

USER'S MANUAL

Electric water heater

ELCB + ELECTRIC FENCE



ML-CVMS1-30L

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Precaution

·The water heater which is used in situation It must be earthed and must be connected with the independent single-press three-plug connector which is also well earthed!

·The water heater which is used for the first time must be filled up with water before you switch on the current.

·The safety valve of our company which is attached with the water heater must be installed on the inlet pipe of the water heater!

If the temperature of the water you set is over 50 °C ,it may burn your body ,so it must be mixed with cold water before use .

· This appliance is not intended for use 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.

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

· 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. Children shall not play with the appliance. Cleaning and user maintenance shall not be made by children without supervision.

· Please don't make the spray-head towards human body when you open or close the valve or adjust the temperature of the water to avoid being burnt by a little stream of hot water.

· The temperature of the pressure-relief vent of the safety valve is high , so it may scald your body!

· Before using this product, the safety valve provided with the product must be installed at the water inlet of the electric water heater. The maximum inlet water pressure is 0.7MPa and the minimum inlet water pressure is 0.02MPa.

· The safety valve should be regularly checked for its effectiveness to ensure that calcium carbonate deposits are removed and that they are not blocked.

· If the power cord is damaged, in order to avoid danger, it must be replaced by the full-time personnel of the manufacturer or after-sales department.

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

· It is necessary to allow the plug accessible to disconnect the appliance from the supply after installation.

· The appliance is intended to be permanently connected to the water mains and not connected by a hose-set.

· Before use, make sure that the electric water heater is installed correctly and completely. When using it for the first time or after emptying it, the electric water heater must be filled with water before it is allowed to connect to the power supply. Do not use this product when there is no water supplied to the electric water heater.

· The electric water heater must be properly and reliably grounded.

· Before installation or use, you must read and understand the instructions and safety warnings. If you

do not follow the instructions and safety warnings, it may cause serious injury or death.

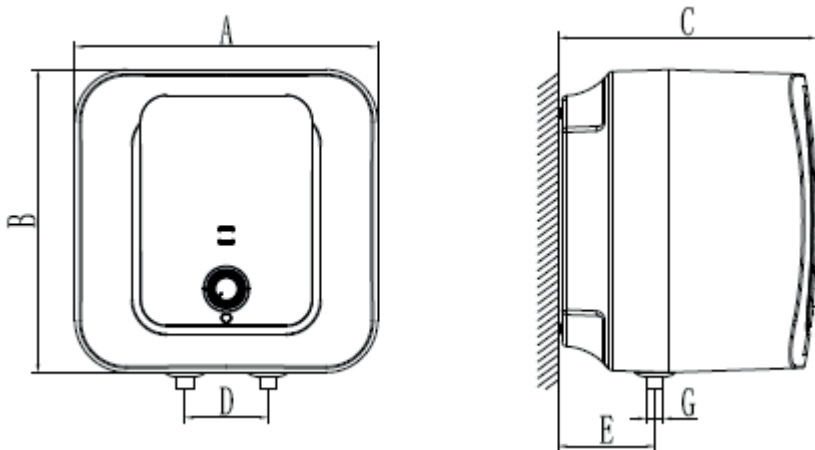
- Make sure that the power supply matches the rated power and rated frequency. Make sure the power plug is not damaged to prevent the risk of electric shock.
- In order to prevent the danger caused by the wrong reset of the temperature limiter, do not connect this device through any external switching device (such as timer or circuit device controlled by public facilities)

Ensure that the safety valve is always in working condition to prevent pressure accumulation, prevent the backflow of water entering the electric water heater and discharge excess pressure when the inner pressure of the electric water heater is high, so as to ensure the life of the inner tank and avoid the occurrence of bursting accidents. During the heating period, the pressure relief port of the safety valve may drop water droplets. This is a normal phenomenon. Do not block the pressure relief port due to this, so as to avoid serious safety accidents caused by the failure of the electric water heater to relieve pressure.

- If the water pressure of the tap water used by the user is too high, the pressure relief port of the safety valve may frequently release the pressure and discharge water. At this time, a pressure reducing valve should be installed on the water inlet pipe, and the pressure reducing valve should be installed in a place away from the water heater.
- Too high water temperature can cause serious burns and scalds.
- Before repairing or checking the electric water heater, make sure the power is cut off.
- The instruction manual must be placed next to or near the device for future reference.

product description

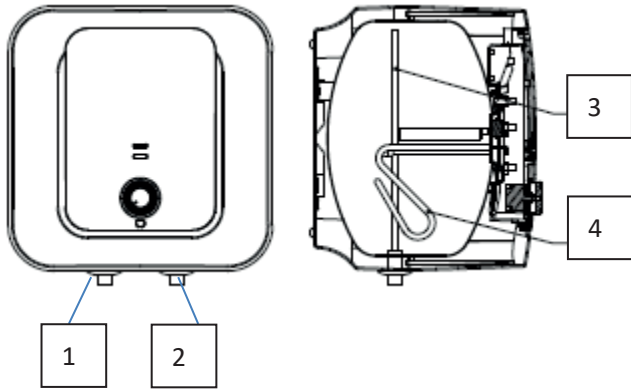
Product size and hanger size



NUMBER	MODELOS		
	10L	15L	30L
A(mm)	341	366	456
B(mm)	341	366	456
C(mm)	290	311	376

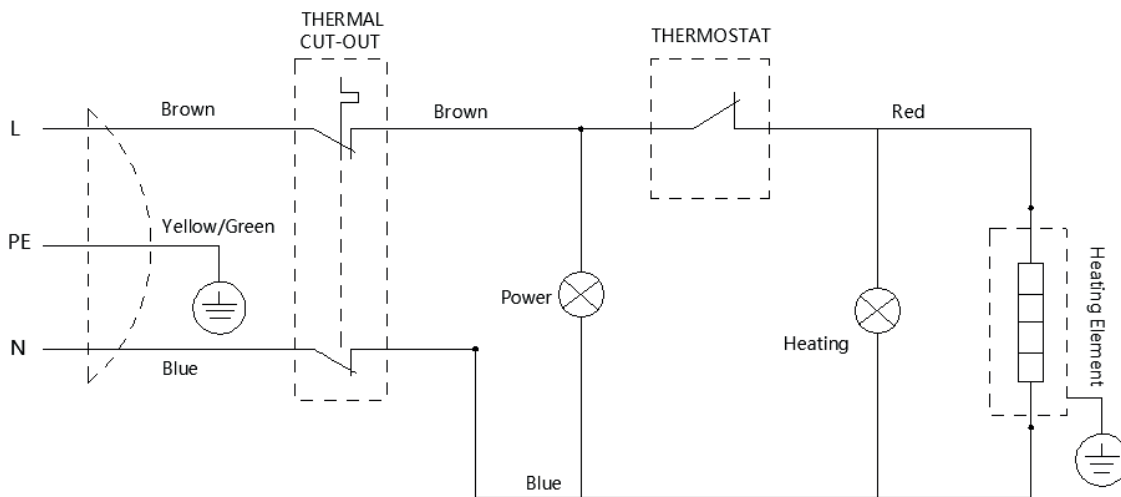
D(mm)	100	100	100
E(mm)	114	118	131
G(mm)	1/2 "	1/2 "	1/2 "

Note: The allowable error range of the above parameters is $\pm 10\%$



1. Hot water outlet
2. Cold water inlet
3. Hot water outlet pipe
4. Heating element

Electrical schematic



Product Specifications

Project	Unit	10L	15L	30L
Rated voltage	V	220~	220~	220~
Rated frequency	Hz	50	50	50
Preset pressure	MPa	0.7	0.7	0.7

Maximum power	W	200	350	500
Maximum temperature	° C	75	75	75
Rated volume	L	15	15	30
Waterproof level	/	IPX4	IPX4	IPX4

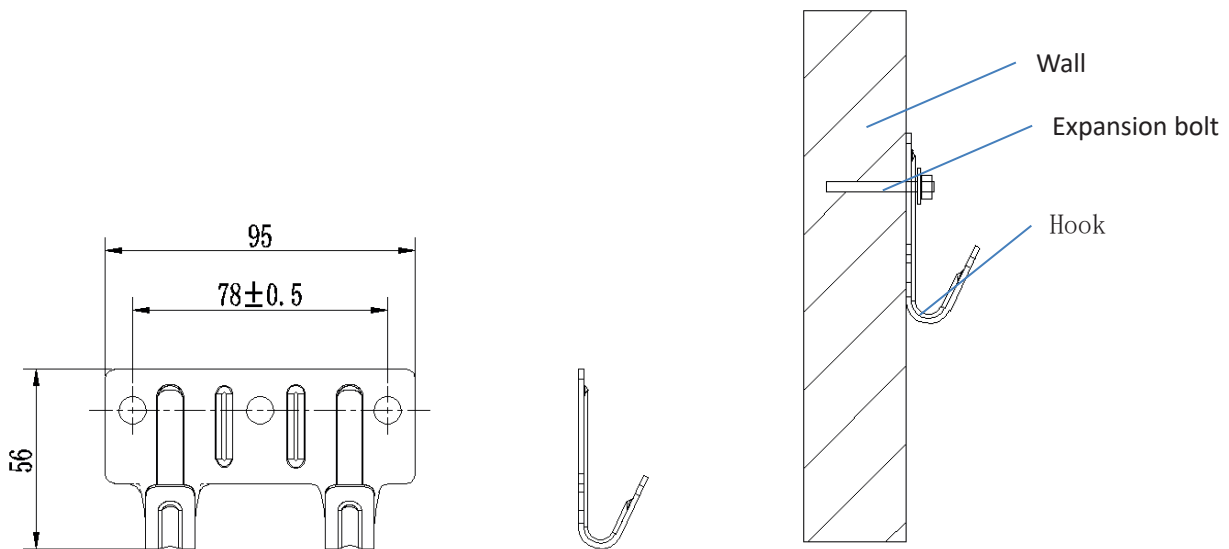
Packing List

Model number name	Electric water heater (set)	Safety valve (pcs)	Relief hose of safety valve	Expansion bolt	Gasket	Manual (this)	hook (pcs)
15L	1	1	1	2	2	1	1
15L	1	1	1	2	2	1	1
30L	1	1	1	2	2	1	1

Installation steps:

Drill 2 holes on a solid wall horizontally according to the mounting size 78mm apart with percussion drill the hold be with a diameter of 14mm and a depth of 80mm。 Thread the screw through the hanger hole and insert it into the wall hole, secure the exposed wiring ring on the fuselage with steel expansion bolts.

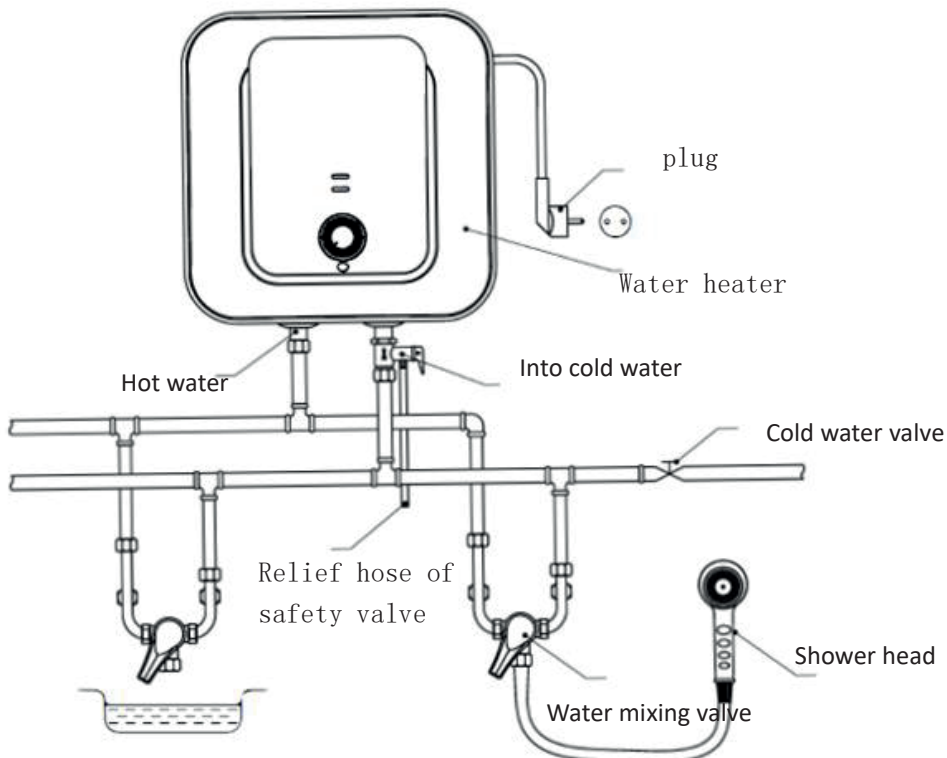
1.

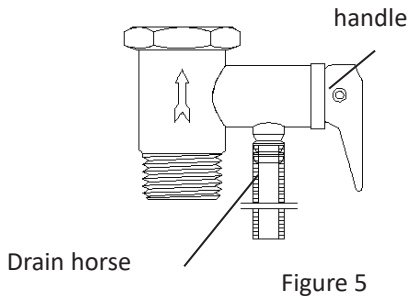


2. Fasten it firmly into position and check the wall plugs are not loose to ensure that the electric heater is firmly mounted.
3. Connect the water heater intake and outlet with pipes or accessories that are able to withstand temperatures over 100°C at a pressure that exceeds working pressure (8 bar) . Therefore, we strongly recommend that no materials should be used that cannot withstand high temperatures.
4. When fitting the water pipes follow the basic rules to prevent corrosion: "Do not use copper before iron or steel in the direction of the water flow". To prevent galvanic pairs and their destructive effect, use Teflon tape to thread the insulating hoses supplied with the heater to its two pipes.

Ants to supply hot water in multiple places, please refer to (Figure4) for pipeline connection and installation.

Note: When installing the safety valve, be sure to recognize the water flow direction sign on the safety valve and install it correctly, and tighten the upper and lower installation nuts to avoid water leakage. After installation, lift the handle (Figure 5) , check whether the safety valve is normal, and then reset.





2. Pipe connection:

2.1 Electric water heaters should be installed on the correct size pipes and fittings and should be clean

2.2 The specification of the water inlet pipe of this product is G1/2", and the threaded port needs to be sealed with a sealing waterproof tape or a sealing ring.

2.3 In order to facilitate the installation and disassembly of the water heater, it is recommended to install G1/2 unions at the appropriate positions of the water heater inlet and outlet pipes. Determine the location of the water supply, connect the water inlet pipe and the tap water pipe to the water source respectively, fill the inner tank with water, and check whether the waterway leaks. If there is water leakage, it must be reconnected

2.4 Install the safety valve with a rated pressure of 0.7MPa (its interface is G1/2) on the water inlet pipe in the direction of the arrow on the safety valve (the arrow points to the water heater). When the water heater is energized and heated, the water in the water tank is heated and expanded. In order to reduce the water pressure in the tank, a small amount of water droplets will flow out from the pressure relief hole of the safety valve. The pressure relief hole should be kept open to atmosphere and must not be blocked.



2.5 Installation method of the safety valve drain pipe: screw one end of the drain pipe to the safety valve .On the pressure relief hole, the drain pipe can be shortened or lengthened according to the actual situation, and the other end of the drain pipe is connected to the sewer mouth, so as to avoid dripping water from splashing the room when the pressure is released.


3. Power connection:

3.1 Electrical connections and wiring should be made by an experienced and qualified electrician.

3.2 All wiring must comply with local regulations.

3.3 The storage-type electric water heater requires a power supply of 220-240V to single-phase 2.2A (500W).

3.4 Connect the power supply to the connector that provides the power supply to supply power to the storage-type electric water heater. Make sure the ground terminal is firmly connected to the ground connection.

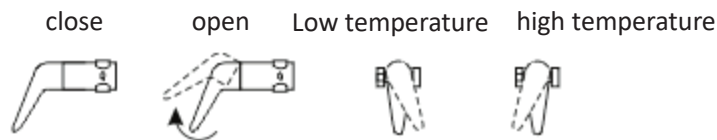
3.5 The ground wire must be green and it must be connected to  the terminal with the ground wire symbol.

3.6 All wires must be properly connected and covered with wire ducts.

Instructions

Preparation before use

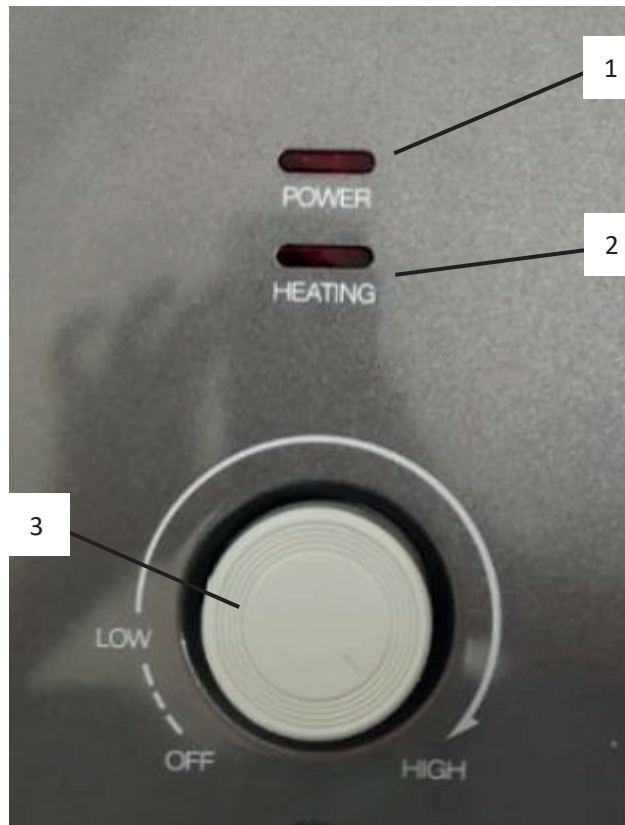
1. Water injection: Open the water mixing valve, lift the handle of the mixing valve, turn it clockwise to the highest point in the high temperature area, and then open the water inlet valve. At this time, water will be injected into the inner tank until the hot water outlet is normal. At this time Indicates that the inner tank has been filled with water, close the water mixing valve, and turn the handle counterclockwise to the lowest point in the low temperature zone.



2. When the water temperature reaches the set temperature, the heating indicator on the panel will turn green, and the water heater will automatically stop heating. The water temperature has reached the set temperature and enters the heat preservation state. At this time, the user can turn on the switch of the mixing valve and slowly turn from the low temperature zone to the heat preservation state. Rotate the handle of the mixing valve in the high temperature area, carefully test the water temperature with your hands, adjust it to the water temperature you need, and then you can use it with confidence. When the water temperature drops to a certain temperature, the water heater will automatically reheat.

Note: the water temperature may be slightly higher, please test the water temperature before use, do not test the water temperature on the human body, so as to avoid burns!

Function Description



- 1, Power indicator light: Indicator lights up when power on .
- 2, Heating indicator light: Indicator lights up when heating.
- 3, Knob: Temperature adjustment knob

- 1、 Adjust the knob of the water heater to set the heating temperature of the inner tank. The maximum water temperature is set to 75 ° C.
- 2、 Temperature adjustment knob, OFF means power off, HIGH means high temperature. Turn the knob clockwise to increase the temperature setting. Once the maximum temperature setting is reached, the knob will not continue to turn. Gradually turn counterclockwise to lower the temperature setting. Once the minimum temperature setting is reached, if you continue to turn the water temperature knob, the electric heating tube of the water heater will stop heating.
- 3、 When heating ,the heating indicator is on ,water temperature reach setting temperature will stop heating the heating light will be off.

maintenance

1. Before cleaning the surface of the electric water heater, make sure that the water heater is disconnected from the power supply. When cleaning, use a damp towel dipped in a little neutral detergent to gently wipe the surface of the product, and then dry it with a dry towel. Do not spray directly with water, and do not use

gasoline, polishing powder and other volatile substances or strong acid and strong alkaline cleaners for cleaning.

2. When the electric water heater is not used for a long time, please disconnect the power supply, unplug the power plug, and drain the water in the inner tank.

3. Regularly (about one year) clean the scale on the electric heating tube and the sediment in the inner tank. In areas with hard water, users can install an anti-scaling device at the front end of the water inlet pipe. Regular replacement of magnesium rods according to local water quality conditions. Please contact the local dealer or after-sales department for the assistance of professional technicians.

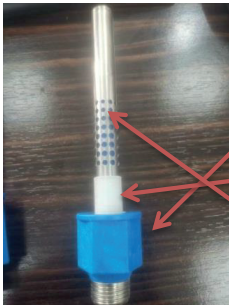
Troubleshooting Guide

question	reason	Solution
Light does not shine	1. Internal circuit failure	Please notify the after-sales department for maintenance
	2. The power is not turned on	Check whether the power supply line is normal
low water temperature (The heating indicator does not light up)	1. The set temperature is too low	Increase the set temperature value
	2. Internal circuit failure	Check and confirm that there is a power supply
	3. Thermostat failure	Please notify the after-sales department for maintenance
low water temperature (The heating indicator light is on)	1. Short heating time	Use after keeping warm
	2. Malfunction of mixing valve	Replace the mixing valve
	3. Electric heating tube failure	Please notify the after-sales department for maintenance
	5. Internal circuit failure	
water leakage	1. The inner tank is not well sealed	Please notify the after-sales department for maintenance
	2. The inner tank leaks	

Note: If your electric water heater is abnormal and cannot be used normally, please check it according to "Troubleshooting". If the above fault is the problem of the electric water heater itself, it must be repaired by professionals.

Current Leakage Protection Description

What is this protection?



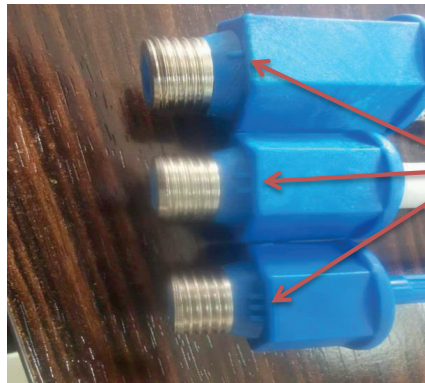
Valve

Plastic ring

Filter

This is a device system, including a valve, a plastic ring, a stainless steel filter
It is assembled on cool water input pipe on the water heater

What is the function?



The mark here to indicate different models which are suitable for different energy efficiency degrees appliance::

Energy efficiency I
Energy efficiency II
Energy efficiency III

Function 1:

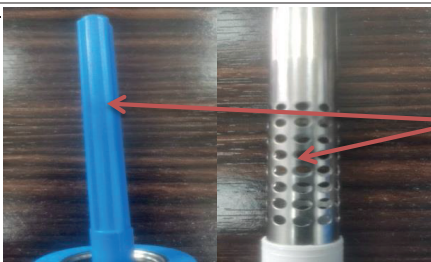
With this device, the hot water output ability will increase additional 20%

E.g: a 40L water heater usually is available for about 56L hot water(40°C), the hot water will be 68L after this device assembled

Function 2:

Normal water heater current leakage accident rate is around 5/100,000, this danger rater can be reduce into 0 after this device used

What is the principle?



The precise arris on plastic pillar & the holes on SS part controls 2 key points:

1. change the water flow speed and direction
2. change the water resistance valve

As a result, the current will be under a very very low level on bath man when the appliance has current leakage

And we can see every arris and hole is unique, deisgned

What can it bring us?

1. Only we have this patent, a complete system to save end-users from accident
2. We can have an unbelievable showing like the video, no other water heater can do like this except us:
That is: even the water has no earthing protection, even the 220V voltage current leakage on the appliance, users are under safe protection
This is a exploding showing for advertisement

3 ANS GARANTIE



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