

# Instant Electric Water Heater

Instruction Manual

Please read and follow the installation and operation instructions carefully, to ensure the long life and reliable operation of this appliance.

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## **Attention !**

This is not a do-it-yourself project. Failure to have this appliance installed by a licensed plumber and electrician will void all warranties.

Under no circumstances should you attempt to install, repair or disassemble the electric instantaneous water heater without first shutting off all power to the unit directly at the circuit breaker box.

Installation of this product is restricted to indoor locations only by licensed plumbing or electrical contractors.

## **Important Safety Instructions**

1. The installation must be in compliance with your local electrical and plumbing codes.
2. This appliance must be EARTHED.
3. All wiring and installation must be supervised by a qualified electrician.
4. This appliance is not intended for use by persons (include 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.
5. This appliance MUST be permanently connected to the fixed circuit breaker and it must be installed vertically. DO NOT install this appliance near to tinder or strong magnetic field place.
6. This appliance is forbidden to be switched on if you think it may be frozen, as this could result in serious damage to the unit. Wait until you are sure that it has completely thawed out before you switch it on.
7. Please feel the outlet hot water temperature with hand to make sure it is suitable for showering before taking shower to avoid getting scalded.
8. Before connecting pipes to the water heater hoses, it is extremely important to FLUSH the pipes to wash away all plumbing paste or residue in the pipes.
9. If there is damage to the wire, you must contact qualified electrician to replace it with dedicated wire from our authorized dealers.
10. Check water flow control valve is required to be installed at the water inlet or water outlet.
11. The shower head should be cleaned and descaled period.
12. The spray head must be descaled regularly.

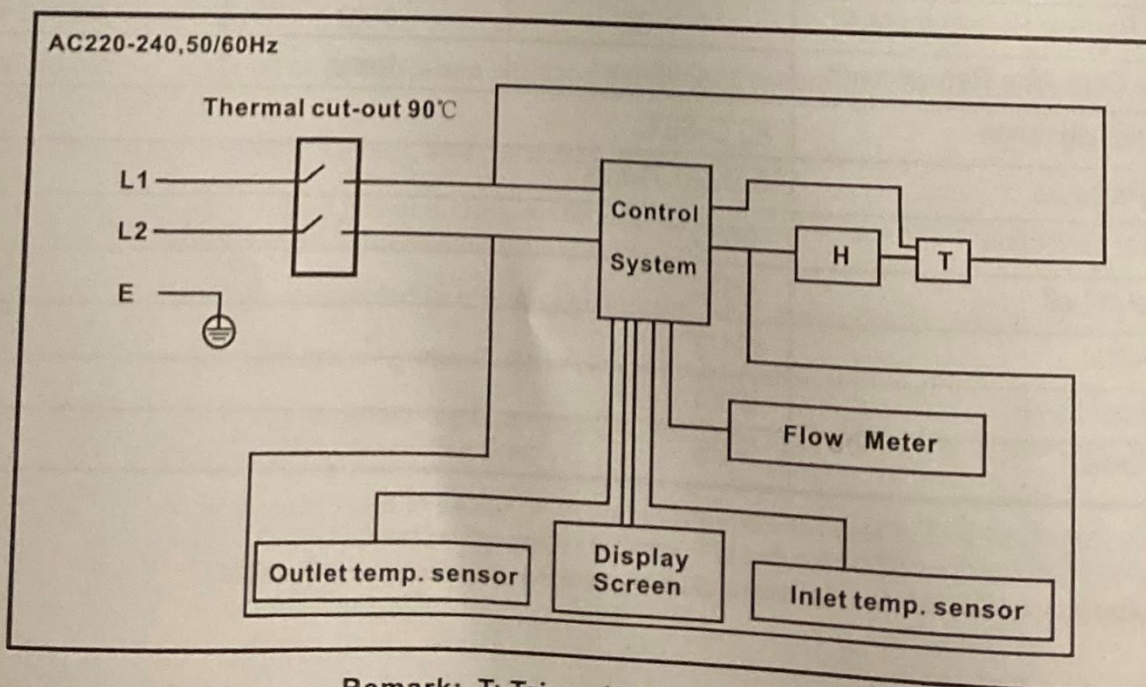
**WARNING:** Do not switch on if there is a possibility that the water in the heater is frozen.

## Product Features

The electric instantaneous water heaters are incorporated with patent heating technology with multi-safety devices. Besides, the unit has the following features.

- \* Tankless, instantaneous heating for on demand hot water, No pre-heating. No stand-by heating loss. Energy-saving.
- \* Adopt the technology of water & electricity isolation, and electric insulation wall to protect people from electric leakage damage.
- \* Microcomputer control, multi-power setting, suitable for different temperature needed in different season.
- \* Over temperature protection device: when the heater unit's temperature  $60^{\circ}\text{C}$ , the electricity will be cut off to avoid getting scalded and the screen displays E3, the appliance will start to work automatically while temperature drop to the set temperature.
- \* Dry heating protection device: when dry heating occurred and the heater unit's temperature is as high as  $90^{\circ}\text{C}$ , the power will be cut off to keep safe.
- \* Electric leakage protection: when electric leakage occurred, the internal protector will start to power off and display the fault code E1.
- \* Sensor trouble protection: when the internal temperature sensor breaks down, the water heater will stop working and display the fault code E2.
- \* Unique and high-tech heating component can auto control the temperature via the materials.
- \* Adopt advanced water flow induction technology, it has overcame the difficulty of using water heater due to the low water pressure.
- \* The only instant water heater that with withstand voltage of 1500v insulation protection in domestic market at present.
- \* Temperature memory function, avoid repetitive work.

## Electrical Diagram



Remark: T: Triac H: Heating system

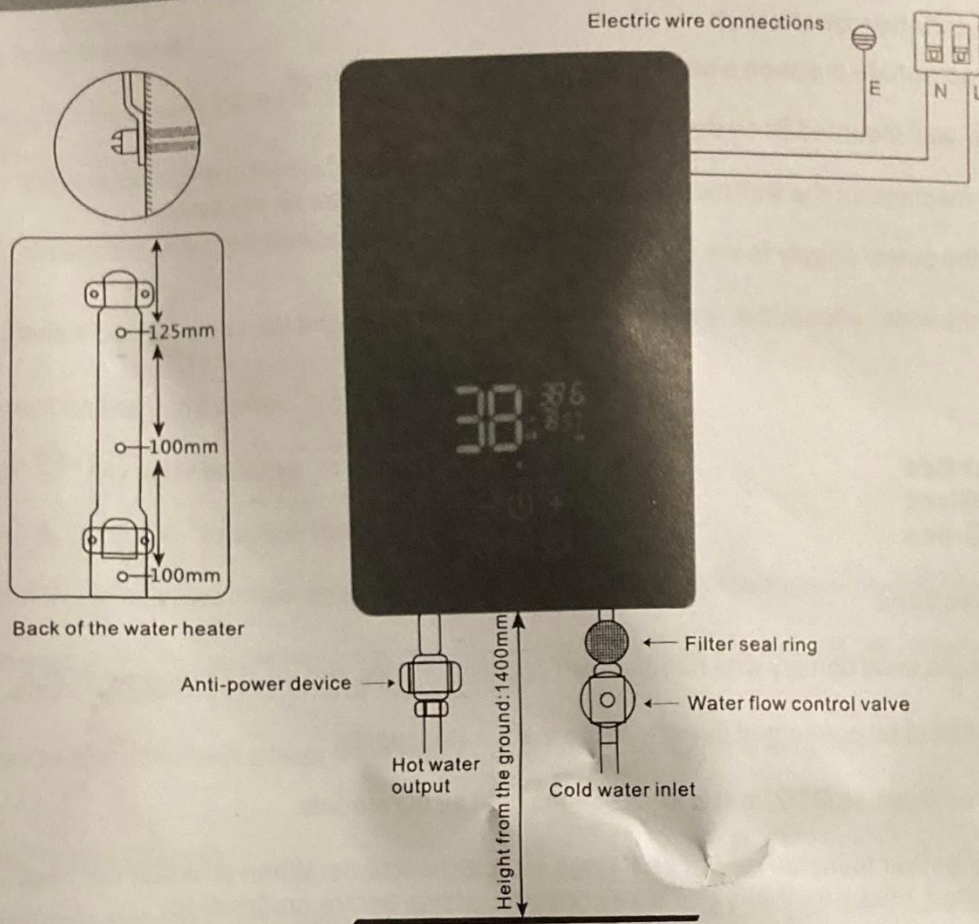
## Technical Data

| Power                          | ≤ 3.5KW            | ≤ 5.5KW            | >6KW             | >8KW             | >9KW              |
|--------------------------------|--------------------|--------------------|------------------|------------------|-------------------|
| Voltage                        | 220V ~ 50Hz/60Hz   |                    |                  |                  |                   |
| Circuit Breaker Requirement(A) | ≥ 25               | ≥ 32               |                  | ≥ 40             | ≥ 63              |
| Copper Core Wire Requirement   | 1.5mm <sup>2</sup> | 2.5mm <sup>2</sup> | 4mm <sup>2</sup> | 6mm <sup>2</sup> | 10mm <sup>2</sup> |
| Temp. setting range            | 30°C-55°C          |                    |                  |                  |                   |
| Water Pressure                 | 0.02-0.7Mpa        |                    |                  |                  |                   |
| Overheat protection            | 60°C               |                    |                  |                  |                   |
| Thermal cut-off                | 95°C               |                    |                  |                  |                   |
| Pipe section                   | G1/2"              |                    |                  |                  |                   |
| Waterproof Level               | IPX4               |                    |                  |                  |                   |
| Safety Level                   | IP25               |                    |                  |                  |                   |

| Power                          | ≤ 3KW               | ≤ 4KW            | ≤ 6.5KW          |
|--------------------------------|---------------------|------------------|------------------|
| Voltage                        | 110-127V ~ 60Hz     |                  |                  |
| Circuit Breaker Requirement(A) | ≥ 32                | ≥ 40             | ≥ 63             |
| Copper Core Wire Requirement   | 2.08mm <sup>2</sup> | 4mm <sup>2</sup> | 6mm <sup>2</sup> |
| Temp. setting range            | 30°C-55°C           |                  |                  |
| Water Pressure                 | 0.02-0.7Mpa         |                  |                  |
| Overheat protection            | 60°C                |                  |                  |
| Thermal cut-off                | 95°C                |                  |                  |
| Pipe section                   | G1/2"               |                  |                  |
| Waterproof Level               | IPX4                |                  |                  |
| Safety Level                   | IP25                |                  |                  |

Note: \*suitable recognized strain relief means shall be provided when the product installed.

## ■ Product Installation diagram



## ■ Installation Guide

The installation must be in compliance with the National Electrical Code, your local electrical and plumbing codes.

1. Make sure the appliance is intact, and the fittings are complete.
2. Please make sure the main power supply, water pressure, grounding condition, ammeter and wire reach the standard of installation requirement.
3. The appliance must be connected to properly grounded dedicated branch circuits of proper voltage rating.  
Ground must be brought to the "ground" at the circuit breaker panel.
4. This appliance MUST be permanently connected to the fixed circuit breaker. If you don't use the heater, please switch off the circuit breaker.
5. Do not install this appliance near to tinder or strong magnetic field place. The unit must only be mounted in a vertical position near by the water fittings. Please electrify try the machine after getting through water way.

## ■ Installation Method

### • Fixed installation on the wall

Locate an appropriate place on a section of wall as above mentioned.

1. Install the wall mounted Back Board on a section of wall.
2. Hang the machine on the wall mounted board, then fix the screw on the bottom.
3. Connect the power supply to the electric leakage switch.
4. Connect the water inlet/outlet, water inlet valve, shower head and the shower head's shelf.

### Remark:

L : Brown or Red

N : Blue or Black

E : Yellow-Green

### Water connections


1. All water pipe must comply with national and applicable state and local water pipe codes.
2. The unit should be connected directly to the main water supply.
3. It is required that use G1/2" water connections to fit all the models.
4. Please remember to install rubber seal rings at the connections. When all water connections are completed, check for leaks and take corrective action before proceeding.

### Electrical connection


1. All electrical work must comply with national and applicable state and local electrical codes.
2. All unit must be connected to a properly grounded dedicated branch circuit of proper voltage rating.
3. All the models can be connected to a single circuit, use a supply cable protected by a double pole breaker.
4. While fixed the cable to terminal blocks, please make sure the metal wire ends and the terminal blocks to touch.
5. Before beginning any work on the electric installation, be sure that main breaker panel switch is OFF to avoid any danger of electric shock, all mounting and plumbing must be completed before proceeding with electrical hook-up.

## ■ Operation Instructions


### Three function keys

- a) " on / off "key, means the circuit switch <  >
- b) " ▼ " means lower the temperature <the left key>
- c) " ▲ " means heighten the temperature <the right key>

### Usage

- \* First turn on the main power.
- \* Press "  "key after water valve is turned on.
- \* Press " ▲ " and " ▼ " to chose the proper water temperature.
- \* Control the inlet water inflow by inlet water value that the water temperature can be adjusted.
- \* When stop using the water heater in midway, press "switch"key to turn off the circuit or inlet water valve ,water heater will enter into standby mode.
- \* Please turn off the main power if the water heater is not used for a long time.

### Functions and display

- a) After turning on the main power ,the buzzer ring once, the screen display the instant temperature.
- b) Press "  "key after turning on the inlet water valve, lighten the red "indicator lamp", initial temperature will be displayed after 2 seconds.
- c) Press " ▲ " or " ▼ "key ,the buzzer will ring once, instant temperature will be displayed after 2 seconds, this moment, you can regulate the water flow to fine tune the water temperature.
- d) Over-temperature protection will auto-start and the water heater stop heating when water temperature exceed 60 °C, screen will display E3, the machine will reheating while the water temperature drop to 45°C.
- e) When cut off the water in the course of operation, the appliance inner water temperature of the machine will rise , people should be careful of the high water temperature.
- f) When stop using the water heater ,first press "switch" key to stop heating, turn off the inlet water valve after a few seconds so that the machine will be better protected.
- g) Shut off the main power when you leave .



## ■ Trouble - shooting

| Problems  | Possible Causes   | Corrective Actions  |
|---|---|---|
| 1. Inlet and outlet fittings leaking              | A. Fittings not tight<br>B. Rubber washer worn-out                                    | A. Tighten fittings<br>B. Change rubber washer                                      |
| 2. LED no signal                                  | A. Power not connected<br>B. LED damaged  | A. Connect power to the unit<br>B. Change LED                                       |
| 3. Functional keys not working                    | A. No water out from the shower<br>B. Water pressure too low<br>C. Key or PCB damaged | A. Open valve to get water<br>B. Open valve to get pressure<br>C. Change key or PCB |
| 4. Water too hot                                  | A. Too high temperature set<br>B. Water flow too small                                | A. Set a lower temperature<br>B. Open valve bigger                                  |
| 5. Water too cold                                 | A. Low temperature set<br>B. Water flow too much                                      | A. Set a high temperature<br>B. Reduce water flow                                   |
| 6. Outlet gets water smaller & smaller            | Inlet straight or shower clogged  | Clean strainer & shower   |
| 7. LED displays E1                                | Overtemperature protection  | Please contact with your local dealer   |
| 8. LED displays E2                                | Leakage Protection  | Please contact with your local dealer   |
| 9. LED displays E3                                | Water temperature sensor failure  | System automatically restore<br>Open large water flow                               |
| 10. Without hot water but LED display normal work | Internal temperature sensor protection start  | Please contact with your local dealer   |

\* Should only be performed by qualified electrician. The person who initially installed the unit is the best one to contact for help.

## Normal Maintenance

**Note:** Do not attempt to repair this water heater yourself. Call a service person for assistance. Always shut off the power supply while operating maintenance.

It is not required any regular maintenance. However, to ensure consistent water flow, it is recommended following maintenance.

1. Periodically remove scale and dirt that may build up at the aerator of the faucet or in the shower head.
2. There is a built in filter screen at inlet connection which should be cleaned from time to time. Please turn off the water flow before doing this.

