SWIMMING POOL HEAT PUMP

SSD&SVD USER MANUAL

Table of Contents

1.Important information

1.1 Safety information

We have provided important safety messages in this manual and on your heat pump. Always read and obey all safety messages.
The manual must be left with the customer.

1.2 Symbols

Explanation of symbols that may be present in this manual.

⚠ 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.
⚠ CAUTION	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.

1.3 Marking

Explanation of symbols that may be present on the product's label(s).


Fire hazard!


Read the User Manual.


Read the Installer Manual.


Dangerous voltage.

1.4 Specific information

Whenever you call to request service for your heater, you must know your complete model and serial numbers. You can find this information on the name plate located on the right side of your heater.Please also record the purchase date of your device and your dealer's name,address, and telephone number.

Model Number_____

Serial Number_____

Purchase Date_ _____

Dealer Name_____

Dealer Address_____

Dealer Phone_ _____

Keep this book and the sales slip together in a safe place for future reference.

2 Delivery and handling

2.1 Transport and hoisting

It must be transported and stored vertically.

⚠ CAUTION

Ensure that the heat pump cannot fall over during transport.

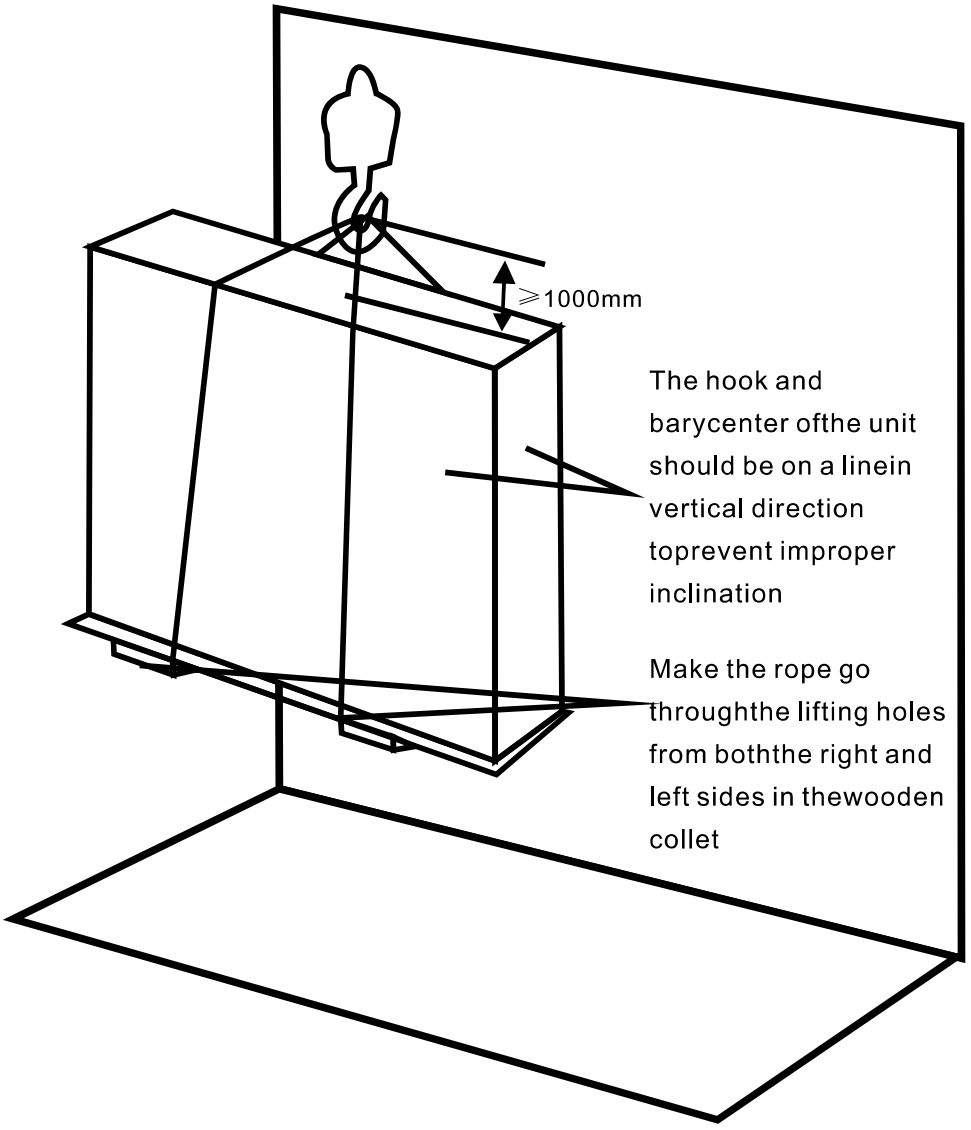
Do not remove any packaging before hoisting. If units are not packaged or if the packaging is damaged, use suitable boards or packing material to protect the units.

Hoist one unit at a time, using two ropes to ensure stability.

Keep units upright during hoisting, ensuring that the angle to the vertical does not exceed 30°.

⚠ CAUTION

The centre of gravity of the heat pump is offset to one side.



2 Delivery and handling

- Check that the heat pump has not been damaged during transport.
- Check that the model, specifications and quantity of the units delivered are as ordered.
- Check that all standard accessories ordered have been included.
- Retain the Owner's Manual for future reference.

3 Standard accessories

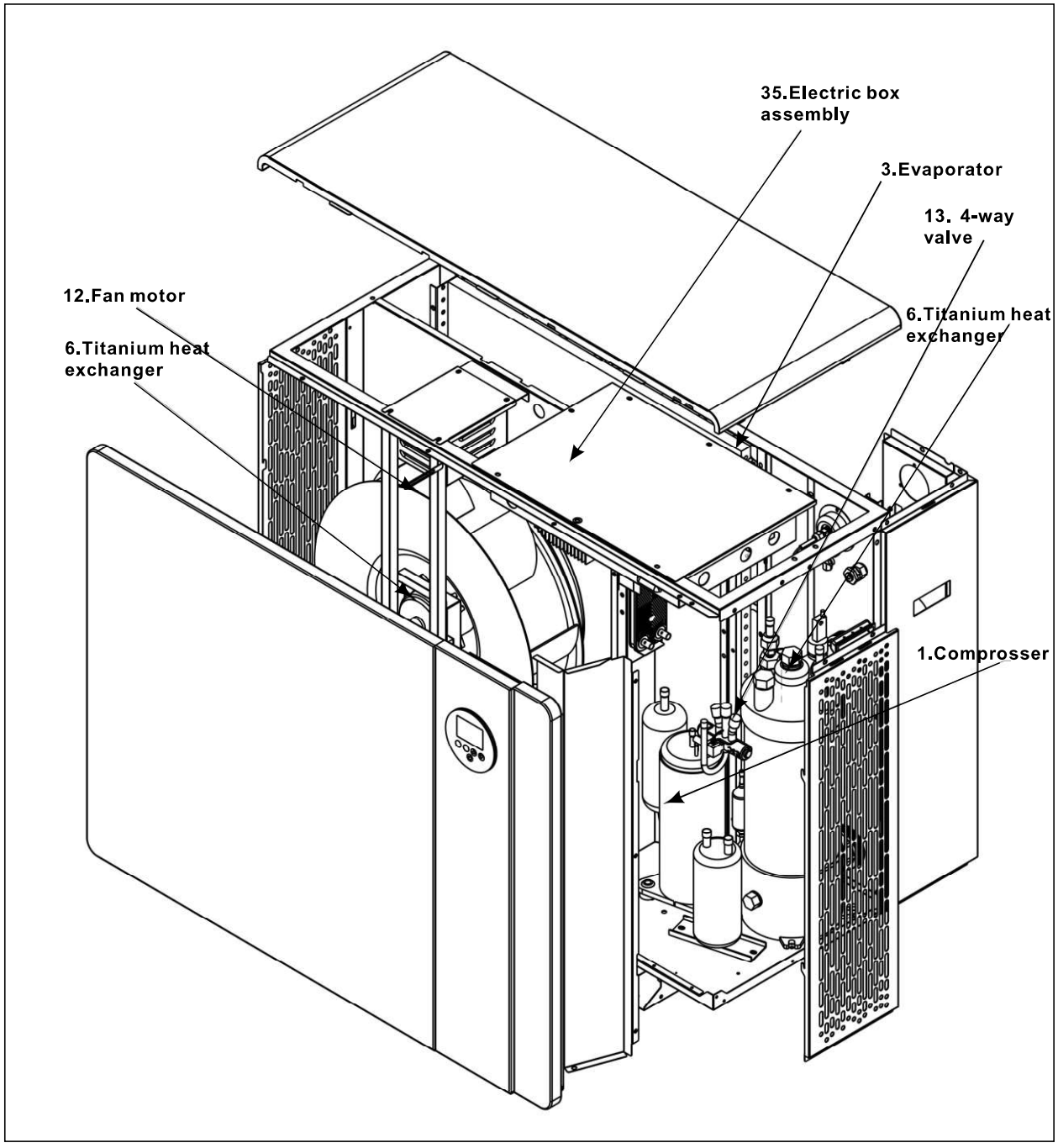
Standard accessories are as follows:

Name	Shape	Quantity
User's manual		1
Drain spout		1
Union		2
Anti-vibration rubber feet		4
Stainless Steel Nut		8

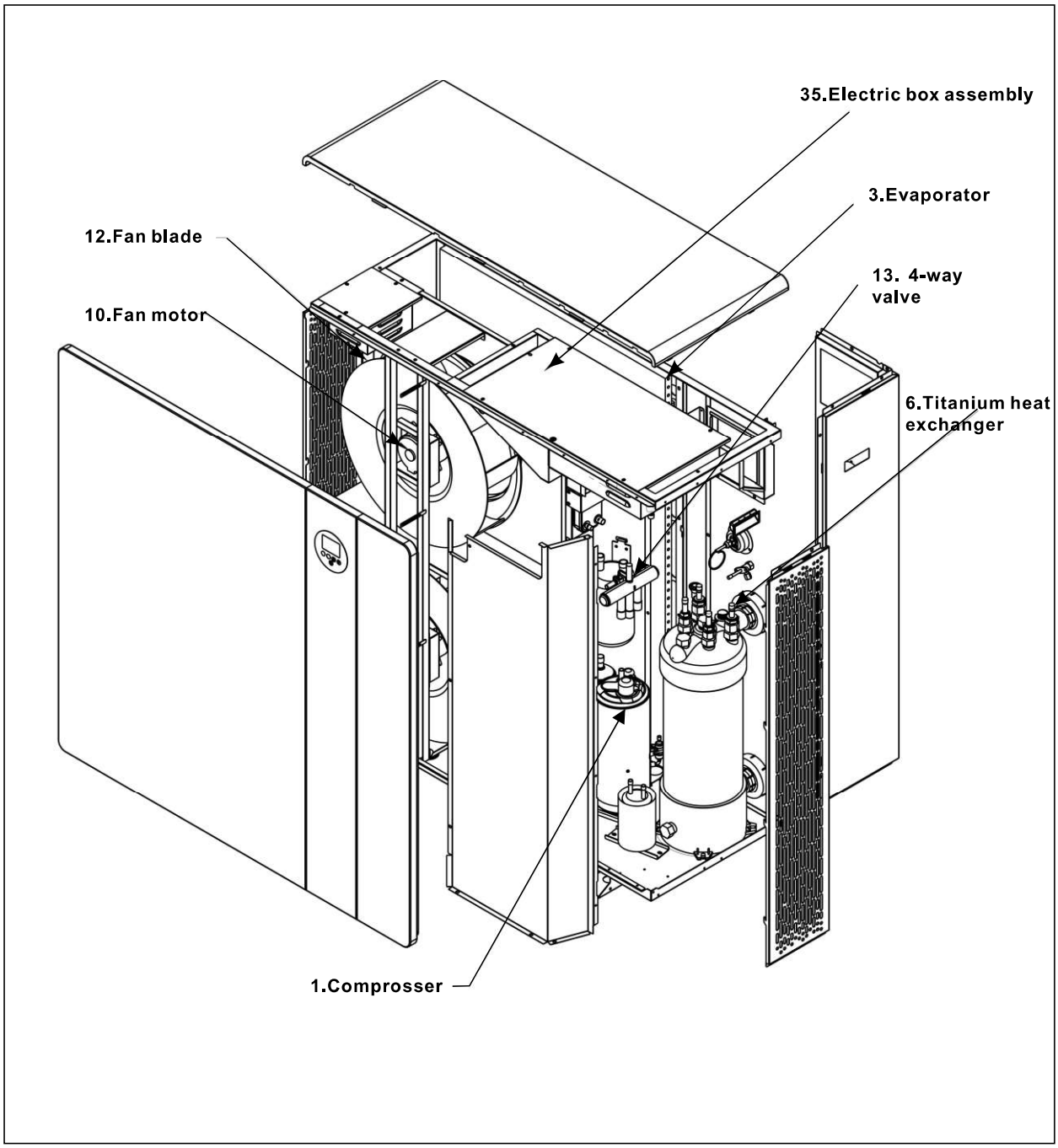
4 The heat pump Introduction

4.1 General

Model:SSD3012/SSD3017



Model:SVD3025,SVD3030,SVD3035S
Model:SSD3025,SSD3030,SSD3035S



4.2 Feature

The SSD/SVD pool heat pump is a self-contained unit designed specifically for pool heating. Each component has been selected with care to achieve a high-quality product in an effort to exceed all industry standards.

- Quiet and efficient backward centrifugal blower
- Artistic circular display panel
- DC twin-rotary inverter compress
- DC brushless fan motor
- Three modes for heating/cooling: fast, normal and silent.
- Accurate EEV control technology
- Wide operating range: SSD minimum heating ambient temperature -15 ℃, SVD minimum ambient temperature -35 ℃ thanks to EVI technology
- Reverse cycle defrosting with 4-way valve
- High-efficiency twisted titanium heat exchanger
- High pressure and low-pressure protection
- Full protection on electrical system

5 Installation Instructions

5.1 installation placement

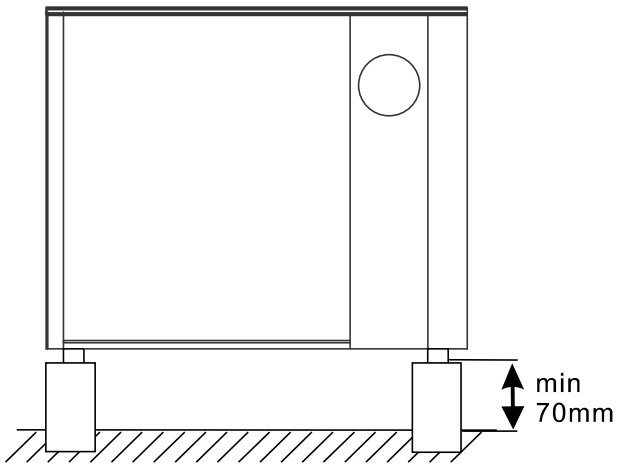
The placement of the pool heat pump is very important in keeping installation costs to a minimum while providing for maximum efficiency of operation, as well as allowing adequate access for service and maintenance.

⚠ WARNING The heat pump using R32 refrigerant cannot be installed indoors, otherwise it may cause accidents such as explosions, injuries and deaths.

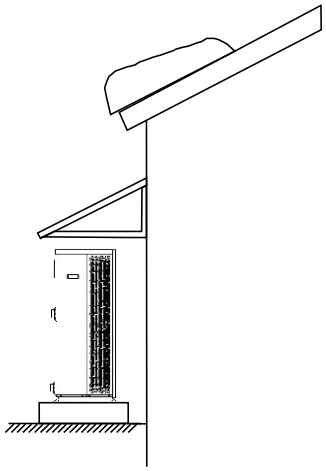
The heat pump using R32 refrigerant cannot be installed indoors, otherwise it may cause accidents such as explosions, injuries and deaths.

- Place the heat pump in a suitable location outdoors to prevent any risk of the refrigerant flowing in through ventilation openings, doors or similar openings in the event of a leak. It must also not constitute a hazard to people or property in any other way.
- The unit should be located as close as practical to the existing pool pump and filter to minimize water piping.
- The unit should not be exposed to direct radiation from a high-temperature heat source.
- The unit should not be installed in positions where dust or dirt may affect heat exchangers.
- The unit should not be installed in locations where exposure to oil or to corrosive or harmful gases, such as acidic or alkaline gases, may occur.
- The unit should not be installed in locations where exposure to salinity may occur.
- The unit should be installed in well-drained, well-ventilated positions.
- The unit should be installed in locations where the noise from the unit will not disturb neighbors.
- The evaporator must be sheltered from direct wind.
- To prevent exposure to wind, install a baffle plate on the air discharge side of the unit.
- To prevent exposure to wind, install the unit with its suction side facing the wall.

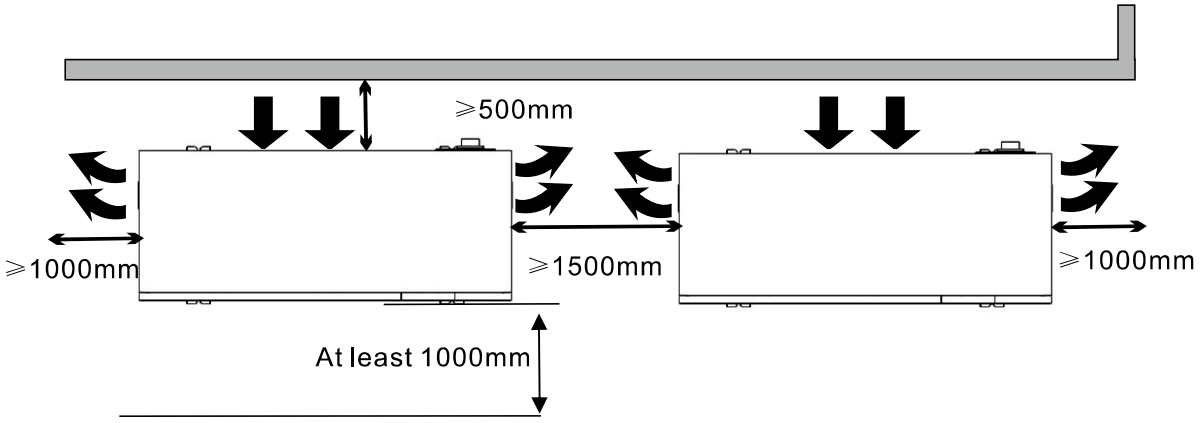
Mount the unit on a sturdy base, preferably a concrete slab or a set of blocks.



If there is a risk of snow slip from roof, a protective roof or cover must be erected to protect the heat pump, pipes and wiring.



The distance between the heat pump unit and the house wall must be at least 350 mm, but not more than 500 mm in locations that are exposed to the wind. The free space above the heat pump unit must be at least 1,000 mm. The free space in front must be at least 1,000 mm for any future servicing.

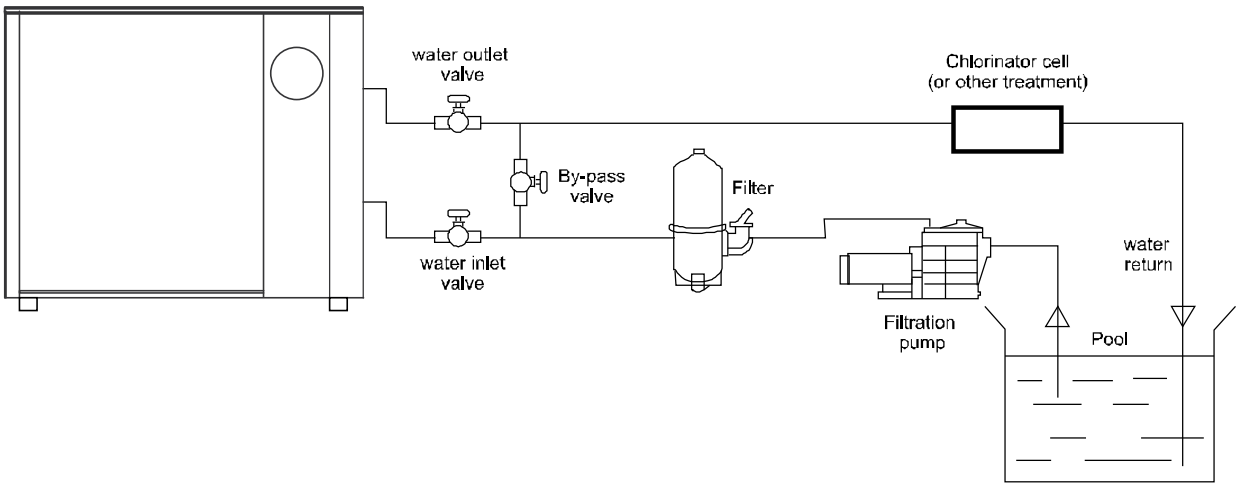


5.2 Pipe connections

Pipe installation must be carried out in accordance with current norms and directives.
The pipe dimension should not be less than the recommended pipe diameter according to the technical specifications. However, each system must be dimensioned individually to manage the recommended water flows.

CAUTION An undersized system can result in damage to the product and lead to malfunctions.

The pipeline connection diagram of the swimming pool heat pump system is shown below.



- The piping sequence is as follows: pool pump > filter > heater > pool. Automated chlorine distribution systems, if used, must be placed downstream of the heater to minimize harm to the pool equipment.
- Use rigid PVC piping if possible (SCH40 or SCH80). All joints should be glued with PVC glue. If rigid PVC is not available, you can use soft or flexible piping with stainless steel clamps.
- When the piping installation is complete, operate the pool pump and check the system for leaks.
- Then, check the filter pressure gauge to verify that there isn't any indication of excessive pump head pressure. You can also make the connections using high-pressure flexible hose, but make sure the hose can withstand high pressure.

CAUTION The maximum water pressure should be less than 5 bar,otherwise it will cause damage to the heat pump condenser and water pipes.

5.3 Electrical connections

5.3.1 General

CAUTION

- All installation and wiring must be carried out by competent and suitably qualified,certified and accredited professionals and in accordance with all applicable legislation.
- Electrical systems should be grounded in accordance with all applicable legislation.
- Over current circuit breakers and residual-current circuit breakers (ground fault circuit interrupters) should be used in accordance with all applicable legislation.
- Wiring patterns shown in this data book are general connection guides only and are not intended for, or to include all details for, any specific installation.

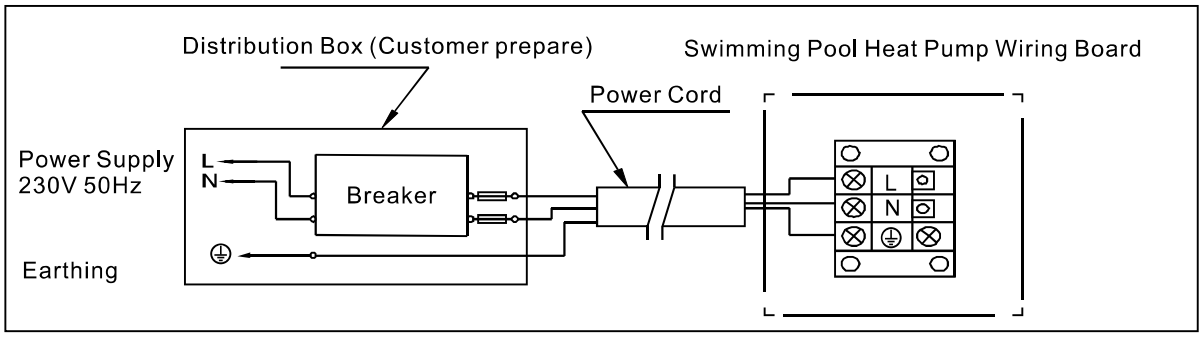
■ The water piping, power wiring and communication wiring are typically run in parallel. However the communication wiring should not be bound together with power wiring. To prevent signal interference, the power wiring and communication wiring should not be run in the same conduit. If the power supply is less than 10A, a separation of at least 300mm between power wiring and communication wiring conduits should be maintained; if the power supply is in the range 10A to 50A then a separation of at least 500mm should be maintained.

5.3.2 Power connection

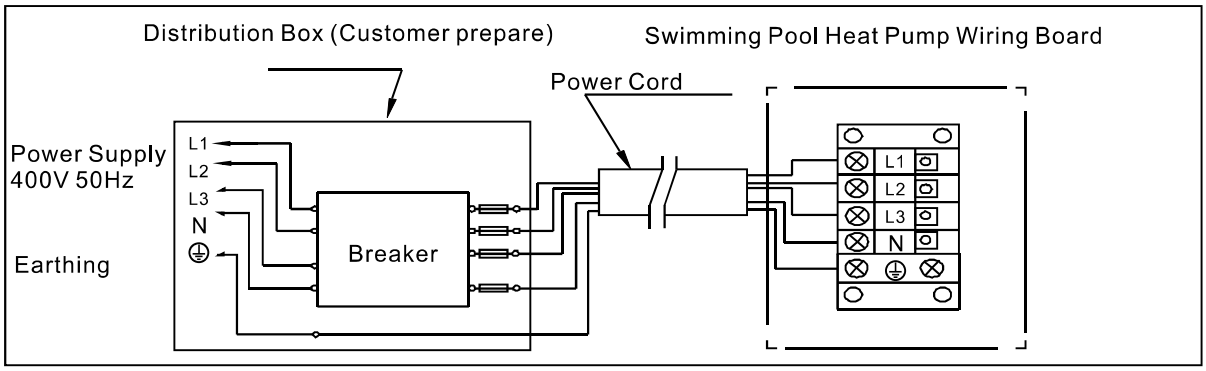
5.3.2.1External power connection diagram

CAUTION The part of the screwed joint that tensions the cable must be tightened to a tightening torque above 3.5Nm.

For power supply: 230V~ 50Hz



For power supply: 400V 3N~ 50Hz



5.3.2.2 References for protecting devices and cable specification

MODEL		SSD3012	SSD3017	SSD3025 SVD3025	SSD3030 SVD3030	SSD3035S SVD3035S
Breaker	Rated Current (A)	10.4	13.5	25.2	25.2	9.1
	Rated Residual Action Current (mA)	30	30	30	30	30
Fuse (A)		30	30	40	40	30
Power Cord (mm^2)		1.5	2.5	4	4	1.5
Signal cable (mm^2)		3×0.5	3×0.5	3×0.5	3×0.5	3×0.5

CAUTION ■ The above data is adapted to power cord ≤10m. If power cord is >10m, wire diameter must be increased. The signal cable can be extended to 100m maximum.

■ The above is for reference only. It is necessary to consider factors such as environmental temperature, heat dissipation conditions,cable length , etc and increase the wire diameter appropriately.

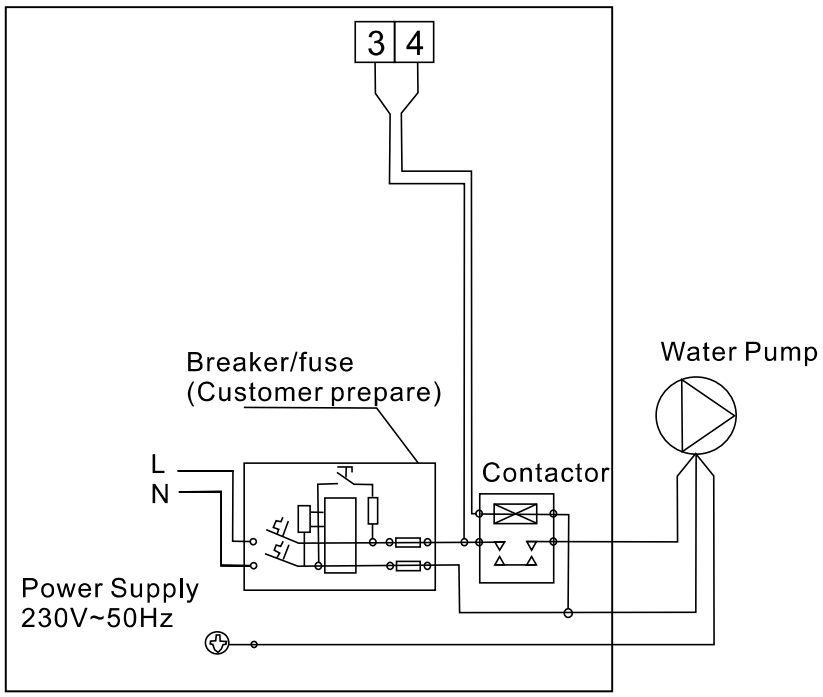
5.3.3Pool water pump connection

The control signal line of the pool water pump can be connected to the heat pump terminal block marked 3 & 4.

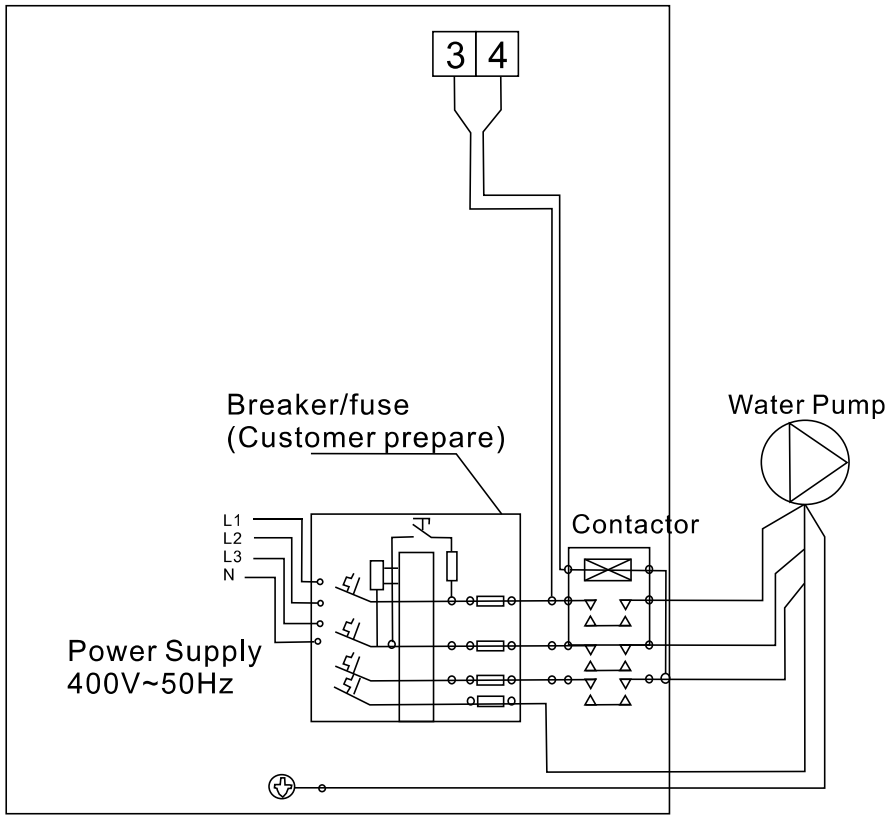
The swimming pool water pump must be connected to a circuit breaker.

The reference water pump wiring diagram is as follows:

Water pump 230V voltage:



Water pump 400V voltage:

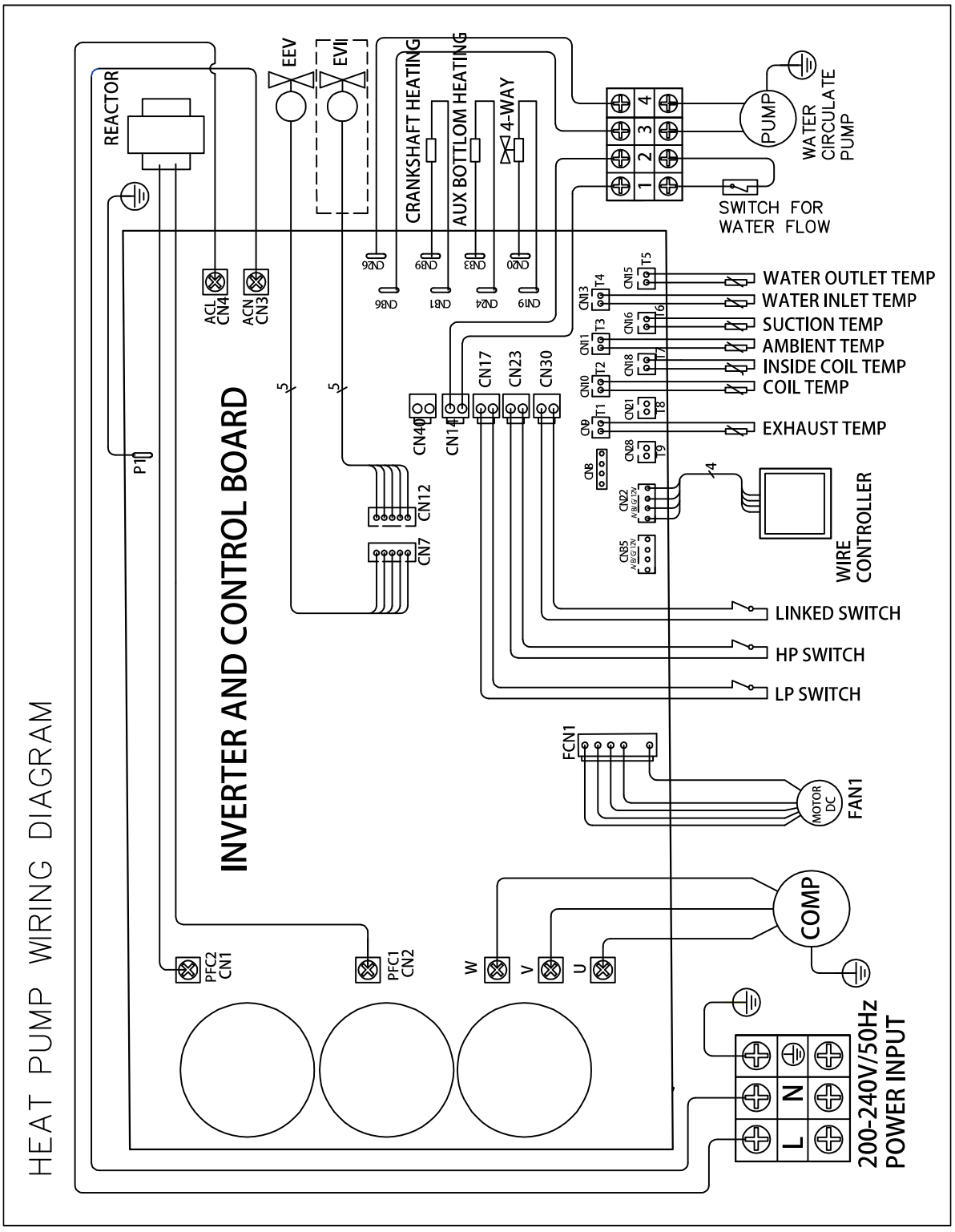


5.3.4 Remote control connection

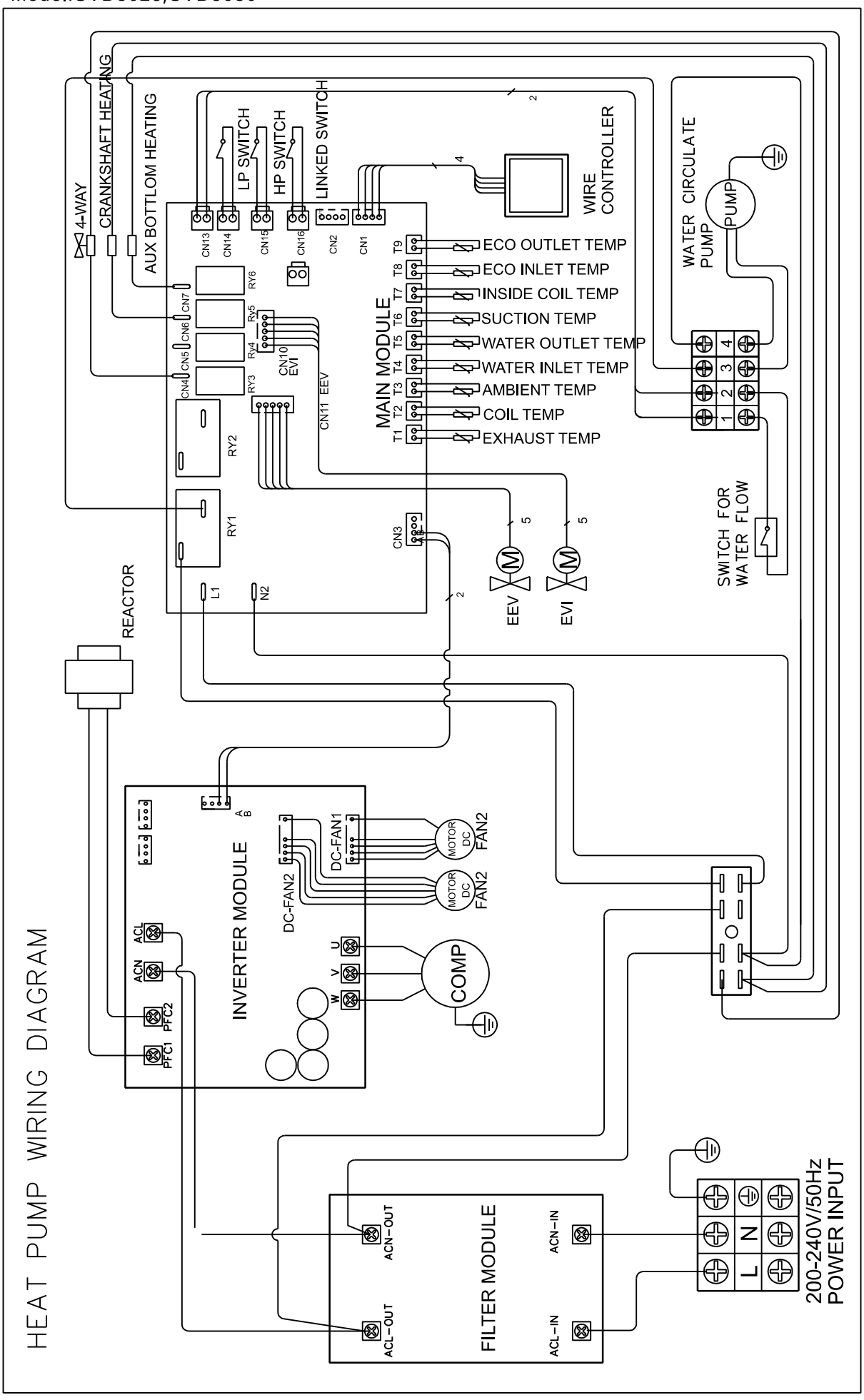
If remote control of the pool heat pump is required, it can be connected to the CN30 terminal of the main board.
Please refer to 4.3.4 Wiring Diagram for specific details.

5.3.5 Wiring diagram

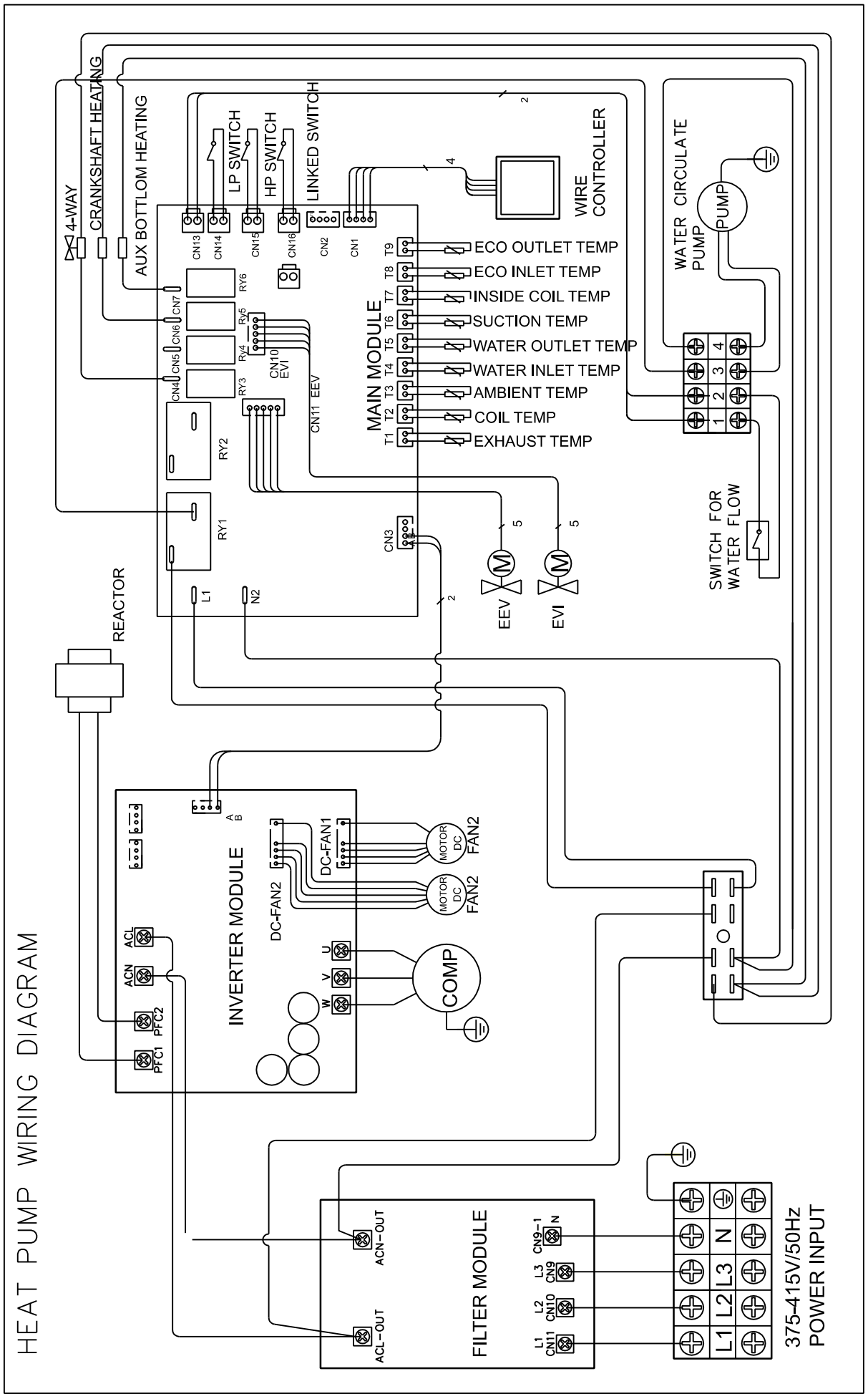
Model:SSD3012,SSD3017



Model:SVD3025,SVD3030



Model:SVD3035S,SSD3035S



6 Water quality standards

Water quality standards that must be strictly observed.

Item	Normal Range	Verification
pH level	7.2 to 7.8	Once/week
Chlorine concentration	1.0 to 3.0 ppm	Once/2-3days
Total alkalinity	80 to 100 ppm	Once/2-3weeks
Total dissolved solids (TDS)	Below 1600 ppm (freshwater)	Once/month
Calcium hardness	200 to 300 ppm	Once/month

7 Operating instructions

7.1 Wire controller operation

Display key pattern

Key definitions: mode key, function key (gear key), up key, down key, on/off key

Iconic meaning:

 ——— Cooling Mode, this icon is always lit when set to cooling;

 ——— Heating Mode, this icon is always lit when set to heating;

 ——— Auto Mode, this icon is always lit when set to Auto;

 ——— Fast mode, when set to fast mode

 ——— Silent mode; When set to low noise mode;

 ——— General mode; When set to normal mode;

7.1.1 Mode setting: On the main interface, short press the mode button  to switch modes, heating→cooling→automatic

7.1.2 Fast/Normal/Silent setting: On the startup interface, short press the function key  to switch different modes.There are three modes for heating/cooling: fast, normal and silent. The automatic mode defaults to normal mode and is not adjustable.

7.1.3 Temperature setting

Under the main interface of power on, keep "▲" key or "▼" key, the set temperature will be displayed, keep "▲" key or "▼" key to adjust the size, and at the same time, the SET icon will be lit up, and it will be automatically exited to restore the display of inlet water temperature after 3 seconds.

7.1.4 Check parameter and setting

● On the home screen, hold down  for 3 seconds to enter the User parameter query screen (parameters L0-L5). You can query user parameters by keep ▲or ▼.

● On the User parameter query screen, select a parameter and keep  to enter the parameter setting screen. When SET blinks, keep ▲or ▼to modify the current user parameter. Keep  to confirm the parameter change, and return to the parameter query state. Note: SET does not blink in the query state; In theSettings state, SET blinks.

If no key is keep on the user parameter query or user parameter setting screen for 30 consecutive seconds, the changed parameter values are automatically saved and the user parameter query or user parameter setting screen is returned to the home screen, or you can keep the On/Off key to return to the home screen directly.

7.1.5 Time and Clock Selection

● On the home screen, keep down for 5 seconds to enter the Real-Time clock setting screen. The clock hour and minute blink together.

● On the real-time Clock setting screen, keep the Gear key. The digit in the hour part blinks and the digit in the minute part blinks. You can keep ▲ or ▼ to set the hour of the real-time clock.

● After the hour part is set, keep the Gear key. The digit in the minute part blinks,and the digit in the hour part blinks. Keep ▲ or ▼ to set the minute of the Real-Time clock.

● After the minute part is set, keep the Gear key to confirm the real-time clock setting and return to the main screen.

● On the Configure real-time Clock screen, keep the Switch key to confirm the current real-time clock setting value. You are returned to the home screen.

● If no button is pressed on the real-time Clock setting screen for 30 consecutive seconds, the system confirms the real-time clock setting value and returns to the home screen.

7.1.6 Timed on/off Setting

Parameter L2: Timing Settings: 0: indicates that there is no timing function, the timing button is invalid, and the related timing icon disappears.The parameter is 1: indicates that the timing is valid every day, and the timing can be set;

● On the home screen, hold down the Gear key for 3S to enter the timing group setting screen.

● When the timing time setting screen is displayed, timing group 1 blinks. The wire controller has one and two timing groups.

● If the timer is blinking in segment 1, keep the Gear key to enter the page for setting the hour part of the timer 1 startup time. When the digit of the timer 1 startup time is blinking, keep ▲ or ▼ to set the timer 1 startup time.11

● After you set the hour part of the timed startup, keep the Gear key. The number in the minute part of the timed startup time flashes. Keep ▲ or ▼ to set the timed startup minutes for a group.

● After you have set the time for powering on group 1, keep the Gear key to enter the hour setting for powering off group 1. The setting method is the same as the above.

● After the scheduled shutdown time is set, keep the Gear key to confirm that the scheduled shutdown time of the current group is saved. Keep ▲or ▼ to enter the next set of timing time Settings. The setting method is the same as that of timing group 1.

● If the timing group is valid, the serial number of the timing group is displayed on the home screen.

● In a set of timing time Settings, if the scheduled startup time is the same as thescheduled shutdown time,the scheduled on/off time is invalid.

● If no button is pressed on the timing screen for 30 seconds, the system confirms the timing time and returns to the home screen.

● On the timing screen, press the Switch key to confirm the current timing time and return to the home screen.

● On the screen for selecting a timing group, hold down the Gear key for 3S. Thetiming takes effect. on/off is on.

● If the timing is valid (on/off lights up the screen), hold down the Gear key for 3S. on/off is off, and the timing is invalid Timed on/off setting process:

● set the timing function: Keep the mode key for 3 seconds to type the L parameter setting→ Keep ▲ twice to select L2→ Keep the mode key to enter the setting→Keep ▲ Set L2 parameter to 1→Keep the mode key to confirm →Keep the on key to exit or wait for 30 seconds to exit automatically

● set the timing time: Hold down the function key for 3 seconds to enter the timing period→ Keep ▲or ▼ Optional 1 or 2 timing periods→ Keep Function key to enter the timing startup hour period setting→Keep ▲ or ▼ Set Value → Press
function key to enter the timing startup minute period setting →Keep ▲ or ▼ Set Value → Keep function key to enter the timing shutdown hour period setting →Press▲ or ▼ Set Value → Keep function key to enter the timing shutdown minute period setting →Keep ▲ or ▼ Set Value →Keep function key to enter the timing shutdown minute period setting →Keep ▲ or ▼ Set Value → Keep the function key to enter the timing period selection, you can set other timing periods

● Enable or Disable timing: Hold down the function key for 3 seconds to select a timing period →Keep ▲ or ▼ Optional 1 or 2 timing periods→ Hold down the function key to enable or disable the timing period (Timing can be enabled only when the timing switch time is different.)

7.1.7 Lock and unlock (the ON/OFF key is the unlock key)

- If the unit does not perform any input operation for 60 seconds, the inline controller display screen goes to sleep, the screen automatically locks, and the Lock button icon lights up.
- In the lock machine state, keep and hold down the unlock key for 5 seconds.

After the buzzer beeps, release the lock key, and the lock button is turned off.

7.1.8 Artificial defrost:

- Long press +▼

7.2 WIFI operation

How to connect wifi

Press and hold the "" key + "" key simultaneously for 3 seconds to enter the "default mode" network pairing, the WIFI mode icon flashes when entering;

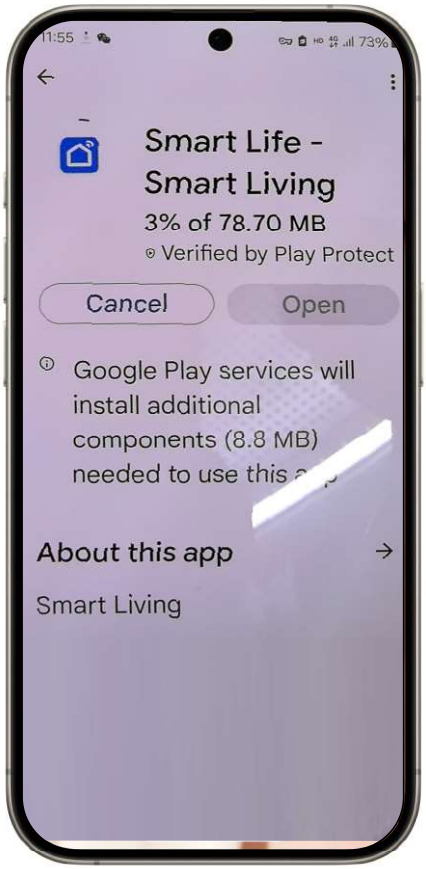
Press and hold the timer key down key on/off key at the same time for 3 seconds to enter the "compatibility mode", and the WIFI mode icon will flash slowly when entering;

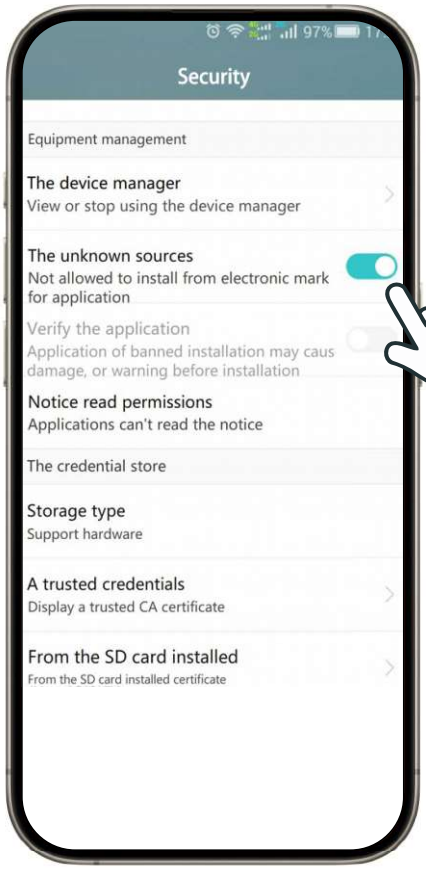
APP download search "smart life":

Smart Life

Google Play services willinstall additionalcomponents (8.8 MB)needed to use this APP

For Android, search for "Smart Life" in all major app stores; for IOS, search for "Smart Life" in the App Store.

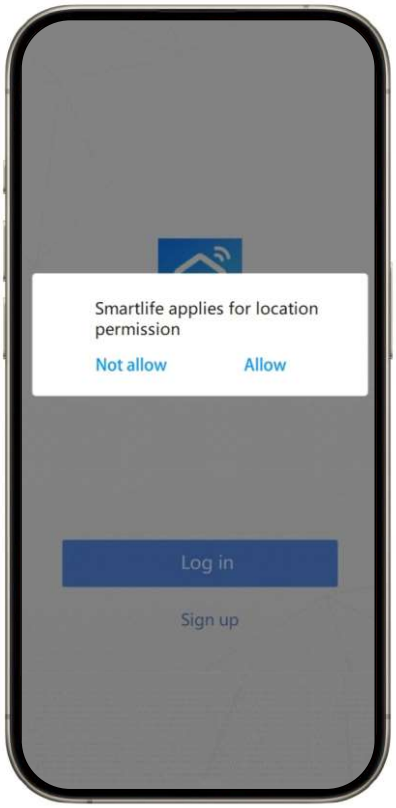




Android version needs to open"unknown source"
Turn on "Unknown

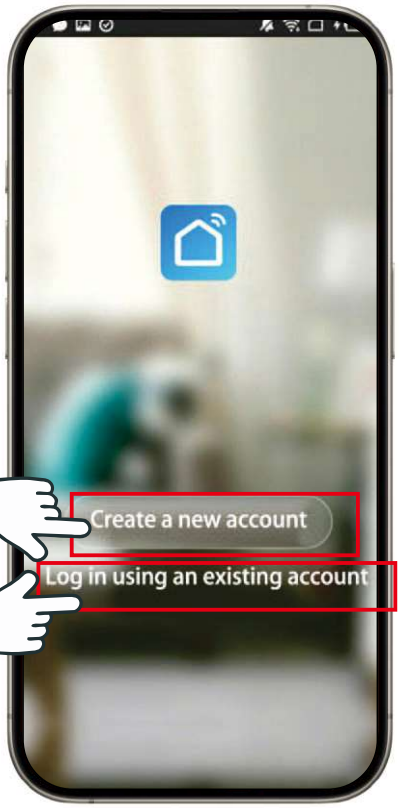
User Registration

After successful installation, you need to allow the positioning permission to be enabled



Click "Allow" to agree to get location access

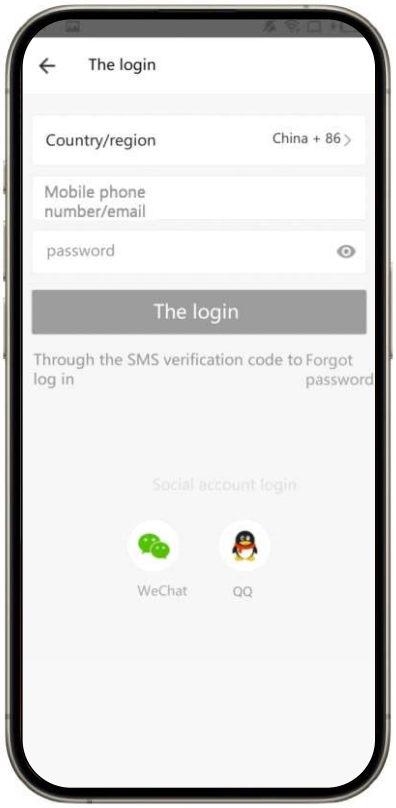
To use Smart Life for the first time, you need to register as a user.



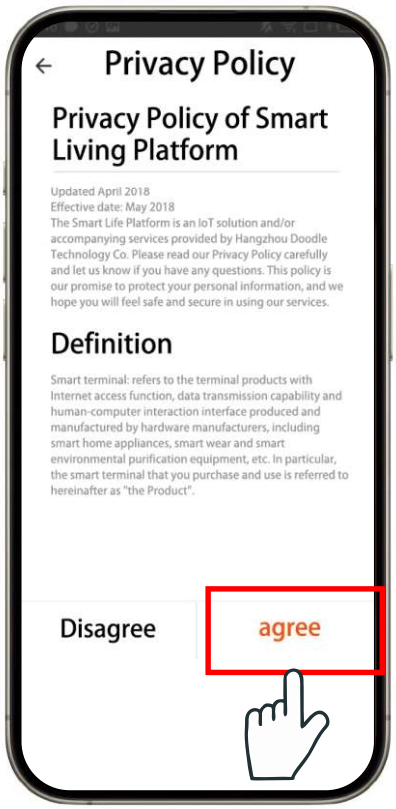
Click the "Create New User" link to enter the registration method screen

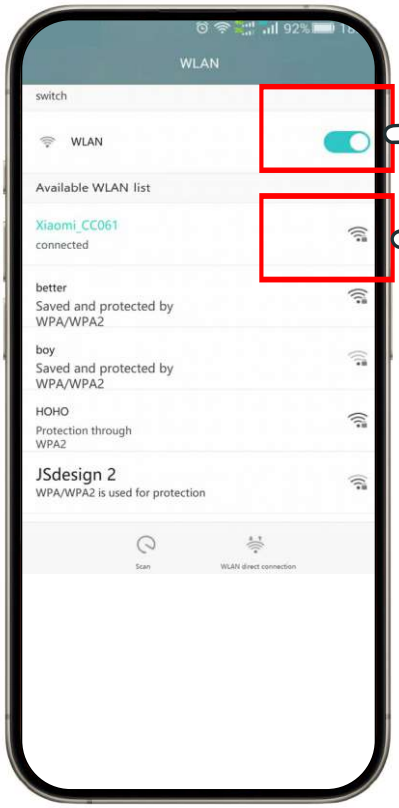
If you already have an account, click Login directly

After entering the registration page, users should follow the instructions on the page to register.



The phone first needs to be connected to the network via WIFI network



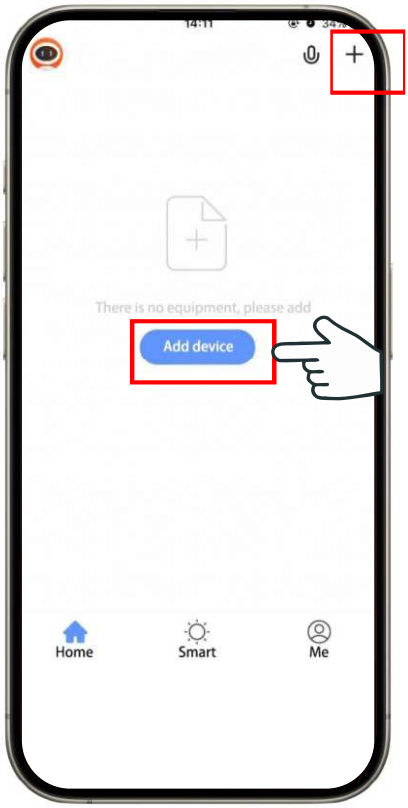


Turn on "WLAN"

Connect to available Wi-Fi

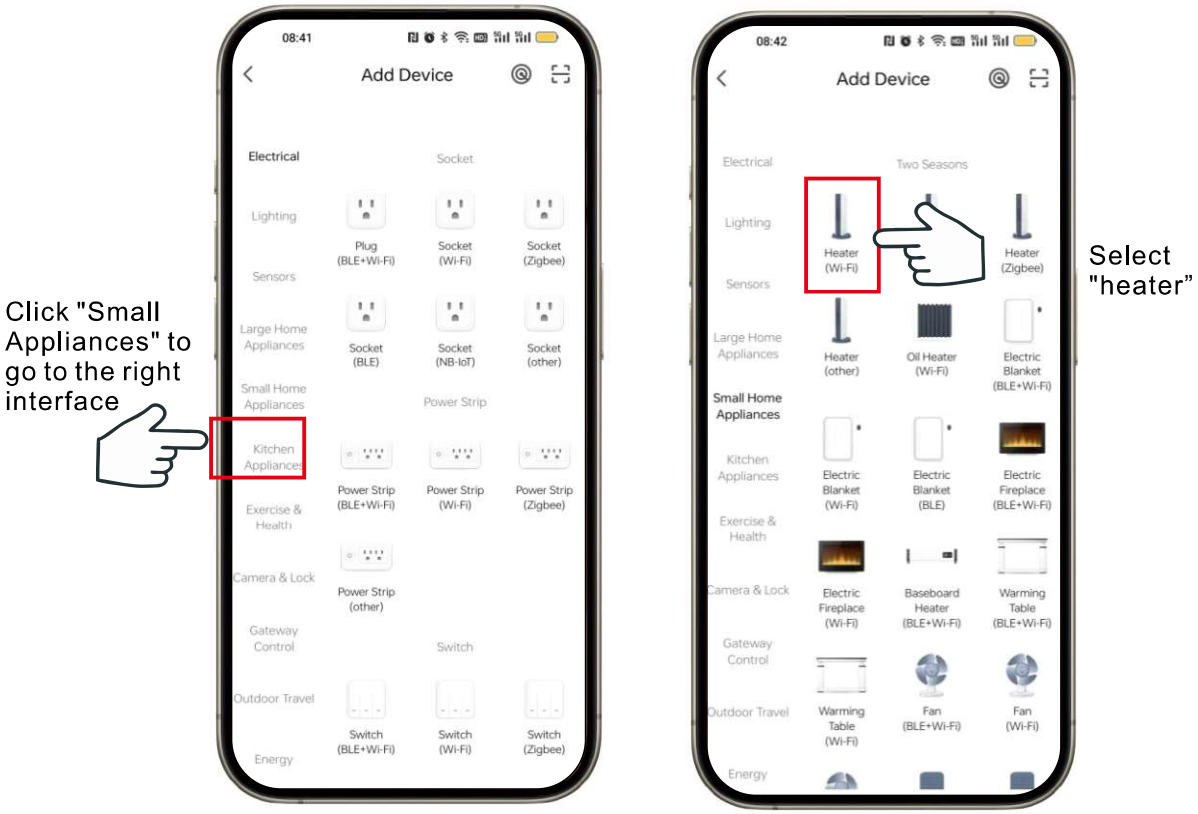
This WIFI is not the one inside the module but the WIFI that can access the Internet; After the user logs into the software, the You can add devices

Device Binding



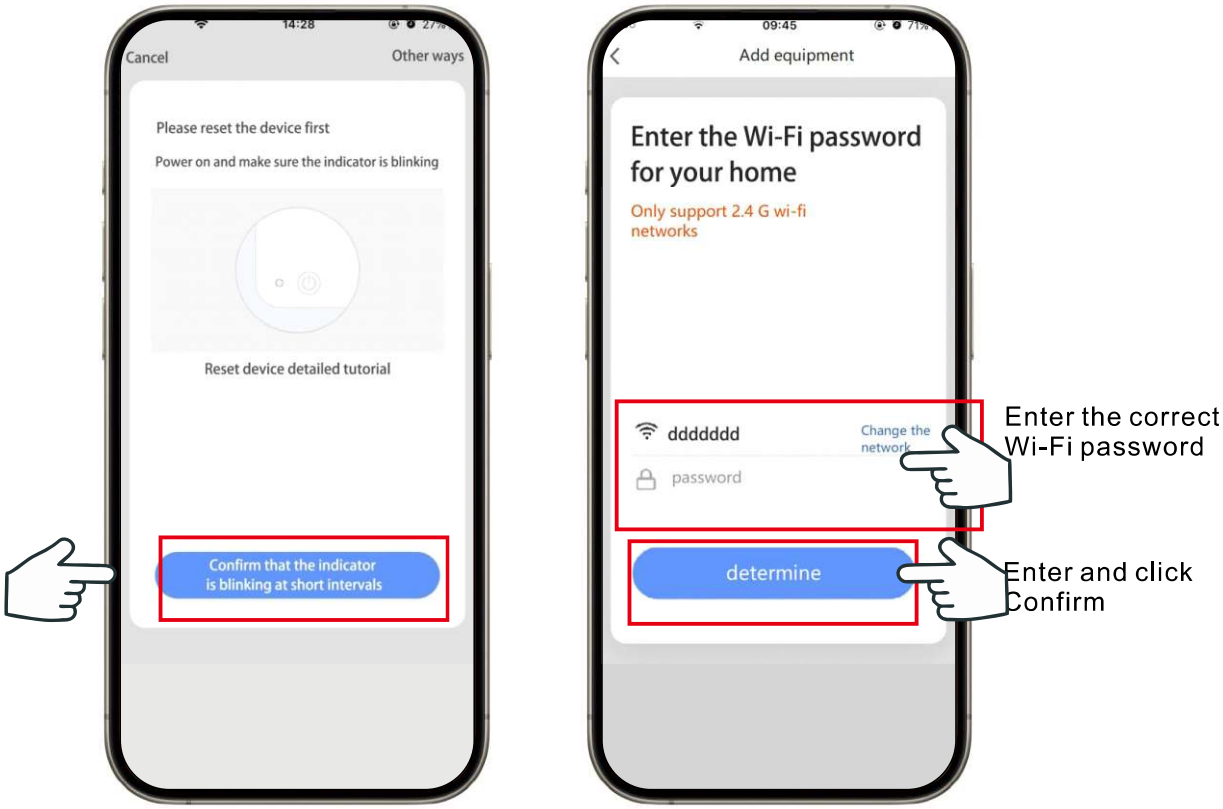
Click "+" or "Add Device" in the upper right corner to bind.

Click to enter the "Add Device Type" interface

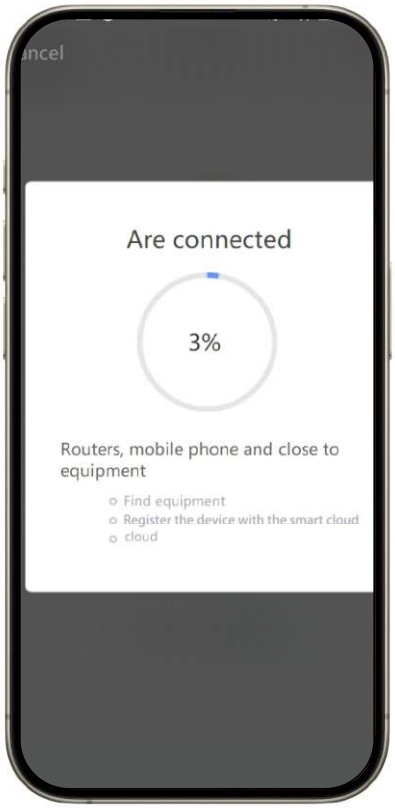


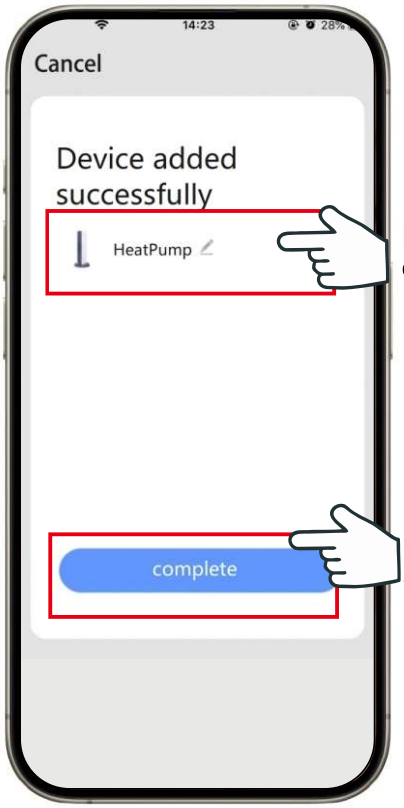
(You can also click "Other" to enter the right screen and then click "Other")

After completing the "Select Device Type", enter the "Add Device Interface", and there are "Default Mode (WI-FI Quick Connect)" and "Compatible Mode" for network wiring.(Hot spot distribution network)"
Default Mode(WI-FIQuick Connect):



After entering the password and confirming it, you will be redirected to this connection screen

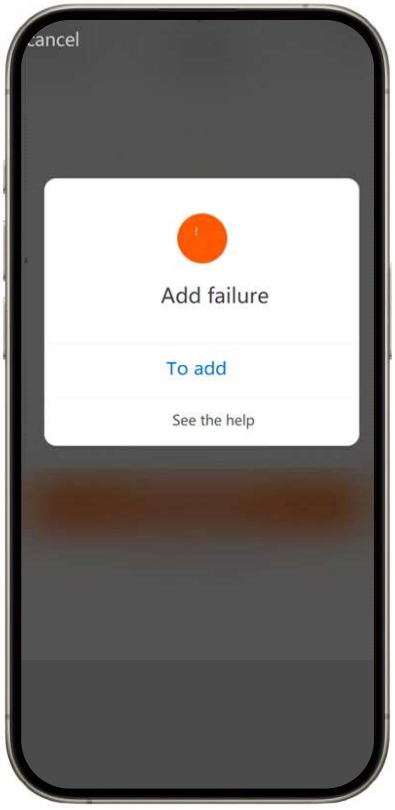




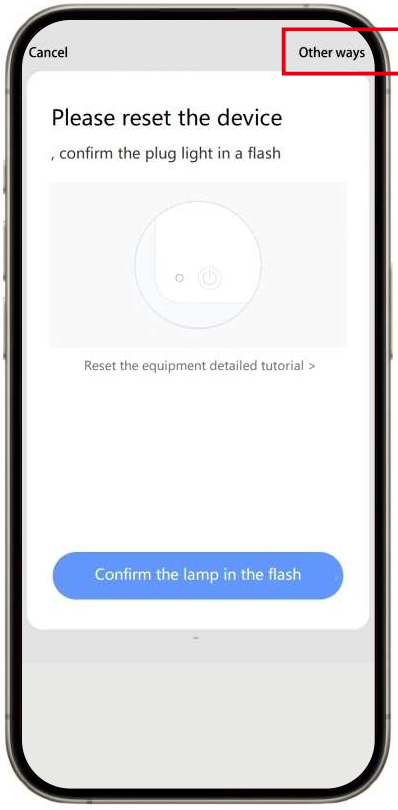
Modifiable device name

Click Finish to start device control

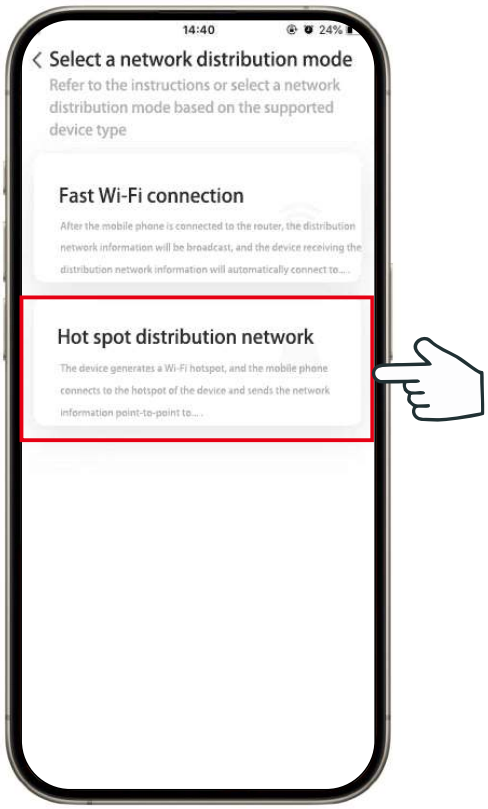
Compatible modes:



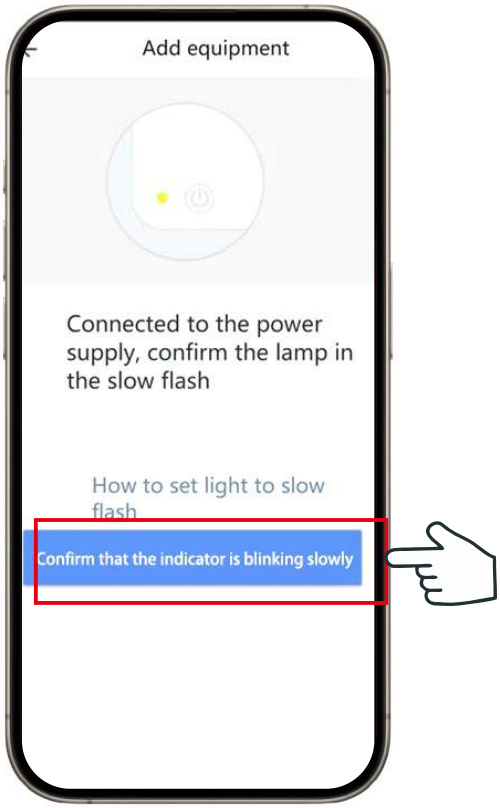
If the network fails, the app will display the page as shown in the figure, you can choose to re-add or check the help



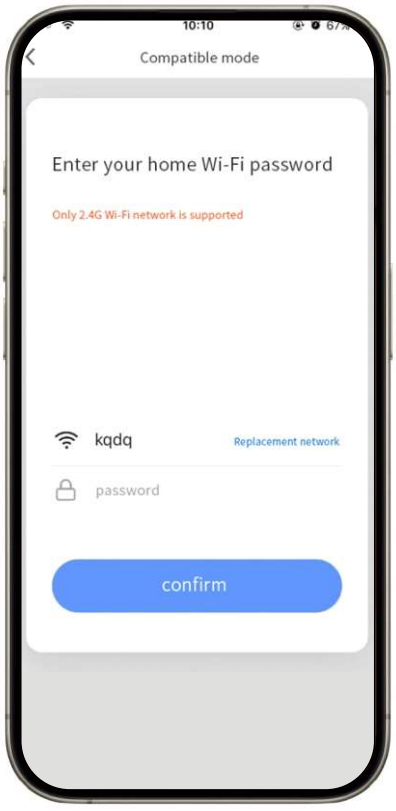
Select "Other Methods" in the Add Device screen



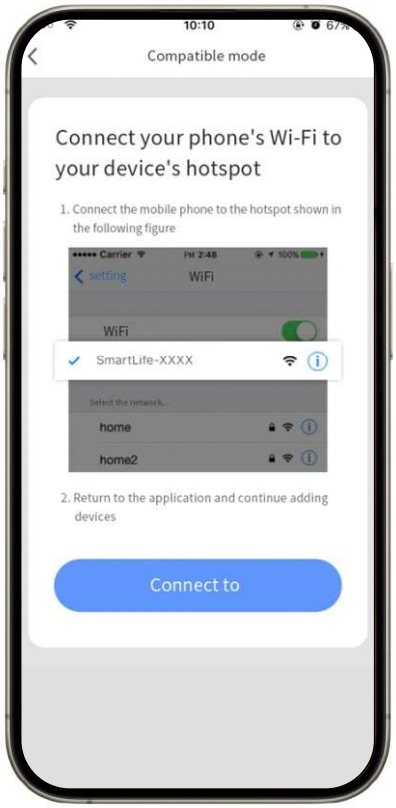
Select “Hot spot distribution network”



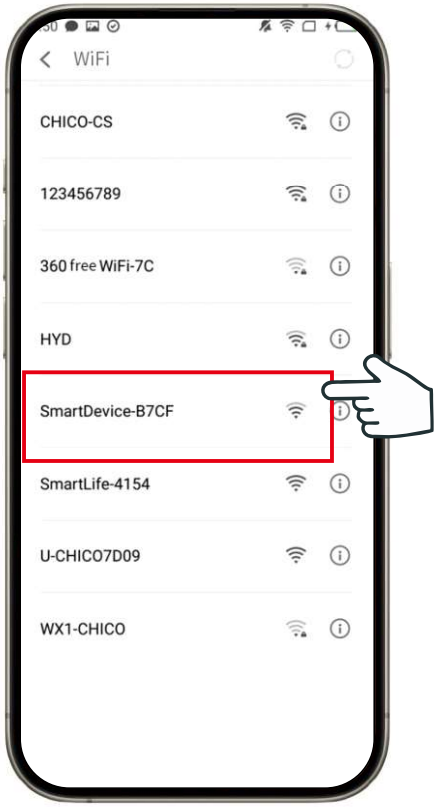
Press and hold the timing key + down key + on/off key for 3 seconds to enter "compatibility mode" with the network



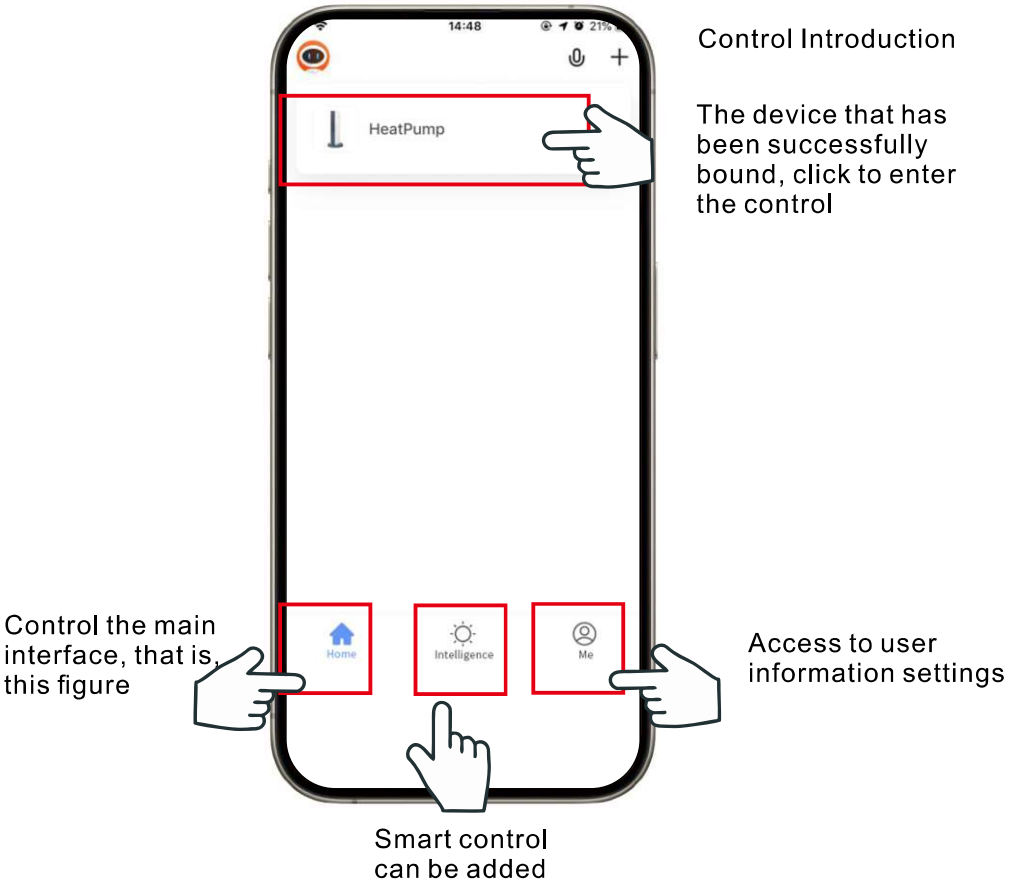
Enter the correct password and click Confirm

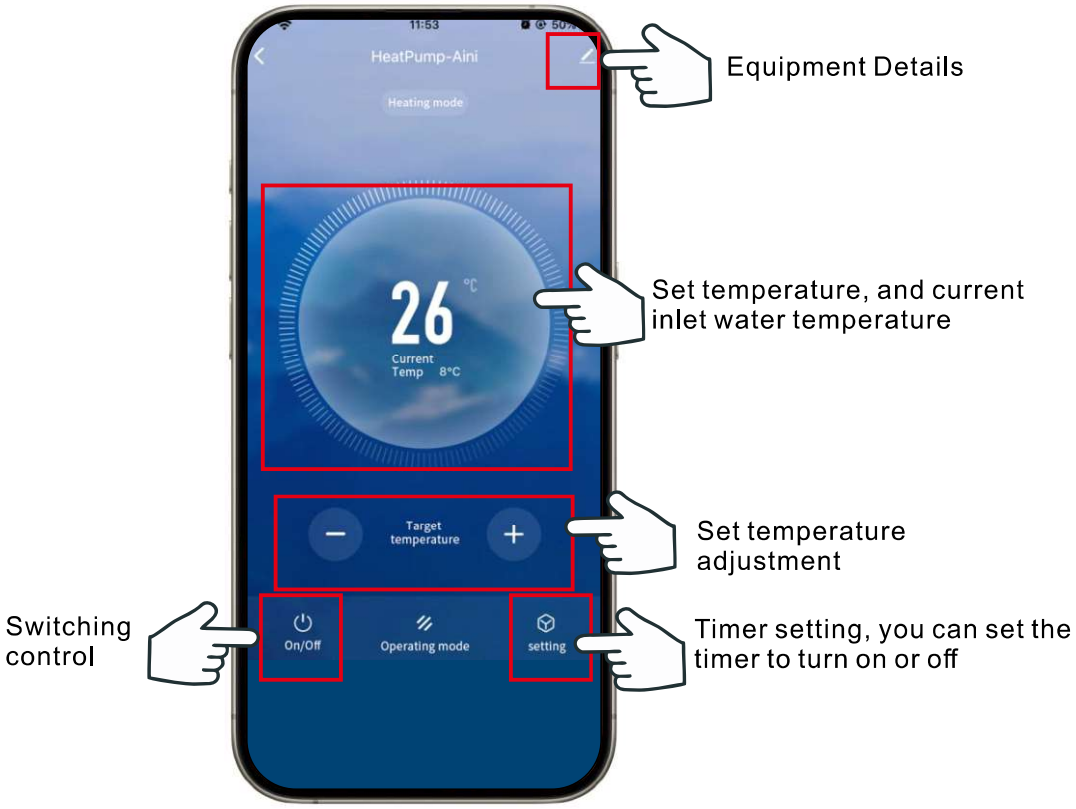


Click Go to Connect to jump to the Wi-Fi interface and select the Wi-Fi with the word SmartLife-xxxx



Select and connect and return to the APP interface to enter the network distribution process


Control Introduction
The device that has been successfully bound, click to enter the control
HeatPump
Control the main interface, that is, this figure
Home
Intelligence
Me
Access to user information settings
Smart control can be added


Equipment Details
HeatPump-Aini
Heating mode
26
Current Temp 8°C
Set temperature, and current inlet water temperature
Target temperature
Set temperature adjustment
Switching control
On/Off
Operating mode
setting
Timer setting, you can set the timer to turn on or off

8 Initial Startup

Start-up Procedure:After installation is completed, you should follow these steps:

■ Check the connections, main voltage and phase voltage before the product is started, to prevent damage to the heat pump electronics.

■ Check if all valves that need to be opened have been fully opened.

■ Rotate the fan to ensure that it turns freely, and that the turbine is properly tightened with the motor shaft.

■ Before starting the pool heat pump for the first time, it is important to verify that the breaker is in the ON position.

■ Check that the condensate drainage hose is properly attached and free of any blockages.

■ Then, you will need to set the mode and the water temperature you desire. The compressor will start after a 3 to 4-minute delay.

■ Make sure that the water circulates freely and that the pool pump is activited.

■ At initial startup,it is normal for the unit to run 24 hours a day.

■ It is also normal to see water dripping from the holes at the base of the unit.This is simple condensation.

9 Servicing and maintenance

9.1 General

Any servicing must be carried out by a competent person.
If any electrical connections have been disconnected and re-connected, checks for earth continuity must be tested for with a suitable multimeter.

⚠ **CAUTION** Before removing any covers or replacing parts the heat pump must be isolated from the mains electrical supply.

General inspection
Check the following:

a. Condition of casing
b. Check Inlet grille is not clogged with leaves
c. Check fan for any obstructions
d. Electrical supply connections
e. Water connections
f. Heating system pressure
g. Alarm log

9.2 Troubleshooting

Failure	Reason	Solution
Heat pump doesn't run	No power	Wait until the power recovers
	Heat pump control set to OFF.	Raise temperature set point above
	Fuse burned	Check and change the fuse
	The breaker is off	Check and turn on the breaker
	Desired water temperature is reached.	Unit will automatically restart when the water temperature goes below the set point.

The heat pump is running but desired water temperature cannot be reached.	Evaporator blocked	Remove the obstacles
	Air outlet blocked	Remove the obstacles
	Refrigerant leakage	Recharge refrigerant
	Restricted water flow.	Adjust water flow.
	Heat loss is too much for the heater	cover your pool as often as you can
Display normal, but no heating	Set temp. too low	Set proper heating temp.
	3 minutes start delay	Wait patiently
The heat pump is displaying "flow switch fault" and it will not start.	Pool pump is not running.	Turn the pool pump on.
	Filter is dirty, restricting the water flow.	Backwash and clean filter.
The fan is running, but the compressor is not.	The heat pump is in protection mode.	In this case, there may be a 5-minute delay before restarting.
	The heat pump is starting up, and the compressor is delayed in starting	Wait patiently

CAUTION If the malfunction cannot be resolved, please contact the supplier with serial number.

9.3 Alarm list

Fault code	Fault Reason
E01	Exhaust temperature senor fault
E05	External coil temperature Transmission fault(T2)
E09	Air Temperature Fault suction Air temp Fault
E17	Water Temperature Fault Water-inlet(T4)
E18	Water Temperature Fault Water-Outlet(T4)
E21	Communication fault with Display
E22	Ambient temperature senor fault
E25	Water flow switch fault
E27	Driver board communication fault
E28	EEPROM error PCB board
E29	Driver EEPROM error
Protection code	
P02	High protection pressure switch
P06	Low protection pressure switch
P11	Exhaust air temperature too high protection
P15	Deviation between water-inlet/outlet value overgigh
P16	Cooling mode water over cooling protection
P17	Standby freeze protection
P19	Protection Compressor current
P24	DC fan protection and fault
P25	Ambient temp protection
P27	Refrigeration external coil over-temperature protection

Driver code	
r02	Compressor drive failure
r05	IPM module overheating protection
r06	Overcurrent protection of the whole machine
r09	DSP and communication board communication failure
r10	DC overvoltage protection
r11	DC undervoltage protection
r12	AC voltage over-under-voltage protection
r14	IPM temperature sensor failure
r21	IPM overcurrent protection
r23	Compressor phase loss
r24	Abnormal power supply of external machine

10 Winterizing

■ First, you must turn the breaker off. The unit must be drained of all its water.You will need to disconnect the IN and OUT water connections.

■ The next step is to reconnect your IN and OUT water connections that will have previously been drained.

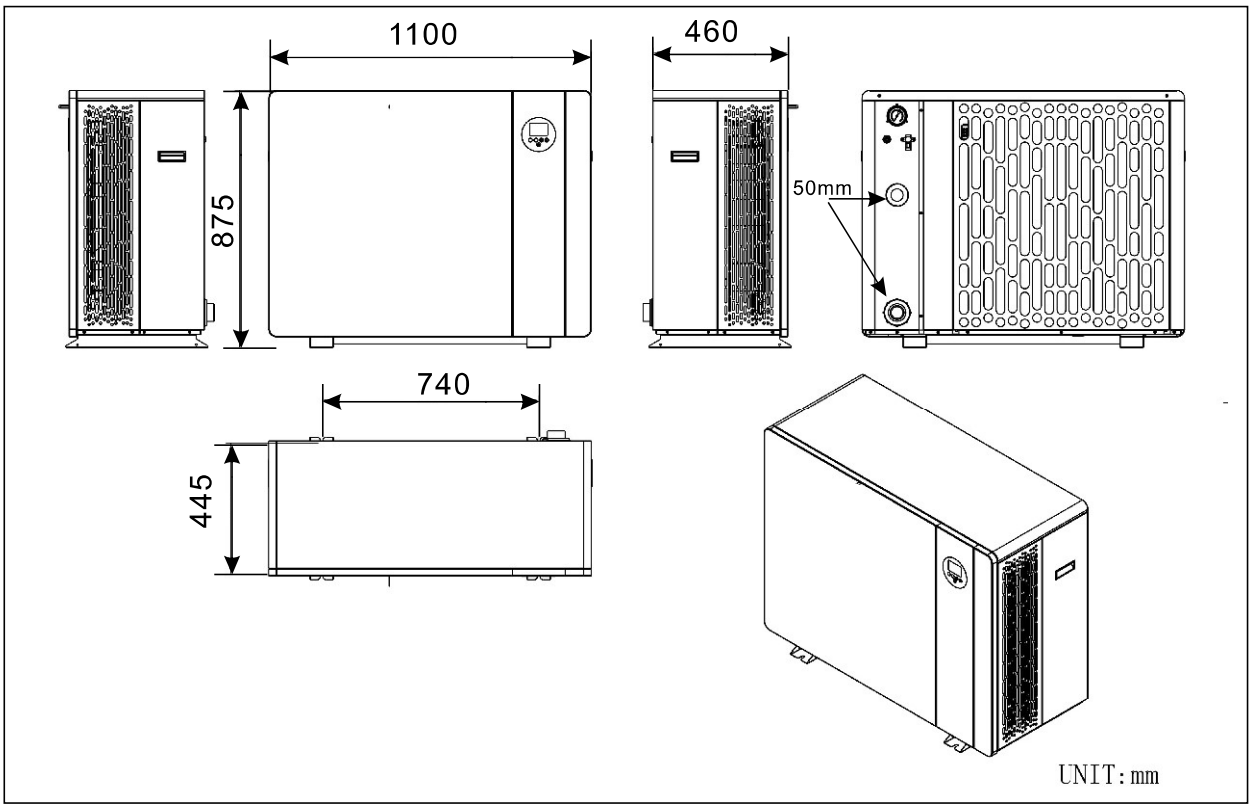
■ It is recommended to cover the heat pump to prevent snow from getting inside.

CAUTION When the water in swimming pool heat pump freezes in winter, the titanium heat exchanger may be damaged.

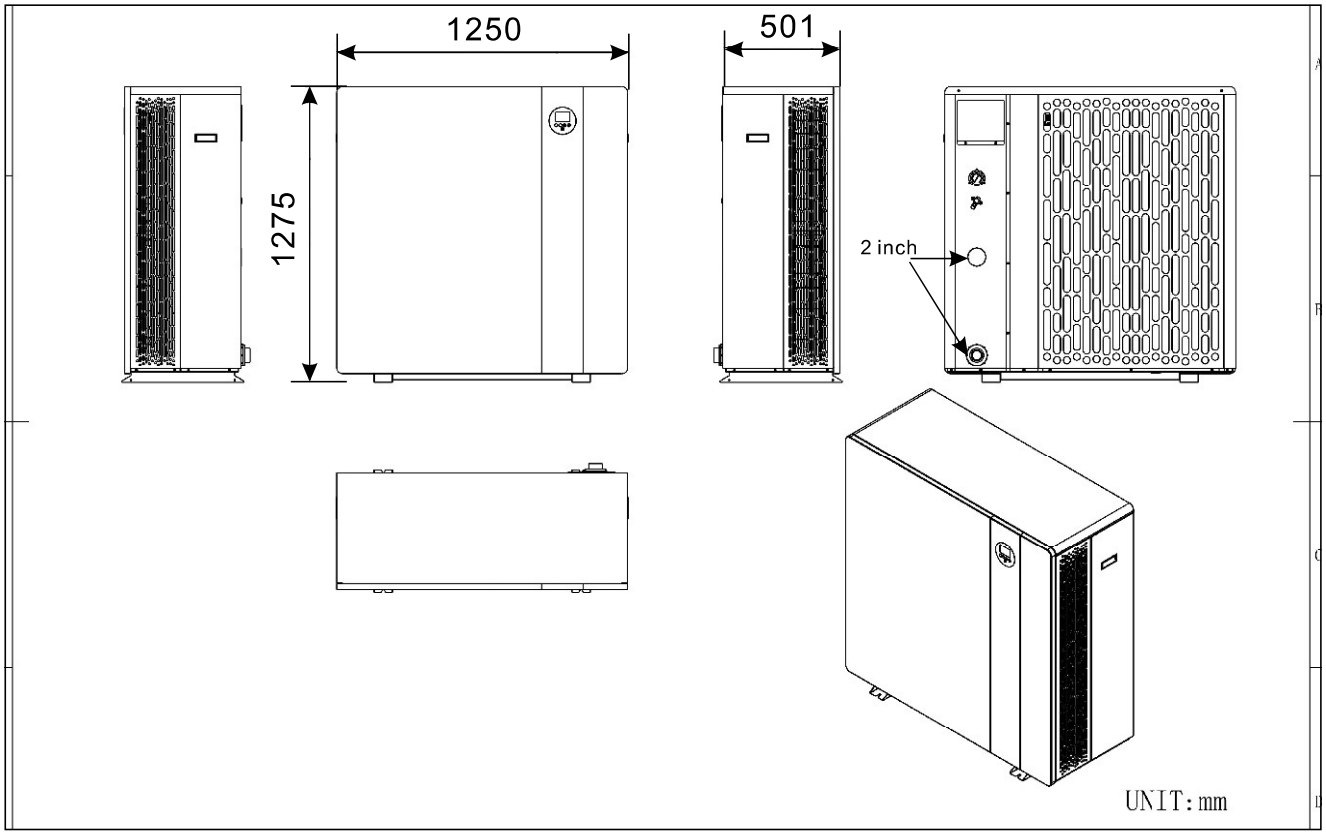
11 Technical Data

11.1Dimensions

Model:SSD3012/SSD3017

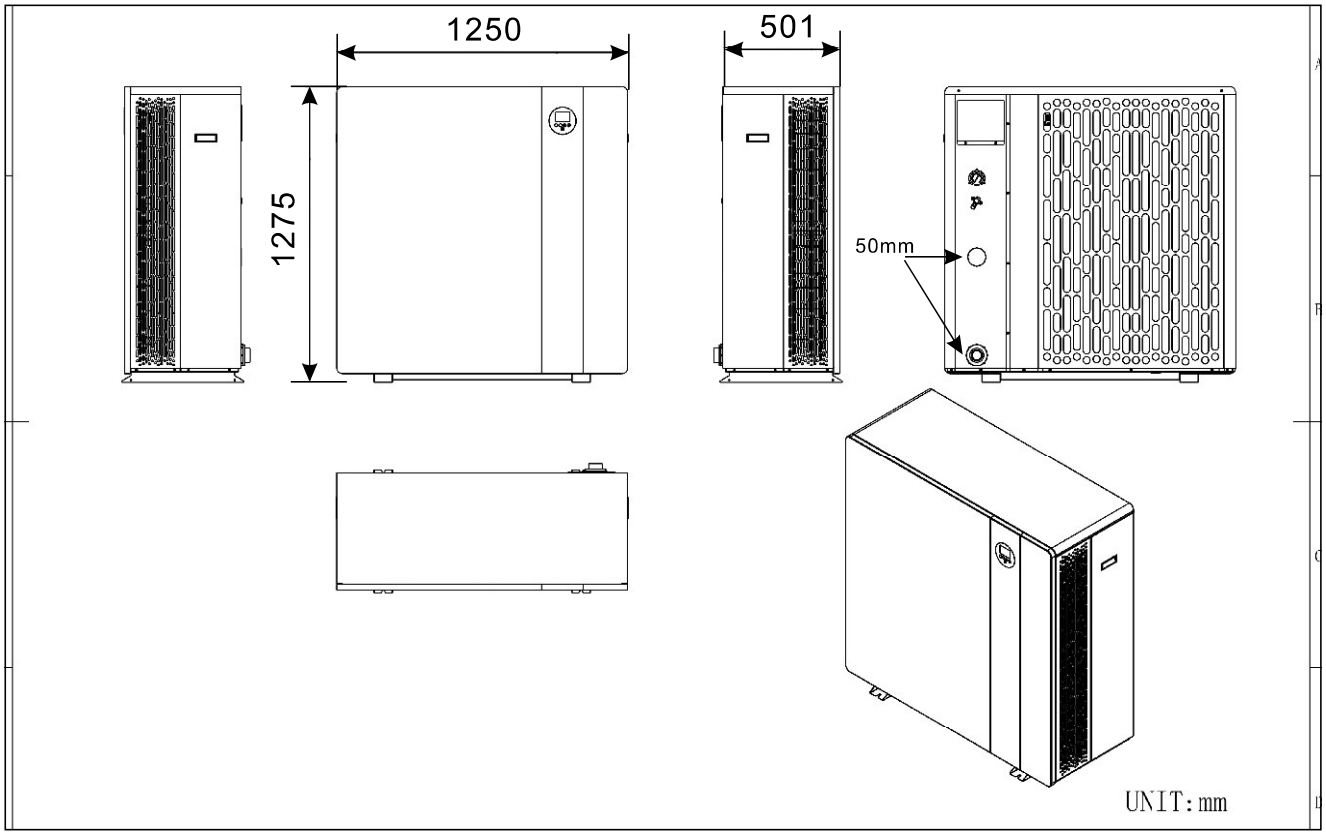


Model:SVD3025,SVD3030,SVD3035S



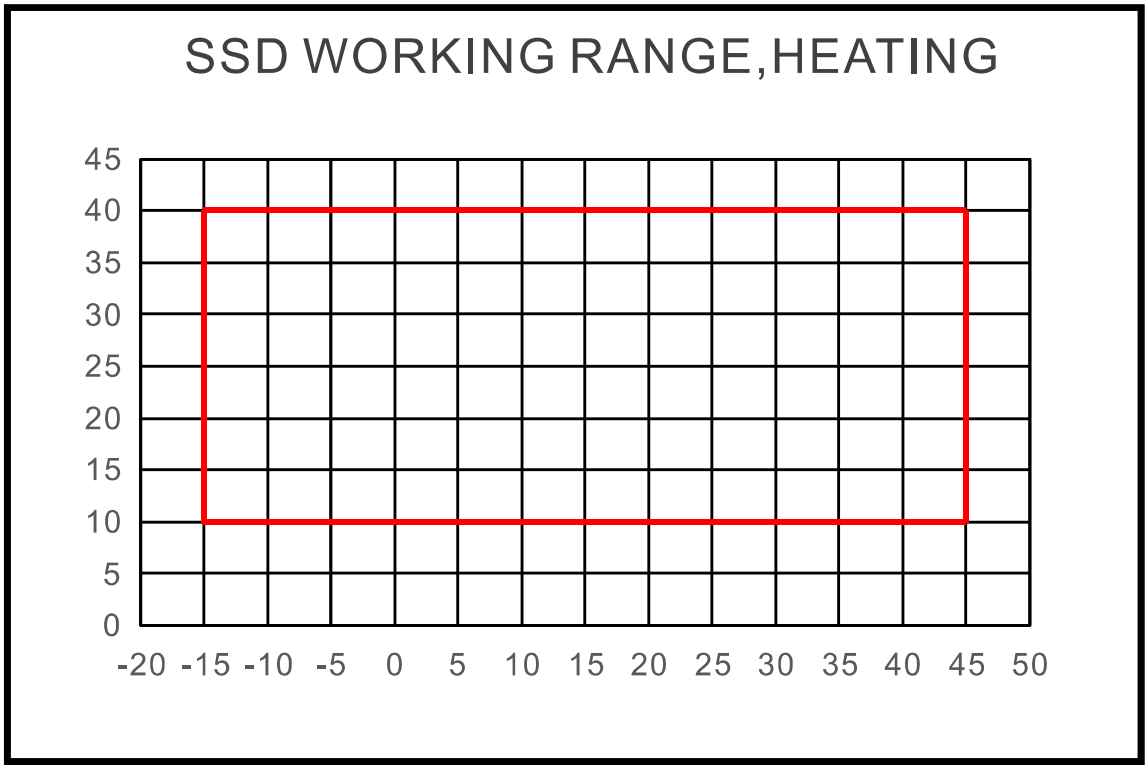
Model:

Model:SSD3025,SSD3030,SSD3035S

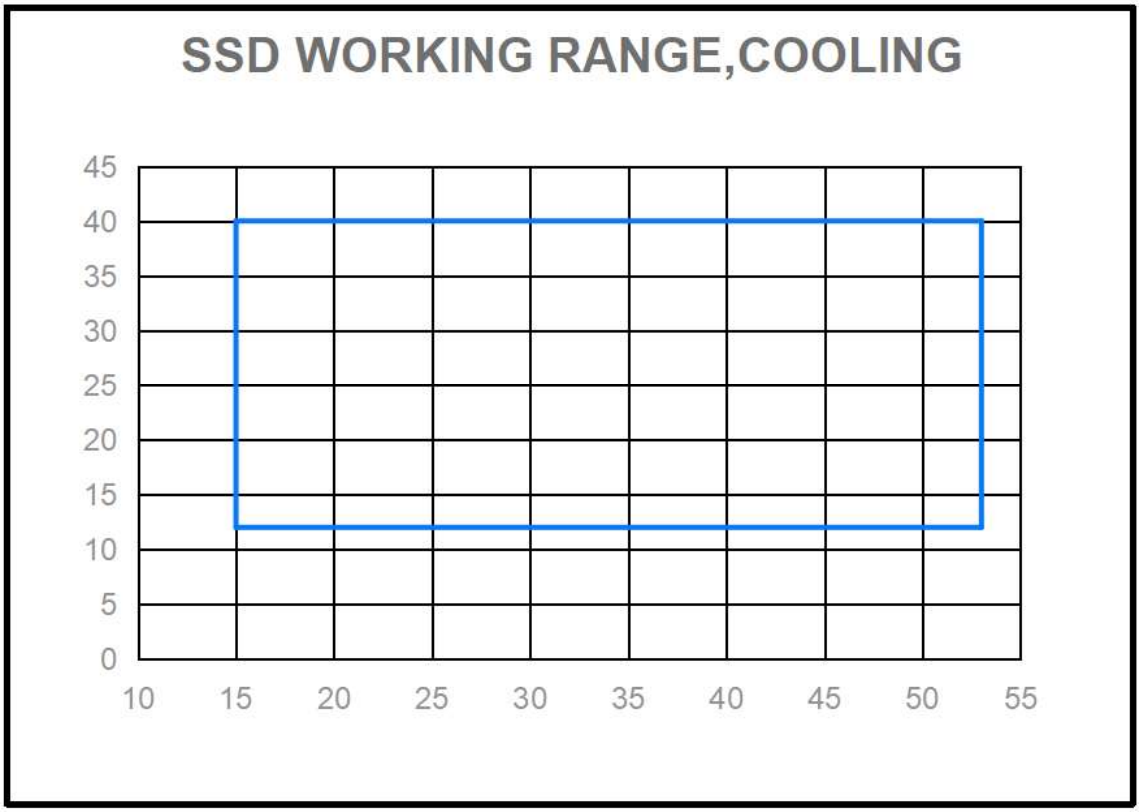


11.2Working range

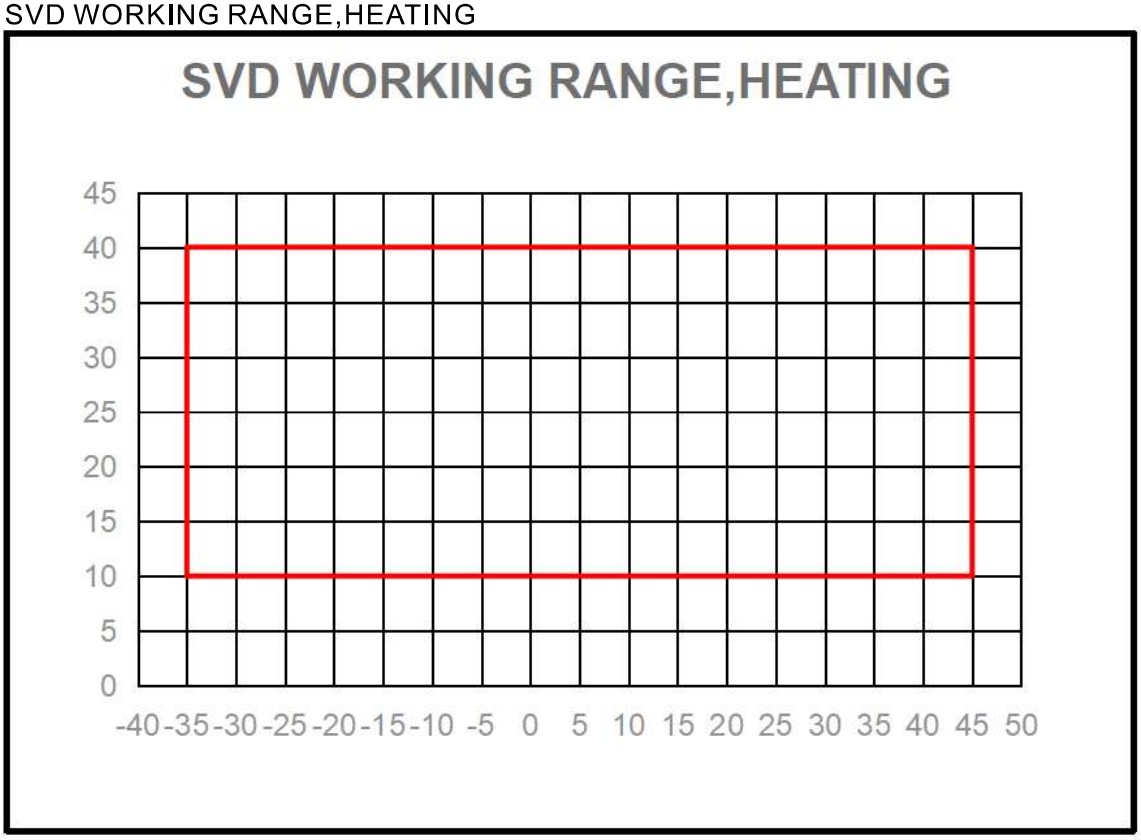
SSD WORKING RANGE,HEATING



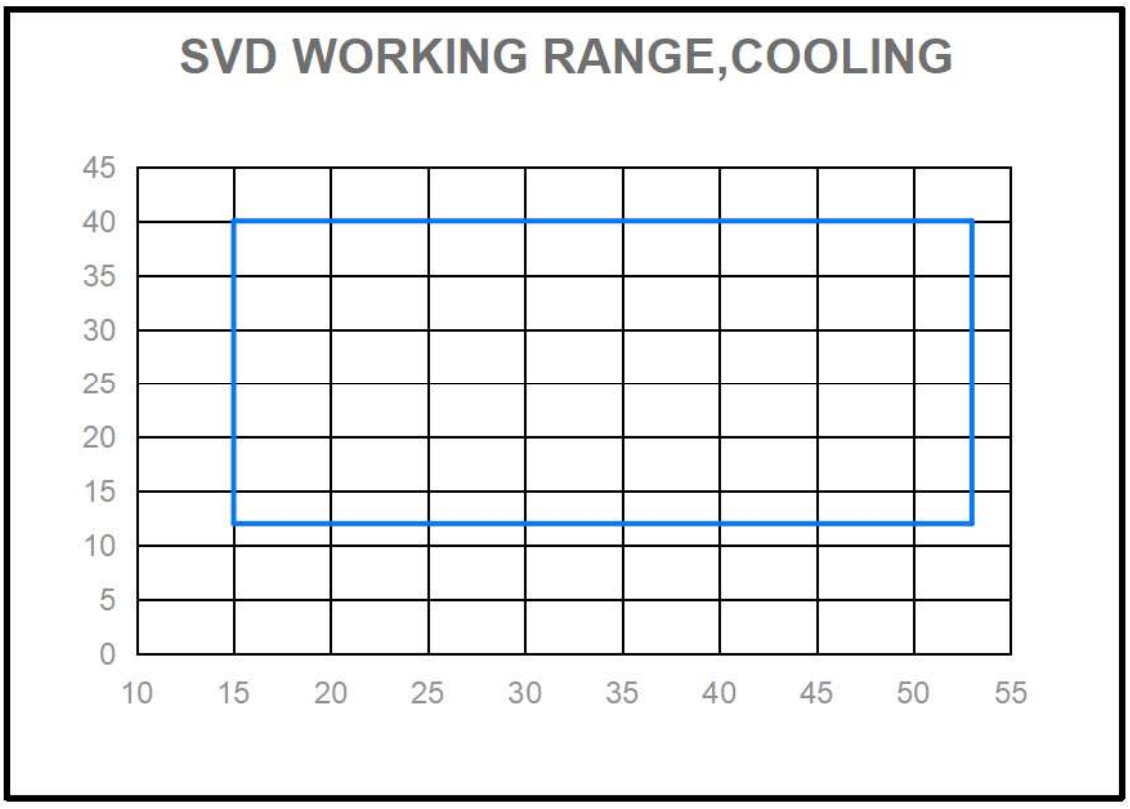
SSD WORKING RANGE,COOLING



SVD WORKING RANGE,HEATING



SVD WORKING RANGE,COOLING



11.3Technical Specifications

Model:SVD

Model		SVD-3008	SVD-3012	SVD-3017	SVD-3025	SVD-3030	SVD-3035S	SVD-3040S	SVD-3045S	SVD-3050S
Performance (Heating)										
A27°C/RH80%,W26°C	Heating Capacity(kW)	1.65~7.5	2.64~12.0	3.75~17.0	5.55~25.2	6.6~30.0	7.73~35.1	8.8~40.0	9.9~45.0	11.0~50.0
	Consumed power (kW)	0.10~1.06	0.17~1.71	0.24~2.42	0.36~3.64	0.42~4.21	0.5~5.0	0.58~5.80	0.68~6.70	0.76~7.55
	COP	16.5~7.08	15.53~7.02	15.63~7.02	15.42~6.92	15.71~7.13	15.46~7.02	15.17~7.01	14.56~6.72	14.47~6.62
A15/12°C,W26°C	Heating Capacity(kW)	1.40~6.1	2.11~9.2	3.13~13.6	4.46~19.4	5.29~23.0	6.03~26.2	7.25~31.5	7.90~34.5	9.20~40.0
	Consumed power (kW)	0.17~1.2	0.25~1.81	0.38~2.7	0.53~3.87	0.62~4.45	0.73~5.20	0.87~6.20	0.97~6.90	1.15~8.10
	COP	8.24~5.08	8.44~5.08	8.24~5.04	8.42~5.01	8.53~5.17	8.26~5.04	8.33~5.08	8.14~5.00	8.00~4.94
Performance(Cooling)										
A45℃/-℃,W40℃	Cooling Capacity(kW)	1.92~4.0	3.02~6.3	4.2~8.6	5.8~12.0	5.9~13.4	8.4~17.5	10.6~19.8	10.6~22.0	12.0~25.0
	Consumed power (kW)	0.5~1.38	0.75~2.2	1.05~2.9	1.62~4.5	1.60~5.0	2.4~6.7	2.95~7.2	2.95~8.1	3.35~9.3
	EER	3.84~2.90	4.03~2.86	4.00~2.97	3.58~2.67	3.569~2.68	3.50~2.61	3.59~2.75	3.59~2.72	3.58~2.69
A35℃/24℃,W30℃	Cooling Capacity(kW)	2.1~5.5	3.1~8.0	4.2~10.5	6.4~16.0	6.5~16.4	9.2~23.0	11.68~26.3	11.68~29.2	12.8~32.0
	Consumed power (kW)	0.4~1.62	0.6~2.3	0.78~3.1	1.32~5.3	1.3~5.3	1.9~7.6	2.3~8.2	2.3~9.2	2.63~10.5
	EER	5.25~3.40	5.17~3.33	5.38~3.39	4.85~3.02	5.00~3.09	4.84~3.03	5.08~3.21	5.08~3.17	4.87~3.05
Technical data										
Power supply		220-240V~/50Hz					380-415V/3N~/50Hz			
Max. power input	kW	1.7	2.4	3.1	5.3	5.3	8.3	9	10	11
Max. current	A	8.2	10.5	13.5	23	23	17.5	18.0	20.0	22.0
Expansion valve	-	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV
Compressor quantity	-	1	1	1	1	1	1	1	1	1
Compressor type	-	DC inverter EVI								
Fan quantity	PCS	1	1	1	2	2	2	2	2	2
Airflow volume(max)	m^3/h	1800	2400	2400	3600	5200	6000	7500	7500	7500
Airflow direction	-	Horizontal								
Sound pressure 1m	dB(A)	35~45	35~46	38~47	40~50	42~51	42~51	42~52	43~54	43~54
Water connection	Inch	2"	2"	2"	2"	2"	2"	2"	2"	2"
Water fow volume	m^3/h	3.2	5.1	7.3	10.8	12.9	15.1	17.2	19.4	21.5
Refrigerant	-	R32								
Operating air temperature	℃	-35~53								
Operation pressure (low side)	Mpa	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Operation pressure (high side)	MPa	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Unit dimensions(L/W/H)	mm	850×440×660	1000×800×450	1000×800×450	1200×1330×550	1200×1330×550	1200×1330×550	1250×1580×600	1250×1580×600	1250×1580×600
Net Weight	kg	54	73	78	151	155	157	205	215	225

Model		SSD-3008	SSD-3012	SSD-3017	SSD-3025	SSD-3030	SSD-3035S	SSD-3040S	SSD-3045S	SSD-3050S
Performance (Heating)										
A27°C/RH80%,W26°C	Heating Capacity(kW)	1.65~7.5	2.64~12.0	3.75~17.0	5.55~25.2	6.6~30.0	7.73~35.1	8.8~40.0	9.9~45.0	11.0~50.0
	Consumed power (kW)	0.10~1.06	0.17~1.71	0.24~2.42	0.36~3.64	0.42~4.21	0.5~5.0	0.58~5.80	0.68~6.70	0.76~7.55
	COP	16.5~7.08	15.53~7.02	15.63~7.02	15.42~6.92	15.71~7.13	15.46~7.02	15.17~7.01	14.56~6.72	14.47~6.62
A15/12°C,W26°C	Heating Capacity(kW)	1.40~6.1	2.11~9.2	3.13~13.6	4.46~19.4	5.29~23.0	6.03~26.2	7.25~31.5	7.90~34.5	9.20~40.0
	Consumed power (kW)	0.17~1.2	0.25~1.81	0.38~2.7	0.53~3.87	0.62~4.45	0.73~5.20	0.87~6.20	0.97~6.90	1.15~8.10
	COP	8.24~5.08	8.44~5.08	8.24~5.04	8.42~5.01	8.53~5.17	8.26~5.04	8.33~5.08	8.14~5.00	8.00~4.94
Performance(Cooling)										
A45℃/-℃,W40℃	Cooling Capacity(kW)	1.92~4.0	3.02~6.3	4.2~8.6	5.8~12.0	5.9~13.4	8.4~17.5	10.6~19.8	10.6~22.0	12.0~25.0
	Consumed power (kW)	0.5~1.38	0.75~2.2	1.05~2.9	1.62~4.5	1.60~5.0	2.4~6.7	2.95~7.2	2.95~8.1	3.35~9.3
	EER	3.84~2.90	4.03~2.86	4.00~2.97	3.58~2.67	3.569~2.68	3.50~2.61	3.59~2.75	3.59~2.72	3.58~2.69
A35℃/24℃,W30℃	Cooling Capacity(kW)	2.1~5.5	3.1~8.0	4.2~10.5	6.4~16.0	6.5~16.4	9.2~23.0	11.68~26.3	11.68~29.2	12.8~32.0
	Consumed power (kW)	0.4~1.62	0.6~2.3	0.78~3.1	1.32~5.3	1.3~5.3	1.9~7.6	2.3~8.2	2.3~9.2	2.63~10.5
	EER	5.25~3.40	5.17~3.33	5.38~3.39	4.85~3.02	5.00~3.09	4.84~3.03	5.08~3.21	5.08~3.17	4.87~3.05
Technical data										
Power Supply		220-240V~/50Hz					380-415V/3N~/50Hz			
Max. power input	kW	1.7	2.4	3.1	5.3	5.3	8.3	9	10	11
Max. current	A	8.2	10.5	13.5	23	23	17.5	18.0	20.0	22.0
Expansion valve	-	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV	EEV
Compressor quantity	-	1	1	1	1	1	1	1	1	1
Fan quantity	PCS	1	1	1	2	2	2	2	2	2
Airflow volume	m^3/h	1800	2400	2400	3600	5200	6000	7500	7500	7500
Airflow direction	-	Horizontal								
Sound pressure 1m	dB(A)	35~45	35~46	38~47	40~50	42~51	42~51	42~52	43~54	43~54
Water connection	mm	50	50	50	50	50	50	50	50	50
Water flow volume	m^3/h	3.2	5.1	7.3	10.8	12.9	15.1	17.2	19.4	21.5
Refrigerant	-	R32								
Operating air temperature	℃	-15~53								
Operation pressure (low side)	Mpa	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1	2.1
Operation pressure (high side)	MPa	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4	4.4
Unit Dimensions(L/W/H)	mm	800×660×400	1000×800×450	1000×800×450	1200×1330×550	1200×1330×550	1200×1330×550	1250×1580×600	1250×1580×600	1250×1580×600
Net Weight	kg	52	71	75	148	152	154	200	210	220