



## MR. PERFECT

### INVERPAD TURBO POOL HEAT PUMP



## USER MANUAL

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## **A. Foreward**

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Thank you for choosing our inverter pool heat pump which is designed for a more silent and energy saving user experience. It is an ideal way for green pool heating.

We hope you'll enjoy using our heat pumps.

Thank you!

## B. Safety Precautions

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We have provided important safety messages in this manual and on your heat pump.

Please always read and obey all safety messages.

**Environment friendly R32 Refrigerant is used for this heat pump.**

### 1. Warning



The WARNING sign denotes a hazard. It calls attention to a procedure, practice, or the like, which, if not correctly performed or adhered to, could result in personal injury or injury to a third party. These signs are rare, but are extremely important.

	a. Keep the heat pump away from fire source.
	b. It must be placed in well-ventilated area; indoor or closed areas are not allowed.
	c. Repair and disposal must be carried out by trained service personnel
	d. Heat pump to be completely vacuumed before welding. Welding can only be carried out by professional personnel in a service centre.

## 2. Attention

- a. Please read the following instructions before installation, use and maintenance.
- b. Installation must be done by professional staff only in accordance with this manual.
- c. A leakage test must be performed after installation.
- d. Except for the methods recommended by the manufacturer, do not use any methods to accelerate the defrosting process or clean the frosted parts.
- e. If a repair is required, please contact the nearest after-sales service centre. The repair process must be strictly in accordance with the manual. All repair practices by a non-professional is prohibited.
- f. Set a comfortable water temperature avoid overheating or overcooling.
- g. Please don't stack substances which will block air flow near inlet or outlet area, otherwise the efficiency of the heat pump will be reduced or even stopped.
- h. Don't use or stock combustible gas or liquid such as thinners, paint and fuel to avoid fire.
- i. In order to optimize the heating effect, please install heat preservation insulation on pipes between the swimming pool and the heat pump and use a heat retention cover on the swimming pool.
- j. Connecting pipes of the swimming pool and the heat pump should be  $\leq 10\text{m}$ .
- k. This unit can only be installed outdoors.
- l. This unit can only be connected to a power source with a single complete cord.

## 3. Safety

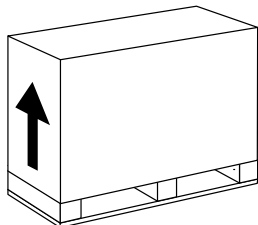
- a. Please keep the main power supply switch far away from children.
- b. When a power cut happens during operation and later the power is restored, the heat pump will start up.
- c. Please switch off the main power supply in lightning and stormy weather to prevent the machine from possible damage caused by the lightning.
- d. Installation and any repairing should be conducted in an area with good ventilation. The ignition source is prohibited during the operation.
- e. Safety inspection must be carried out before the maintenance or repair to heat pumps with R32 gas, in order to minimize the risk.
- f. If R32 gas leaks during the installation process, all operations must be stopped immediately and call the service centre.

## C. About your heat pump

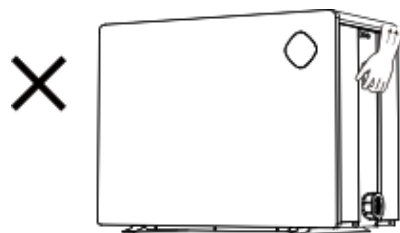
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### 1. Transportation

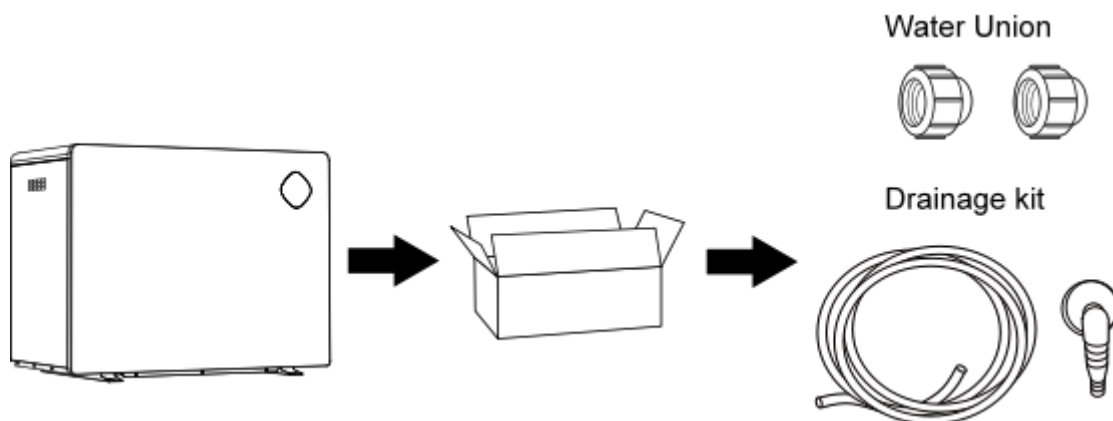
- a. Always keep upright



- b. Do not lift the water union  
(Otherwise, the titanium heat exchanger may be damaged)



### 2. Accessories



### 3. Features

- a. Turbo fan
- b. DC Twin-rotary inverter compressor
- c. DC Brushless fan motor
- d. EEV Technology
- e. Reverse cycle defrosting with 4-way valve
- f. High efficiency twisted titanium heat exchanger
- g. Sensitive and accurate temp control and water temp display
- h. High pressure and low-pressure protection
- i. Full protection on electrical system

## 4. Operating Range




To provide you comfort and pleasure, please set swimming pool water temperature efficiently and economically.

- a. The heat pump can work between air  $-15^{\circ}\text{C} \sim 43^{\circ}\text{C}$ ,
- b. Temperature of heating  $18^{\circ}\text{C} \sim 40^{\circ}\text{C}$
- c. Temperature of cooling  $12^{\circ}\text{C} \sim 30^{\circ}\text{C}$

Ideal operation range is between air  $15^{\circ}\text{C} \sim 25^{\circ}\text{C}$ .

## 5. Introduction of Different Modes

- a. The heat pump has three modes: Power, Perfect and Silence.
- b. They have different strengths under different conditions.

Mode	Modes	Strength
	Power mode	Heating capacity: 100% ~ 20% capacity Fast heating
	Perfect mode	Heating capacity: 80% ~ 20% capacity Automatic adjustment according to ambient and water temperature, intelligent optimization. High efficiency and energy saving
	Silence mode	Heating capacity: 50% ~ 20% capacity Operating at night.

To obtain maximum heat output it is assumed the pool has the following conditions:

- ~ Private pool use.
- ~ Pool has been installed below ground.
- ~ Water table below pool construction depth.
- ~ Average water depth 1.30m.
- ~ Pool is covered for minimum 20 hours per day.
- ~ Filtration cycle 12-24 hours per day dependent on summer or extended season requirement – please refer to your dealer for operating advice.

## 6. Technical Parameter

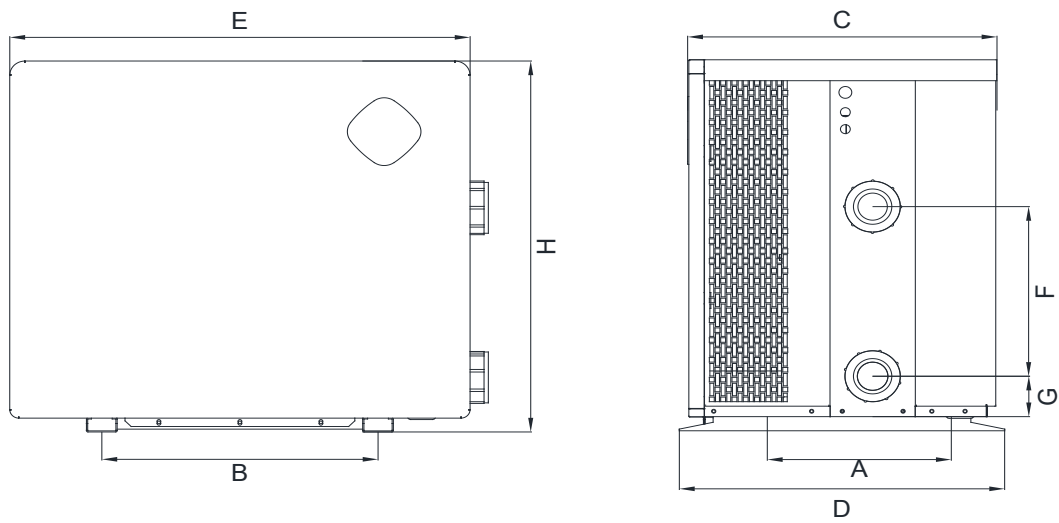
Model		MPC220	MPC270	MPC270s	MPC320	MPC320s	MPC410s
Technology		InverPad® Turbo (Patented)					
Operating air temperature (°C)		-15°C~43°C					
Advised pool volume (m3) *		40~80	50~95	50~95	60~120	60~120	85~160
PERFORMANCE CONDITION: Air 27°C/ Water 27°C/ Humid. 80%							
Turbo Mode	Heating capacity (kW)	22.5	26.5	26.5	31.5	31.5	40.5
Perfect Mode	Heating capacity (kW)	18.0	20.6	20.6	26.8	26.8	34.5
	COP	15.5~7.4	15.2~7.3	15.2~7.2	16.0~7.2	15.8~7.2	16.0~7.0
	Average COP	11.8	11.5	11.3	11.6	11.6	11.5
PERFORMANCE CONDITION: Air 15°C/ Water 26°C/ Humid. 70%							
Turbo Mode	Heating capacity (kW)	15.0	18.0	18	21.8	22.1	29.0
Perfect Mode	Heating capacity (kW)	12.6	14.4	14.6	18.0	18.0	23.9
	COP	8.2~5.1	7.9~5.2	7.9~5.1	8.0~5.2	8.0~5.0	8.3~5.1
	Average COP	7.0	6.8	6.8	6.9	7.0	7.0
PERFORMANCE CONDITION: Air 35°C/ Water 28°C/ Humid. 80%							
Cooling capacity (kW)		8.1	10.2	10.2	12.2	12.3	15.0
TECHNICAL SPECIFICATIONS							
Compressor		Twin-rotary Mitsubishi DC Compressor					
Fan Motor		Turbo Fan					
Casing		Aluminum-alloy Casing					
Power supply		230V 1Ph		400V 3Ph	230V 1Ph	400V 3Ph	
Rated input power (kW)		0.45~3.33	0.54~4.00	0.54~4.0	0.59~4.36	0.60~4.42	0.78~5.8
Input power at 50% speed (kW)		0.90	1.06	1.08	1.30	1.29	1.71
Rated input current (A)		1.96~14.48	2.35~17.39	0.78~5.80	2.56~18.96	0.86~6.41	1.13~8.41
Sound level at 1m dB(A)		39.5~49.8	39.8~50.2	39.8~50.0	40.3~50.8	40.5~50.9	40.6~51.3
Sound level 50% at 1m dB(A)		<u>43.0</u>	<u>43.1</u>	43.4	45.1	45.6	45.7
Sound level at 10 m dB(A)		19.5~29.8	19.8~30.2	19.7~30.0	20.3~30.8	20.5~30.9	20.6~31.3
Advised water flow (m³/h)		6~9	8~10	8~10	10~12	10~12	12~18
Water connection (mm)		50					

### Remarks:

This heat pump is able to perform normally within air temp -15°C~+43°C. Efficiency will not be guaranteed out of this range. Please take into consideration that the pool heat pump performance and parameters are different under various conditions.

Related parameters are subject to adjustment periodically for technical improvement without further notice. For details, please refer to the nameplate.

## 7. Dimensions



Size(mm) / Name / Model	A	B	C	D	E	F	G	H
MPC220	510	680	504	530	980	460	75	756
MPC270	520	760	514	540	1135	460	75	756
MPC320	520	720	512	540	1029	640	75	1107
MPC320s	520	720	512	540	1029	640	75	1107
MPC410s	520	760	512	540	1139	650	75	1106

※ Above data is subject to modification without notice.

### Note:

The above swimming pool heat pump specification drawing is for installation reference only to technical staff.


## D. Installation Guidance

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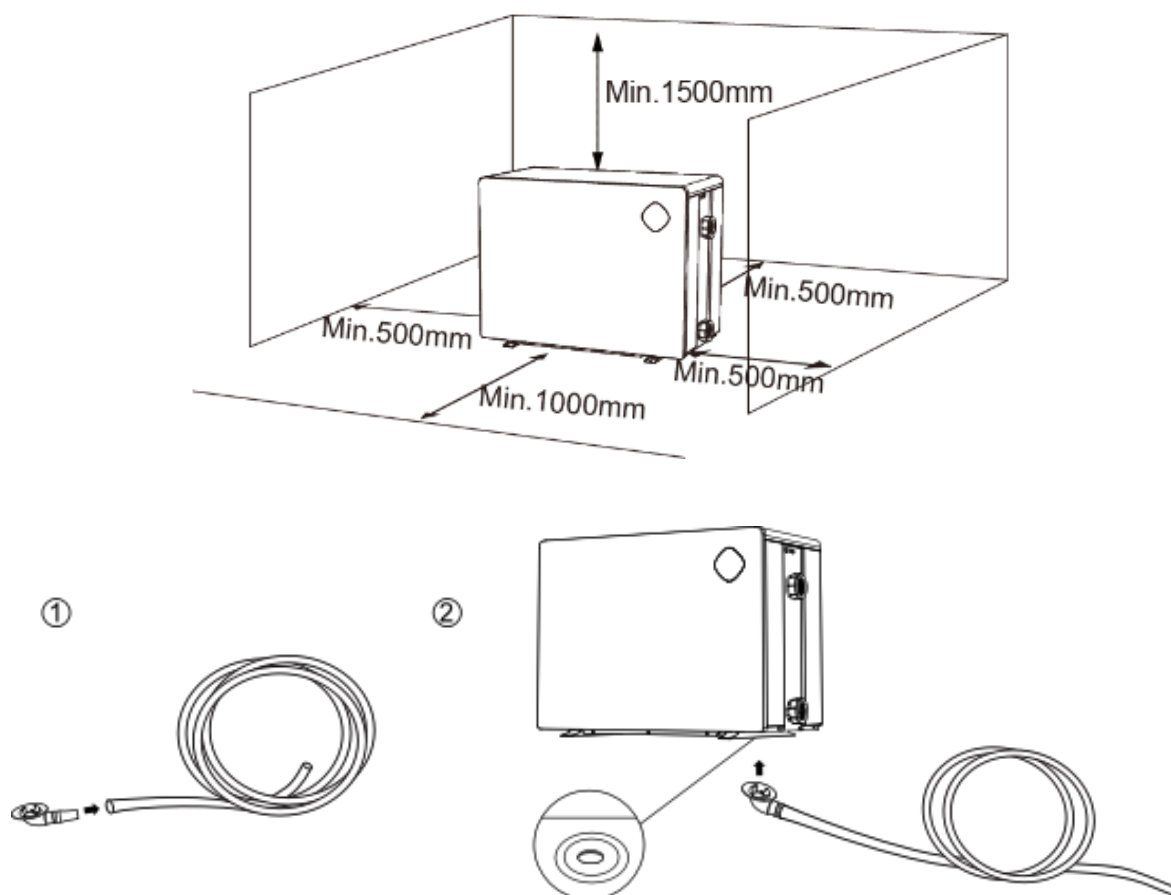
### 1. Installation Reminder

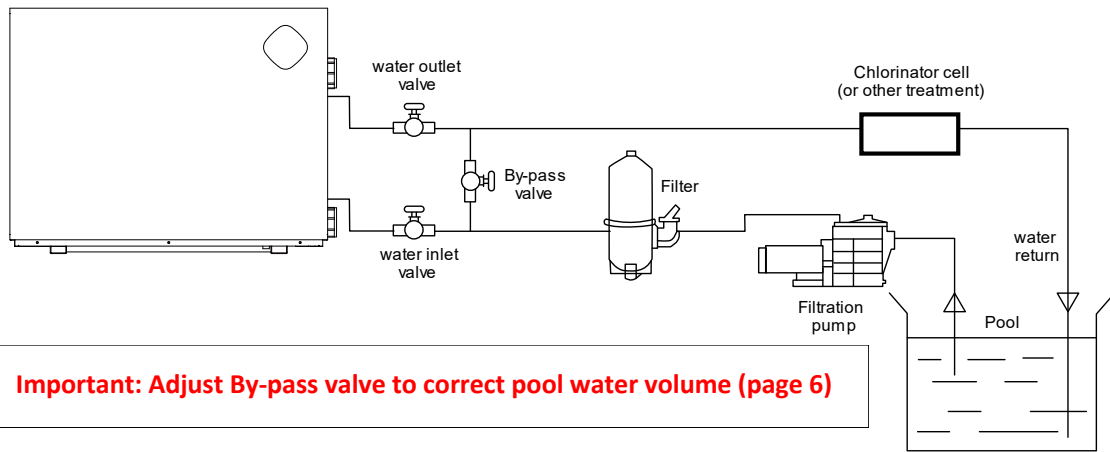
Only professional staff are allowed to install the heat pump. The users are not qualified to install by themselves, otherwise the heat pump might become damaged and unsafe for a users' safety.

#### a. Installation distance, drainpipe installation and water pipe connection

 The inverter pool heat pump should be installed in a good, ventilated place. The distance should be greater than the following;

Installation distance



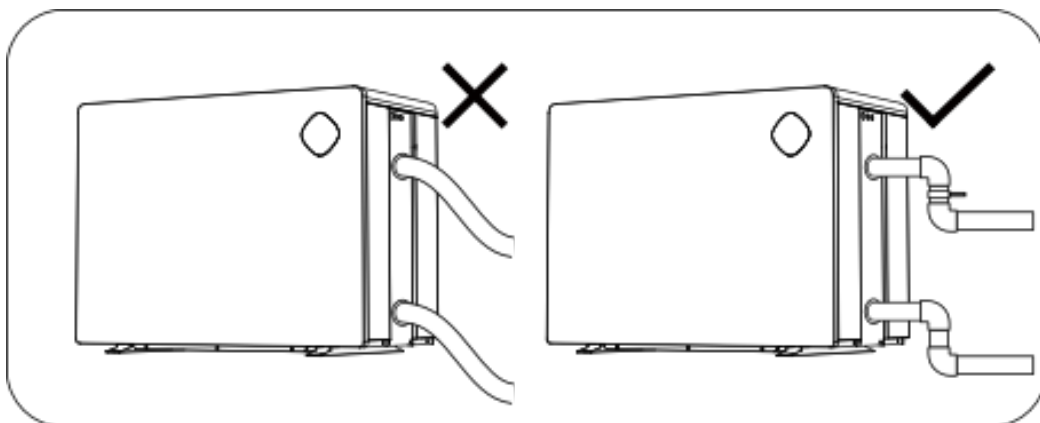


- 1) The frame must be fixed by bolts (M10) to a concrete foundation or brackets. The concrete foundation must be solid and fastened; the bracket must be strong enough and antirust treated; **For UK installations Anti-vibration feet are supplied.**
- 2) Please don't stack substances that will block air flow near the inlet or outlet area and there is no barrier within 50cm behind the machine, or it will affect the efficiency of the heat pump and even stop the machine.
- 3) The machine needs an appended pump (Supplied by the user). The recommended pump specification-flow: refer to Technical Parameter, Max lift  $\geq 10\text{m}$ .
- 4) When the machine is running, there will be condensation water discharged from the bottom, please pay attention to it. Please hold the drainage nozzle (accessory) into the hole and clip it well and then connect a pipe to drain the condensation water out.

#### b. Water pipe connection



The inlet and outlet water unions can't stand the weight of soft pipes. The heat pump must be connected by hard pipes!

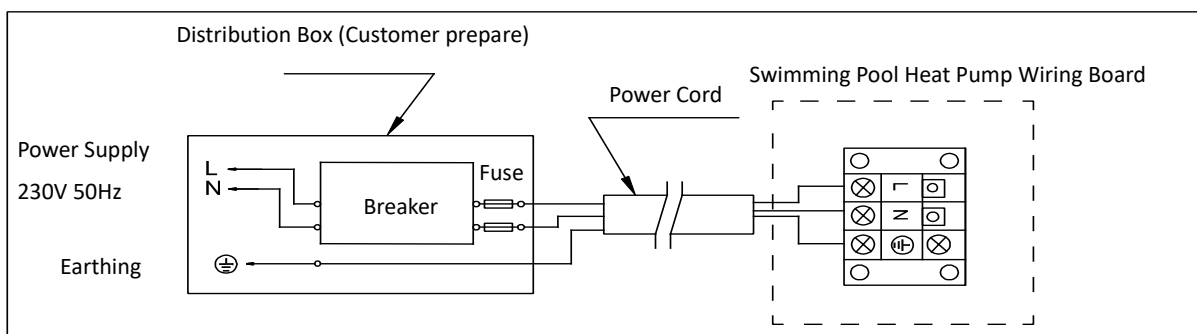


## 2. Warning

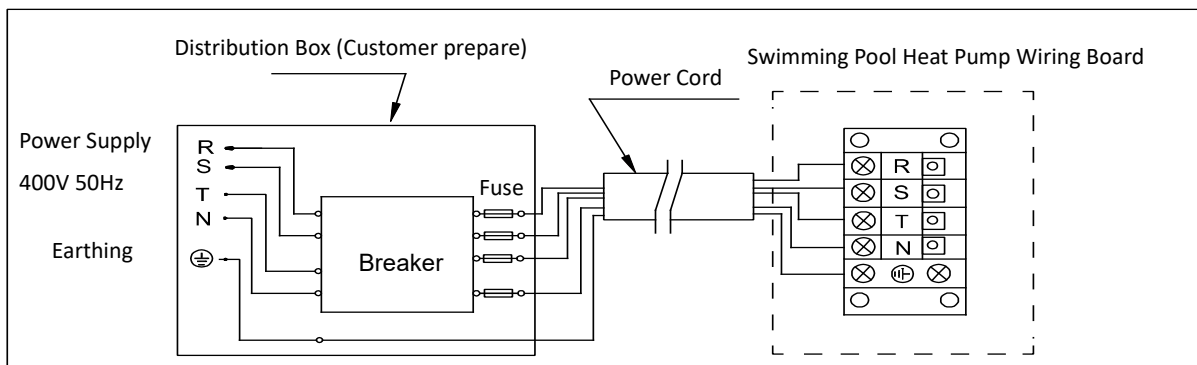
- Connect to an appropriate power supply, the voltage should comply with the rated voltage of the products.
- The heat pump must be earthed.
- Wiring must be handled by a professional technician according to the circuit diagram.
- Set leakage protector according to the local code for wiring (leakage operating current  $\leq 30\text{mA}$ ).
- The layout of the power cable and signal cable should be orderly and not affecting each other; the cross-sectional area of the cables can be appropriately enlarged according to the environmental conditions (such as ambient temperature, direct sunlight, rainfall, network voltage, cable length)

## 3. Electric Wiring Diagram

### a. For power supply: 230V 50Hz




### b. For power supply: 400V 50Hz



### UK Colour Coding: RSTN

L1 - Brown	Yellow - R
L2 - Black	Green - S
L3 - Grey	Red - T
Neutral - Blue	Blue - N
<b>Earth - Green Yellow</b>	

### Note:

-  Must be hard wired, a plug is not allowed.
- The swimming pool heat pump must be earthed.

#### 4. References for Protecting Devices and Cable Specification

MODEL		MPC220	MPC270	MPC320	MPC320S	MPC410S
Breaker	Rated Current (A)	18	20	25	10	12
	Rated Residual Action Current (mA)	30	30	30	30	30
Fuse (A)		18	20	25	10	12
Power Cord (mm <sup>2</sup> )		3x4	3x4	3x6	5x2.5	5x2.5
Signal Cable (mm <sup>2</sup> )		3x0.5	3x0.5	3x0.5	3x0.5	3x0.5
Maximum Current (A)		16	18	21	8.0	10.5

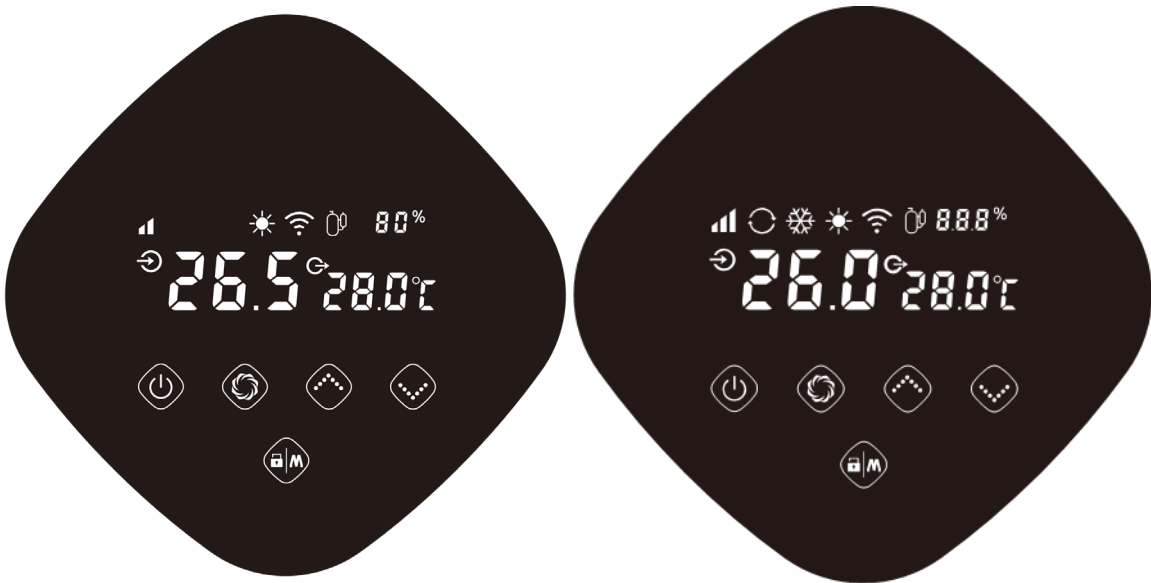
※ The above data is subject to modification without notice.

**Note:**

1. The above data is adapted to a power cord < 10m. If a power cord is 10m ~ 40m, the wire diameter must be increased. The signal cable can be extended to 50m maximum.

E. Operation Guidance

1. Key Function



Symbol	Heating & cooling modes
	1. Power On/Off 2. Wi-Fi setting
	1. Lock/Unlock Screen 2. Heating mode (18-40°C) 3. Cooling mode (12-30°C) 4. Auto mode (12-40°C)
	1. Power 2. Perfect 3. Silence
	1. Temperature Setting

Attention:

- i. The controller has a power-down memory function.
- ii. The buttons will turn dark when it's locked.








## 2. Screen Display

### a. Plugged without turning on



### b. Power on



	Heating mode
	Cooling mode
	Auto mode
	Running speed percentage
	Wi-Fi connection
	Inlet
	Outlet

### 3. Operation Instructions

#### a. Screen Lock

- 1) There is an automatic screen lock function. No operation for more than 30 seconds, the screen will automatically lock and the screen will dim while the lock button will light on and the other button light will be off.



- 2) Press " " for 3 seconds to unlock the screen; screen and buttons will light on.



- 3) Press " " for 3 seconds to lock the screen; screen will be dark; lock button lights on and other buttons will light off.



- 4) Only " " works under off-screen; other buttons work after screen on.



- 5) Lock Period: only " " lights on. If with Wi-Fi, " " and " " light on.



#### b. Power On



Press " " for 3 seconds to unlock screen. Press " " to power on machine.



#### c. Temperature Setting



Press " " and " " to display and set temperature under screen on.

#### d. Mode Selection

- 1) Heating/Cooling/Auto



Press " " to switch among heating " ", cooling " " and auto mode " ".



- 1) Heating mode " ": Water temperature setting range(18-40°C)



- 2) Cooling mode " ": Water temperature setting range(12~30°C)









- 3) Auto mode " ": Water temperature setting range(12~40°C)

\* When water inlet temperature is higher than setting point, automatic cooling mode starts.

\* When water inlet temperature is lower than setting point, automatic heating mode starts.

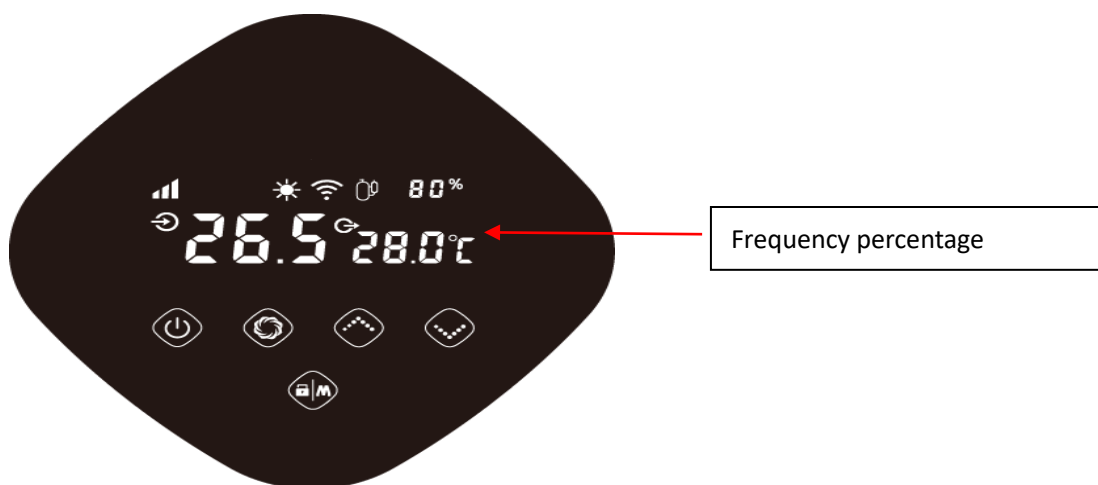
### e. Power/Perfect/ Silence mode

Heating mode: Press " " to switch among Power mode , Perfect mode  and Silence mode .

Cooling and Auto mode: only support Power mode , Perfect mode .



### f. Operating Frequency


Compressor icon lights on during operation. Operation frequency speed will show on screen as below:





### g. Wi-Fi

#### 1) Wi-Fi connection


When the screen is on, press " "for 3 seconds, after " " flashing, enter Wi-Fi connection.

Connect Wi-Fi on mobile phone and input password and then control equipment by Wi-Fi. When APP connects Wi-Fi successfully, " " lights on.


#### 2) WIFI reset (WIFI password change or the network configuration change)



Press " " for 10 seconds, after " " slowly flashing for 60s and lights off.

Clear configuration records and repeat step 1).

3) " " will always stay on after connection.

## h. Defrosting

- 1) Automatic defrosting: When machine is auto defrosting,  will flash, and return to previous working mode when it finishes.
- 2) Manual Defrosting: To enter forced defrosting mode, the compressor must be working for more than 10 minutes.


in heating mode, press "" and "" on touch controller simultaneously for 5 seconds to start forced defrosting.



(Remarks: the interval between manual defrosting should be more than 35 minutes.)


Operation and end way of Automatic and Manual defrosting is the same.

## i. Advanced Applications (Professional Operation)

- 1) Running Status Checking

Press "" for 5 seconds to enter running status checking. During this time, the display will show the status symbol

"C0" and its corresponding value. Change status through "" and "" to check corresponding value. Press

"" to quit "Running Status Checking".

Running status checking table:

Symbol	Content	Unit
C0	Inlet water temp	°C
C1	Outlet water temp	°C
C2	Ambient temp	°C
C3	Exhaust gas temp	°C
C4	Evaporator coil pipe temp	°C
C5	Return gas temp	°C
C6	Cooling coil pipe temp	°C
C9	Cooling plate temp	°C
C10	EEV opening angle	P
C11	DC motor fan speed	r/min

## F. Testing

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### 1. Inspect Heat Pump Before Use

- a. The ventilating device and outlets are operating adequately and are not obstructed.
- b. It's prohibited to install refrigeration pipe or components in a corrosive environment.
- c. Inspect the electric wiring on basis of the electric wiring diagram and earthing connection.
- d. Double confirm the main machine power switch should be off.
- e. Check temperature setting.
- f. Inspect the air inlet and outlet.

### 2. Leakage Detection Notice and Method



- a. Leakage checking is prohibited in closed areas.
- b. The ignition source is prohibited during the leakage inspection. A halide torch (or any other detector using a naked flame) shall not be used.
- c. Leakage detection fluids can be applied with most refrigerants but the use of detergents containing chlorine shall be avoided as the chlorine may react with the refrigerant and corrode the copper pipe.
- d. Vacuumize completely before welding. Welding can only be carried out by professional personnel in a service centre.
- e. Please stop using while gas leakage occurs and contact professional personnel in a service centre.

### 3. Trial

- a. The user must “Start the Pump before the Machine and Turn off the Machine before the Pump”, or the machine will be damaged.
- b. Before starting the heat pump, please check for any leakage of water and set the appropriate temperature, then switch on the power.
- c. In order to protect the swimming pool heat pump, the machine is equipped with a time lag starting function, the fan will run 1 minute earlier than the compressor when starting the machine and it will stop running 1 minute later than the compressor when powering off the machine.
- d. After the swimming pool heat pump start-up, please kindly check for any abnormal noise from the machine.

## G. Maintenance – (SUMMER) - for a Service Technician

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**“CUT OFF” the power supply to the heat pump before cleaning or servicing.**

In the Summer season, we recommend the evaporator coil/condenser is periodically cleaned by a service technician to prevent clogging and enhance the efficiency of the heat pump.

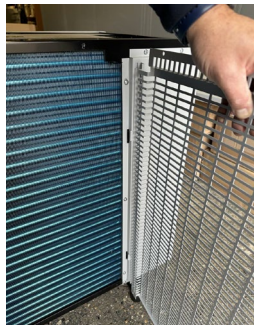
1. Remove top cover and rear panel by removing locating screws.



### **Important!**

The summer maintenance should be assigned to a professional technician who can unscrew the panel and perform evaporator cleaning.

2. Unclip the back panel, lift and remove it to expose the condenser. **WARNING!** — fins are extremely sharp. DO NOT touch or attempt to clean with bare hands.



Do Not Touch

3. Use a cleaning agent, compressed air, vacuum cleaner or brush to remove debris. To straighten any fins, use a specialist combing tool as shown below.



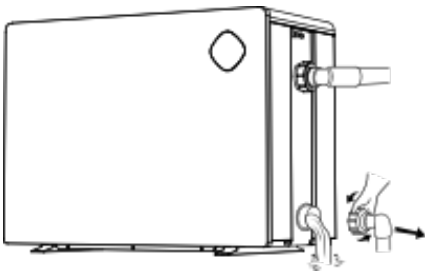
## G. Maintenance (WINTER) – Homeowner

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**“CUT OFF” power supply of the heat pump before cleaning, examination and repairing**

4. In the winter season when the pool is no longer in use:
  - a. Cut off the power supply to prevent any machine damage.
  - b. Heat pump (heat exchanger) **MUST** be drained to remove all water from heater. If using the machine at ambient temperatures below 2°C, water must be kept flowing.
  - c. Cover the machine body when not in use.



**Important!**

Unscrew the plumbing union(s) to the water nozzle of inlet pipe to let the water flow out.

*When the water in machine freezes in winter season, the titanium heat exchanger may be damaged. This is NOT covered under warranty.*

5. Please clean this machine with household detergents or clean water, NEVER use gasoline, thinners, or any similar fuel.
6. Check bolts, cables, and connections regularly.
7. If repair or scrap is required, please contact an authorised service centre nearby.
8. Do not attempt to work on the equipment by yourself. Improper operation may cause danger.
9. In case of risk, a safety inspection must be carried out before the maintenance or repair of heat pumps with R32 gas by an authorised refrigerant technician.

## H. Trouble Shooting for Common Faults

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### 1. Repairing Guidance



**WARNING:**

- a. If repair or scrap is required, please contact authorised service centre nearby.
- b. Requirements for Service Personnel.
- c. Any person who is involved with working on or breaking into a refrigerant circuit should hold a current valid certificate from an industry-accredited assessment authority, which authorises their competence to handle refrigerants safely in accordance with an industry-recognised assessment specification.
- d. Do not attempt to work on the equipment by yourself. Improper operation may cause danger.
- e. Strictly comply with the manufacturer's requirements when charging R32 gas and equipment maintenance. This chapter focuses on special maintenance requirements for a swimming pool heat pump with R32 gas. Please refer to the technical service manual for detailed maintenance operations.
- f. Vacuumize completely before welding. Welding can only be carried out by professional personnel in a service centre.

## 2. Failure Solution and Code

Failure	Reason	Solution
<b>When powered on, the controller displays a code</b>	Startup code	This is not a failure. Please wait until it disappears.
<b>Unresponsive controller</b>	Some models have screen lock function.	Refer to the manual to unlock the screen
<b>Heat pump doesn't run</b>	Improper operation	Refer to the manual
	No power	Wait until the power recovers
	Unit is powered off	Switch on the power
	Burned fuse	Check and change the fuse
	The breaker is off	Check and turn on the breaker
	Voltage anomaly	Inspection by a professional
<b>Unit suddenly starts or stops running</b>	The unit may be in defrost. At this point the fan stops spinning and the heat indicator on the controller will flash	Not a failure, the unit will switch back after defrosting
	Some models have a timed power on/off function.	Refer to the manual to disable this function
	Once the set temperature is reached, the heat pump will go into standby	This is not a failure
<b>Air is blowing out, but unit is not heating well</b>	Evaporator blocked	Clear the blockage
	Air inlet and/or outlet blocked	Clear the blockage
	3 minutes start delay protection for compressor	Wait patiently
<b>Display normal, but no heating</b>	Set temperature too low	Set to proper temperature
	3 minutes start delay protection for compressor	Wait patiently
<b>Unit is releasing white smoke</b>	The unit is defrosting	This is not a failure. Please wait until unit finished defrosting.
<b>Unit is leaking water</b>	In heating mode, condensation will be generated on the evaporator and released through the bottom of the unit	This is not a failure
If above solutions don't work, please contact your installer with detailed information and your model number. Don't try to repair it yourself.		

### Note:

If the following conditions happen, please stop the machine immediately, cut off the power supply and then contact your dealer:

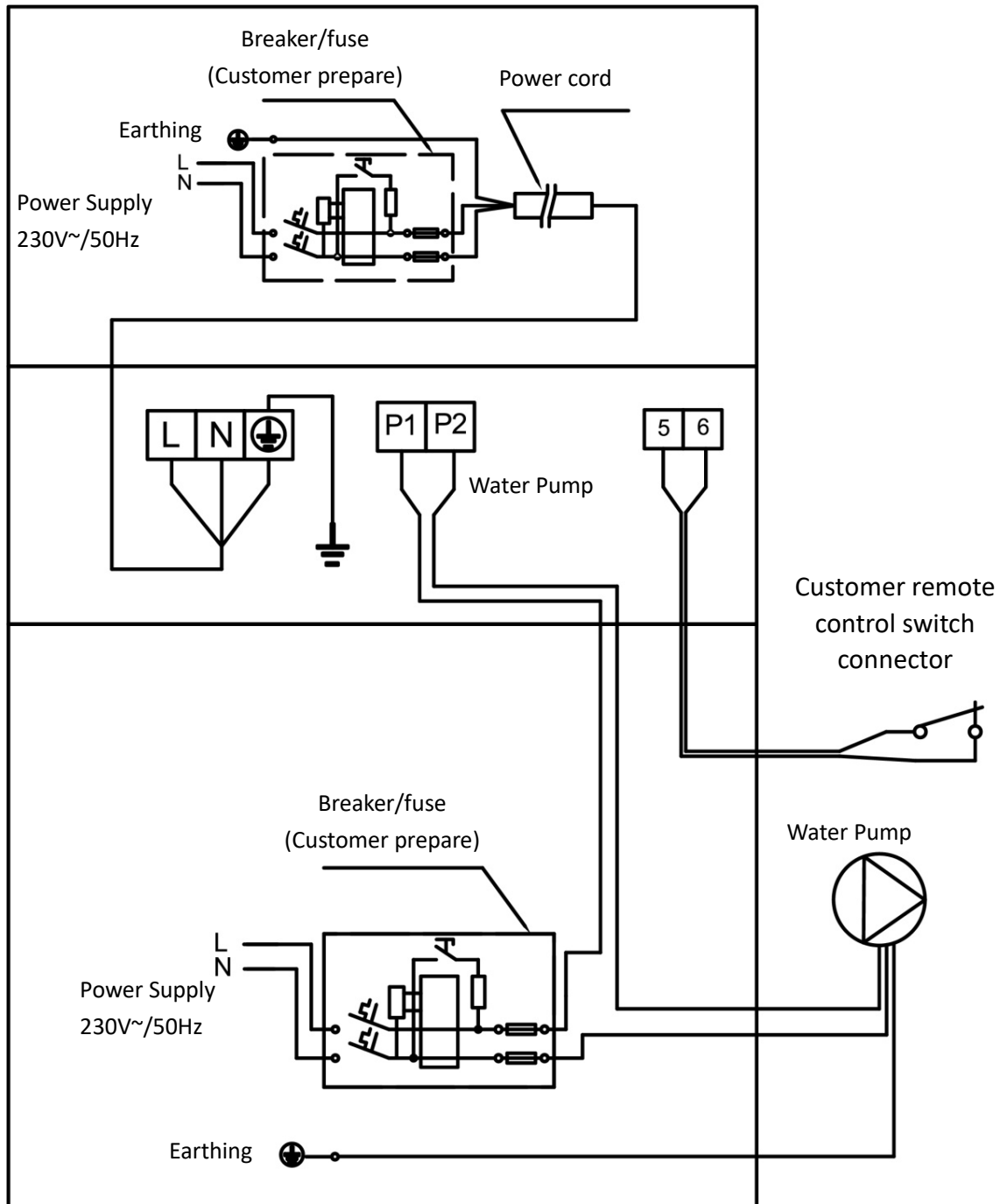
1. Unit has stopped running because of external factors.
2. The fuse is frequently broken or leakage circuit breaker jumped.

## Protection & Failure code

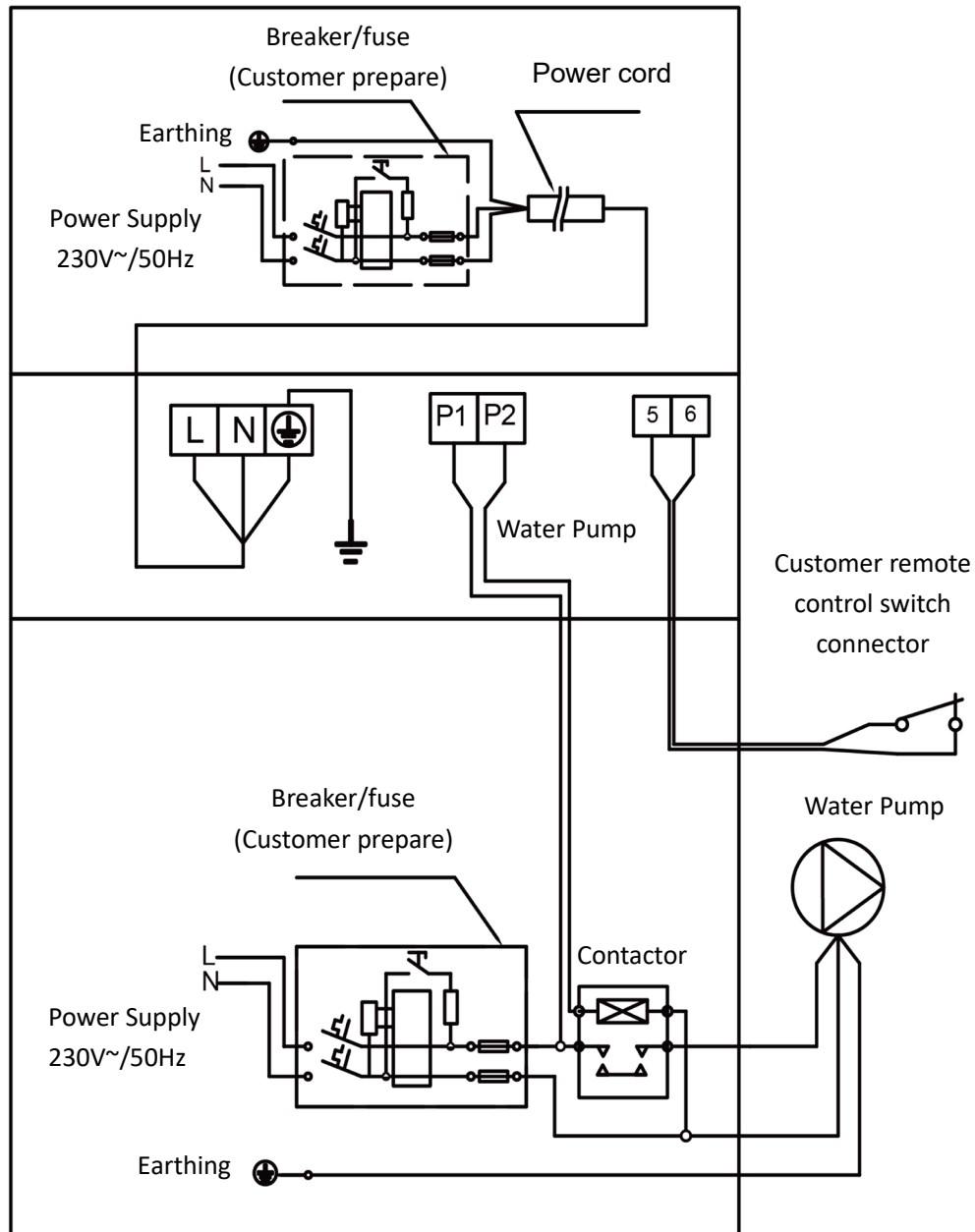
NO.	Display	Protection Code Description
1	E3	No water protection
2	E5	Power supply excesses operation range (not a failure)
3	E6	Excessive temp difference between inlet and outlet water (Insufficient water flow protection)
4	Eb	Ambient temperature too high or too low protection (not a failure)
5	Ed	Anti-freezing reminder (not a failure)
NO.	Display	Failure Code Description
1	E1	High pressure protection
2	E2	Low pressure protection
3	E4	3 phase sequence protection (three phase only)
4	E7	Water outlet temp too high or too low protection
5	E8	High exhaust temp protection
6	EA	Heat exchanger overheat protection/Evaporator overheat protection (only at cooling mode)
7	P0	Controller communication failure
8	P1	Water inlet temp sensor failure
9	P2	Water outlet temp sensor failure
10	P3	Gas exhaust temp sensor failure
11	P4	Evaporator coil pipe temp sensor failure
12	P5	Gas return temp sensor failure
13	P6	Cooling coil pipe temp sensor failure
14	P7	Ambient temp sensor failure
15	P8	Cooling plate temp. sensor failure
16	P9	Current sensor failure
17	PA	Restart memory failure
18	F1	Compressor driver module failure
19	F2	PFC module failure
20	F3	Compressor start failure
21	F4	Compressor running failure
22	F5	Inverter board over current protection
23	F6	Inverter board overheat protection
24	F7	Current protection
25	F8	Cooling plate overheat protection
26	F9	Fan motor failure
27	Fb	Power filter plate No-power protection
28	FA	PFC module over current protection

## I. Water Pump Control Connection

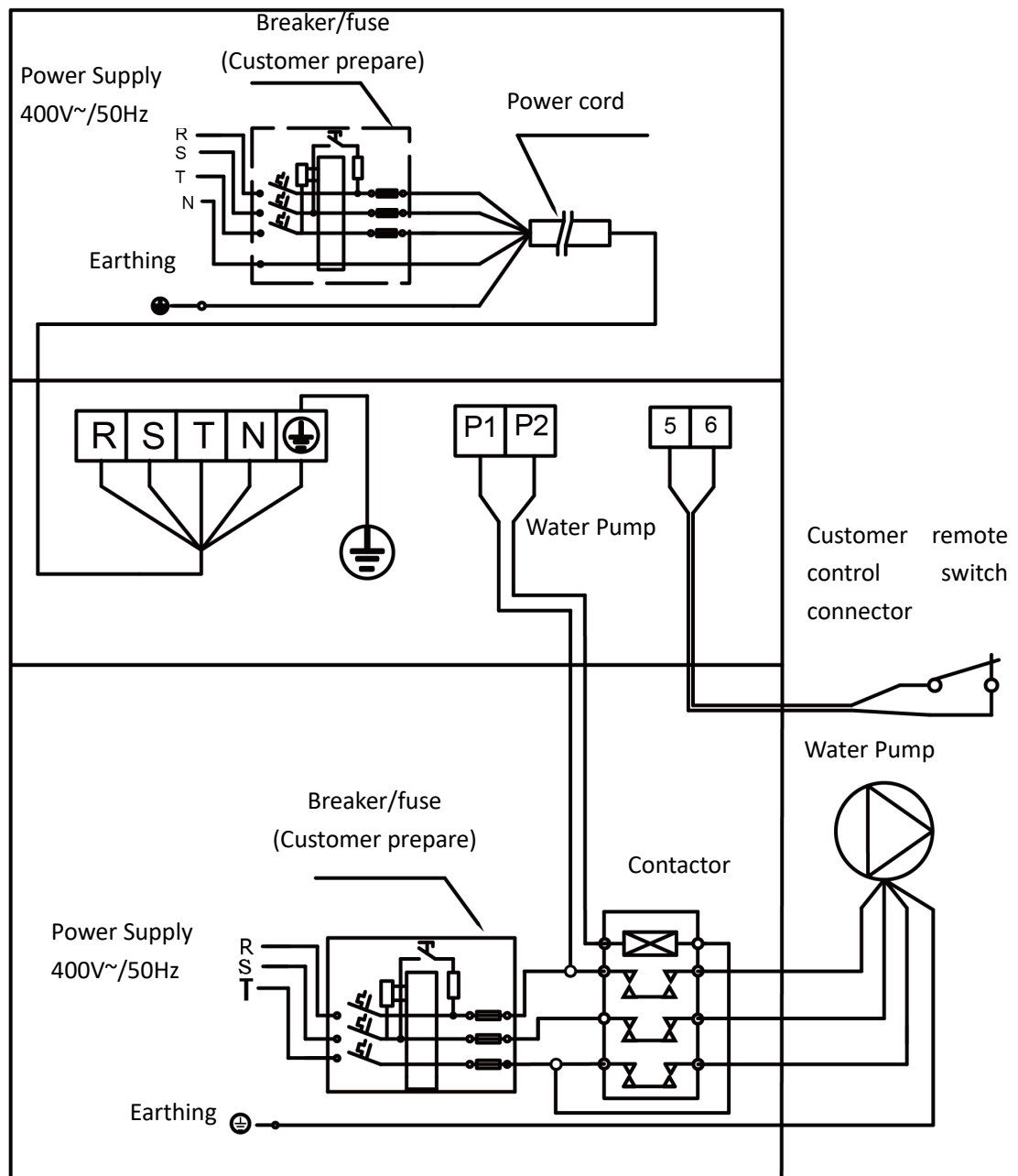
Water pump: 230V voltage,  $\leq 500\text{W}$  capacity



# Water pump: 230V voltage, >500W capacity

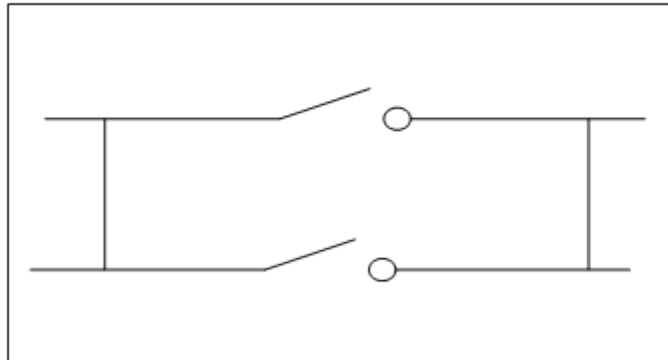


## Water pump: 400V voltage



## J. Water Pump Control and Timer Connection

1: Water pump timer



2: Water pump wiring of Heat Pump

### Note:

The installer should connect 1 parallel with 2 (as above picture). To start the water pump, condition 1 or 2 is connected. To stop the water pump, both 1 and 2 should be disconnected.

# WARRANTY

## K.

**5/12 YEAR LIMITED WARRANTY** – Mr Perfect is supplied with a 5-Year Parts only Warranty extended to 12-Years on the Heat Exchanger and Compressor. Applicable to UK Mainland only.

The liability of the manufacturer shall not exceed the repair or replacement of defective parts and does not include 1) any costs for labour to remove and reinstall the defective part, 2) transport costs to and from the factory and 3) any other materials required to make the repair. All replacement parts, including freight, are to be invoiced and credited upon inspection and fault verification of returned goods to Paramount Pools Ltd, Head Office.

All warranties are limited to the first retail purchaser and are not transferable, nor does it apply to heat pump(s) that have been moved from their original installation site. The warranty will commence on proof of sales invoice date or commission date.

The warranty does not cover failures or malfunctions resulting from any of the following:

1. Failure to properly install, operate or maintain the product in accordance with our published “installation & instruction manual” provided with the product.
2. The workmanship of any installer of the product.
3. Improper maintenance of the water chemical balance exceeding the following levels pH levels between 7.2 and 7.8. Total Alkalinity (TA) between 80 to 120 pm. Free Chlorine between 0.5 to 3 mg/l. Total Dissolved Solids (TDS) less than 1200 ppm. Salt maximum 35000 ppm]
4. Abuse, alteration, accident, fire, floods, rodent or insect damage or acts of God.
5. Scaling, Freezing or other conditions causing inadequate water circulation.
6. Operating the product at water flow rates above or below the published minimum and maximum specifications.
7. Use of non-factory authorised parts in conjunction with this product.
8. Chemical contamination or improper use of sanitising chemicals, i.e. introducing chemicals upstream of the heater or through the skimmer.
9. Overheating, incorrect wiring runs, improper electrical supply, collateral damage caused by failure of O-rings, DE grids or cartridge elements or damage caused by running the pump with insufficient water flow.

This is the only warranty given by the manufacturer. No one is authorised to make any other warranties on our behalf. Any extended warranty purchased is the sole responsibility of the local distributor (Paramount Pools Ltd) in conjunction with the authorised pool dealer.

**3-YEAR LABOUR WARRANTY** – an optional three-year labour warranty can be purchased to undertake all incurred labour expenses to repair or replace faulty goods. This warranty must be purchased separately by the retailer at the same time the heat pump is acquired. The warranty will commence on proof of sales invoice date or commission date. Applicable to UK Mainland only.

**5-YEAR LABOUR WARRANTY** – an optional five-year labour warranty can be purchased to undertake all incurred labour expenses to repair or replace faulty goods. This warranty must be purchased separately by the retailer at the same time the heat pump is acquired. The warranty will commence on proof of sales invoice date or commission date. Applicable to UK Mainland only.

## WARRANTY CLAIM & SERVICE

For prompt warranty/ service consideration, please contact the pool dealer/retailer from whom you purchased the heater. If they are not able to assist, please email your query to [sales@paramountpools.co.uk](mailto:sales@paramountpools.co.uk). Please do not contact us by telephone, we are unable to offer telephone support directly to consumers. Paramount has a number of affiliated refrigerant and electrical engineers who will respond directly.

To help us, please email the following information

1. Serial number (located on heat pump): \_\_\_\_\_
2. Model Number MPC220/270/320/420 : \_\_\_\_\_
3. Name: \_\_\_\_\_
4. Your postal address: \_\_\_\_\_
5. Contact number: \_\_\_\_\_
6. Pool Dealer/Retailer: \_\_\_\_\_
7. Proof of purchase: \_\_\_\_\_
8. Installation Date: \_\_\_\_\_  
(If later than sales receipt/invoice , signed documentation from pool/refrigerant required).

Please do not attempt to modify or mend a fault without prior permission as this may invalidate the warranty.

To register your warranty or make a claim, please go to [www.paramountpools.co.uk](http://www.paramountpools.co.uk) and search for Aquark Heat Pump.



**PARAMOUNT**  
POOL PRODUCTS

## L. Wi-Fi Operation

### 1 InverGo Download



Android

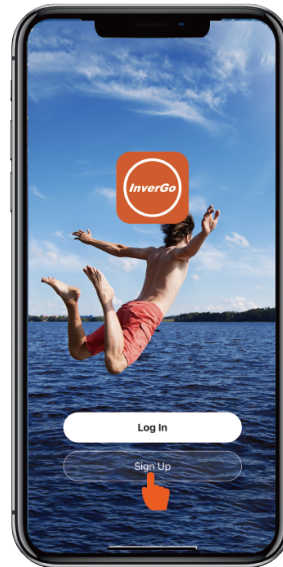


iOS

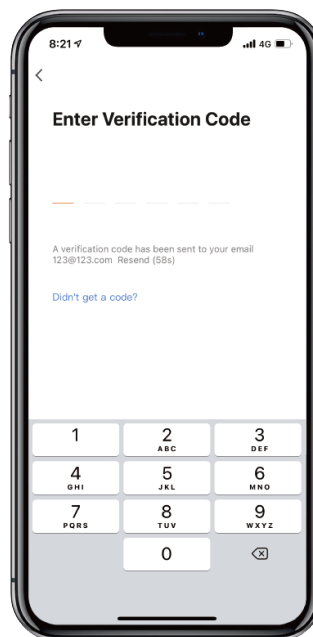
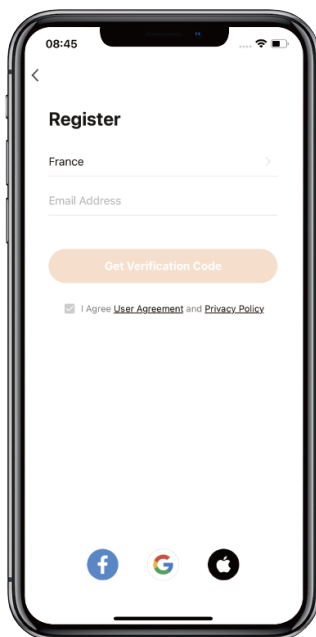


### 2 Account Registration

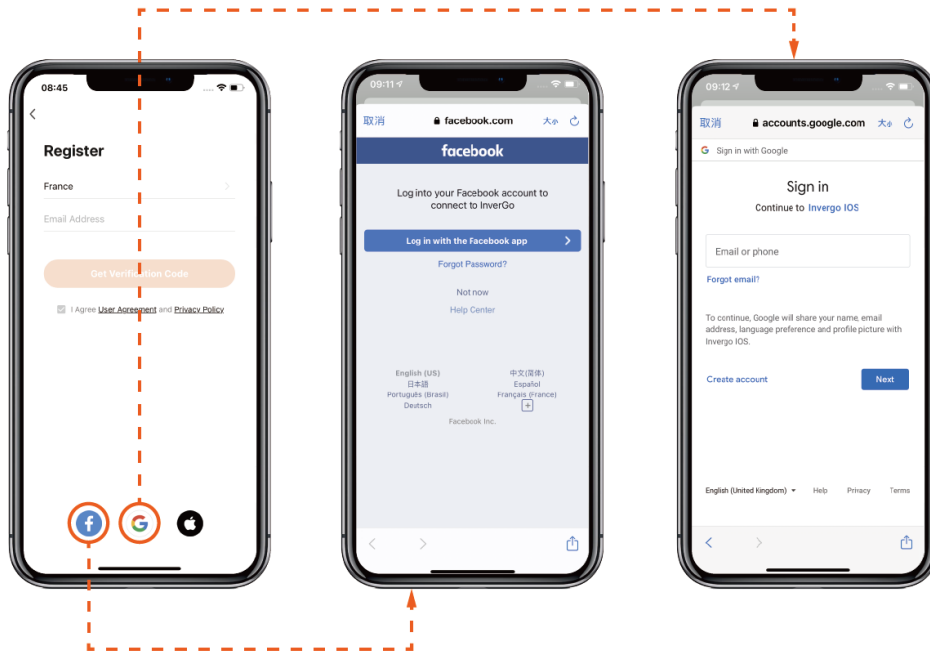
Register by e-mail or third-party application.



#### a. E-mail registration.

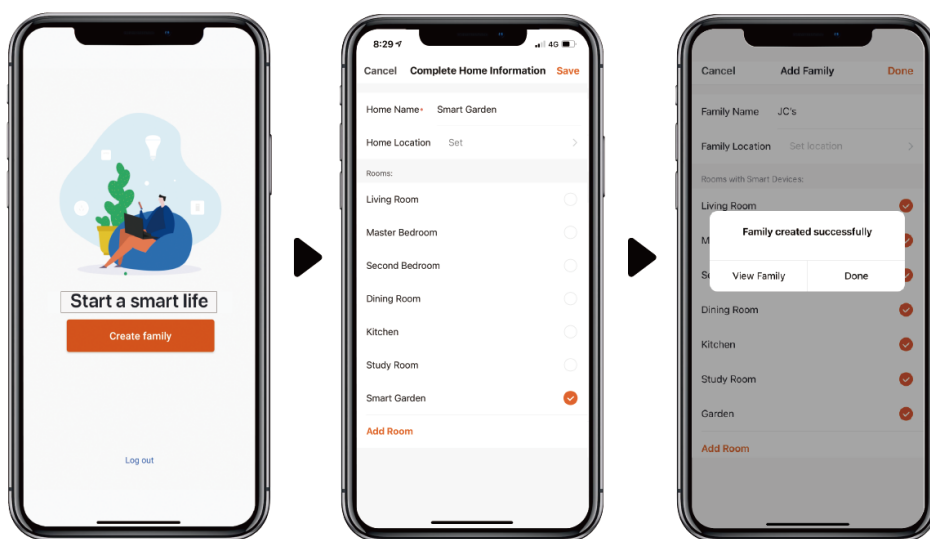


## b. Register through third-party application



## 3 Create Family

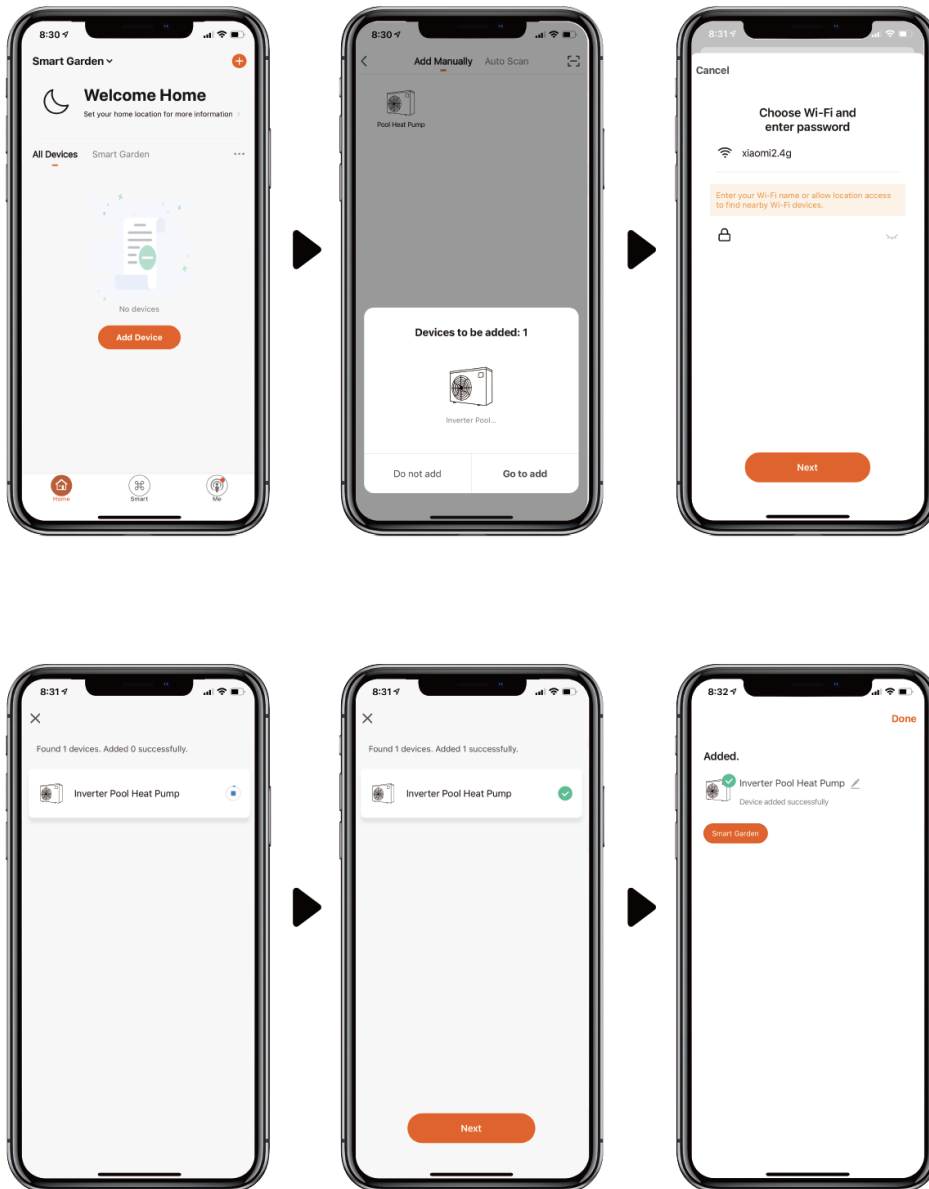
Please set family name and choose location of device.



## 4 APP Pairing

### a. With Bluetooth

1. Please confirm that you're connected to Wi-Fi and your Bluetooth is on.
2. Click "Add Device", and then follow the instructions to pair device.



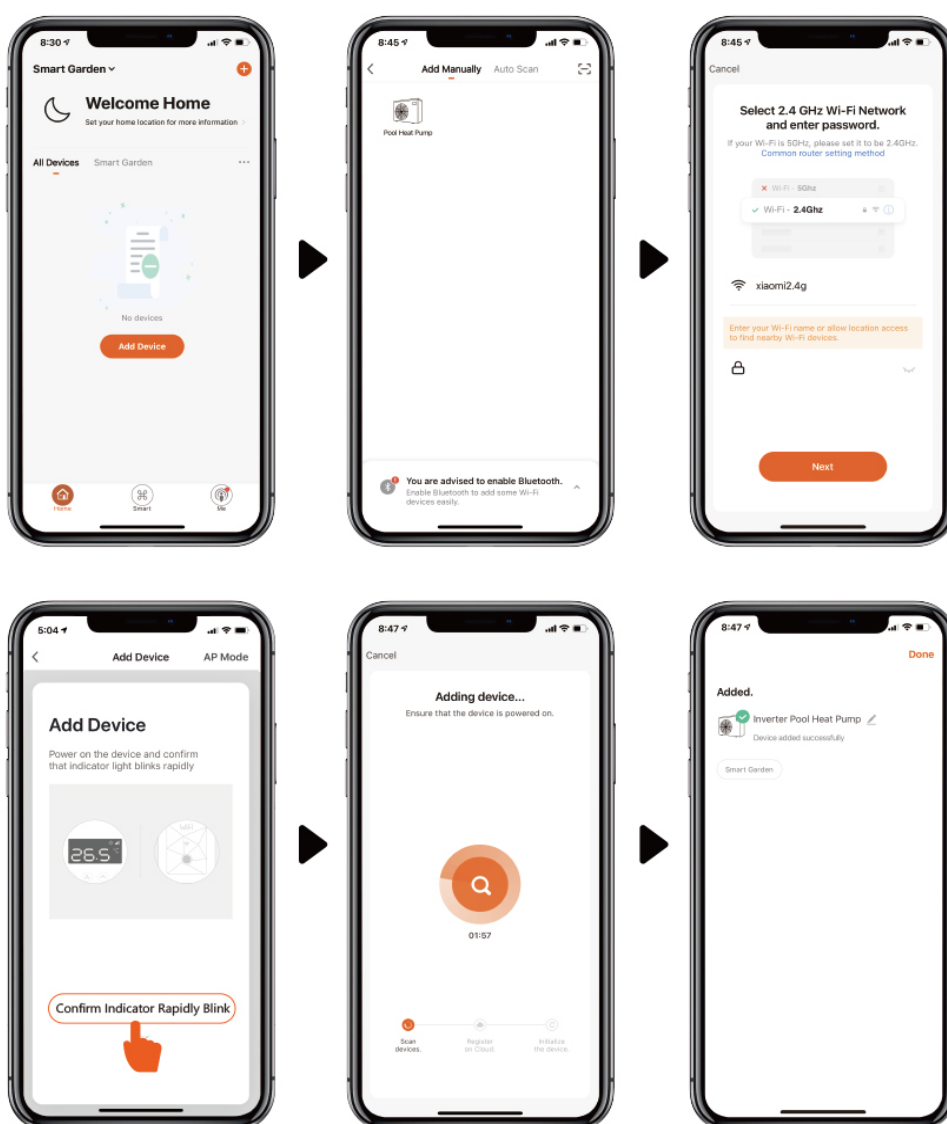
## b. With Wi-Fi

1. Please make sure you are connected to Wi-Fi.

2. Press "🔒" for 3 seconds to unlock the screen. Press "🔌" for 3 seconds and release. After hearing "Beep", enter Wi-Fi password in app. During connection, "📶" will flash. Once the app connects to Wi-Fi successfully, "📶" will display.



3. Click "Add Device", and then follow the instructions to pair device.



## 5 Operation

1. For heat pump with Heating function only:

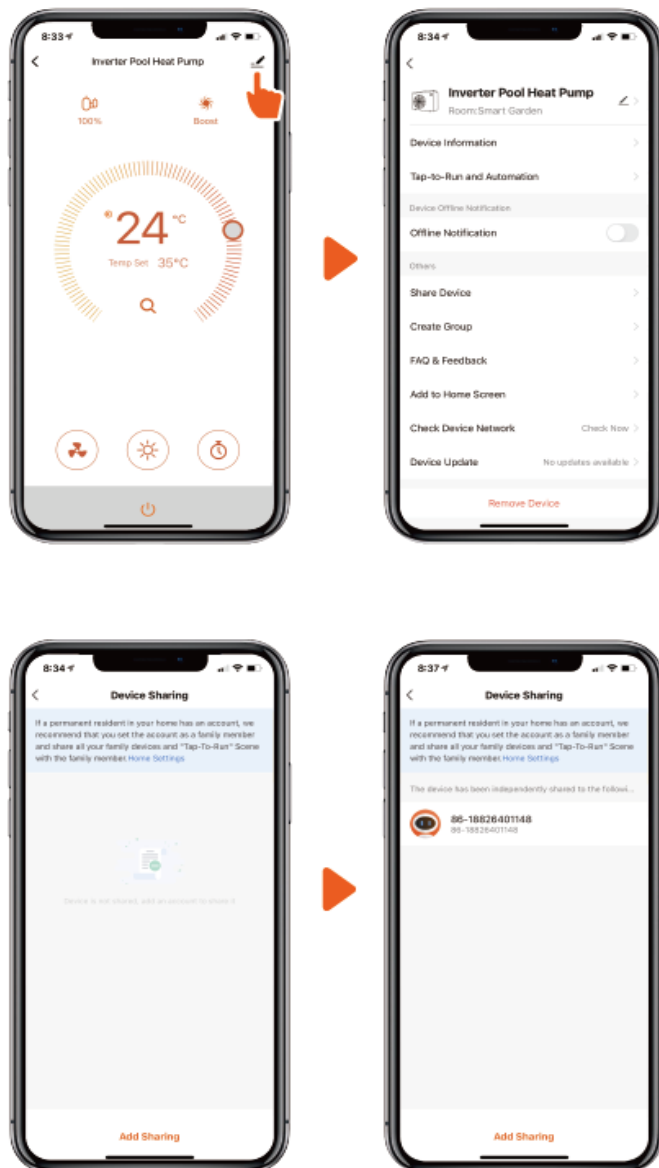


2. For heat pump with Heating & Cooling function:



## 6 Share Devices to Your Family Members

After pairing, if your family members also want to control the device, please let your family members register “InverGo” first, and then the administrator can operate as below:



Notice:

1. Weather forecast is just for reference.
2. App is subject to updates without notice.