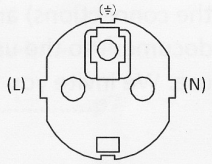
10. Always make sure the water connections of the heat pump are properly locked before you start using the machine.
11. Never insert objects directly into the fan when the heat pump is operating, as this will cause it to become blocked and damaged.
12. Suggested water flow speed is 1.5~4m³/h.
13. In a concern to a constant improvement, our products can be modified without notice; the present pictures in this note or the characteristics which are described are not contractual.



14. When connect plug to socket (power supply), please make sure that live wire, neutral wire, earth wire to plug should be connected as right drawing.
15. If the supply cord is damaged, it must be replaced by the manufacture, its service agent or similar qualified persons in order to avoid a hazard.
16. This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.
17. Children shall not play with the appliance.
18. Cleaning and user maintenance shall not be made by children without supervision.

3. Delivery's control

At the delivery time, check the condition of packing; in case of damages, have reservation about them to the carrier, before 48 hours and by registered letter with acknowledged receipt.

Before any manipulation, check the complete state of the machine.

4. Technical description

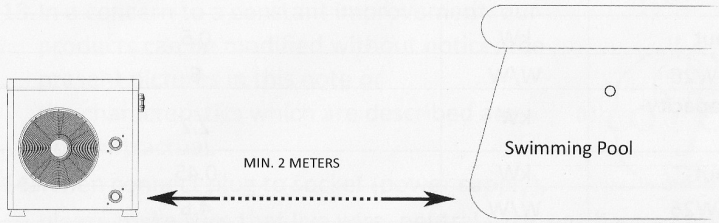
Unit Model	Unit	BP-32WS-MY
Heating Capacity A26/W26	kW	3.2
Power Input	kW	0.5
COP A26/W26	W/W	6
Heating Capacity A15/W26	kW	2.2
Power Input	kW	0.45
COP A15/W26	W/W	4.6
Power Supply	V/P/Hz	220/1/50
Current	A	2.5
Advised pool volume (with pool cover)	m3	0-10
Water Flow Volume	m3/h	3.0
Compressor Style		Rotary
Heating Exchanger		Titanium in PVC
Water Connection	mm	32&38
Noise (10m)	dB(A)	36
Noise (1m)	dB(A)	46
Refrigerant -R32	g	270
Co2 weight of the fluorinated greenhouse gases	T	0.18
Net Unit Size (L/W/H)	mm	360x355x410
Carton Size (L/W/H)	mm	450x410x440
Net/Gross Weight	kg	19/21

*** possible variations of value according to climatic conditions**

5. Preparation

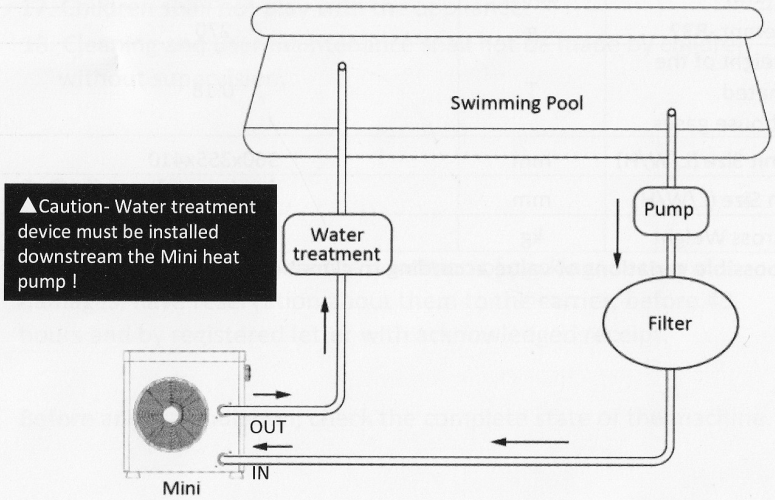
5.1. Distance from the pool

The heat pump should be located at least 2m away from the swimming pool.



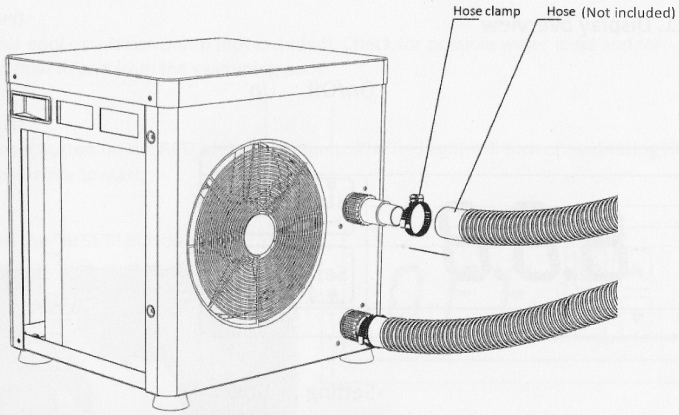
- **A free area of minimum 0,3 meter around the heat pump has to be kept clear from any object.**
- **Put the heat pump on a flat, solid base.**
- **Do not obstruct the fan, leave at least 1.5m free unobstructed space in front of the fan.**

5.2. Typical configuration



▲Caution- Water treatment device must be installed downstream the Mini heat pump !

5.3. Hose connection

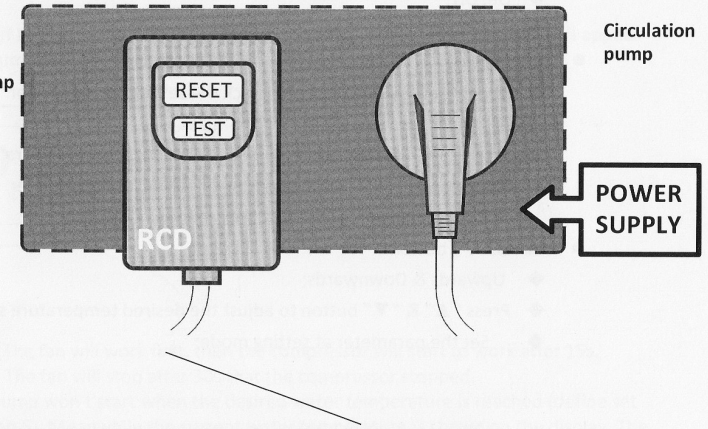


▲Caution-It is normal for condensation water to come out of the heat pump when it is operating. This is not a fault or leak!

5.4. Electrical connection

The RCD is

Mini heat pump RCD plug



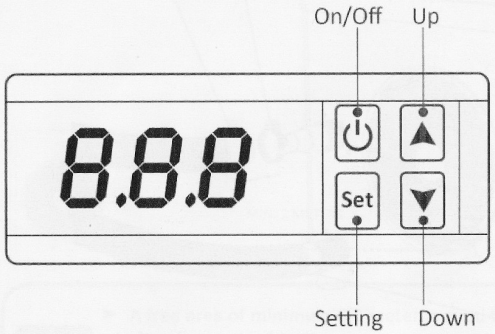
Circulation pump

▲Caution- Make sure your outlet is earthed.

▲Caution- The pool circulation pump must operate with the heat pump. Therefore, connect them to the same circuit used for outdoor.

6. Start up and settings

6.1. Display overview



6.2. Operation Instruction

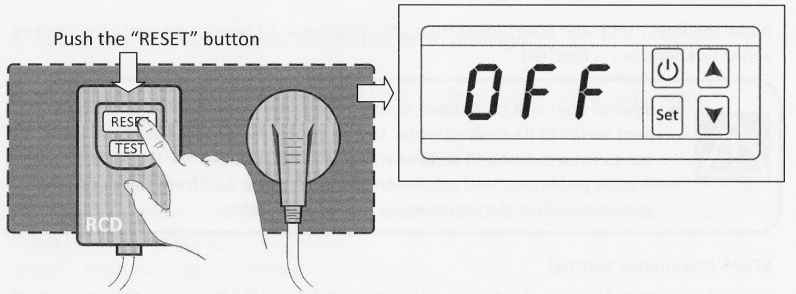
1. **Button and operation**

- On/Off button:
  - On/Off;
  - Exit the setting mode;
- "Set" button:
  - Press "Set" button for 5s to check the setting, press "▲" or "▼" to page up or page down;
  - Press "Set" button again to set the parameter (the parameter starts to flash), press "▲" or "▼" button to adjust the parameter, then press the "Set" button again to confirm the setting;
- "▲" & "▼" button:
  - Upwards & Downwards;
  - Press "▲" & "▼" button to adjust the desired temperature setting.
  - Set the parameter at setting mode;

6.3. Starting

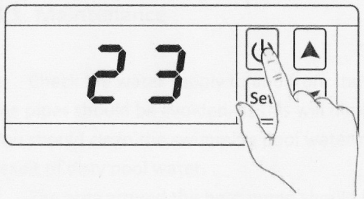
STEP1 (Start)
Turn on your pool circulation pump (not included). Check for possible water leaks and for good water flow to and from the swimming pool.

STEP2 (Start)
Push the reset button on the RCD of the heat pump. The Red light will turn on, indicating the heat pump is ready to start.



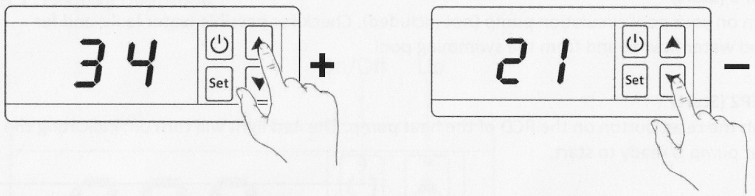
STEP3 (Start)

Push the On/Off button to start the heat pump. The current water temperature will appear and the heat pump will start automatically.



1. Power on- The fan will work first, then the compressor will start to work after 15s.
   Power off- The fan will stop after 30s that the compressor stopped.
2. The heat pump won't start when the desired water temperature is reached (define set point in step 5). Meanwhile the current water temperature is shown on the display. The heat pump will start automatically when the water temperature drops a pre-setting °C (*default is 3°C, available to be set to 1~10°C, refer the 'Operation parameter' on page 12*) below set point.
3. The compressor will NOT stop within 2 minutes after it starts to work.
4. The compressor will stop in 3 minutes after it stops working.

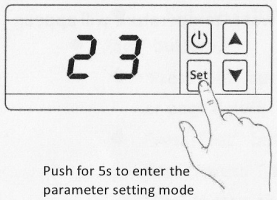
STEP4 (Temperature Setting)
Push the "▲" & "▼" to set the desired temperature.



Allow the heat pump and filter/water pump to initially run 24 hours a day until the desired water temperature is reached.

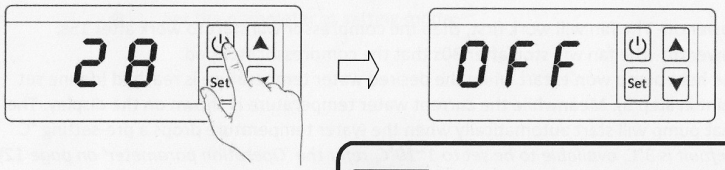
- **Several days will be needed to bring the temperature of the swimming pool water to its desired water temperature, depending the initial water temperature, ambient temperature and pool volume.**
- **A good pool cover and insulation of the piping to and from the swimming pool can reduce the warming up time considerably.**

STEP5 (Parameter Setting)
Press "Set" button for 5s to check the setting, press "▲" or "▼" to choose the parameter. Press "Set" button again to set the parameter (the parameter starts to flash), press "▲" or "▼" button to adjust the parameter, then press the "Set" button again to confirm the setting.



Push for 5s to enter the parameter setting mode

STEP6 (Stop)
Push the On/Off button to stop the heat pump.



- **The heat pump shuts down but the fan keeps on turning for 30 seconds to cool down.**

7. Guidelines

7.1. Cold/harsh weather conditions

Your heat pump is designed to operate in rainy weather conditions and withstand frost using a specially created antifrost technology. However it is not recommended to leave it outside for long periods of time (eg over winter). After draining down the pool for the winter, store the heat pump in a dry place.

7.2. Restarting the heat pump after long term storage

If your heat pump has been stored for a long time, perform the following steps when re-starting the system:
1. Inspect the system for any debris or damage to the case.
2. Clean the evaporator fins if necessary. Make sure the evaporator fins are clean. Blocking the air intake will cause insufficient operation and will result in lower production of heat.
3. Check the fan for blockages.
4. Connect the water inlet and outlet.
5. Turn on the pool water circulation pump to start the water flow to the heat pump.
6. Restore electrical power to the heat pump and press the RESET button on the RCD.

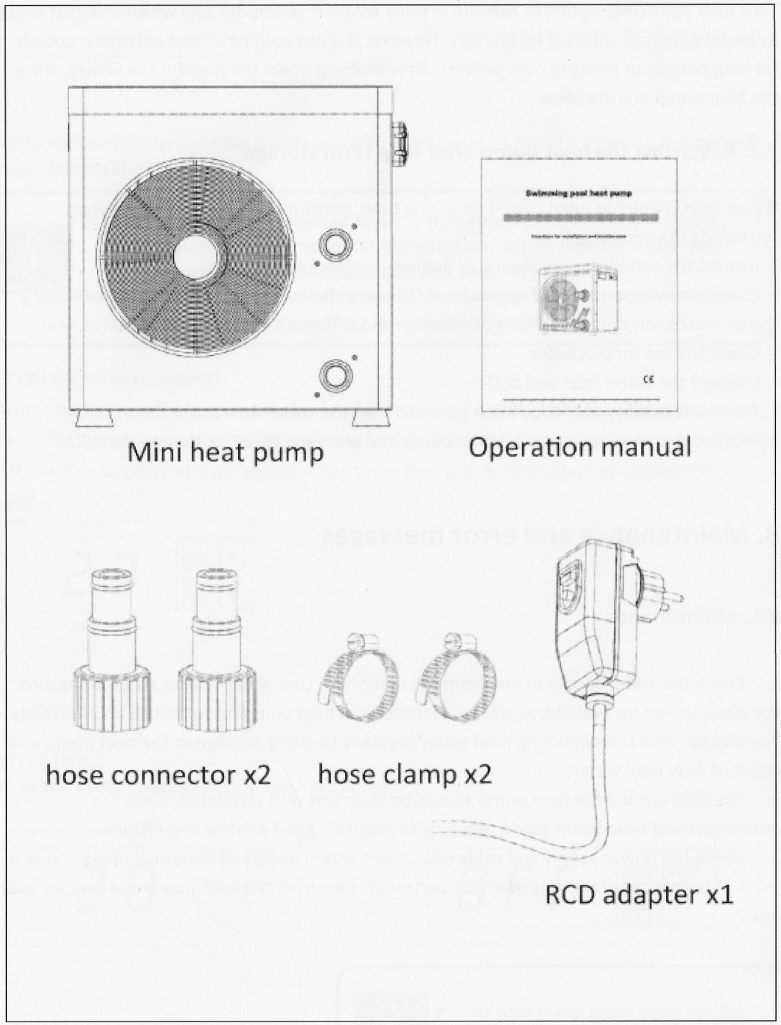
8. Maintenance and error messages

8.1. Maintenance

1. Check the water supply to and from the unit often. Low water flow or air entering into the pipes should be avoided, as this will diminish the heat pump performance and reliability. You should clean the swimming pool water regularly to avoid damage to the heat pump as a result of dirty pool water.
2. The area around the heat pump should be clear and well ventilated. Clean the evaporator and evaporator guard regularly to maintain good air flow and efficiency.
3. Check the power supply and cable connection often. In case of abnormal operation or a smell of burning near the electrical compartment, switch off the heat pump and contact your dealer.

8.2. Packaging

The packaging includes:



8.3. Error Message and trouble shooting

Error Message	Component	Possibility	Solution
P1	Water temperature sensor	Sensor disconnected, non supplied or defective	Check the connections, the wires, change it or replace the electronic card
P2	compressor exhaust temperature sensor	Sensor disconnected, non supplied or defective	Check the connections, the wires, change it or replace the electronic card
P3	Copper sensor	Sensor disconnected, non supplied or defective	Check the connections, the wires, change it or replace the electronic card
P4	Auto power off	No flow rate or flow rate is too low.	Check the pump and filtration system to make the flow rate right
P5	Low pressure protection	Sensor disconnected, non supplied or defective	Check the connections, the wires, change it or replace the electronic card
		Refrigerant Leaks	Have the heat pump checked by a refrigeration technician

At error P4, the compressor will restart automatically after 3 min when the exhaust temperature lower than the protection pre-setting (parameter 3) for 15°C. If P4 happens 3 times in 30 min, it requires to restart manually by cutting off the power.

Operation parameter

No.	Meaning	Range	Default	Changeable
A	Water input temperature (actual)	-19～99°C	-	N/A
B	Exhaust temperature (actual)	-19～99°C	-	N/A
C	Copper temperature (actual)	-19～99°C	-	N/A
1	Heating setting water temperature	15°C～35°C	27°C	YES
2	Water temperature difference to restart	1°C～10°C	1°C	YES
3	Exhaust temperature protection	30°C～80°C	47°C	YES
4	Automatic restart	0/1	1	YES
5	Automatic defrost cycle time	10-90min	40min	YES
6	Automatic defrost setting temperature	-30°C～0°C	0°C	YES
7	Temperature of exit auto-defrost mode	1°C～30°C	2°C	YES
8	Time of exit auto-defrost mode	10-40min	30min	YES