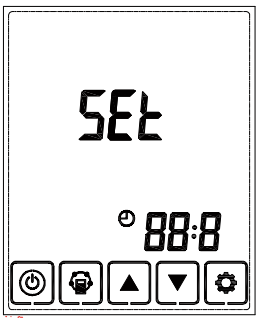
Touch Screen Controller Instructions

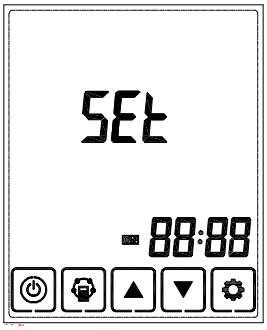
11. Time setting

Keep pressing the SET button for 6 seconds, after buzzing to enter the time setting interface. Under this interface, press the MODE button shortly, then can switch from time setting, day setting, weekly timer on and weekly timer off setting.



Time setting

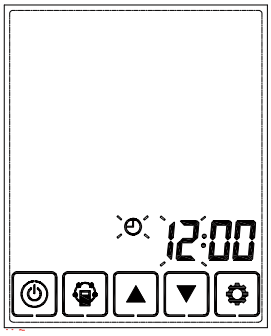
Week setting



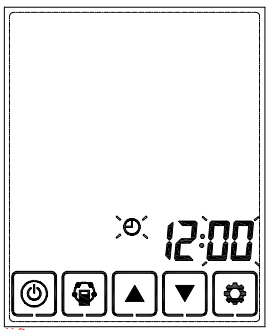
Weekly timer on

Weekly timer off

I. Time setting: under time setting interface, press SET button for short, at this time "hour" flashes, press UP and DOWN button to change "hour". After setting "hour", press MODE button for short to switch to "minute" setting, at this time "minute" flashes, press Up and Down button to change "minute". After time setting, press SET button to save and return to the main interface.



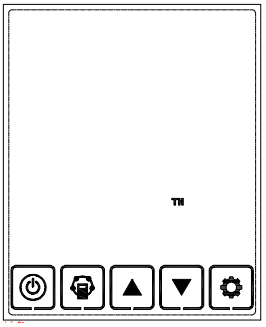
Hour setting



Minute setting

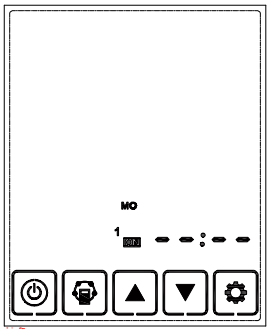
Touch Screen Controller Instructions

II. Day setting: under day setting interface, press SET button for short to begin the day setting, by pressing UP and DOWN buttons to select the correct day, after this finished, press SET button to save and return to the main interface.

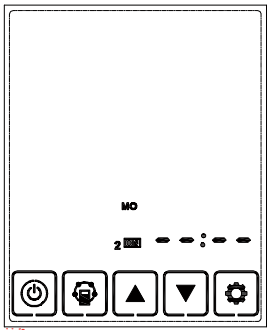


Day setting

III. Weekly timer on setting: under weekly timer on setting interface, press SET button to begin the timer on setting, press SET button time after time to select Monday period 1 to Sunday period 2 (namely Monday period 1 to Sunday period 2).

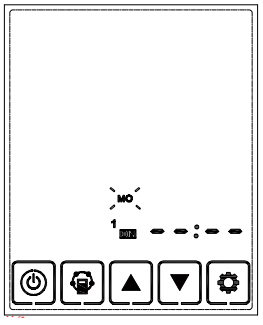


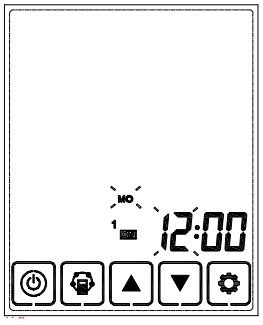
Period 1 timer on



Period 2 timer on

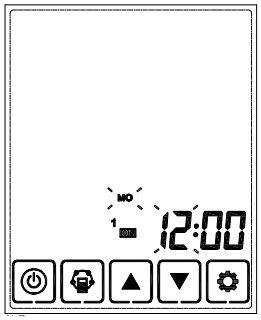
After selecting the day, press ON/OFF button to confirm timer on is valid/invalid.



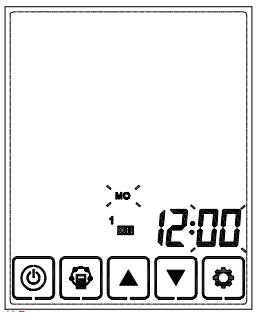


Touch Screen Controller Instructions

When timer on is valid, press MODE button to enter "hour" setting, by pressing UP and DOWN button to set "hour". After "hour" setting, press MODE button to enter "minute" setting. After "minute" setting, press SET button to save and switch to the next day timer on setting, and repeat the above steps to set all days and periods timer on. After setting all the time on, press SET button to save the data.

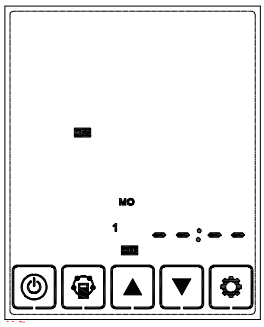


Timer on hour setting

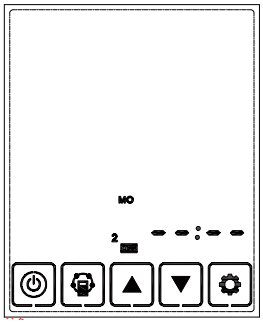


Timer on minute setting

IV. Weekly timer off setting: under weekly timer off setting interface, press SET button for short to begin the timer off setting, press SET button time after time to select Monday period 1 to Sunday period 2 (namely Monday period 1 to Sunday period 1 then Monday period 2 to Sunday period 2).



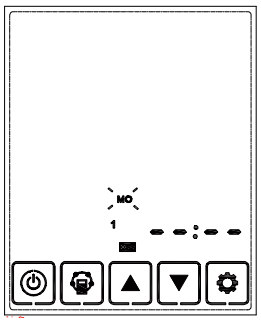
Period 1 timer off



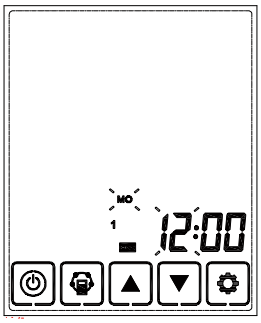
Period 2 timer off

Touch Screen Controller Instructions

Under the week interface, press ON/OFF button to confirm the timer off is valid/invalid.



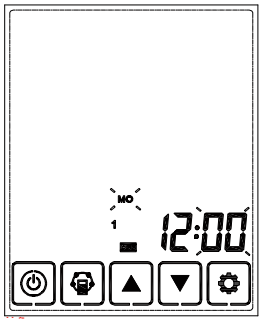
Timer off invalid



Timer off valid

When timer off is valid, press MODE button to enter "hour" setting, by pressing Up and Down button to set "hour", after "hour" setting, press MODE button to enter "minute" setting, after "minute" setting, press SET button to save and switch to the next day timer off setting and repeat the above steps to set all days and periods timer off. After setting all the timer off, press SET button to save the data.

Timer off hour setting



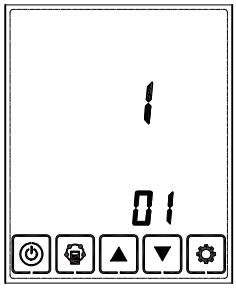
Timer off minute setting

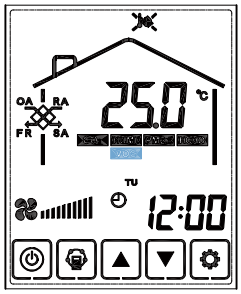
Attention: Under time setting, if no operation for 10 seconds, system will return to the main interface automatically.

Touch Screen Controller Instructions

SA electric heater

Parameter 01 refers to the function of the SA electric heater

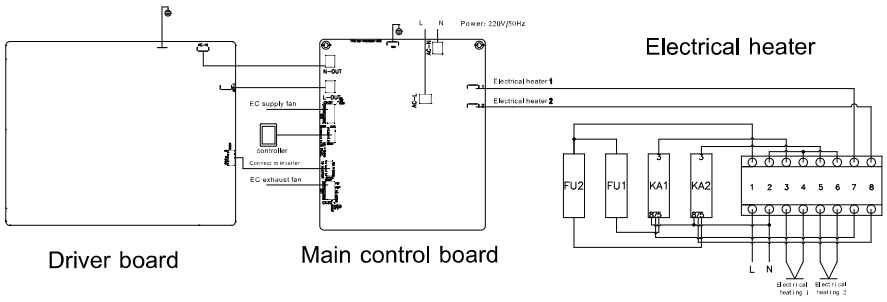




0：OFF 1：ON

When connecting the SA electric heater, the user should switch parameter 01# to “1” to activate the electric heater function and Parameter 09# to “0”
Under the SA temperature setting interface, the SA temperature can be set by UP and DOWN buttons. Setting range is 10-40°C.

SA Electric Heater Wiring Diagram



Touch Screen Controller Instructions

When connecting the SA electric heater, the user should switch to 1 to activate the electric heater function. Under the SA temperature setting interface, the SA temperature can be set by UP and DOWN buttons. Setting range is 10-40°C.

A)0℃<setting temperature minus SA temperature<2℃, 1st stage heater on, 2nd stage heater off
B) Setting temperature minus SA temperature >5℃, 1st and 2nd stage heater on
C) When the SA temperature increases and if 0℃<setting temperature minus SA temperature<2℃, the second stage heater turns off, if SA temperature≥setting temperature, both the two stages heaters turn off.

Note:
When the ventilator is in cooling and dehumidification mode, the SA electric heater is unavailable.

When the ventilator is in the heating and ventilation mode, SA electric heater can be turned on according to the following controls:

OA electric heater

1.Parameter 09# is to switch defrosting mode. The default is “0”, which means traditional EA fan defrosting. When turning to "1", the defrosting mode is changed to OA heater defrosting (need to connect the heater to OA air duct and OA heater defrosting is only recommended where in winter is long time below -15℃). Parameter 01 is to activate the heater function, only when parameter 01 value is 1, the electric heater function is on.
Note:
When the ventilator is in cooling and dehumidification mode, the OA electric heater is unavailable.
When the ventilator is in the heating and ventilation mode, OA electric heater can be turned on according to the following controls:

a.When the compressor turns on, if OA temperature≤-15 °C. the OA heater turns on, if the OA temperature≥ -5℃, the OA heater will turn off.

b.After the compressor is shut down for 5 minutes or in fresh air mode, the OA heater works as follows:

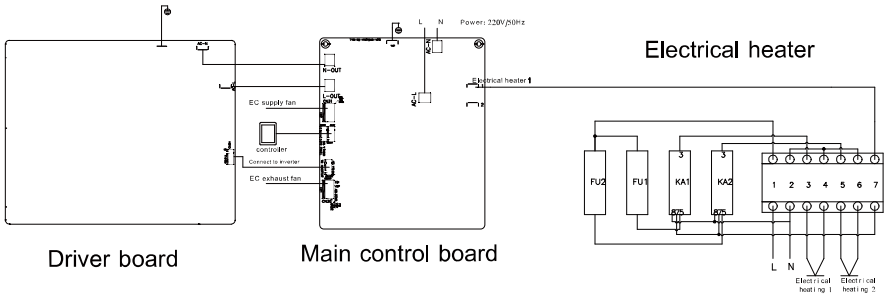
1) If the OA temperature ＜ -15 °C, turns on the OA heater for 50 minutes, and then turns off for 10 minutes and restarted.

2) If the OA heater is turned on and the EA temperature is <-1℃, the ventilator will stop for 50 minutes.

Touch Screen Controller Instructions

3)If the EA temperature is <-1℃ and the outdoor air temperature is >-15℃, the OA heater will start for 10 minutes and stop for 30 seconds. If the state continues, the OA heater will start and stop again according to the preceding steps.
4) If the OA heater is turned on and the OA temperature≥25℃, the OA heater will stop. After the OA electric heater is turned off when the OA is <-15℃, the OA heater will be turned on again and repeat the above steps.

OA Heater Wiring Diagram



EA Fan defrost mode

(EA fan defrost is not available when the compressor is on. This function is available only after the compressor is off for 5 minutes)
Setting parameter 01 value to be 0 and setting parameter 09 value to be 0, the EA fan defrost function is activated.
When EA temperature＜ -1°C (settable by parameter 05) and lasts for 1 minute, and the frost interval is more than 30 minutes (settable by parameter 04), the EA fan automatically runs at high speed to defrost and the SA fan stops.
Until the EA temperature＞15 °C for 1 minute or the defrosting time is more than 10 minutes (settable by parameter 06), the defrosting mode stops, both fans return to the previous conditions.

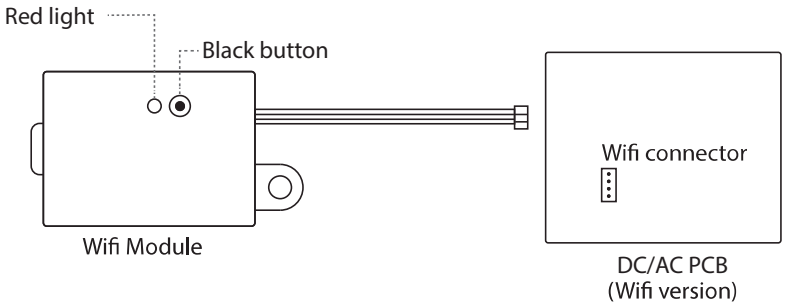
WiFi Module Manual

1. APP download

Scan the QR code as below, or search "Smart Vent" at Apple Store or Google Play Store to install the APP.

2. WIFI module connected to fresh air heat pump

- Open the controller box of Fresh air heat pump.
- Refer to the wiring diagram of Fresh air heat pump in the user manual, connect the wifi module to the PCB and ensure the wifi network signal can cover the module.
- Take a pin, press and hold the wifi module "Black button" on the back for 6 seconds, until the red light flashes one time every 0.5 seconds.



3. Network Connection

- Enter the app, register and login accordingly
- Under the home page, press the "+" at top right, and "Devices to be added" will pop up. Press "go to add" to connect the Fresh air heat pump.
- Chose the wifi network selection (Only 2.4G WIFI networks are supported), input correct wifi password. Press "Confirm" and wait for the Fresh air heat pump to be connected to the mobile phone.
- After the connection is successful, press to edit the Fresh air heat pump name, and press "Save" to enter the Fresh air heat pump name control page.

Maintenance

1. Caution

Power must be isolated before installation and maintenance to avoid injury or electric shock. Supply power cables, main circuit breaker and earth leakage protection, must comply with national regulations.

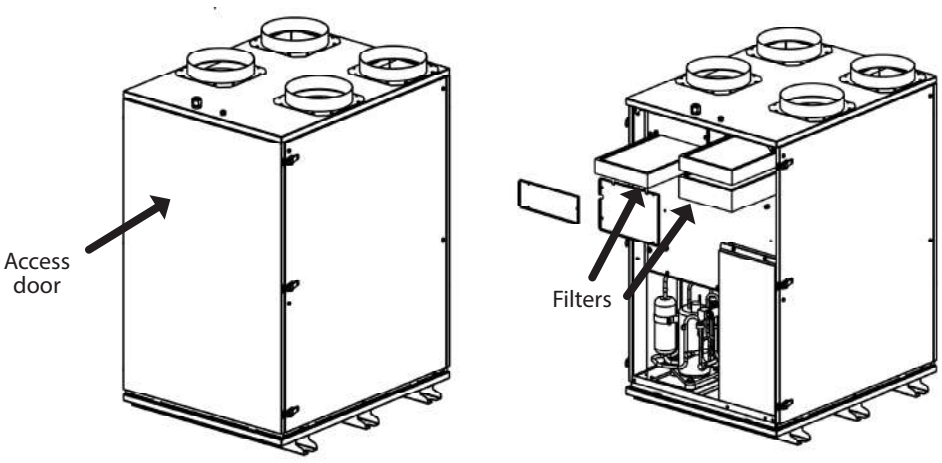
Failure to observe could cause unit failure, electric shock or fire.

Standard filtration is supplied with this unit and must be used. Dust and dirt can accumulate in the heat exchanger if filters are removed. (This can lead to failure or decreased performance). To ensure efficient operation, regular cleaning or replacement of filters is required. Filter maintenance frequency will depend on working environment and unit running time.

2. Cleaning the ÿlter

1. Open the access door.
2. Remove the filters (from the side of the unit).
3. Vacuum the primary filters to get rid of the dust and dirt.
4. Push the filters to the positions after they get dried naturally, close the access door.
5. Change the filters if they are badly affected with dust and dirt or if they are broken.

Note: filters are not washable.

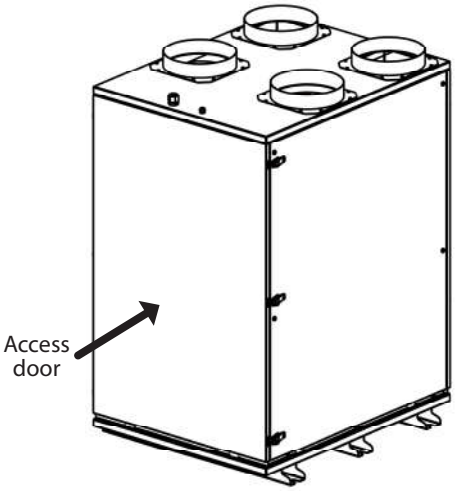


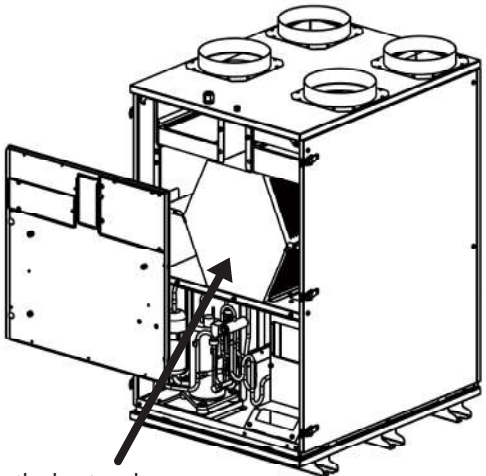
Maintenance

3. Maintenance of heat exchanger

1. Open the access door.
2. Remove the heat exchange core and clean it with water.
3. Establish a cleaner schedule to clean the dust and dirt on the exchanger.
4. Install the access door to its positions.

Remarks: It is recommended maintenance of the exchanger is made every 2-3 years.





Remove the heat exchange core
and clean it with water

Installations

1. Installation position

- Leave enough space for installation and maintenance.
- There are no obstacles near the inlet and outlet, which can not be blown by strong winds.
- Dry and well ventilated.
- No flammable leak.
- Place on the flat surface, which can withstand the unit weight, unit can be installed levelly, and does not increase the noise and vibration.
- Running noise and expel the air does not affect the neighbors.
- Install connecting pipe and do the wiring correctly.

2. Installation precautions

Installation in the following places may lead to machine failure.

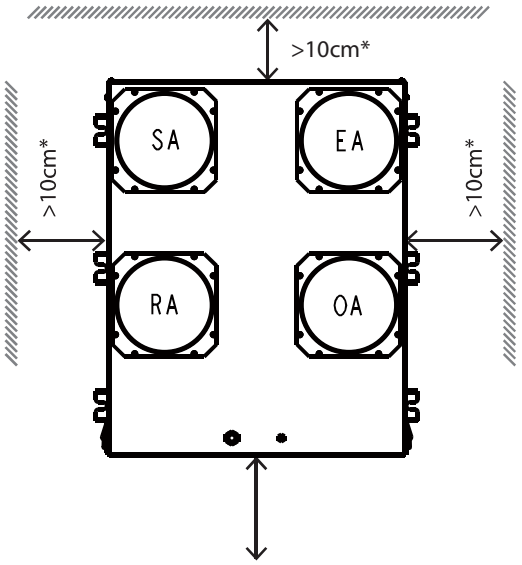
- Places with organic oil lamps mineral oil.
- Places with corrosive gases such as sulfur gas in hot spring areas.
- Places such as inside cars or cabins.
- Places with strong electromagnetic waves.
- Places with acidic and alkaline gases evaporate.
- Places where there is more salt in the air such as the seaside.
- Places such as factories with severe fluctuations in power supply voltage.
- Places filled with oil gas and oil splashes such as kitchens.
- Places where flammable gases and materials are present.
- Other special environments.

3. Precautions before installation

- Find the correct path to move in.
- Try to carry the unit in original condition.
- If the unit is installed on the metal part of the building, the electrical insulation should be done well and comply with the relevant technical standards for electrical equipment.

Installations

4. The unit should be installed with access space shown in the figure.

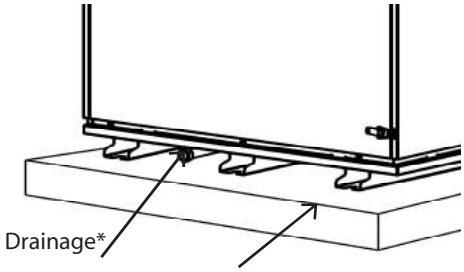


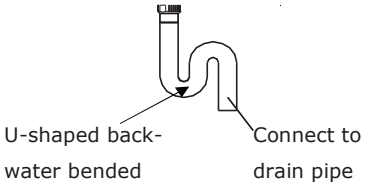
* >10cm of the distance is to ensure the normal operation of the machine. The access door side of the machine should have space of more than 1m, which will be more convenient for future maintenance.

5. Installation of drainage pipe

- The unit should be placed on a platform or holder that is more than 10cm off the bottom.
- Connect to the condensate drainage port of the unit with a hose (drainage port connection size 3/4 inch).
- The slope of the drainage pipe must be larger than 1/100.
- To prevent condensation on the surface of the drain pipe, the surface of the drain pipe should be wrapped with insulation cotton.

* There must be a back water to connect the drainhose





Trouble Shooting

User can use the unit after trial operation. Before contacting us, you can make self trouble shooting following below chart in case of any failure.

Phenomenon	Solutions
The airflow volumes both in door and outdoor vents drop obviously after a period of operation.	Dust and dirt blocking the filter. Replace or clean the filter.
Noise comes from vents.	Vents installation are loosing. Re-tightening the vents connections.
Unit doesn't work.	1. Guarantee power is on. 2. Connect the breaker.
No readings on the remote controller (blank display).	Check if the mains power is still connected to your installation.
One of the error codes appears.	Consult your local dealer. Refer to the installation manual for a detailed list of error codes.
Capacity shortage.	Consult your local dealer.

R32 Refrigerant Safety Overview

1. Refrigerant properties

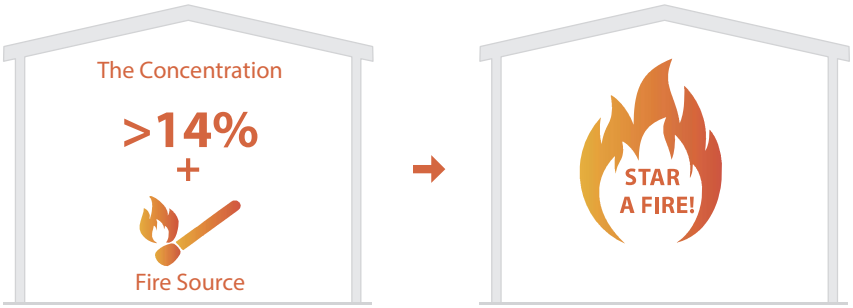
- Automatic combustion temperature of R32 is 648°C.
- International standards ISO817 and ISO5149 define its safety level as A2L, which means that R32 cannot be ignited by any ignition source other than an open flame, and it will automatically extinguish as soon as it leaves the open flame.
- The working environment of the R32 refrigerant in the fresh air heat pump is completely sealed and has undergone strict anti-leakage and anti-entrainment treatment. As long as it is installed in a standard and used normally, there is no need to worry about safety issues! In fact, it is safer than the natural gas used in our homes.

2. Refrigerant safety

- **Installation room for the fresh air heat pump:**

  The indoor unit is installed in a closed machine room.
  The outdoor unit is installed inside the shutter.

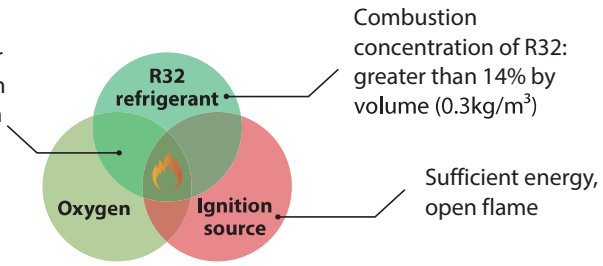
- **Carrying out plumbing repairs in enclosed spaces. At a concentration of 14%, it can burn if it comes into contact with the source of the fire.**



R32 Refrigerant Safety Overview

R32 slightly flammable:

OxygenR32 is heavier than air and has strong sedimentation properties. The concentration below is relatively high, and the combustion within 40 cm from the ground will exceed 4 times its normal burning speed



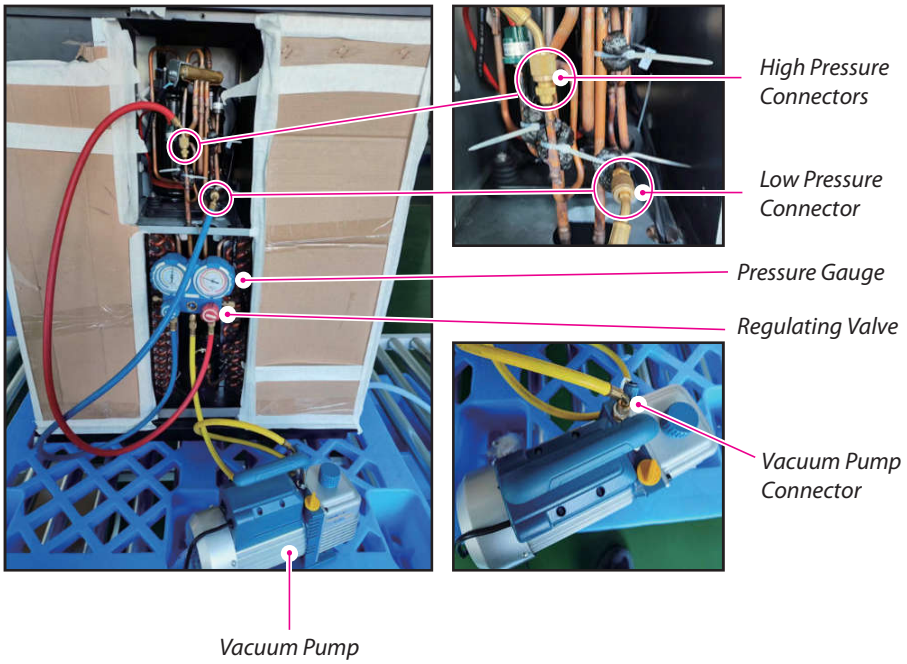
Burning the three elements

Warning

- The installation, refrigerant charging, maintenance and other operations of this product must be carried out by qualified personnel.
- Customers are not allowed to work on their own as this may result in serious safety accidents!

Vacuuming and Filling Refrigerant

1. Connect and tighten the high and low pressure connections of the vacuum pump and the fresh air heat pump using a pressure gauge as shown in the diagram. Pay attention to the colour of the hoses. The pressure gauge valve must be closed at this stage.



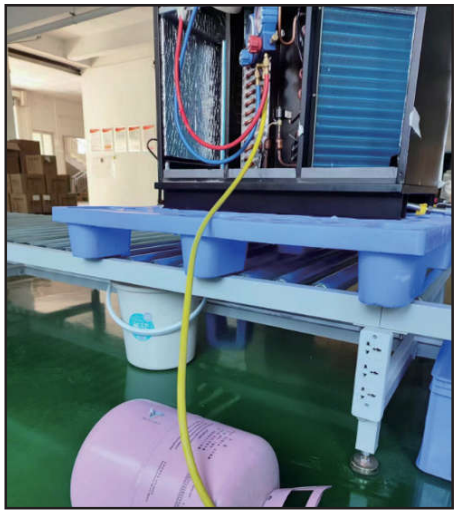
2. Start the vacuum pump, open both valves until the needle of the pressure gauge (high and low) points to 0, run the vacuum pump for at least 15 minutes, switch off the vacuum pump and close the pressure gauge valve.

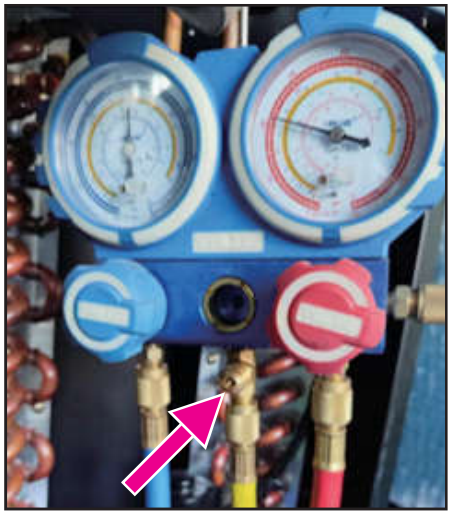
3. Disconnect the yellow tube from the vacuum pump and connect it to the refrigerant tank (ensuring that the tank is closed).

4. Partially open the switch on the refrigerant tank, you will hear a noise, then close the switch.

5. Gently press the thimble valve marked with a red arrow, using a screwdriver, and immediately release it (within 0.5 seconds).

Vacuuming and Filling Refrigerant





6. Repeat steps 4 and 5 several times to ensure that all the air in the yellow tube is removed.

7. Place the refrigerant tank onto the electronic scale, ensuring that the R32 bottle is positioned either sideways or squarely, and the R410A bottle is placed upside down. Please note that the bottle in the picture is being used solely for demonstration purposes.

8. Keep the red valve closed, but open the blue valve for low pressure before you turn on the switch for the refrigerant tank. Check the electronic scale readings before charging the specified amount of refrigerant. Once you have finished charging, close the refrigerant tank switch and the blue valve on the pressure gauge.

9. Wear protective gloves suitable for antifreeze before rapidly disconnecting the high and low pressure connections from the machine. It is important to do this quickly due to the risk of refrigerant escaping from the high-pressure heat pump. Only professionally trained and competent personnel should conduct this operation, as it is a hazardous process.

10. Once the refrigerant has been successfully added, the machine may be started for operation.