

WiFi Controller Instruction



1.Controller with WIFI replacement

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1.Controller with WIFI replacement

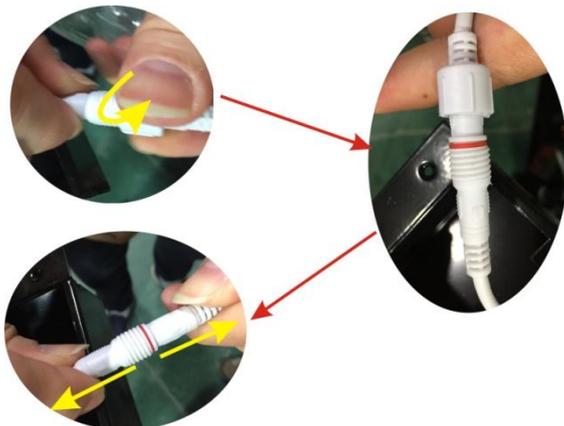
1.1 Open the waterproof box,then disconnect the cable,and take off the original controller.



Pic. 1a (inverter)



Pic. 2a (inverter)



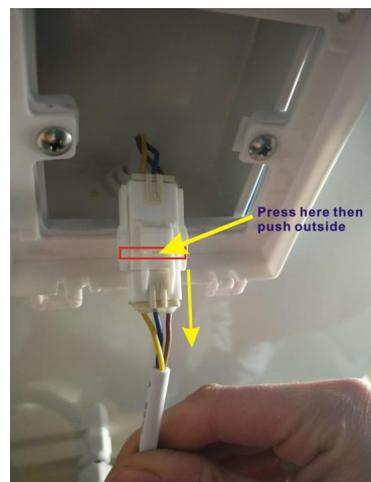
Pic. 3a (inverter)



Pic. 4a (inverter)



Pic. 1b (ON/OFF)



Pic. 2b (ON/OFF)

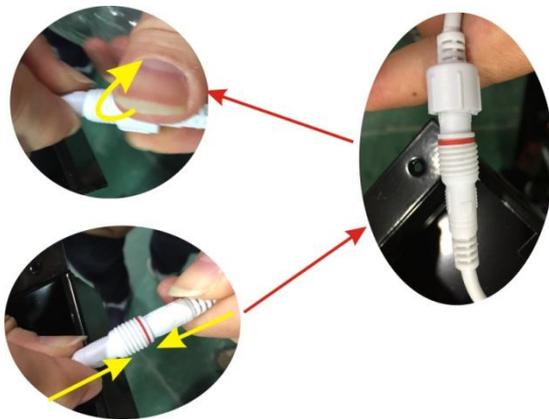
1.2 Re-connect cable of new controller with the WIFI as below. The WIFI antenna could be hidden in the controller box. Lastly fix the controller with WIFI back in the box.



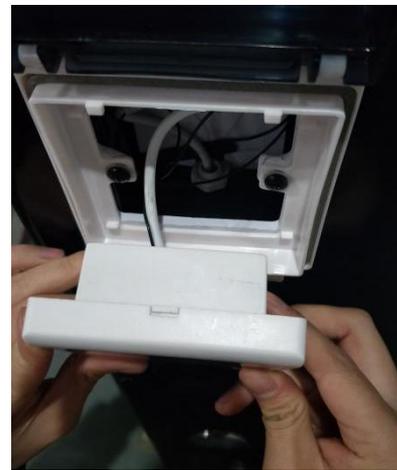
Pic. 5a (inverter)



Pic. 6a (inverter)



Pic. 7a (inverter)



Pic. 8a (inverter)



Pic. 3b (ON/OFF)



Pic. 4b (ON/OFF)



Pic. 5b (ON/OFF)

2.ABOUT “Alsavo Pro” APP

Thank you for using the heat pump with WIFI controller,you can remotely control your pool heat pump from your smart phone.The controller information could syncs to“Alsavo Pro” APP via an internet connection (WIFI or 3G/4G). For the first time connection, your smart phone and the WIFI controller must be under the same WIFI network.From then on,your smart phone can use the 3G/4G network to control pool heat pump remotely.

By “Alsavo Pro” APP,you can turn heat pump on or off, adjust water temperature,change mode, timer setting, parameter setting and malfunction checking. It’s just right at your finger tips.

”Alsavo pro” APP is compatible with Android system (6.10 version or above) and IOS system (8.0 version or above).

Currently 10 languages (English,Swedish,French,Spanish,Italian,Czech,Polish,German,Russian, Chinese)is available.

Several heat pumps with WiFi controller could connect to one phone’s app, and several phones’ app could connect one heat pump.

Both ON/OFF and Inverter pool heat pump can be applied to App ‘Alsavo Pro’, when the first time ‘Alsavo Pro’ connect to the machine, it identifies the heat pump is ON/OFF or Inverter then display the related interface.



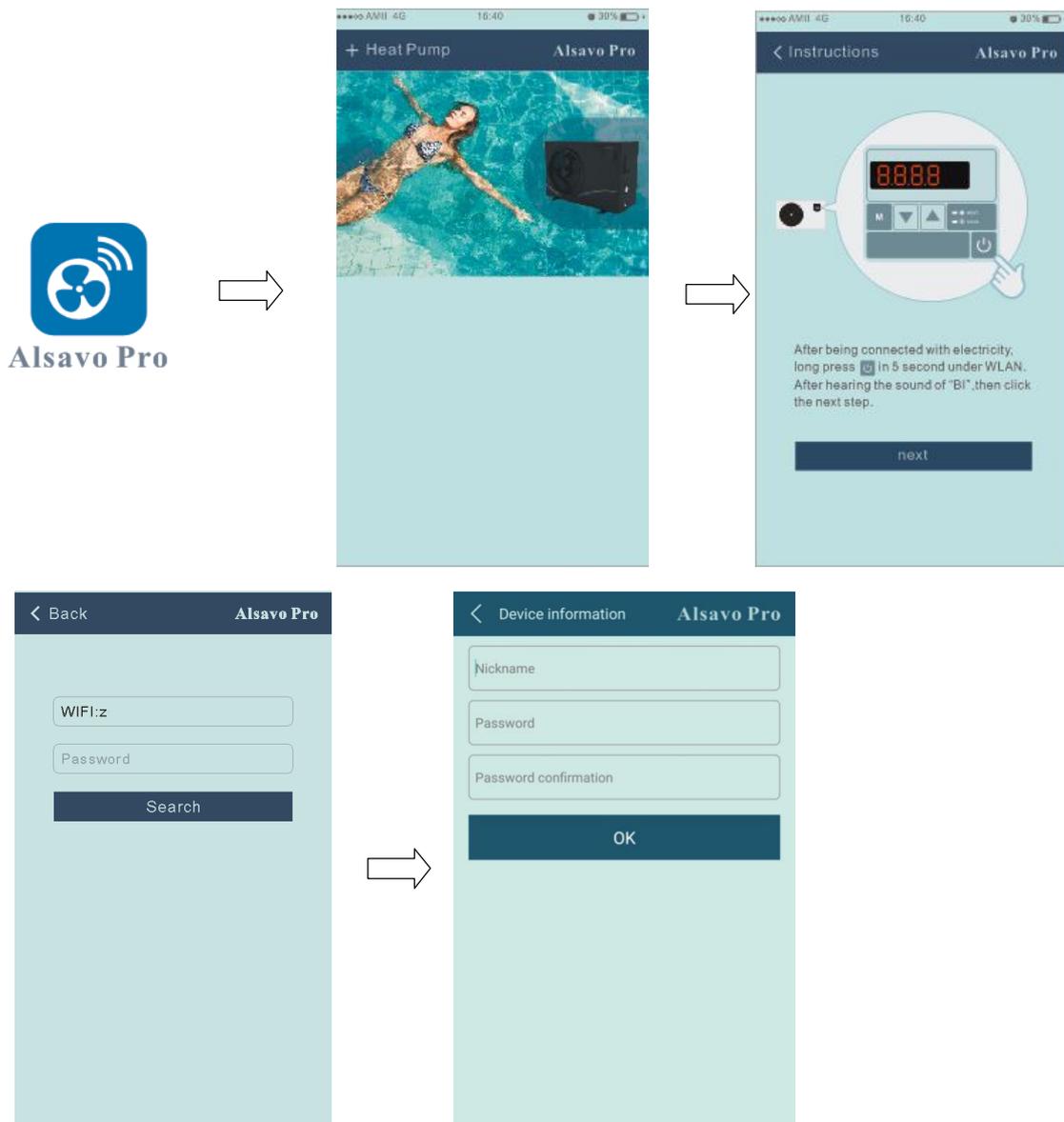
3. "Alsavo Pro" APP Operation

3.1 Firstly search & download the "Alsavo Pro" APP from App store or Google play in your smart phone.

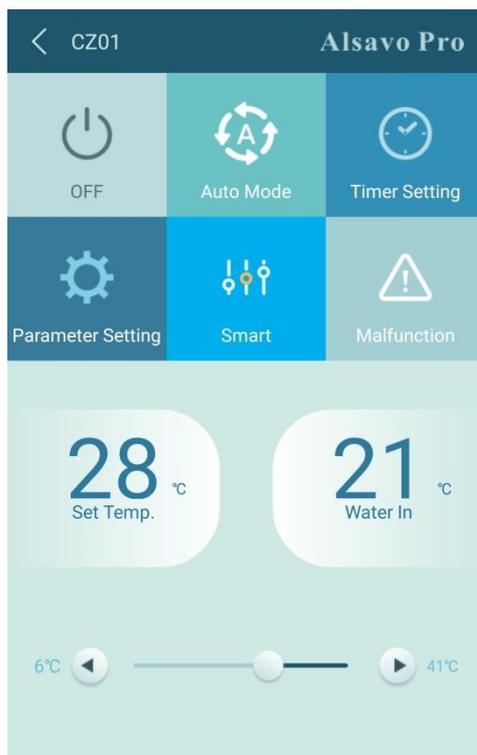
3.2 Open the "Alsavo Pro" app, then Click "+" on the upper left and select the "New device". Then Click "Next" and Enter the current WIFI password to connect. Pls do remember to press "⏻" 5S on the display no matter it's ON or OFF. Or it will indicate "Failed to connect device".

"Nickname and password" interface only appear one time when new heat pump first successful connection. You can name and encrypt this unit.(If unsteady WIFI network,this interface may be missing. You will miss a chance to name and encrypt it. In this case, default password "123456" is available.)

If someone's app is in the same WIFI network as yours, his app could automatically identify your heat pump. And he can operate your heat pump after inputting your password.



3.3 The main interface (inverter)



1) Turn ON/OFF

Click the “” to turn on or off the heat pump

2) Switch the working mode

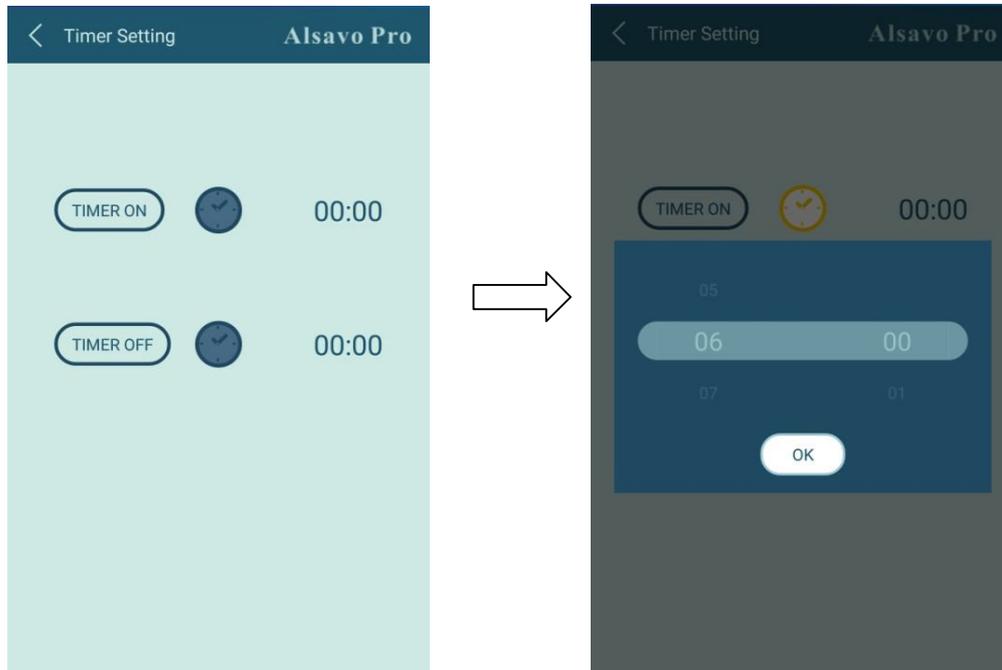
There are three modes (Auto mode, cooling or heating) for the invertboost unit. Click its icons to

switch (Auto mode , heating , cooling )

3) Timer Setting

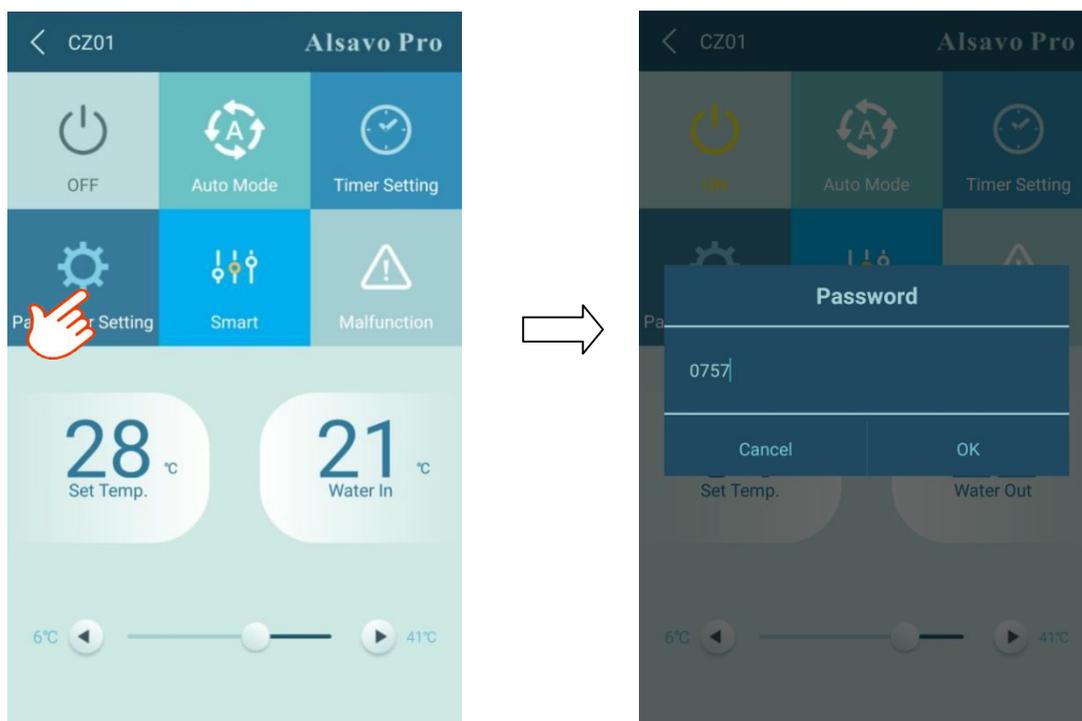
Click  at first time, it turns .Timer on and off will be activated together. Then choose desired time in “timer on” and “timer off”, lastly click “OK” to confirm.

Click“” again, timer on and off will be disable.



4) Parameter checking and setting

Click Parameter , then enter the Password “0757”.It includes Parameter query and setting.



Parameter Query		Default setting	
Water In	22°C	Ambient temperature	23°C
Water Out	22°C	Exhaust temperature	21°C
Heating pipe temperature	22°C	Actual steps of electronic expansion valve	1
Limited frequency code	0	IPM module temperature	25°C
Ambient temperature	23°C	Compressor working frequency	0Hz
Exhaust temperature	21°C	Compressor current	0A
Actual steps of electronic expansion valve	350	DC fan motor speed	0Rpm
IPM module temperature	25°C	Parameter Setting	Range
Compressor working frequency	0Hz	Water pump operating mode	0(0 - 1)
Compressor current	0A	Inlet water temperature calibration	0.0°C(-9.0 - 9.0°C)
DC fan motor speed	0Rpm	Temperature Unit	°C
Parameter Setting	Range	Re-set to factory default setting	

Parameter setting:

1. There are 2 modes option for Water pump operating(1:Always running,0:Depends on the running of compressor)
2. Inlet water temperature calibration: (-9.0 -9.0°C)
3. Temperature unit: °C or °F.
4. When do the re-set to factory default setting, pop-up tips whether you want to reset it.



(5)Switch the running modes

In heating or cooling mode, there are 3 running modes (Silent,Smart,Powerful) for options



While in Auto mode, its default running mode is Smart.

6) Malfunction

If error occurs, the Malfunction icon  turns red . Click it to check the Error.

Error code	Malfunction
PP01	Inlet water temperature sensor failure
PP02	Outlet water temperature sensor failure
PP03	Heating coil pipe sensor failure
PP04	Gas return sensor failure
PP05	Ambient temperature sensor failure
PP06	Exhaust temperature sensor failure
PP07	Anti-freezing protection in Winter
PP08	Low ambient temperature protection
PP10	Coil pipe temperature too high protection under Cooling mode
PP11	T2 too low water temperature protection under cooling mode
EE01	High pressure failure
EE02	Low pressure failure
EE03	Water flow failure
EE04	Water temperature overheating protection under heating mode
EE05	Exhaust temperature too high failure
EE06	Controller malfunction or communication failure
EE07	Compressor current protection
EE08	Communication failure between controller and PCB
EE09	Communication failure between PCB and driver board
EE10	VDC Voltage too high protection
EE11	IPM Module protection
EE12	VDC Voltage too low protection
EE13	Input current too strong protection
EE14	IPM module thermal circuit is abnormal
EE15	IPM module temperature too high protection
EE16	PFC module protection
EE17	DC fan failure
EE18	PFC module thermal circuit is abnormal
EE19	PFC module high temperature protection
EE20	Input power failure
EE21	Software control failure
EE22	Current detection circuit failure
EE23	Compressor start failure
EE24	Ambient temperature device failure on Driving board
EE25	Compressor phase failure
EE26	4-way valve reversal failure
EE27	EEPROM data reading failure in Transfer board
EE28	The inter-chip communication failure on the main control board

7) Set the desired temperature



You can set the target water temperature by adjusting the slider or press “◀” or “▶”.

The setting water temperature on the controller display correspondingly changes after letting go. When the setting water temperature on the display changes, it will be synchronously updated to the APP.

8) Check device information.

In the main interface, click the upper right “Alsavo Pro”. The Device info will show up.



With the serial number and password, others could connect this unit by choosing the existing device

9) Revise the heat pump info in the homepage

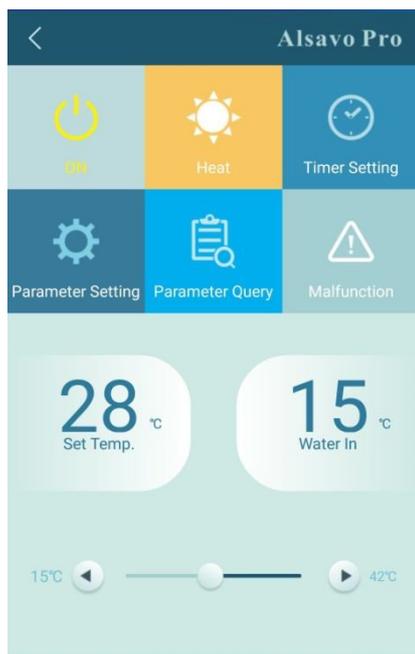
Click “🔧”, you could rename, change its password and delete the device.



In the communication, APP act as a host, while the display as a slave:

1. When the parameters are modified in the APP, accordingly it will be updated in the display.
2. When the parameters changes in the display, also it will be updated in the APP.

3.4 The main interface (ON/OFF)



1) Turn ON/OFF

Click the “” to turn on or off the heat pump

2) Working mode

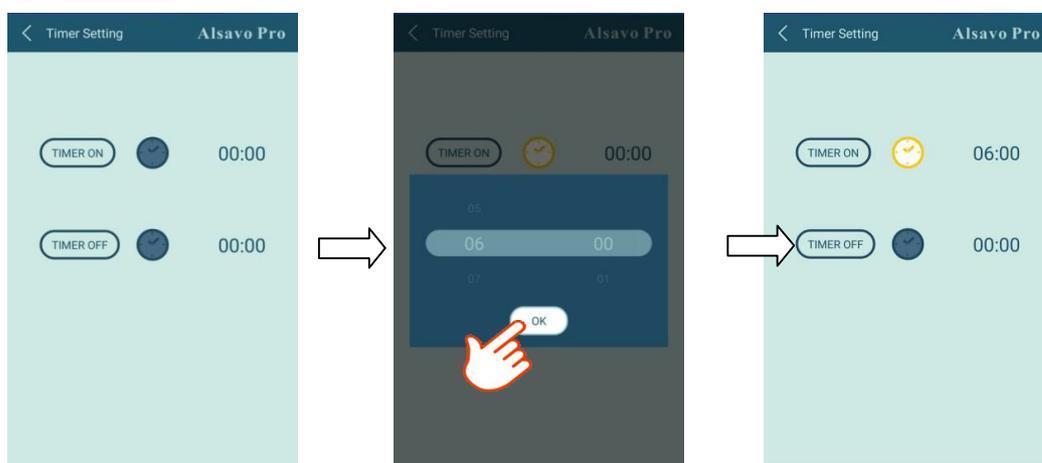
There are two modes (cooling or heating) for the heat pump. Click its icons to switch (heating , cooling )

3) Timer Setting

Click  at first time, it turns . Then choose desired time in “timer on”, lastly click “OK” to confirm.

Click “” again, timer on will be disable.

“Timer off” setting is the same as “timer on”.



4) Parameter setting

Click Parameter , then enter the Password "0757".



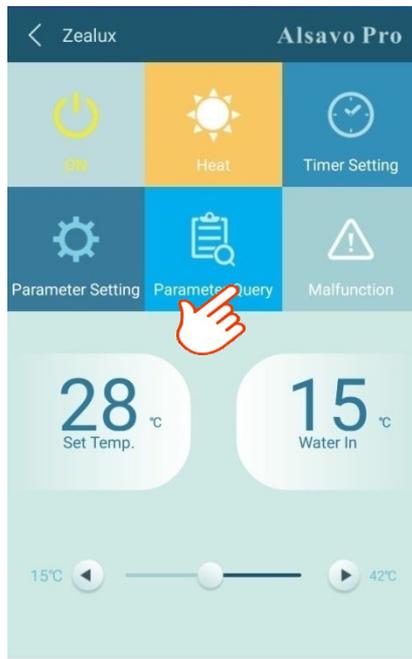
Parameter setting:

1. Entry into defrosting time period: (30-90Minute)
2. Terms of Entry defrosting function: (-30-0°C)
3. Terms of Exit defrosting: (2-30°C)
4. Inlet water temperature calibration: (-9.0 -9.0°C)
5. Temperature unit: °C or °F.
6. When do the re-set to factory default setting, pop-up tips whether you want to reset it.



5) Parameter checking

Click Parameter , then enter the Parameter checking.



Parameter Query		Alsavo Pro
Water temperature setting under cooling mode		10°C
Water temperature setting under Heating mode		33°C
Entry into defrosting time period		40Minute
Terms of Entry defrosting function		-7°C
Terms of Exit defrosting		20°C
Time of Exit defrosting		12Minute
Mode selection of Electronic expansion valve		1
Superheat for heating target		3°C
Superheat for cooling target		-2°C
Manual adjustment steps of electronic expansion valve		350
Actual steps of electronic expansion valve		350
Inlet water temperature calibration		16.6°C

6) Malfunction

If error occurs, the Malfunction icon  turns red . Click it to check the Error.

Malfunction		Alsavo Pro
Error code	Malfunction	
PP1	Inlet water temperature sensor failure	
PP2	Outlet water temperature sensor failure	
PP3	Heating piping sensor failure	
PP4	Gas return sensor failure	
PP5	Ambient temperature sensor failure	
PP6	Temperature difference between water in and water	
PP7	Cooling water too cold ; Antifreeze protection in	
PP8	Exhaust temperature sensor failure	
EE1	High pressure failure	
EE2	Low pressure failure	

Malfunction		Alsavo Pro
PP4	Gas return sensor failure	
PP5	Ambient temperature sensor failure	
PP6	Temperature difference between water in and water	
PP7	Cooling water too cold ; Antifreeze protection in	
PP8	Exhaust temperature sensor failure	
EE1	High pressure failure	
EE2	Low pressure failure	
EE3/ON	No water flux or Water flow switch failure	
EE4	Power supply connection wrong (for 3 phases)	
EE5	Temperature difference between water in and water	
EE8	Communication failure between the controller and	

7) Set the desired temperature,

8) Check device information,

9) Revise the heat pump info in the homepage is the same as the inverter one.

4. Troubleshooting

4.1 Better first connection

For quick and better connection between the 'Alsavo Pro' APP and controller, it's suggested that APP operation goes on under the WIFI network shared by few users in case the limited WIFI connection or test under another phone's hotspot.

And try the below step:

① Firstly, reset the controller.

For the inverter controller, press the "ON/OFF" button + "M" button at the same time for 10s.



For the ON/OFF controller, press the "ON/OFF" button + "Time" button at the same time for 10s.



Both controllers will show "0000" after successfully factory reset.

② Secondly, reset the WIFI Module.

Press the "ON/OFF" button for 5s. The controller will show "FI 1".

Then press "ON/OFF" button again for 5s to exit.



(Inverboost controller)



(ON/OFF controller)

③ Please check and close the unnecessary Apps in the Phone to release more memory. So that 'Alsavo Pro' APP goes more smoothly.

And please try to press the 'ON/OFF' button for 5s again if it takes too much time to wait for the connection.

4.2 Password forget

If forget password, please reset the WIFI Module on the controller by pressing ON/OFF" button for 5s twice as the above 4.1.2, then follow the operation to do the connection once again. According to the operation of 3.2 'New Device' connecting, it doesn't require the old password, just define a new password.

This reset WIFI Module operation also is available for the end user for the new connection after the installer debugs this APP.