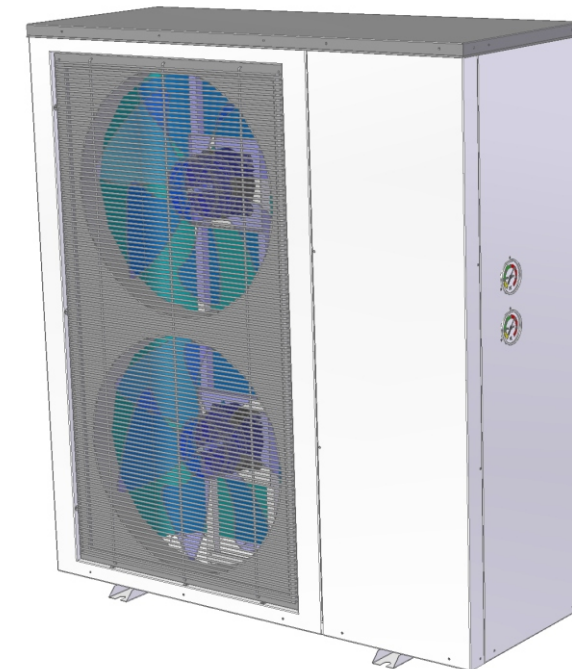


DC Inverter Air Source Heat Pump

User Manual



Model: SHAW-15DM1

Please properly keep this manual.
Please read this manual carefully before using the machine.

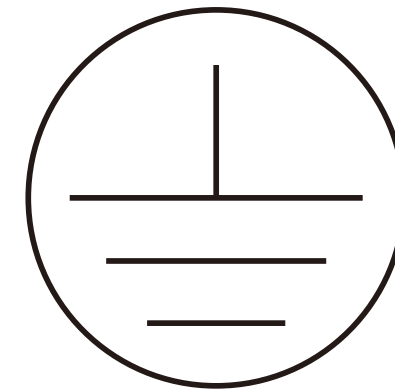
Content

1.Safe precautions	1
2. Structure	2
3.Installation	4
4.User instruction	10
5.Trial operation	20
6.Unit operation and performance	21
7.Maintenance and trouble shooting	23
8.Wiring diagram	25
9.WIFI function	26

Warning

The safety of you and your families is the most important !

This machine belongs to class I equipment.
Please ensure the reliable grounding before using it.




Note: Please don't use this machine if there is no grounding or the grounding is not reliable
If you are not sure if the grounding is reliable, please let the professional to check.

Please carefully read the safety precautions and notes about the machine before using it.

All the important notes and warning have the corresponding marks,the following is the meaning of the marks.

 Attention ! There is potential risk to cause the physical injury.

 Warning ! Please strictly obey the instructions, otherwise there would be life danger and serious injury.

1. Safety Precautions

⚠ Warning

Requirements for the installation environment

The installation location must be ventilated, waterproof, sun-proof, and requires a convenient power supply, water supply and drainage channels.
Customer's electrical environment must be in accordance with local electrical safety regulations.
The power supply specifications conform to the requirements of the local rating. There must be reliable grounding, leakage protector and give the machine power supply directly by the leakage switch wiring way.

The wall or stand must meet the bearing requirements

The installation, maintenance and renovation must be done by the designated dealer and professionals.

If the operator does not have relevant professional knowledge and authorization, but install and repair to result in the damage on furniture and decoration, injury or electric shock, and even serious accidents such as fire, we'll not assume legal responsibility.

The requirement on installation accessories

Please use the accessories in the packing according to the requirement, do not replace them with any other similar.

The purchased parts must be the designated model or specification, if the parts beyond the specified are used and result in the accidents, we'll not take the responsibility.

⚠ Attention

The household power supply, circuit to comply with relevant standards

The power circuit should be equipped with leakage protector.

Check whether the socket is qualified, after the unit runs for half an hour, remove the plug, if the pin is hot, that means the plug has more than 50 °C and must be replaced by another qualified one.

The location of the power supply should be not less than 1.8 meters from the ground, and be water-proof well and far from children.

The power lines have no damage. If there is any damage, please contact the relevant dealer or professional staff for replacement.

The unit should be installed firmly to run without vibration and the noise will not affect the neighbors.

Drainage piping can smoothly drain and will not lead to leakage or make the furniture wet.

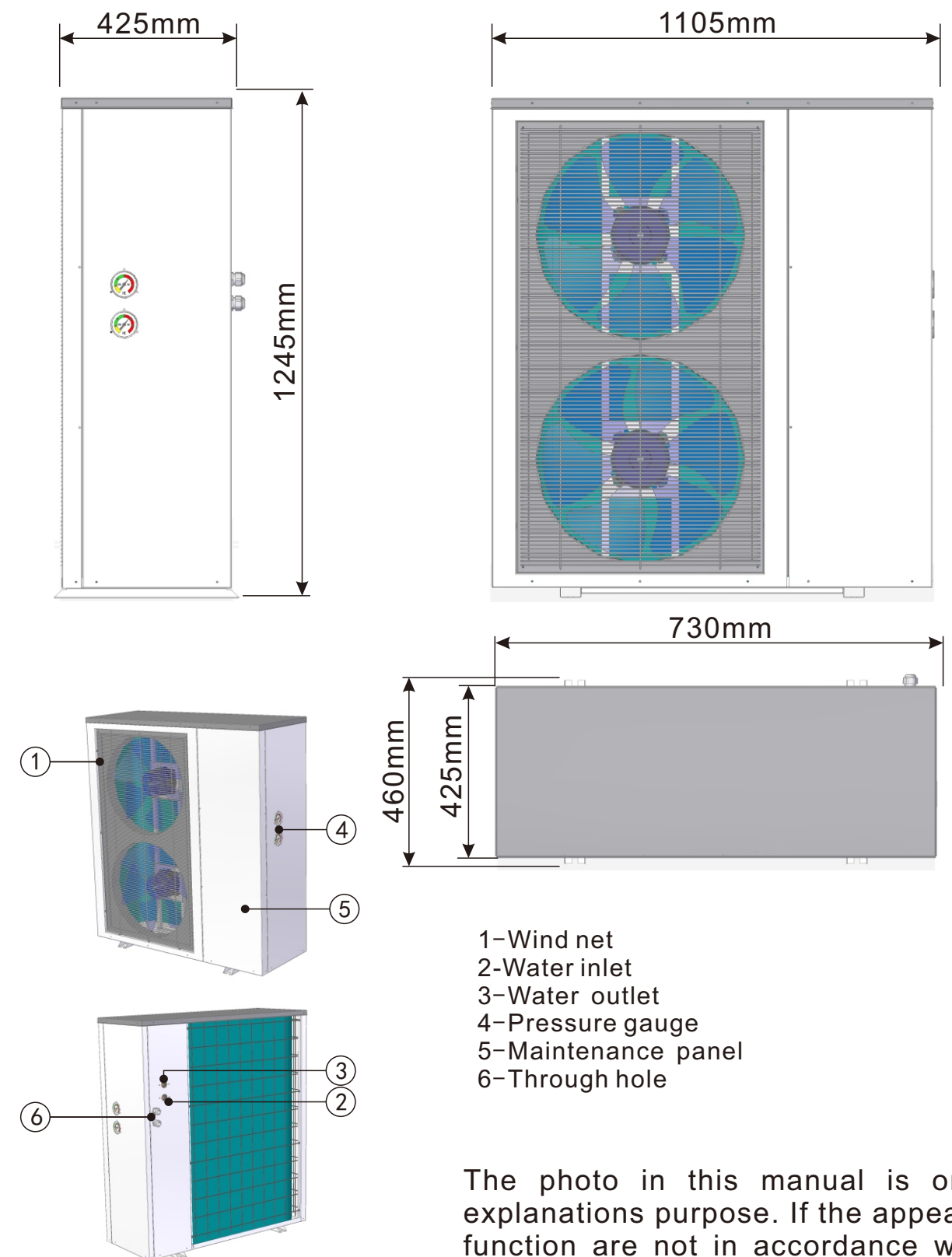
The installation space is well ventilated, once there is refrigerant leakage, the gas will not gather, so there is no combustible gas leak near the installation location.
If there is such risk, please change the installation environment, otherwise, it's easy to cause poisoning, fire accident, etc.

Do not keep the unit in the humid environment or exposed to the rain, otherwise it's easy to damage the unit.

If there is refrigerant leak during the installation, ventilation measures must be taken immediately. Otherwise, if the leaked refrigerant meets fire, such as heater, stove or electric rice cooker, etc., poisonous gas maybe produced.

2. Structure

2-1 Outer Structure



The photo in this manual is only for explanations purpose. If the appearance, function are not in accordance with the real one, please in kind prevail.

3.Installation

Attention

The following installation places may cause the malfunction of the machine

The places where there is mineral oil;
The place that contains salt in the air, such as the seaside;
The place that contains corrosive gas, such as hot spring area;
The place where the powers supply voltage fluctuates seriously;
In the car or cabin etc.;
The place where is full of oil gas and oil spray, such as the kitchen;
The place where there is strong electromagnetic waves;
The place where exists flammable gas or material;
The place where there is acidic or alkali gas evaporation;
Other places where belongs to special environmental conditions

3-1 The choice of the installation location

The unit can be installed on the balcony or external wall; meanwhile, please waterproof measures should be done well.

There is sufficient space for installation and maintenance.

There is no barrier in front of the heat pump air outlet and strong wind can't blow there.

The installation place should be well ventilated and avoid the environment where there is flammable, explosive gas and strong corrosive gas.

The installation place should be convenient to install the pipe and electric wiring.

The bearing surface is flat, can withstand the unit weight and doesn't increase the vibration and noise.

If the installation base is metal parts, insulation treatment must be done well, and to comply with relevant standards

The running noise and discharge cold air will not affect yourselves and your neighbors

The high voltage and strong magnetic field should be avoided.

There should be no water logging in the installation place.

The unit should be blocked up to install if sundries or snow may accumulate in the installation place.

3.Installation

3-2 Movement

1)Because the gravity center of the unit is not in the middle, when you move the machine, please beware of the dumping.

2) Please do not hold the air inlet, or it will be deformed.

3) In the movement, please don't touch the fan blade by hand or other things in order to prevent from the damage on the fan blade.

4)Please don't lean it more than 45℃ or lie it down.

5) Please try to use the auxiliary equipment, such as the forklift or crane to prevent the body injury caused by the overweight in the movement of the big models.

Warning

Determine the feasible moving path.
Please try to move the unit under the condition of the original
Install the accessories according to the requirements..

3-3 Installation

The installation should be done by the qualified dealer or professional technicians.
If the installation is improper, it may cause the water leak, current leak or accidents such as fire.

The installation bearing surface should be flat and can support the weight of the unit.
Please install the unit firmly by using the MB expansion valve to fix it on the stand and anti-vibration rubber pads should be used to prevent the abnormal vibration and noise.

Please try to remove the barrier around the unit, otherwise the air circulation range will be too small and affect the performance.

If the unit is installed in the basement, indoor or in the other closed space, good air circulation between the unit and outdoor should be ensured.

If the unit is installed at the seaside or in the high place where there is strong wind, to make sure the normal operation of the fan blade, it must be installed against the wall. If necessary please use the baffle.

In the place where there is strong wind, please make sure the air outlet of the unit and the strong wind are the same direction, in order to prevent the strong wind blow to the indoor unit and affects the performance. If the wind direction can't be ensured, please put baffle in front of wind

Attention

The installation of the unit should comply with the user manual.

When the unit is moved to another place, the movement and installation should be done by the professionals.

If the user installs the unit on their own, we'll not be responsible for the accidents such

3.Installation

3-4 The space of installation and maintenance

Please leave enough maintenance space as the below before the installation.

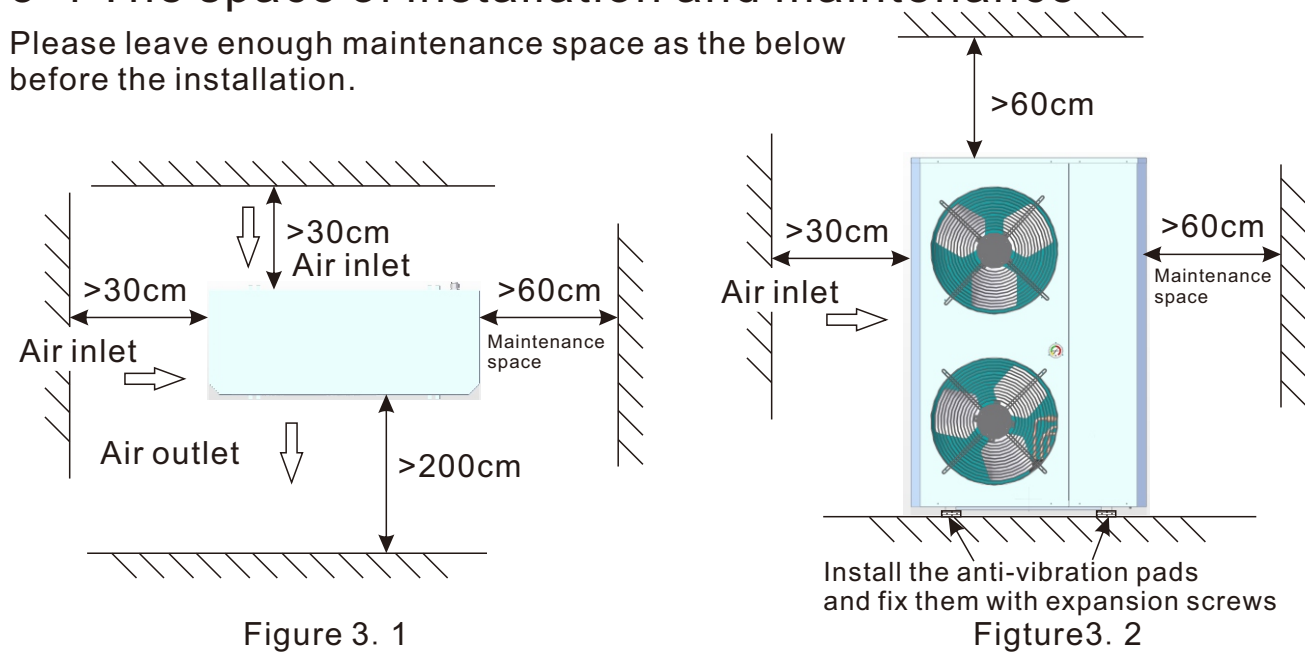


Figure 3. 1

Figure3. 2

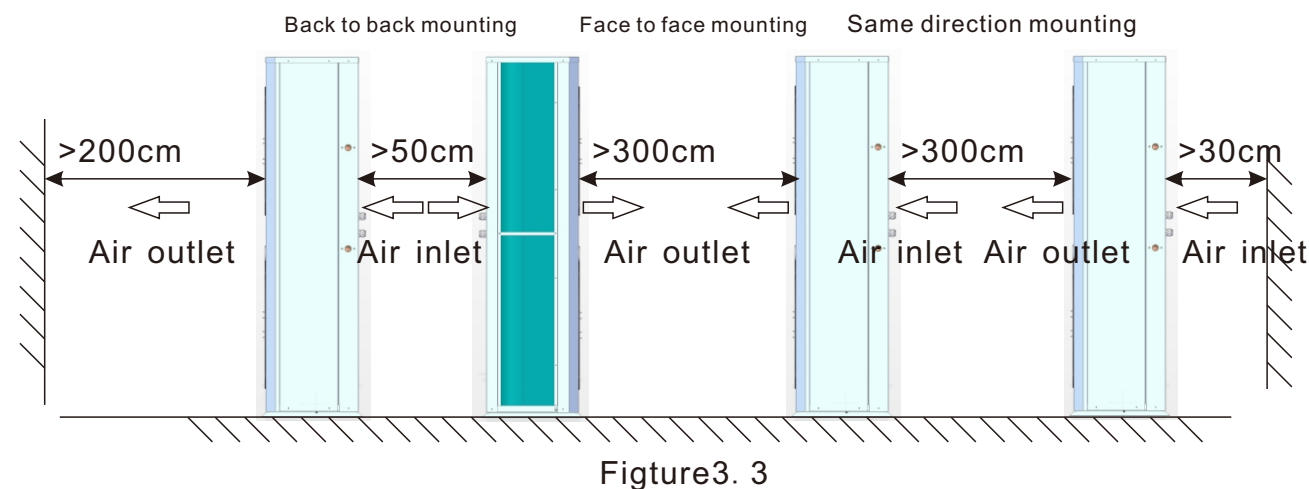


Figure3. 3

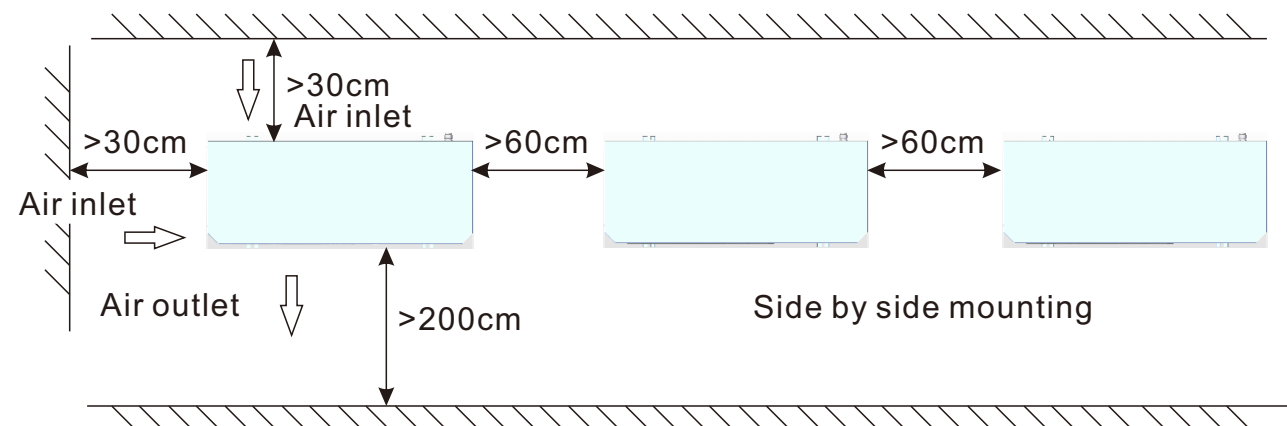


Figure 3. 4

3.Installation

3-5 Installation of the water pipes

- 1) To reduce the resistance of the water pipe as much as possible, reducing the elbow position and variable diameter can be adopted.
- 2) In the process of the piping connection, please make sure the whole system to be clean, no rust and no other dirt, in order to prevent the piping blockage.
- 3) Leak test should be done after the piping connection is finished. The test should focus on the screw thread connection to ensure the whole system without leakage, then thermal insulation should be done.
- 4) After all the piping are connected and tested leakage, 20mm thick thermal insulation must be packed on the piping in order to reduce the heat loss and prevent the water pipe freezing in winter.
- 5) Expansion tank needs to be installed in the highest point of the water circuit. The water level of the expansion tank should be at least 0.5 M higher than the highest point
- 6) Check the water flow of the water circuit system to ensure the normal water flow rate. If there is water flow fault, check the installation of the water circuit system. In order to make sure the protection on the unit when the system has no water, do not bridge the water flow switch casually.
- 7) Auto vent valve should be installed in the highest point of the water circuit, to prevent the air trapping which will affect the operating effect.
- 8) Thermometer and pressure gauge should be installed for the water inlet and water

3-6 Water injection and evacuation

- 1) Vent valve needs to be installed in the highest point of the water circuit system and drain valve needs to be installed in the lowest point of the water circuit system.
- 2) When the installation is finished, please keep the power supply off.
- 3) When the inlet valve is opened, the water injection begins. At this time, please keep the vent valve open, the air in the system will evacuated via the vent valve outlet, and there is sound "tehee" from the vent valve.
- 4) Double check all the connections and elbows of the water circulation system, make sure there is no leak.
- 5) If there is no leak, then start the water pump to run the water circuit and double check if there is leak from the connections and elbows.
- 6) When the sound "tehee" disappears from the vent valve, the water injection is finished and water pump can be stopped, then prepare to energize the unit and start it.

3.Installation

3-7 Antifreezing measures

- 1) When the ambient is lower than minus 5 , please make sure the unit is energized.
- 2)The unit is set with anti-freeze protection program, in the state of power on, when the ambient temp gets to the protection value, the unit will run the water pump automatically and even start the heating to prevent the freeze of the water circuit, in order to make sure the normal operation of the system.
- 3)If the unit can't be energized for a long time, please make sure the water in the buffer tank and water circuit system is totally drained to prevent from the freezing of the water system and the damage on the unit.
- 4) If the power failure or power off happen, and the water is not timely drained from the water circuit system, then cause the damage on the unit and crack of the water system, our company will not take the responsibility of the maintenance.

Warning

In the situation of the power failure or power off, if the water circuit is not timely drained, it will cause the crack of the water pipe system, even damage the heat exchanger and compressor, and then the whole system will scrap, so please strictly obey the anti-freeze requirements.

Attentions

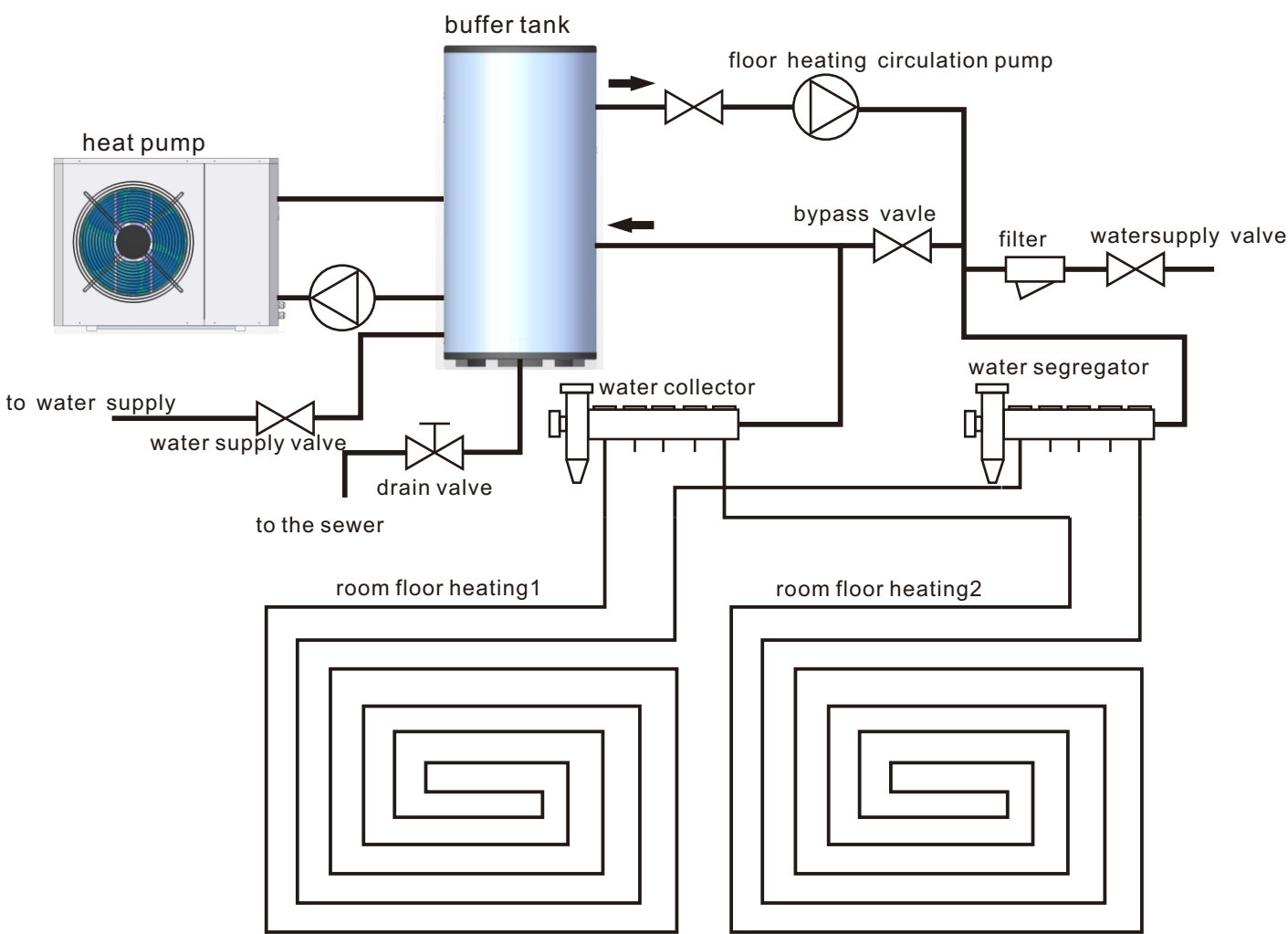
Choose one of the water supply valves to install.
The temp of the water supply to the buffer tank needs to be less than 50℃.
The water quality needs to meet the requirements in the following table, otherwise, the heat exchanger and the floor heating pipes will scaling after a period of using. It will affect the heat exchange efficiency

Ph value	total hardness	conductivity	sulfide	chlorid ion	ammonia ion
6.5-8.0	200 μ V/cm(25℃)	<50ppm	No	<50ppm	No
sulfate ions	silicon	iron content	sodion	calcium ion	_____
<50ppm	<30ppm	<0.3ppm	no requirement	<50ppm	_____

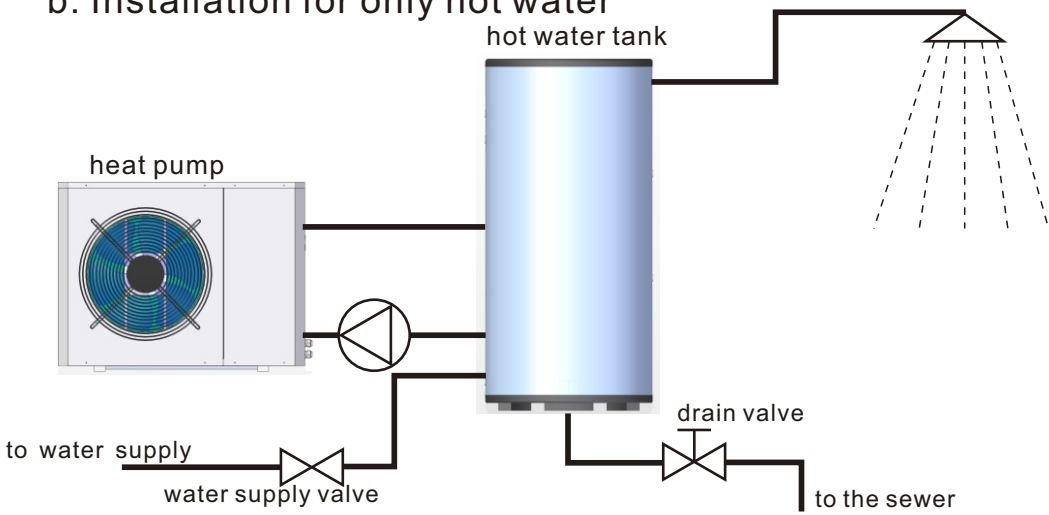
3.Installation

3-8 Installation diagram

a. Installation for only heating



b. Installation for only hot water



3. Installation

c. Installation for hot water & heating

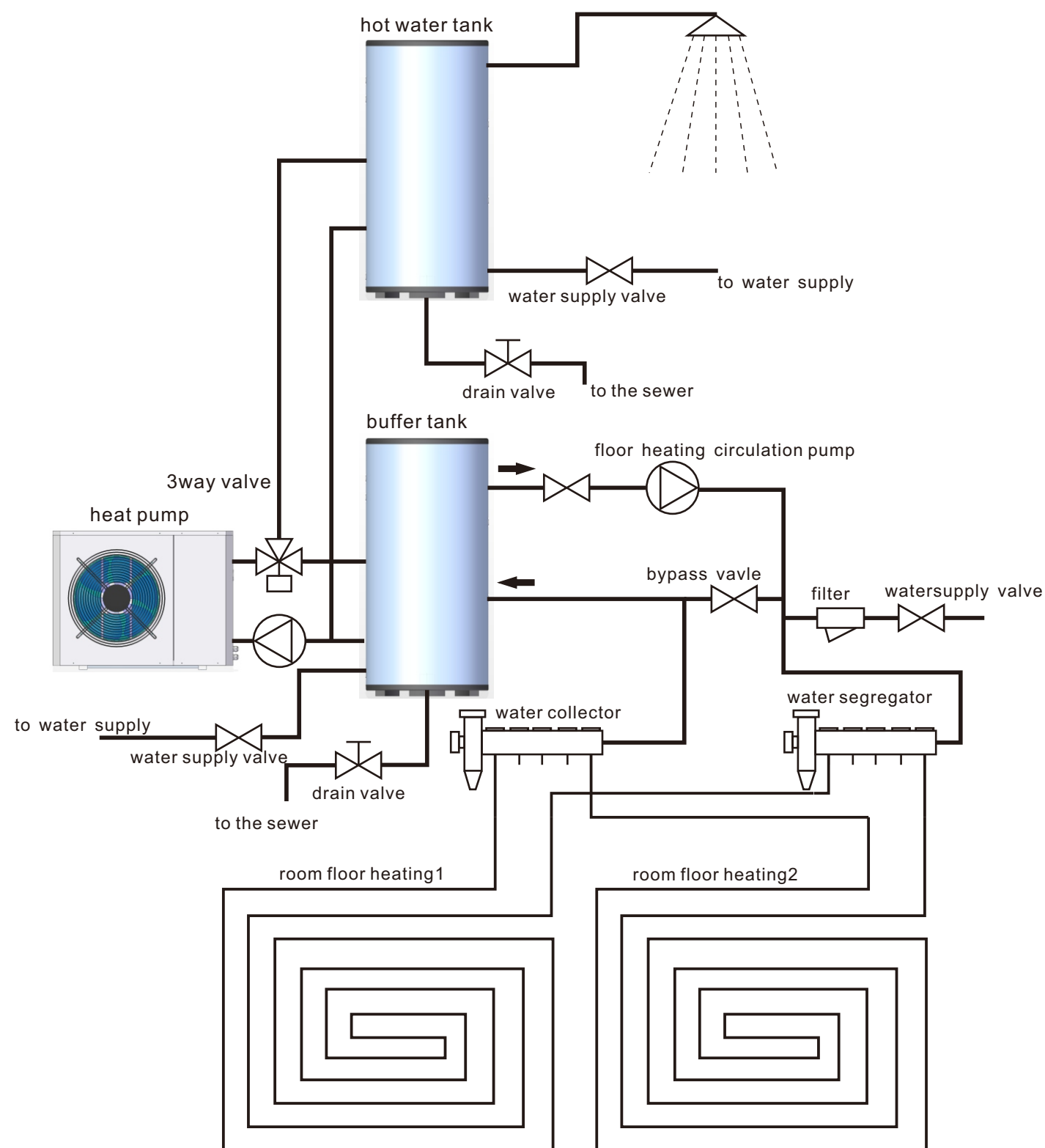


Figure 3. 5 recommended installation way

4. User instruction

The unit can be pre-programmed by the wire controller and will then be run automatically.

4-1 Controller description

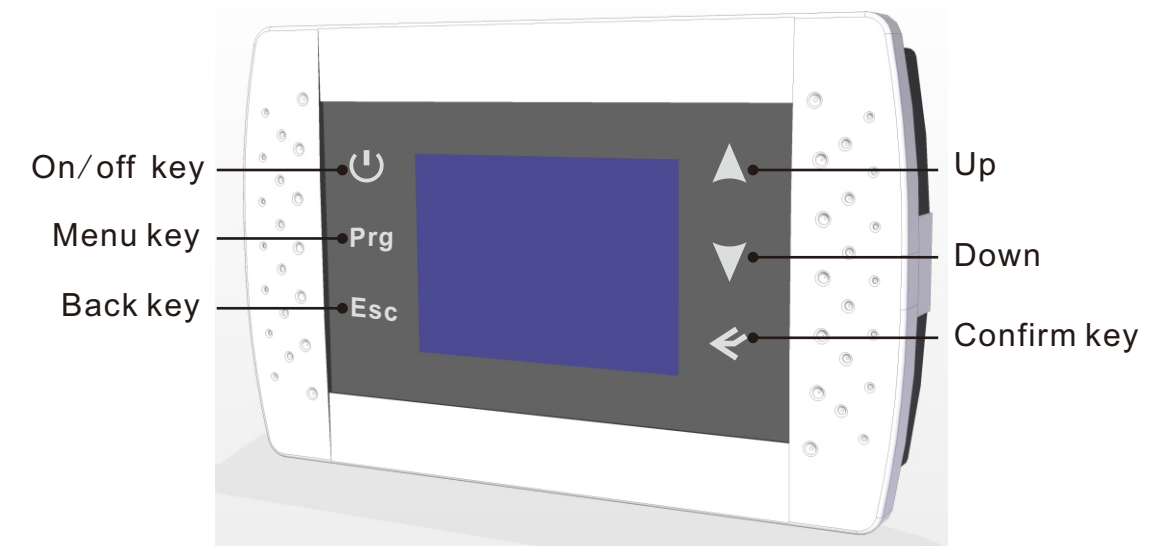


figure 4. 1

4-2 Key function

4-2-1 On/off key

- Press and hold this button for 2 seconds to switch the heat pump on and off.

4-2-2 Menu key

- Press this key in the main interface to enter the menu.
- Long press 5S on the menu interface to change languages (For multilingual models only).
- In hot water mode, press and hold this button for 5 seconds on the main interface to force disinfection mode.

4-2-3 Back key

- After entering the menu, press the key to return to the previous menu.
- After modifying the set parameters, press this key to confirm the modified parameters.
- Press and hold this button for 5S to start the forced defrost.

4.User instruction

4-2-4 Up key

- Modify and increase parameter value or page up.

4-2-5 Down key

- Modify and decrease parameter value or page down.

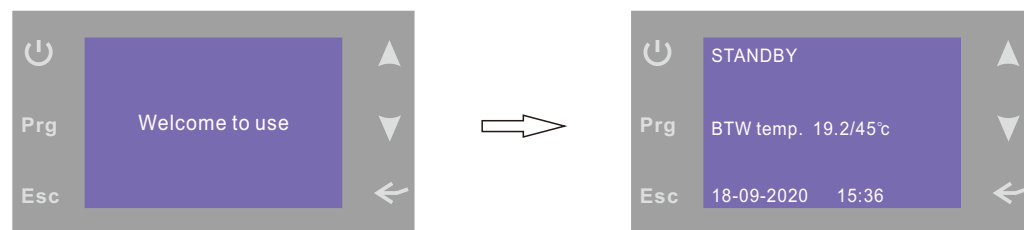
4-2-6 Confirm key

- Press this key to enter the next layer of parameters or enter the parameter modification state.
- Press and hold for 5S to lock/unlock.

4-3 Controller operation

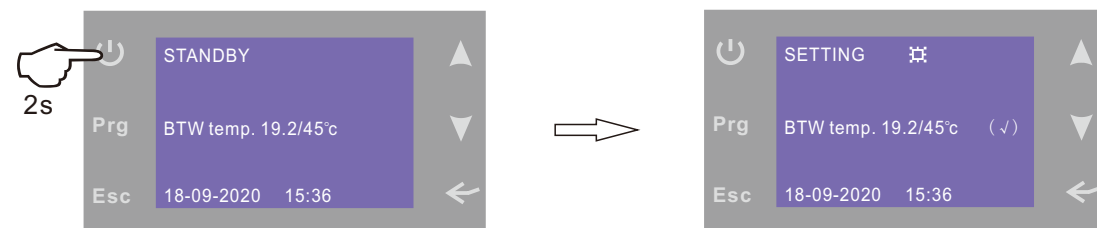
4-3-1 Initialization

After the unit is energized, the controller's back light will light and the initialization page will show. After 3s the main screen will show.



4-3-2 Turn on/off

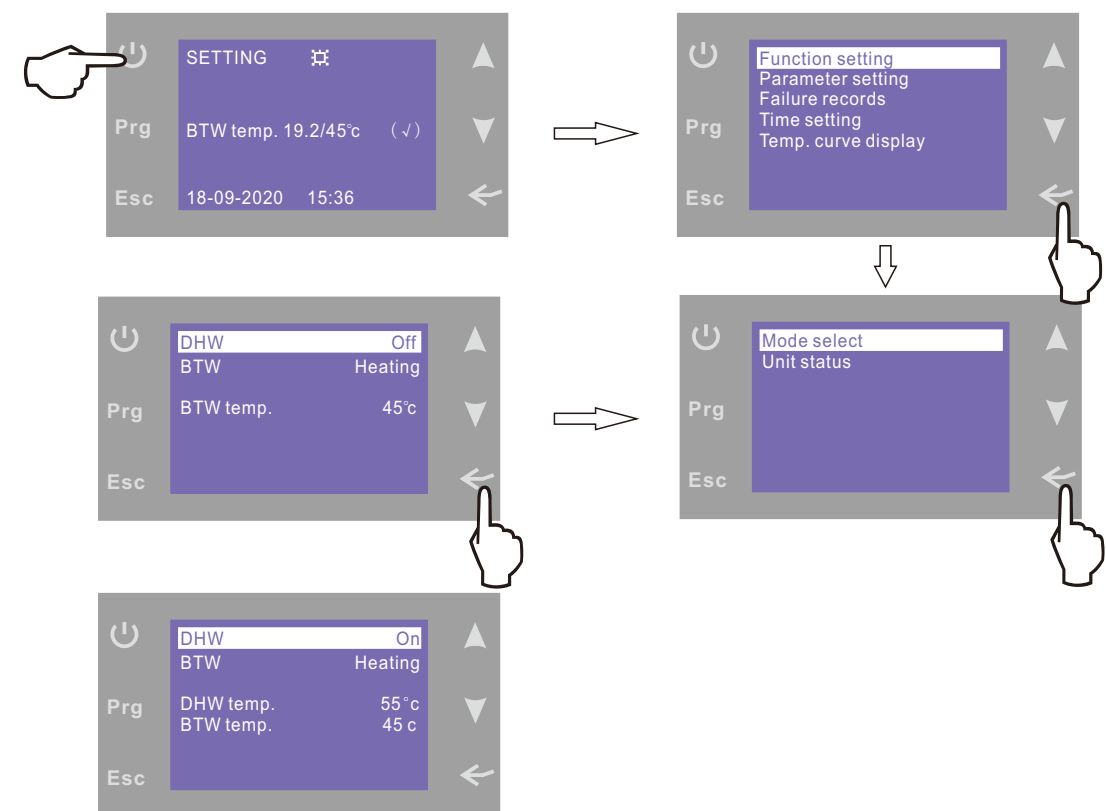
Press and hold on/off key for 2 seconds to switch the heat pump on and off.



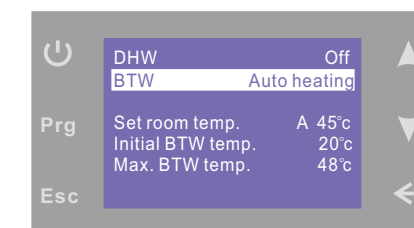
4-3-3 Mode setting

- Press "Prg" key in main interface to enter "Menu choose" page.
- Press "Enter" key to enter "Function setting" page.
- Press "Enter" key to enter "Mode select" page.

4.User instruction



- "DHW" is hot water mode, when choose "on", the heat pump will running hot water mode, you can set "DHW temp.".
- "BTW" is house heating or cooling mode, you can choose three mode in this menu, "Heating", "Cooling" or "Auto heating" mode.
- "Auto heating" mode means the temperature of the air-conditioning water tank will be automatically adjusted according to the ambient temperature. The lower the ambient temperature, the higher the temperature of the air-conditioning water tank.
- You can choose "only DHW", "only Heating", "only Cooling", "DHW+Heaing", "DHW+Cooling" five mode.
- If you choose "DHW+BTW" mode, the unit will run the hot water mode first, and then switch to the air conditioning mode after the hot water tank reaches the set temperature.

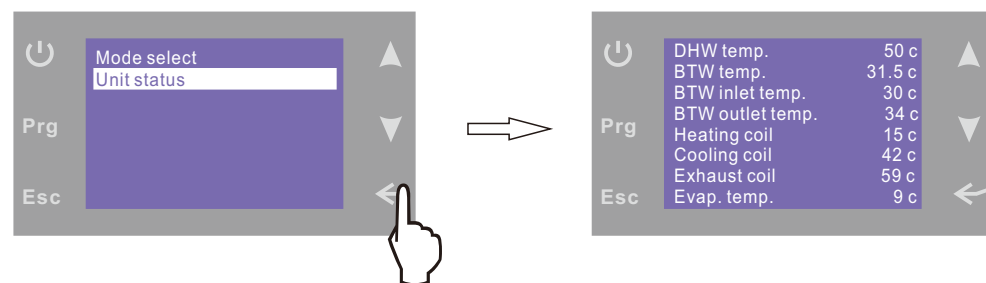


4.User instruction

- When you choose “Auto heating” mode, calculated as follows:
- A/C water tank target temperature =
 $\text{Initial BTW temp} + (\text{Max BTW temp} - \text{initial BTW temp}) / 35 \times (\text{Set room temp} - \text{ambient temperature})$
Description: $15^{\circ}\text{C} \leq \text{target water temperature} \leq 60^{\circ}\text{C}$
- For example set: set room temp = 20°C
Max BTW temp= 48°C
Initial BTW temp= 20°C
- Then under the following ambient temperatures, the target water tank temperatures are:
- Ambient temperature= 20°C ,
target water temperature= $20 + (48 - 20) / 35 \times (20 - 20) = 20^{\circ}\text{C}$
- Ambient temperature= 0°C ,
target water temperature = $20 + (48 - 20) / 35 \times (20 - 0) = 36^{\circ}\text{C}$
- Ambient temperature= -15°C , t
arget water temperature = $20 + (48 - 20) / 35 \times (20 + 15) = 48^{\circ}\text{C}$

4-3-4 Run parameters query

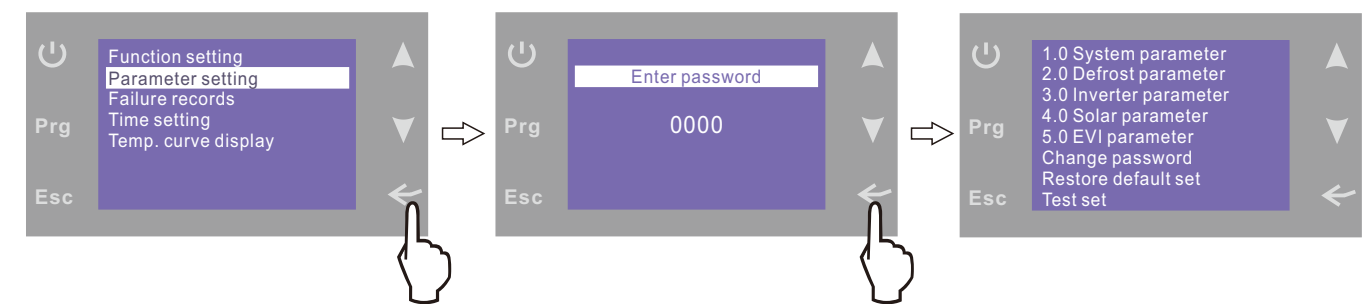
After entering the “Function setting” page, press the “down” key to adjust the cursor to the “Unit status” row, and press the “Enter” key to query the operating parameters of the unit



4-3-5 Parameter setting

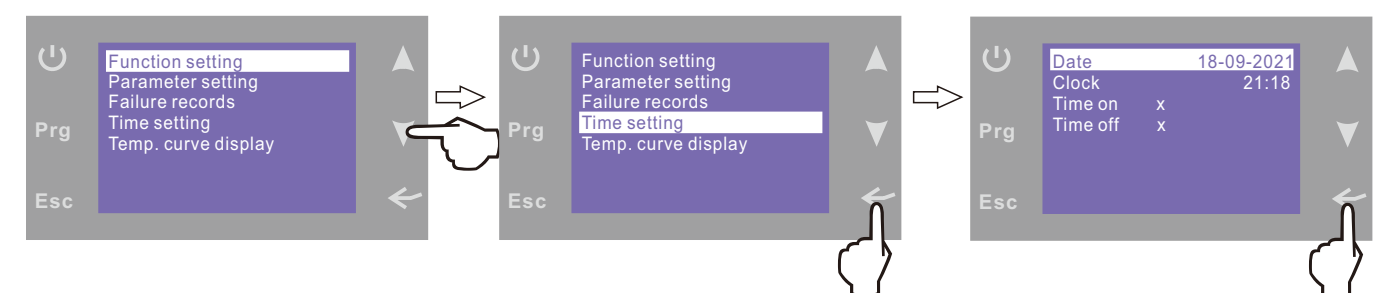
In the “Menu choose” page, press the “down” key to adjust the cursor to the “Parameter setting” row, and press the “Enter” key to enter password input page, enter the initial password “0000” to enter “Parameter setting” page.

4.User instruction



4-3-6 Current clock setting

- In the “menu setting” interface, press the “down” key to move the cursor bar to the “Time setting” line, press the “Enter” key to enter the time page.
- Press “Enter” key, the date characters flash, then press “up” or “down” to adjust the number to the correct date, press the “Enter” key again, the month characters flash.
- You can adjust the month and the year to the correct value in same way, press the “Enter” again to confirm the date setting.
- Press the “down”key, the cursor bar move to the “Clock setting” line, you can set the current time in the same way as above.

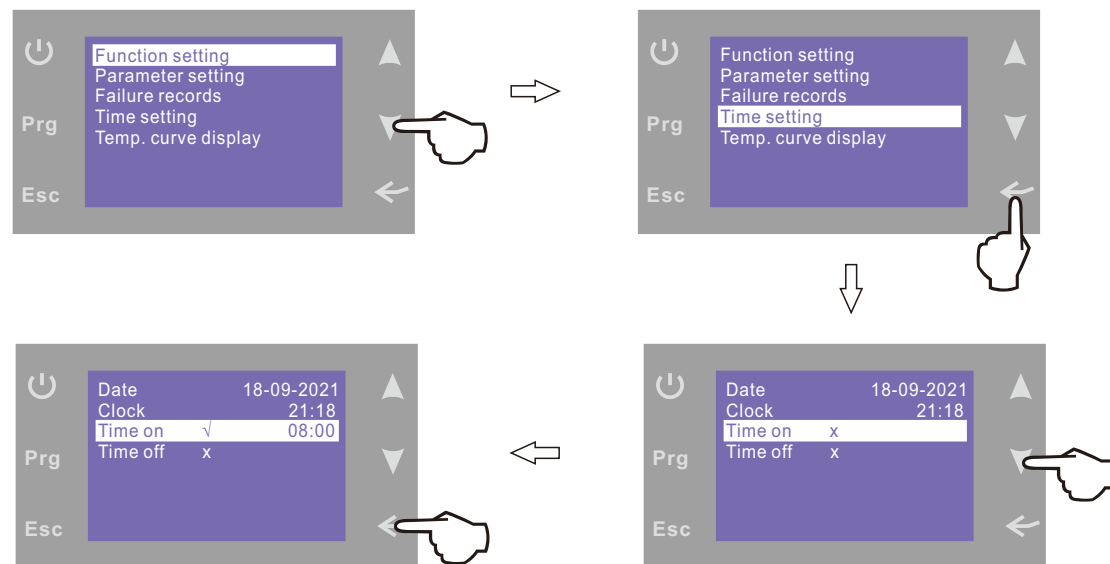


4-3-7 Timing setting on/off

- In the “menu setting” interface, press the “down” key to move the cursor bar to the “Time setting” line, press the “Enter” key to enter the time page.
- Press “down” key to move the cursor bar to the “Time on” line, press “Enter” key, the “Time on” line will flash, press “down” key, the cross mark will turn into the checkmark.

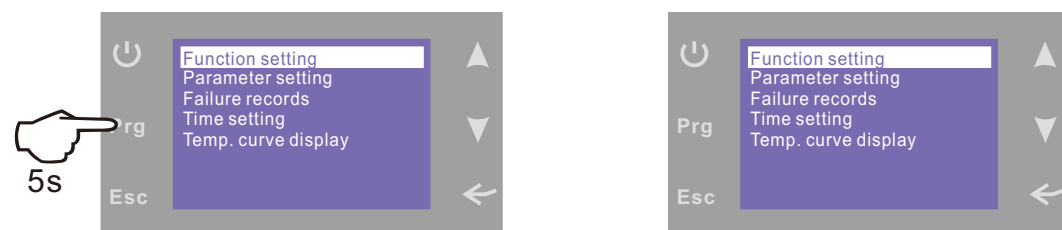
4.User instruction

- Press “Enter” key again, confirm that time on activated, the hour number will flash, press “down” or “up” to adjust the hour to the number you want, then press “Enter” again, confirm the hour number and the minute number will flash, press “down” or “up” key to adjust the minute to the number you want, press “Enter” to confirm the setting time.
- Set the time off in the same way as above



4-3-8 Change language

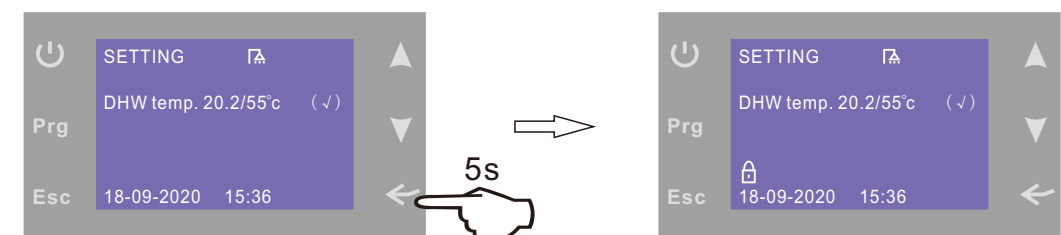
- In the “menu setting” interface, press and hold “Prg” button for 5 seconds can change the menu language. (For multilingual models only) , note that the white cursor bar must stay on the first line.



4-3-9 Lock and unlock screen

- In the main interface, long press the "Enter" key for 5 seconds to lock the screen, there will be a “lock” icon display on the screen, the screen will not respond when you press any key. Long press the key again to unlock screen.

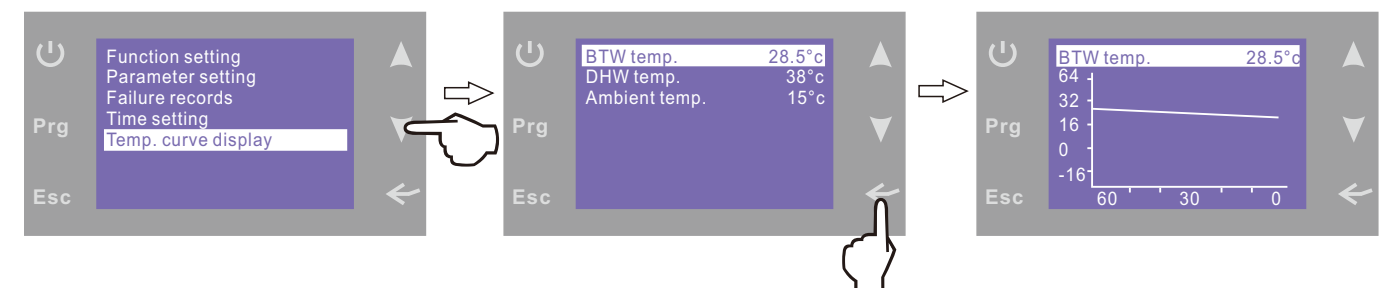
4.User instruction



4-3-10 Temperature curve

- In the “menu setting” interface, press the “down” key to move the cursor bar to the “Temperature curve display” line, press the “Enter” key to display the temperature curve.

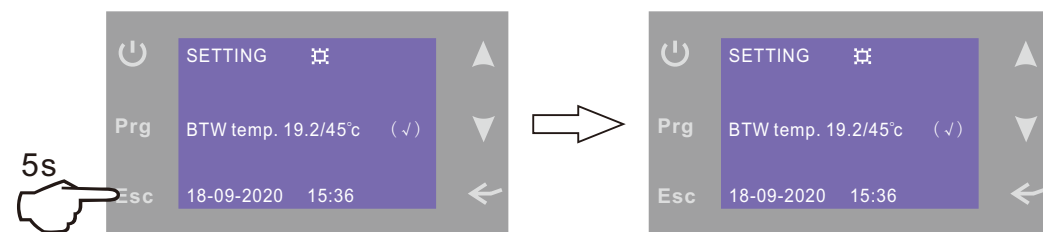
It can display the temperature change curve within 60 minutes.



4-3-11 Defrost and forced defrost

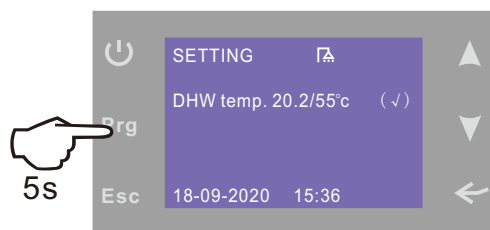
- When the unit operates at low ambient temperature, a white frost layer will appear on the evaporator fins, which is caused by the heat exchange between the refrigerant and the air.
- When the frost layer gradually thickens, the capacity and COP of the unit will decrease, affecting the operating performance of the unit, so after frost occurs, the system will automatically run the defrosting program.
- After the defrost starts, you may hear a loud air flow sound from the unit, and there may be white mist rising from the evaporator fins, which is a normal phenomenon of defrosting, and will disappear after the defrosting is completed.
- Sometimes, defrosting may be delayed or even not defrosted due to temperature sensor deviation or parameter setting. At this time, forced defrosting can be used.
- In the main interface, press and hold “Esc” button for 5S to start the forced defrost.

4.User instruction



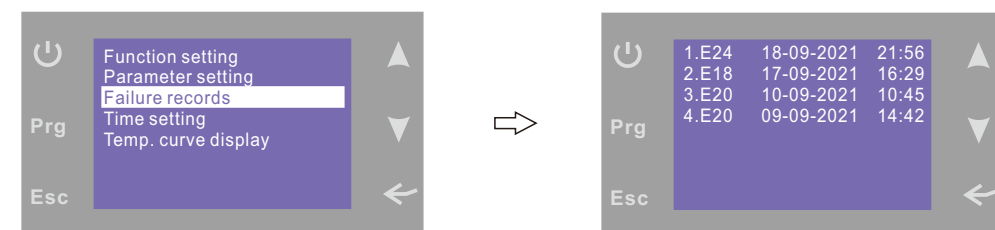
4-3-12 Forced sterilization

- The high temperature disinfection cycle is once every 7 days.
- When entering high temperature sterilization, the unit is forced to open the hot water tank for electric heating.
- When the temperature of the hot water tank is greater than or equal to 65°C and the protection temperature lasts for 15 minutes or greater than 65°C, exit the high temperature disinfection.
- If the temperature of the hot water tank does not reach 65°C for 3 consecutive hours after entering high temperature disinfection, it will be forced to exit high temperature disinfection.
- In hot water mode, press and hold “Prg” button for 5 seconds on the main interface to force sterilization mode.



4-3-13 History failure records

- In the “menu setting” interface, press the “down” key to move the cursor bar to the “Failure records” line, press the “Enter” key to check the history failure records.
- A total of eight historical fault messages can be recorded in this menu.



5.Trial operation

5-1 Inspection before the trial operation

Please check if the following items before the trial operation.

- 1)If the unit is installed correctly;
- 2)If the piping and wiring are correct;
- 3)If the drainage is smooth;
- 4)If the thermal insulation is well done;
- 5)If the grounding wire is connected properly;
- 6)If the power supply voltage fits the rated voltage of the unit;
- 7)If there is any barrier in front of the air inlet/outlet;
- 8)If the air inside the water circuit system is totally evacuated, if all the valves are opened;
- 9)The current leak protector can act effectively;
- 10)The inlet water pressure is no less than 0.15MPa.

5-2 Trial operation

When all the above items are normal, connect the power supply and start the unit.

During the trial operation, check the following items:

- 1) If the unit working performance is normal, if it can normally produce the demanded heating capacity or cooling capacity.
 - 2) If the water connection is tightly fixed without water leak ;
 - 3) If the fan blade runs normally;if the outlet air is smooth and if there is abnormal vibration from the fan motor;
 - 4) During the unit running, if there is abnormal vibration and noise.
 - 5) If the operation keys of the controller is flexible, reliable and responds normally.
 - 6) If the controller display is normal, if there is missing or wrong segment, if the back light brightness is normal.
 - 7) If there is any abnormal vibration and pipeline collision from the pipe system during the operation.
 - 8) If the power line is hot abnormally during the unit operation;
- If all the above is normal, the unit can be sent to the customer to put in use.

6.Unit operation and performance

6-1 explanation for some phenomena during the unit operation

1) Start delay

During the unit running, if the unit is turned off or stops automatically, if restart the unit, the unit has to wait for 3 minutes to start. This setting is the protection on compressor instead of fault.

2) Defrosting

In the heating mode, when the outdoor evaporator surface has white frost (when the air temp is low or the air is humid, this phenomenon will be more obvious), the heat exchanging and performance will be affected, so when the frost gets to a certain degree, the system will run the defrosting automatically.

In the defrosting mode, the outdoor fan motor will stop run. Sometimes there is while vapor from the outdoor evaporator. Those are normal defrosting phenomenon instead of fault.

3) Antifreeze protection

In the cold winter, when the unit is standby mode, sometimes it will run the water pump automatically or even starts the compressor to run for a short time, in order to prevent the freezing of the water circuit at the low temp. Those are the antifreeze protection operation of the system instead of fault.

In the cold winter, if the unit is no longer used, please keep the unit energized. Please do not cut off the power supply, otherwise, it will be impossible to run the antifreeze protection mode and result in the water circuit freezing and damage on the unit.

If the unit will not be used for a long time, please make sure the water circuit system is completely drained before cutting off the power supply.

4) Fault displaying

During the normal operation, if the unit suddenly stops, please immediately check the content displayed on the controller in order to make clear if it is the action of some protective device.

The unit system is set with many protection measures, if there is fault code on the controller displayer, please immediately contact your dealer or after service support to solve the problem.

5) Screen lock function

In the running of the unit, if the controller can't be operated, please check if the controller screen is locked. Please refer to the item 7) "screen lock setting" in the part of 5-2.

6-2 Notes about unit running

Please keep the air inlet/outlet surroundings clean, do not block the air inlet/outlet channel in order to not affect the heat exchanging efficiency.

Set a comfortable water temp instead of over-high water temp, otherwise it will cause the electricity waste and overload operation of the compressor, possibly also affect the life span of the unit.

In any case, if the unit has abnormal noise and over vibration, please immediately contact your dealer or after-sales technician.

If any problem happens during the operation, please contact your dealer or after-sales technician to solve the problem. Please do not try to dismantle machine or repair the machine by your own in order to avoid unnecessary injury.

6.Unit operation and performance

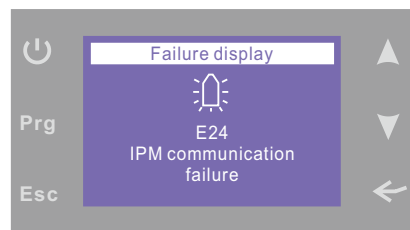
6-3 Performance parameter

Model	SHAW	15DM1
Heating capacity (A7/W35)	kW	15.3
Heating power input (A7/W35)	kW	3.45
COP (A7/W35)		4.43
Heating capacity (A7/W55)	kW	12.9
Heating power input (A7/W55)	kW	4.91
COP (A7/W55)		2.63
Heating capacity (A2/W35)	kW	13.6
Heating power input (A2/W35)	kW	3.39
COP (A2/W35)		4.01
Heating capacity (A2/W55)	kW	11.6
Heating power input (A2/W55)	kW	4.62
COP (A2/W55)		2.51
Heating capacity (A-7/W35)	kW	11.7
Heating power input (A-7/W35)	kW	3.61
COP (A-7/W35)		3.24
Heating capacity (A-7/W55)	kW	10.2
Heating power input (A-7/W55)	kW	5.91
COP (A-7/W55)		1.73
Max. water temp.	°C	60.00
Rated water temp.	°C	55.00
water flow	m3/h	2.60
pressure drop	Kpa	28
Net weight	kg	124
Gross weight	kg	142
Noise	dB(A)	58
Pipe connection	mm	1 inch
Power supply		380V/3PH/50Hz
Net size	mm	1110*450*1250
Package size	mm	1200*520*1390

7.Maintenance and trouble shooting

7-1 Fault code table (table 8.1)

The unit will stop automatically if any fault happens during the operation, meanwhile, the fault code will display on the controller screen. Please contact the serviceman to check by referring to the flowing table and exclude the fault.



Error code	Error description	Error code	Error description
E00	communication fail	E21	coil sensor failure
E01	water inlet temperature sensor failure	E22	cooling coil sensor failure
E02	water outlet temperature sensor failure	E23	ambient temperature too high
E03	water flow switch protection	E24	Module communication failure
E04	Power phase sequence failure	E25	Module abnormal protection
E05	The temperature difference between the inlet and outlet water is too large	E26	Module heat sink high temperature protection
E07	Tube overtemperature protection	E27	Compressor overcurrent protection
E08	hot water tank temperature sensor failure	E28	module temperature sensor failure
E09	heating buffer tank temperature sensor failure	E29	Compressor overload protection
E10	high pressure protection	E30	Defrosting water temperature is too low
E11	low pressure protection	E31	ambient temperature too low
E12	Outlet water temperature is too high	E32	PCB board communication failure
E13	Outlet water temperature is too low	E33	EVI inlet temperature sensor failure
E14	suction sensor failure	E34	EVI outlet temperature sensor failure
E15	discharge sensor failure	E35	solar temperature sensor failure
E16	discharge temperature too high	E37	DC fan 1 failure
E18	hot water mode secondary antifreeze	E38	DC fan 2 failure
E19	heating mode secondary antifreeze	E39	high pressure sensor failure
E20	ambient sensor failure	E40	low pressure sensor failure

7.Maintenance and trouble shooting

7-2 Malfunctions and treatment

⚠Warning

If any fault occurs and the unit stops running, please contact your dealer or after-sales technician to solve the problem. Please do not dismantle the unit and do repair by your own in order to avoid any unnecessary injury.

When the unit has abnormal fault, please immediately cut off the power supply, do not force it to run, otherwise there will be more damage.

7-3 Cleaning

⚠Warning

For the sake of safety, the unit much be turned off and the power supply is cut off before the cleaning.
Please take care to not damage the temp sensors during the cleaning.

- 1) Please be careful of those sharp metal edges and evaporator fins during the clearing to avoid the injury caused by improper operation.
- 2) Regularly check the air inlet and air out and see if there is any blockage.

7-4 Maintenance

⚠Attention

When the unit is prepared to be put in use again after a period of leaving unused, please check the air inlet and air outlet to see if there is any blockage. If there is blockage, please clean up immediately.

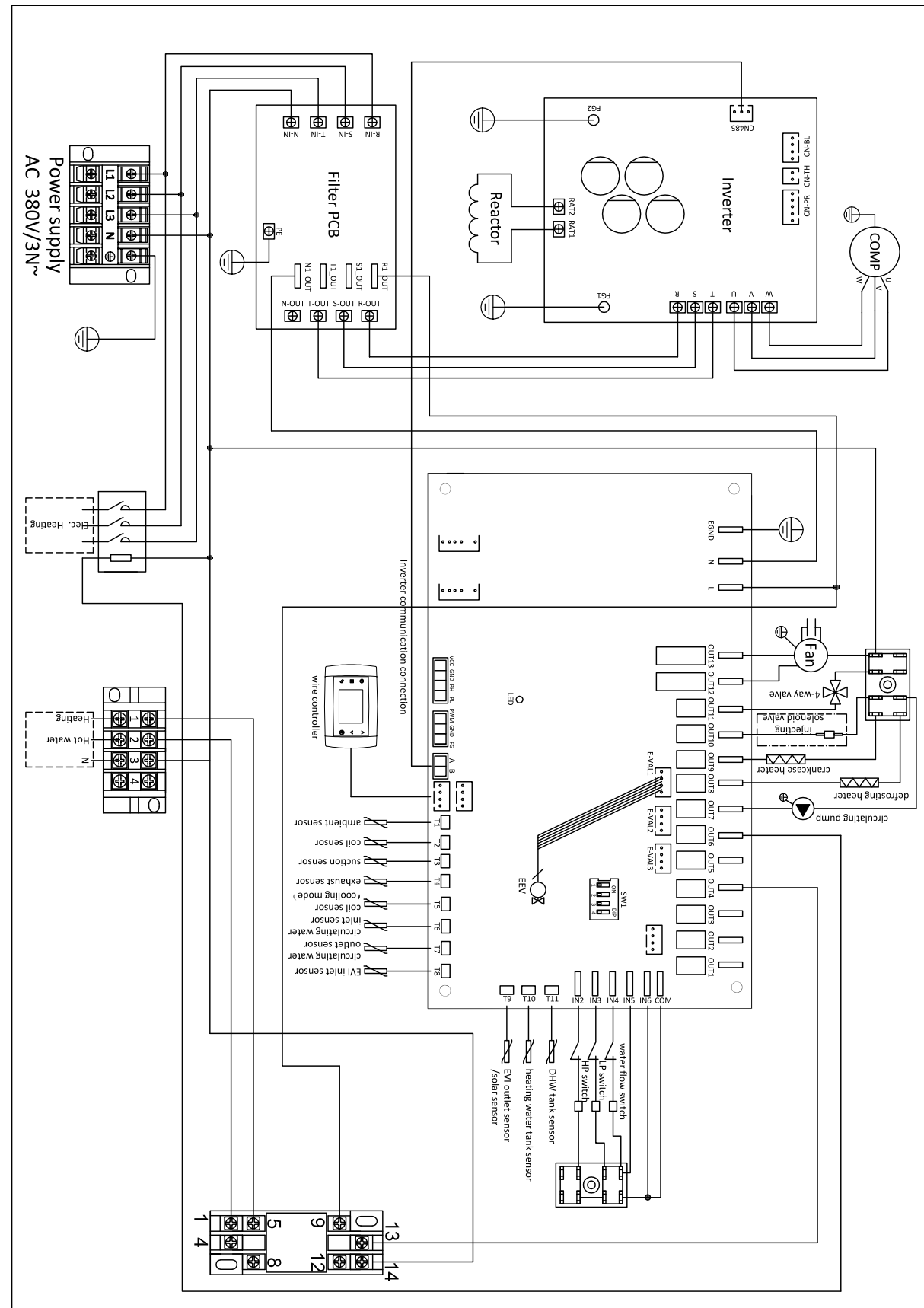
- 1)Before the use of the unit in each season, Please clean the filter on the water circuit system to make sure the smooth water flow
- 2)During the unit operation, when the water flow is mall and the water temp difference is too big, please check if the filter of the water circuit is clear.
- 3)Before the use of the unit in each season, please check if the heat exchanger surface is clean. If there is too much dirt or impurities, please contact your dealer or the after-sales serviceman to do the cleaning in order to make sure the good heat exchanging efficiency and using effect.
- 4)If there is plenty of snow in winter, please block up the unit before install it to avoid the blockage of the air outlet because of the deep snow.

7-5 After-sales service

When the unit can't work normally, please immediately turn off the unit and cut off the power supply, then contact the local dealer or professional technician to solve the problem.

8. Wiring diagram

Model: SHAW-15DM1



9. WIFI function

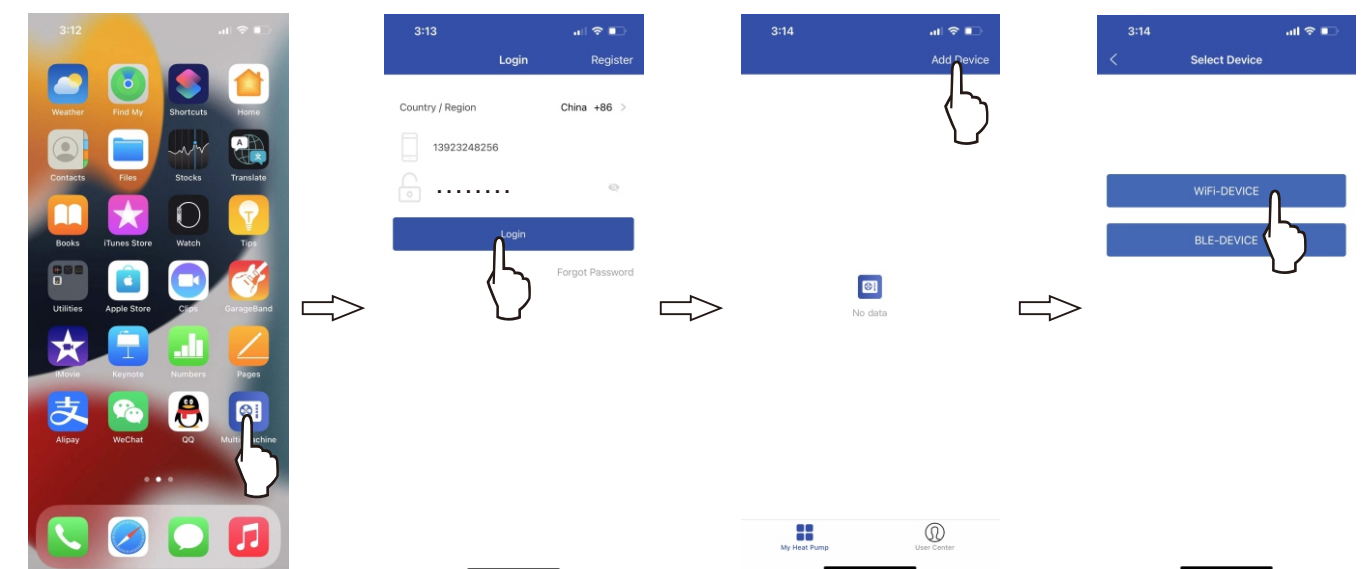
9-1 Software download and installation:

- For IOS:
Enter "Multi-Machine" in Google Play or App Store, search for multi-function machine APP, download and install.
- For Android:
Enter the URL in the browser: <http://d.3appstore.com/phx9>, you will find "Multi-Machine" app, download and install.

The following instructions are based on the IOS system

9-2 User registration

- Click the icon "Multi-Machine" to open the app.
- Enter your mobile phone number or email address and password, press the "Login" button.
- After successful registration, click the "Add Device" button.
- Click "WIFI Device" button.



9.WIFI function

9-3 WIFI Connection

- Connect the WIFI box between the PCB and the wire controller, the red power light and the green WIFI light are on.
- Long press the "connect" key for 8 seconds, the green WIFI light start flash quickly.
- Click the “Confirm” button on your phone.
- Enter the WIFI password and press the “Next” button.
- Press “OK” button, the app start to find and connect to device.

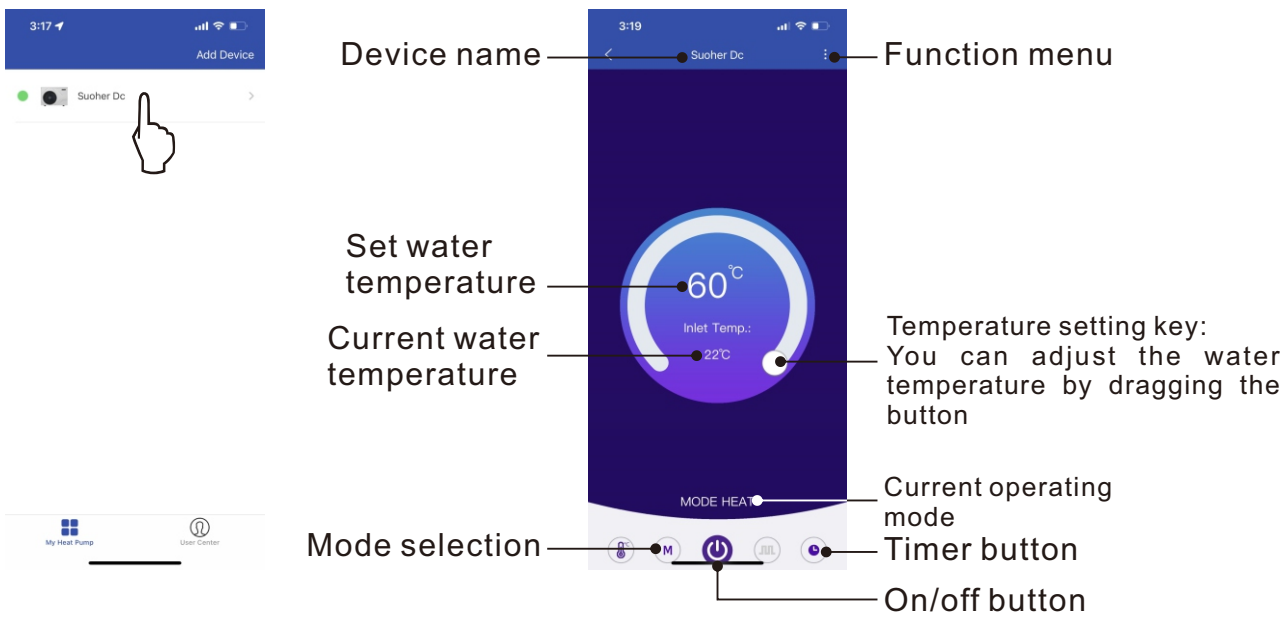
When the device is successfully connected, the phone screen will display the “Connection succeed” information, press “OK” button to confirm the connection .



9.WIFI function

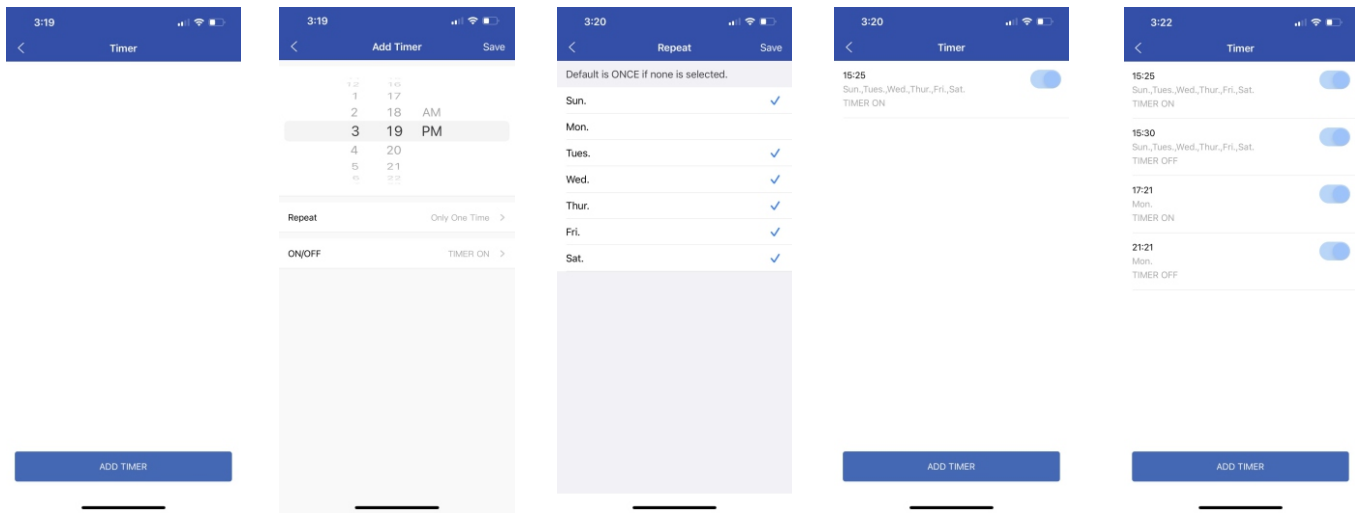
9-4 App user guide

- Open the app, click on the device name.
- Enter the app control interface, see the description for the name of each part of the interface.



9-4-1 Timer function

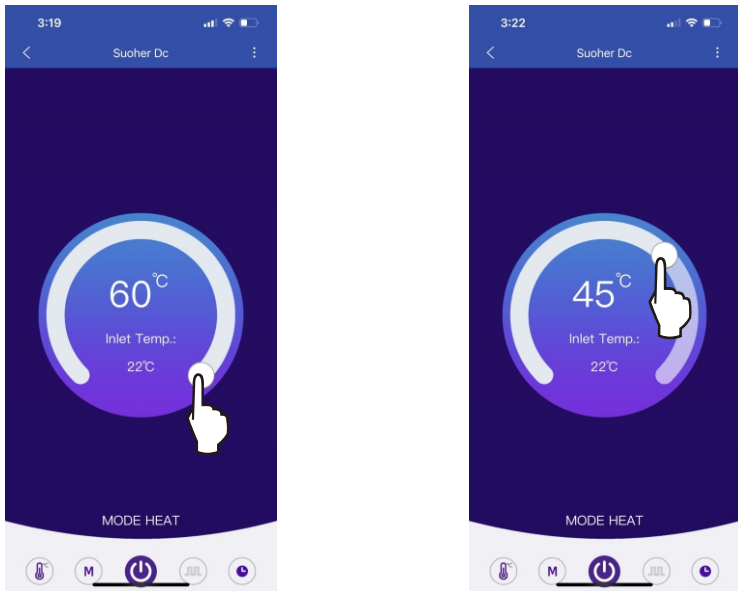
- Press timer button.
- Press “ADD TIMER” button.
- Set timing time and select date and timing on/off.



9.WIFI function

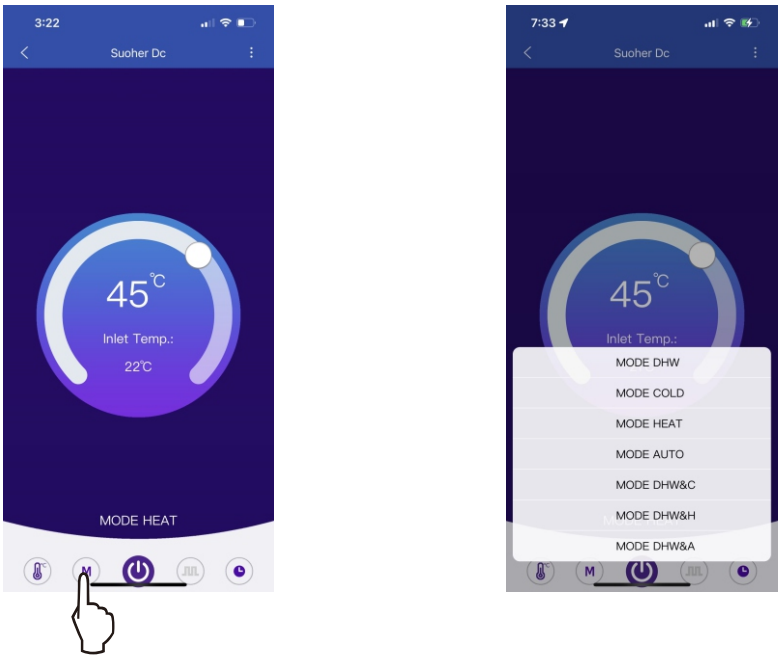
9-4-2 Set water temperature

- Drag the big dot on the temperature circle with your finger to adjust the set water temperature.



9-4-3 Operation mode selection

- Press the “M” button, You can call out the operating mode menu, you can select the operating mode you need.



Note