## Air Source Heat Pump Water Heater





Monobloc Type

(L1 Series)

## Table of Contents

ρ

Caution3
Technical Parameter4
Installation diagram4
Wire controller instruction5
Trouble shooting8
Wire diagram8

മ

## **CAUTION**

Do not climb on the unit or try to move it when Installed .

Do not insert fingers or anything into air inlet / outlet. The rotating fan maybe cause serious incident.

If an abnormality (smell of burning...) occurs, stop the Unit, unplug or switch off the power.

Do not connect / unconnect the unit when running; Please handle after all the buttons OFF.

Do not touch the plug with wet hands, It will caused electric shock.

At stormy weather, cut off power to avoid any

damaged caused by the lightning

Keep out of the reach of children do not let children playing near the unit.

Important: Keep plug clean, any dirtiness adheres to it maybe lead to fire or electric shocks.

Do not clean the machine with water. Water will go into the unit and destroy system.

Do not draw the power supply cable . When it is in hand don't connect the plug to avoid any risk or damage.

Once find leaves or other little particles blocking the air inlet, please pick them out of machine after shut off the power.

Check the compatibility of the network with the data on the nameplate of machine before installation.

Any disinfection systems such as electrolysis, chemical ... are not recommended for a running status. They are should be used before systems running.

### **Technical parameter**

Model			YASL1-28HL	YASL1-38HL	
Heating Capacity		W	2800	3800	
		BTU	9554	12966	
Power Supp	bly	V/PH/HZ	220V/1/50HZ	220V/1/50HZ	
Input Power		KW	825	1085	
Running Current		А	4	4.9	
Hot Water Generated		L/h	95	140	
Water Tank Volume		L	150 / 200 / 260 / 300 / 400 / 500		
Thermostat Factory Setting		°C	60		
Maximum Outlet Water Temp.		°C	65		
Compressor Quantity			1	1	
Noise		dB(A)	47	48	
Dimension	Н		1300 / 1430 / 1630 / 1800 / 2170 / 2430		
	W	mm	570 / 640 / 640 / 640 / 640 / 700		
	D		570 / 640 / 640 / 640 / 640 / 700		
Weight	Weight Net Weight ka	62 / 75 / 81 / 102 / 119 / 133			
vveigni	Gross Weight	кy	72 / 90 / 96 / 120 / 136 / 155		

## Installation diagram



- The monobloc heat pump water heater has compact and grace shape with built-in water tank, has the simplest installing, that is only need to connect power supply, water pipe or/ and inlet / outlet air duct.
- The monobloc heat pump water heater also provides cool air (by-products) freely when it heating the water, meantime promote ventilation in room through air duct, and cool down air temp. for reserve goods/vegetables, etc.
- The monobloc heat pump could connect solar system or/ and boiler/ gas system to show perfect performance of heating room meantime bather water even in coldest winter.

Note: please install a reducing valve on the top or beside the water outlet for pressure discharging and protecting water tank.

### **Controller Displayer instruction**



#### Feature

- 1. Displayer shows ambient temperature from ranged 30 °C to 80°C.
- 2. Mode: Heat pump hot water and Electric heating mode.
- 3. Display water temperature and setted water temperature.
- 4. Protection function: give an alarm automatically when trouble occur.
- 5. Automatical disinfection function for water tank every week.
- 6. Electric heating will running automatically during defrosting.
- 7. Clock display function.
- 8. Memory function: Keep information when machine was shut off.

#### Button

#### Power on

When power on, the displayer shows in full screen within 3 seconds then enter into running status.

### <u></u>ப் botton

Under running state, press U to enter the standby state, displayer shows the inlet/out water temp., timer status and clock. Under standby status, press U to enter the running status. displayer shows the inlet/ outlet water temp, timer status and clock.

### "**▲**", "**▼**" button

Be used for setting and adjusting parameter ,timer, time and clock.

Under clock setting status, press "▲"or "▼" to adjust number of hour and minute;

Under timer status, press, press "▲"or "▼" to adjust the setted hour and minute;

Under usual status, (except the clock and timer status), press "▲"or "▼" to adjust parameter( parameter 0-11).

Under the parameter adjusting of standby status, press and ELEC at same time for 5 seconds to lock the button, do it once again to exit the lock status.

#### "CLOCK" button

When power on, the machine enters clock setting status with "88.88" flashing. Press "CLOCK" again to enter hour setting status, once again for minute setting status. Press CLOCK one more time to exit the clock setting parameter. Under clock setting status, press "▲", "▼" to adjust the relattive time. The button "TIMER" is not available when machine is under clock setting status.

Under timer status, press CLOCK to cancel the timer.

#### "TIMER" button

Be used for geting into timer status.

Press "▲", "▼" button to choose time for power on and power off, press "TIMER" again to confirm the chosen mode.

Except the clock setting status, press the button to enter the timer status, press "▲", "▼" to choose timed power on or power off, then press "TIMER" to confirm the chosen mode, press "TIMER" to enter the setting status for timed hour and minute, to exit this timer setting, with one more press on "TIMER" under relative timer status, press CLOCK to cancel the timer.

#### "ELEC.HEATING" button

Press the button to enter the mode of electric heating, to browse and setting of the parameter.

Under the standby status, press <sup>□</sup> and "ELEC.HEATING" button at same time to enter parameter setting status. Press "▲", "▼" button to adjust parameter.

Under other status, press "▲", "▼" button to browse parameter.

Parameter	Meaning	Scope	Default	Note	
0	The setting for water temp in tank Ta1	10-70℃	55℃	Adjustable	
1	The temp difference setting to restarting Ts6	2-15℃	5℃	Adjustable	
2	The temp for exiting elecheater Ts2	10-90℃	55℃	Adjustable	
3	Lagtime for Electric heating t1	0-90	30	30 t*5min	
4	The disinfection temp of elec heater(weekly)Ts3	60-90℃	70℃	Adjustable	
5	The durative time for disinfection t2	10-90min	30min	Adjustable	
6	The cycle for defrosting in heating mode t3	30-90min	4-5min	Adjustable	
7	The temp point to enter defrosting in heating mode TS4	-30-0°C	-7℃	Adjustable	
8	The temp point to exit defrosting in heating mode Ts5	2-30℃	13℃	Adjustable	
9	The time exiting defrosting in heating mode T4	1-12min	8min	Adjustable	
10	The adjustment for electronic expansion valve	0/1	1	0 manual 1 automatic	
11	The superheat of target	-20℃-20℃		Adjustable	
12	The step amount to adjust the electronic expansion valve	10-50	35	35N*10(parameter 0=0 is valid)	
А	The bottom temp of water tank T1	-9 ~ 99°C	actual tested date , display P1 if fault		
В	The top temp of water tank T2	-9 ~ 99°C	-9 ~ 99°C actual tested date , display P2 if fault		
С	Coil temp T3	-9 ~ 99 ℃ actual tested date , display P3 if fault			
D	Return air temp T4	-9 ~ 99°C actual tested date , display P4 if fault			
E	Exhaust temp T5	-9 ~ 99°C	°C actual tested date , display P5 if fault		
F	The step amount of electronic expansion valve	0 ~ 50	N*10		

#### The shows and adjustable parameter on displayer

Note: All these above parameter were settled in factory , please do not alter it at random.

Note: temperature protection failured can be restored automatically.

Trouble shootin	ıg			
Trouble	Code	Running and trouble polit lamp	Reason	Solution
Standby Status		Black out	/	/
Running		Light	/	/
Bottom of water tank sensor trouble	PP1	☆•	The short circuit or disconnection Of the sensor on the bottom of tank.	Check or replace the sensor
Top of water tank sensor trouble	PP2	<b>☆☆</b> ●	The short circuit or disconnection of the sensor on the top of tank	Check or replace the sensor
Coil sensor trouble	PP3	***	The short circuit or disconnection of the sensor of coil	Check or replace the sensor
Return air sensor trouble	PP4	****	The short circuit or disconnection of the sensor for the back gas	Check or replace the sensor
Exhaust sensor trouble	PP5	****	The short circuit or disconnection of the sensor for exhaust	Check or replace the sensor
High pressure protection	EE1	*****	System pressure is too high	To check if the water temp is too high or if there is water in tank
Low pressure protection	EE2	******	The system pressure is too low/ capacity or expansion valve blocked	Lack of refrigerant, to check if there is any leakage, change the capillary or expansion valve.
Overheat protection	EE5	*****	The switch for overheat protection is disconnected	The water temp in tank is too high. Cut off the elec heater to down the water temp.
Exhaust temp protection	EE6	**********	The switch for exhaust protection is disconnected	To check if the system is lack of refrigerant, if the water temp in tank is too high, if there is water in tank
Defrosting	Defrosing indicator	Always flashes	/	/
Communication trouble	EE8	No flash	There is no communication between the PCB and remote controller	To check if the controller is connected well with PCB

# Wire Diagram for Monobloc type Heat Pump Water Heater

