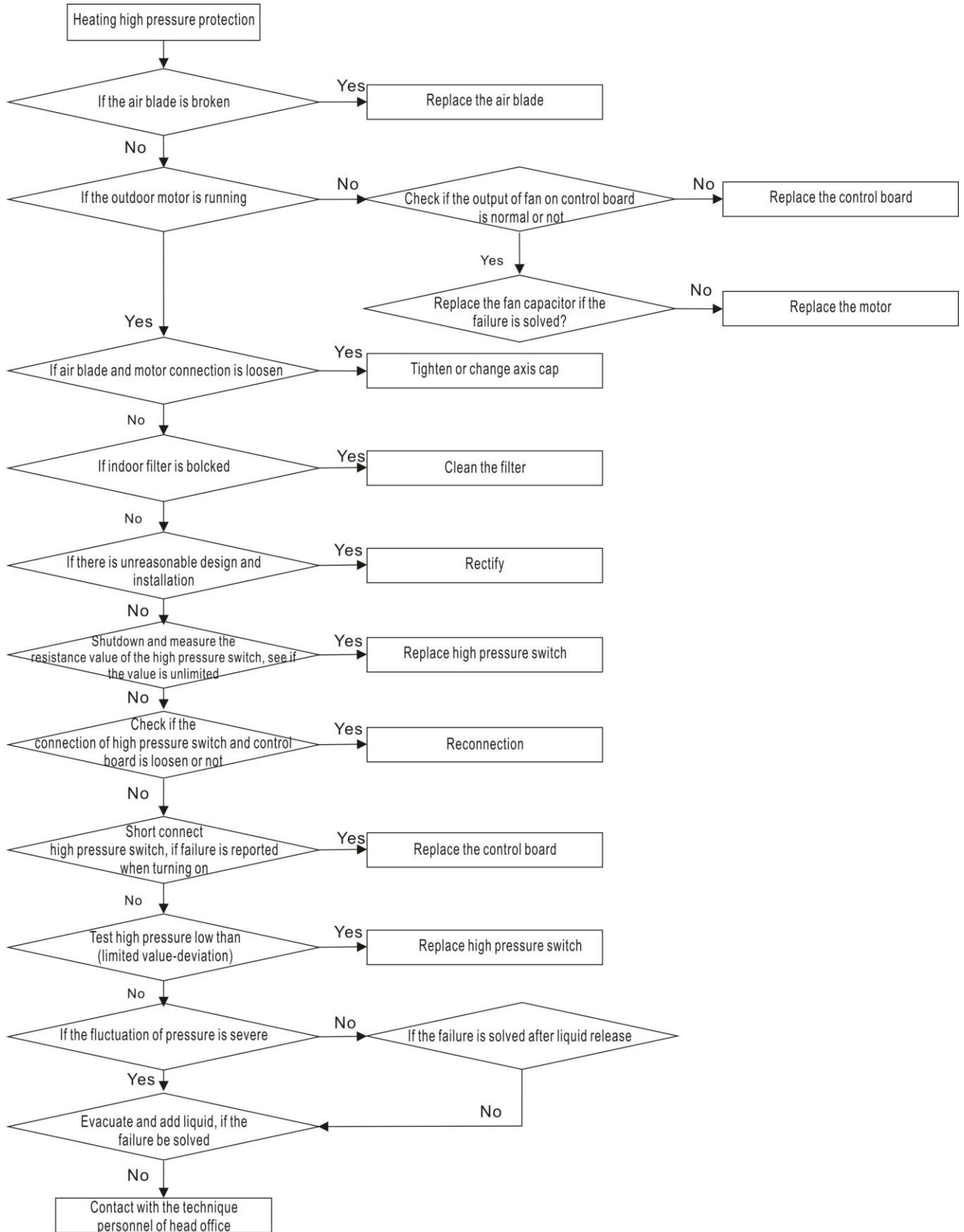
Outdoor protection(phase sequence)



2.3 【P2】 Cooling high pressure protection

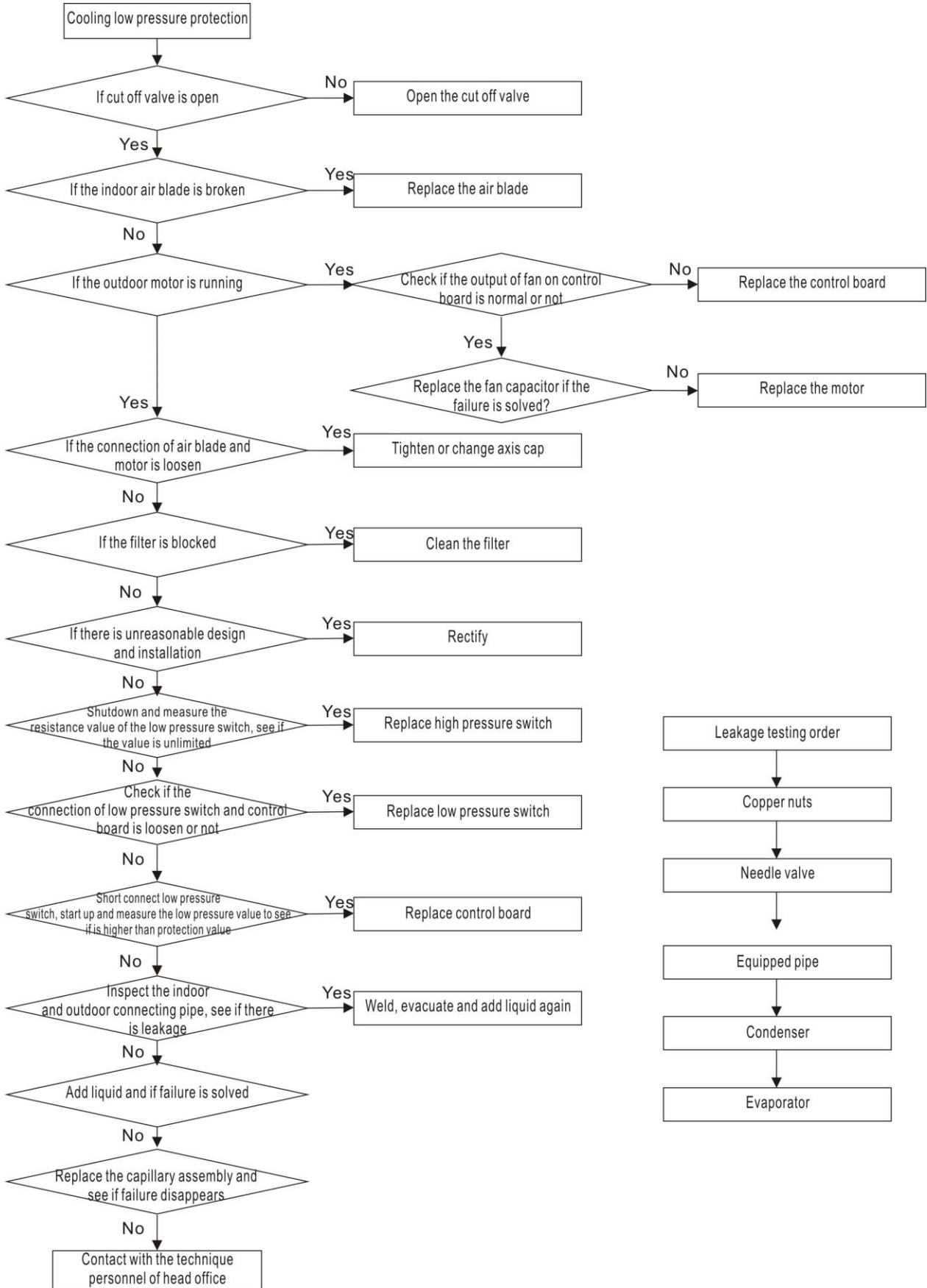


**[P2] Heating high pressure protection**



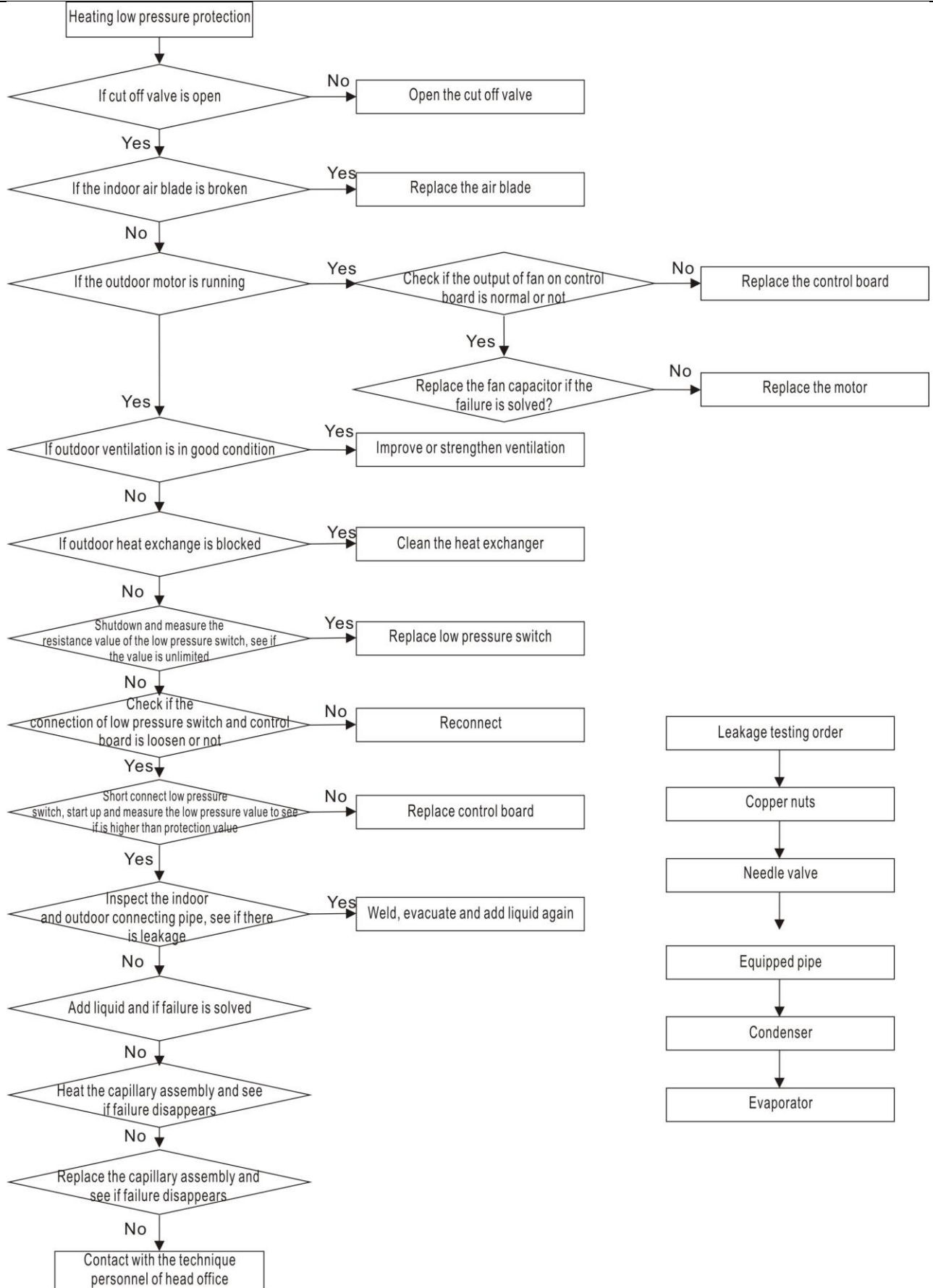


2.4 [H6] Cooling low pressure protection

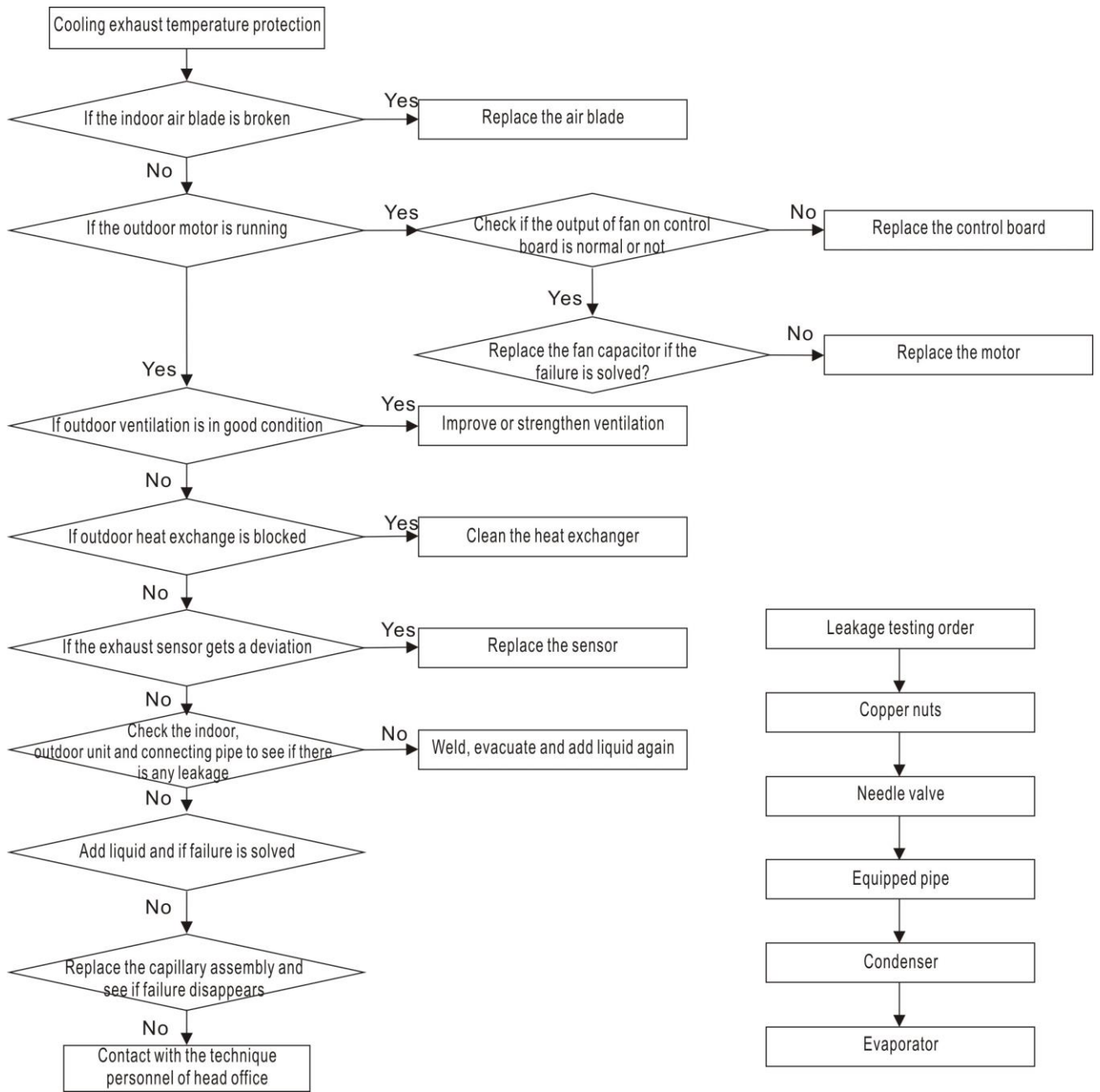


[H6] Heating low pressure protection

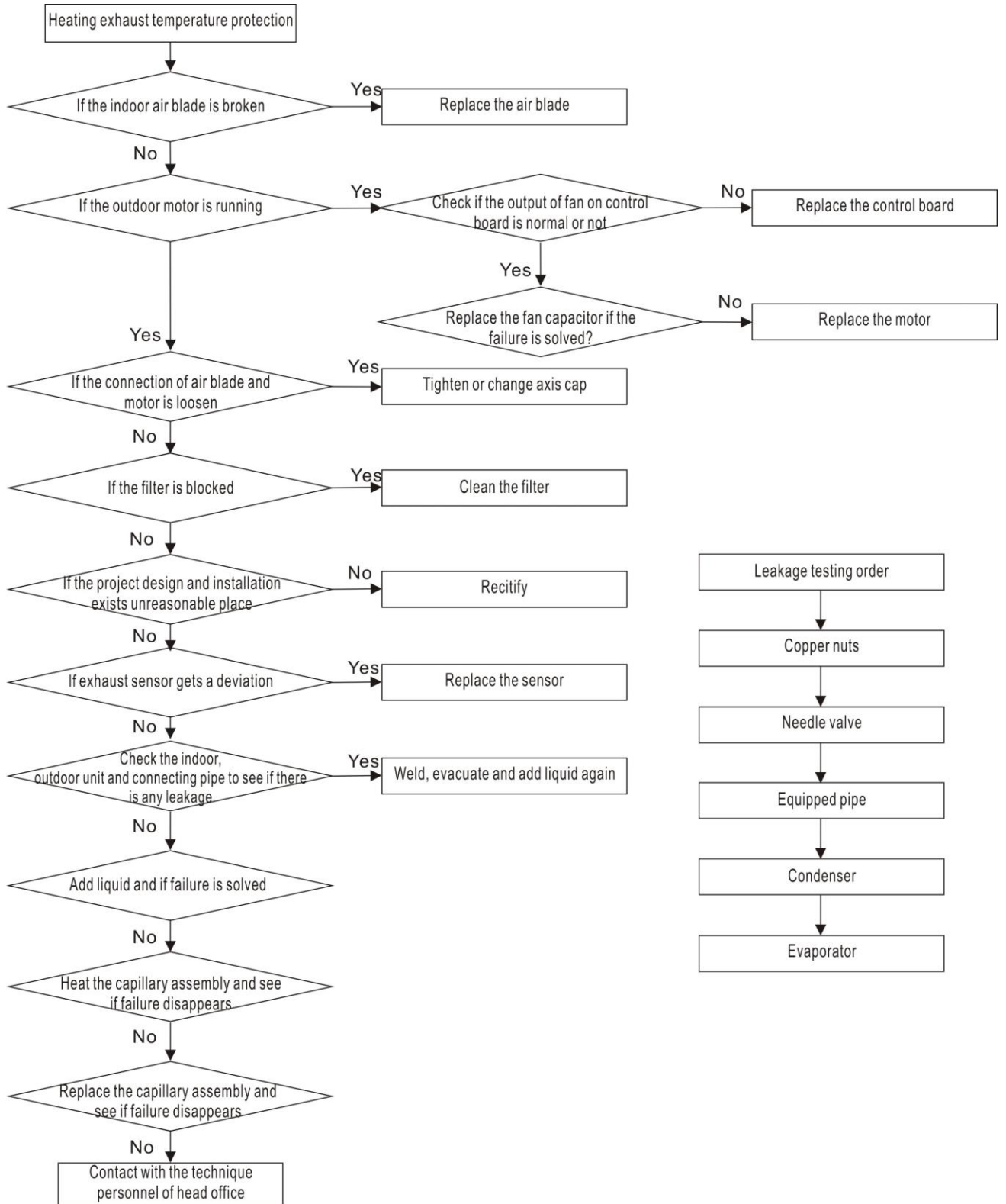
# R410A T1 ON/OFF LCAC B7 Series



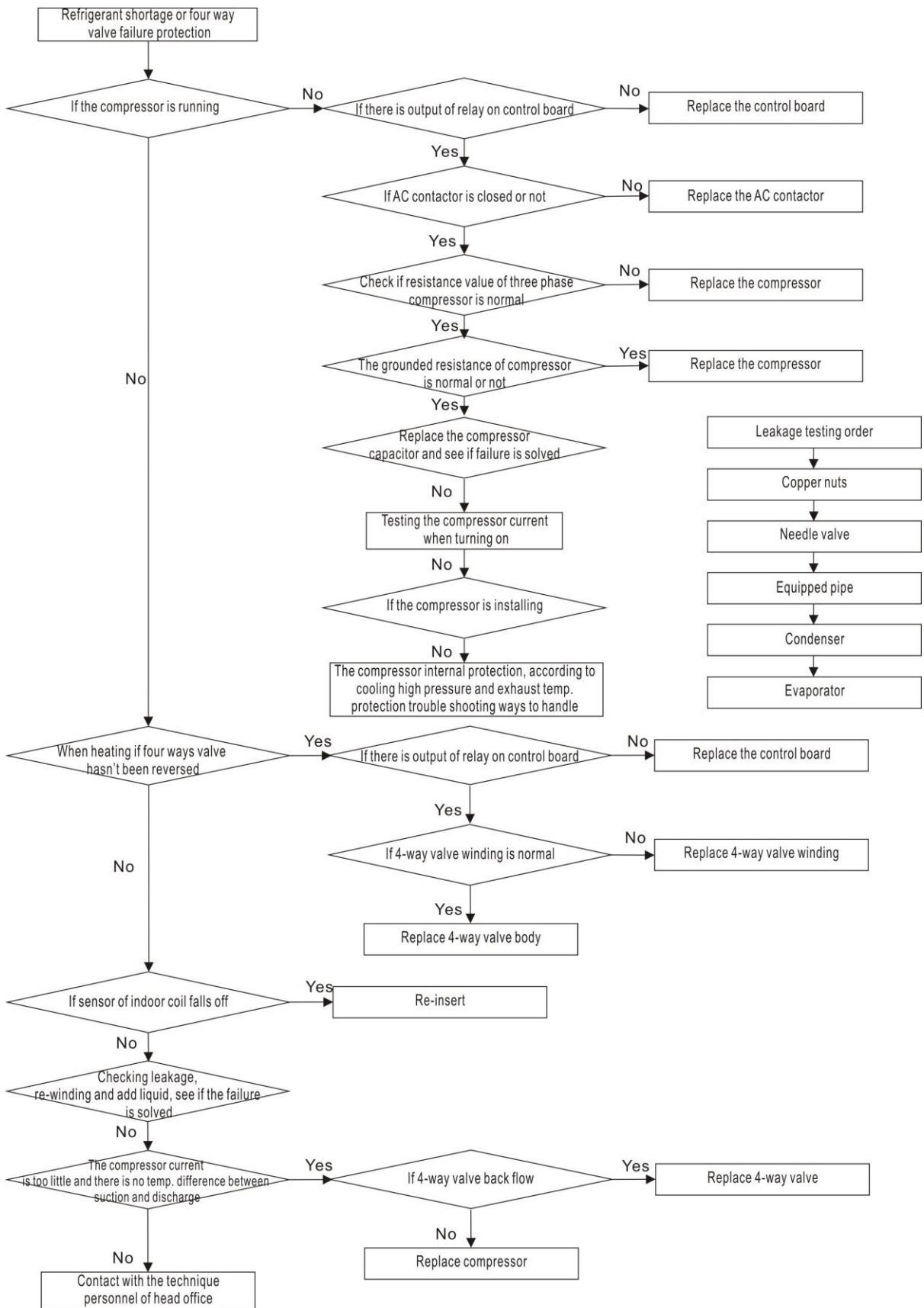
2.5 【P5/J5】 Cooling exhaust temperature protection



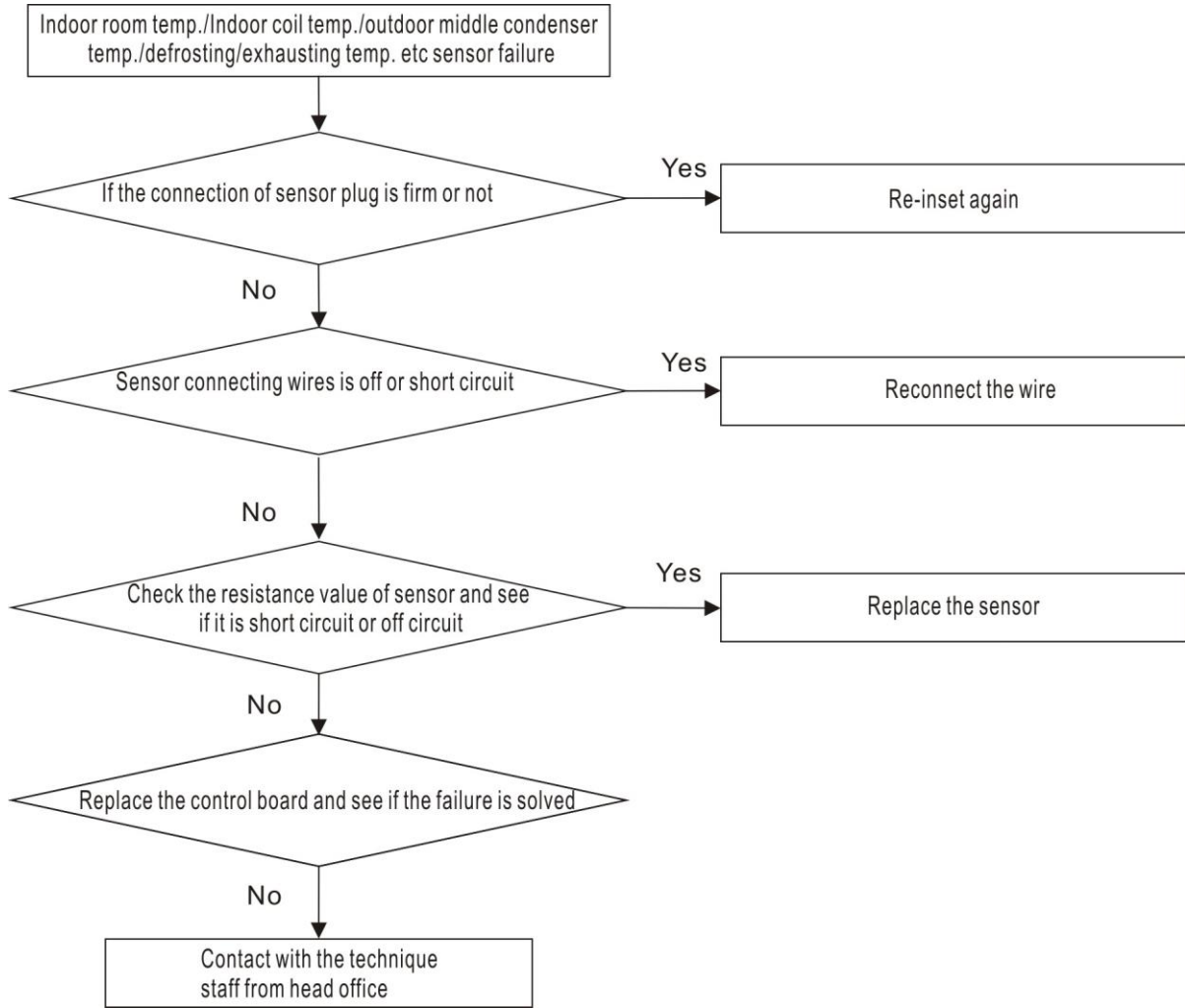
**【P5/J5】 Heating exhaust temperature protection**



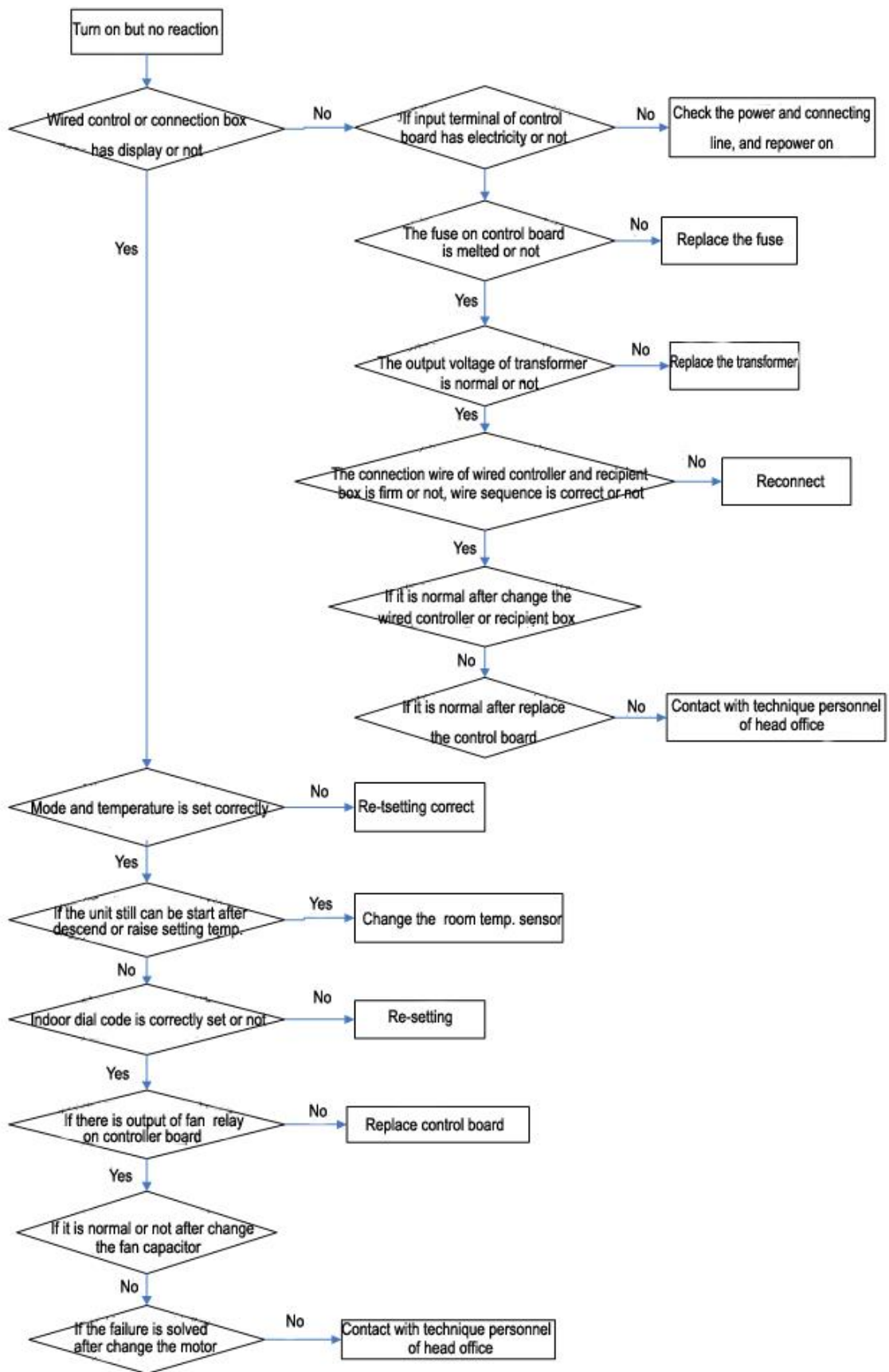
2.6 【H8】 Refrigerant shortage or four way valve failure protection



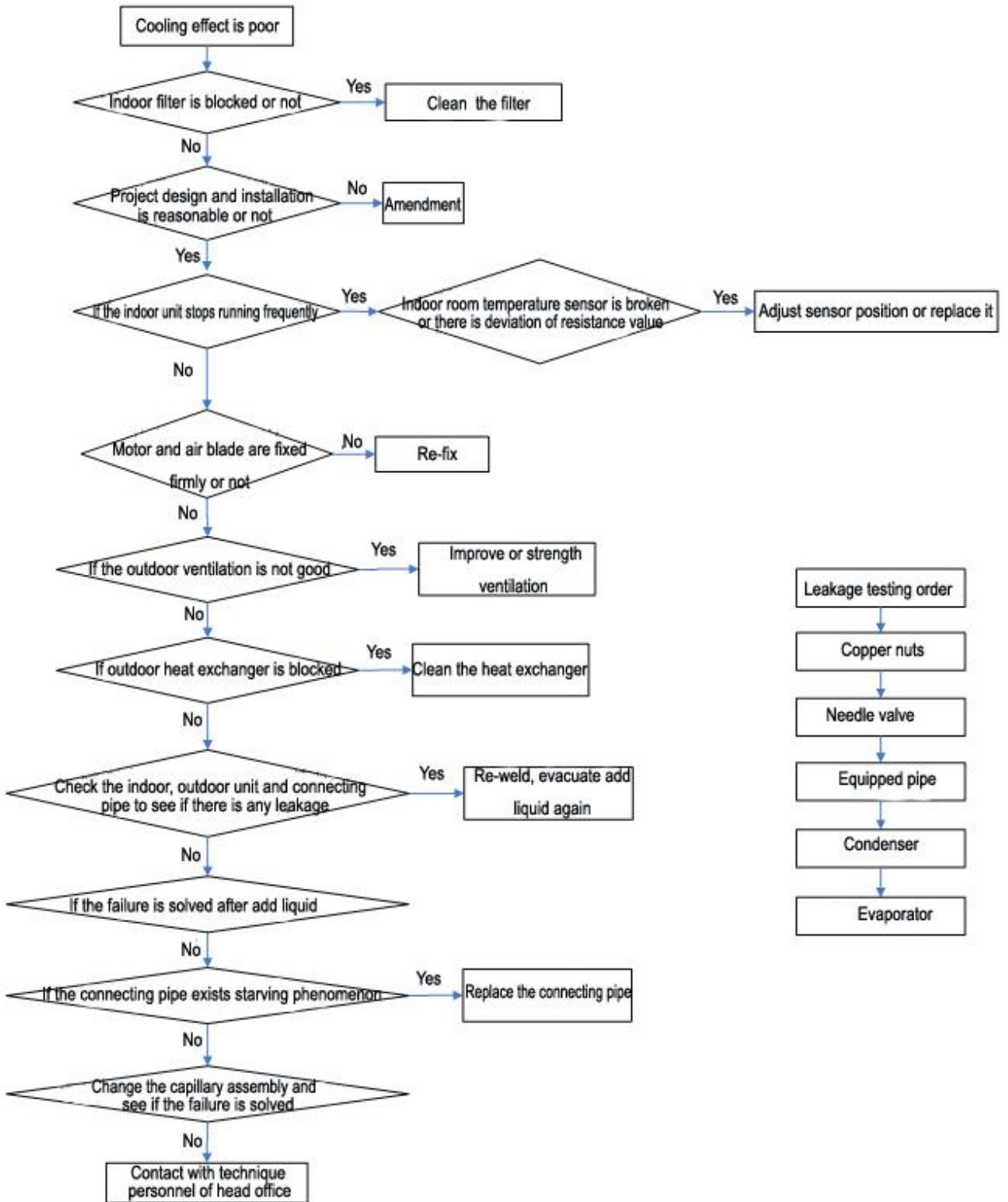
Sensor failure protection



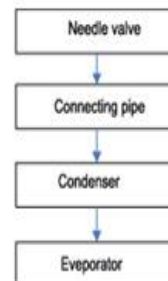
No action after power-on



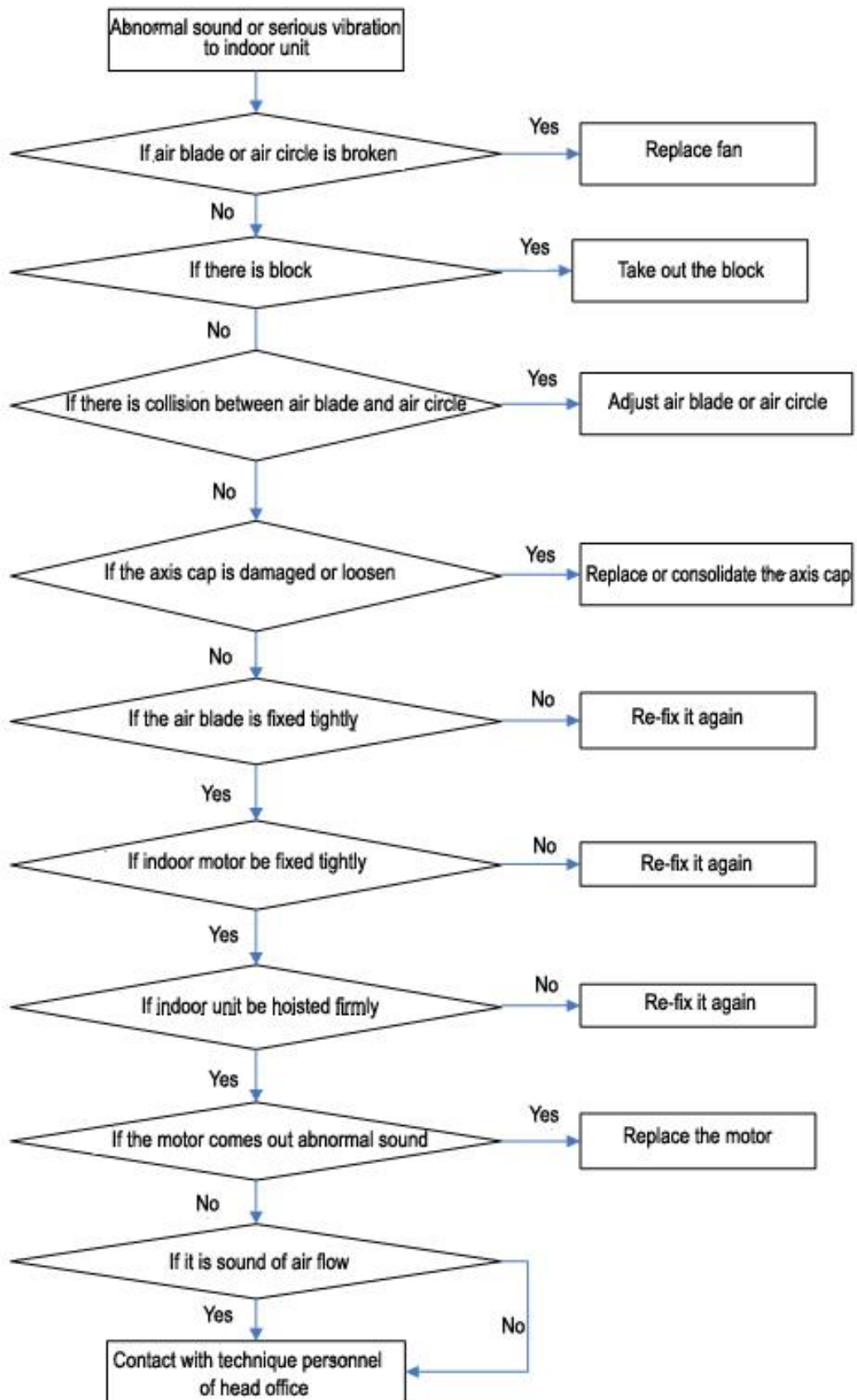
Poor effect

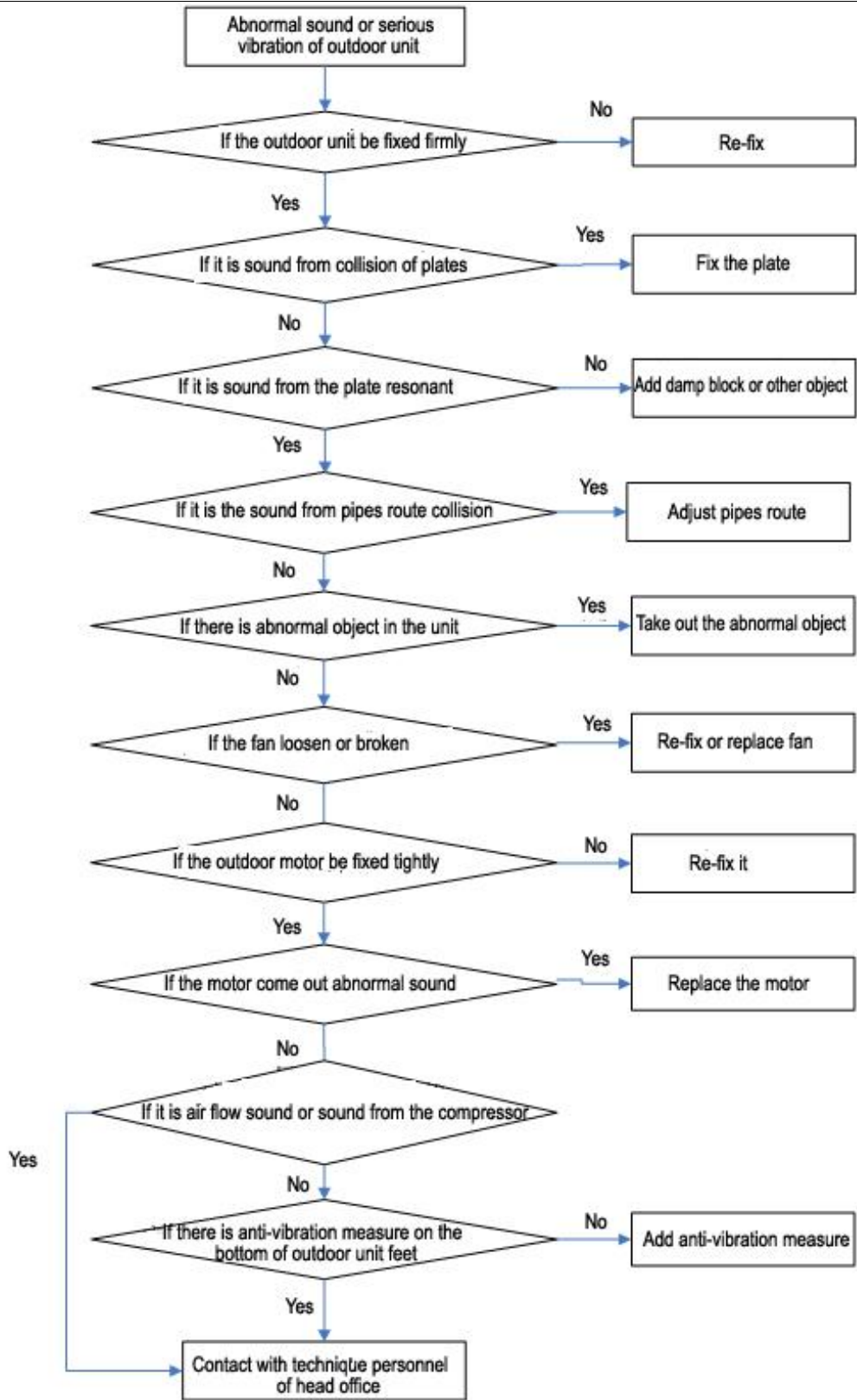




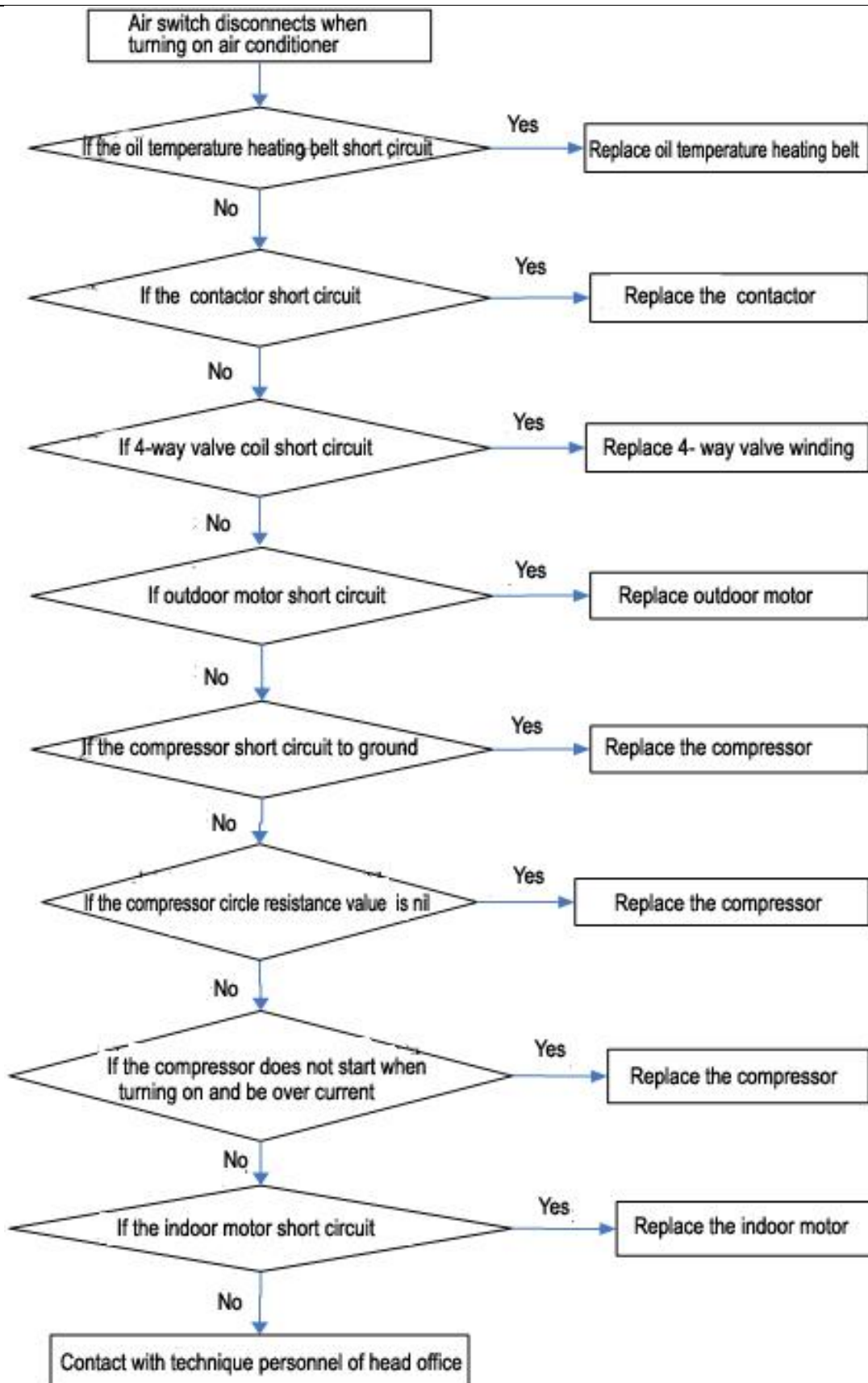


Abnormal sound or vibration

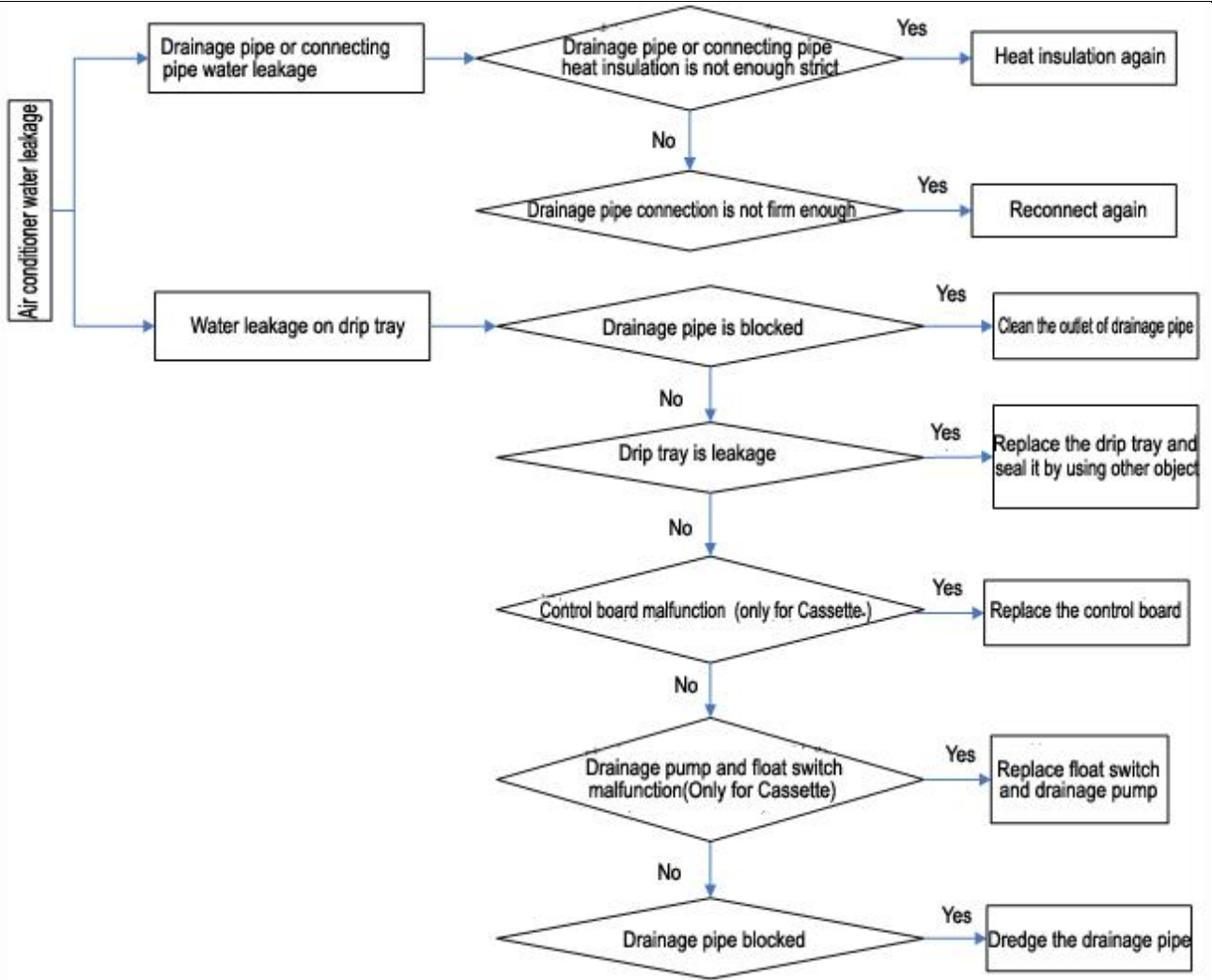




Air switch action when air conditioner starting up



**Air conditioner water leakage**



# AUX

Technology leads Intelligent life

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The above designs and specifications are subject to change without prior notice. Final specifications please refer to latest technical specification provided by sales representative.  
201811 *Technical Suppport Department*

## 更新记录表

更新时间	更新版本	更新人	更新内容
2021.07.12	20210712 版	程送圆	B7 系列项目完成, 增加认证型号、爆炸图、电气原理图