INSTALLATION AND USER'S MANUAL

BUFFER TANK FOR HEATING SYSTEMS

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1. Introduction

E|S Buffer tanks

A buffer tank is recomended together with a heat pump when water volume for the heating system is less than 15 l/kW. This increases the water volume and running stability of the heat pump in order to;

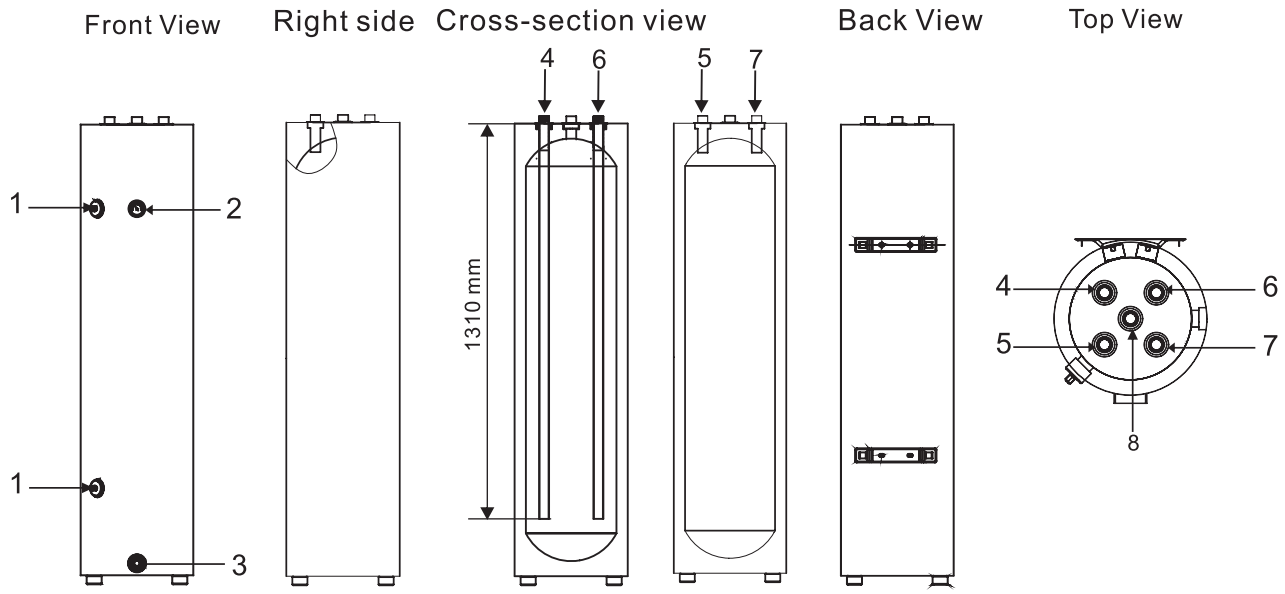
1. Ensure stable and sufficient flow
2. Store heat to minimize fluctuation of the system
3. Increase the water volume for better heat pump performance
4. Optional with stainless steel coil for hot water heating, outdoor snow melting system or solar heating system.

BT100TC/SC

ES buffer tank can be delivered in different configurations and design.
The standard stainless steel innertanks are delivered in 100 liter.
2 sensor tubes, 1 inch connectors and 37.5 mm foam insulation is standard.
Optional

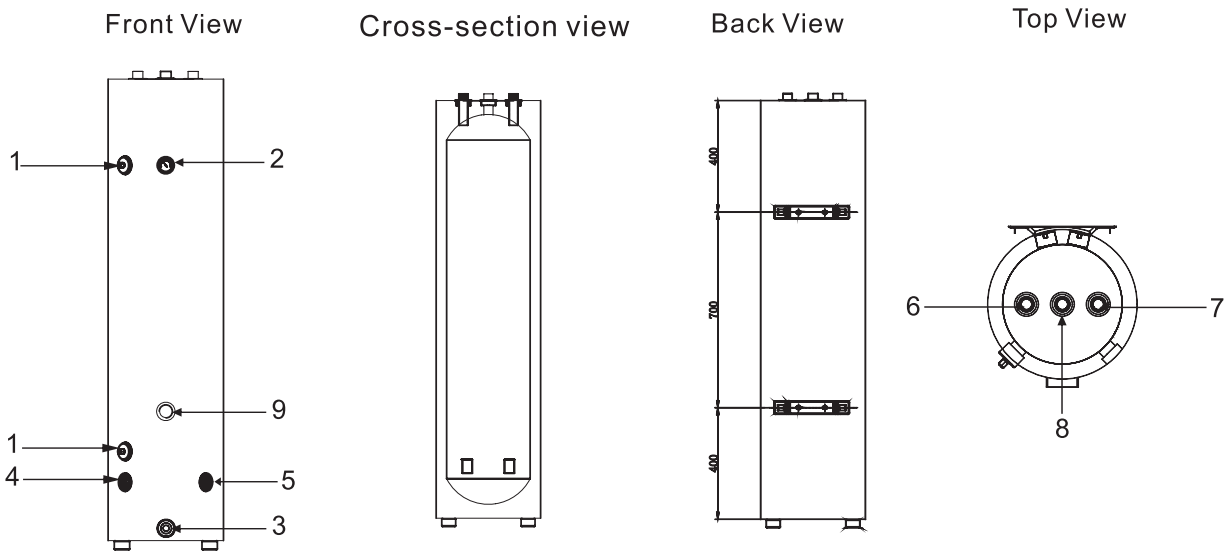
1.Stainless steel coil 15 meter,
2.Thermometer
3.R50 connector for up to 9 kW electric heater
4.Wall bracket

BT100TC-1

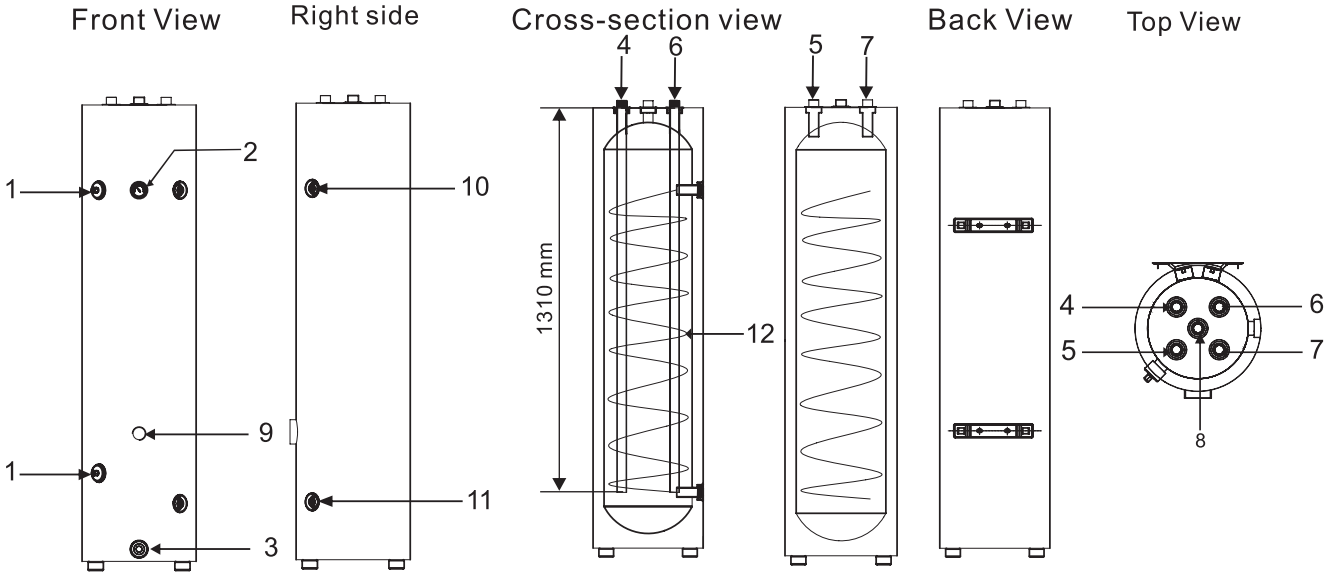


1. Introduction

BT100SC-1



BT100TC-2



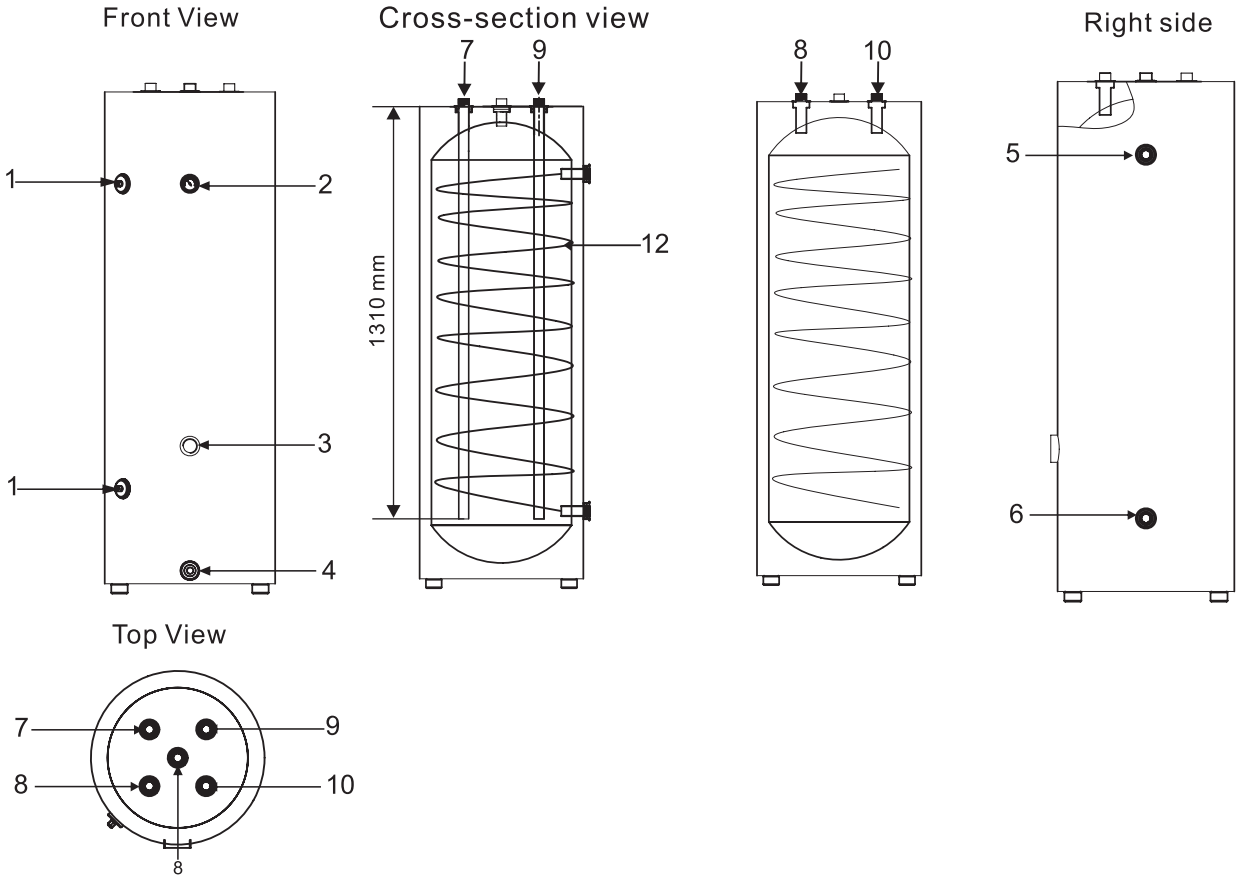
Item on	name	size	Item on	name	size
1	Temperature Sensor		8	Connector for air purging valve	G3/4" female
2	Thermometer				
3	Drainage	G3/4″female	9	Connector for electric heater	G2" female
4	Connector 1	G1" female,Depth :1310mm			
5	Connector 2	G1" female	10	Coil Connector 2	G1" female
6	Connector 3	G1" female,Depth :1310mm	11	Coil Connector 2	G1" female
7	Connector 4	G1" female	12	Coil	Ø22×15M

1. Introduction

BT200TC

ES buffer tank can be delivered in different configurations and design.
The standard stainless steel innertanks are delivered in 200 liter.
1 inch connectors and 50 mm polyurethan foam insulation is standard.
Exactly the same shape as the BT100TC/SC
520 mm in diameter
Optional
1. tainless steel coil 20 meter
2. R50 connector for up to 9 kW electric heater

BT200TC-1

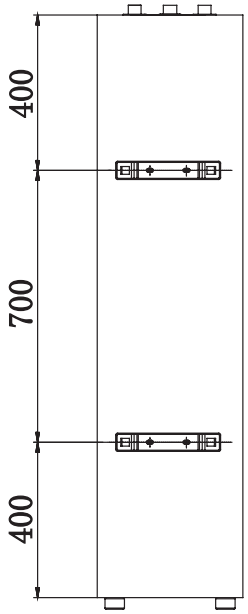


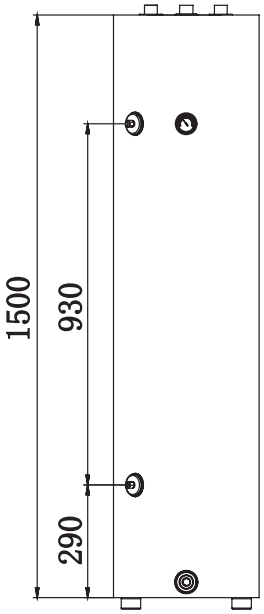
Item on	name	size	Item on	name	size
1	Temperature Sensor		8	Connector 2	G1" female
2	Thermometer		9	Connector 3	G1" female ,Depth:1310mm
3	Connector for electric heater	G2" female	10	Connector 4	G1" female
4	Drainage	G3/4" female	11	Connector for air purging valve	G3/4" female
5	Coil Connector 1	G1" female			
6	Coil Connector 2	G1" female	12	Coil	Ø22×20M
7	Connector 1	G1" female,Depth:1310mm			

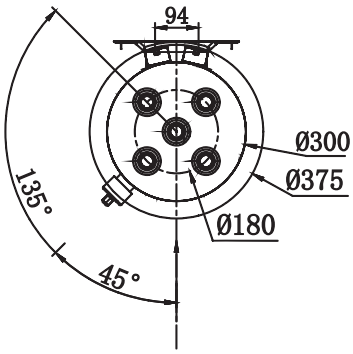
1. Introduction

Outlines and dimensions

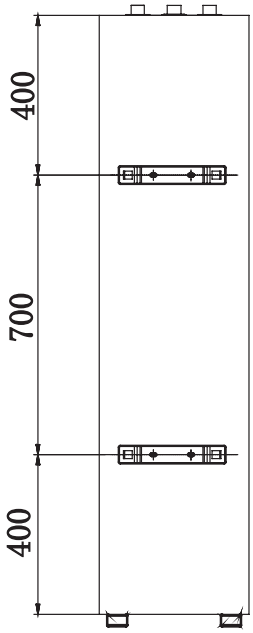
BT100TC-1

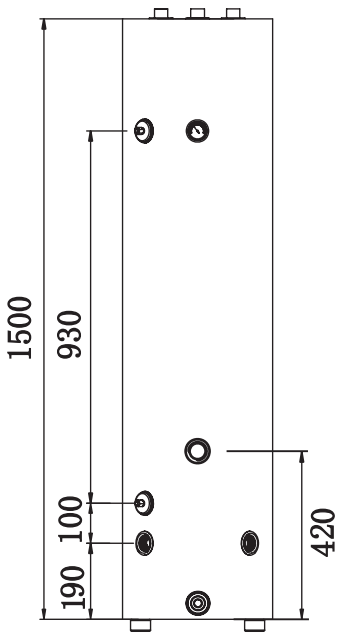


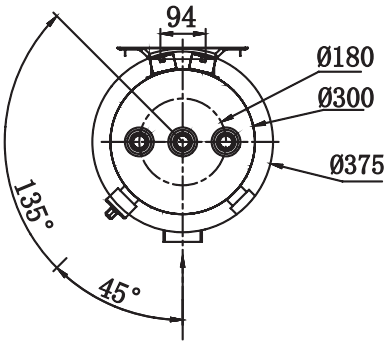




BT100SC-1

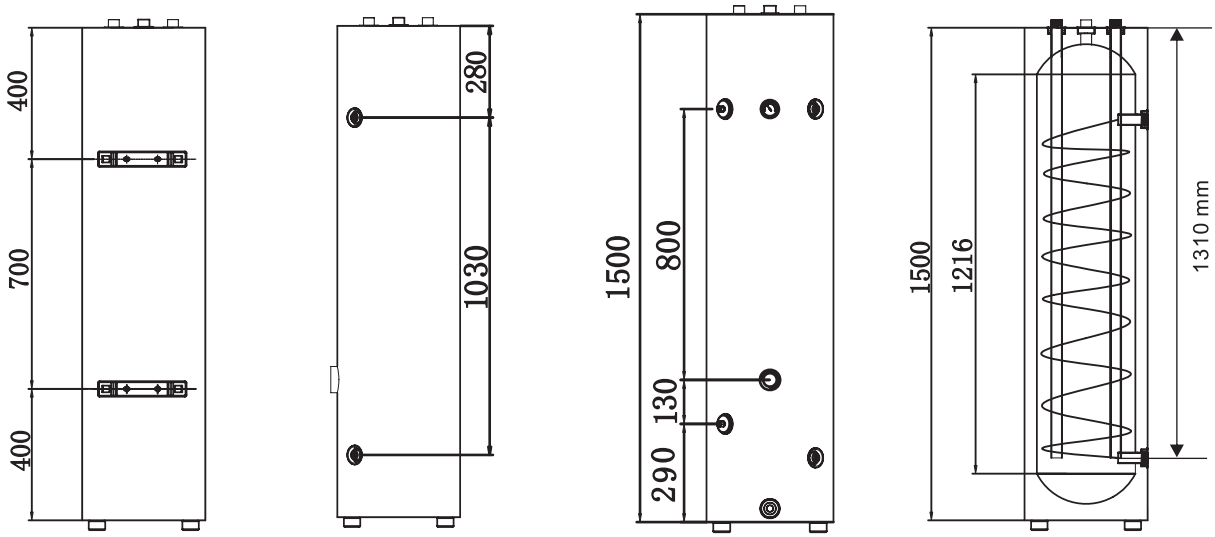


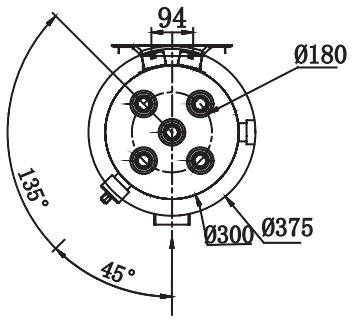




1. Introduction

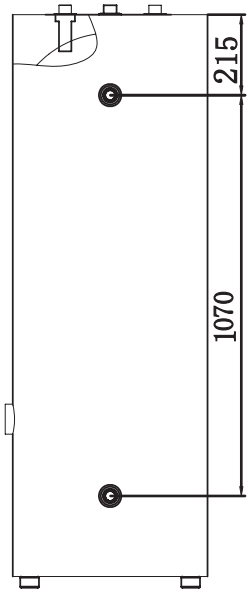
BT100TC-2

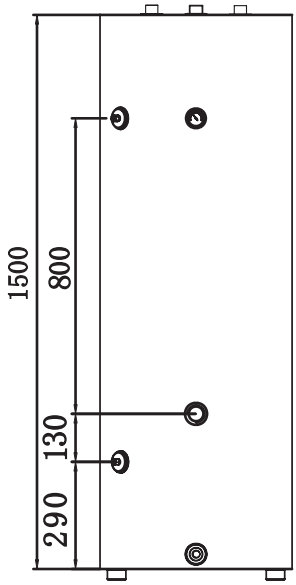


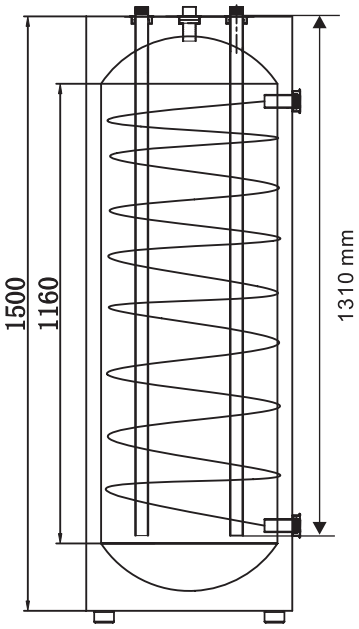


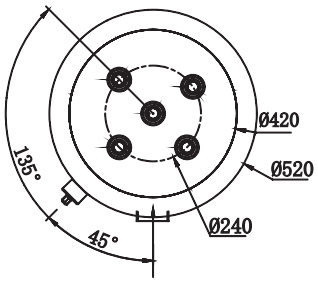
1. Introduction

BT200TC-1









2.Technical data

Technical data	BT100TC-1	BT100TC-2	BT100SC-1	BT200TC-1
Max. water pressure	10 bar	10 bar	10 bar	10 bar
Net Dimension	95° C	95° C	95° C	95° C
Volume	100 liter	100 liter	100 liter	200 liter
Height	1500 mm	1500 mm	1500 mm	1500 mm
Diameter	375 mm	375 mm	375 mm	520 mm
Material of Inner tank	Stainless steel 304	Stainless steel 304	Stainless steel 304	Stainless steel 304
Material of coil	Stainless steel 316	Stainless steel 316	Stainless steel 316	Stainless steel 316
Outer tank	White	White	White	White
Thermometer	Yes	Yes	Yes	Yes
Insulation	Polyurethan 37.5 mm	Polyurethan 37.5 mm	Polyurethan 37.5 mm	Polyurethan 50 mm
Net Weight	26.2kg	29.3kg	24.6kg	46.3kg
Coil for hot water	–	15 M	–	20 M
2 inch / R50 connector	–	1	1	1
Wall bracket	Yes	Yes	Yes	–

2. 1 Accessories

(BT100SC-1、BT100TC-1、BT100TC-2)

Item no.	Part name	Quantity(pcs)
1	Wall bracket	1
2	Fixture	2
3	Expansion bolt	4
4	Machine screw	2
5	Bolt	16

▲ There is a reserved connector for electric heater at the bottom of water tank. You can insert an electric heater from this connector to the water tank. Please purchase electric heater from your local distributor.

3. Installation

3.1 Installation

(BT100SC-1、BT100TC-1、BT100TC-2)

There are two installation options for different applications.
The unit can be mounted on the wall, and also can stand on the floor.

Mount on the wall

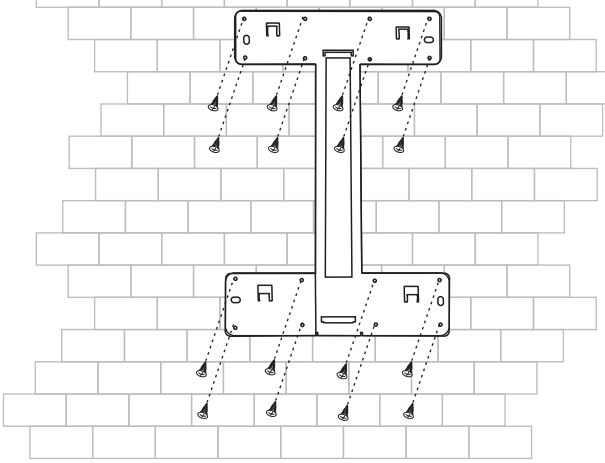
1.Fix the wall bracket to the wall, by using 16 pieces of self-tapping screw (expansion bolts can be optional).

2.Hang the water tank on the fixed wall bracket at four points, as shown in the picture 2 .

3.Using fixtures and Machine screw to firmly fix the tank to the bracket, as shown in picture 3.

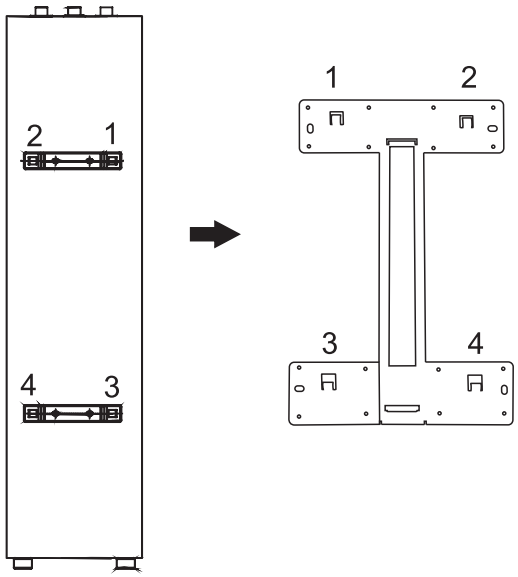
Note: If electric heater is needed to be installed from the bottom, the water tank only can be mounted on the wall.

1



2

Back of the tank



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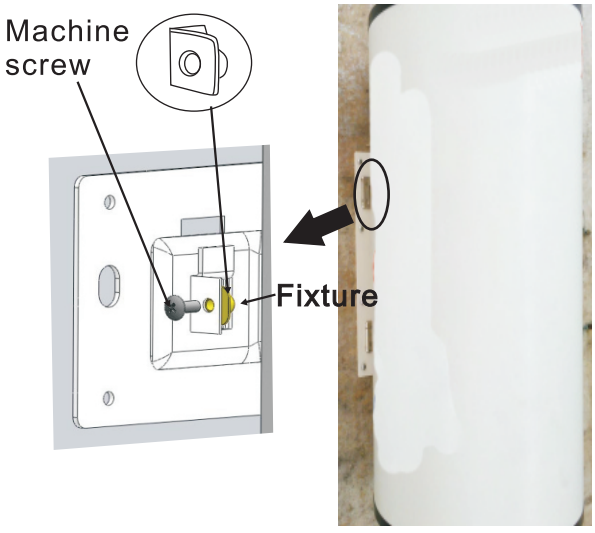


Floor standing

If you don't need to install the electric heater in the bottom of the water tank, the water tank can stand on floor.

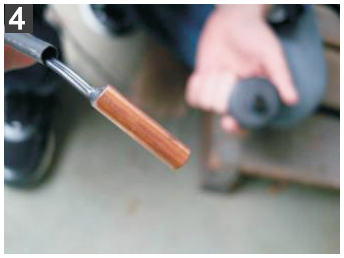
3. Installation

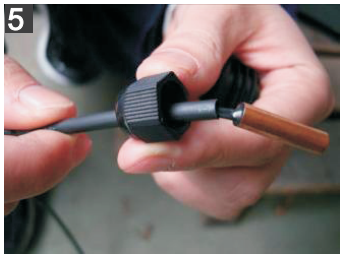
3.2 Installation of temperature sensor

Temperature sensor should be put into the water tank as follows:

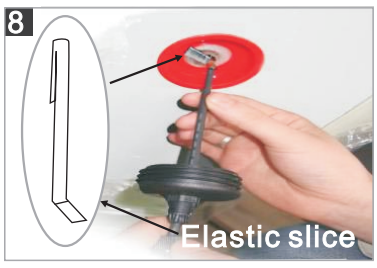
1. Remove the plastic cover for installing the temperature sensor on the water tank, screw off the plastic nut and remove the ″O″ shape rubber ring.

2. Pass the temperature sensor through the plastic nut and reinstall the ″O″ shape rubber ring. Pass the temperature sensor through the plastic cover.





3. Insert the elastic slice into the sensor tube in the water tank as much as possible until it's fixed in the water tank, then insert the temperature sensor into the temperature sensor hole on the tank till it's fixed by the elastic slice inside the water tank. Please make sure the elastic slice can hold the temperature sensor in place. then put the plastic cover back on the water tank and screw tightly the plastic nut to fix the sensor cable.



Note: There are two reserved places for temperature sensor on the top and bottom of water tank, please choose the suitable ones according to real application.

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