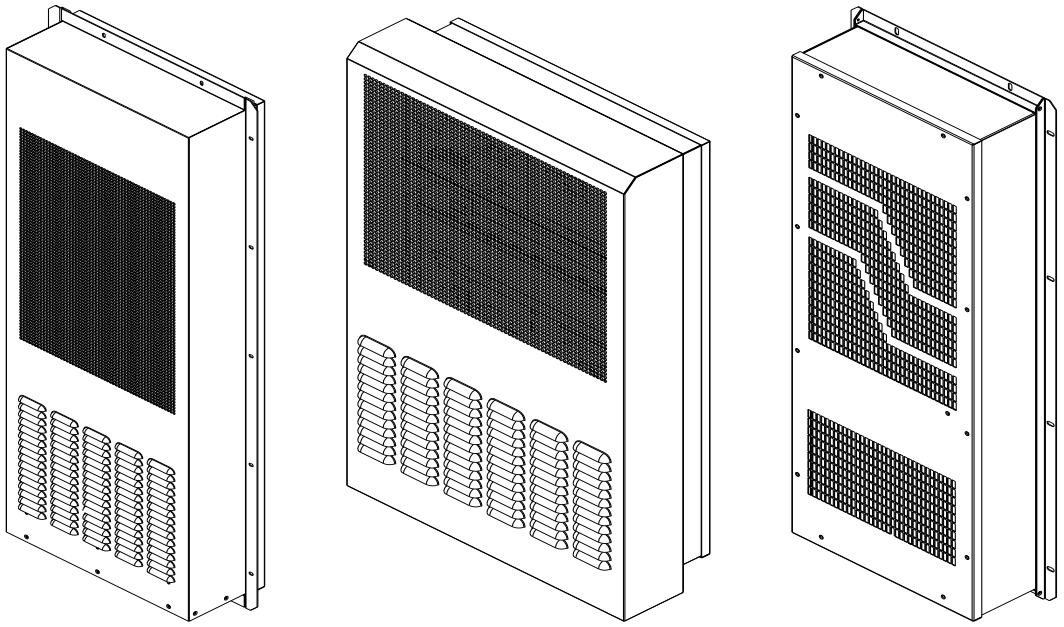
用户手册

User Manual

AC系列空调器

AC Series Air Conditioner



在产品安装使用前请仔细阅读本手册

Reading this manual carefully before installation and using

目 录

1 简介

1.1 前言

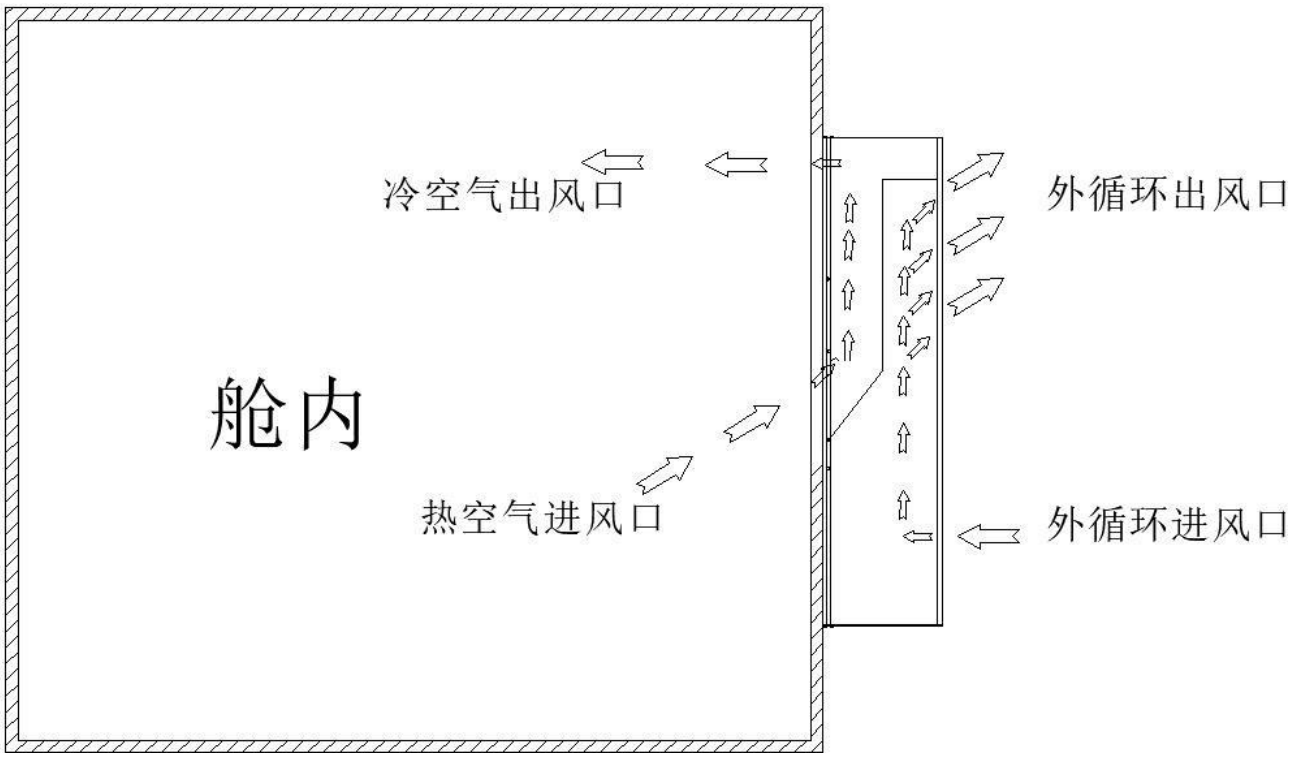
本手册介绍了一体式空调的安装、操作、功能描述和定期维护，请在使用之前务必详细阅读，并遵守其中的使用方法和注意事项。

注意：任何针对本产品的操作必须由专业的技术人员进行。

1.2 产品介绍

本空调是一款自主研发的、为舱体制冷的产品，适用于舱体内部发热量较大、内部电子设备对环境温度敏感，而且内外需要完全隔离的应用场所。本产品功能齐备，具有可靠性高、安装简单、通电后即可工作、无需复杂调试等特点。

空调内循环的风扇从下部吸入热空气，使空气不断通过蒸发器的翅片进行热交换，并将放热后变冷的空气从上部排出空调，并送向舱内。如此舱内空气不断循环流动，达到降低温度的目的。同时，外部循环的风扇从下部吸入外界冷空气，经过热交换后热空气从上部排出空调。



工作原理图

1.3 符合的主要标准

序号	标准编号	标准名称
01	GB 4208	外壳防护等级
02	GB/T 4857.5、9、10、11、16	包装 运输包装件 运输包装件基本试验
03	GB/T 2423.1、2、3、8、10、17、38	电工电子产品环境试验
04	GB9254-1998	信息技术设备的无线电骚扰限值和测量方法
05	GJB150-86	军用设备环境试验方法
06	GB/T17626.8	电磁兼容试验和测量技术工频磁场抗扰度试验
07	YD/T 2768-2014	通信户外机房用温控设备 第 1 部分：嵌入式温控设备
08	CE	第三方认证

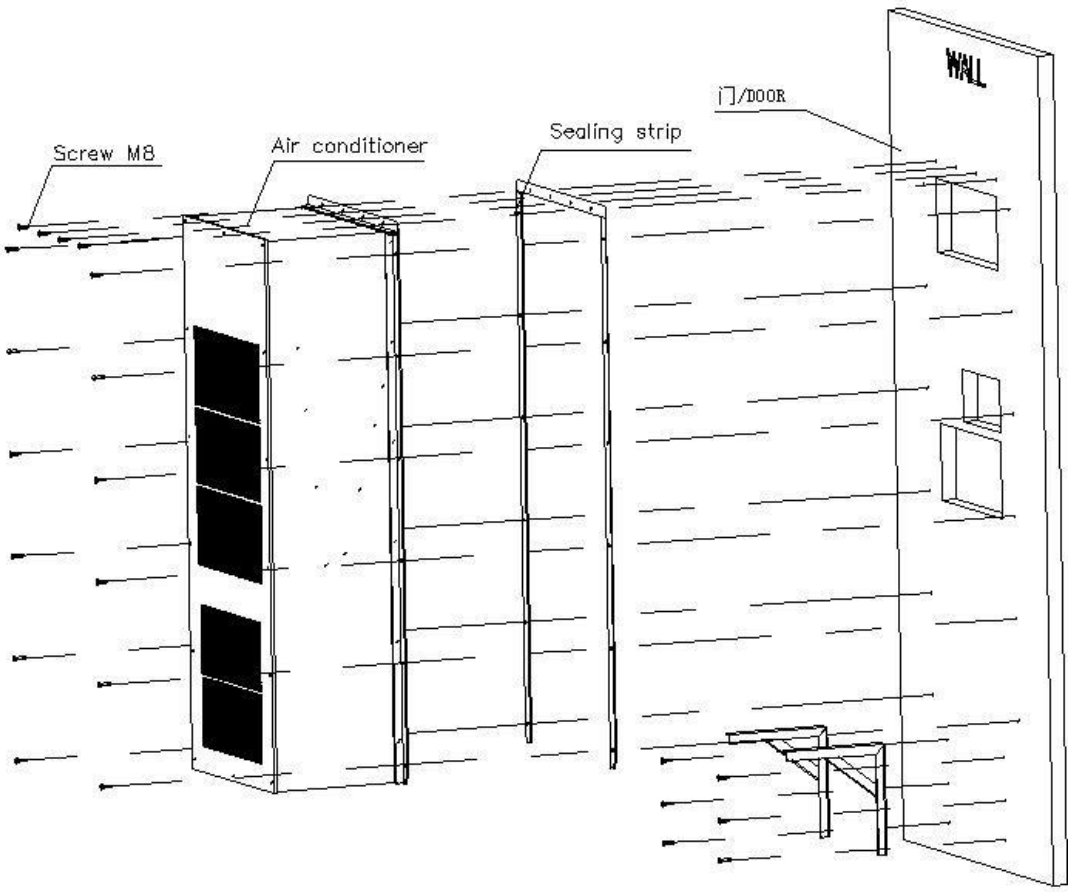
2 产品参数

2.1 技术参数

类型	名称	单位	参数
尺寸及安装	外形尺寸(高*宽*深)	mm	2100*800*530
	含法兰外形尺寸(高*宽*深)	mm	2145*890*530
	重量	Kg	245
	安装方式	外置式	
	安装环境	户外	
环境及保护	工作环境温度	℃	-40 至+55
	噪音	dB(A)	78
	寿命	Years	>10
	防护等级	IP55	
	制冷剂	R410a	

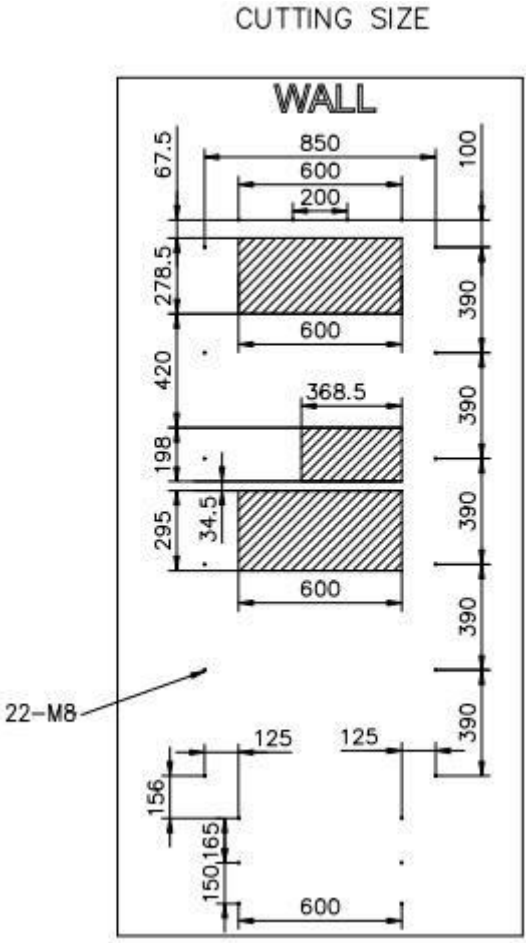
	RoHS 认证	yes	
性能	电源	3N~, 380V, 50Hz	
	制冷量(L35/L35)	W	20000
	额定功率(L35/L35)	W	8200
	额定电流(L35/L35)	A	13.7
	最大工作电流	A	18.8
	加热量（选配）	W	12000
	循环风量	m^3/h	5500

2.2 安装示意图



注意：安装示意图经供参考，具体操作应根据实际使用环境而确定安装方案。

2.3 开孔图



3 准备和安装

3.1 拆包及检查

1. 准备好拆除包装的工具：刀片、剪刀，并需穿戴防护手套；
2. 将缠绕膜和打包带拆除，再拆除纸包装，取出空调。
3. 清点包装内的装箱清单和附件包，确认包装箱内空调型号是否符合要求。

注意：

1. 拆除包装后，请确保空调竖立放置，不能平放或者倒置。
2. 拆除包装后，请仔细检查空调外观是否损伤或者油污。若空调外观明显变形或油渍，则请及时与 厂家联系。
3. 如果产品不是立即安装或者需要转运到其它地区，请在检查完后重新对空调进行包装。
4. 建议对拆除后的包装材料进行回收利用。

3.2 机械安装

安装工具：十字螺丝刀

安装步骤：

1) 根据开孔尺寸图，在舱体上选定位置，切除阴影部分面积，并打好安装孔。

2) 将空调法兰与舱体门板紧贴，用 M8 安装螺钉将空调可靠固定在舱体安装面上。

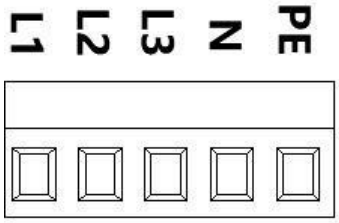
3) 检查空调是否安装水平和可靠。

注意：

- 检查空调排水是否顺畅，避免出现堵塞空调排水口的情况；
- 确定舱体上的安装开孔位置时，确保空调周围通风良好，应使进出风口与舱体内的设备保持 150mm 以上的间隔距离，否则容易引发回风短路、制冷效果不良等现象；
- 搬运或移动空调时，小心轻放，以免碰撞和刮伤设备表面喷涂；

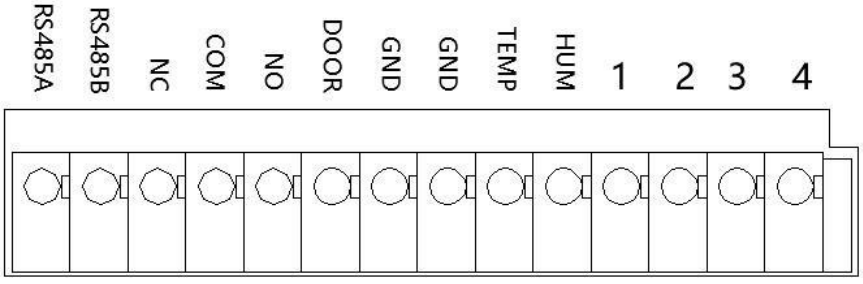
3.3 电气安装

（1） 电源输入端口



类型	对应端口	定义
火线	L1	380VAC 电源
	L2	
	L3	
零线	N	
地线	PE	地线

（2） 告警输出和信号输入端口



类型	对应端口	定义
RS485A 通信接口	RS485A	上位机监控接口
RS485B 通信接口	RS485B	上位机监控接口
干接点输出 NC 触点	NC	常闭（运行无告警时闭合）
干接点输出 COM 触点	COM	公用端
干接点输出 NO 触点	NO	常开（运行无告警时断开）
门禁开关量输入 NC 触点	DOOR	门禁开关
门禁开关量输入 COM 触点	GND	
温湿度 4-20mA 信号输出接口	GND	温湿度 4-20mA 信号输出-（共用接地）
温度 4-20mA 信号输出接口	TEMP	温度 4-20mA 信号输出+
湿度 4-20mA 信号输出接口	HUM	湿度 4-20mA 信号输出+
预留	1	无
预留	2	无
预留	3	无
预留	4	无

4 产品功能

4.1 制冷

当舱体内温度高于制冷开启温度时，空调开始制冷；当舱体内温度低于制冷停止温度时，空调停止制冷。

参数设置点

参数	缺省值	设置范围	单位	备注
制冷开启温度	28	[20～50]	℃	制冷停止温度=制冷开启温度-制冷回差温度
制冷回差温度	5	[3～15]	℃	

4.2 加热

当舱体内温度低于加热开启温度时，空调开始加热；当舱体内温度高于加热停止温度时，空调停止加热。

参数设置点

参数	缺省值	设置范围	单位	备注
加热开启温度	5	[-30～50]	℃	加热停止温度=加热开启温度+加热回差温度
加热回差温度	10	[3～15]	℃	

4.3 除湿

当柜内湿度大于除湿开启湿度（默认 70%，范围 50%～99%）时，开始除湿；当湿度回落到除湿停止湿度（默认 60%，范围 45%～99%）时停止除湿。

参数	缺省值	设置范围	单位
除湿开启湿度	70	50～99	%RH
除湿停止湿度	60	45～95	%RH
高湿告警值	90	50～99	%RH

4.4 微正压（选项）

空调上带有微正压装置，当舱内气压低于设定值，将开启微正压装置，保证舱内气压高于舱外气压。

4.5 温湿度信号输出

具有温湿度4-20mA信号输出功能。

温度4-20mA信号定义范围：-40℃～70℃

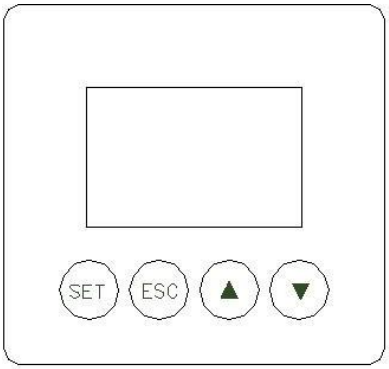
湿度4-20mA信号定义范围： 0%～100%

4.6 远程监控

空调上带有RS485通讯接口，可通过RS485 通讯接口和上位机进行通讯，或者用户可以直接通过显示屏查看空调运行状态，更改空调运行参数。

5 显示屏

5.1 主界面显示及按键说明



序号	图标	功能	功能说明
1	SET	确认键	对功能选择、参数设置进行确认
2	ESC	返回键	返回上一级菜单
3	▲	上升键	对数值进行增加或选择上一条记录/菜单
4	▼	下降键	对数值进行减少或选择下一条记录/菜单

5.2 菜单结构

参数菜单分为二级，分别是：用户级、厂商级。

5.3 激活自检逻辑

长按(SET) 5s 可激活自检功能。

5.4 主界面切换至功能界面逻辑

1) 显示处于主界面状态下，按 (SET)，进入功能界面，即主菜单界面（包含状态查询，参数设置，厂家参数，中英文设置），选中菜单为慢闪显示。
2) 按(▼)或者(▲)，可在主菜单中来回切换。
3) 在任何显示期间，再按 (ESC)或 60s 无任何按键动作，则返回主界面。

5.5 告警内容

如果机器有告警，显示屏会在主页面上显示告警内容，如果同时有多个告警，会循环显示告警内容。

告警序号	告警内容	英语	英文简写
1	柜内高温告警	High temperature alarm in the cabin	High Temp alarm in the cabin
2	柜内低温告警	Low temperature alarm in the cabin	Low temp alarm in the cabin
3	柜内温度故障	cabin temperature fault	cabin Temp Fault
4	蒸发温度故障	Evaporator temperature fault	Evaporator temperature fault
5	冷凝温度故障	Condenser temperature fault	Condenser temperature fault
6	蒸发低温告警	Evaporator low temperature alarm	Evaporator low temperature alarm
7	冷凝高温告警	Condenser high temperature alarm	Condenser high temperature alarm
8	湿度故障	Humidity Fault	Humidity Fault
9	柜外温度故障	Temperature fault outside the cabin	Temperature Fault Outside cabin

6 运行

6.1 运行前检查

1) 空调的内外循环的进出风口附近无明显的阻挡物。
2) 输入电源及其他信号线缆已经可靠连接，并接线正确。
3) 检查电压和频率是否符合空调的要求。
4) 风机可以自由顺畅转动，无异声。

6.2 开机运行

1) 空调上电后，内风机开始运作，整机进入压缩机保护功能。3分钟后，如果内循环温度达到运行 的条件，制冷系统运行。
2) 运行参数已默认设置，运行后确认正常即可；如有需要更改参数，请参考第5节。

7 故障分析与处理

7.1 告警信息

类型	触发条件	复位方式	干接点上传
高温告警	舱内的温度高于设置值	自动	是
低温告警	舱内的温度低于设置值	自动	否
舱内温度传感器告警	舱内温度传感器故障传感器线路短路或断路	自动	否
蒸发器温度传感器告警	蒸发器温度传感器故障传感器线路短路或断路	自动	否
冷凝器温度传感器告警	冷凝器温度传感器故障传感器线路短路或断路	自动	否
蒸发器冻结告警	蒸发器温度低于 0℃	自动	是
系统高压告警	系统压力大于设置值	自动	是
掉电告警	控制板无电源输入	自动	是

7.2 故障与处理

故障类型	可能的原因	故障处理

温度传感器故障	传感器连接不良	检查传感器线路连接，重新连接
	传感器损坏	更换传感器
高温告警	冷凝器或蒸发器脏堵	清洁冷凝器
	空调制冷能力不够	请咨询专业人员
	温度设置不合适	测量温度，并重新设置高温值
系统高压报警	冷凝器或蒸发器脏堵	清洁冷凝器
	外循环风机出现故障	更换外循环风机
	冷凝器温度传感器误报警	更换冷凝器温度传感器
蒸发器冻结	内部循环空气受到遮挡	检查是否存在遮挡物，并清除它们
	内循环风机故障	检修/更换内循环风机
	制冷系统不能够关闭	检查是否达到制冷关闭条件而不停止制冷。如是，通知厂家处理
	蒸发器温度传感器误报警	更换蒸发器温度传感器
压缩机不运行	不需要制冷	检查是否需要制冷
	处于 3 分钟间隔保护	检查是否处于保护状态
	压缩机线连接不良	检查传感器线路连接，重新连接
	压缩机保护开关或电机损坏	压缩机保护开关是否完好，更换压缩机保护开关；如是电机损坏，更换压缩机
内循环风机不运行	内循环风机出现故障	更换内循环风机
	内循环风机线连接不良	检查传感器线路连接，重新连接
	风机被卡死	检查是否有异物卡住风机
外循环风机不运行	外循环风机出现故障	更换外循环风机
	未到达开启条件	检查是否符合开启条件
	内循环风机线连接不良	检查外循环风机线路连接，重新连接
	风机被卡死	检查是否有异物卡住风机
风机异音	风机叶片破损或轴承摩擦	更换风机
	风机叶片与其他物料干涉	检查并重新固定
加热器不运行	加热器出现故障	更换加热器
	加热器线连接不良	检查加热器线路连接，重新连接
	未到达开启条件	检查是否符合开启条件

8 维护和保养

对空调进行经常性的维护保养，可以保持空调良好的使用效果和正常的寿命，主要应做好以下工作：

序号	检查/维护	周期
1	检查是否存在告警提示	6 月
2	检查风机是否正常工作	6 月
3	检查压缩机是否工作正常	6 月
4	有无明显异响或抖动	6 月
5	清洁空调的进出风口格栅	6 月
6	清洁换热器的表面	1 年
7	检查舱体空调的电源线及通讯线是否正常	1 年

1. Introduction

1.1. Preface

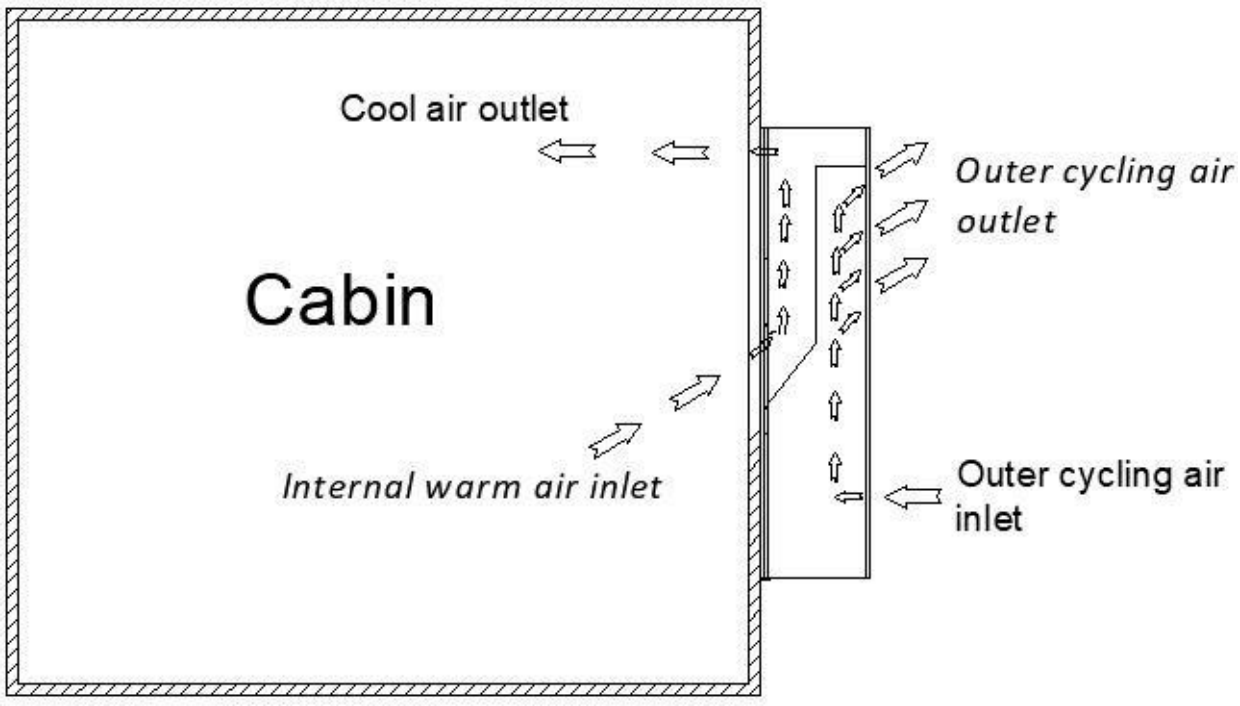
This manual introduces the guide for the installation, operation, function and routine maintenance of the cabin air conditioner. Please read carefully the manual before using and follow the usage and note.

Note: All the operations of this product shall be performed by professional engineers.

1.2. Product introduction

The air conditioner is one kind of refrigeration product self-developed for cabin. It is applicable in the place where the cabin internal heat is very large, the internal electronic equipment is sensitive to the environment temperature and which should be isolated internally and externally completely. This product has multiple functions, high reliability, and has the feature that it can start to work without complex debugging after powering.

The fan in the internal cycle air path absorbs the hot air from the downside to make air heat exchange by evaporator fins, and sends the cooled air from the upside of the air conditioner. By so, the air in cabin can cycle to achieve the purpose of lowering the temperature. Meanwhile, The fan in the external cycle air path absorbs the external cold air from the downside, and discharges the hot air from the upside after heat exchange.



1.3. Standards

NO.	Standard No.	Standard Name
01	GB 4208	Enclosure Protection Class
02	GB/T 4857.5、9、10、11、16	Packaging-Basic tests for transport packages
03	GB/T 2423.1、2、3、8、10、17、38	Electrical and electronic products environmental test
04	GB9254-1998	Information technology equipment-Radio disturbance characteristics-Limits and methods of measurement
05	GJB150-86	Environmental test methods for military equipments
06	GB/T17626.8	Electromagnetic compatibility-Testing and measurement techniques--Power frequency magnetic field immunity test
07	YD/T 2768-2014	The temperature controlling devices for Communication outdoor room 1st parts: Embedded temperature controlling devices
08	EN 55022:2006+A1:2007	Conducted Emission and radiation test
09	EN 61000-3-2:2006+A2:2009	Harmonic Current
10	EN 61000-3-3:2008	Voltage Fluctuation and Flicker
11	EN 61000-4-2:2009	ESD
12	EN 61000-4-3:2006	Radiation disturbance Immunity Test
13	EN 61000-4-4:2004	Electrical Fast Transient Burst
14	EN 61000-4-5:2006	Surge
15	EN 61000-4-6:2009	Conduction disturbance Immunity Test
16	EN 61000-4-11:2004	Voltage dips and short interruptions

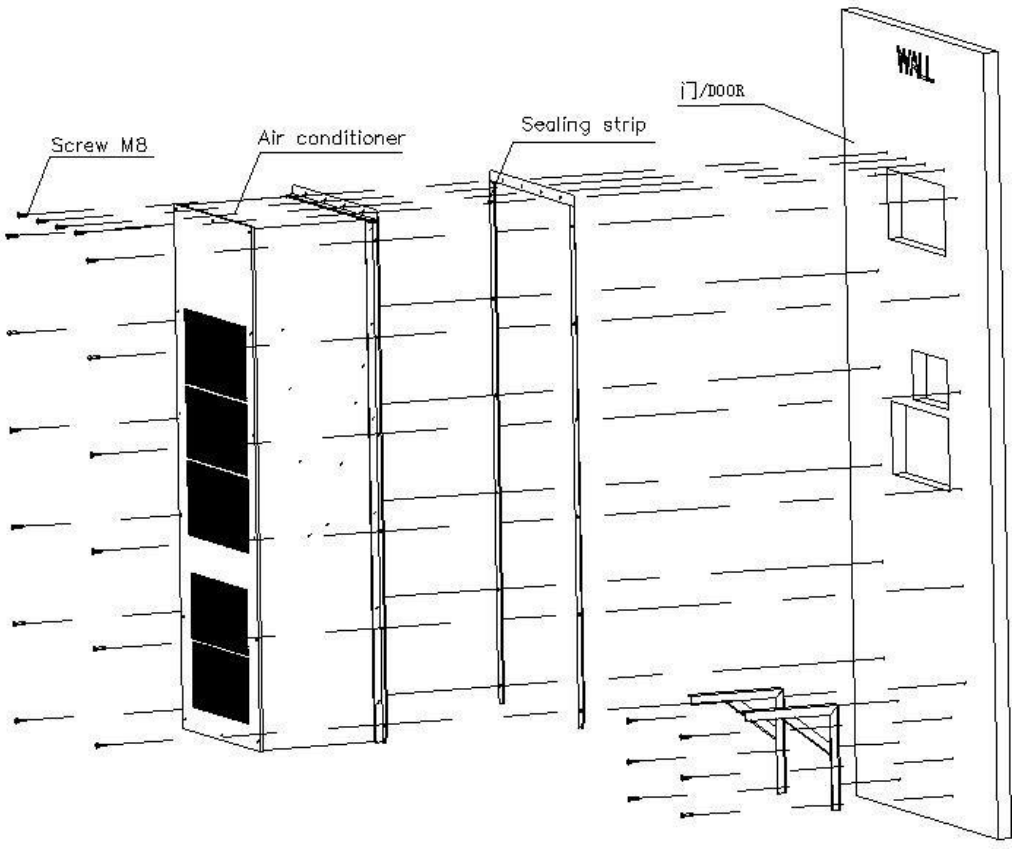
2. Product parameter

2.1. Product technology parameters

Item	Name	Unit	Parameter
Dimension and installation	Body outline dimension (height*width* depth)	mm	2100*800*530
	Outline dimension including flange(height*width* depth)	mm	2145*890*530
	Weight	Kg	245

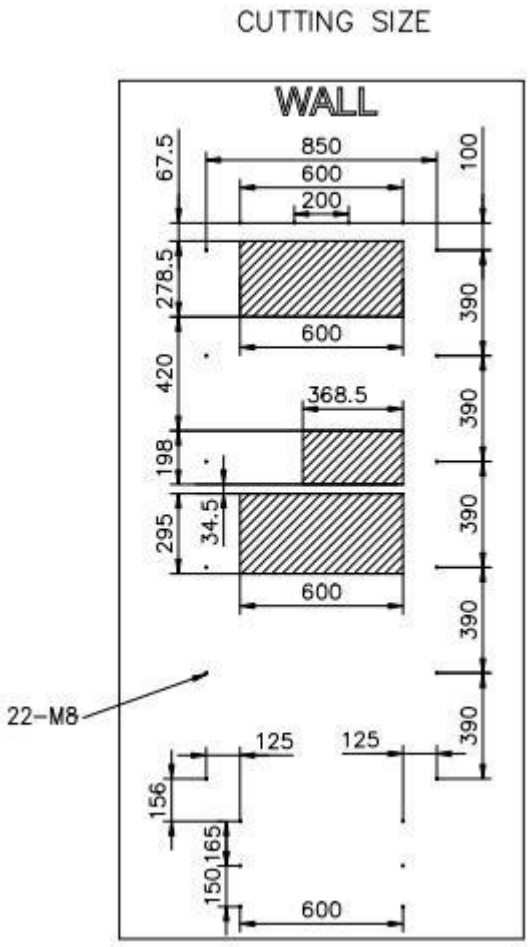
	Installation method	External	
	Installation method	Outdoor	
Environment and protection	Working environment temperature	℃	-40 to +55
	Noise	dB(A)	78
	Life expectancy	Years	>10
	IP grade	IP55	
	Refrigerant	R410a	
	ROHS certification	yes	
Performance	Power	3N~,380V,50Hz	
	Refrigerating capacity(L35/L35)	W	20000
	Rated Refrigerating input power(L35/L35)	W	8200
	Rated Refrigerating current (L35/L35)	A	13.7
	Maximum Refrigerating current	A	18.8
	Heat capacity	W	12000
	Air Volume of Inner Circulation	m^3/h	5500

2.2. Installation diagram



Note: the installation diagram is just for reference, the specific installation scheme should be determined according to the environment of the actual usage.

2.3. Cutting size



3. Preparation and installation

3.1. Removing package and checking

1. Please prepare installation tools: knife and scissors, and wear protective gloves.
2. Please remove wrapping film and packing belt, then remove the carton, take out the air conditioner.
3. Please check the attachment list and accessory bags in the carton, check whether the air conditioner model is right .

Notes:

1. After removing the outer package, please make sure that the air conditioner is placed upright , and not placed horizontally or upside down.

2. After removing the outer package, please check carefully whether the appearance of the air conditioner is damaged or oil polluted, if the appearance of the air conditioner has obvious deformation or oil stain, please contact the manufacturer in time.

3. If there is no need to install the product immediately or it needs to be transported to other place, please repack the air conditioner after the checking.

4. It is recommended to recycle the unpacking materials.

3.2. Mechanical installation

Installation tool: Phillips screwdriver

Installation Steps：

1) Choose cut location on the cabin according to the holing diagram, remove the shadow area and make the installation hole.

2) Make air conditioner flange close to cabin door, Fix the air conditioner on the installation surface of the cabin firmly with M8 screws.

3) Check whether air conditioner is installed levelly and firmly.

Notes:

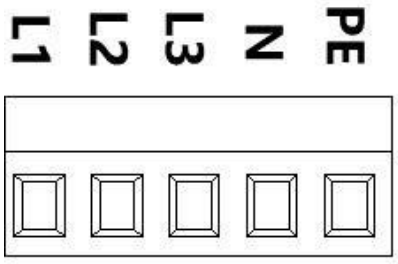
1) Check whether air conditioner drainage loop is smooth, in case that drainage is blocked.

2) When determine the location of the installation hole in the cabin, you should avoid the inlet and outlet air ports inside the cabin are not blocked by any components inside the cabin, and the two should be kept a horizontal distance of more than 150mm; otherwise, it is prone to lead to r short circuit of the return air, and poor cooling effect, etc.;

3) carrying or moving the air conditioner should be careful to avoid colliding it and scratching its surface coating;

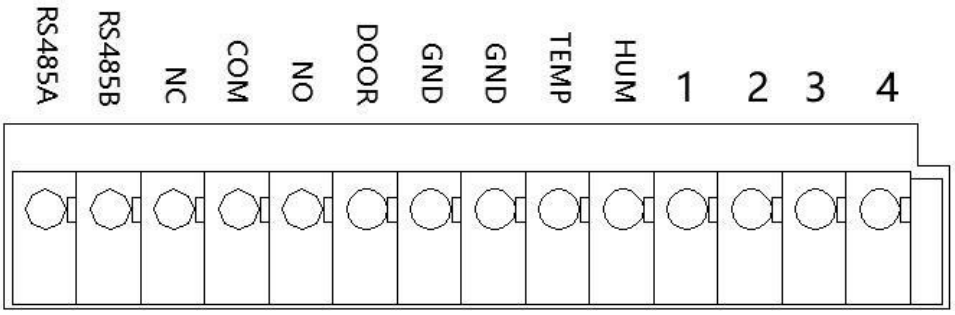
3.3. Electrical installation

（1） Power input port



Item	Port	Definition
Live 1	L1	380V
Live 2	L2	
Live 3	L3	
Null	N	
Earth	PE	Earth line

（2） Alarm output and signal input port



Item	Port	Definition
Communication ports	RS485A	RS485 communication ports (+)
	RS485B	RS485 communication ports (-)
Alarm output	NO	It is normally open if no alarm
	COM	common port
	NC	It is normally close if no alarm
Access Contro	DOOR	Access Control input ports (NC)
	GND	Access Control input ports (COM)
4~20mA signal output interface	GND	Temperature 4~20mA signal output -(common port)
	TEMP	Temperature 4~20mA signal output +
	HUM	Humidity 4~20mA signal output +
None	1	None
None	2	None
None	3	None
None	4	None

4. Product function

4.1. Cooling

When the temperature inside cabin is higher than refrigeration starting temperature, it starts refrigerating; when the temperature inside cabin is lower than refrigeration stopping temperature, it stops refrigerating.

User parameter setting point

Parameter	Default value	Setting range	Unit	Note
Refrigeration stopping temperature	28	[15～50]	℃	Refrigeration starting temperature =Refrigeration stopping temperature+Refrigeration return difference
Refrigeration return difference	5	[3～15]	℃	

4.2. Heating

When the temperature inside cabin is lower than heating starting temperature, it starts heating; when the temperature inside cabin is higher than heating stopping temperature, it stops heating.

User parameter setting point

Parameter	Default value	Setting range	Unit	Note
Heating stopping temperature	15	[-30～50]	℃	Heating starting temperature= Heating stopping temperature- Heating return difference
Heating return difference	10	[3～15]	℃	

4.3. Dehumidification

When the humidity inside the cabin is greater than the dehumidification opening humidity （default 70%, RANGE 50% ~ 99%），Start dehumidification；When the humidity drops back to the dehumidification stop humidity（default 60%, RANGE 45% ~ 99%），Stop dehumidification;

Parameter	default	range	unit
Dehumidification opening humidity	70	50～99	%RH
Dehumidification stop humidity	60	45～95	%RH
High humidity alarm value	90	50～99	%RH

4.4. Micro positive pressure（Optional）

The air conditioner is equipped with a micro positive pressure device. When the air pressure inside the cabin is lower than the set value, the micro positive pressure device will be activated to ensure that the air pressure inside the cabin is higher than the air pressure outside the cabin.

4.5. Temperature and humidity signal output

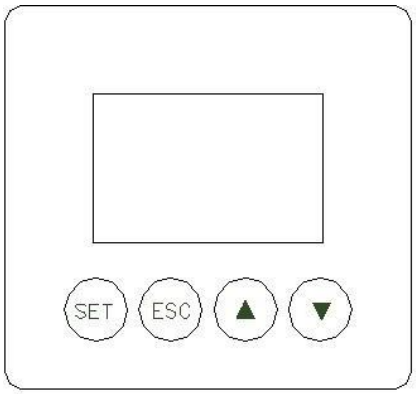
It has the function of temperature and humidity 4-20mA signal output.
Temperature 4-20mA signal definition range: - 40 ℃ ~ 70 ℃
Humidity 4-20mA signal definition range: 0% ~ 100%

4.6. Remote monitor

Air conditioner has an RS485 communication interface, supporting MODBUS- RTU communication protocol。The air conditioner communicates with the upper monitor through the RS485 communication interface. Or users can check the air conditioner's running state by viewing the display screen directly and change its running parameters.

5. Display screen

5. 1. Display interface

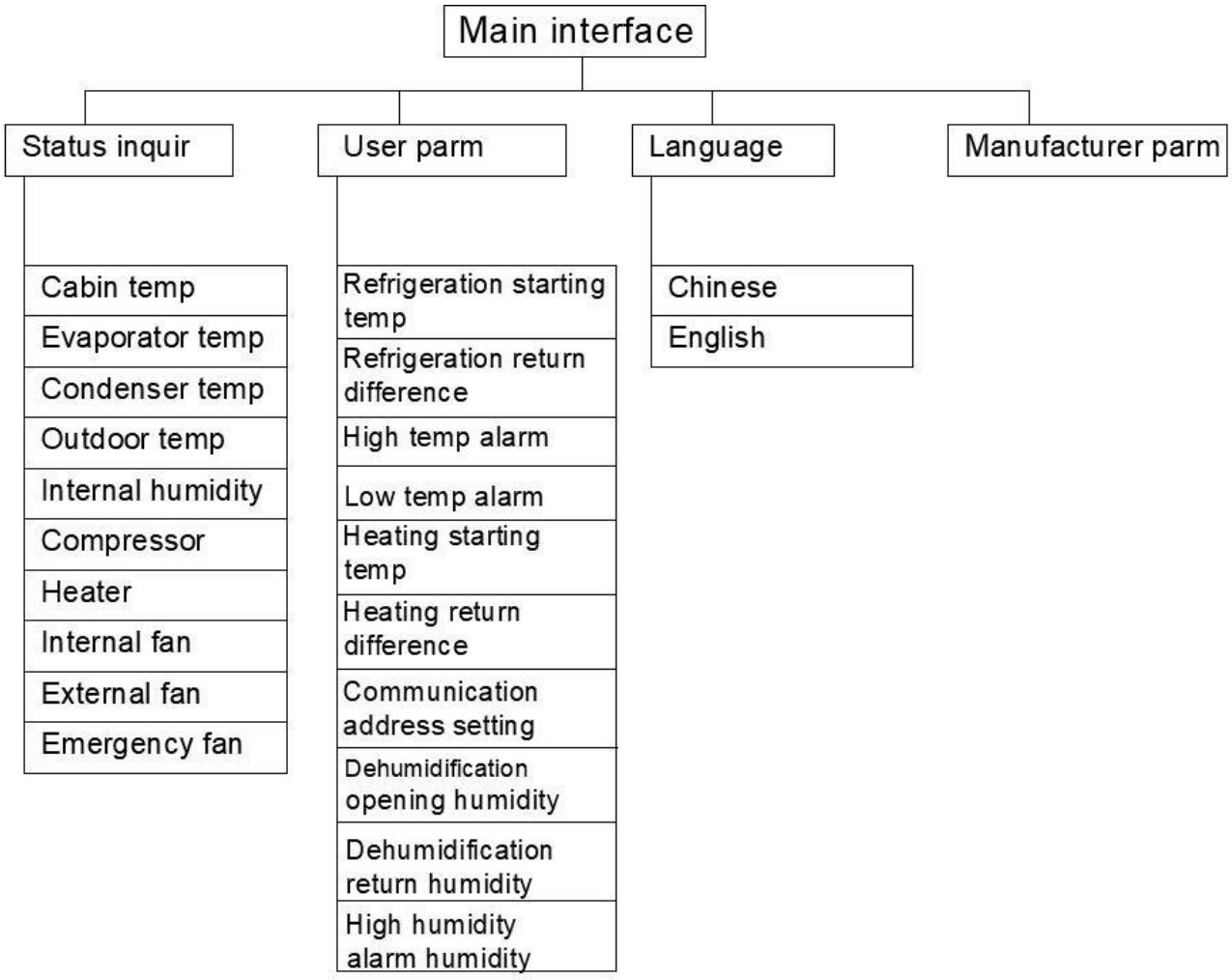


NO.	Icon	Function	Function explanation
1	SET	Confirm key	Select function and enter parameter set
2	ESC	Return key	return to previous menu
3	▲	Up key	Increase value, page up

4	▼	Down key	Decrease value, page down

5. 2. Menu structures

Parameter menu is divided into two levels, namely: , user-level and manufacturer-level.



5.3. Activate Self Test Logic

Long press SET 5s activatable self check function。

5.4. Switch from main interface to functional interface logic

1) When the display is in the main interface state， Press SET， Enter the function interface， Namely,the main menu interface（Including status query, parameter settings, manufacturer parameters, Chinese and English settings）， The selected menu is displayed in slow flashing mode。
2) Press ▼ or ▲， Can switch back and forth in the main menu。
3) In any display interface， Press ESC or If there are no button actions after 60 seconds, return to the

main interface。

5.5. Alarm content

If the machine has an alarm, the display screen will display the alarm content on the main page. If there are multiple alarms at the same time, the alarm content will be displayed in a loop。

NO.	Alarm content	English abbreviation
1	High temperature alarm in the cabin	High Temp alarm in the cabin
2	Low temperature alarm in the cabin	Low temp alarm in the cabin
3	cabin temperature fault	cabin Temp Fault
4	Evaporator temperature fault	Evaporator temperature fault
5	Condenser temperature fault	Condenser temperature fault
6	Evaporator low temperature alarm	Evaporator low temperature alarm
7	Condenser high temperature alarm	Condenser high temperature alarm
8	Humidity Fault	Humidity Fault
9	Temperature fault outside the cabin	Temperature Fault Outside cabin

6. Running

6.1. Check before start running

1) There are not obvious blockages near the internal cycle air inlet and outlet of the air conditioner.

2) The input power cables and other signal cables have been connected reliably and correctly.

3) The input voltage and frequency should meet the requirement of air conditioner.

4) The fans can turn freely without abnormal noise

6.2. Start running

1) Close the input power switch, it enters the compressor protection function，and the internal cycle fan of the air conditioner will be started. After 3 minutes, If the internal cycle temperature meets the running condition, the cooling system will be started.

2) Operating parameters have the default settings, and it is Ok to confirm normal after running; if you need to change the parameters, please refer to the 5th section.

7. Faults and treatment

7.1. Alarm information

Item	Alarm conditions	Reset	output from dry contact
High temperature alarm	Temperature inside the cabin is higher than the setting	Automatic	Yes
Low temperature alarm	Temperature inside the cabin is lower than the setting	Automatic	No
T1 temperature sensor alarm	There is short or open circuit on the cabin internal temperature sensor cable	Automatic	No
T2 temperature sensor alarm	There is short or open circuit on the Evaporator temperature sensor cable	Automatic	No
T3 temperature sensor alarm	There is short or open circuit on the Condenser temperature sensor cable	Automatic	No
Evaporator-frozen alarm	Evaporator temperature is lower than 0℃	Automatic	Yes
Frequent high system pressure alarm	System pressure is higher frequently than the setting	Automatic	Yes
Controller power failure alarm	No power is be input for controller	Automatic	Yes

7.2. Faults and treatment

Item	Possible reasons	Fault handling
Temp. sensor failures	The sensor has not been connected correctly	Check the circuit connectors，and connect it again
	The sensor is damaged	Change the sensor
high Temperature alarm	The condenser or evaporator is dirty and blocked	Clean the condenser or evaporator
	Refrigerating capacity isn't enough	Please consult usability professional
	The temperature setting is fault	Set the temperature again
Frequent high system pressure alarm	The condenser or evaporator is dirty and blocked	Clean the condenser or evaporator
	External fan is fault	Change the fan
	Condenser temperature sensor	Change the condenser temperature sensor

	wrongly sends alarm	
Evaporator-frozen alarm	Internal cycling path is blocked	Check if there are block to stick the internal cycling path
	Internal fan is fault	Maintain or change it
	Refrigerating system can’t stop	Check if the air-conditioner reaches the refrigeration stop conditions but the actual status doesn't stop, if yes, inform the AC maker to deal with it.
	Evaporator temperature sensor wrongly sends alarm	Change the evaporator temperature sensor
Compressor can’t run	There is no cooling demand	Check if refrigeration is not needed
	Within shutdown delay	Check if compressor is protected
	Compressor line has not been connected correctly	Check the compressor line，and connect it again
	Compressor protect switch or motor is fault	Check if compressor protect switch is ok, and change compressor protect switch if fault; if motor is fault, change the compressor
Internal fan can’t run	Internal fan is fault	Change the fan
	Internal fan line has not been connected correctly	Check the Internal fan line，and connect it again
	External fan is stuck	Check if there are block to stick the fan or not, and clear the block
External fan can’t run	External fan is fault	Change the external fan
	The operating condition has not been satisfied	Check if the operating condition is satisfied
	External fan line has not been connected correctly	Check the external fan line，and connect it again
	External fan is stuck	Check if there are block to stick the fan, and clear the block
Fan makes abnormal noise	Fan blades are damaged or the bearing of fan wears	Change the damaged fan
	The blades of fan scratch other objects	Check and fix it again
Heater can’t run	The heater is fault	Change the heater
	The heater lines has not been connected correctly	Check the external fan line，and connect it again
	The operating condition has not been satisfied	Check if the operating condition is satisfied

8. Maintenance

Maintaining air conditioner very closely can keep it having a good performance and normal life, the following works should be done:

No.	Check/Maintain	Cycle
1	Check whether there are alarm information or not	6 months
2	Check whether fans can rotate normally or not	6 months
3	Check whether compressor can rotate normally or not	6 months
4	Check whether there is obvious noise or shake or not	6 months
5	Clean the inner and outer circulation air inlet and outlet of the air conditioner	6 months
6	Clean heat exchangers	1year
7	Check whether air conditioner power supply wire and communication wire is OK or not	1year

Suzhou Quick Thermal Control Technology Co.,Ltd
苏州酷克温控科技有限公司
No.98,Yangpu Road Industrial Park Suzhou China
中国·苏州·工业园区·阳浦路98号
http://www.topquickcooling.com；sale@topquickcooling.com
Tel: +86 512 6533 5116