Monoblock DC Inverter Series

User Manual



Air source swimming pool heat pump

Heating+Cooling

Attention

Thank you for choosing our product, we shall be more than glad to service you. For you to better operate this product and to prevent accidents due to misoperation, please read carefully this user manual before carrying out any installation or operation, also please pay special attention to the warning, prohibition and attention instructions. We are continuously supplementing and upgrading this user manual to better service for you!

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Part 1. Before Use

1. Attentions

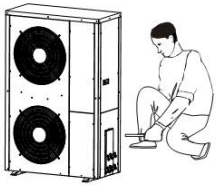
Warning Caution Prohibition



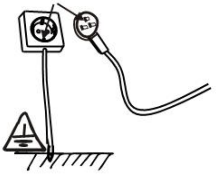
This appliance is not intended for use by persons, including children, with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety. Children should be super vised to ensure that they do not play with the appliance.



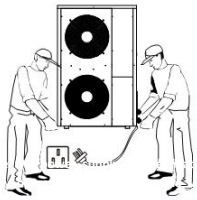
Be sure to read this manual before use.



Be sure to read this manual before use. The installation, dismantle mentand maintenance of the unit must be performed by qualified personnel. It is forbidden to do any changes to the structure of the unit. Otherwise injury of personor unit damage might happen.



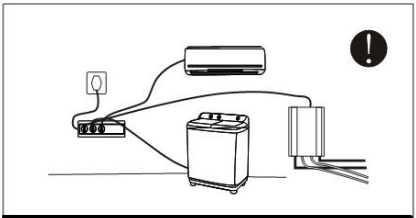
The power supply to the unit must be grounded.



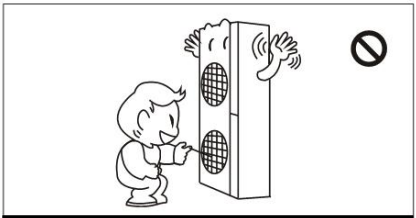
a qualified person to fix it.



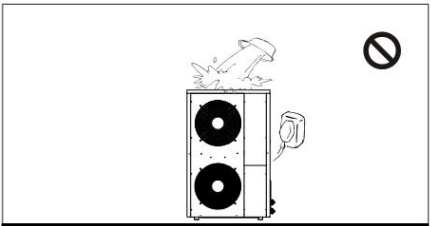
Keep the unit away from the combustible or corrosive environment.



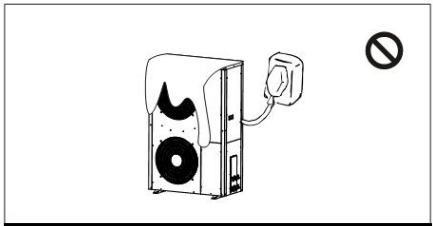
Use a dedicated socket for this unit, otherwise malfunction may occur.



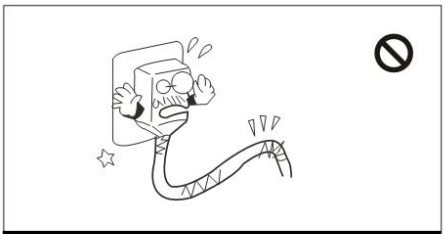
Do not touch the air outlet grill when fan motor is running.



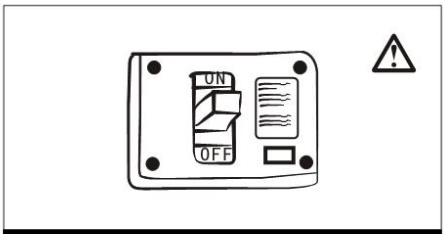
Water or any kind of liquid is strictly forbidden to be poured into the product, or may case creepage or breakdown of the product.



When running the unit, never cover clothes, plastic cloth or any other material that block ventilation on the product which will lead to low efficiency or even non-operation of this unit.

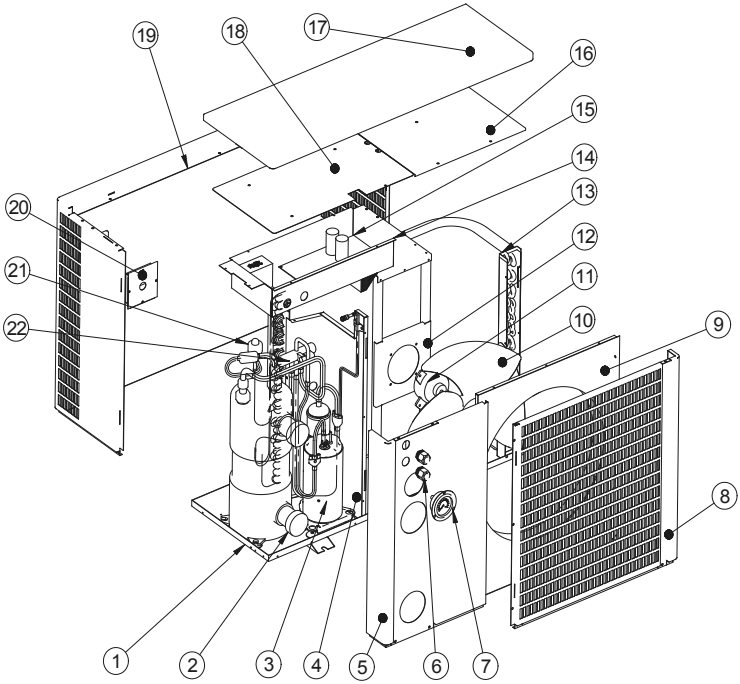


When the power cord gets loose or is damaged, always get a qualified person to fix it.

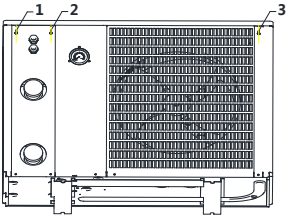


It is mandatory to use a suitable circuit breaker for the heat pump and make sure the power supply to the heater corresponds to the specifications. Otherwise the unit might be damaged.

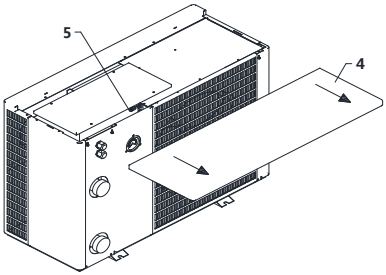
2. Internal structure of unit



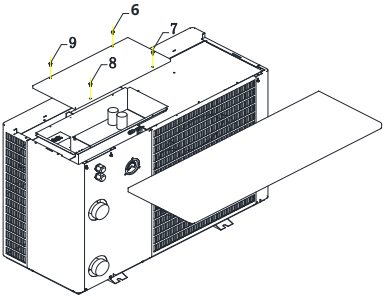
No.	Component	No.	Component
1	Chassis	12	Fan support
2	Titanium tube heat exchanger	13	Finned evaporator
3	DC compressor	14	Electrical box
4	Middle diaphragm	15	Frequency converter
5	Rear service panel	16	Evaporator cover plate
6	Power inlet hole	17	Cover
7	Pressure gauge	18	Cover plate of electrical box
8	Air outlet network	19	front panel
9	Air outlet frame	20	control panel
10	Wind leaf	21	Electronic expansion valve
11	DC motor	22	Four way valve



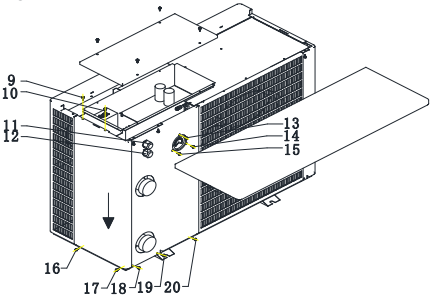
Step 1: first remove the 1-2-3 screws fixing the top cover, water outlet plate and rear screen plate



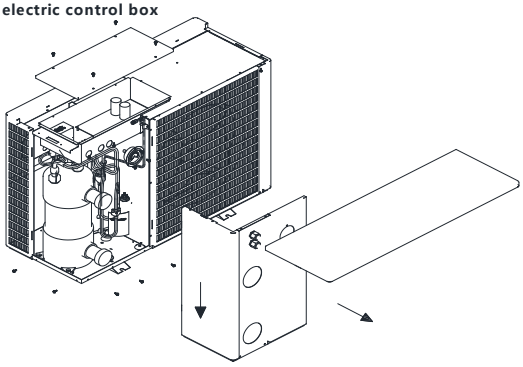
Step 2: push back the 4 top cover, and then the top cover will come out. We can see the inside of the machine and the refrigerant filling port 5



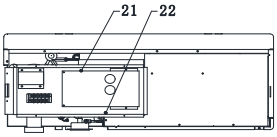
Step 3: remove the 6-7-8-9 screws to remove the cover plate of the electric box, and you can see the inside of the electric control box



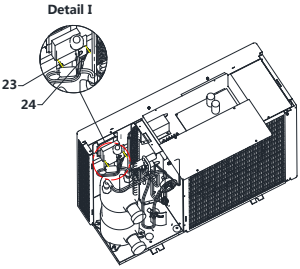
Step 4: remove the screws 9-10-11-12-13-14-15-16-17-18-19-20, and then take down the water outlet plate to remove the water outlet plate



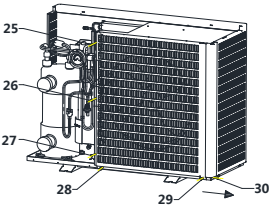
Step 5: shoot the water outlet plate down to remove the water outlet plate



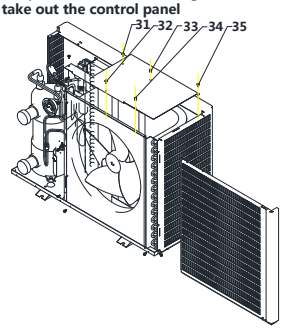
Step 6: remove the 21-22 screws shown on the PCB board of the electrical box. At this time, the electrical box can be moved, but the wires are mainly pulled. Be careful not to break the wires



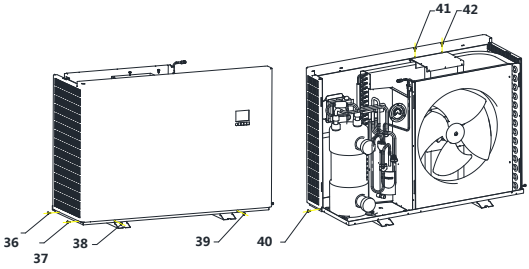
Step 7: remove the 23-24 screws at the position shown in the figure to take out the control panel



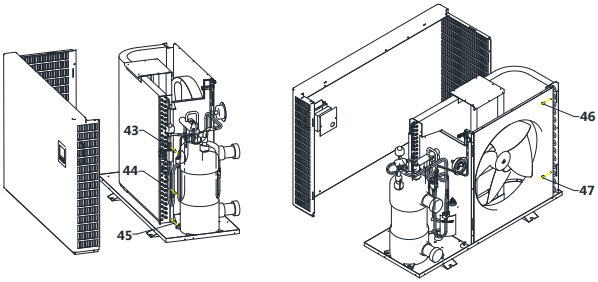
Step 8: remove the screws 25-26-27-28-29-30 at the position shown in the figure, and then remove the rear air outlet net



Step 9: remove the screws 31-32-33-34-35 at the position shown in the figure to remove the evaporator cover plate,The fan can also be checked at this time

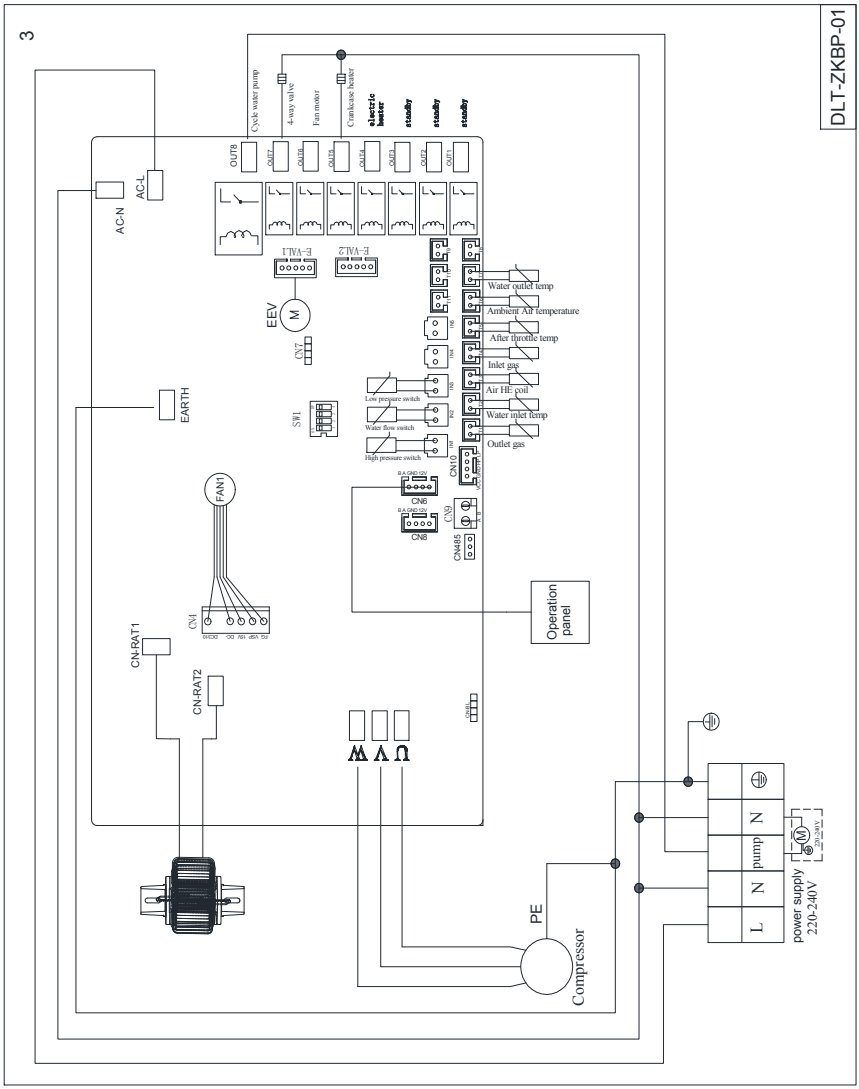


Step 10: remove the screws 36-37-38-39-40-41-42 at the position shown in the figure to remove the front panel



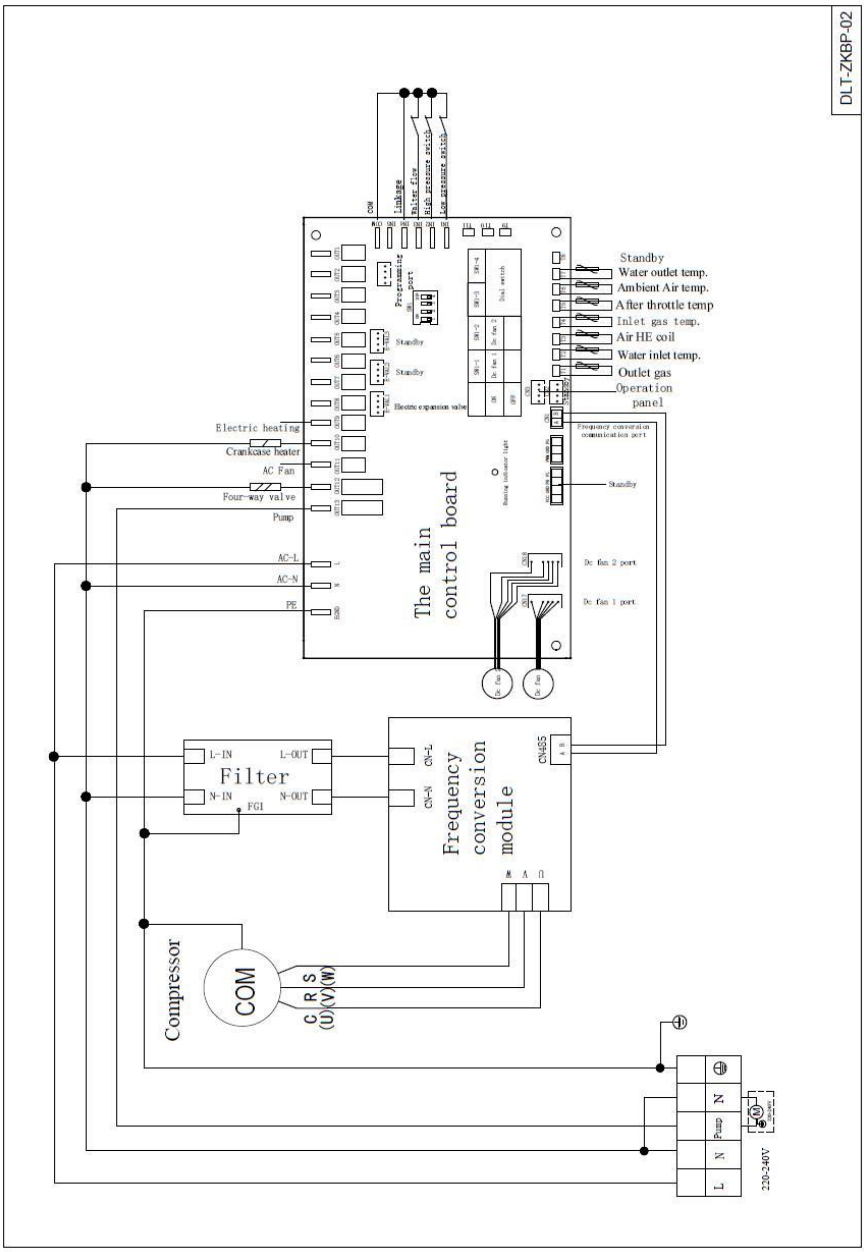
Step 11: remove the screws 43-44-45-46-47 at the position shown in the figure to disassemble the finned evaporator

3. wiring diagram

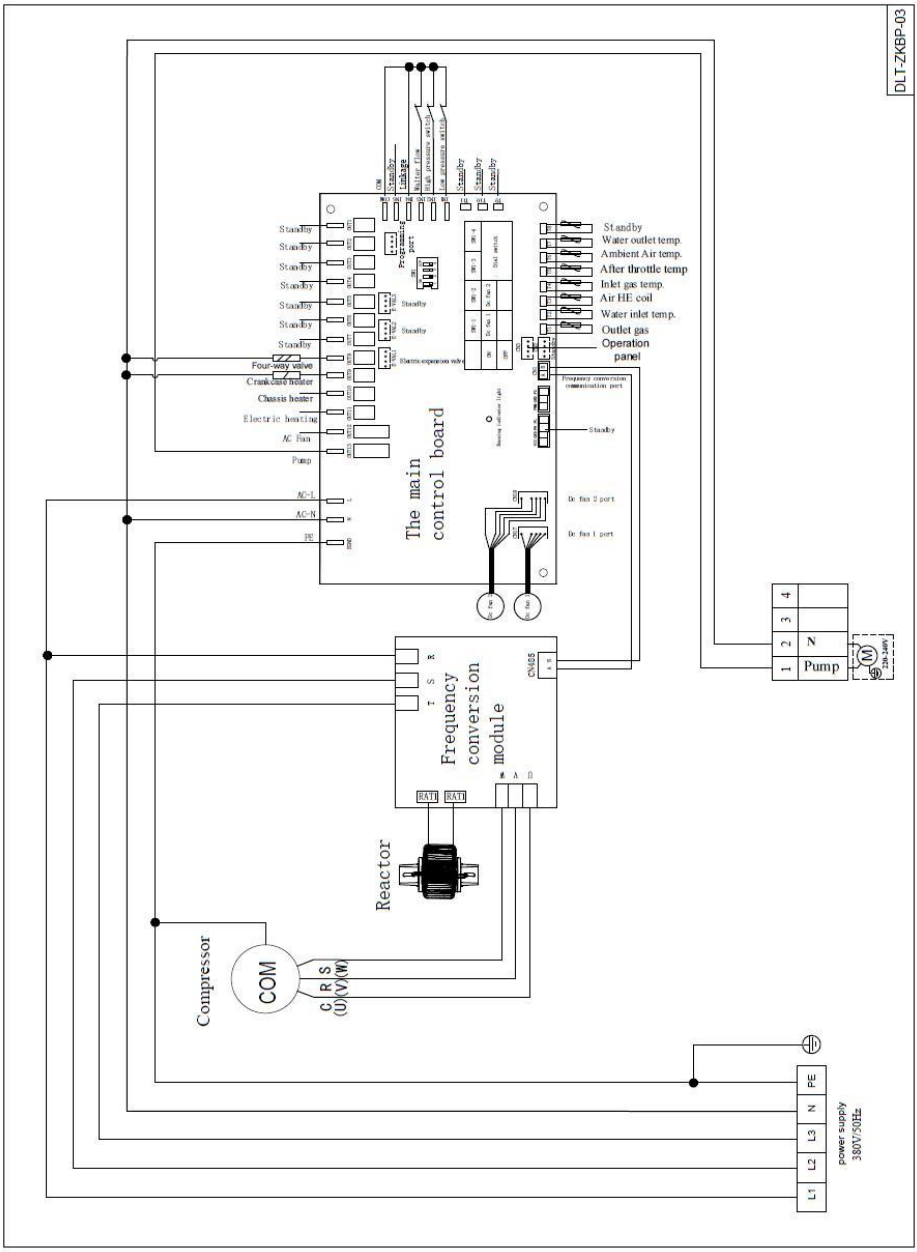


1、**FOR CGY010V3/CGY015V3/CGY020V3/CGY025V3/CGY030V3/CGY035V3/CGY040V3**.

Voltage: 220V～240V/50Hz or 60 Hz/1Ph.

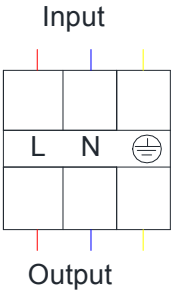


2、**FOR CGY050V3/CGY060V3 , Voltage: 220V～240V/50Hz or 60 Hz/1Ph**

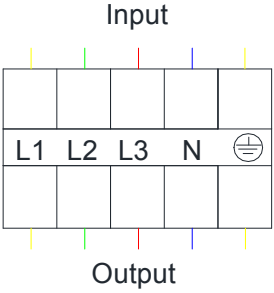


3、FOR CGY-050V3/CGY-060V3 , Voltage: 380V～420V/50Hz or 60 Hz/3Ph

4、Connecting terminal：



Power supply
220V~

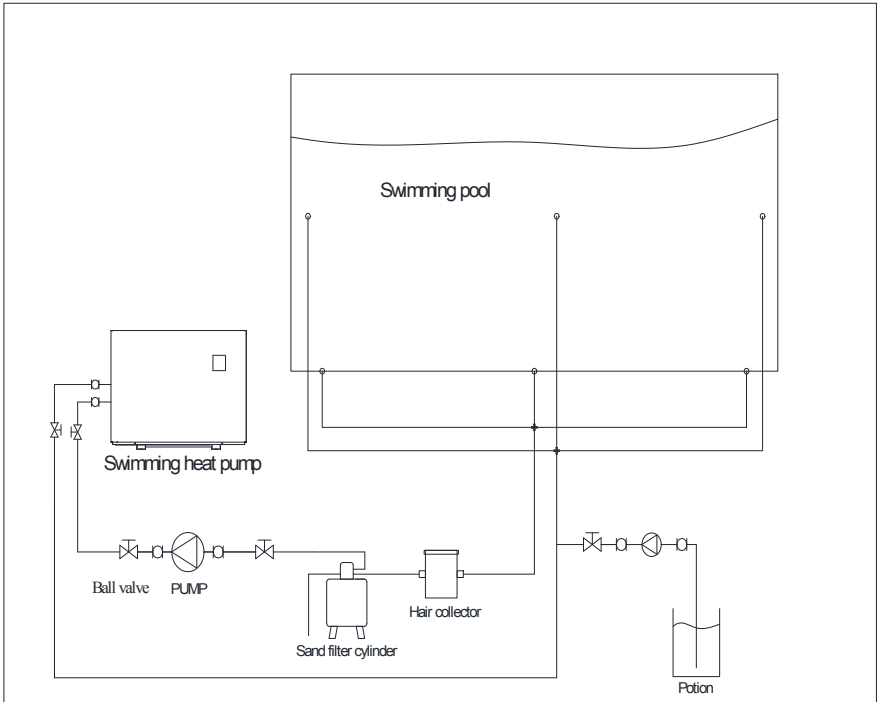


Power supply
380V~

Model	Line(mm^2)	Max. Current(A)
CGY015V3	2.5	6.5
CGY020V3	2.5	8.3
CGY025V3	2.5	9.8
CGY030V3	2.5	13.1
CGY035V3	4.0	16.2
CGY040V3	4.0	21.8
CGY050V3	6.0	26
CGY060V3	6.0	29.9

Model	Line(mm^2)	Max. Current(A)
CGY-050V3	4.0	11.48
CGY-060V3	4.0	13.2
CGY-080V3	4.0	17.1

5、Primary circulation system



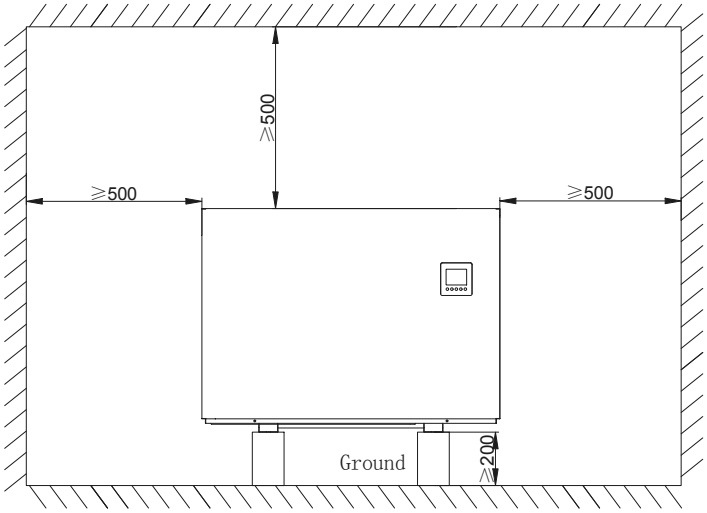
Air source swimming pool heat pump

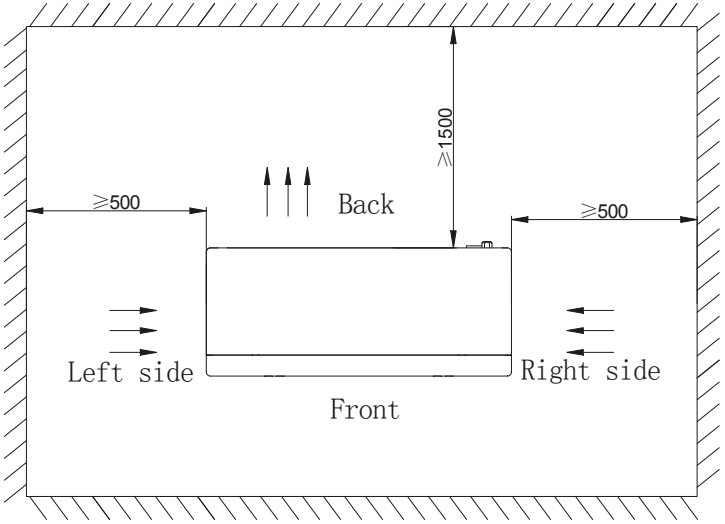
For all Model

- The heat pump must be installed in open space. Normally is installed on the roof of house.
- The unit should be placed in dry and well-ventilated environment. If the environment is humid, electronic components may get corroded or short circuit.
- Heat pump mustn't be installed in the environment where corrosive, volatile, or flammable liquid or gas exists.
- Because of the noise is a little loud, please don't install the heat pump near bedroom or living room or meeting room.
- The bottom of the heat pump should be at least 50cm higher than ground, because rain water, snow may enter inside if the installation is on ground. Heat pump can be installed on concrete basic or steel support.
- Please install a shed for the heat pump, otherwise, rain water can reduce the lifetime of the shell, and snow may cover the air outlet.
- Water drainage ditch should be set around the heat pump, when heat pump is working, there is condensing water flow down, or when defrosting,

there are plenty of water flow down too.

- Heat pump should far away from kitchen exhaust, because the finned tube is not easy to clean if there is oil on it.





For all Model

- Heat pump must be installed on flat concrete blocks or a raised concrete platform, or steel bracket.
- Between heat pump and basic or bracket, at leas 4pcs anti-shock pads should be placed



Steel bracket



Concrete basic Anti-shock pad



Expansion bolt

- Before make basic or bracket, please check heat pump dimension
- Before fix heat pump on basic, please confirm heat pump direction according to project design.
- Normally use expansion bolt to fix heat pump on concrete basic.
- Make sure circulating water pipe must be PVC50.

When install water temp sensor on pipe or in water tank, make sure temp sensor will not touch water directly, best through a sensor tube. Like below picture

Part 2. Use

LED color screen line controller：



Icon introduction ：

- Heating mode“ ”
- Cooling mode“ ”
- Silent mode ：“ ”；Smart mode ：“ ”；Strong mode ：“ ”。
- When defrosting ， “ ” Flashing display, indicating defrosting

operation .

- When Wi-Fi connection is successful “ ”light stays on, flashing when not connected or connected.
- Screen is locked “ ”.
- When a fault is reported “ ”Flashing .

Key operation instructions ：

1、“ ”power button :

Short press“ ”as the exit key and return to the main page.

When in the main interface, long press “ ”3 seconds to turn on/off .

2、“ ”Mode key ：

In the power-on state, long press“ ”for 3 seconds to switch between working modes: heating mode and cooling mode.

3、“ ”Plus key

When powering on, in the main interface, single press“ ”，to adjust the current mode setting temperature；

4、“ ”Minus key

When powering on, in the main interface, single press“ ”，to adjust the current mode setting temperature；

In the main interface, long press the“ ”key for 3 seconds to enter the unit status parameter query, and cooperate with the“ ”、“ ”keys to scroll through the parameters.Press“ ” to exit parameter query。

◎ Unit status table: long press "-" minus key

Query code	Representative meaning	Display range
A01	Inlet water temperature	-30~99℃
A02	Outlet temperature	-30~99℃
A03	Ambient temperature	-30~99℃
A04	Exhaust gas temperature	0~125℃
A05	Return air temperature	-30~99℃
A06	Outer coil temperature	-30~99℃
A07	Inner coil temperature	-30~99℃
A08	Main expansion valve opening	
A09	Enthalpy expansion valve opening	
A10	Compressor current	
A11	Heat sink temperature	
A12	DC bus voltage value	
A13	Actual speed of compressor	
A14	DC fan 1 speed	
A15	DC fan 2 speed	

5、“⏲”Setting key

Clock setting ：

Long press“⏲”“▲”for 3 seconds to enter the clock setting state. First, the hour digit flashes, indicating that

the hour value of the current time can be adjusted through the“▲”、“▼” keys. Each time you press the

“▲”key, the hour increases by one, and each time you press the

“▼”the hour decreases by one. If you hold down the“▲”or“▼” key for a long time, the hour will automatically increase or decrease. After setting the hour digit value, press the“◷”button again; at this time, the minute digit flashes, indicating that the minute value of the current time can be adjusted by the“▲”“▼”button. After setting the minute value, press the “◷”key again to end.

Timer setting:

Long press the“◷”button for 3 seconds to enter the timing setting:

Enter the timing selection. At this time, "Time On 1", the clock "Hour" flashes, and the hours can be set with“▲” 、 “▼”.Press the“◷”button again to switch to the clock "minutes", and the“▲”、“▼”buttons can be used to set the minutes；

Press the“◷”button again to switch and switch to the "timing off 1" setting: the clock "hour" flashes, and the hours can be set with the “▲”、“▼” keys; press the “◷”button again to switch to the clock "minutes", with“▲”、“▼”key can set the minutes;

Other time periods are set by analogy;

Press“⏻” to exit or confirm.

Return to the main interface, it will display the current number of set time periods;.

Cancel timer setting:

When the set power-on time and power-off time are the same, the timing setting of the current time period is cancelled.

6、Forced defrosting：

Press the“Ⓜ”and“▼”to enter the forced defrost mode.

When entering the defrost, the flashing display “”。

7、Frequency mode switching：

In the boot interface, press “”to switch the frequency mode: silent, smart, and strong mode.

8、Celsius/Fahrenheit switch：

In the shutdown state, long press“”and“” for 3 seconds in the main interface to switch between Celsius/Fahrenheit.

9、Unlock/lock screen operation:：

When in the main interface, press and hold the“”and“”keys for 3 seconds to unlock/lock the screen.

10、Manual electric heating function：

In the main interface, long press“”for 3 seconds to manually turn on/off the electric heating function.

- WIFI settings

  Press the "+" and“”keys at the same time for 3 seconds to enter the "default mode" network configuration, the“  ” icon flashes quickly when entering;；

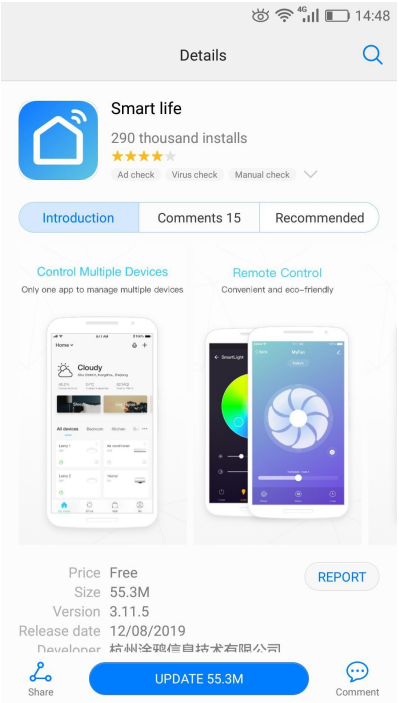
  Press the "-" and“” keys at the same time for 3 seconds to enter the "compatibility mode" network configuration, the“ ”icon flashes slowly when entering;

Part 3. WIFI module networking manual

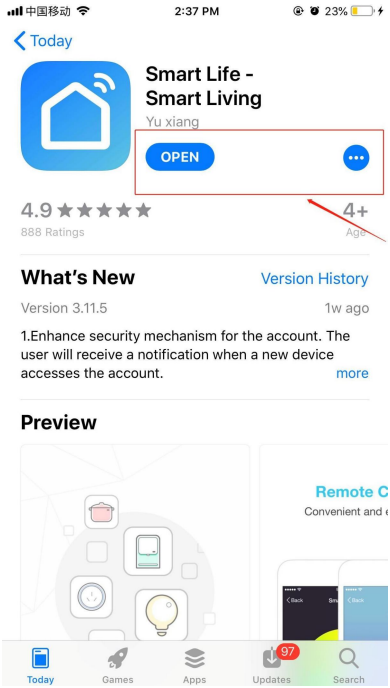
1. APP download and install

   - Scanning QC code with browser（for both Android and iOS）

- Android System



- IOS System



2. Start the APP

- After the installation, click the "" icon on the desktop to start the software.

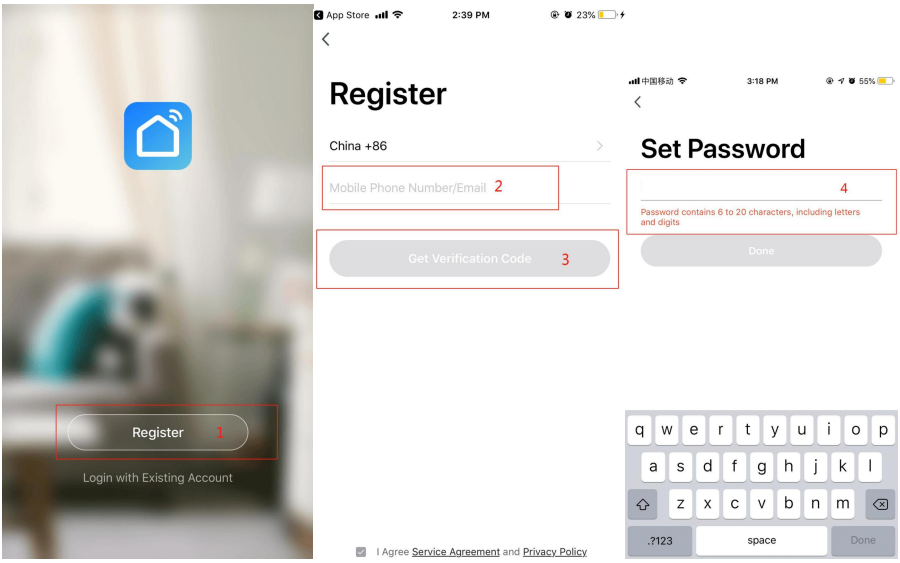


Smart Life

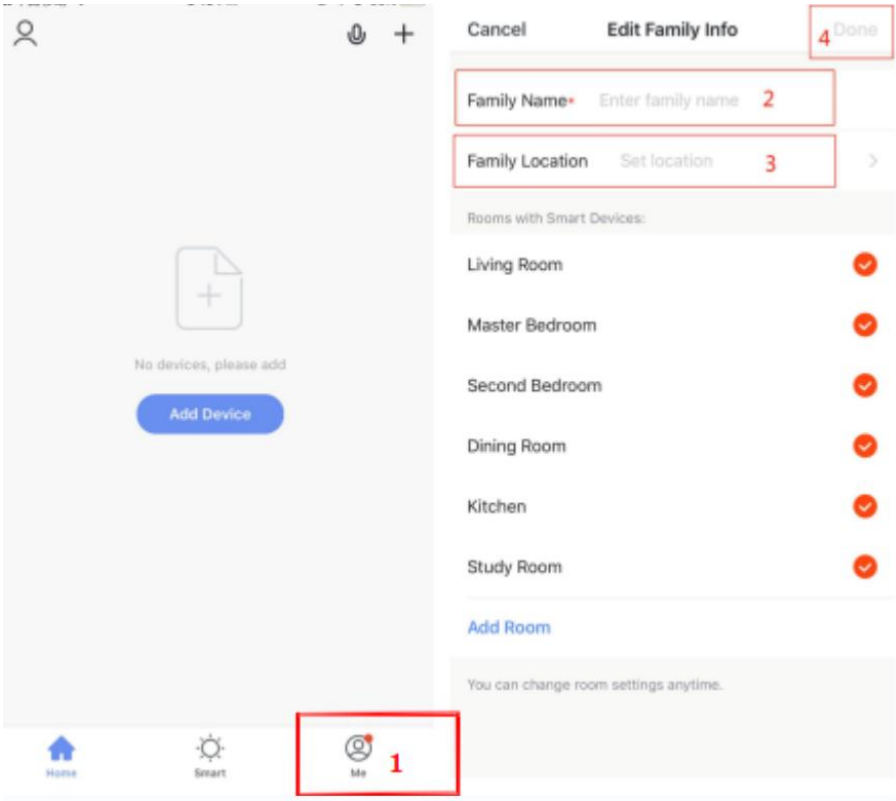
3. Register and Login

3.1 Register

- Users without account can apply by clicking the "Register"function on the login page: Register → Agree the privacy policy→Enter the mobile number → Get the verification code→ Enter the verification code → Set the password → Complete, as shown in the following figure:

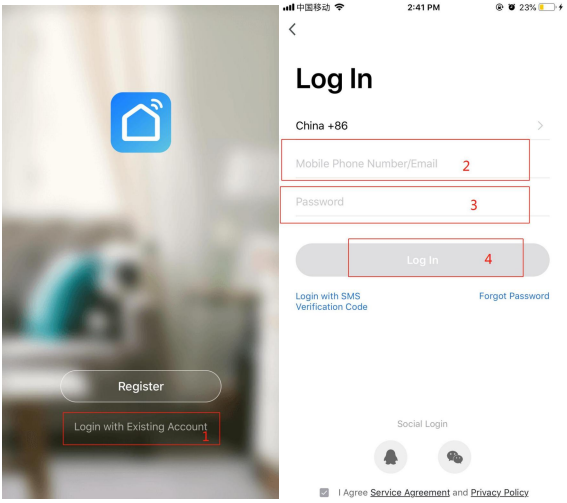


- After registration, you need to create a family: me → family management → family adding → family name setting → location setting → room adding → complete, the sequence as follows:

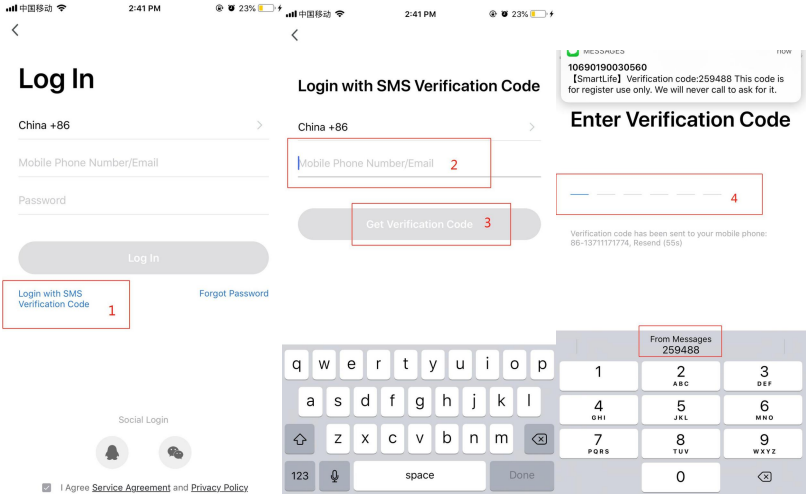


3.2 Login

- You can login directly if you have the account , the sequence as follows:



If you forget the passport ,you can choose the authentication number to login. Choose “aut hentication number logon▶ enter phone no▶ get the authentication number.



As follow:

After creating a family or login, enter the interface of App Intelligent Life.

4. WIFI module networking

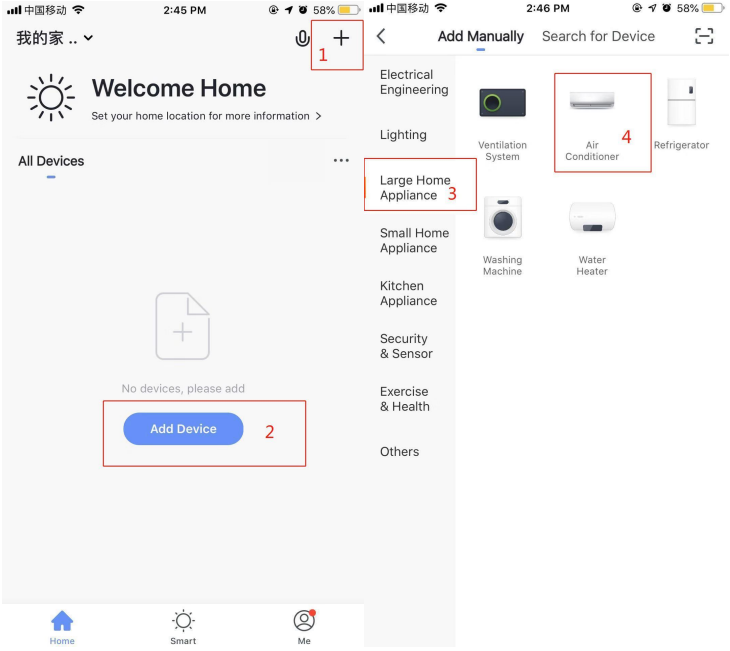
- **Step 1**

The heat pump manually enters the smart distribution grid mode: within 10S after power-on, press and hold the "switch","△","timing" three buttons 5S at the same time to enter the smart distribution grid mode, the "WIFI" icon flashes, phone can start distribution grid.

Note: Withdrawal from distribution grid after 3 minutes. The "WIFI" icon will stop flashing. The WIFI module will no longer be equipped with the network. To re-distribute the network, you need to press "Switch" , "△" , "Timed" 5S again.

- **Step 2**

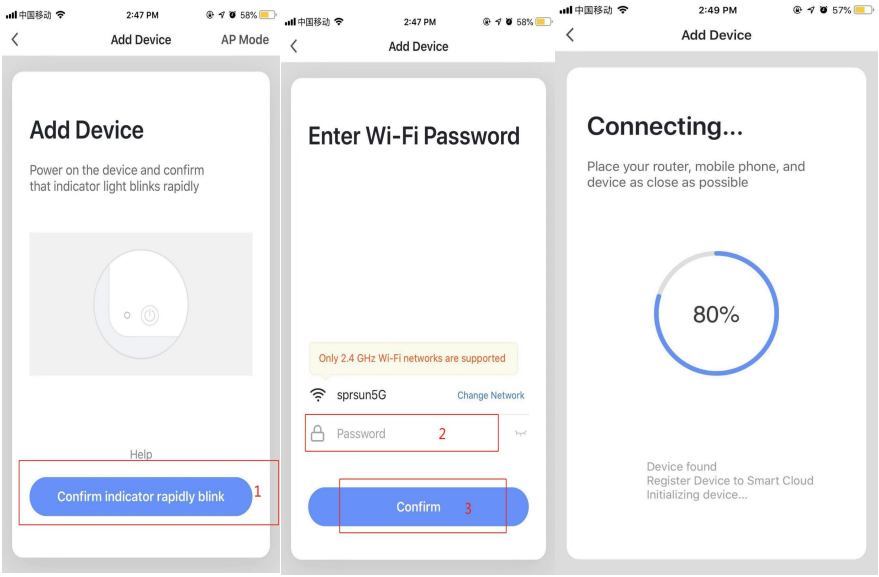
Open the "Smart Life" app, log in to the main interface, click "+" in the upper right corner or "Add Device" in the interface to enter the device type selection, select "Air Condition" in the "Household Power" device to enter the Add Device interface;



- **Step 3**

"Add Device" interface, confirm that the line controller has selected the smart distri bution mode. After the "WIFI" icon is flashing, click "Confirm indicator is flashing";

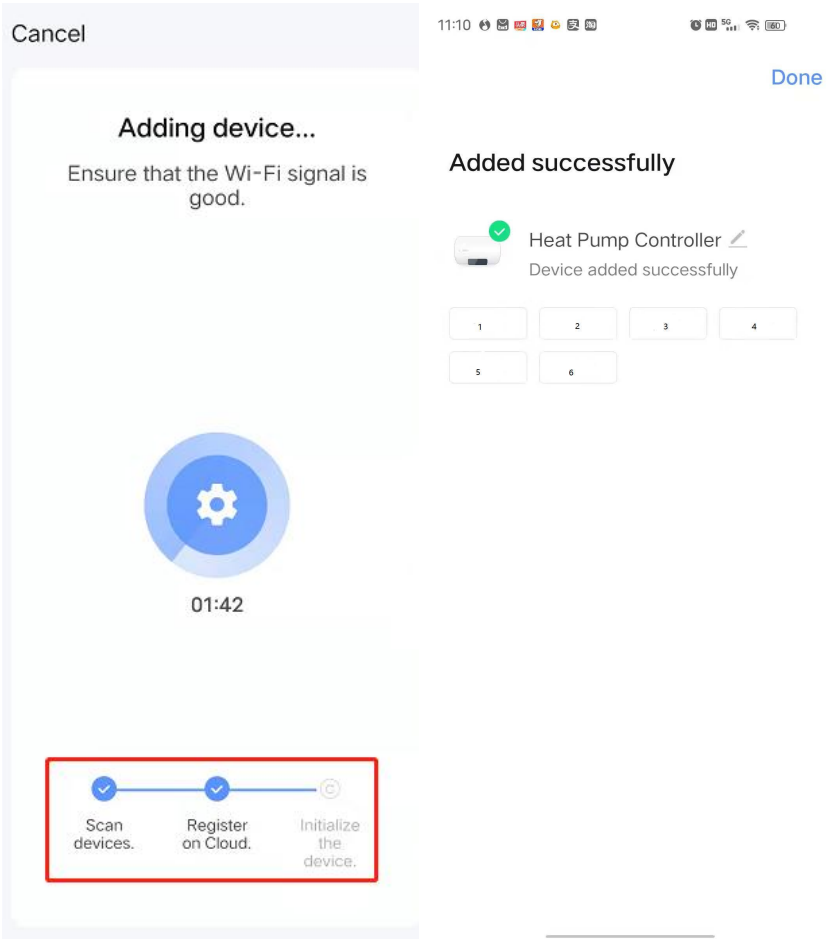
Enter the WIFI connection interface, enter the WIFI password that the mobile phone has connected (must be consistent with the WIFI connected to the mobile phone and the WIFI must be 2.4G WIFI), click OK to enter the device connection status directly.



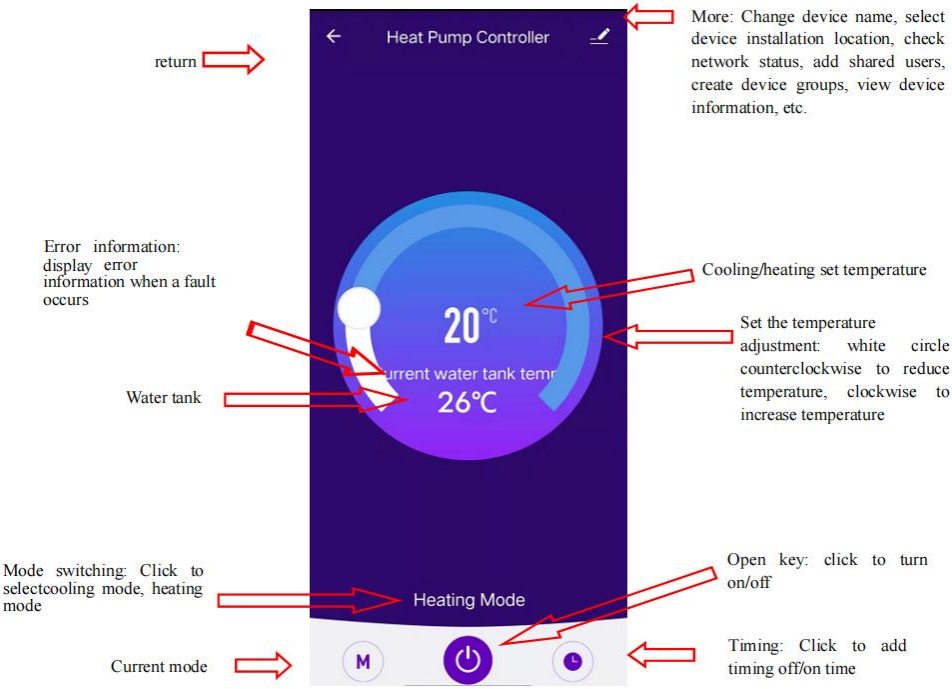
- **Step 4**

After automatic process of " found device", " Device register to smart cloud" , "D evice initialize", the connection is done and distribution network is done after showing "Add device successfully" . In this interface , you can change the name of the device and chooce the installation location(hall, bedroom…)And click "finish" to enter to Operation Int

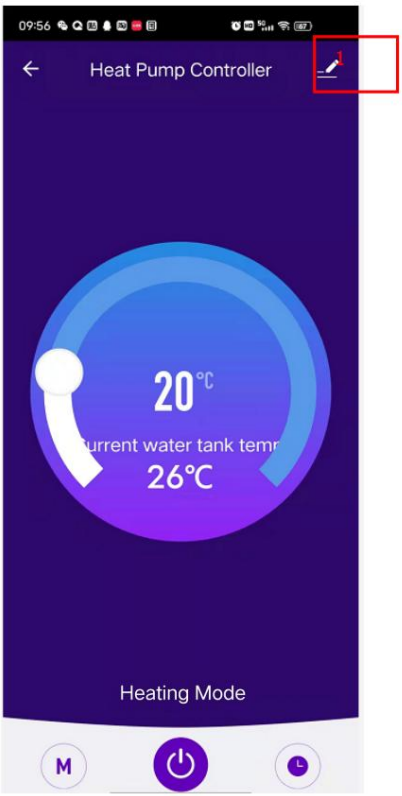
erface of the device.

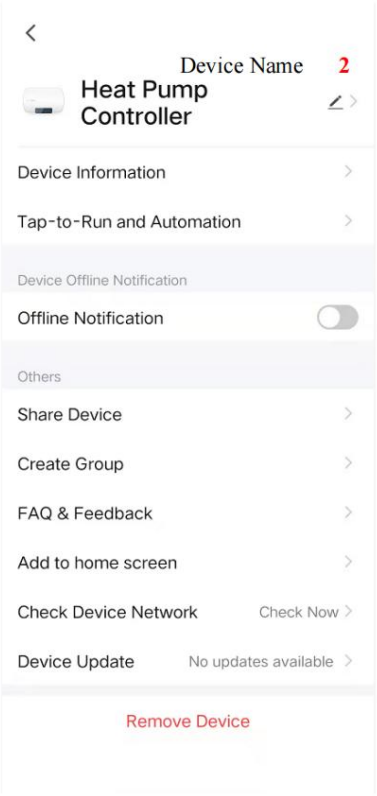


5. APP Operation Instructions



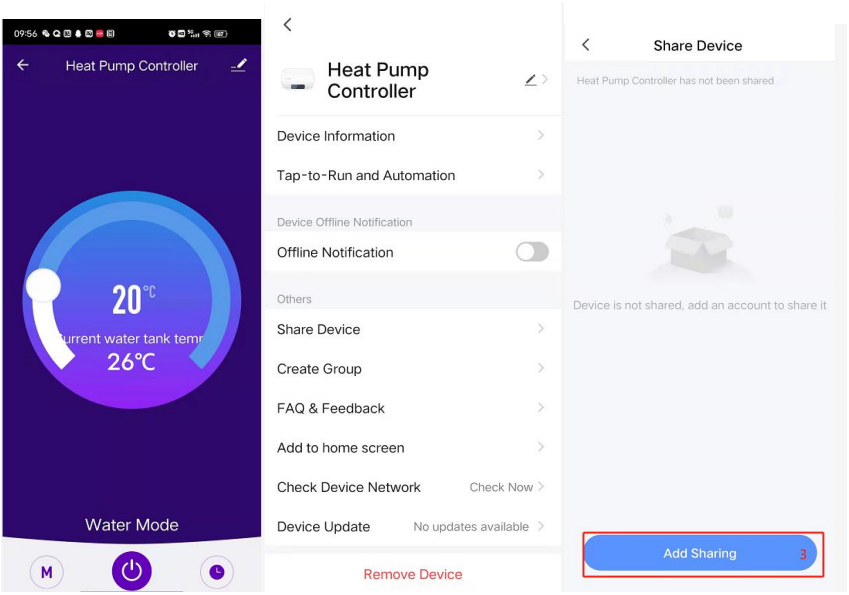
- Modify the device name
- Click “Device Details” in the following order and click “Device Name” to rename the device name.



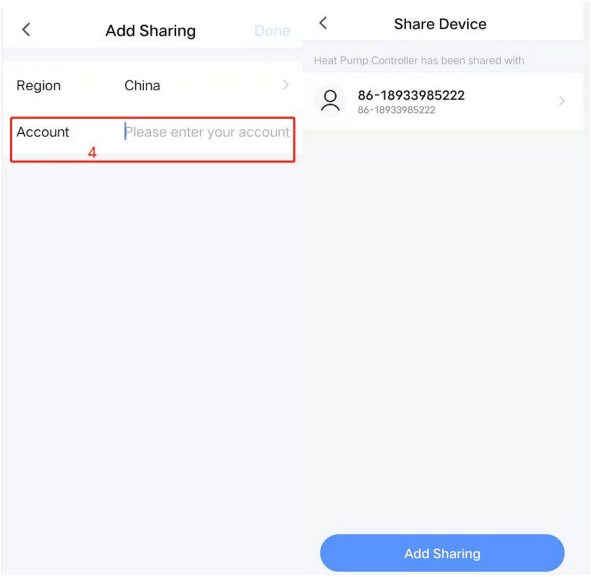


Device sharing

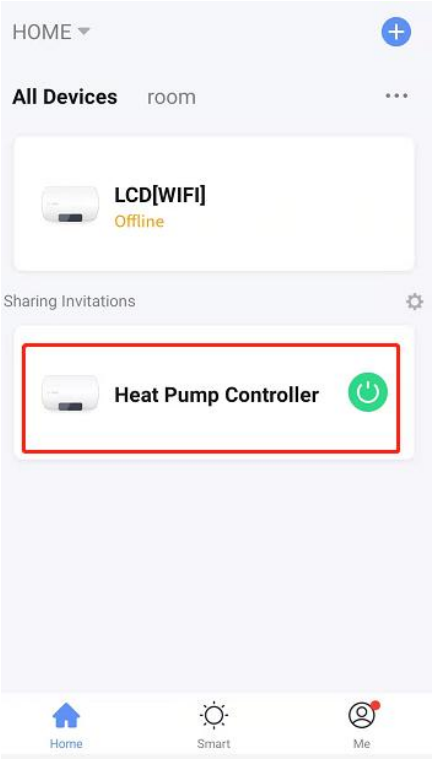
- Share the bound devices, and the sharers operate in the following order.
- After the sharing is successful, the list increases to show the shared person.
- Delete the shared person, press and hold the selected user, the pop-up interface will pop up, click “Delete”
- The sharing interface is as follows:



- Enter the shared account and click “Finish”. The sharing success list shows the newly added account.

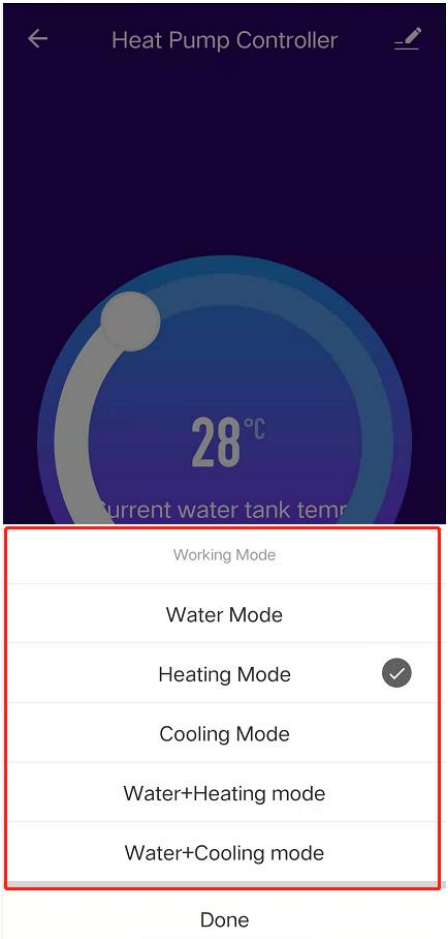


- The interface of the shared person as below, showing the shared deviced is received, then chick to enter can ooperate the control device.



Mode setting

- Click “ M ” mode switch on the main interface of the device operation, and the mode selection interface will pop up as shown below. Click the mode you want to select.

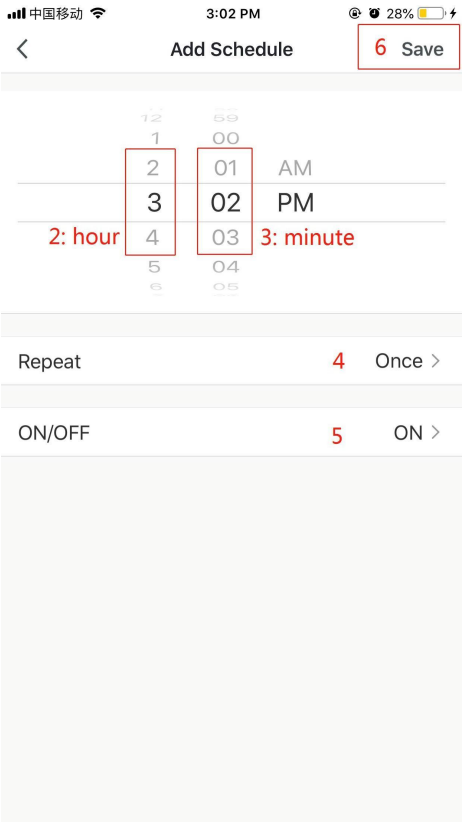


Timer setting

- Click “ ” on the main interface of the device operation, and enter the timing setting interface. As shown in the figure below, click Add Timing.



- Enter the timing settings, sliding up and down hours/minutes can set the timing time, and set the repetition week and turn/turn, according to the upper right corner can be saved, as shown in the following order;

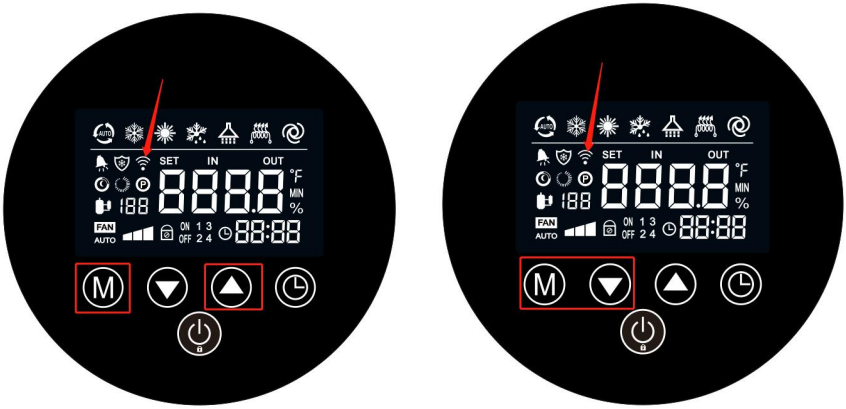


Remove device

Remote control removal

- When the device has been added,if you need to remove the device, long press "▲" plus plus "Ⓜ" 5S, the device is removed and re-entered into the smart distribution network mode.The“WIFI” icon flashes within 3 min to re-configured the network. If it exceeds 3 min, the network will be quit.
- When the device has been added, if you need to remove the device. Press and hold “▼” plus “Ⓜ” 5S. The device is removed and re-entered into the AP distribution mode.The

“WIFI” icon flashes within 3 min to re-configured the network. If it exceeds 3 min, the network will be quit.



Remove APP

Click on the top right corner of the device operation main interface“ ”Enter the device details interface. Click “Remove Device” on the device details interface to enter the smart distribution network mode.The “WIFI” icon does not flashes , re-configured the network within 3 min. If it exceeds 3 min, the network will be quit. The specific operation is as follows.



6. Other problem and repairig

No	Error	Possible reason	Method
1	Heat pump doesn't run	1. Power supply cable is loose 2. The fuse of power supply is fused.	1. Cut off the power supply to check and repair. 2. Change the fuse.
2	Heating capacity is too small	1. Refrigerant is not enough 2. Water system insulating is not good 3. Air heat exchanger is dirty 4. Water heat exchanger scaled	1. Check leakage and repair and refill gas 2. Improve the insulation 3. Clean air heat exchanger 4. Clean water heat exchanger
3	Compressor doesn't run	1. Power supply has error 2. Cable connecting is loose 3. Compressor is overheat	1. Check reason and solve 2. Check loose and repair 3. Check reason and repair

4	Compressor noise is loud	1. Expansion valve damaged lead to liquid entering compressor 2. The internal parts of compressor damaged 3. Compressor lack of oil	1. Change expansion valve 2. Change compressor 3. Compensate oil for compressor
5	Fan motor doesn't run	1. Fan blade fixing screw is loose 2. Fan motor damaged 3. Fan motor capacitance damaged	1. Tight the screw 2. Change fan motor 3. Change the capacitance
6	Compressor run, but not heat	1. There is not refrigerant at all 2. Compressor damaged	1. Check leakage and repair 2. Change compressor

Warranty card

Product model：　　Bar code：

Buyer		Address	
Invoice No.		Date	

Repair date	Repair record	Repairer

Items of warranty:

1. Warranty terms: _____; Within warranty, any problem because of quality, please contact us for support.

2. When repair needed, please show the warranty card and invoice of order or other proof.

3. We don't afford the problem that is caused by re-fitment or adding other function by user.

4. Warranty card and invoice or other purchasing proof will be invalid if alerted.

5. Please keep the warranty card and invoice or other purchasing proofs well, we will need these for service purpose.

6. We will not provide free warranty for below conditions:

(1) without proof;

(2) errors caused by re-fitment or not correct operating;

(3) damage caused by not professional people operating;

(4) faulty by moving or falling;

(5) faulty caused by natural disaster;

(6) After the power failure, the water in the pipeline of the unit was not discharged, which caused the unit to freeze.

NO.11801011

CERTIFICATE

Product Model: _____

_____

Bar code: _____

_____