

Full Inverter Swimming Pool Heat Pump

Model:

BYC-007TC1	**BYC-010TC1**
BYC-013TC1	**BYC-017TC1**
BYC-021TC1	**BYC-028TC1**
BYC-028TC3	**BYC-035TC1**
BYC-035TC3	



Thank you very much for purchasing our product, please keep and read this manual carefully before you install heat pump.

NOTE

1. **Please read the instruction manual carefully before installation or operation.**
2. **The heat pump must be installed by a professional installer.**
3. **Please follow the instruction manual strictly when installing the heat pump.**
4. **If any update on the product, this instruction manual is subject to change without notice.**
5. **If the heat pump is installed where is vulnerable to lightning strikes, it is necessary to take lightning protection measures.**
6. **If the heat pump is turned off in the winter, please be sure to drain the water in the system to prevent cold water from swelling and causing system damage.**

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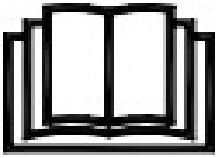
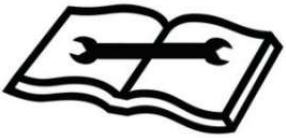
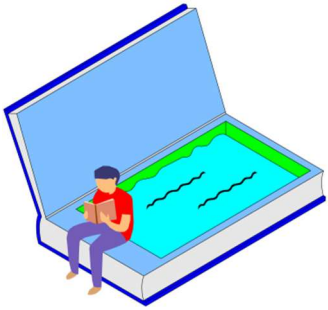






1.1 Precautions



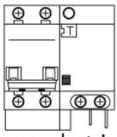
Please make sure that you have read this manual before using our air source heat pump. In the "User Instructions" chapter, it provides essential safety information. Please be sure to follow the instruction strictly.

Warning Wrong operations are likely to cause serious consequences such as death, serious injury, or major accidents.

Note Improper operation may result in a safety accident, damage to the machine, or affect the function of the machine.

Note Please read the labels on the machine carefully. If abnormal conditions such as abnormal noise, odor, smoke, temperature rise, electric leakage, fire, etc. are found during use, please cut off the power immediately and contact our local customer service center or dealer in time to repair it. Contact the local fire and emergency department immediately if necessary.

1.2 Safety Precautions



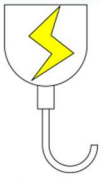
Please use an electrical leakage switch, and make sure that the leakage protection switch is securely connected, otherwise there may be electric shock, fire, etc.



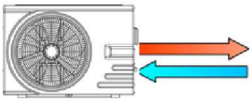
This unit is required reliable earthing before usage,otherwise might cause death or injury



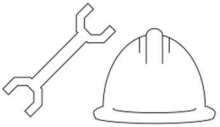
Ambient temperature:
-15℃ ~43℃
Beyond the above range, protective shut down or standby failure may occur



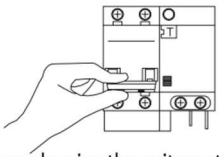
Power supply voltage:
according to the model select
220V/1/50HZ or 380V/3/50Hz



Water outlet the highest temperature: 40℃
Water inlet the lowest temperature: 8℃



Entrust a professional to move/install/repair it



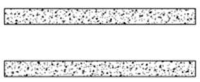
When cleaning the unit must stop and cut off the power switch.



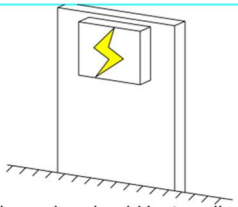
When installed indoor, maintain smooth ventilation to prevent the leakage of refrigerant from exceeding the limit concentration and causing suffocation.



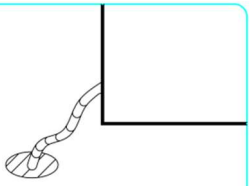
When abnormality (burnt smell) occurs,the manual power switch should be cut off immediately, and get in touch with the manufacturer



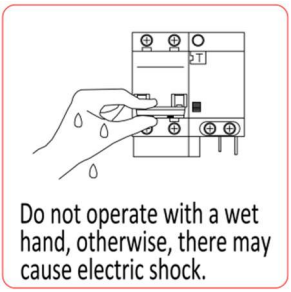
Confirm whether the long-term use and installation foundation is firm



The socket should be installed at a height that children or water cannot reach



Please install the appliance in a place that can self drain.



Do not operate with a wet hand, otherwise, there may cause electric shock.



Do not modify it by yourself



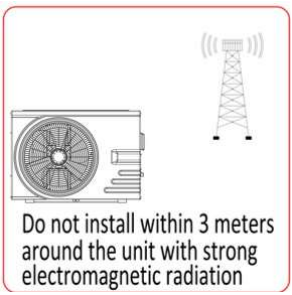
Do not install in a place where flammable gas is easy to leak



Do not insert your fingers or any stick into the inside of the ventilation area, otherwise, harm will be caused.



Do not dismantle any permanent instruction, label, or nameplate from the appliance



Do not install within 3 meters around the unit with strong electromagnetic radiation

Always communicate with the manufacturer when used outside the above range.

1.3 Other Safety

1. Unit antifreeze: when the unit is running at an ambient temperature below 0□, the unit will automatically enter antifreeze protection:
   1) In the standby state, the compressor or circulating water pump of the unit will automatically：Operation is normal;
   2) If the unit is out of power for more than 15 minutes (the time is measured at minus 5□. The lower the temperature, the shorter the time), please at the lowest end of the unit, the water in the unit water inlet and circulating water pump and pipes is drained cleanly to prevent the unit from freezing and effecting the use of users.
2. The machine needs to use a separate power switch to avoid sharing the same circuit with other electrical appliances, supply the

power to the machine vice the specified power cable, and use the proper breaker with the electric leakage protection required.

3. The machine must be installed with a specified grounding wire. Do not connect the grounding wire to the gas pipe, water pipe, lightning conductor, or telephone, and the machine must be grounded reliably to avoid any electric shock.
4. Do not disconnect the power supply when the machine is running.
5. When the machine is not used for a long time, please disconnect the main power switch to avoid accidents.
6. If the ambient temperature is below 0 □, it is forbidden to cut off the power supply. If the power is turned off unexpectedly under these conditions, drain the water inside the pipeline.

1.4 Arrival inspection

After receiving the product, please follow the following steps to inspect the product upon arrival:

1. **Check the outer package**: Confirm that there is no damage, deformation, moisture or other phenomena on the outer packaging, and that the seal is intact and undamaged.If there are any issues, please do not open the package and contact your local dealer in a timely manner.

2. **Check the product** : After opening the package, check whether the product is intact and has any obvious physical damage. Also, verify that the product model, color, quantity, etc. are consistent with the order. If there are any issues, please contact your local dealer in a timely manner.

3. **Testing product functions** : Conduct a simple test on the various functions of the product according to the instructions on the

product manual to ensure that the product works properly. If there are any problems, please contact your local dealer in a timely manner.

4. **Check accessories**: Please confirm that all accessories are complete and free from any missing or damaged items according to the contents listed in the table below. If there are any issues, please contact your local dealer in a timely manner.

No.	Description	Qty.	Remark	Use
1	Installation & Operation Manual	1		User Guide to install the unit
2	Controller	1		Used for the machine operation interface
3	Drain-pipe (2 m)	1		Used for draining the condensate water
4	Drain-pipe connector	1		To connect the drain pipe to the heat pump
5	Rubber shock absorber	4		To reduce vibration and noise
6	Heat Pump Unit	1		For water heating and cooling

2.1Specification parameter

MODEL:

BYC-007TC1

BYC-010TC1

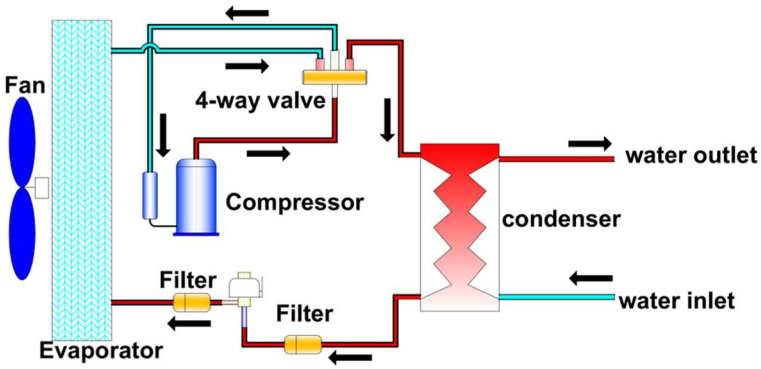
BYC-013TC1

BYC-017TC1

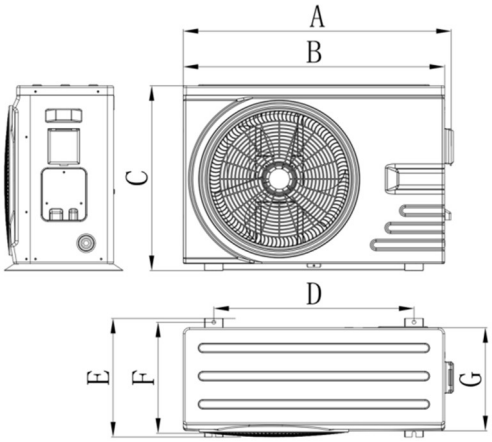
BYC-021TC1

BYC-028TC1

2.2Running principle

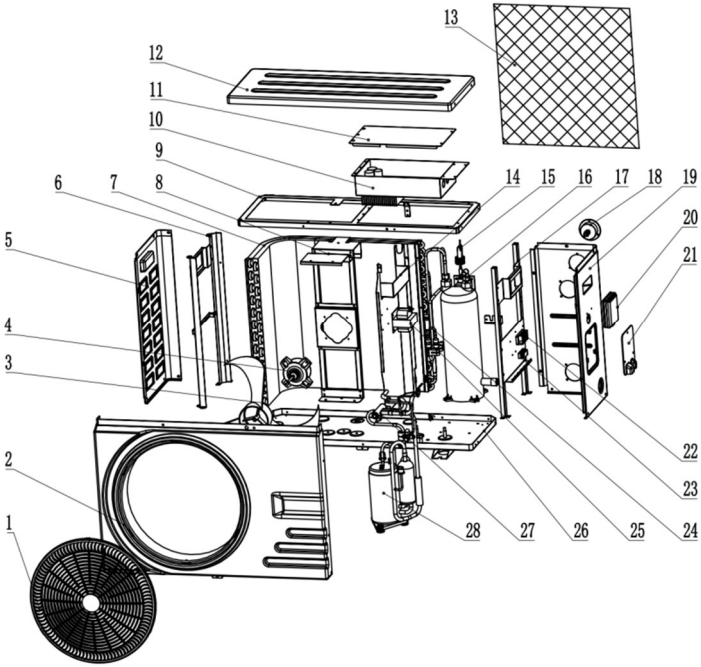


2.3Dimension



Model	A	B	C	D	E	F	G
BYC-007TC1 BYC-010TC1	864	836	594	640	379	355	335
BYC-013TC1 BYC-017TC1 BYC-021TC1	924	896	641	640	400	376	363
BYC-028TC1 BYC-028TC3 BYC-035TC1 BYC-035TC3	1084	1056	740	710	445	421	401

2.4Exploded view

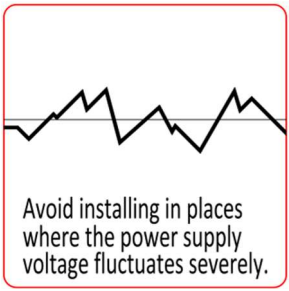


NO.	Description	NO.	Description	NO.	Description
1	Air outlet grille	11	Electric box cover	21	Junction box cover
2	Front panel	12	Top cover	22	Terminal Block
3	Fan blade	13	Rear guard net	23	Wire buckle
4	Fan motor	14	Middle panel	24	Throttle components
5	Left panel	15	Water flow switch	25	Reactor
6	Left structure	16	Heat exchanger	26	Chassis components
7	Evaporator	17	Right structure	27	4-way valve
8	Fan motor mount	18	Pressure gauge	28	Compressor
9	Upper structure	19	Right panel		
10	Electric box	20	Control panel		

3.1 Installation note

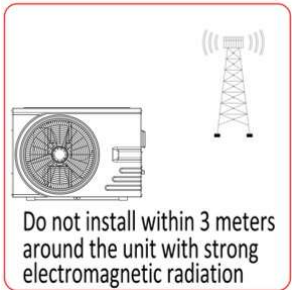










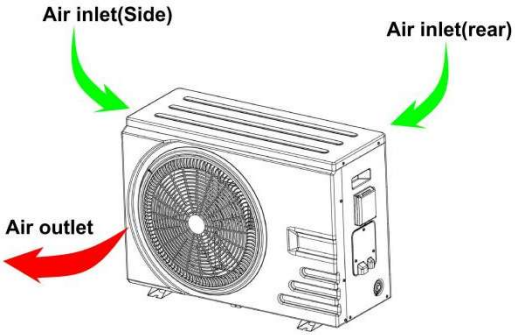


3.2 Installation check

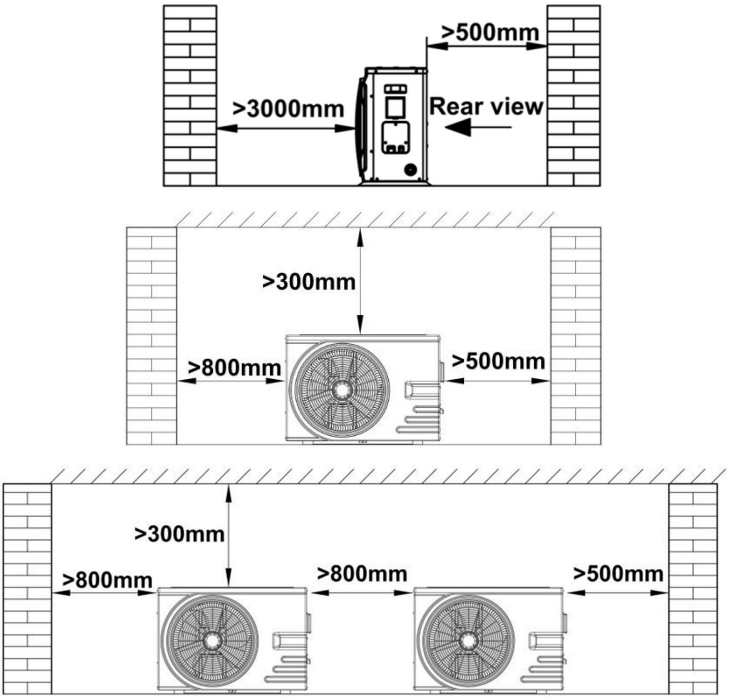
- Confirm the model, number, name, etc .
- Whether the installation and maintenance space is sufficient.
- The air inlet and outlet are barrier-free and dry and ventilated.
- The weight on the supporting surface meets the requirements.
- Please select the power supply, power supply capacity, and wire diameter in accordance with the electrical installation requirements.
- Electrical installation must comply with the relevant technical standards for electrical equipment, and electrical insulation must be done.

3.3 Installation space

The air inlet or outlet ports are shown in the following figure:



When installing, leave the maintenance space shown in the figure below before installing the unit.There should be no obstacles 500mm above the unit, and the side of the water pipe of the unit can be appropriately enlarged according to the actual situation.



3.4 Transport and preserving foundation

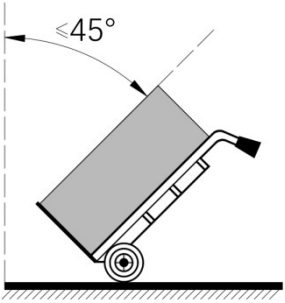
Tips

Tips: Before transport and hoisting, please confirm again whether the model, number, name, color, etc. are consistent with the order. And please have qualified dealers or designated professional technicians responsible for transport and hoisting, otherwise it may cause danger.

3.4.1 Transport

Before unpacking, the unit should be transported as close to the installation site as possible;

* When transporting the unit, attention should be paid to maintaining verticality , and the inclination should not exceed 45^0, do not store the unit horizontally to prevent damage to compressor and other components;
* Prohibit storing any items on the crew;
* Do not hold the air outlet grille on the shell, as it may deform;
* Do not let your hands or other objects come into contact with the wind turbine blades.

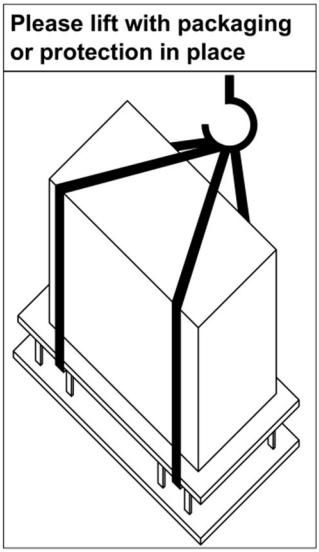


3.4.2 Hoisting

* Prohibit storing any items on the crew;
* When hoisting the unit, two slings with a length of more than 6m should be used, if the suspension rope is too short, it may cause deformation of the unit. The sling should have sufficient strength to

withstand the weight of the unit; When hoisting, the machine should be kept balanced and raised safely and steadily;

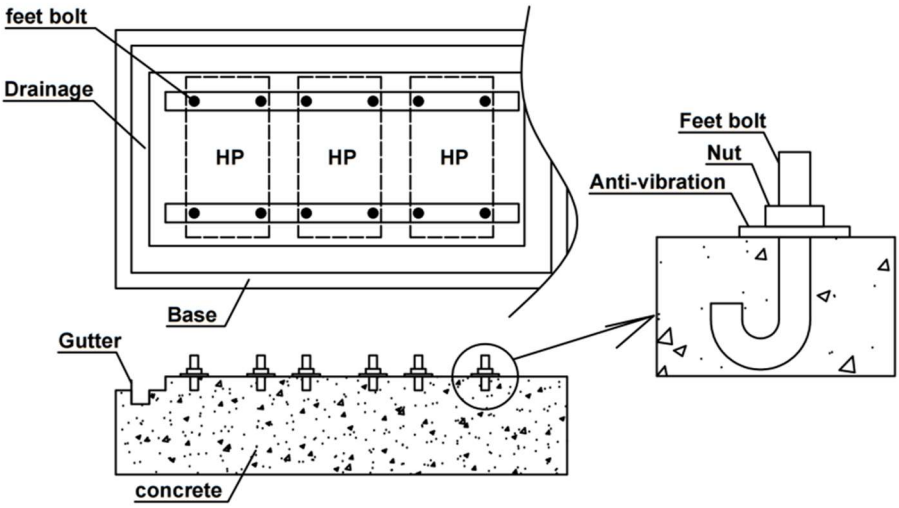
* It is strictly prohibited to remove the outer packaging during hoisting to avoid scratching or damaging the machine.



3.4.3 preserving foundation

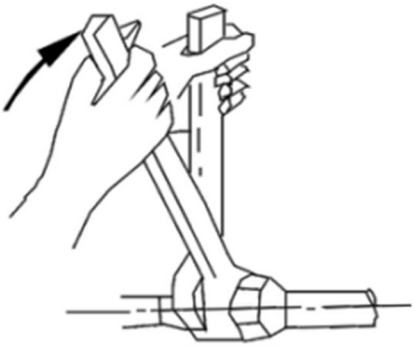
Before installation , the foundation needs to be checked again to prevent it from being wrong with the actual object .

The unit has a lot of condensed water. Please consider installing a shock absorber between the drainage channel and the foundation around the foundation .When installing, each unit reserves the foundation according to the following outline drawing.


feet bolt
Drainage
HP
HP
HP
Base
Gutter
concrete
Feet bolt
Nut
Anti-vibration

4.1 Installation note

- Try not to allow dust and other debris to enter the piping system.
- The unit must be secured before the water pipes can be installed.
- The inlet and outlet pipes must be sealed with thermal insulation materials.
- The pipeline ensures a certain flow rate of water, and try to avoid excessive throttling.
- Do not hook the inlet and outlet pipes during transportation, only the mounting holes of the base beam can be hooked.
- When connecting the inlet and outlet pipes, two pipe wrenches must be used to clamp the two parts of the pipe to be connected to ensure that the inlet and outlet pipes do not rotate.



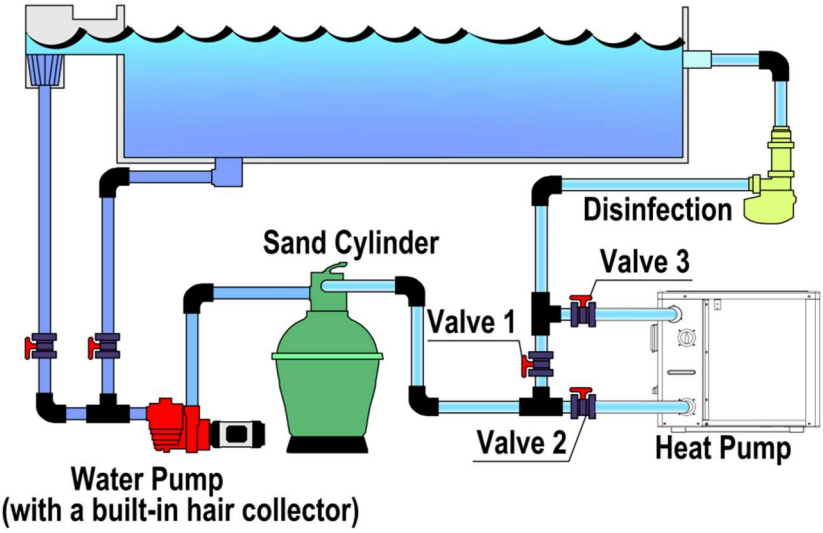
4.2 Selection of pipe diameter

Model	The water inlet/outlet size
BYC-007TC1 BYC-010TC1 BYC-013TC1 BYC-017TC1 BYC-021TC1 BYC-028TC1 BYC-035TC1 BYC-028TC3 BYC-035TC3	DN50

When multiple machines are cascaded, the pipe diameter should be selected according to the water flow rate .

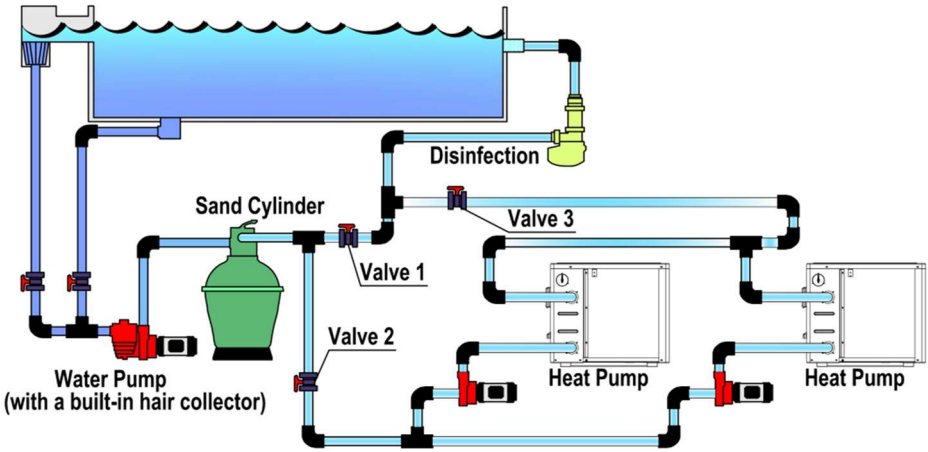
4.3 Engineering installation diagram

Single:

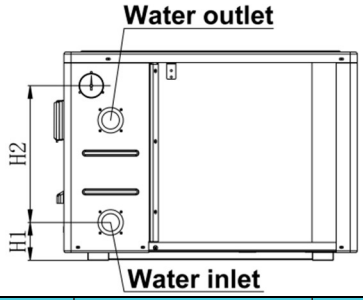


- This diagram is only for illustration, please refer to the actual situation.
- When the heat pump is not needed to work, Valve 1 is open, Valve 2and Valve 3 are close.
- When the heat pump is needed to work, Valve 1 is close, Valve 2and Valve 3 are open.

Cascade:



- This diagram is only for illustration, please refer to the actual situation.
- When the heat pump is not needed to work, Valve 1 is open, Valve 2and Valve 3 are close.
- When the heat pump is needed to work, Valve 1 is close, Valve 2and Valve 3 are open.



Model	H1	H2
BYC-007TC1 BYC-010TC1	107	388
BYC-013TC1 BYC-017TC1 BYC-021TC1	107	445
BYC-028TC1/TC3 BYC-035TC1/TC3	100	536

4.4 Filter

A hair collector needs to be installed in front of the water pump, or a water pump with a built-in hair collector can be used .

A sand cylinder should be installed after the water pump to filter out small impurities in the water.

4.5 Selection of water pump

The machine must be installed with a water pump to be operated.

Flow Volume of water pump=1.2***heat pump water flow Volume**.

Head of water pump = 1.1***[height difference between water level and main unit** + **total pipeline resistance** (estimated based on a pressure drop of 0.5-1m per 100 meters of pipe length) + **pressure loss of heat pump** (see nameplate)+ **pressure loss of sand cylinder]** .

4.6 Pressure testing and flushing

Pressure testing

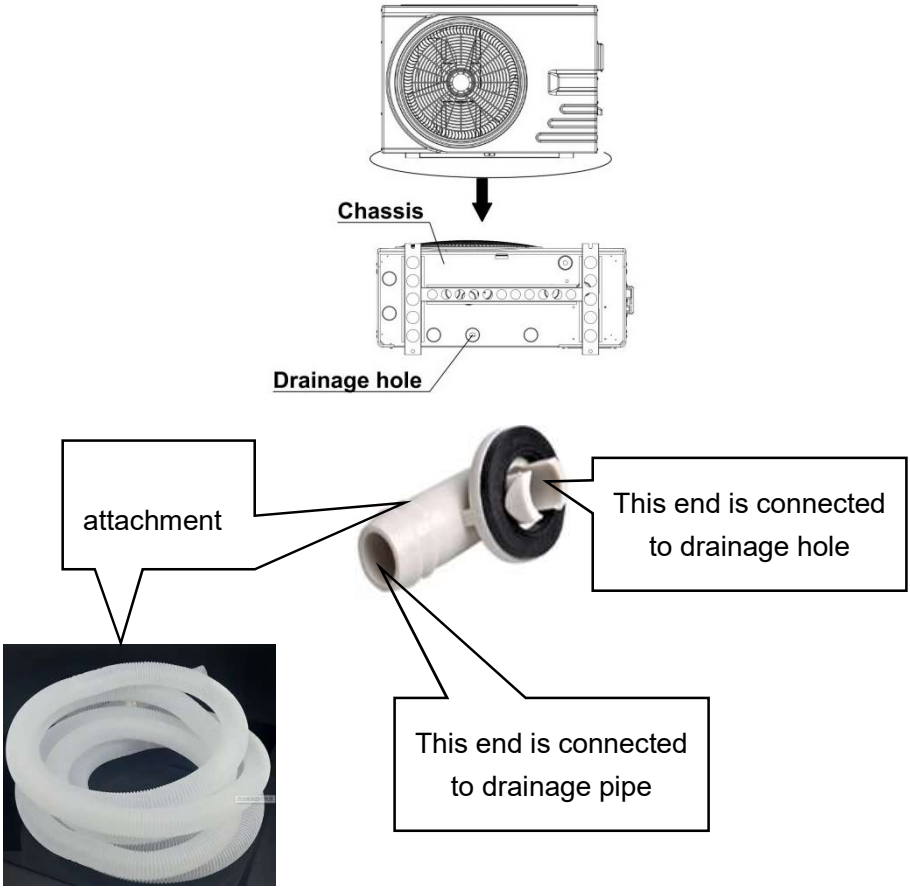
Water system pressure test: After the system installation is completed, a water pressure test should be conducted before the pipeline insulation.

Flushing

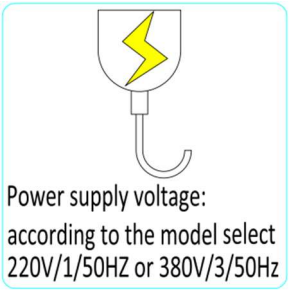
After the pressure test is qualified, the system should be flushed , and the filter and dirt remover should be cleaned until the discharged water is free of impurities such as sediment and iron filings, and the water color is not turbid, which is considered qualified.

4.7 Installation of chassis drainage hole

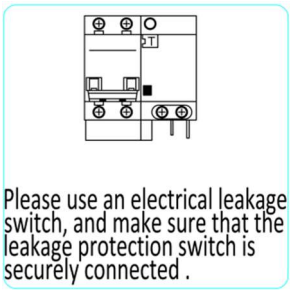
The unit's drainage holes are designed for uniform drainage treatment, and condensate will be generated when the unit is running in heating mode . Therefore, it is necessary to install drainage pipes and direct the water to the drainage point .Random attachments

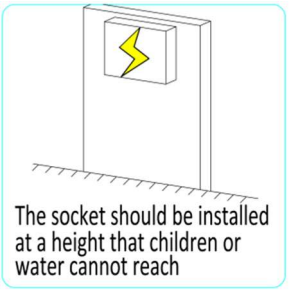


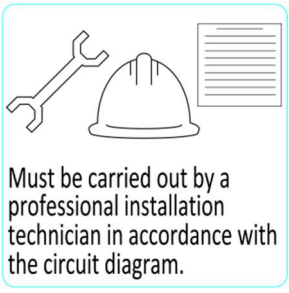
5.1 Installation note

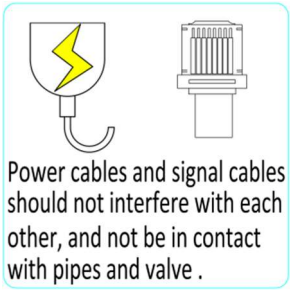












5.2 Power Cable Connection Instruction

1. Remove the power wire cover and connect the wire to the corresponding terminal block according to the electrical wiring diagram to confirm that the connection is secure.
2. Secure the cable with the wire clamp and install the power wire cover.
3. Do not connect the wrong line. Otherwise, it will cause electrical failure or even damage the machine.
4. The type and rating of the fuse are based on the specifications of the corresponding controller or fuse cover.
5. The power cable must be selected and installed by a professional

installer. When the installer chooses the power cable, the power cable should not be lighter than the neoprene armoured cord (line 57 of IEC 60245). For specific power cable specifications, see the electrical specifications.

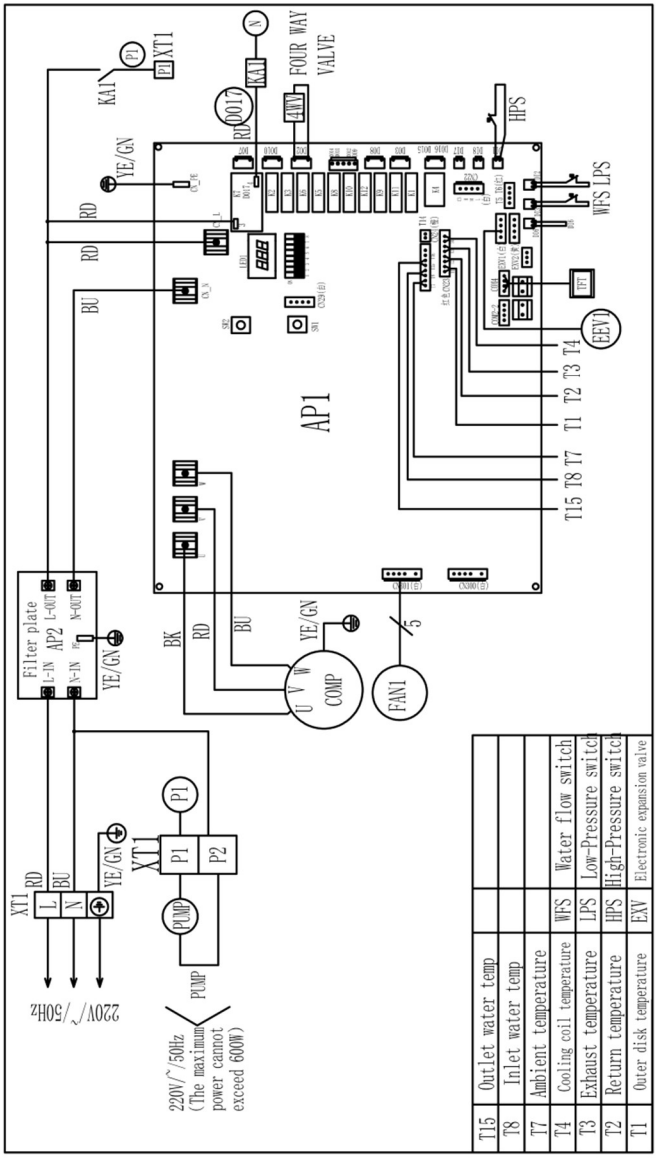
6. If the user's power distribution capacity is insufficient or the power cord (copper core wire) is not configured as required, the machine cannot be started or operated normally. The seller will not take any responsibility.

Model	BYC-007TC1	BYC-010TC1	BYC-013TC1	BYC-017TC1
Power Supply	220~240 V/ 1/ 50 Hz			
Max Input Current (A)	7.3	8.3	10.2	12
Fuse (A)	15	15	15	15
Electric Leakage Protector (mA)	30	30	30	30
Power Cable (mm^2)	3*2.5	3*2.5	3*2.5	3*2.5

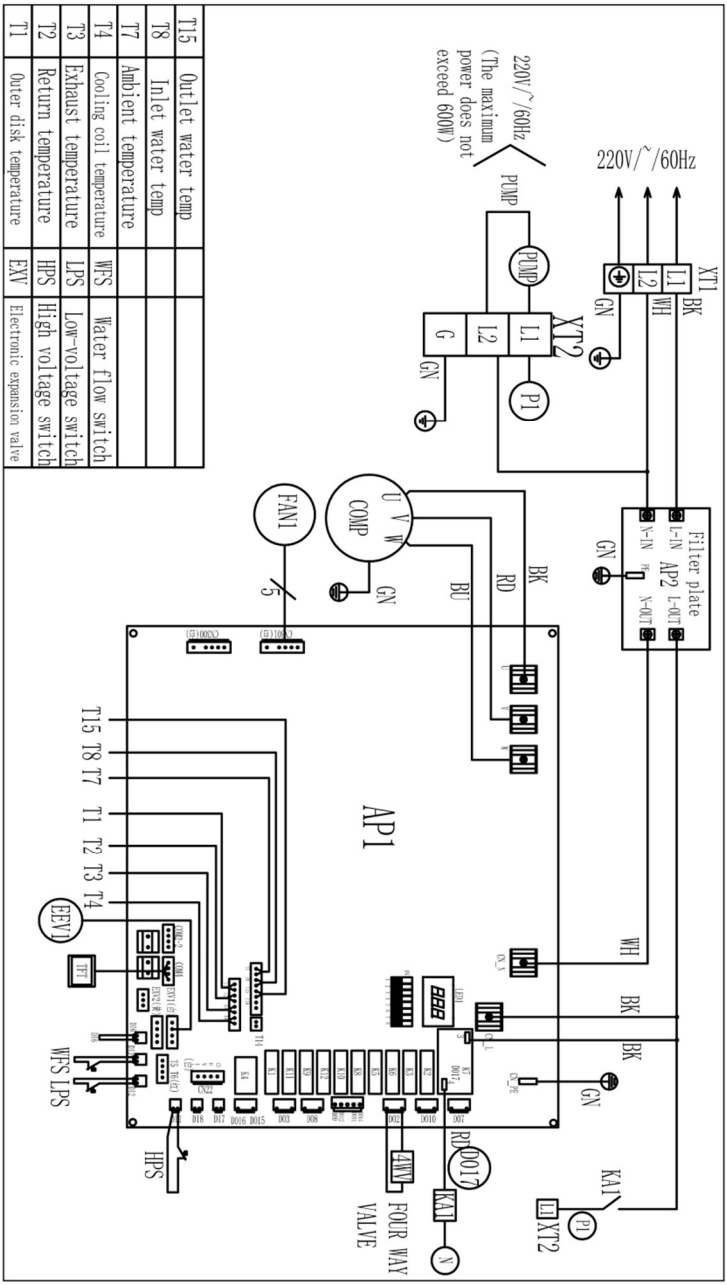
Model	BYC-021TC1	BYC-028TC1	BYC-035TC1	BYC-028TC3	BYC-035TC3
Power Supply	220~240 V/ 1/ 50 Hz			380~415 V/3/ 50 Hz	
Max Input Current (A)	14.7	20.4	30	7.9	11.3
Fuse (A)	20	25	40	15	15
Electric Leakage Protector (mA)	30	30	30	30	30
Power Cable (mm^2)	3*4	3*4	3*6	5*2.5	5*2.5

5.3 Wiring Schematic

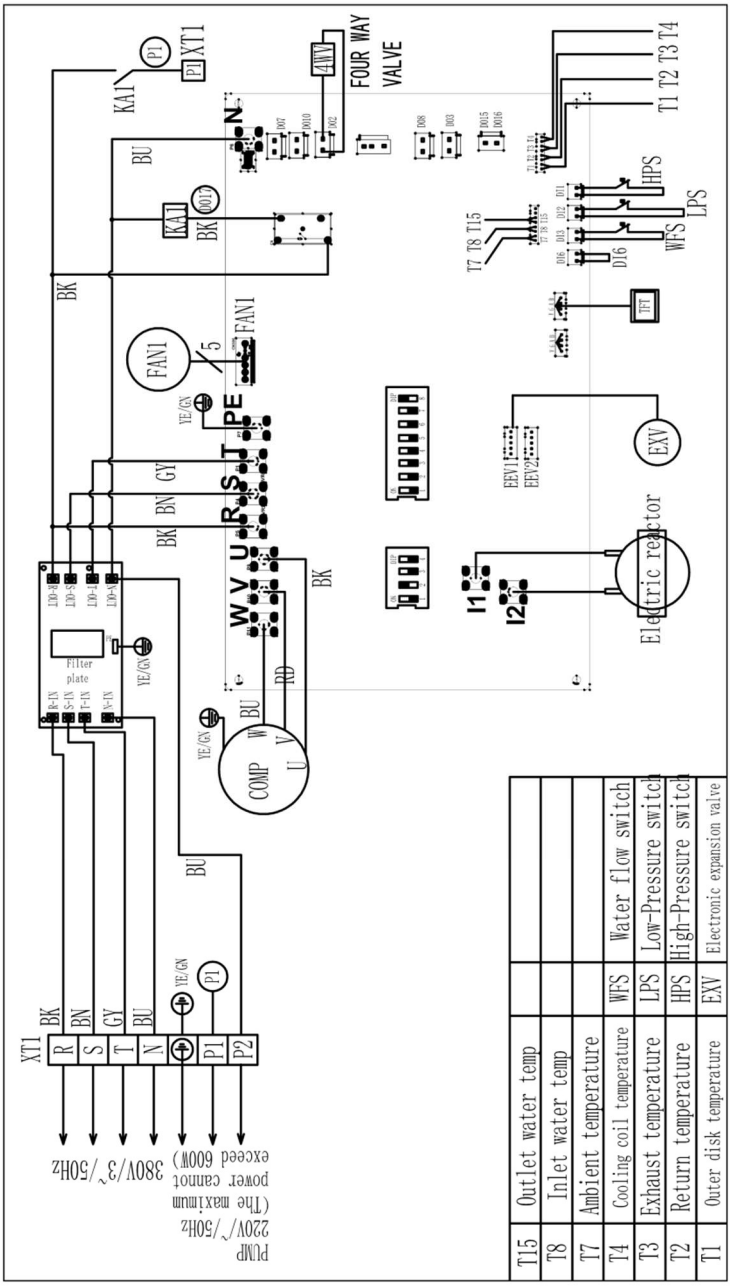
BYC-007TC1 BYC-010TC1 BYC-013TC1 BYC-017TC1 BYC-021TC1



BYC-028TC1 BYC-035TC1

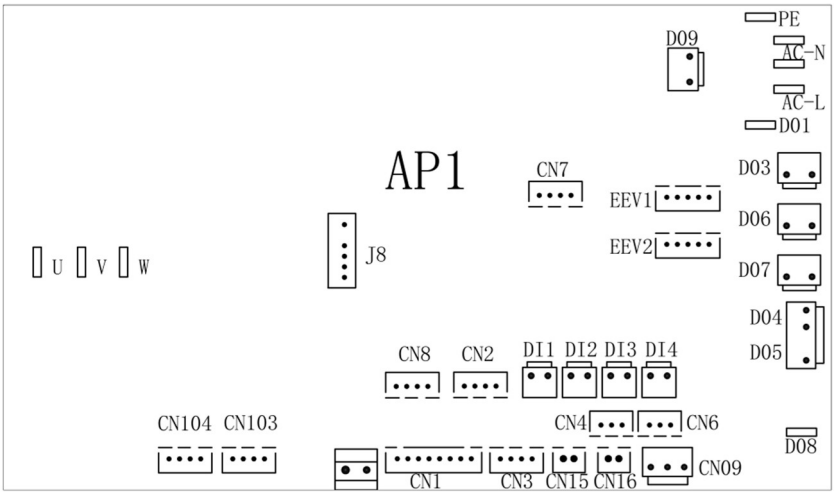


BYC-028TC3 BYC-035TC3



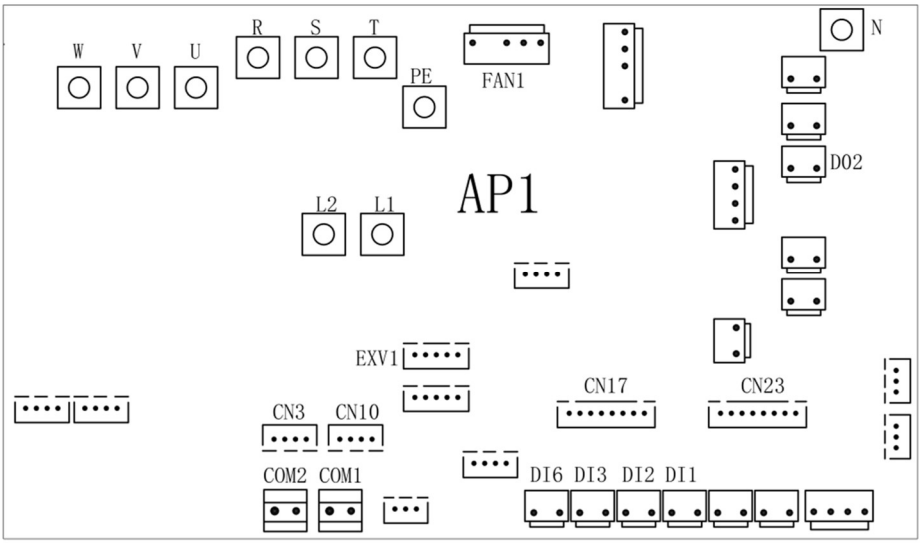
5.4 Main Unit Port Definition Diagram(AP1)

BYC-007TC1 BYC-010TC1 BYC-013TC1 BYC-017TC1
BYC-021TC1 BYC-028TC1 BYC-035TC1



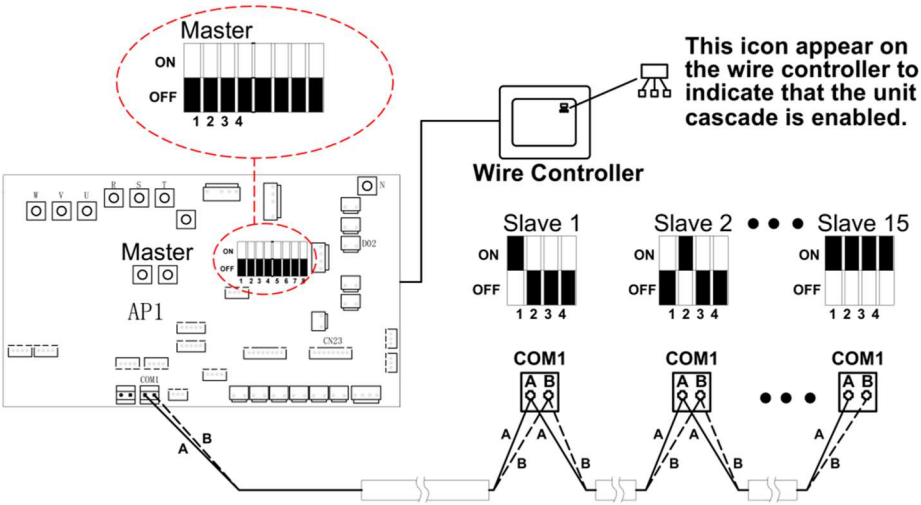
Port	Description	Port	Description	Port	Description
U	Compressor U	CN3	T4/T6	AC-L	Power input L
V	Compressor V	CN15	T7	AC-N	Power input N
W	Compressor W	J8	Fan connector	D01	Electric heating
DI1	High pressure switch	DI2	Low pressure switch	D09	Electricity module
CN104	Driver OTP port	DI3	Water flow switch	CN7	Motherboard OTP
CN103	Monitor	DI4	Linkage switch	CN1	T1/T2/T3/T5
CN8	Wire Controller	CN4	Reserve	PE	Earth wire
CN2	RS485	D03	4-way valve		

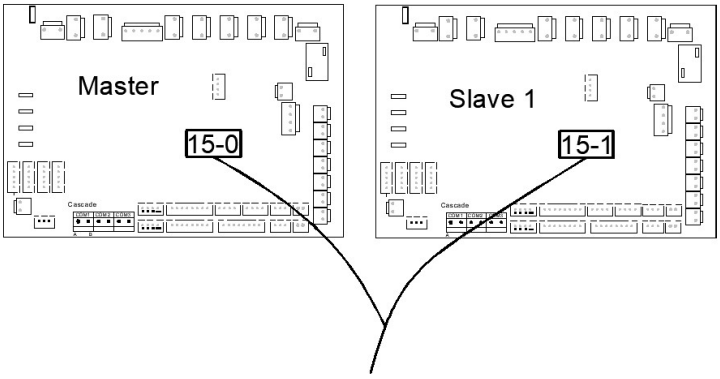
BYC-028TC3 **BYC-035TC3**



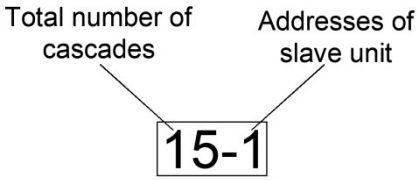
Port	Description	Port	Description	Port	Description
U	Compressor U	FAN1	Fan connector	R	Power input R
V	Compressor V	CN17	T7/T8/T15	S	Power input S
W	Compressor W	CN23	T1/T2/T3/T4	T	Power input T
DI1	High pressure switch	D02	4-way valve	N	Power input N
DI2	Low pressure switch	EXV1	EXV	PE	Earth wire
DI3	Water flow switch	L1	Electric reactor	CN8	RS485
DI6	Linkage switch	L2	Electric reactor	CN2	Wire Controller
COM1	Cascade Module	COM2	Host Unit Monitor		

5.5 Cascade (Only BYC-028TC1 / BYC-028TC3 / BYC-035TC1 / BYC-035TC3 have this function)





After the units are cascaded, the digital tube on the main board will display the number of cascades and the addresses of the slaves, and you can query the operation of the units with the corresponding addresses on the wire controller.

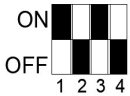
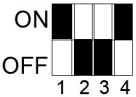
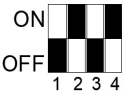
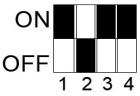
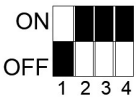


Note:

- With the cascade on, the slave unit is controlled only by the master wire controller.
- Cascade maximum of 1 master unit and 15 slave units.
- Make sure the Communication cables be shielded and grounded.
- Make sure the cascades ports on the different units are connected correctly (A-A/B-B).
- Make sure the slave address (dip switch setting) is set correctly.
- Make sure the parameter setting is correct.

Address setting combinations for master and slave:

No.	SE1	SE2	SE3	SE4	Status
Master	OFF	OFF	OFF	OFF	
Slave1	ON	OFF	OFF	OFF	
Slave2	OFF	ON	OFF	OFF	
Slave3	ON	ON	OFF	OFF	
Slave4	OFF	OFF	ON	OFF	

Slave5	ON	OFF	ON	OFF	
Slave6	OFF	ON	ON	OFF	
Slave7	ON	ON	ON	OFF	
Slave8	OFF	OFF	OFF	ON	
Slave9	ON	OFF	OFF	ON	
Slave10	OFF	ON	OFF	ON	
Slave11	ON	ON	OFF	ON	
Slave12	OFF	OFF	ON	ON	
Slave13	ON	OFF	ON	ON	
Slave14	OFF	ON	ON	ON	
Slave15	ON	ON	ON	ON	
**The black square represents the position of the switch*					

6.1 Controller instruction

After entering the welcome page 3s, the wired controller will go to the homepage. No operation for 2 minutes the screen will turn off and click on the screen to turn it back on. (If there is a communication failure, it will stay on the welcome page.)





1.Homepage icon description

Date & Time Display Area

Ambient Temperature

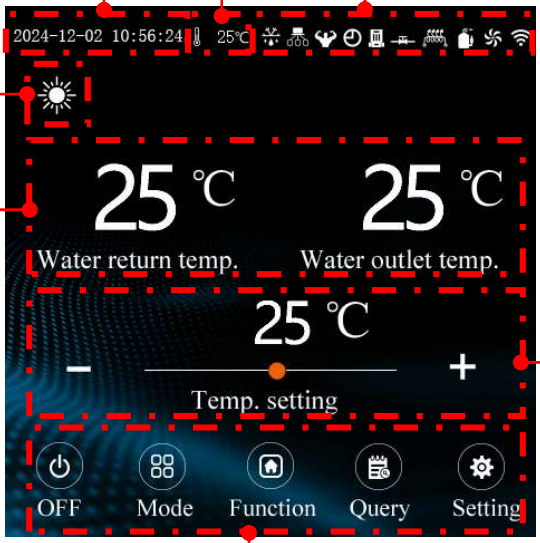
-Outdoor Ambient

Unit Status Display Area

-The operating status of the unit will be displayed here.

Operation Mode

-Current operating mode display of the unit



Operation Area

-Click the operation button to enter the corresponding control page of the wired controller.

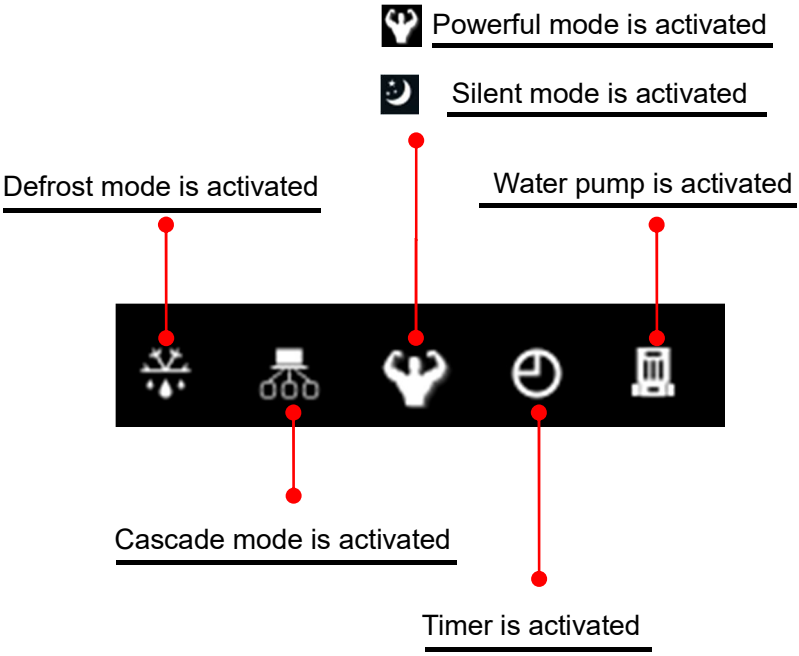
Water Temperature Display

-Current water temperature display

Water Temperature Display

-Target water temperature display

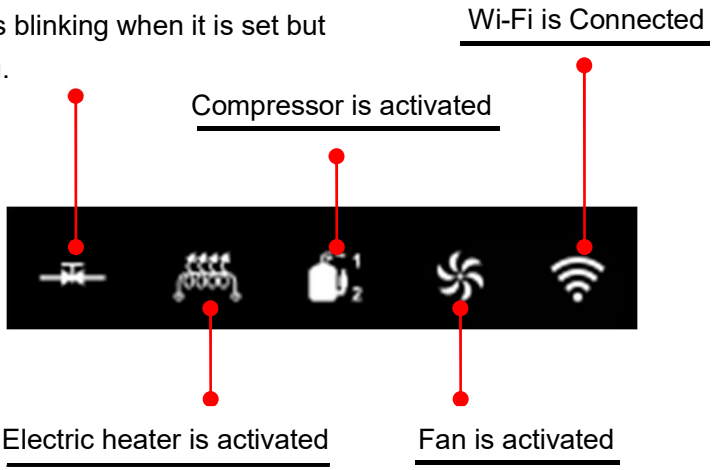
2.Unit Status icon description



Return Water Mode is activated

-The icon is always on, it is running

-The icon is blinking when it is set but not running.



4.ON/OFF Button

Touch "  " to control the unit to turn on and off.

5.Mode Button

Touch "  " to enter the operation mode selection.



After selecting the mode, you can click here to return to the home page quickly.

Tips

Applicable to all interfaces

6.Function Button

Touch "  " to enter the operation mode selection.



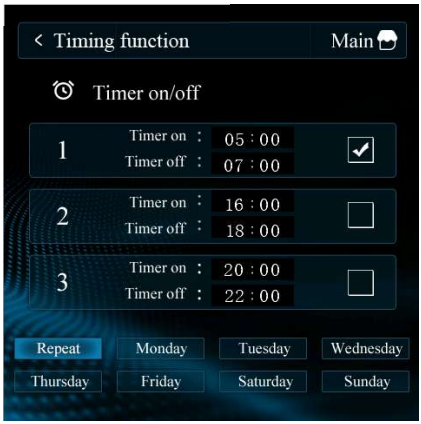
Touch " User functions " to enter user function setting page.



Forced frosting When the unit is not operating cooling mode, click it to operate/off the frosting mode.

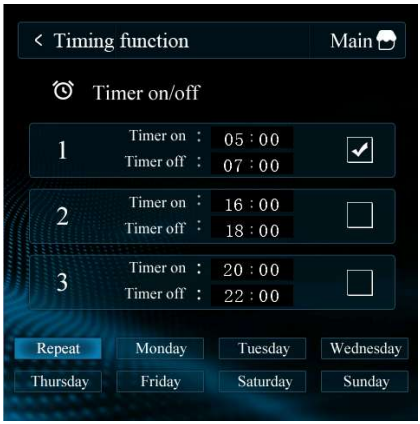
Waterway emptying When the unit is off , click it, unit will run the water pump to circulate the water circuit and discharge the air. When the unit is on, the emptying function will off .

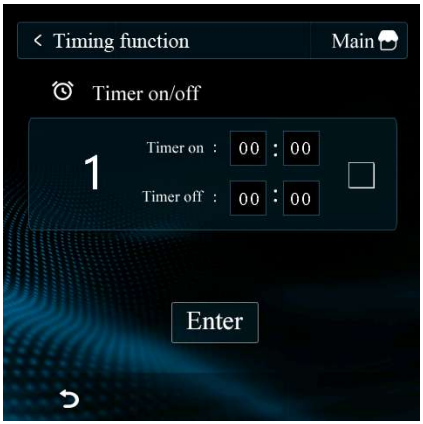
Touch " Timing function " to enter timing setting page.



Repeat It means timing every day, the unit operates according to the set time every day.

If you need to enable weekly timing ,click any button from Monday to Sunday to start the weekly timing.Click the time period to enter the time setting of the time period，From keyboard to input the time，Click the enable button“ ☑ ” you can enable or disable this segment timing，Press “Enter ”to save the Settings.





Touch " WIFI distribution " to enter WIFI setting page.



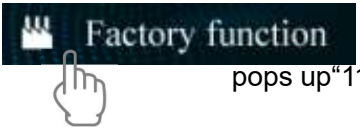


To enter smart mode.



To enter AP network mode.

For more information about WIFI connection, please refer to **6.4 WIFI connection**

Touch " 

" and type on the keyboard that pops up“1122” to enter factory function.





You can manually control the running status of the compressor, fan, EEV, and EVI, and enter the IPLV test mode.



You can enter the tooling number setting.



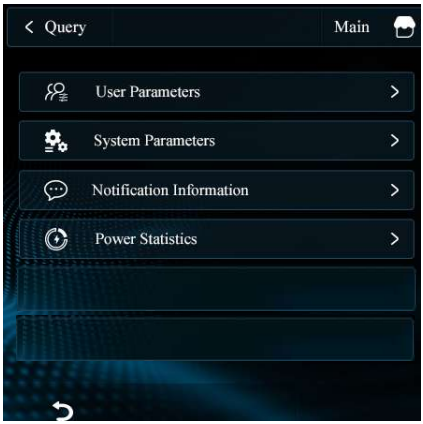
You can recycling refrigerant .

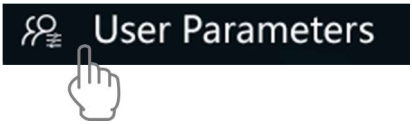
Note

Factory function is needed professional to operation.

7.Query Button

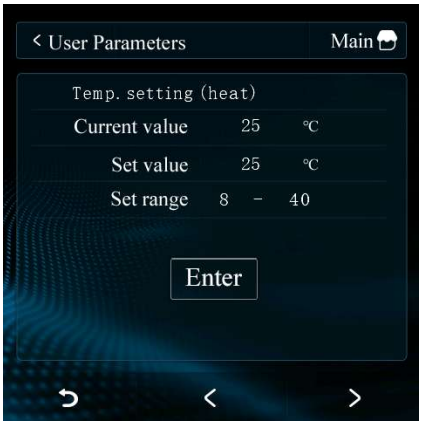
Touch "  " to enter the query mode selection.



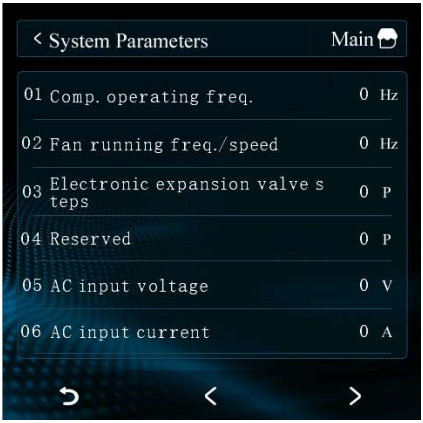
Touch "  " to enter parameter setting page.

Click on the parameter item to enter the page for modifying the corresponding parameter value. Click on the parameter value on the right, enter the modified value on the pop-up keyboard, click "Enter", and then press "Enter" to save the parameter value.





Touch " System Parameters " to enter parameter setting page.



Running status query method in cascade mode:

Select the corresponding slave unit to query the running status of the corresponding unit.Units that are not online display gray .

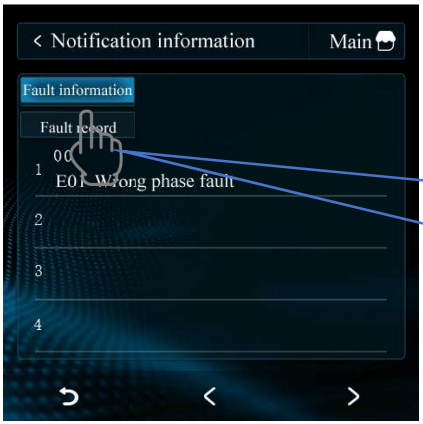


Touch " Notification information " to enter parameter setting page.



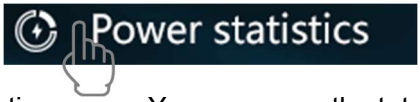
Chick it to clearing historical faults.

When the unit is faulty，“ ”Blinking icon Display，When the fault is disappear，Icon out. Click the icon to go to the fault query page；A maximum of 20 faults and 50 historical faults can be realized，00E03：00 means master unit，02.03.....means slave unit，E03 means Error code .



Chick it to check historical faults.

When the unit is equipped with a battery module:

Click“ 

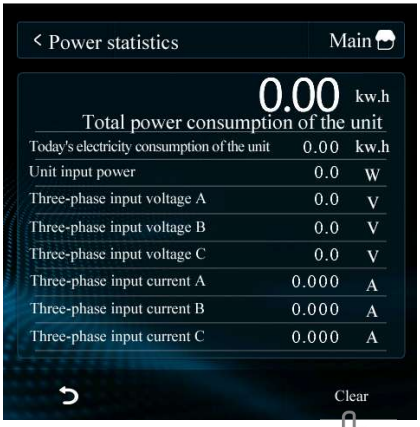
”Enter the unit electricity information query，You can query the total power consumption, current power, voltage, and current parameters.

Single phase



Reset battery level

Three phase

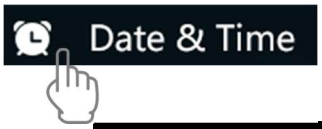


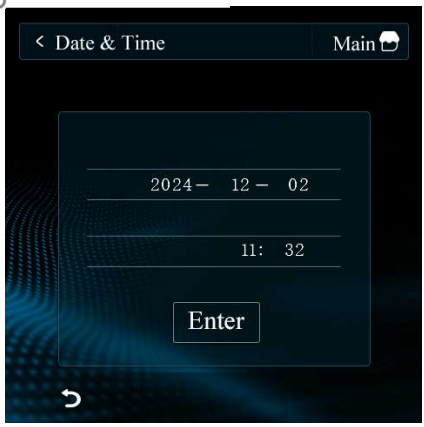
Reset battery level

8.Setting Button

Touch "  " to enter the query mode selection.

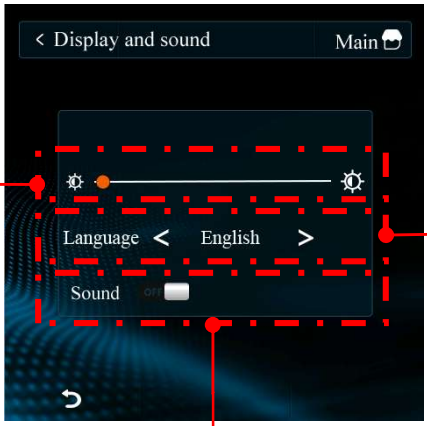


Touch "  " to enter time setting page.



Click the corresponding year, month and day to enter the value on the keyboard，finally press “Enter” save time.

Touch "  " to enter brightness setting page.

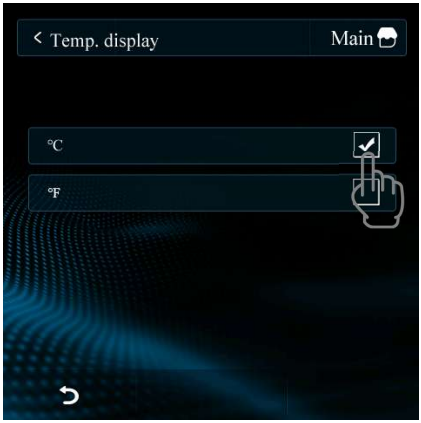


Click "OFF/ON" to turn on/off the sound

Slide the slider to set different brightness

click“ ” “ ”Switch different languages

Touch " Temp. display " to enter setting page.



Choose to display temp. units

Touch " Factory Parameters " to enter setting page.





Factory parameter query method in cascade mode:
Select the corresponding slave unit to query the running status of the corresponding unit.Units that are not online display gray .



Touch " Restore factory settings " to enter setting page.

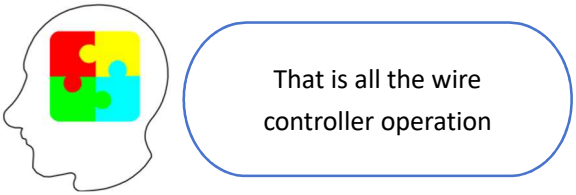


Click It can restore factory Settings

Touch " About " to enter setting page.



You can view the program version numbers of the motherboard and display screen.



6.2 Operation Parameter query

Query Code	Description	Range
1	Compressor Running Frequency	measured values
2	Fan Motor Running Frequency	measured values
3	Electronic expansion valve steps	measured values
4	Reserved	measured values
5	AC Input Voltage	measured values
6	AC Input Current	measured values
7	Compressor Phase Current	measured values
8	IPM temperature of the compressor	measured values
9	Reserved	measured values
10	Reserved	measured values
11	External ambient temperature T1	measured values
12	Outer coil (fin) T2	measured values
13	Internal coil (plate heat exchanger) T3	measured values
14	Gas Suction Temperature T4	measured values
15	Gas Exhaust Temperature T5	measured values
16	Water Return Temperature T6	measured values
17	Water Outlet Temperature T7	measured values
18	Reserved	measured values
19	Reserved	measured values
20	Unit Tooling Number	measured values
21	Reserved	measured values
22	Reserved	measured values

23	Driver manufacturers	measured values
24	Reserved	measured values
25	Reserved	measured values
26	Reserved	measured values
31	Four-way valve	measured values
32	Reserved	measured values
33	High pressure switch	measured values
34	Low pressure switch	measured values
35	Water flow switch	measured values
36	Linkage switch	measured values
37	Unit input voltage	measured values
38	Unit input current	measured values
39	Unit input power	measured values
40	Total power consumption of the unit	measured values

6.3 Trouble Analysis

Error code	Fault Description	Failure Causes
E01	Wrong-Phase Protection	Power supply phase sequence error
E02	Power Supply Lack Of Phase	The power supply is out of phase
E03	Outside Water Flow Switch Fault	1. Circulating pump failed, or water system blocked 2. Water flow switch failed, or opposite installed direction 3. The lift of the circulating pump is not enough 4. Circulating pump has opposite installed direction
E05	High-Pressure Switch One Fault	1. High-voltage switch failed 2. Excessive refrigerant

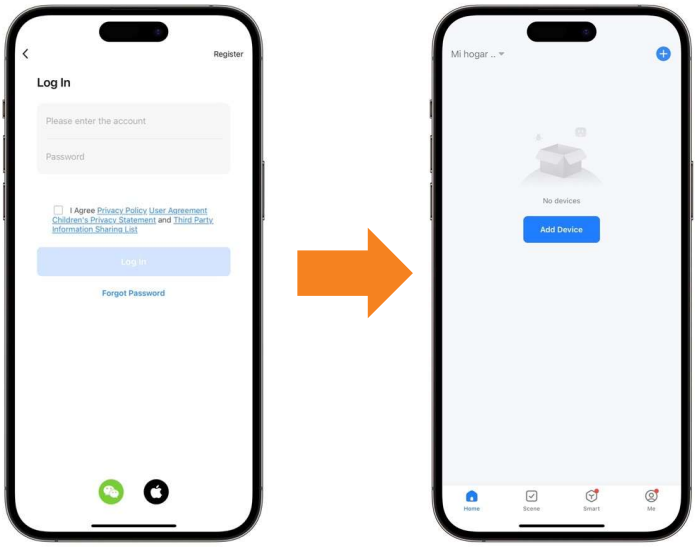
		3. Fan doesn't work typically, or water circulated abnormally 4. Air or other objects mixed into the refrigeration system 5. Too much scale in the water heat exchanger
E06	Low-Pressure Switch One Fault	1. Low-voltage switch fault 2. Lack of refrigerant 3. Fan doesn't work normally 4. Block exists in refrigeration system
E09	Line controller and motherboard communication failure	Check the communication connection
E11	Limited Time Protection	Enter the power-on password
E12	Exhaust Gas Temperature One Too High Fault	Lack of refrigerant in the fluorine circuit system or sensor damage
E14	Hot Water Tank Temperature Failure	Damaged motherboard or sensor
E15	Water Inlet Temperature Sensor Failure	Damaged motherboard or sensor
E16	Coil Sensor One Failure	Damaged motherboard or sensor
E18	Exhaust Gas Sensor One Fault	Damaged motherboard or sensor
E21	Environmental Sensor Failure	Damaged motherboard or sensor
E22	User Return Water Sensor Failure	Damaged motherboard or sensor
E29	Suction Sensor One Fault	Damaged motherboard or sensor
E38	DC Fan One Failure	Fan drive board or motor damage
E96	Abnormal Communication between Compressor One Driver and Main Control Board	Poor or broken signal cable contact
E98	Abnormal Communication between Fan Motor One Driver and Main Control Board	Poor or broken signal cable contact

6.4 WIFI connection

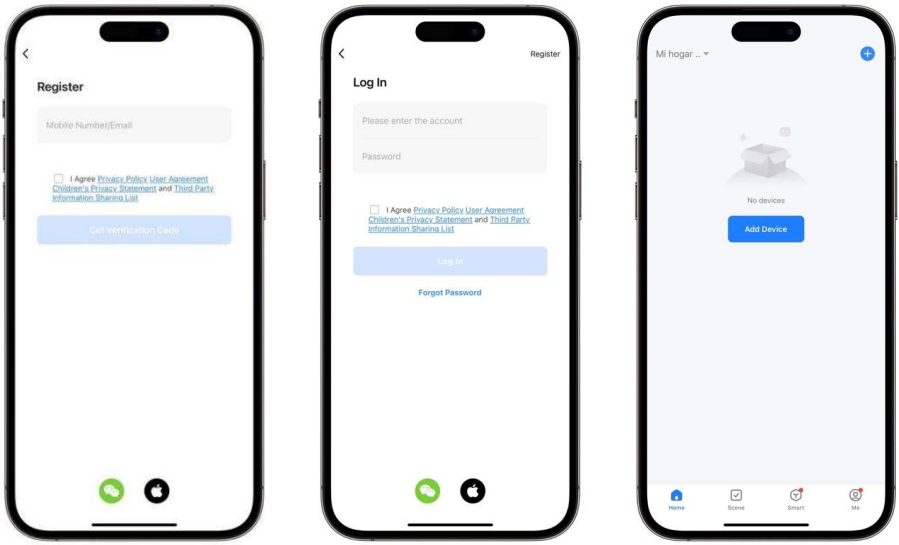
The heat pump supports remote control by mobile phone. You need to download the APP in the app store and register an account to perform network distribution operations. The heat pump supports smart distribution network and AP distribution network. Under normal circumstances, it is recommended to use smart distribution network connection.

1. Search "Smart Life" in the App Store or scan the following QR code with your mobile phone to download.

2. Enter your account number and password to enter the APP main page.



3. If you log in for the first time, you need to register an account. After registration is completed, enter your account password to enter the APP main page.

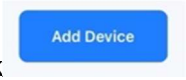


Networking (Smart Mode)

Generally, it is recommended to use smart mode. The wire controller is required to be within WIFI coverage.The wire controller must first enter the network distribution mode.

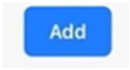
The following is the operation method:

After the wire controller enters the network distribution mode, open the "Smart Life" APP on the mobile phone to enter device binding. Before binding, the mobile phone needs to be connected to the WIFI network, confirm that the Bluetooth and WIFI of the mobile phone are turned on and authorize the APP.

1.Place your mobile phone close to the wired controller and on the same WIFI network, open the APP and click 

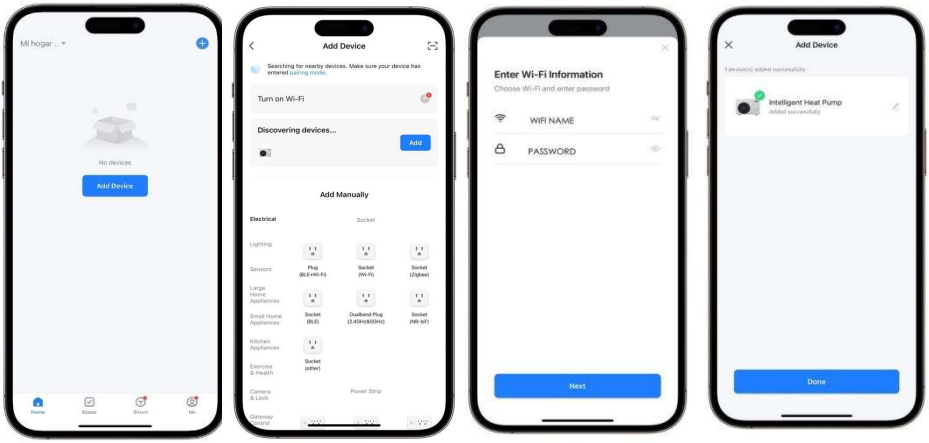
.

2. In the Smart mode, the APP will automatically identify the device, click



.

3. After entering the current WIFI account and password, wait for the APP to complete binding

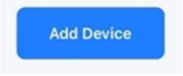


Networking (AP Mode)

Generally, it is recommended to use smart mode. The wire controller is required to be within WIFI coverage.The wire controller must first enter the network distribution mode.

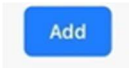
The following is the operation method:

After the wire controller enters the network distribution mode, open the "Smart Life" APP on the mobile phone to enter device binding. Before binding, the mobile phone needs to be connected to the WIFI network, confirm that the Bluetooth and WIFI of the mobile phone are turned on and authorize the APP.

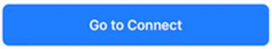
1.Place your mobile phone close to the wired controller and on the same WIFI network, open the APP and click 

.

2. In the Smart mode, the APP will automatically identify the device, click

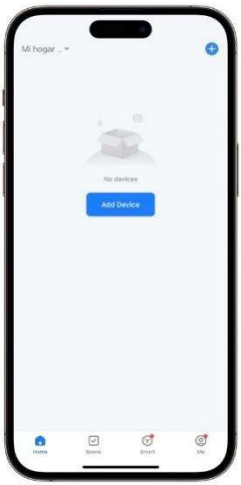


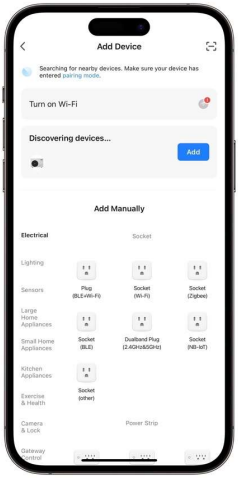
3. Enter the account and password of the WIFI to be connected .

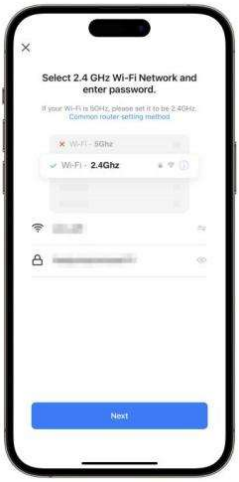
4.Click "

" to enter the WIFI settings page, find the WIFI hotspot named "smartlife-XXX" or "SL-XXX" and connect.

5. Wait for the APP to complete binding .

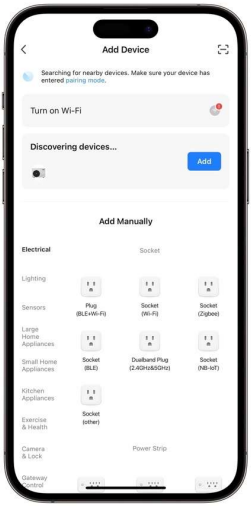












Software Function Operation

1. A device is automatically bound to a virtual gateway. The "My Home Heat Pump" (device name, which can be changed) operation page is displayed.
2. Enter the device operation page of "My Home Heat Pump" by clicking on "My Home Heat Pump" in the "All Devices" screen of smart Life.
3. Modify device name and modify device location information Click "Name" to rename the device name and "Location" to alter the device location.

Device Sharing

Share bound devices in the following sequence:

1) After successful sharing, the list is added to display the shared person.
2) To delete the shared user, long-press the selected user, and the deletion interface will pop up, click "Delete"
3) User interface operations are as follows:
4) Enter the account of the shared user and click "Finish" to display the newly shared history in the list of successful sharing
5) The interface of the shared person is as follows. The shared device received is displayed. Click in to operate and control the device.

NOTE:

1. This unit is one of the units in the entire engineering system. Trial operation can only be carried out after the installation of the entire system is completed .

2. The trial operation needs to ensure that the entire system is filled with water and air is removed.

3. Only after confirming that all valves are in the correct on /off state can trial operation be carried out.

4. Trial operation can only be carried out after electrical safety inspection.

7.1 Precautions before commissioning

1. Is the unit adequately installed?
2. Is the wiring and pipe correct?
3. Whether the water pipelines are empty or not?
4. Whether the heat insulation has been perfected?
5. Is the ground wire connected reliably?
6. Whether the power supply voltage matches the unit?
7. Is there any obstacle in the air inlet and outlet of the unit?
8. Is the safety valve installed correctly?
9. Whether the leakage protector can operate effectively?

7.2 Commissioning

Use the controller to control the unit and check the following items according to the instruction manual: (If there is any fault,

find out the faults and reasons described in the manual and eliminate them)

1. Is the controller regular?
2. Is the function key of the controller regular?
3. Is the drainage normal?
4. Whether the heating mode and cooling mode are working correctly;
5. Is the outlet water temperature average?
6. Whether there is vibration and abnormal sound during operation?
7. Does the generated wind, noise, and condensate affect others?
8. Is there a refrigerant leakage?

7.3 Operation and debugging

1. About 3mins of protection

Due to the self-protection of the compressor, the machine cannot be restarted again within 3 mins.

2. Feature of heating operation

If the ambient temperature is too high during operation, the fan motor may run low or stop.

3. Defrosting during heating operation

In the case of heating operation, when the unit has frost formation, the defrosting procedure (about 2-8 minutes) is automatically performed to improve the heating effect. The fan motor stops running during the “defrost” operation.

4. Power Outage

If there is a power outage during operation, the machine will stop running. Before the power outage, the controller automatically

memories the ON/OFF status of the device. After re-powering, the controller will send an ON/OFF signal to the device according to the state of memory before the power outage to ensure that the device recovers from the previous status from abnormal power failure.

5. Heating Capacity

Because the heat pump absorbs heat from the outside, the heating capacity will be reduced once the outdoor temperature is lowered.

6. Electric Leakage Protector

After the unit has been running for some time (usually one month),the leakage protector needs to press the test button under the closed energized state to check whether the performance of the leakage protector is regular and reliable (the leakage protector should be disconnected once every time the test button is pressed). If the accident is not found, the test can be sent once. If it is not working, the cause should be found, and if necessary, the action characteristic test should be carried out. After checking, it is confirmed that the leakage protector itself has failed. It should be replaced or repaired in time.

7. Working Temperature Range

To use the machine correctly, please operate under the following conditions, outdoor temperature: - 15 □ ~ 40 □ for heating mode, 15 □ ~ 43 □ for cooling mode.

8. Antifreeze in the winter

When the ambient temperature is below 0 □, it is strictly forbidden to cut off the power. If there is an unexpected power failure under this condition, please drain the water from the heat pump.

7.4 Maintenance

1. All safety protection devices inside the unit are set before the product leaves the factory. Please do not adjust or remove them on your own to avoid damage to the unit.

2. When the unit starts up for the first time or cuts off the power for a long time (more than a day), the next time it starts up, the power supply of the main unit should be turned on in advance to ensure a preheating time of more than 12 hours and avoid damaging the compressor of the main unit.

3. Do not stack debris on the unit, and keep the surroundings dry, clean, and well ventilated.

4. Regularly clean the filters in the water system to avoid blockage that may cause unit protection or damage, and regularly check whether the water system's water replenishment device is functioning properly.

5. When the winter ambient temperature is below zero degrees Celsius, it is strictly prohibited to cut off the power supply, otherwise the anti freezing protection of the unit will fail.

6. When the unit is not in use for a long time, water should be drained from the unit and pipeline system, including the water tank.

7. Do not manually start or stop the unit frequently, and do not manually close the manual regulating valve of the water system while the unit is running.

8. Regularly inspect the working condition of various components of the unit, and also inspect the internal pipeline joints of the unit.

9. When the unit malfunctions and the user is unable to solve it, please contact us in a timely manner so that someone can be sent for repair in a timely manner.

10. Attention should be paid to drainage: if not used for a long time in winter or if there is a power outage for a long time, the water in the water system must be drained completely; Before draining, ensure that the unit is powered off while in standby mode, open the water system drain valve, and at the same time, open the unit drain valve.