

## **Shanghai Thenow Purification Technology Co.Ltd**

Wine Cellar Cooling Units
Split System

## **User Manual**



Thank you for purchasing this "Thenow" product;

Please read this manual carefully before attempting to install, operate or service;

Please retain this booklet for future reference.

Thank you for purchasing Thenow cooling system. We strive to provide the highest-quality products and the best possible customer service. If you have any questions about our system, please call us at 4001878599 or visit www.thenowair.com



## !!! WARNING !!!



To avoid the risk of electrical shock, property damage, personal injure or death, please read the following instructions carefully with safety or warning labels.

\*Do not attempt to carry out any measurement, device replacement or other maintenance work not covered in this manual, otherwise it may lead to warranty failure, endanger normal operation, extend equipment downtime and increase additional maintenance costs.

Disconnect electric power from the appliance before performing any maintenance or repairs, failure to do so could result in death or electrical shock.

<sup>\*</sup>During transportation or moving, please follow the correct direction on the packing case.

<sup>\*</sup> After transportation or moved, it needs to be allowed to stand for more than 24 hours before it can be turned on.



## Contents

1.	Product Introduction	4
2.	Dimensions & Technical Data	.5
3.	Installation & Debugging	.8
4.	Introduction of Controller	.14
5.	Maintenance	.18
6.	Troubleshooting	.19
7	Warranty	21



## **Product Introduction**

Thenow wine cellar cooling units split system is intended for cellars without access to proper ventilation. They are known for their efficiency and longevity. Each unit is designed to maintain a consistent temperature and humidity in spaces where proper ventilation is not feasible. The units are functionally divided into two sections, the evaporator and the condenser. The evaporator is installed inside and the condensing unit can be placed as far as 25m away. Since it exhausts outside, split cooling systems operate quietly and reduce vibration inside the cellar, which is believed to negatively affect the quality of wine.

#### Features:

Auto cooling and heating mode, keep wine cellar under constant temperature.

Adopt circulating water wet-film auto control humidification system, wet film is made of Swedish organic polymer material with sterilization and disinfection function.

High energy efficiency, green energy saving

Intelligent control panel, famous brand sensors with stable quality, integrated ModBus connection

Control constant condensation temperature

Three speed air flow under auto control to maintain the ideal environment for long-term wine storage Pull-out design wet film module, Sweden brand, easy to replace

#### **Working Principle**

#### 1、Refrigeration

Using cycling vapor compression refrigeration system, when the compressor work, indraft low temperature and pressure refrigerant gas from evaporator, compressed by compressor into high temperature and pressure gas, and then into the condenser to condense into liquid, meantime release heat, after throttling under the function of the thermal expansion valve, entering into the evaporator and absorbed heat, then evaporate into gas, finally back to the compressor through the suction tube and complete a refrigeration cycle; On the other hand, through changing of refrigerant flow direction, total or partial condensing heat generated from refrigeration can be exhausted to outside, to achieve the purpose of adjusting the indoor temperature.

#### 2. Dehumidification Principle

When the wet air flows through the evaporator surface, the air temperature will drop, when it falls below the dew point, the steam in the air will condense out, gathering and drainage of water pipes in the receiving plate, the controller automatically adjusts the compressor start-up time according to the setting humidity, so as to achieve the purpose of adjusting humidity.

#### 3. Heating

Electric heating compensation.

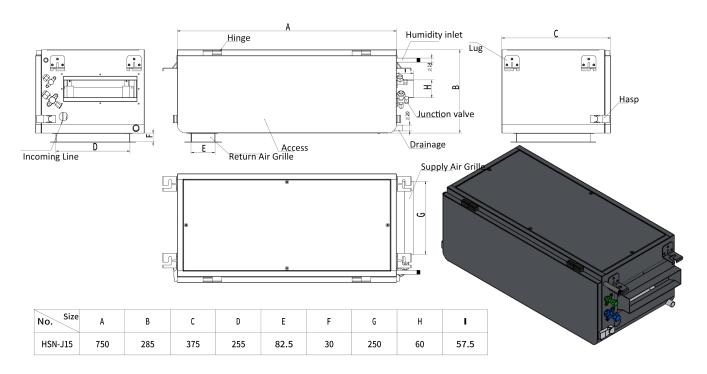
#### 4. Humidification

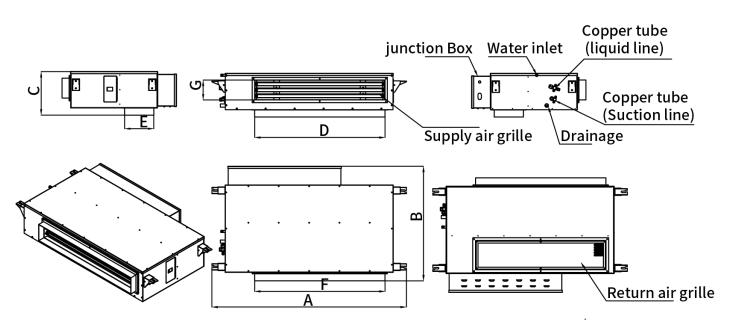
Adopt circulating water wet-film auto control humidification system, wet film is made of Swedish organic polymer material with sterilization and disinfection function.



## **Dimensions and Technical Data**

## **Unit Dimension / Indoor Unit**

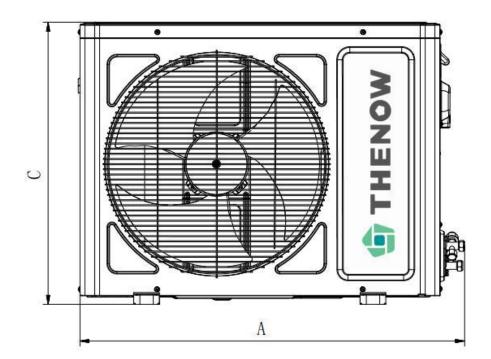


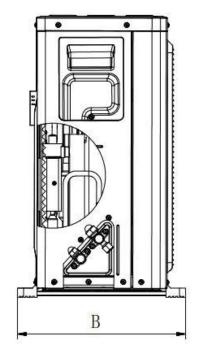


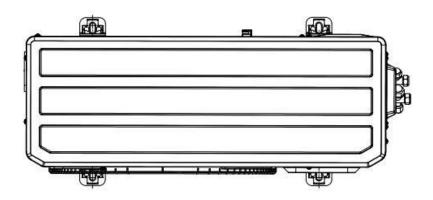
No.	Model	Size:mm						
INO.	Model	Α	В	С	D	Е	F	G
1	HSN-J30	760	600	250	570	200	460	135
2	HSN-J60	1160	600	250	900	200	900	135
3	HSN-J90	1360	600	250	1200	200	1020	135
4	HSN-J150	1760	600	250	1600	200	1485	135



## Unit Dimension /Outdoor Unit









No.	Model	Size:mm			
INO.	iviodei	А	В	С	
1	HSN-J15	700	300	460	
2	HSN-J30	810	275	540	
3	HSN-J60	860	300	540	
4	HSN-J90	1000	405	870	
5	HSN-J150	1010	405	1250	



## **Technical Data**

Model	Unit	HSN-J15	HSN-J30	HSN-J60	HSN-J90	HSN-J150	
Cellar Size (Up to)	m³	15	30	60	90	150	
Power	V/HZ		220V/50HZ		380V	7/50HZ	
Cooling	W	570	1120	3100	5000	7600	
Heating (Electrical)	W	2000	4000	6000	9000	12000	
Air Flow(M)	m³/h	154	450	740	900	1300	
Static Pressure	Pa	20	30	30	40	60	
Nosie	dB (A)	40 (Indoor)	50 (Indoor)	50 (Indoor)	53 (Indoor)	62 (Indoor)	
Refrigerant	/	R134a		R <sup>2</sup>	110A		
Control		PC Full-touch smart control					
Temperature	$^{\circ}$ C		10-18℃, ±2℃				
Humidity	$^{\circ}\!\mathbb{C}$		50~70%, ±5%				
Total Power	W	2700	5300	7400	11900	17000	
Humidifier	Туре			Wet-film			
Humidification	Kg/h	1	2	2	4	6	
Indoor Unit Size	L*W*H (mm)	885*375*315	945*790*300	1345*790*300	1545*790*300	1945*890*350	
Outdoor Unit Size	L*W*H (mm)	700*300*460	860*300*540	860*300*540	1000*405*870	1010*405*1250	
Tube	Liquid(mm)	6.35	6.35	9.52	9.52	12.7	
Connection	Gas(mm)	9.52	9.52	12.7	15.88	19.05	
Drainage	mm	20	20	20	20	20	

**Note:** Cellar inside dry-bulb t=12  $^{\circ}$ C 60% Outside dry-bulb t=35  $^{\circ}$ C, wet-bulb t=28  $^{\circ}$ C

There are several factors such as glass, stone, concrete, insulation, ambient temperature, ventilation etc. which will change the required amount of Kw needed to properly cool your wine room or wine cabinet. We strongly recommend you contact with us or our distributors beforehand to help you to choose the model matched. We do not bear the losses caused by the selection errors caused by the above reasons.



## **Installation and Debugging**

## **Pre-installation Inspection**

# Use caution when lifting and check package for damage

- A. Check the outer packing for breakage.
- B. Machine model (nameplate), check whether it is consistent with what you ordered.
- C. The appearance of the whole machine is intact.
- D. A shipment may include one or more boxes containing accessories, please check all shipped boxes for the following contents.

Item No.	Item	Q'ty	Size	Photo
1	Unit	1 set	See the nameplate	2003
2	User Manual	1 pc	<b>A</b> 5	User Microsity
3	Control Panel	1 pc	90*90mm	10 10 10 10 10 10 10 10 10 10 10 10 10 1
4	Water Inlet Valve	1 pc	/	
5	Drain-pipe	1 pc	Ø20 15cm	
6	Head Outside The Wire	1 pc	DN15	



7	Ноор	2 pcs	Ø20-Ø28	90
8	Screw	J15&J30: 4pcs J60: 6pcs J90: 10pcs	HSN-J15 ST4.2*9.5&HSN-J30 ,J60,J90,J150 ST4.2*13	
9	Inlet flange	1 pc	HSN-J15 253.5*82.5mm HSN-J30 572.5*202.5mm HSN-J60 902.5*202.5mm HSN-J90 1142.5*202.5mm	
10	Cooper Pipe	1 pc	HSN-J15 ø6.35&ø9.52 3m HSN-J30 ø6.35&ø9.52 3m HSN-J60 ø9.52&ø12.7 3m HSN-J90 ø9.52&ø15.88 3m HSN-J150 ø12.7&ø19.05 3m	

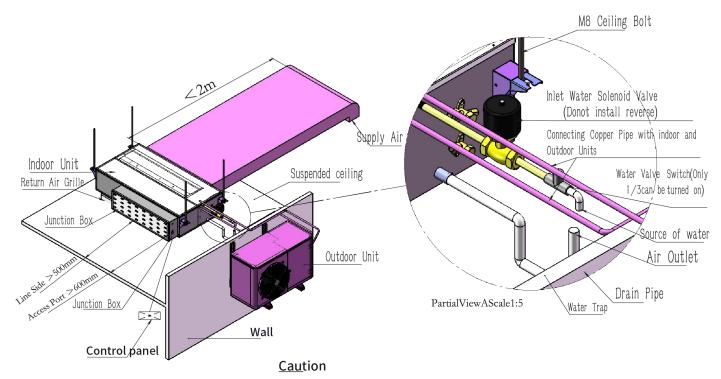
#### Note:

- 1. The drain pipe must be added with a hard pipe, the thread taper and the hose can be used as a connection
- 2.A wine cellar cooling unit with a humidification function requires an inlet pipe. An independent valve must be installed on the inlet pipe to regulate the pressure of the machine's water pipe or turn off the water when the machine fails.
- 3. The indoor unit installation needs the boom and nut, the outdoor unit needs the tripod.
- 4. Air ducts (return duct, supply duct etc.), no matter what the material, but all need with good heat insulation
- 5. When necessary, the length of the copper pipe can be increased as needed.

Warning: Our company is not responsible for any accident caused by opening the panel and electric control cabinet without the permission of the company.



#### Installation Sketch



- 1. Inspection port on the ceiling must be reserved under the junction box near the piping side, size must be confirmed with manufacturer or dealer
- 2. To make sure the unit in good running, please install the unit strictly according to the above sketch and keep the supply air and return air smoothly.
- Water inlet solenoid valve must be installed by qualified person(s), and connect the wiring to the reserved port of the junction box.
- 4. Standard pipe length is 5m,less than 5m no need to add refrigerant. If more than 5m,excess length adding refrigerant according to standard 70g/m.

  5. PVC drain pipe is acceptable, the size must be greater than or equal to the condensate water pipe and the shorter the better, keeping at least 2% downward.
- Meantime, water trap and air outlet port must be installed according to the above sketch.

  6. The installation length of the outlet pipe does not exceed 2m, otherwise it will affect the performance of the unit.

As following, please refer to the appendix or contact with THENOW directly for the maximum connection distance of unit copper pipes and the supplementary refrigerant filling.

Appendix I: Refrigerant charge under default value of 3m distance between indoor unit and outdoor unit.

Model	Refrigerant	Refr.Charge
HSN-J15	R134A	680g
HSN-J30	R410A	830g
HSN-J60	R410A	2100g
HSN-J90	R410A	2600g
HSN-J150	R410A	

Appendix II: Recommended distance between evaporator and condenser.

Model	Horizontal Distance	Vertical Distance
HSN-J15	≦10m	≦3m
HSN-J30	≦15m	≦3m
HSN-J60	≦18m	≦5m
HSN-J90	≦22m	≦6m
HSN-J150	≦25m	≦6m

Note: You must consider the max. distance of the different models when increasing the distance.



**Appendix III:** If distance exceed 3 meters(actual installation distance must be in the scope of our max. value in the above sheet), extra refrigerant charge, please take reference of the below sheet.

Refrigerant Type: R134A

Tube Size(mm)	Refrigerant charge per extra 1m
Ф6	0.005kg
Ф6.35	0.010kg
Ф9.52	0.020kg
Ф12.7	0.032kg
Ф15.88	0.048kg
Ф19.05	0.064kg
Ф22.23	0.100kg

Refrigerant Type: R410A

Tube Size(mm)	Refrigerant charge per extra 1m
Ф6.35	0.022kg
Ф9.52	0.054kg
Ф12.7	0.110kg
Ф15.88	0.170kg
Ф19.05	0.250kg
Ф22.23	0.350kg
Ф25.4	0.520kg
Ф28.6	0.680kg

#### **Installation Conditions**

#### **Indoor unit:**

- 1. When the machine is hoisted, the lifting bracket must be vertical and the install surface is flat. Meantime, the ceiling joists must be able to bear the weight of the unit.
- 2. To keep good ventilation and easy maintenance, requires that there must be more than  $\geq 400^*$  600mm maintenance space around and at the top of the equipment.
- 3. Never install the unit in danger areas, such as strong magnetic, steam, dust, heating source, corrosion and combustible gases etc.
- 4. If the installation location of the machine is not in the refrigeration area, the indoor unit needs to be insulated to prevent condensate water.
- 5. Never reduce the diameter of the drainage pipe by yourself when installing the drain line.
- 6. To better control the wet-film water inlet flow rate, electromagnetic water valve and ball valve are suggested to be installed. Otherwise, the water will always be supplied to the machine in a normally open state, which will cause the equipment to leak and fail to operate.

The reference range of valve adjustment opening under the standard pressure of each model is as follows:



Model	HSN-J15	HSN-J30	HSN-J60	HSN-J90	HSN-150
Valve Opening	1/4	1/3	1/3	1/3	1/2

Note: Make sure the smooth drainage too.

- 7. Recommended materials for commonly used air duct:
  - A: Thermal insulation board, 15-20mm thickness.
  - B: Stainless steel air duct, 20mm insulation outside.

#### **Outdoor Unit:**

- 1. Good heat dissipation must be ensured.
- 2. The load-bearing capacity of the unit installation frame shall not be less than 4 times of the unit weight.
- 3. If mounting in the ground, the unit must above normal snowfall levels.
- 4. The condensing unit shall not be installed in a common area such as aisles, corridors, and exits inside the building.
- 5. The condensing unit should be as far as possible away from the adjacent doors and windows and green plants, and the distance between the door and the window shouldn't be less than 3 to 4 meters.
- 6. The copper pipe must be insulated, and the thickness of the insulation cotton is ≥15mm.

## **Online Debugging**

**Note:** Always operate this machine from a 220V 1 phase or 3-phase 380V, 50Hz power source, and the fluctuation amplitude does not exceed 10%, the junction box capacity meets the equipment electrical using requirements; Take reference to the internal electrical schematic diagram of the unit, connect the indoor unit and outdoor unit, and ensure that the unit is effectively grounded.

- 1. Power the machine.
- 2. Set the operation mode, temperature and humidity (For setting methods, please check the operation section of the controller in the user manual)
- 3. Humidity setting value is 95% (higher than the ambient humidity) and temperature is set at 8°C (lower than the ambient temperature), the setting operation mode is auto. Then cooling, heating and humidification will be calling automatically according to the setting value.
- 4. Keep the machine running at least 30 minutes.



#### After the machine runs for 30 minutes:

- 1. Check the alarm record. If all functions work well, no alarm record will be generated.
- 2. Check the machine for leaks. In case of leakage, first check whether the drainage is smooth. If so, reduce the opening of the ball valve to reduce the inlet water pressure. Run the machine for half an hour again and check whether the leakage problem is solved.
- 3. Check whether the temperature is lower than that when the machine is started. Generally, the coil temperature is reduced by 5-14°C as the normal range.
- 4. Check whether the humidity is higher or the same as when the machine is turned on.
- **5.** If the cooling, heating and humidification of the equipment can operate normally and there is no water leakage, the debugging work is completed.

#### Note:

After transportation or moved, it needs to be allowed to stand for more than 24 hours before it can be turned on.

The system is designed to maintain a cellar temperature of 10-18 $^{\circ}$ C as long as the outside ambient temperature does not exceed 43 $^{\circ}$ C or no less than 5 $^{\circ}$ C.

**TIPs:** Save your box and all packaging materials, they provide the only safe means of transporting/shipping the unit .



## **Introduction of Controller**



#### **Controller Introduction:**

CK-4C-86 series controller is a new type of controller to realize intelligent control of constant temperature and humidity for a wine cellar and wine cabinet cooling units, which is widely used in precise temperature control places with small volume.

The controller adopts 4-inch large -screen colorful display technology, timing control, automatic/manual control of air flow speed, automatic operation of the appropriate air flow speed, comfortable energy saving, accurate and reliable.

#### **Functional features:**

- 1. With 4-inch capacitive full-touch display, clear picture and easy to operate.
- 2. Real-time display of temperature, humidity and clock.
- 3. Timing control.
- 4. Fan speed manual/automatic control selection.
- 5. Multiple operating mode options.
- 6. Built-in advanced parameter settings, manufacturers can freely set according to different customer needs.
- 7. Standard 86 mounting bottom case for quick and easy installation.
- 8. Power off and restart function.
- 9. Alarm can be remembered.

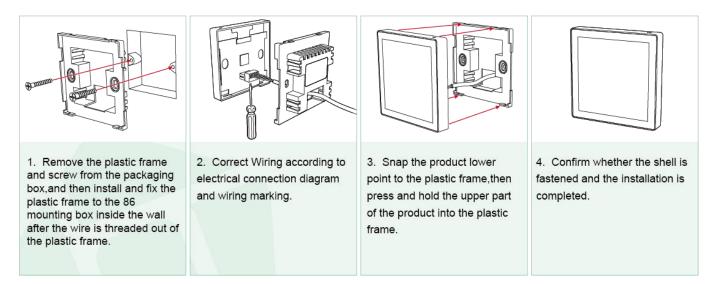


#### **Technical Specifications**

	<del>-</del>			
	PCB: AC220V±10% 50/60HZ			
Power Supply	Display: DC12V			
Shall Material	Flame retardant ABS+PC			
Power	<12W			
Pich of Installation	60mm			
Size	PCB: 123mm×85mm			
	Display: 91mm×90mm			
Storage Environment	-10~~70°C 5%~~95%RH			
Working Condition	-10~~70°C 5%~~95%RH			

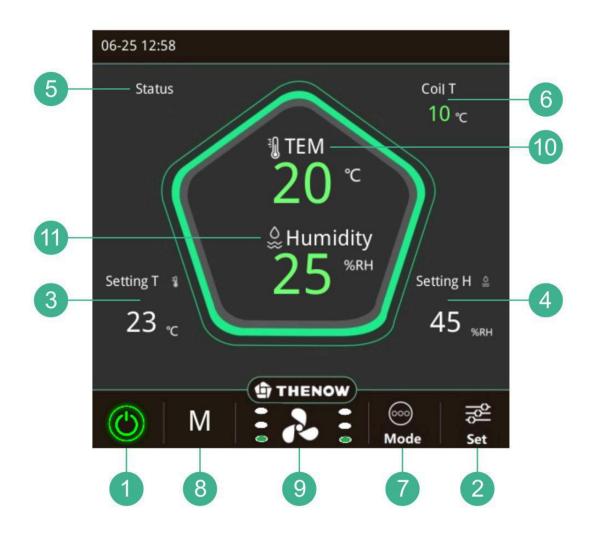
Please connect in strict accordance with the product wiring diagram, wiring must be disconnected from the power supply ,if any abnormality occurs, please cut off the power supply and contact the manufacturer as soon as possible. Non-professionals should not disassemble it in order to avoid danger.

## **Product installation:**



- 1. Remove the plastic frame and screw from the packaging box, and then install and fix the plastic frame to the 86 mounting box inside the wall after the wire is threaded out of the plastic frame.
- 2. Correct wiring according to electrical connection diagram and wiring marking.
- 3. Snap the product lower point to the plastic frame, then press and hold the upper part of the product into the plastic frame.
- 4. Confirm whether the shell is fastened and the installation is completed.





#### **Functions:**

1.Power ON/OFF 2.Set (humidity/temperature/time etc.) 3.Setting temperature

4.Setting humidity 5.Running mode display (Constant Temperature/Constant Humidity/Auto/Ventilation)

6.Coil temperature 7.Running Mode Setting 8.Fan running mode(Manual/Auto)

9.Fan air flow setting(Only when fan running mode at "Manual") 10.Cellar temperature

11.Cellar humidity



Turn system ON/OFF	Sering 1 2 5 Mark Sering 4 2 23 v    THENOW Set In Sering 4 2 23 v    THENOW Set In Se	Touch the switch icon in the lower left corner to turn on or off the unit Color red is on and green is off
Set temperature	Section 1 10 c 1	Touch icon 'Set'     Find 'Temperature' , click to enter and set temperature
Set humidity	CS-25 1.2-01  4 cm c  1 cm 1  10 c  20 v  45 year  45 year  45 year  Mode Set	1. Touch icon 'Set' 2. Find 'Humidity' , click to enter and set humidity
Set time	SS-512-38  THEROW  THEROW  TO THEROW	1. Touch icon 'Set' 2. Find 'Time' , click to enter and set time
Mode	(B) M (4) THENOW (5) Mode Set	Touch icon 'Mode' to choose the running mode, default value is 'Auto'
Fan Running Mode	(6) M (6) THENOW (7) Mode (8) Mode (8)	Touch icon next to the switch, choosing the running mode of the fan at 'A' or 'M'  (A-Auto running speed, M-Selecting running speed manually)
Set the fan speed (Only available at the fan work under "Manual" running mode)	(6) M (6) THENOW (25) And (25)	Touch the fan icon to change the fan speed



#### **Maintenance**

## **Using Requirements**

- 1.Working conditions: evaporator unit use temperature :5 $^{\circ}$ C-35 $^{\circ}$ C, relative humidity lower than 90% ;condensing unit use temperature:5-43 $^{\circ}$ C.Please use the equipment strictly in accordance with the specified environmental and temperature conditions.
- 2. Please make certain power supply is specified voltage, it's strictly prohibited to operate equipment with phase missing or under voltage.
- 3. This product is a non-explosion-proof product. Please do not use the unit in the environment with flammable or explosive gas.
- 4. It is forbidden to disassemble, process, modify or repair the machine without authorization. Otherwise there is a danger of abnormal movement, electric shock or fire.
- 5 .If the equipment has not been used for a long time ,please make sure to turn off the power.

## Cleaning

## Disconnect electric power from the appliance before any operation, otherwise there will be the risk of electric shock.

- (1) Because the temperature probe is a sensitive element,in dusty place, please use low pressure water to clean regularly (for example, with the dust ball blowing wash), when the accuracy become poor ,please correct or replace.
- (2) Always check if the contact between the electrical plug and the socket of the machine is good. If the power lead wire or plug is hot when the machine is running, it may be that the electrical wiring is too thin or the plug or socket is in poor contact. Measures should be taken to solve it.
- (3) Always observe if there is refrigerant leakage at the interface of the refrigerant circuit of the machine. If there is oil stain, it means that the refrigerant leaks out, it should be treated in time to avoid leakage of the refrigerant for a long time, which will affect the refrigeration (heat) effect of the air conditioner and even cause damage to the compressor.
- (4) Clean the condenser and evaporator coils of the machine regularly. Use a brush and a vacuum cleaner to clean the dust on the coil. Note that the brush and vacuum cleaner should be cleaned in the vertical direction of the coil during cleaning. Do not sweep in the horizontal direction to avoid damaging the ribs of the coil.
- (5) Clean the air filter of the machine regularly. It is usually cleaned in about 3 to 6 months (depending on the site conditions). When cleaning, pull out the filter and use a dry soft brush to filter the dust on the net. It can also be cleaned with water to filter dust on the net.



Do not replace the filter while the machine is working



## **Troubleshooting**



Disconnect electric power from the appliance before performing any maintenance or repairs, failure to do so could result in death or electrical shock.

- If maintenance is needed, wait for 3 minutes after power failure (let capacitor discharge on PCB), and then
  open the maintenance door.
- The surface temperature of the condenser may be very high. Do not touch it to prevent burns.
- Even if the fan and compressor have stopped ,there is still a dangerous voltage at the terminals of the starting capacitor.

The below information is for reference only. If the machine fails to work properly, please contact your local dealer or your local authorized repair station.

All electrical installation and maintenance work in this manual must be performed by a professional electrical engineer.,our company is not responsible for opening the panel and electric control cabinet without the permission of the company.



Troubleshooting			
Status	Reason	Suggestion	
Cooling unit not running	<ol> <li>No power.</li> <li>Power cord unplugged.</li> <li>Low voltage.</li> <li>Incorrect or loose wirings.</li> <li>Ambient temperature above 35°C or lower 5°C.</li> <li>Setting higher than ambient temperature.</li> <li>Defrosting mode on.</li> </ol>	<ol> <li>Check power at receptacle &amp;fuses.</li> <li>Plug-in power cord plug.</li> <li>Contact an authorized electrician.</li> <li>Check all wirings and connections.</li> <li>Ambient temperature not meet unit working conditions.</li> <li>Lower temperature setting.</li> <li>Wait 5-30minutes.</li> </ol>	
Cannot dehumidification	<ol> <li>Inlet or outlet air grille is stuck.</li> <li>Air filter is stuck.</li> <li>Refrigerant leakage.</li> <li>Compressor not working.</li> <li>Fan is not working</li> </ol>	<ol> <li>Please check the air grille and clean it.</li> <li>Check air filter.</li> <li>Add refrigerant.</li> <li>Check whether the compressor is normal.</li> <li>Check the fan.</li> </ol>	
No air exhaust	1.The air supply is blocked. 2. Fan is not working.	Check and clean air outlet.     Check the fan.	
Louder noise	<ol> <li>Loose parts.</li> <li>Air filter is stuck.</li> <li>The unit is not installed smoothly.</li> </ol>	Check parts.     Clean filter.     Install the machine smoothly.	
Temperature too high	<ol> <li>Setting too high.</li> <li>Improper cabinet seals.</li> <li>Ambient temperature too high.</li> <li>Cabinet/room too large.</li> <li>Fan fault.</li> <li>Refrigerant leakage.</li> </ol>	<ol> <li>Lower setting.</li> <li>Check gasket and door opening.</li> <li>Check installation location.</li> <li>Check for excessive size or the machine model choice is improper.</li> <li>Check both evaporator and condenser fans.</li> <li>Add refrigerant.</li> </ol>	
Unit running too long or continually	The machine model choice is improper or improper room sealing.     Ambient temperature to high.	Check machine mode or check room tightness.     Check installation location or increase setting.	
Evaporator icing	<ol> <li>Evaporator airflow restricted.</li> <li>Unit not stopping due to air leak,high ambient temperature or low setting.</li> <li>Low ambient temperature.</li> <li>Bad thermostat or sensor.</li> <li>Refrigerant leaking.</li> <li>Expansion valve blockage.</li> </ol>	<ol> <li>Check the fan.</li> <li>Check fr seal,door opening,ambient temperature and setting.</li> <li>Defrost the unit</li> <li>Check for thermostat and sensor.</li> <li>Check for sealed system leakage.</li> <li>Check for low side pressure.</li> </ol>	
The fan keeps running No cooling but	Fan protection procedure.     Wrong wiring harness connection.	Wait 3 minutes.     Check harness links.	
compressor running	<ol> <li>Refrigerant leakage.</li> <li>Evaporator airflow restricted.</li> </ol>	<ol> <li>Check of refrigerant.</li> <li>Check for airflow through evaporator.</li> </ol>	



## Warranty

#### **Limited Warranty**

The machine provided by our company is guaranteed for one year and the fan is guaranteed for two years and the compressor for three years from the date of arrival. During the warranty period, any defects due to workmanship or materials, we guarantee to repair or replace the machine free of charge. (warning: the machine due to the use of dust ,corrosive liquid and other non-machine quality reasons for damage is not covered by the warranty.

#### Commitment in after-sales service

During the warranty period, our company is responsible for the maintenance of the equipment, if the equipment exceeds the warranty period, our company will charge for reasonable maintenance cost.

#### Other preferential terms

Our company provides free technical advisory services to users.

Shanghai Thenow Purification Technology Co.,Ltd

Factory Add: No. 59 Linsheng Road, Tinglin Town, Jinshan District, Shanghai, China

www.thenowair.com

Email: sales@thenowair.com Service Line: 400-187-8599