SUNJET

Domestic Hot Water Heat Pump

User Manual

THANKS FOR YOUR CHOICE

MODEL:
ZLHW-3T150DF
ZLHW-3T200DF
ZLHW-3T250DF
ZLHW-3T300DF

Please Carefully Read this Manual Before Using the Heat Pump.
Please Properly Keep this Manual.

Note

Content

1. Safety Precautions

ELECTRICAL POWER MUST BE SWITCHED OFF BEFORE

STARTING ANY WORK ON JUNCTION BOXES

The aim of this manual is to provide instructions for installation, commissioning, operation.

WARNING!
The installation, commissioning and maintenance of these machines should be performed by qualified personnel having a good knowledge of standards and local regulations, as well as experience of this type of equipment.

WARNING!
Any wiring produced on site must comply with local electrical regulations.

WARNING!
Ensure that the electrical supply corresponds to the specification indicated on the unit's maker's plate before proceeding with the connection in accordance with the wiring diagram supplied.

WARNING!
The unit must be EARTHED to avoid any risks caused by insulation defects.

WARNING!
No wiring must come in contact with the heat source or the fan rotating parts.

WARNING!
Preparation for shutting down the unit for a prolonged period if the installation does not contain glycol, the evaporator and the chilled water pipes need to be carefully and completely drained of water.

TAKE CARE!
The unit should be handled using lifting and handing equipment appropriate to the unit's size and weight.

TAKE CARE!
It is forbidden to start any work on the electrical components without switching off the electrical supply to the unit.

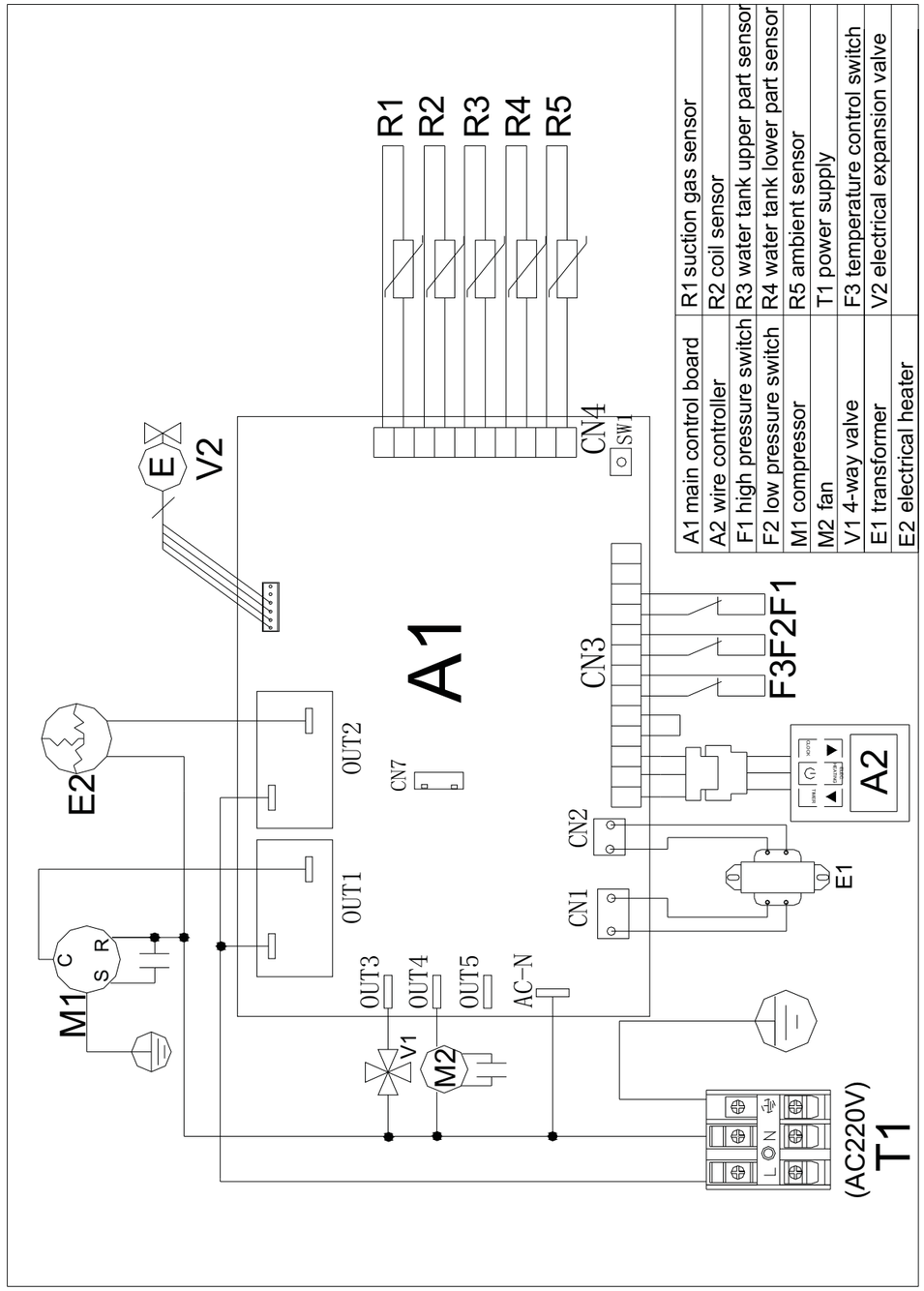
TAKE CARE!
When the unit is being connected, ensure that no impurities are introduced into the pipe work and the water circuits.

TAKE CARE!
A mesh filer must be provided on the hydraulic pump and in exchanger water inlets.

The manufacturer's warranty will not apply if the installation recommendations listed in this manual are not followed.

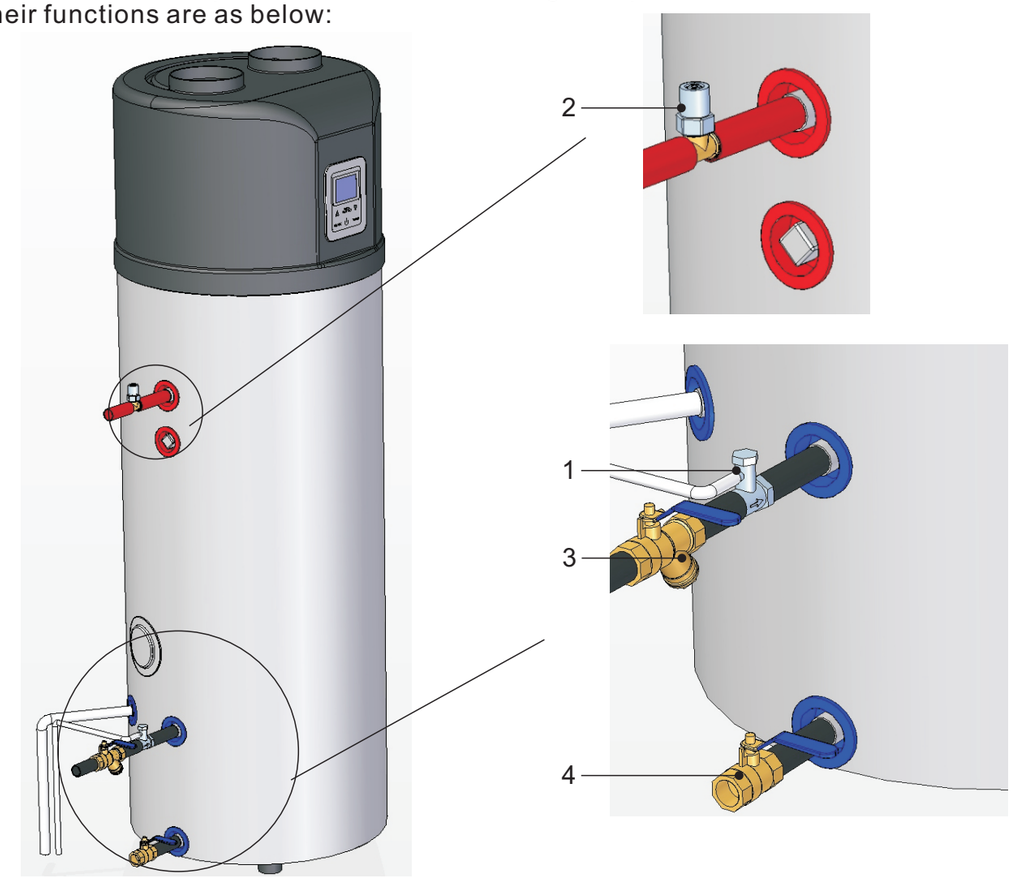
Note

8. Wiring Diagram



1. Safety Precautions

The following valves must be installed in the unit installation:
1-temperature and pressure relief valve; 2-Negative pressure valve
Their functions are as below:



1. Temperature and pressure relief valve: to prevent from the high temperature and high pressure inside the tank. This valve must be installed to make sure that when the water temperature or pressure inside the water tank reaches to certain value, the pressure can be released from this valve to make sure the safety and normal using of the water tank. And it must be installed in the cold water inlet, to ensure that when this is no cold water supply, the hot water inside the tank will not flow back to make sure the hot water supplied normally and the inside tank not damaged.

2.Negative pressure valve: It must be installed in the hot water outlet, to ensure that when there is no water inside the tank (for example, hot water flows out), air can be supplied from this valve and goes into the tank to make sure the inside tank not damaged by the negative pressure.

3.Water filter valve: To keep cold water inlet cleaning.

4.Ball-valve: Open it to drain the water inside the tank before the cleaning.

2. Specification

2.1 Specification

Model	ZLHW	3T150DF	3T200DF	3T250DF	3T300DF
Heating Capacity	KW	3			
Heating Power Input	KW	0.91			
Hot Water Volume	L/h(15-55℃)	75			
Rated Current	A	4.14			
COP		3.3			
Power Supply		220V/1PH/50Hz			
Compressor Style		Rotary			
Water Tank Cubage	L	150	200	250	300
Size of Air Inlet-Outlet	mm	150-150			
Max. Water Temp.	℃	60			
Rated Water Temp.	℃	55			
Net Weight	kg	75	80	88	95
Shipping Weight	kg	87	92	101	109
Noise	dB(A)	47			
Water Connection	Inch	3/4"			
Net Dimension	Diameter(mm)	560	560	640	640
	Height(mm)	1540	1730	1620	1840
Shipping Dimension	Diameter(mm)	670	670	750	750
	Height(mm)	1670	1860	1740	1970

Measurement Conditions:
Outdoor Air Temp.:20℃,Inlet/Outlet Water Temp.:50℃/55℃

2.2 How to choose the suitable volume of water tank.

The domestic hot water user	The volume of the water tank
2 or 3	150L
3 or 4	200L
4 or 5	250L
above 6	300L

Note: It is just a reference and should be decided by the local climate and the customs of the local people.

7. Maintenance and trouble shooting

7-3 Malfunctions and treatment

Faults	Possible reasons	Treatment
The screen doesn't light.	1.The power plug is not well connected； 2.The water temp. setting is too low； 3.The thermostat is broken ； 4.The circuit board of the screen is broken.	1.Re-connect the power plug； 2.Increase the water temp.setting； 3.Change a new thermostat； 4.Change the circuit board of the screen.
The outlet water is cold.	1.The power plug is not well connected； 2.The start key is not pressed； 3.The water temp. setting is too low； 4.The unit doesn't start normally.	1.Re-connect the power plug； 2.Press the start key； 3.Increase the water temp.setting； 4.Contact the serviceman.
There is not water out from the hot water outlet.	1.The water supply stops ； 2.The water pressure is too low； 3.The tap water inlet valve is not opened.	1.Wait the water supply back to the normal； 2. Wair the water pressue to increase to be normal, or install a booster pump ； 3.Open the tap water inlet valve.
The water tank is leaking.	The seal of each pipe's connection is bad.	Re-seal the conenction of each pipe.
The fautl codes display on the screen.	There is corresponding fault on the machine.	See table 6.3

Table 8. 1

7. Maintenance and trouble shooting

7-2 Phenomenon of non-mahicne-fault

1) Why the compressor doesn't run sometimes after turning on the machine ?

When the power supply is on, the unit immediately re-start after running to stop, but it doesn't run for about 3min, this is the system setting for protecting compressor.

2) Why does the water temperature decrease sometimes in the heating?

When the temperature at the top of the tank is much higher than the temp. at the bottom of the tank, as there is natural convection between the hot water and cold water in the heating process, the hot water and cold water will stir and mix ,so the water temp. at the top of the tank will decrease a little.

3) Why does the unit not start to heat when the water temp. has decreased ?

Because of the natural heat loss, when the hot water is not used for a long time, the temp. will gradually decrease. To avoid the frequent on-off of the machine, there is a temp difference setting to re-start the unit. When the hot water is not in use, the unit will not re-start until the water temp. decrease 5°C.

4) Why does the water temp. suddenly decrease a lot ?

Because the machine is built with pressurized water tank, the hot water needs to be pushed out by cold water in the using, there will be obvious laying between the hot water and cold water, when the cold water overflows the water temp. sensor at the top of the tank, the displayed water temp. will suddenly decrease. This is the natural phenomenon of the high utilization of the water tank.

5) Why does the hot water still come out when the displayed water temperature decreases a lot?

Because the water temp. sensor is positioned in the middle of the water tank, when the displayed water temp. suddenly decrease, there is still 1/3 hot water in the tank.

6) Why does it not work to press the keys?

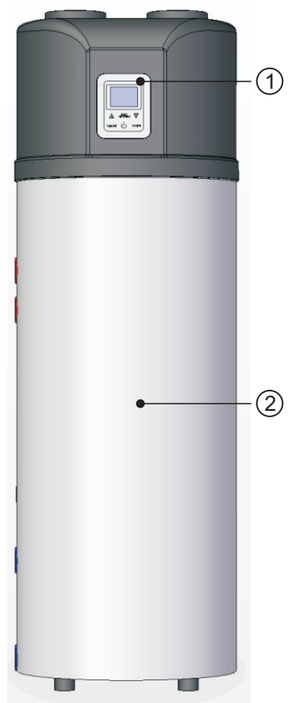
The key board may be locked. When the key board is not operated for 1min, it will be locked automatically. There is no lock icon on the screen. Press the lock key for a long time to unlock the key board.

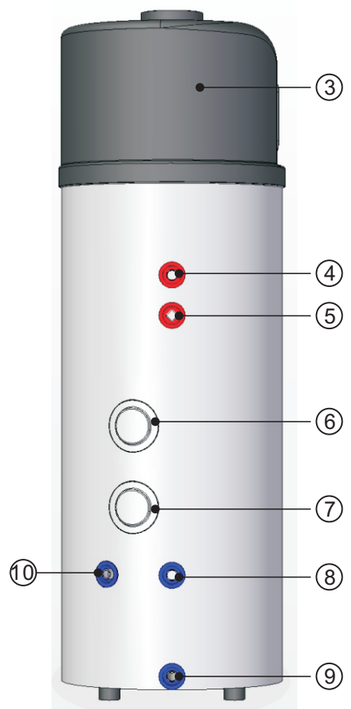
7) Why there is water dropping from the temp. and pressure relief valve?

The tank is a sealed and pressurized container, water is expanded in the heating , when the pressure inside the tank is more than 0.8MPa, the relief valve port will act and hot water flows out so that the tank will not be damaged or even explode because of the high pressure.

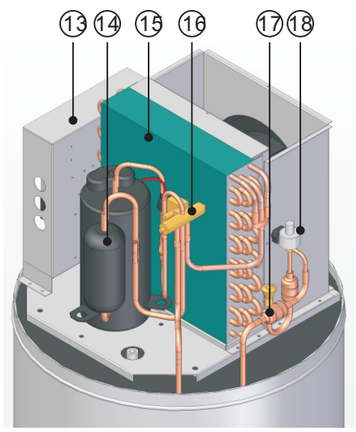
If there is continuous water dropping or leaking from the pressure valve, please contact the dealer or the professionals to check and change a new valve if necessary.

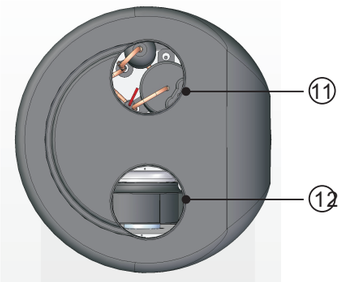
3.Structure





1-Controller
2-Water tank
3-Cap
4-Hot water outlet
5-Sacrificial magnesium anode rod
6-Overheat protector
7-Electric heater
8-Cold water inlet
9-Drainage
10- Condensing Water Drainage
11-Air inlet
12-Air outlet





Open the cap, and then please see the left picture

13-Electric control box
14-Compressor
15-Evaporator
16-4-way valve
17-Filter
18-Electronic expansion valve

4. Installation

4-1 The choice of installation place

1) If the machine is installed indoor, there maybe problems such as water spill, noise, indoor temp. decreasing, please make some precautions in advance.

2) Please leave enough space for installation and maintenance.

3) Please keep the air inlet and outlet not blocked and not blown by strong wind.

4) The supporting surface should be flat (the level elevation angle should not be more than 2℃), be able to bear the weight of the machine, make the machine vertically positioned and not cause noise as well as vibration.

5) Please make sure that the running noise and discharged air will not affect your neighborhood.

6) Please make sure there no combustible gas leak in the installation place .

7)The place should be where is convenient for installing the connection pipe and connecting the appliance.

8) If the machine is installed on the metal part of the building, the electrical insulation must be well done and fit the related technical requirements of the electrical equipments.

⚠ Attention

In the area where the air temp is minus zero, please install the machine indoor or somewhere there is no freezing, to prevent the water pipes from crack caused by freezing.

In the area where the air temp is minus zero, if the machine is installed outdoor, please make protection on the water pipes based on the lowest air temp. to prevent from the freezing and the crack of the water pipes.

Please keep the machine away from the high temperature place and away from the long-term sun exposure, otherwise the life span of the machine will be shortened.

⚠ Attention

Malfunctions may happen if the machine is installed in the following places. (If it is unavoidable, please consult the manufacturer)

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

7. Maintenance and trouble shooting

7-1 Repair and maintenance

1)The power plug and socket should be always checked, if the contact is good and reliable, if the grounding is effective and please make sure there is no overheating.

2) If the unit is not used for a long time, especially in the low temperature area (below than 0°C), the water inside the tank should be drained to prevent from freezing.

3)To make sure the long-term effective working, please thoroughly drain and clean the tank every six months, remove the sediment accumulated during the running. Please drain the tank by the following steps:

3.1) Turn off the power supply.

3.2) Close the cold water inlet valve and open the hot water tap.

3.3) Connect the drain port with a soft pipe to the sewage draining exit (the drain pipe should resist heat not less than 93°C, if the drain pipe doesn't fit this requirement, please open the cold water inlet valve and the hot water tap at the same time till the water is not hot.

3.4) Open the drain port and evacuate all water out. If necessary, wash the tank for a few times to get rid of the sediment.

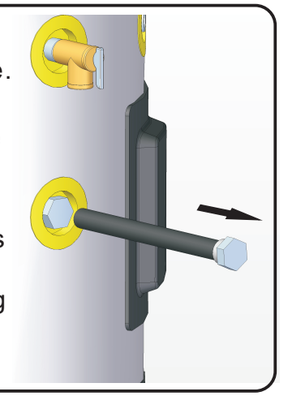
3.5) Close the drain port and re-inject water into the tank, then turn on the power supply.

4) Each unit is equipped with a magnesium rod to prevent the tank from being corroded and to prolong its life span. The magnesium rod will be gradually consumed in the using. Under some certain water conditions, there will be reaction between the rod and the water. Once the rod is consumed up, the tank will begin to be corroded and leak will happen finally. So please check the rod once time a year, if it is consumed up, please change a new one.

⚠ Attention

* Instruction to change the magnesium rod：

1、Turn off the power supply and close the cold water inlet valve.
2、Open the hot water tap to decrease the pressure of the tank.
3、Open the drain port and evacuate about 50L water out (to make the water level drop below the rod)
4、Take the rod out from the tank with wrench。
5、Install a new rod and make sure the seal of the connection is reliable .
6、Open the cold water inlet valve till there is hot water coming out from the hot water tap, then close the hot water tap.
7、Connect the power supply and use it as normal.



5) When the hot water is enough for use, please set the setting temp. lower to reduce the heat loss and the produce of the limescale.

6) In the area where the air temp. is below 0°C, if the unit is installed outdoor, please do well thermal insulation on the water pipes. If necessary, please add heating device to prevent the pipes from being freezed.

6. Operation and performance

6-1 Trial operation

Please check 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)If the current leak protector can act effectively;

10)The inlet water pressure should be no less than 0.15MPa.

6-2 Performance

1）Introduction about the structure：

This machine has two heating parts, one is heat pump system and the other is electrical heater.

And it has two temperature sensors,one is in the middle of the water tank and the other is above the electrical heater.

2）About the running modes：

In the standard mode, the machine produces hot water by the working of compressor. This is the most energy efficient mode.

When the ambient temp. is below −5℃ or above 43℃, the heating efficiency will decrease sharply, in this case, the electrical heater is suggested being opened.

When the unit malfunctions, the electrical heater can be opened to make sure the normal hot water supply.

3）Defrosting：

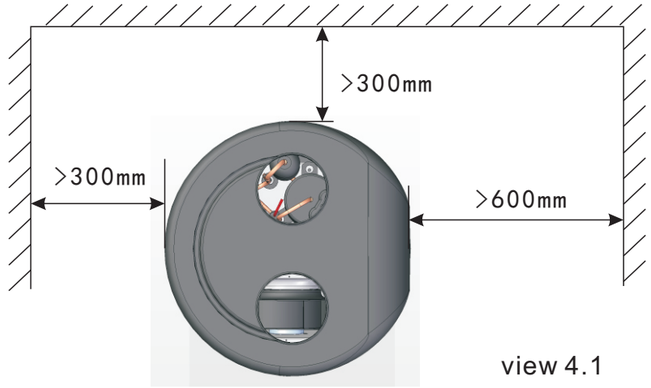
In the standard or quick heating mode, if the ambient temp. is low, the heat exchanger may frost. In such case, in order to increase the heating effect, the unit will automatically enter into the defrosting mode (about 3-10min). In the defrosting mode, you'll see the water temp. decreasing. Sometimes, there maybe white vapor coming from the air outlet, all those are the normal phenomenon during the frosting.

4. Installation

4-2 Space for installation and maintenance.

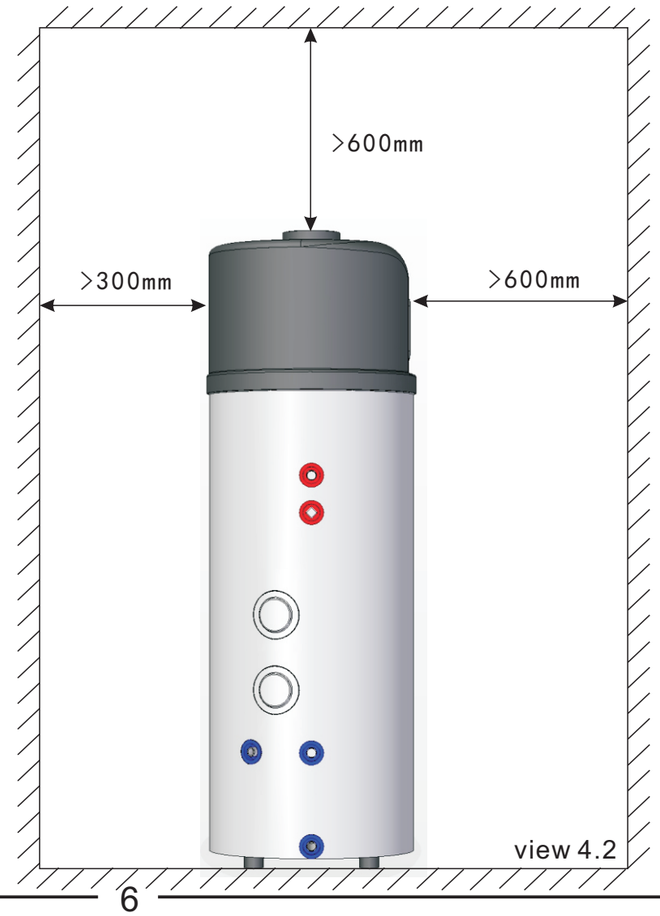
Please leave the space as show in the below view before installing the machine.

There should be no obstruction around the air outlet, if there is, please make sure the distance between the obstruction and the air outlet is more than 300mm.



view 4.1

Please leave enough space above the top of the unit and around it for the convenience of the installation, maintenance and repair.



view 4.2

4. Installation

⚠Warning

The installation should be operated by the dealer or the professionals.

The installer needs to have the related knowledge, the wrong operation will cause water leak, current leak, fire etc. or water leak etc.

Please prevent the machine from the direct sunlight and other sources of direct heat radiation. If it is unavoidable, please cover a shelter for the machine.

Please install the machine firmly to prevent from the noise and vibration due to the improper installation.

Remove the obstacles away from the machine as far as possible to make sure the good air circulation around it.

At the sea or place where there is strong wind, please shelter the machine from the wind to ensure the normal running of the fan. Please prevent the machine from being blown down, especially in place with strong wind.

4-3 The movement of the machine

1) The machine is heavy, the installation and movement needs to be handled by more than 2 persons. The improper operation may cause the injury.

2) Please don‘t dismounting the machine by your own, please move it as the state that it is from the factory.

3) Please add a guard board between the machine and the hard object to avoid the scratch or deformation of the surface.

4)Please don’t touch the fan blades with hands or other object.

5)Please don’t tilt it more than 45℃ in the movement and do not recline it.

4−4 The installation

1) If the machine is installed in the basement, inside house or other sealed space, please keep good air circulation around the machine as well as the outdoors’ good air circulation of the air inlet and outlet. The air circulation volume should not be less than 700m3/h

2) Please leave enough space for installation and maintenance.

Please refer to the view 4.1 and 4.2 about the installation space.

5. Controller

5.3.2Fault of temperature sensor at the top of water tank

If it is detected that temperature sensor, at the top of the water tank, short circuit or cut off, it will be judged as water temperature sensor fault. **PP2** fault code was displayed.

5.3.3Coil temperature sensor fault

If it is detected that coil temperature sensor is short circuited or cut off, it will be regarded as coil temperature sensor fault. Defrosting will turn to timing defrosting. PP 3 fault code was displayed.

5.3.4Suction gas temperature sensor fault

If it is detected that suction gas temperature sensor is short circuited or cut off, then it will be regarded as suction gas temp sensor fault. The electrical expansion valve will run by manual operation. **PP4** fault code was displayed.

5.3.5Ambient temperature sensor fault

If short circuit or cutoff of ambient temperature sensor is detected, then ambient temperature sensor fault can be judged. In this situation, the system works normally and the fault can be removed by itself. **PP5** fault code was displayed.

5.3.6High pressure protection

When it is detected that the high pressure switch is off for 10 seconds, the system will enter into high pressure protection. When it is detected that the high pressure switch is on, the system will exit from high pressure protection. When high pressure protection fault happens for 3 times within 30 minutes, only by power down can the unit recover to run normally. **EE1** fault code was displayed.

5.3.7Low pressure protection

After the compressor runs for 5 minutes, When it is detected that the low pressure switch is off for 10 seconds, the system will enter into low pressure protection. When it is detected that the low pressure switch is on, the system will exit the low pressure protection. When low pressure protection fault happens for 3 times within 30 minutes, only by power down can the unit recover to normal. This fault will be shielded during defrosting. **EE2** fault code was displayed.

5.3.8Overheat protection

When the overheat protection switch is off, the electronic heater will be turned off. When the overheat protection switch is on, the electronic heater can start depending on the conditions. **EE3** fault code was displayed.

5.3.9 Communication failure

Within the 20 seconds of the initial electrification, if the main control board can’t receive the communication signal from the remote controller all the time, then it is judged that the remote controller is not connected to the main controller board. There is no signal in the system to indicate this fault. In this case, the system will be started or stopped by the emergency switch. If the main control board is connected with remote controller, but the remote controller can not receive any signal from the main control board within 10 seconds, then it is judged to be communication failure. **EE8** fault code was displayed.

5. Controller

5-3 System fault

Protection/fault	Remote controller	Main unit running/ fault indicating lamp
Standby states		Light off
Booting normally		Light on
Water tank lower part temp. sensor fault	PP 1	☆● (1 flashing 1)
Water tank upper part temp. sensor fault	PP 2	☆☆● (2 flashing 1 off)
Coil temp. sensor fault	PP 3	☆☆☆●(3 flashing 1 off)
Suction gas temp. sensor fault	PP 4	☆☆☆☆●(4 flashing 1 off)
Ambient temp. sensor fault	PP 5	☆☆☆☆☆●(5 flashing 1 off)
High pressure protection	EE 1	☆☆☆☆☆☆●(6 flashing 1 off)
Low pressure protection	EE 2	☆☆☆☆☆☆☆●(7 flashing 1 off)
Overheating protection	EE 3	☆☆☆☆☆☆☆☆● (8 flashing 1 off)
Defrosting	Defrosting indicating	☆☆☆☆☆☆☆☆..... Continuously flashing
Communication fault	EE 8	No flashing

5.3.1Fault of temperature sensor at the bottom of water tank

If it is detected that temperature sensor, at the bottom of the water tank, short circuit or cut off, it will be judged as water temperature sensor fault. The system will stop running and enter into protection mode. **PP1** fault code was displayed.

4. Installation

4-5 Instruction of the pipe connection

1) Please do not use iron pipe. Please use the new pipes which fit the drink water requirements, such as the CPVC, PPR pipe or polyebutylene pipe. Please use the water pipes without bad smell.

2) Please install the water pipes and connecting pieces according to the above sketch. If the ambient temperature is below zero, all the water pipes must be done thermal insulation.

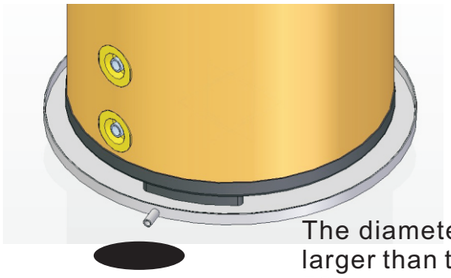
3) Installation of the inlet and outlet pipes: The connection of the inlet and outlet is G1/2" (female). The connecting pipes and fittings should have longer life span than the machine and be heat-resistant.

4) Installation of the temperature and pressure relief valve's connecting pipes: the connecting pipes must be hard. The connection of the temp. and pressure relief valve is G3/4'' (female). Please make sure the drain pipe outlet is connected with the atmosphere.

5) Installation of the check valve: The connection of the check valve is G1/2'', it is installed to ensure that when this is no cold water supply, the hot water inside the tank will not flow back, to make sure the hot water supplied normally and the inside tank not damaged.

6) If the inlet water pressure is low than 0.15Mpa, to get the large water flow, please add a booster pump on the inlet pipe to make sure the inlet water pressure is above 0.15Mpa.

7) In the running, there maybe condensed water produced in the air outlet and the drain port may be accidentally blocked. In such case, there will be water dropping from the machine's surface. Please put the machine in the place where is convenient for draining (such as balcony or bathroom), or add a drain pan at the bottom of the machine to accumulate the water and discharge to the floor drain.



The max.flange height of the drain pan is 22mm.

The diameter of the drain pan should be larger than that of the water tank, at least 50mm.

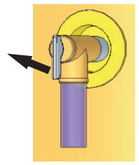
Connect the drain port to the floor drain to make the condensed water directly drained into the floor drain.

view 4.3

4. Installation

⚠Attention

- Please pull the temperature and pressure relief valve's handle once every six months, in order to remove the tosca and confirm if there is block. The outlet temperature of the drain port may be high, please be careful to handle.
- The drain pipe should be done thermal insulation to prevent from freezing.



⚠Danger

- Please do not press the handle of the relief valve.
- Please do not dismounting the relief valve.
- Please do not block the drain port.
- Please lead the drain pipe to an open drain port.

4.6 Different installations, different functions

A. Waste heat recovery

The heat pump could be installed outside the kitchen, by the fireplace in the garage where existing a great deal of waste heat. This makes sure that the unit can keep COP at a high level when ambient temperature is low in winter.

B. Domestic hot water heating and dehumidification

The heat pump could be placed in laundry room and used for sanitary hot water heating. At the same time, its cooling and dehumidification functions can be performed for the room, especially in high humidity season, its advantages will be more obvious and the results will be more satisfactory.

C. Domestic hot water heating

The heat pump can be placed in the storeroom where wine, beverage and fruit etc. are in store. When it is used for domestic hot water heating, cooling function for food fresh-keeping will be carried out at the same time. One unit, several applications. It's totally worthwhile.

D. Domestic hot water heating and fresh air exchange

The heat pump can be placed in the garage, gymnasium, basement and so on. It could be used for domestic hot water heating, meanwhile, cooling and fresh air exchange function for the room can be achieved.

Please refer to the view 4.4.

5. Controller

5-2 System parameter

Parameter	Meaning	Meaning	Default	Remarks
0	Water tank temperature set value TS1	10-70℃	50	Adjustable
1	Heating set point differencial TS6	2-15℃	2	Adjustable
2	When auxiliary electrical heater HT1 enabled, water tank temperature.TS2	10-90℃	50	Adjustable
3	Auxiliary electrical heater HT1 starting delay t1	0-90	30	t*5min
4	Anti-Legionnella set point TS3	50-70℃	70℃	Adjustable
5	Anti-Legionnella time t2	0-90min	30min	Adjustable
6	Mini. time between two Defrosting cycle t3	30-90Min	45min	Adjustable
7	Defrosting starting coil temp. TS4	-30-0℃	-9℃	Adjustable
8	Defrosting exit temp.TS5	2-30℃	13℃	Adjustable
9	Max. time t4 of defrosting	1-12Min	13Min	Adjustable
10	Electronic expansion valve regulation	0/1	1	0- Manually ,1- automatically
11	Target superheat temperature	-20℃-20℃	5	Adjustable
12	Manual adjustment step of electronic expansion valve	10-50	35	N*10 (parameter 10=0 available)
A	Water tank lower part temp. T1*	-9～99℃	Measured value, if fault, displaying PP 1	
B	Water tank upper part temp. T2*	-9～99℃	Measured value, if fault, displaying PP 2	
C	Coil temp. T3*	-9～99℃	Measured value, if fault, displaying PP 3	
D	Suction gas temp. T4*	-9～99℃	Measured value, if fault, displaying PP 4	
E	Ambient temp. T5*	-9～99℃	Measured value, if fault, displaying PP 5	
F	Electronic expansion valve opening	0～50	N*10	

5. Controller

“▲“ and “▼“ button

Press “▲“ or “▼“ button, you can check and set parameters, adjusting the clock and regulate the timing.

In the state of clock setting, press “▲“ or “▼“ button to adjust the clock, hours and minutes;

In the timing ON/OFF state, press this button to adjust the hours and minutes for timing switch on or timing switch off the heat pump.

In normal state (not in clock or timing set state), press “▲“ or “▼“ button to check parameter value (parameter 0 to parameter 11), when the system is in a standby state.

Press “⏻“ and “ELEC.” these two buttons an the same time, you can enter into parameters setting. when in other states, press and hold “▲“ or “▼“ at the same time for 5 seconds, it will enter key lock state. You can press and hold “▲“ or “▼“ at the same time once again for 5 seconds, to exit form this state.

“TIMER” button

Press this button, you can enter timing switch on or timing switch off state.

Press “▲“ or “▼“ to choose timing switch on or switch off, press “TIMER” button to confirm the mode you want.

Note that you can set both timing switch on and timing switch off.

Press this button and you can enter timing switch on or timing switch off except in clock setting. Press “▲“ or “▼“ button to choose timing switch on or timing switch off, and press “TIMER” button to confirm the mode you choose. Press “TIMER” button to enter the hours setting, minutes setting for timing switch on or timing switch off. and then press “TIMER” button once again to exit from timing switch on setting. Press “ “ or “ “ button to set the time value accordingly. In the timing switch ON/OFF state, press “CLOCK” button to cancel timing switch on function.

“ELEC.HEATING” button

Press this button to enter electrical heating mode.

Press this button for 5 seconds to turn ON/OFF ventilation function.

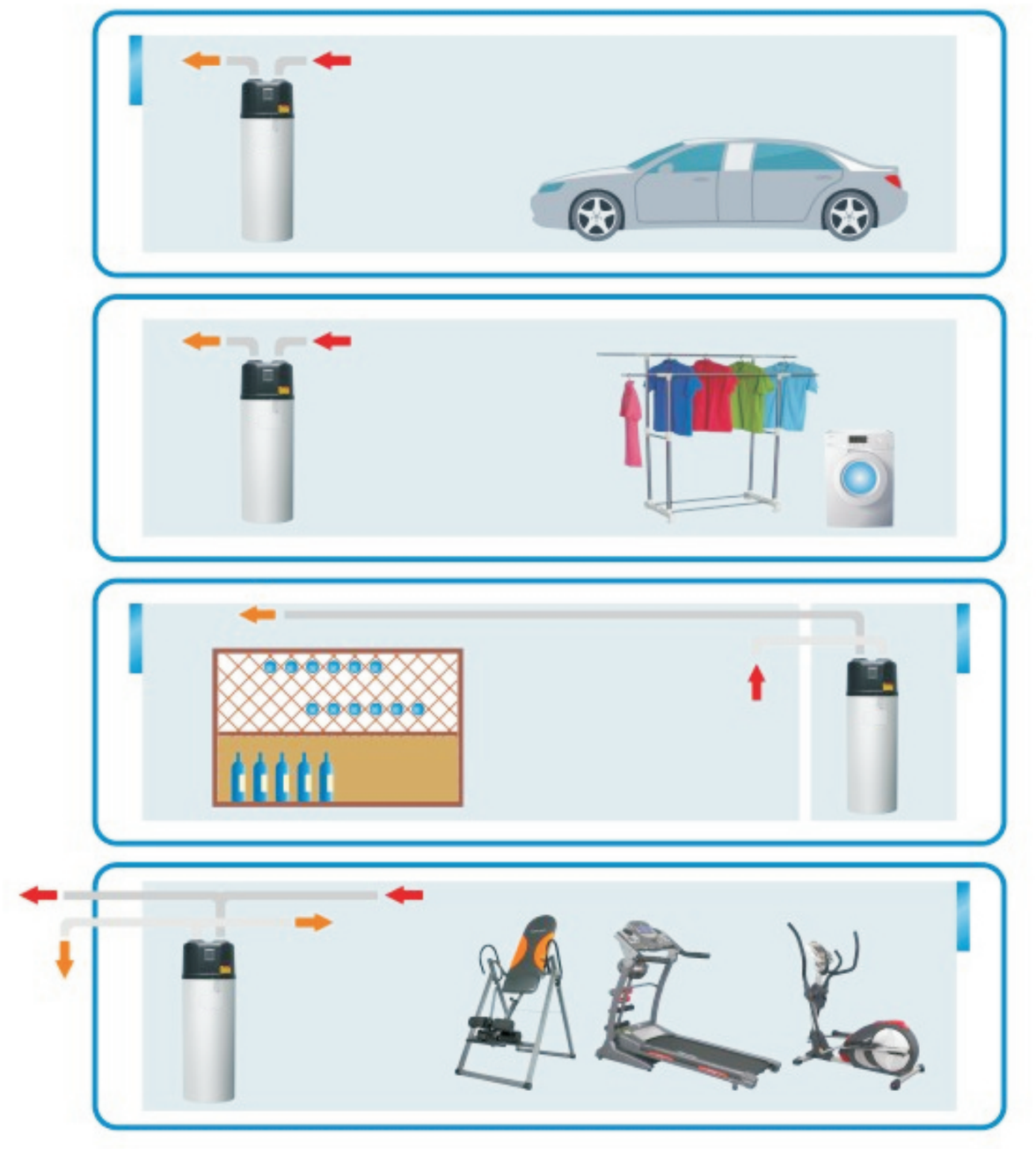
in standby state, press “⏻“ and “ELEC.” button at the same time, you can enter parameter setting state, press “▲“ or “▼“ button change the parameters.

When in other states, press “▲“ or “▼“ button, you check the parameters.

Remarks

Note: In standby state, press “⏻“ button, 5 seconds later to enter compulsive defrosting mode, exit when it reach the set value of defrosting temperature.

4. Installation



view 4.4

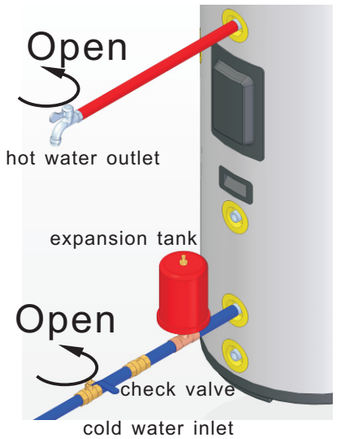
4. Installation

4-7 How to use

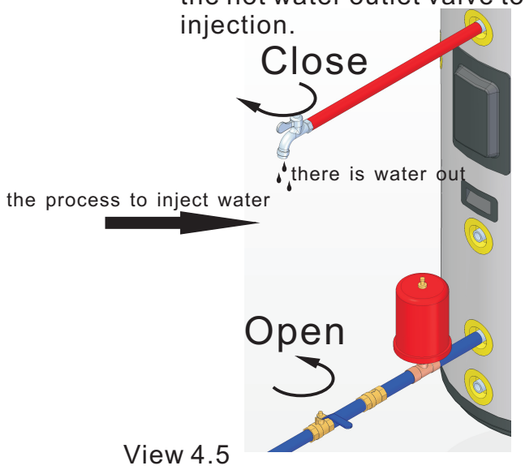
Please operate according to the following order in the using:

1) Inject water: In the first use of the machine (or water tank is evacuated and used again), the tank must be fully injected water before it is electrified.

Open the cold water inlet valve and hot water outlet valve.



When there is water out from the hot water outlet, it means the tank has been fully injected water. At this time, please close the hot water outlet valve to finish the water injection.



View 4.5

⚠ Warning

* If there is no water in the tank, running the machine will damage the electrical heater. Our company will not be responsible for the quality assurance in this case.

2） Energization:Connect the machine to the power supply and energize it, if the display screen lights, it means the machine is electrified. The user can adjust the control mode via the different keys on the screen.

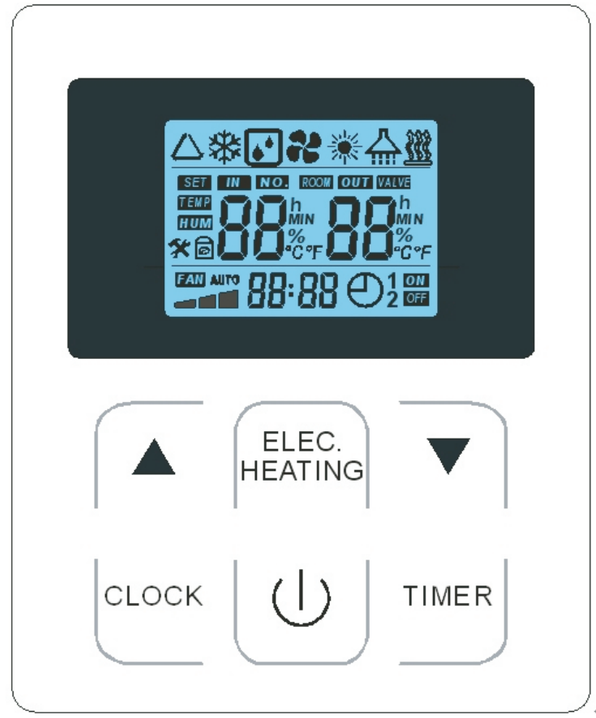
⚠ Warning

* If the water temperature is more than 50°C, it may cause heavy burn or even death. This is especially dangerous for the children, the disabled and the aged people. Please feel the water temperature with hand before the using the hot water.

3） Draining: Please drain the machine before cleaning or moving it.

Close the cold water inlet and then open the hot water outlet and drain port(note: please use the professional hexagon wrench to open and close the drain port). When there is no water coming out from the drain port, screw the nut of the drain port back with the hexagon wrench), then the draining is finished.

5. Controller



5-1 Controller

Power on

When the controller is power on, full-screen displayed for 3 seconds and then enter into normal worknng state.

button

In the state of ON, press this button, and the heat pump can be switched off, displays the current operating mode, timing state and clock on the screen. On the contrary, in the state of OFF, press this button, and the heat pump can be switched on and work as it's been set, display the water inlet temperature, operation mode and timing state.

"CLOCK" button

When power on, the controller enter clock setting, "88.88 " flash on the screen. After that, press "CLOCK" button to enter clock setting for hours and minutes value. Press "CLOCK" button once again to exit from it. You can press " " or " " button to set time value, but when in clock setting state, "TIMER" button is invalid.

In the timing switch ON/OFF state, press "CLOCK" button to cancel the timing switch on/off.