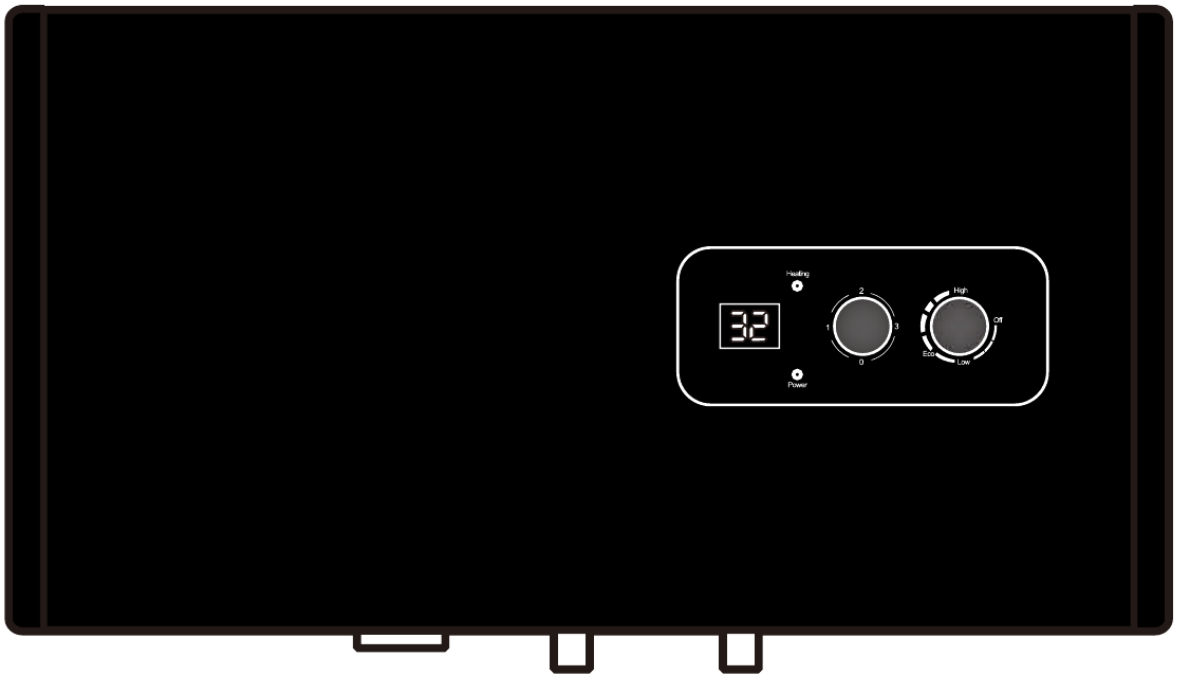
Electric Water Heater
Instruction Manual

QHB20-CW Series



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General Notes

- Read all instructions before installing and using this water heater. Keep this brochure close at hand for future reference.
- Only a qualified electrician may install the appliance correctly. In the event of incorrect installation of the water heater, our company accepts no responsibility.
- A high hot-water temperature can cause serious scalding. Make sure you mix cold and hot water before you bathe. Because the appliance is in use, close supervision is necessary when it is used by children.
- The pressure relief valve (safety valve) must be installed at the specified location. No modification is permitted. The pressure relief hole must be kept clear.
- Make sure you unplug the plug from the socket before you intend to open, inspect, repair or adjust the appliance. Maintenance or repair work may only be carried out by qualified service personnel.
- The water heater must be installed close to the water drain pipe. Allow the drain pipe to flow freely. If this is not the case, the company will not accept responsibility.
- The water heater is supplied with a power cord. If the power cord is damaged, make sure it is replaced by a service technician with a special cord supplied by the manufacturer. The key components of the product all use insulation and thermal-insulation layer protection, so you can use it with confidence.
- Use of a water heater while intoxicated is strictly prohibited, to ensure your personal safety.
- Unplug the plug from the socket and close the inlet valve if the water heater is not used for a long period of time.

Precautions

- This appliance is a type of appliance designed to prevent electric shock. Make sure the socket meets the applicable national standard and is reliably earthed. Never use the water heater without reliable earthing.
- If you feel or notice electrical leakage, unplug the plug from the socket and stop using the appliance immediately. Call the service department for inspection and repair. Make sure you do not open or repair it yourself.
- When using electrical appliances, follow the safety instructions to reduce the risk of fire, electric shock or personal injury.

Functions

Safety

This series of electric water heater is manufactured using imported electrical thermal components and a first-class, specially extra-thick stainless steel tube without perforations. It offers high corrosion resistance. The product has multiple protection features, such as overheating protection, overpressure protection, dry-burning protection, water backflow prevention and electrical leakage protection, to ensure the safety of the appliance.

Energy saving

An ultra-thick, high-density polyurethane foam layer is applied by high-pressure, high-speed spraying, using the first classic whole-body foaming technology, completed in one pass and unprecedented in the industry. It clearly helps to maintain the water temperature and delivers the energy-saving effect.

Durable

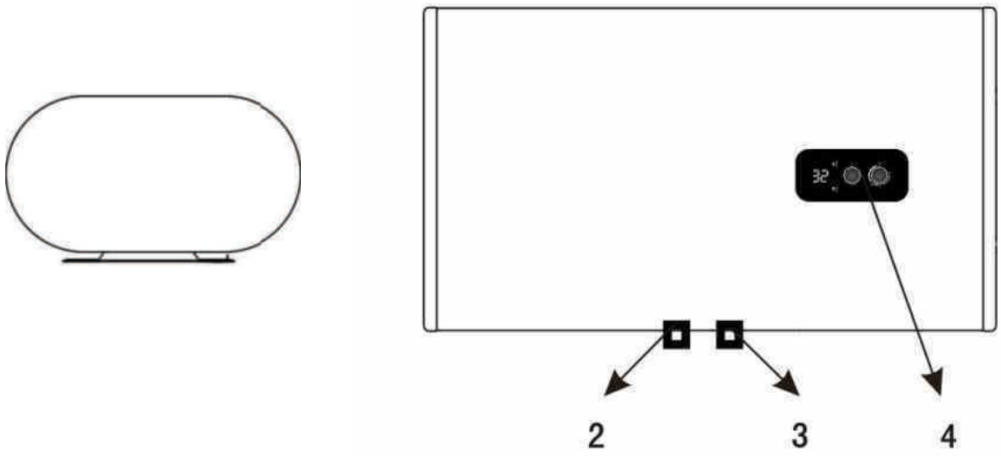
The quality of the inner tank is stable and reliable, with automatic connection technology using gas shielding for the coupling. Internationally advanced anti-corrosion technology and an anti-corrosion layer of uniform thickness ensure the inner tank's high-pressure resistance, impact resistance and high strength.

High efficiency of hot water production

This series uses our company's proprietary energy-saving technology. The inner assembly and the power-cap design significantly improve the efficiency of the hot water output.

Technical Parameters

General appearance diagram



2 Hot water outlet. 3 Cold water inlet. 4 Temperature knob. 5 Plug.

Dimensions table

Model	**QHB20-CW**			
Capacity	**30 L**	**50 L**	**80 L**	**100 L**
Dimensions	450 × 240 × 570 mm	450 × 270 × 870 mm	530 × 280 × 955 mm	530 × 280 × 1155 mm

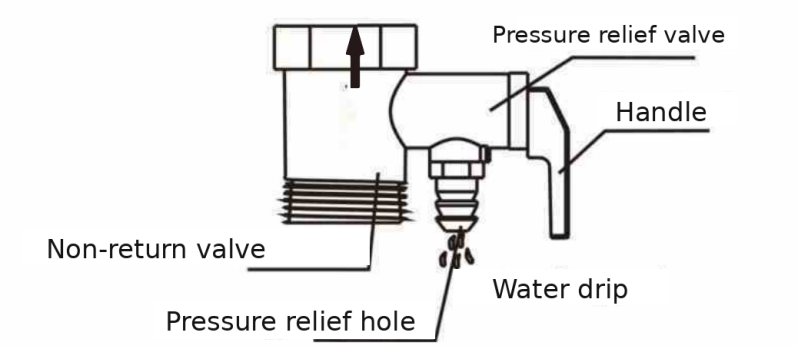
Specification parameters

Model	**Power**	**Current**	**Voltage**	**Temperature**	**Pressure**
QHB20-CW	1000–2000 W	9.09 A	AC 220–240 V / 60 Hz	20–75 °C	0.8 MPa

Safety Accessories

Safety valve

A safety valve (pressure relief valve) is fitted to the water heater. It is normal for the pressure relief hole to drip a little water during heating. Because the water in the tank expands after heating, the water drip device lets water flow out in order to relieve the pressure in the tank. When the water supply is cut off, the non-return (backflow) protection prevents the water from flowing back, so dry burning is not possible. The safety valve must be installed on the water inlet side (blue colour side). The safety valve is preset at the factory to a nominal pressure of 0.8 MPa, so do not adjust it yourself.



The safety valve must be installed in a frost-free location, to prevent the hole from freezing or becoming blocked.

The safety valve must be installed facing downwards. Connect the water drip device to a drain line. No blockages and no kinked drain hose.

The company will not accept responsibility for any accident or economic loss resulting from improper use or failure to follow the instructions.

Overheating protection

This product is equipped with a non-self-resetting overheating protection. If the temperature control system of the electric water heater is out of control, or other faults cause the water temperature to rise, the overheating protection will immediately cut the power and stop heating as soon as the water temperature reaches the nominal temperature.

Installation Specifications

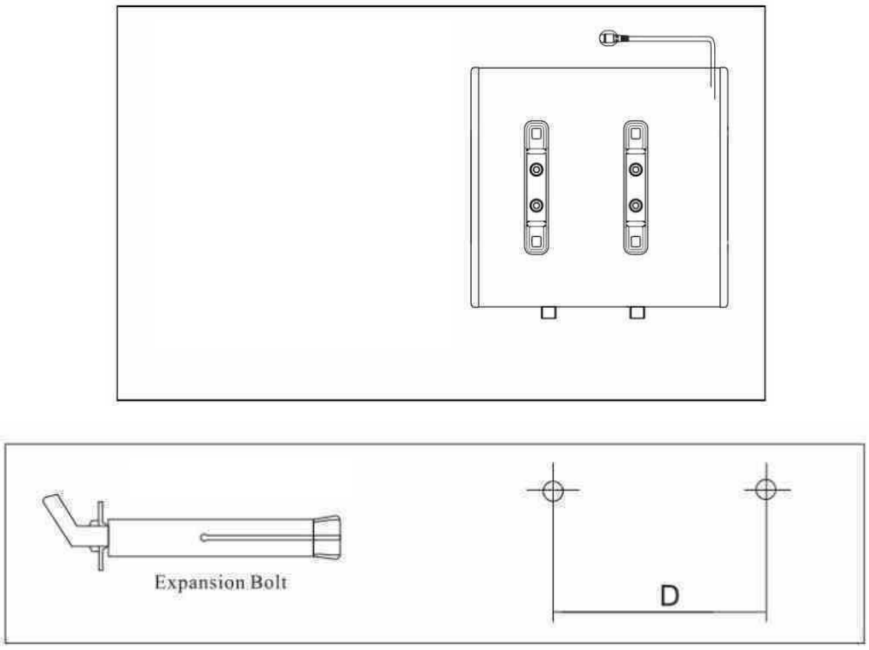
Installation guidelines

- The water heater must be installed close to the mains water supply and a water drain. Allow the drain pipe to flow freely.
- The electric water heater must be installed indoors, where the ambient temperature is above 0 °C. The hot water point of use must not be too far from the heater. If the distance is more than 8 metres, the pipe must be wrapped with a thermal insulation layer to reduce heat loss.
- Make sure the wall can bear four times the weight of the fully filled electric water heater.
- The socket must be installed in a dry position where water cannot splash. Never insert the plug into the socket with wet hands.
- Ease of use and repair should be considered when selecting the installation location of the heater.
- Before fixing the bolt holes, make sure enough space is left for convenient maintenance and future repair. If you mount the appliance on the ceiling, make sure you open a hole of the corresponding size in the ceiling decoration plate.

- The heater uses a 110–240 V / 60 Hz AC power supply. Make sure you choose a good-quality socket rated for 10 A that is reliably earthed and meets national standards. Never use a multi-function or detachable socket.
- When installation is finished, check that it is secure before filling the water tank. While filling with water, check the inlet and outlet connections to see whether there is any water leakage. Once you have confirmed there is no leakage, switch on the power to heat the water.

Installing the hanging brackets

1. To fix the installation position, use a hammer drill to drill two holes of Ø14 mm in the wall, depending on the installation dimensions. Fix the M10 steel expansion bolts in the correct position.



2. There is a square hole in the upper position of the two mounting brackets on the back of the electric water heater. Hang this hole on the hook and move the heater downwards, making sure the square hole reaches the full depth of the hook. Make sure the heater is securely fixed, as shown.

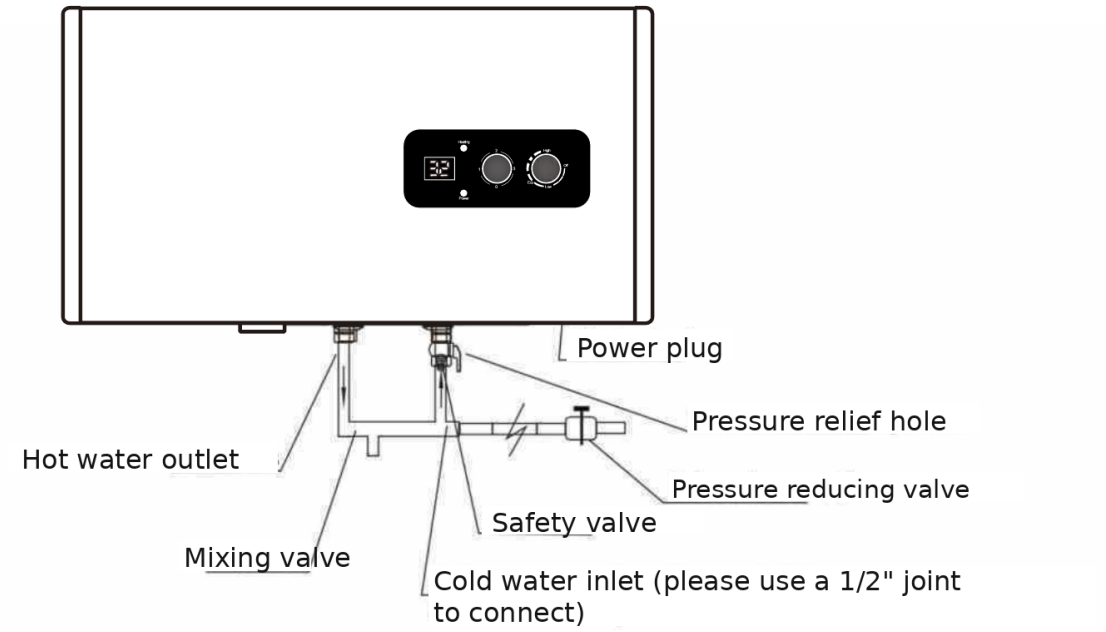


Correct *Incorrect*

Connecting the pipes

Connect the cold water supply pipe to the inlet nipple (marked with a blue ring) and the hot water outlet pipe to the outlet nipple (marked with a red ring). The safety valve (pressure relief valve) must not be screwed on too tightly, to avoid possible damage. Connect the mixing valve to the supply pipe and the outlet pipe separately and correctly. If the user's tap water pressure is close to or higher than 0.8 MPa, install a pressure reducing valve in the inlet pipe, at a good distance from the water heater. Otherwise the lifespan of the water heater will be significantly shortened if it is under high pressure for a long time.

Be sure to use PTFE thread seal tape on the connection between the safety valve and the water heater. The use of a rubber band is prohibited, as it may create an explosion hazard.



Power connection

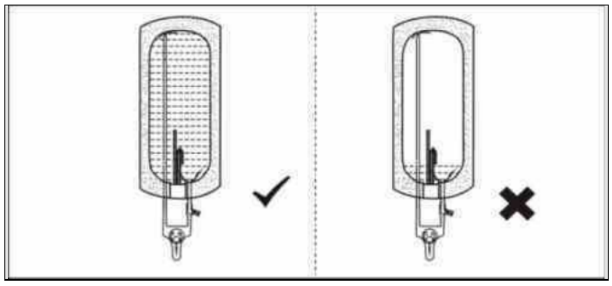
The electric water heater is supplied with a power cord and plug that are already reliably earthed. The user simply plugs it into a matching socket. The socket must be of good quality and able to carry 10 A.

The electric water heater must have a reliable, dedicated power supply line with a cross-sectional area of at least 1.0 mm².

Operating instructions

Instruction notes

Before connecting the power, completely fill the tank system with water and check for leaks. To make sure all the air is out of the water system, open the hot water taps on your mixers as far as possible until water flows out constantly; otherwise the element may be damaged. Make sure the valve on the cold water inlet pipe stays open. To start the heating cycle, make sure the tank is full, to prevent the heating element from being damaged.



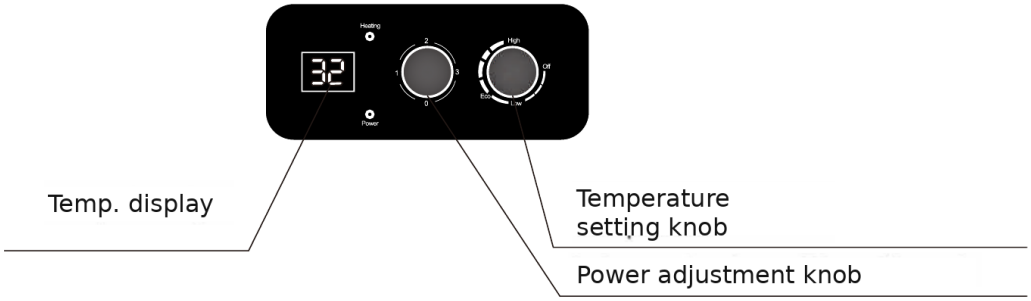
Settings and operation

1. Connect the water heater to the power supply and turn on the on/off knob. The heating indicator lights up. Heating begins.

2. If the water temperature needs to be adjusted, turn clockwise to raise the temperature and counter-clockwise to lower it. During heating, the pointer on the temperature display moves with the temperature. When the indicator lamp is lit, the electric water heater is in the heating state. When the indicator lamp is no longer lit, the electric water heater has reached the nominal temperature; the power is switched off and the heater is in a temperature-holding state.

3. When using the water heater, open the mixing valve to adjust to a comfortable temperature. After use, turn the mixing valve to the cold side.

4. Turn the power adjustment knob clockwise to increase the power. When the scale on the knob points to Off, the water heater is switched off and stops heating.



NOTE! A water temperature above 50 °C can cause scalding, so set the correct temperature for your safety.

Keep the cold water inlet flow open; do not fit a shut-off valve.

When you use the water heater again, make sure you first fill the tank completely and then switch on the power; otherwise the water heater may be damaged.

Maintenance Instructions

- Troubleshooting and maintenance of the product must be carried out by a qualified professional electrician. An incorrect method can lead to serious injury or financial loss.
- Disconnect the power supply before maintenance.
- If there is enough hot water, you can set the temperature slightly lower to reduce heat loss, and corrosion and scale at high temperatures, in order to extend the service life of the electric water heater.
- Check whether there are any leaks at the pipe connections. If so, deal with them in good time.
- The socket should be checked regularly to test that it is reliably earthed and meets the national standard.
- Place the water heater’s socket in a dry place away from water. Never insert or pull the plug into or out of the socket with wet hands, to prevent electric shock, injury or other accidents. Pull the plug out of the socket if you will not be using the water heater for a long time.
- Scale may form in the water tank after a period of use, because of the water quality and hardness in different areas. Therefore drain the water heater regularly to make sure sediment in the water tank is flushed out.
- If the heater is not used for more than 2 days in winter in cold areas, drain the water to prevent damage caused by freezing. If the inner tank bursts because it has frozen, the company will not accept responsibility.

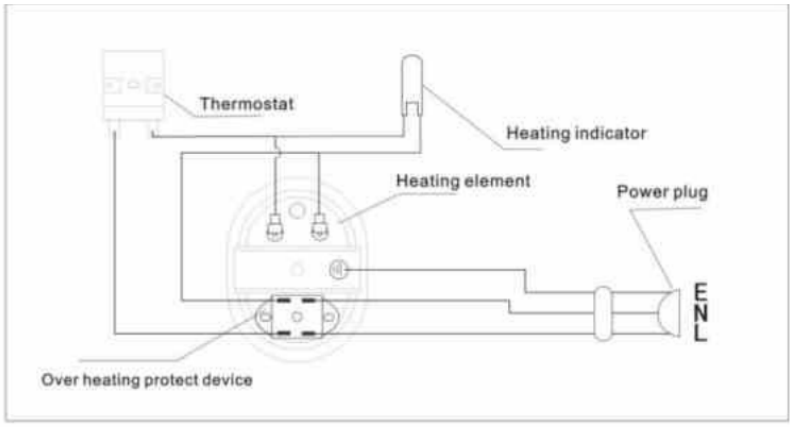
Draining the water heater

- This product must be cleaned when it needs to be repaired or when it has not been used for a long time. Disconnect the power supply, close the inlet water valve, open the outlet water valve and unscrew the safety valve. At this point water will flow out of the water inlet opening. When clean water comes out of the drain hose, the dirt in the inner tank has been completely drained. Reinstall all components in their original positions. Note that the water inlet valve must be opened several times during flushing, in order to flush the dirt from the bottom of the inner tank.
- When reusing the heater, first fill the water tank completely and check all connections.
- Remark: The drained water may be at a high temperature, so be careful.
- Remark: If no water comes out of the shower head, the tank is not completely filled; the power must not be switched on.

- The relief valve must be checked once every two weeks during use. Method: turn the small handle on the relief valve. It is normal for water to flow out.

Troubleshooting

Electrical wiring diagram



Troubleshooting table

Problem	Symptom	Cause of fault	Solution
Electrical leakage	Indicator lamp 1 on	1. The appliance leaks 2. The electrical environment leaks electricity	Stop using it, unplug it from the socket and call for maintenance.
Cold water out	Indicator lamp off	1. Water heater is not connected to power 2. Ammeter fuse is defective 3. Socket does not connect properly	1. Plug the plug into the socket 2. Check the line and replace the fuse 3. Check the socket
	Indicator lamp off	1. Temperature controller is in the off status 2. Overheating protection device has switched off: A. Temperature controller not working B. Dry burning C. Overheating protection does not work	1. Adjust the knob to the high-temperature area 2. Check or change: A. Replace the temperature controller and place it over the heating protection device B. Add water to the inner tank and place it over the heating protection device C. Replace the heating protection device
	Indicator lamp on	1. Mixing tap is on the cold water side 2. Damage to the electric thermo-element, or a problem with the internal circuit	1. Turn the mixing tap to the hot water side 2. Call customer service
No hot water	Indicator lamp on	1. Indicator lamp is damaged 2. Indicator lamp line is cut	1. Replace the indicator lamp 2. Call customer service
Water too hot	Indicator lamp on	1. Temperature knob is set too high 2. Temperature sensor is defective	1. Lower to the correct temperature 2. Replace the temperature sensor
No water coming out	Indicator lamp on	1. Water supply has stopped 2. Low water pressure 3. Inlet water valve is closed 4. Blockage (shower head / outlet)	1. Wait for the water supply 2. Wait for high water pressure 3. Open the inlet valve 4. Check and clear it
Water leakage	Inlet or outlet pipe leaks	Pipe connection problem	Close the inlet valve and call customer service
	Tank shell leaks	Tank or accessory leaks water	Unplug it from the socket and call customer service

Packing List

No.	Name	Unit	Qty
1	Electric water heater	pcs	1
2	Instruction manual	pcs	1
3	Instruction manual	set	1
4	Hanging bracket expansion bolt	set	1