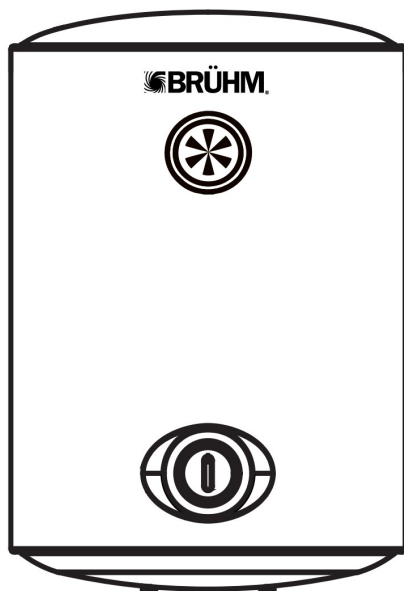




Manual Instruction

Storage Electric Water Heater



BWH-30YW
BWH-50YW
BWH-80YW
BWH-100YW

Please read the instruction manual carefully before use, and keep it for future reference.

V01

Sincerely thank you for selecting our electric water heater. Please read this manual carefully before use; correctly grasp the methods for installation and use of this electric water heater, to make full use of its excellent performances.

>> GENERAL INSTRUCTIONS <<

1. This appliance **MUST** be earthed.
2. This appliance must be permanently connected to fixed wiring.
3. The spray head must be descaled regularly.
4. The outlet must not be connected to any tap or fitting other than those specified.
5. This appliance is not to be installed in a location where freezing can occur.
6. Do not install this appliance near to tinder or strong magnetic field place.
7. Do not switch on if there is a possibility that the water inside the water heater is frozen, as this could result in serious damage to the appliance. Wait until you are sure that is completely thawed out before you switch it on.
8. In order to avoid a hazard due to inadvertent resetting of the thermal cutout, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.
9. This appliance is for its intended use only.
10. Please install the appliance close to floor drain if possible.
11. Disconnect the appliance from electrical supply before cleaning, servicing, or removing the cover.

>> SAFETY GUIDANCE <<

1. This appliance is not intended for using by persons (including Children) with reduced physical sensory or mental capabilities , or lack of experience and knowledge ,unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety .
2. Children shall not play with the appliance.
3. Cleaning and user maintenance shall not be made by children without supervision.

WARNING: Children should be supervised to ensure that they do not play with the appliance.

5. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
6. This appliance is intended to be permanently connected to the water mains and not connected by a hose-set.
7. The water inlet of this appliance shall not be connected to inlet water obtained from any other water heating system.

WARNING: This appliance is not to be used for a potable water supply.

8. This appliance is for its intended use only.

WARNING: If the water heater is used incorrectly, the user shall be responsible for any problems.

9. The pressure-relief device must be attached with the machine and be installed at the cold water inlet and the installation.
10. This appliance must be installed and serviced by a licensed electrician and plumber, or a professional service technician in accordance with the national electrical codes, local electrical and plumbing codes and regulations.

WARNING: Improper installation and operation, or installation and service by an unqualified person may cause property damage, serious body injury or even death.

>> **FEATURES AND FUNCTIONS** <<

1. Completely automatic control: automatic addition of cold water, automatic heating.
2. Multiple safety protection, safe and reliable devices, such as:
 - Dry heating protection,
 - Extra temperature protection,
 - High hydraulic pressure protection,
3. Sapphire enamel inner container: manufactured by using advanced wet method enamel technique, anti-rust, corrosion-proof, incrustation-resistant, leak-prevention, with longer lifetime.
4. Heating pipes designed with low thermal load: Stainless steel 316L material, safe and reliable, with longer lifetime.

5. Equipped with corrosion-proof and incrustation-retardant equipment: durable products.
6. Thickened urethane integral foaming: keep water 24h warm, good thermal insulation effect, energy efficient and electricity saving.
7. Temperature controller: accurate and reliable control of temperature.
8. Adjustable range of water temperature from 30°C to 75°C.
9. Simple operation and easy use.

>> TECHNICAL SPECIFICATION <<

Model No.	BWH-30YW	BWH-50YW	BWH-80YW	BWH-100YW
Rating Capacity (L)	30L	50L	80L	100L
Rating Power (W)	1500W	2000W	2000W	2000W
Max Temp. (°C)	75			
Rating Voltage (V~)	220			
Rating Frequency (Hz)	50			
Classification	Class I			
Ingress Protection	IPX4			

Product Structure

Fig. 1

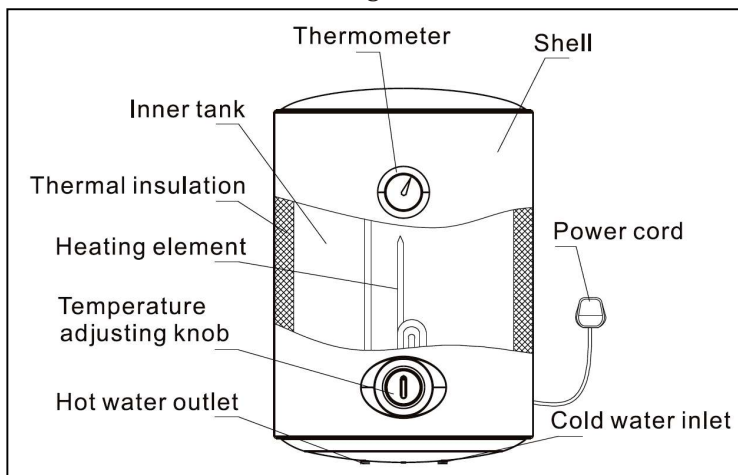
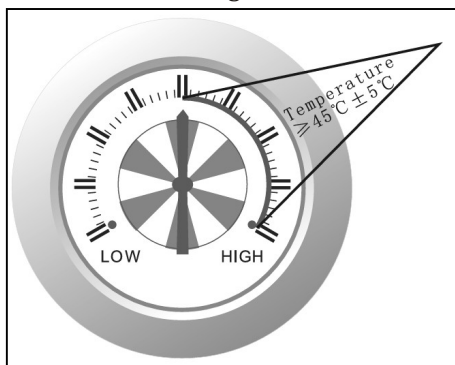
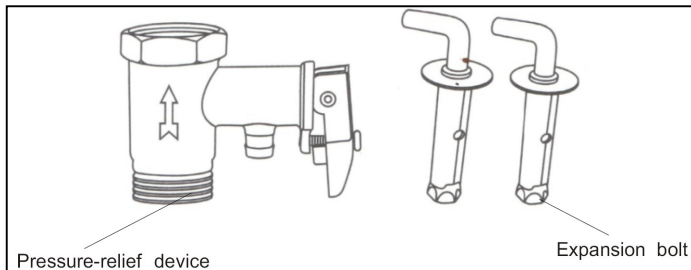
**Thermometer**

Fig.2



Accessories

Fig.3



>> INSTALLATION INSTRUCTIONS <<

General guidance

Before installing this water heater, check and confirm the earth electrode on the socket is reliably grounded, without electricity. Otherwise, the electric water heater can not be installed and used.

1. Electrical water heater should be installed by a qualified personal and in accordance with the national electrical codes, local electrical and plumbing codes and regulations.
2. Check the wire, circuit breaker, fuse and watt-hour meter before installation, making sure they are applicable to your water heater.
3. Install the water heater as per its intended installation method, do not install upside down.
4. Ensure the water heater is properly earthed.

Before installation

1. Choose a smooth surface for installation.
2. Please install water heater close to floor drain if possible.
3. Keep away from violent vibration.

Caution: Outdoor installation is not recommended.

WARNING:

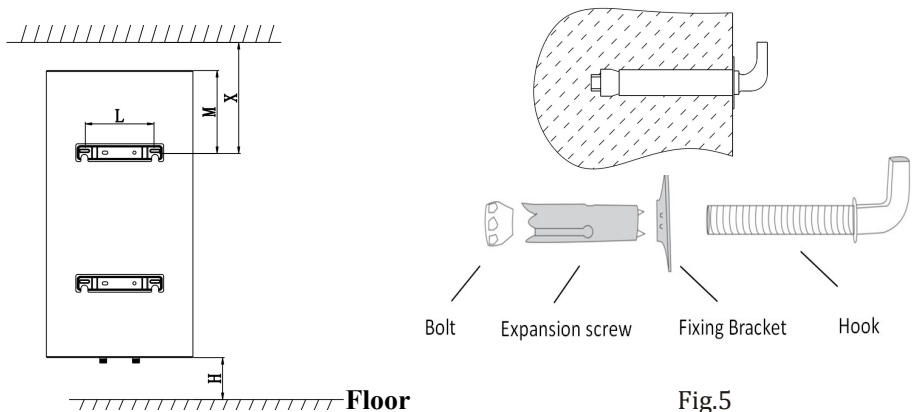
1. Please be sure to use the accessories (see Fig.3) provided by our company to install this electric water heater.
2. This electric water heater shall be installed in the solid wall. If the strength of the wall can not bear the load equal to two times of the total weight of the heater filled fully with water, it is necessary to install a special support.
3. When determining the locations of the bolt holes, it shall be ensured that there is a clearance not less than 0.2m for the electric heater, to convenient the maintenance of the heater, if necessary.
4. This electric water heater can not be hung on the support until it has been confirmed to be firm and reliable. Otherwise, the electric water heater may drop off from the wall, resulting in damage of the heater, even serious accidents of injury.
5. This appliance must be installed and serviced by a licensed electrician and plumber, or a professional service technician in accordance with the national electrical codes, local electrical and plumbing codes and regulations.
6. Improper installation and operation, or installation and service by an unqualified person may cause property damage, serious body injury or even death.

Wall-mounting instructions

1. After selecting a proper location, determine the positions of the two install holes used for hook (see distance instruction in Fig.4).
2. Make two holes in the wall with the corresponding depth by using a driller with the size matching the expansion screws supplied with the water heater.
3. Insert the expansion screws, make the hook upwards, tighten the screws to fix firmly. (see Fig.5)
4. Hang the water heater on the hooks.

Wall Mounting	Vertical			
Capacity	Distance			
Liter	M	X	H	L
30L	16.3cm	21.3cm	≥20cm	20cm
50L	16.3cm	21.3cm	≥20cm	20cm
80L	17.5cm	22.5cm	≥20cm	20cm
100L	17.5cm	22.5cm	≥20cm	20cm

Fig.4



>> PLUMBING INSTRUCTIONS <<

General guidance

1. The water inlet and the water outlet shall be identified according to the indications or marks on the water heater. If colors are used, blue should be used for the inlet and red for the outlet.
2. The water inlet and the water outlet must be connected correctly, otherwise the water heater cannot function.
3. Do not use plumbing cement on connection. If necessary, use only thread or sealing tape.

4. Water inlet valve should be installed at water inflow pipe.
5. Choose and install a suitable water valve first, then connect the water heater with the inlet valve.
6. In order to avoid leakage when connecting the pipelines, the rubber seal gaskets must be added at the end of the threads.
7. Connect water hose with water heater at the outflow pipe, then connect the shower with water hose.
8. Spray head holder is installed on the wall at an appropriate height, then place the spray head into the holder.
9. Verify all fittings are tight and secure.
10. The dimension of inlet and outlet pipe should be G1/2.
11. Connection of Pressure-relief device: install the Pressure-relief device attached with the machine at the water inlet of the main machine.

CAUTION: Must keep the installed discharge pipe of the pressure-relief device sloping downward and connected with the atmosphere.

Schematic diagram water supply

1. Hard connection: water mixer connecting the appliance: see Fig. 6
2. Soft connection: water mixer installation by flexible hose: see Fig. 7

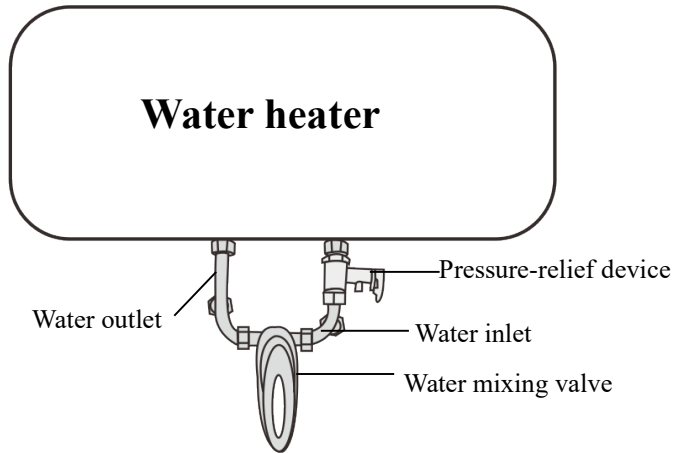


Fig. 6

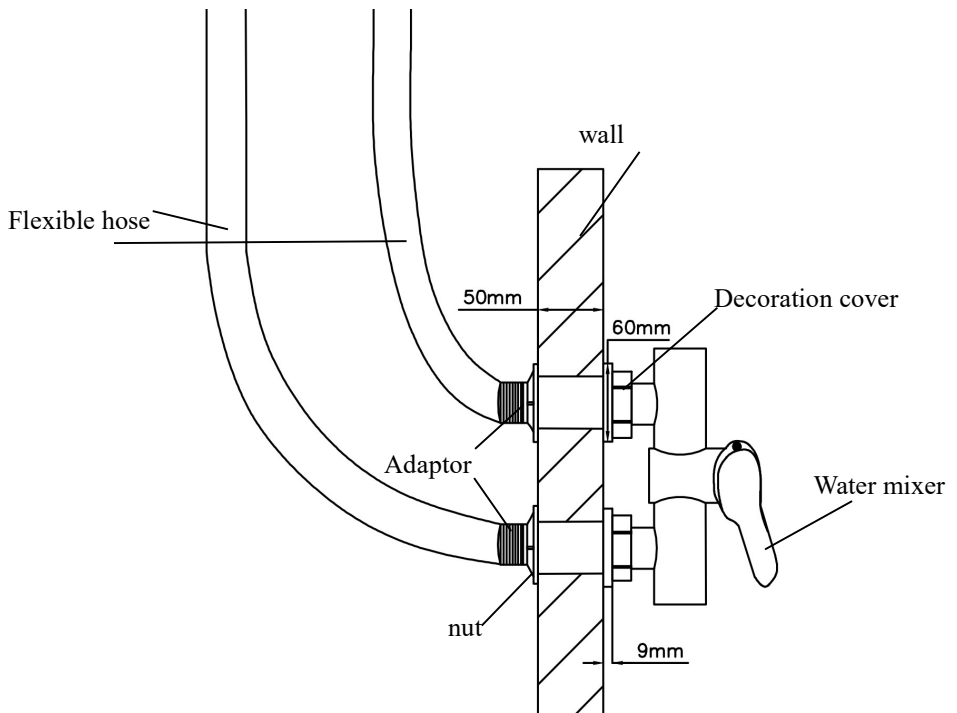


Fig. 7

Electric connection

1. Install the supply socket in the wall. Requirements for the socket are: 250V/10A, single phase, two electrodes.
2. It is recommended to place the socket on the right above the water heater. The height of the socket to the ground shall not be less than 1.8m.
3. If the bathroom is too small, the water heater can be installed at another place in an environment of no direct exposure under the sun or the rain. However, in order to minimize heat loss between pipelines, the water heater is to be installed at a position that is as close as possible to the location of use of the water heater.

CAUTION: The supply socket must be earthed reliably. The rated current of the socket shall not be lower than 10A or other specified by the manufacturer. The socket and plug shall be kept dry to prevent electric leakage. Inspect frequently whether the plugs contact well with the socket.

Inspect method is as follows: insert the power supply plug into socket, after using for half an hour, shut down the unit and pull the plug out, then inspect the plug whether it scalds hand or not. If it scalds (temperature over 50°C), please change another well-contacted socket to avoid fire, property damage, or body injury caused by bad-contacting.

WARNING: In order to avoid a hazard due to inadvertent resetting of the thermal cutout, this appliance must not be supplied through an external switching device, such as a timer, or connected to a circuit that is regularly switched on and off by the utility.

Pressure-relief device

1. Pressure-relief device must be fitted during installation of the water heater.
2. The Pressure-relief device must be attached with the machine and be installed at the cold water inlet, and the installation direction must be correct with the pressure release hole downward (see Fig. 8). Pls pay

attention to keep the installed discharge pipe of the Pressure-relief device sloping downward in an environment above zero and connected with the atmosphere.

3. A discharge pipe connected to the Pressure-relief device is to be installed in a continuously downward direction and in a frost-free environment.
4. The water may drip from the discharge pipe of the Pressure-relief device and that this pipe must be left open to the atmosphere.

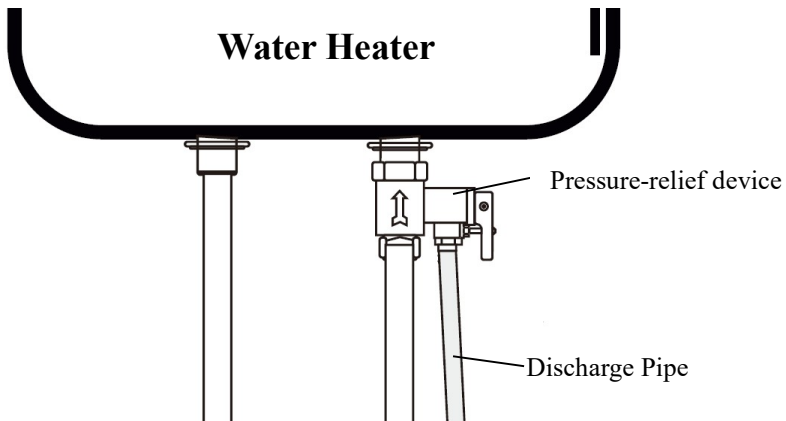


Fig.8

5. The Pressure-relief device is to be regularly operated to remove lime deposits and to verify that it is not blocked.
6. Specification of Pressure-relief device:
 - a. Type / model: One-way Pressure-relief device
 - b. Material: brass
 - c. Rated operation pressure: 0.75 MPa
 - d. Connector: G 1/2
 - e. Installation method: per the arrow mark on the valve
7. How to drain the water (and to verify the Pressure-relief device is not blocked):
 - a. Shut off power supply
 - b. Close water inlet and outlet
 - c. Unfasten the screw on the handle (as shown in Fig. 9)
 - d. Lift the handle (by following the direction as shown in Fig. 9)
 - e. Drain the water

- f. Restore the handle to its original position
- g. Fasten the screw

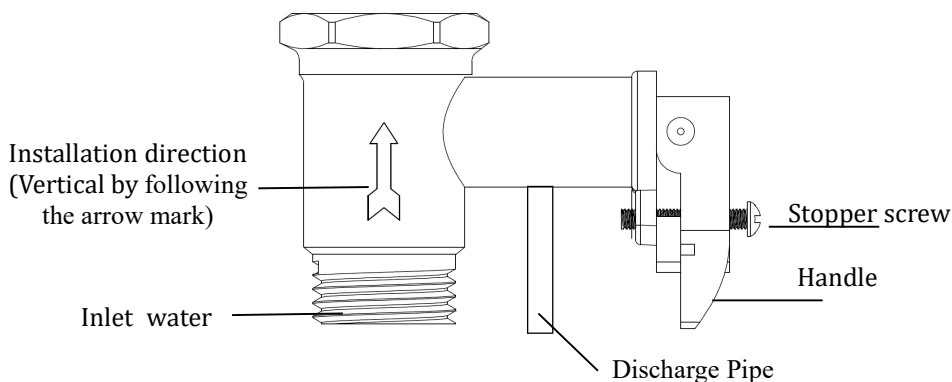


Fig.9

>> OPERATION INSTRUCTIONS <<

1. First, open the water outlet of the water heater, then open the water inlet, the water heater begins to be filled with water.
2. When there is water coming out of the outlet, it indicates that the water heater has been filled fully with water.
3. Then the water outlet can be closed.
4. After that, the water heater is ready to use.
5. Turn the temperature adjusting knob after insert the supply plug into the socket, the indicator light are on at this time.

CAUTION: For the use of the first time (or the first use after maintenance or cleaning), the water heater can not be switched on until it has been filled fully with water. When filling the water, at least one of water outlets of the water heater must be open to exhaust the air.

CAUTION: During normal operation, the water inlet shall be set in the status of OPEN.

6. Since the water temperature inside water heater can reach up to 75°C, the

hot water must not be exposed to human bodies when it is initially used.
Adjust the water temperature to a proper point to avoid scald.

7. This appliance can automatically control the temperature. When the water temperature inside the water heater has reached the set temperature (It is set to 75°C), it will be turned off automatically, and enter into the status of KEEP WARM. When the water temperature is decreased to a certain point, it will be turned on automatically to restore the heating, thus hot water will not be interrupted. When the water heater is switched off automatically, the heating indicator will turn off.

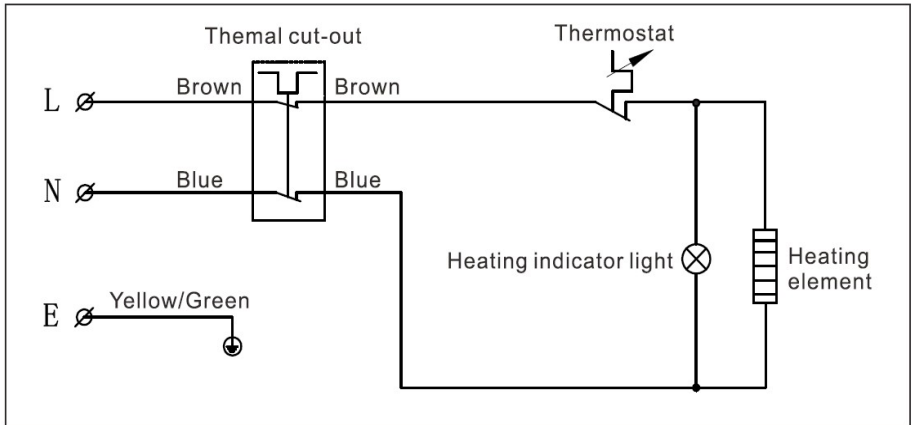
WARNING: If the supply cord is damaged during use, it must be replaced by the manufacturer, its service agent or similar qualified persons in order to avoid a hazard.

8. If any parts and components of the water heater are damaged, please contact local service agent or similar qualified personnel for repair, and use the spare parts and components provided by the manufacturer.

>> MAINTENANCE <<

1. Check the power supply plug and socket frequently to make sure that they have good, reliable contact and are well grounded without over-heat.
2. If the water heater will not be used for a long time, especially in the regions with low atmospheric temperature (lower than 0°C), the water inside the container shall be drained in order to prevent the appliance being damaged due to freeze of the water in the container.
3. In order to ensure that the water heater can operate efficiently for long term, it is recommended to periodically clean the container and the deposits on the heating element.
4. It is recommended to examine the anode rod every half a year. If anode protection materials have been consumed, replace with a new anode rod.

>> **ELECTRIC DIAGRAM** <<



>> TROUBLE-SHOOTING <<

Failure	Root cause	Solution
no power / no work / no function	a. no power supply b. water heater not power on	a. check mains power supply b. check the plug and socket
heating indicator light-off	Failure of temperature control device	Contact local service agent or similar qualified personnel for repair
no hot water coming out	a. running water supply cut-off b. too low water pressure c. inlet water not open	a. wait for restoration of running water supply b. use water heater when pressure is normal c. open the water inlet
too high outlet water temperature	Failure of temperature control device	Contact local service agent or similar qualified personnel for repair
water leakage	sealing problem of the joints of pipes	check the joints of pipes, replace sealing materials if needed

IF PROBLEMS PERSIST,CONTACT AN APPROVED BRUHM SERVICE TECHNICIAN.ALWAYS USE A CERTIFIED TECHNICIAN/ELECTRICIAN.

BRUHM products are intended for household use only.

BRUHM has policy of continuous improvement in product quality and design.

The company, therefore reserves the right to change the specification of its model at any time.

Environment Friendly Disposal:



You can help protect the environment!

Please remember to respect the local regulations:



Hand in the non-working electrical equipment to an appropriate waste disposal center.

