



Installation & Instruction Manual



Contents

L	Preface	2
	1.Important Safety Instructions	2
	2.Products	2
	3. Principle	2
	4.Principle descdiption	3
	5.Advantages	3
11,	Specification	4
	Product model parameters table The dimension for dehumidifier	4
Ш	Introduction	5
	1. Wire controller device installation	
	2.The user interface and function shows as below	5
	3.Uses of wire controller	6
	4. Diagram of the model show	_
	5. Functional illustration of the remote controller	_
	6.Connection of PCB illustration	8
IV.	、Installation	
	1.Plastic shell dismantling for ABS wall mounted mode	9
	2.The requirement of installation place	.9
	3.Installation requirement	9
	4. Hot water pipe connection	11
	5.Electric wiring	12
٧,	Safe use and maintain attention	13
	1.Safe use	13
	2.Maintenance Notes	14
	3.Common faults	14
		15
	5 Wiring diagram	4 =



I. Preface

1.Imporant Safety Instructions

- Before using this machine, please read all instructions.
- Before use, make sure the power is to meet the requirements.
- Do not use the method of pulling the power cord, unplug the dehumidifier plug.
- Not to plug in or allocated to control and stop the operation of the dehumidifier.
- In the mobile dehumidifier should be careful not to roll and damage the power cord.
- Do not reach into the hand or rod-like objects within the grid.
- Do not allow children to climb, stand or sit on the dehumidifier.
- Cleaning or maintenance, be sure to unplug the dehumidifier plug.
- Shall not operate in a closed confined space.
- Please keep this manual.

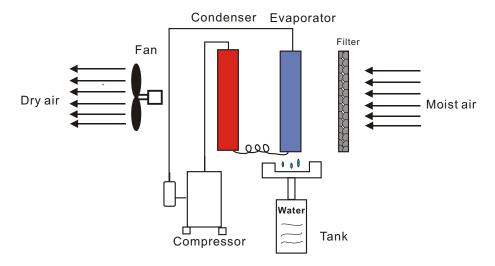
Note: We recommend that any repairs must be professional.

2.Products

Installed dehumidifiers to reduce humidity in the air the room, so people were comfortable life or stored items.

The company dehumidifier has beautiful shape, compact structure, easy operation, which is widely used in scientific research, health care, goods storage, underground engineering and the kitchen, swimming pool, bathroom, archives, storage places high humidity dehumidification to prevent equipment, instrumentation, telecommunications equipment, pharmaceuticals, information and other damp, rust, mildew and damage.

3. Principle





4. Principle description

The product is frozen dehumidifier, whole machine from the compressor, heat exchangers, fans, water containers, chassis and controller, and its working principle is:

The moist air from the fan and pump it into the machine, through the cooling system(compressor, evaporator, condensor) formed under the interaction of suspected frost, defrost automatically into water by heating water outflow, resulting in a dry air discharge, so the cycle to reduce indoor humidity, wet and dry space to gradually achieve effect.

5. Advantages

Protect your environment

Even when you cannot see it. moisture in the form of water vapour is all around us. held in suspension in the air. The relative humidity of the air in many cases determines the extent of corrosion of certain materials. The speed at which moulds develop and the rate of increase of bacteria that cause decay. Most materials and goods are best stored under cool dry conditions.

A false economy

Traditionally the problem was disguised by the use of heat or ventilation. This process is exceptionally energy inefficient and rely on introducing outside air that is generally not suitable unless expensively heated. Drying by traditional heating involves continuously warming a stream of outside air on a constant in and out cycle.



II Specification

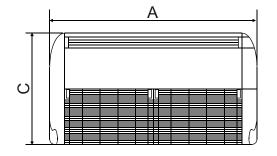
1. Product model parameters table

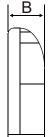
1.1The parameters of ABS wall mounted series

Model	MBA	7A	12A	17A
Dehumidification @ 30 °C/70%RH	kg/24h	75	125	175
Sound level	dB(A)	48	50	50
Circulating air volume	m³/h	600	1200	1800
Heat pump power supply	V/PH/Hz	220/1/50	220/1/60	220/1/50
		1300	2000	2920
Condensate drain, pipe size	mm OD	16	16	16
Operating temperature ranger	°C	5-35		
Compressor protection		3 minutes delay		
Defrost mode		Automatic		
Refrigerant			R410a	
Compressor			rotary	
Net weight	Kg	52 59		70
Gross weight	Kg	57	66	79
Net dimension	mm	905/243/673	1288/243/673	1672/243/673
Packaging dimension	mm	990/290/730	1260/290/730	1680/290/730

2. The dimension for dehumidifier

2.1 ABS wall mounted mode





			Units: mm
Size	7A	12A	17A
Α	905	1288	1672
В	243	243	243
С	673	673	673



III、Introduction

1. Wire controller device installation

The remote controller is designed and employed standard electrical box dimensions (86*86, fixed hole distance 60mm). The electrical box and three core can be built in the wall before decoration, which makes the interior decoration more perfect. The illustration shows as below:



Illustration 1





Illustration 2

two top back-off.



Illustration 3

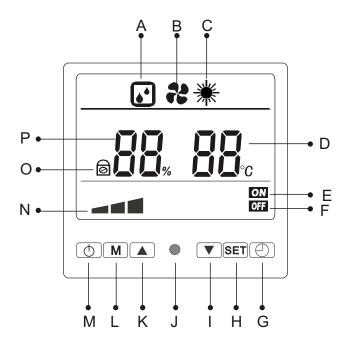
3 Put the remote controller in the electrician base. box and tighten the two setscrews.



Illustration 4

Cover the face covering in the reverse procedures as shown in Illustration 2 and Illustration 1 to complete the mounting of the remote controller.

2. The user interface and function shows as below

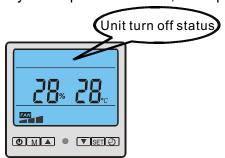


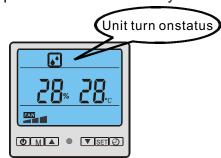
NO.	Symbol	Means		
Α	•	Dehumidifier mode icon		
В	#	Air supply mode icon		
С	*	Heating mode icon		
D	88.	Ambient temp.		
Е	ON	Timer on icon		
F	OFF	Timer off icon		
G		Timer setting button		
Н	SET	Parameter setting icon		
I	•	Down setting button		
J	•	Infrared receiver		
K		Up setting button		
L	M	Model select setting button		
М	Ф	Unit turn on/off button		
N	-41	Fan speed icon		
0	Ø	Button lock icon		
Р	88.	Humidity icon		



3.Uses of the wire controller

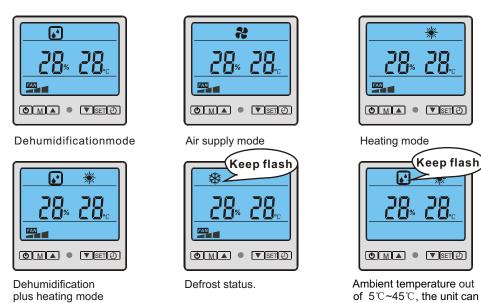
1) ON/OFF " button. Press this button to power on and off. In the ON mode, the remote controller displays the operation mode, fan speed, ambient temperature and the humidity.





2) The " M " button for mode selection. Press this button to choose what the mode do your want. The unit has four modes to choose from, dehumidification mode display " , icon, air supply mode display " R " icon, heating mode display " 💥 " icon. dehumidification plus heating mode display " icon . (Heating mode effective for electric heating model)

4. Diagram of the model show



1) The "SET" button, after on this button, you can change the fan speed. Parameter guery and settings.

Press "SET" 3 seconds to enter parameter query setting menu.

When display shows C1 and C3, pressing the "SET" button, parameter value is blinking, set the parameter value by " and " keys . Press the " set button to confirm the modified parameters. Press the " or ON/OFF key to exit parameters setup.



Acquiesce: 0

Parameters C1 Code Meaning: Weather have Code Meaning: display the heating function. 0: NO 1:YES



Parameters C2 Condenser(coil) temperature



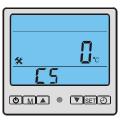
Parameters C3 Code Meaning: humidity sensor error. Acquiesce: 0%.



not properly dehumidify.

Parameters C4 Code Meaning: Defrost cycle. Setting range: (20min~90min) Acquiesce: 40min.





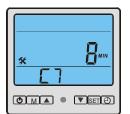
Parameters C5

The temp. point to enter defrosting Exit defrost temperature mode Setting range: (-5° ~-10°) Default 0℃



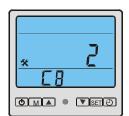
Parameters C6

Setting range: (0° ~15°)



Parameters C7

Exit defrosting cycle Setting range: (1-12Min) default setting: 8Min



Parameters C8

Fan operation mode after the compressor

range:(0: turn of f 1:keep moving 2:every 20min the fan running 30 second.) default setting: 2

2) The " button and " " button.

When working, if it is dehumidifying mode, each press "

" button once, set the humidity plus 1%, when in heating mode, the temperature increases 1 °C; when in dehumidifier plus heating mode, you can switch the humidity and temperature by the " D" button.

When the setting temperature or humidity to the maximum setting, then press the " Lal" "▼" button at the same time for 3 seconds, set given temperature and humidity remains unchanged.

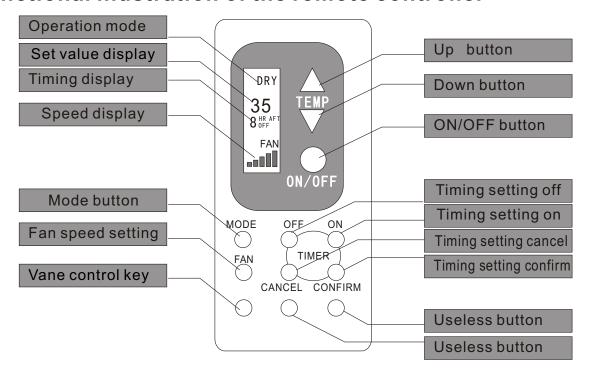
3) Timed ON/OFF setting. Timed ON setting

Press the " () button: to enter the timing setting. By " and " v buttons to change the setting time, press ON / OFF button to cancel the timer, when finish the timing setting, press " D " to confirm exit.

NOTE: In the case of the boot, you can press the "①" button, set the unit off after how many

In the case of the shutdown, you can press the " D " button, set the unit start after how many hours.

5. Functional illustration of the remote controller



1) ON/OFF button. Press this button to power on and off. In the ON mode, the remote controller displays the operation mode, fan speed, ambient temperature and the humidity.



2) The mode button for mode selection. Press this button to choose what the mode do your want.

The unit has four modes to choose from, dehumidification mode display "DRY" icon, air supply mode display "FAN" icon, heating mode display "HEAT" icon, dehumidification plus heating mode display "AUTO" icon. (Heating mode effective for electric heating model).

NOTE: Press mode button to switch the current mode. When AUTO mode is displayed as the default for the dehumidification + heating mode, at this time can not adjust the settings on the remote control humidity and heating temperature.

- 3) Vane control button can control the vane blade rotation direction, on and off.
- 4) Timing setting

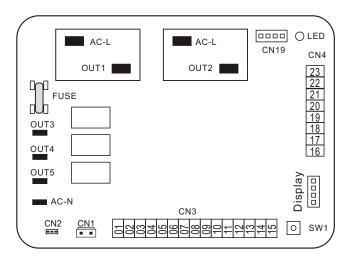
In the boot of the state, according to timer key OFF key can be set with timing off. Press OFF button continuously, you can adjust the values, after the adjustment press the confirm button, timing off setting is completed. Press the Cancel button to cancel timer settings.

In shutdown mode, press the timer button ON button can be set with timing on. Continually press ON button, you can adjust the values, after the adjustment, press the confirm button, timing on setting is completed. Press the Cancel button, cancel the timer settings.

NOTE: No remote control function parameters, only the default mode, so when the remote control unit, according to the actual situation of the control unit.

NO Symbol

6. Connection of PCB illustration



NO.	Symbol	Meaning		
	OUT1	Electric heater /heating water pump output		
	OUT2	Compressor power output		
	OUT3	Reservation		
	OUT4	High speed wind terminal		
	OUT5	Low speed wind terminal		
	AC-L	Power input(AC-L)		
	AC-N	Power input(AC-N)		
	CN1	Transformer primary coils		
	CN2	Transformer secondary coils		
01/02/03		LCD/LED Wire controller		
04/05		High pressure switch		
06/07		Low pressure switch		
08/09	CN3	Auxiliary heating overload PT switch		
10/11		1 Infrared remote control switch		
12/13		② Turn on /turn off switch		
14/15		Phase sequence protection switch		
16/17/18		Humidity sensor		
19		Reservation		
20/21		System coil temperature		
22/23	CN4	Ambient temperature		
24/25		Ambient temperature		
Display		Infrared receiver signal output (effective for the mode of ABS)		
CN19		Stepping motor signal output		

Moaning

NOTE: 1 Infrared remote control switch short circuit: turn on open circuit: turn off

When the wired remote is damaged, disconnect the wired remote, infrared remote control unit to run through the unit. If the remote is damaged or missing, disconnect the "Infrared remote control switch", by "Turn on / Turn off switch" to control the unit, the default mode for dehumidification mode!



IV. Installation

1. Plastic shell dismantling for ABS wall mounted mode



Step one: Unplug the screw cap on the grill



Step two:
Use a Phillips screwdriver
to twist the screw



Step three: pull down the left and right buckle on the grille



Step four: Open up the grille



Step five: Use a Phillips screwdriver to twist the screw



Step Six: Move up the right side of the plate



Step Seven: Move left the right side of the plate



Step Eight: Remove the right side of the plate

Note:Please do not force these operations over to avoid damage to the buckle

2. The requirement of installation place

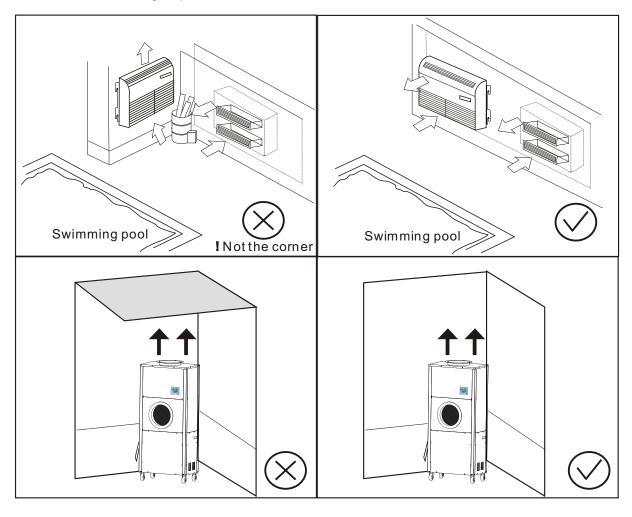
- 2.1. To get enough air for ventilation of the unit, the installation position should be with good ventilation.
- 2.2. The installation position can hold the outdoor unit without noise and shake.
- 2.3. No sunlight to the unit. Set an awning if necessary.
- 2.4. The water from rain and defrosting can be discharged in the installation position.
- 2.5. The unit will not be covered by snow in the installation position.
- 2.6. The discharged air will not face strong air in the installation position.
- 2.7. Assure the noise caused by the unit ventilation and operation will not affect the neighbour.
- 2.8. The installation position will not be affected by garbage, oil and mist.
- 2.9. The unit will be damaged under the condition with oil(engine oil), salt(sea area) and sulfide air(near thermal spring and refining factory).

3. Installation requirement

- **3**.1. The unit can be installed in the balcony, roof, floor or any other convenient place and reliable load-bearing.
- 3.2. Airiness place.
- 3.3. No heat radiation or other heat source place
- 3.4. Should be set up shed against the snow in winter.
- 3.5.Barrier-free at the air inlet or outlet place.



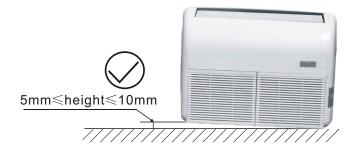
- 3.6. Outlet against strong winds blowing place.
- 3.7. There should be drainage channels around the machine in order to rule out the condensate.
- 3.8. Control Panel, do not install in the bathroom, so as not to affect the unit work by wet.
- 3.9. Should leave enough space around the machine. As shown below.



3.10 Open the front grille plastic case, you can see the plastic plate around the screw, open the screw only after about two plastic plates can be opened. Before the initial installation, containing the product accessories. Please remove the attachment.



Unit installation, does not allow the right tilt, equipped with side outlet is slightly lower, so the unit can be conducive to the normal drainage.

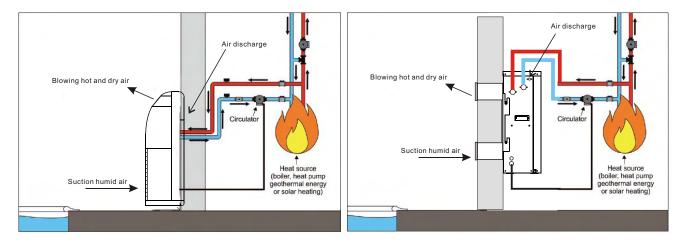






4. Hot water Pipe connection

- **4**.1.Pipe material selection, can be stainless steel pipe, copper pipe, aluminum water pipe, hot water PPR pipes and so on, according with national health and safety standards, heat-resistant, rust-proof, no scaling pipe.
- 4.2. The choice of pipe sizes can be used the one which is matches the heat pump inlet and outlet main pipe, and, respectively connect to heat pump inlet and outlet, and follow the proper construction of plumbing standards.
- 4.3. After hot water pipes connected, it must be pipe connection rigorous testing, plus 0.7Mpa pressure testing 24 hours, system pipes connector no leakage and clean and sewage pipes, to ensure that the system clean, no debris. No leakage after the test, then pack the pipe and valve with insulation (including the replenishment pipes and valves).
- 4.4.In order to discharge the water system air clean, avoid air trapping in the pipeline, the water supply return pipe highest point should be set up a automatically exhaust valve.
- 4.5. The water system expansion tank, automatic water valve and stop valve should be installed indoors, to prevent water pipes and valves crack when not use in the winter.
- 4.6.The metal pipe must be used above 50mm thickness of glass fiber or high-density fire retardant PE for thermal insulation and moisture, PPR water pipe can be used 30mm thickness of glass fiber or high-density fire retardant PE for thermal insulation and moisture to prevent cold, heat loss and condensation.
- 4.7 The hot water installation diagram





- 1:Dehumidifying console for installation in the area to be treated at least at 2 metres form the pool. The heating can be included as an option: either by hot water battery or by electric heating
- 2: When not used in winter, please discharge water left inside the dehumidifier, in case of water system freezes, lead to coil distends to crack.



5. Electrical wiring

- **5**.1.The unit should use dedicated power supply, power supply voltage line corresponding with rated voltage.
- 5.2. The unit power cable must use copper cable, the cable diameter must ensure that the unit's maximum starting current requirements.
- 5.3. The unit power supply circuit must have a grounding wire, which should connect with a reliable external ground wire, and the external ground wire is effective.
- 5.4. Wiring construction must be installed by professional technicians refer to circuit diagram.
- 5.5. Power lines and signal line layout should be neat, rational, strong and weak lines separate and can not interfere with each other, while not contacted with the connecting pipe and the valve body.
- 5.6. When power lines and control lines parallel, the wires were placed in each tube, also leave appropriate distance between the lines.
- 5.7.Unit electric wire connection: take the unit power line, remote control three core lines, electric heater power line, solar circulated water pump control power line, water tank temperature sensing line, solar collector temperature sensor line, terminal equipments connect to unit lines, through the unit wiring hole set into the electrical box, connect to the appropriate terminals according to wiring diagram, and fix it by the pressure line of board in the electrical box.
- 5.8. Unit control panel Code Mk4032, Fuse specifications: 5A/250V
- 5.9 The unit input power wire select diagram.

Mode	Host Power	Phase line	Zero line	Ground line	Max.line length (m)	Signal line	Tem. sensor assistance line	Max.line length (m)
7A	220V/1PH/50Hz	1.5mm ²	1.5mm ²	1.5mm ²	15	0.5 mm²	0.5 mm²	50
12A		1.5mm ²	1.5mm ²	1.5mm ²	15	0.5 mm²	0.5 mm²	50
17A		2.5mm ²	2.5mm ²	2.5mm ²	15	0.5 mm²	0.5 mm²	50

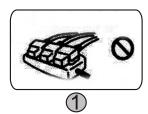
Note:

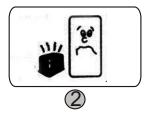
- 1. used PVC insulated copper wire for above wiring
- 2. for installation requires, the line is longer than the maximum line length, please contact the company

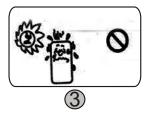


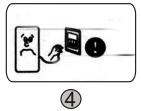
V, Safe use and maintain attention

1.Safe use



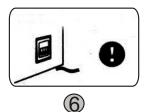


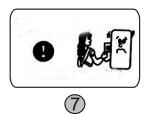


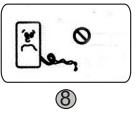


- ① Do not use relays, extension cords or adapters to connect the machine, otherwise it will result in fire, electric shock or heat.
- ② Do not place this machine stoves, heaters and other heating equipment side. Or resin may be melted, or even fire.
- 3 Do not subject to direct sunlight or exposed to the elements of the local use of dehumidifiers. The machine for indoor use only.
- Problem occurs (such as a burning smell, etc.), please turn off the machine and pulled out the plug. Or may cause fire, electric shock and a new fault.

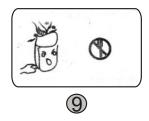


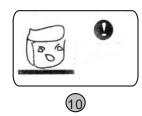


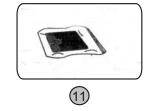


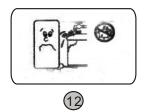


- (5) Do not place vulnerable to chemicals affecting the use dehumidifiers into the atmosphere of drugs or solvents may cause local adverse effects, and use the tank water leakage occurred.
- 6 The long-term no use, please, pull the plug.
- (7) Cleaning the machine, please stop and pulled out the power plug, otherwise easily lead to personal injury.
- 8 Continuous drainage, please put away pipes to the drainage flow. If the water temperatures may freeze around, you can not be continuous drainage.





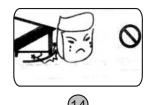


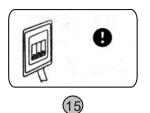


- Please do not repair, unweave or modify the machine, otherwise lead to a fire or electric shock.
- Please place the unit on firm premises, if the machine overturned, the water tank would leak and damage the surrounding materials, thus resulting in fire or electric shock due to leakage.
- (1) Skill to extend the life of air purification filters, if not used in a long time, put it into a plastic bag, sealed.
- Do not use of dehumidifiers exposed to water. This unit may leakage when watered, causing fire or electric shock.











- 13 Please use the appropriate power switch, or else cause fire or electric shock.
- Do not damage or change the power cord. Do not place heavy objects on the power cord, heating or force the cord, or else damage the power cord result in fire or electric shock.
- Power cord securely connected to the power switch on, if the power cord loose; there is risk of electric shock.
- 16 Do not unplug the power cord to stop the dehumidifier to run; otherwise will cause a fire or electric shock.

2. Maintenance Notes

- 1) When moving, do not tilt the body over 45°C to prevent damage to the compressor.
- 2) When dehumidifier work, the heat generated by compressor operation, room temperature will rise $1 \sim 3^{\circ}C$, this is normal phenomenon, ease of use.
- 3) If the setting humidity higher than the real humidty, the dehumidifier will not work.
- 4) When dehumidification, compressor began to work, fan and compressor will run at least 3 minutes to stop work; Compressor must go through three minutes to start working after stopping working.
- 5) If at lower temperatures, the unit will judge the system temperatures automatically to achieve automatic defrost purpose; When defrosting defrost working compressor.
- 6) system possesses automatic memory function, when all the mode setting the system meet power failure a or suddenly meet without tight slide in power, the system can automatically stored before the operation state in the next time in power system will automatically enter before operating mode.
- 7) If long time without using the dehumidifer, remove power wire or power down.
- 8) Inlet and outlet must leave at least 10cm from the wall, so as not taffect the dehumidification effect.
- 12) Air filter accumulation dust, this will affect the dehumidifier effect, even failure, must be regularly cleaned at least once a month, if the environment more dust, it is recommended that a weekly or even daily cleaning, pull down the front panel ,clean the filter, tapping or vacuuming to remove dust on the filter when cleaning, or wash filter in the warm water (= $40 \, ^{\circ}$ C and add some neutral detergent), rinse with water and dry, can not be directly exposed to the sun or broiled, prevent deformation.

3. Common faults

Failure phenomenon	Analysis	Troubleshooting
Dehumidifier not run	1.Power failure 2.Power switch is not turned 3.Power cables are not connected Fuse blows	1.Restoration of electricity 2.Restore power 3.Plug the power cord Replace the fuse
Dehumidification little effect	Air filter fouling Doors and windows open Refrigerant leak.	1.Clean the filter 2.Removal of obstructions 3.Close doors and windows 4.Contact with the agent or factory repair



Leakage	1.Tilt the machine 2.Outlet pipe plug	1.Adjust the machine level 2.Remove the pane to remove tube booty
Abnormal noise	1.Place the machine is not smooth 2.Filter is blocked	1.Reposition the machine steady 2.Clean the air filter

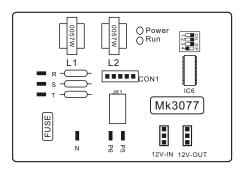
4. Fault code description

The dehumidifier automatically determine fault with features such as failure, in the humidity in the display fault code will appear.

Wired remote display	Running lights display	Issue	Problems Solutions
E1	1flash 1 off	Temperature sensor fault	1.Temperature sensor connection is normal or not. 2.Check the filter is blocked or not
E2	2flash 1 off	System coil temp. Sensor failure	Check coil temp sensor connection is normal or not
E3	3flash 1 off	Humidity sensor failure	Check humidity sensor connection is normal or not
E4	4flash 1 off	System high pressure protection.	Check whether the unit is running hot
E5	5flash 1 off	System low pressure protection.	Check whether the unit is running normal or not
E6	6flash 1 off	Electric heater overheating protection	Detection of the heating water supply system s normal
E8	8flash 1 off	Phase sequence protection	Check the power phase sequence whether misphase.
№ Keep flash	7flash 1 off	Under the dehumidification mode, the non-normal ambie temperature protection.	
☆ Keep flash	※ Keep flash Keep flash Defrost status		
EE		Communication failure	Check humidity wire controller connection is normal or not.

5. Wiring diagram

5.1. Power phase sequence protection board description

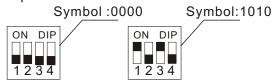


NO.	Symbol	Meaning		
1	R	Power input		
2	S	Power input		
3	Т	Power input		
4	N	Power input		
5	P5	Protection signal output		
6	P6	Protection signal output		
7	12V-IN	Connect transformer power(12VAC)input		
8	12V-OUT	power(12VAC)output		



5.2. The setting of current protection value

For example:



Symbol	Current value	Symbol	Current value
0011	8A	1010	20A
1101	9A	0010	21A
0101	10A	1100	28A
1001	11A	0100	29A
0001	12A	1000	30A
1110	18A	0000	31A

5.3 Wiring diagram(MK4032-0501)

