

**EN** User manual

Electrical Water Heater

Calore Control

30L- 40L- 50L- 60L- 80L

# **USER MANUAL**

**ZANUSSI**

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Subject to change without notice



## Safety instructions



**Important!** Read carefully and keep for future reference.

- The safety of your appliance complies with the industry standards and with legal requirements on the safety of appliances. However, as manufacturers, we feel it's our duty to provide the following safety notes.
- It is most important that this instruction book should be retained with the appliance for future reference. Should the appliance be sold or transferred to another owner, or should you move the house and leave the appliance, always ensure that the book is supplied with the appliance in order that the new owner can get to know the functioning of the appliance and the relevant warnings.
- Correct functioning of your water heater does not only depend on the product's quality, but on the correct installation by a qualified professional.
- Before first time starting up, check the appliance for any damage incurred during transport. Never connect up a damaged appliance. If parts are damaged, contact the service center.
- Never remove or damage stickers, warning labels or nameplates attached to the appliance.

## General safety

- Installation and maintenance should be carried out by Service center authorized professionals.
- Check that the specifications written on the appliance's identification plate are the same as those of the electrical supply.
- The installation and start up must be carried out in accordance with these instructions and only by qualified professionals.
- Zanussi electric water heaters are manufactured and tested in accordance with valid regulations.
- This appliance is not intended for use by person (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.
- Do not leave the packing materials (cardboards, nails, bolts, plastic plate and other similar materials) within reach of children, they can be exposed to suffocation danger.

## Waste of electrical equipments

At the end of the appliance's useful life, it should not be disposed of with general domestic waste.

By disposing of a waste electrical device separately, you are reducing possible negative consequences for health and the environment, caused by incorrect disposal, and enables treatment and recycling of the materials that it is made of, thus saving energy and resources.

For more information, please get in contact with your local authority or the shop where you purchased the product.



## Installation

### • Accessories

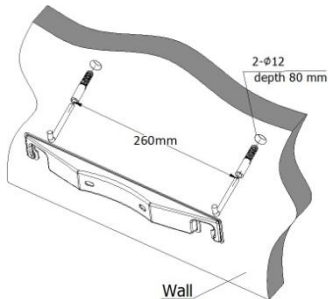
The electrical water heater is supplied with the basic equipment required for their installation, such as:

- Safety valve.

This accessory is inside the packaging.

### • Placement

**i** Both the wall on which the water heater is to be installed and the fixing wall plugs and screws must hold the weight of the appliance full of water. If the wall is very thin, back plates must be used on the other side of the wall.

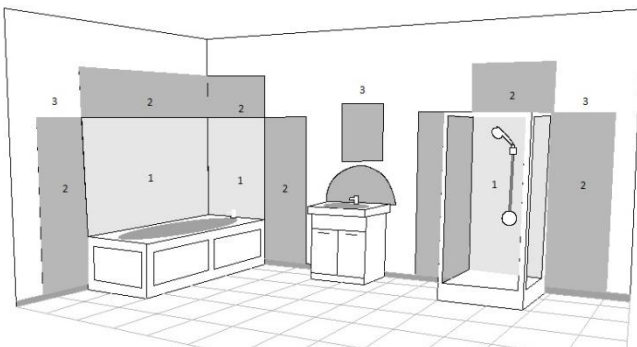


**Do not install the appliance in the following places:**

- **Outdoor**
- **Areas that are cold and freezing, the freezing water may damage the internal tank and pipes.**
- **Close to the ground.**
- **Where water discharge is not possible**

- The water heater can be placed anywhere in the house. Nevertheless we recommend placing it as near as possible to the hot water tap, in order to prevent temperature loss in the pipes.

- The appliance can be installed in all bathroom sections except Zone "1"



### • Hydraulic Installation



**Leave a minimum space of 40 cm under the pipe outlet, to be able to gain access to the electrical parts and to make maintenance and repairing easier.**



**If plastic pipes are being used, and in order to carry out the installation conditions, the pressure and temperature conditions they are going to undergo have to be taken into account. A maximum pressure of 9 bars and maximum temperature of 70°C, in normal conditions, or of 100°C in abnormal conditions if the safety thermostat switches off.**



**The water heater MUST be installed with the safety unit, which has a non-return valve (supplied with the water heater) check page#7.**



**No Hydraulic accessory must be installed between the safety unit and the cold water inlet tube service valve (plug valve, non-return valve, etc..) check page#7.**

The pressure relief opening of the safety unit can be connected to a drain pipe, with a diameter that is at least the same as the water heater connection pipe, with a continuous inclination and open to atmosphere.



**Pressure relief valve works only when the pressure inside the heater tank increases above 7±1bar, relief will be in a continuous water drops form that come out from pressure relief opening.**



**If the main network pressure is more than 5 bars, it is OBLIGATORY to install a 3 or 4 bar pressure regulator in the mains connection of the house.**

### • Electrical Installation

- Connect the appliance to the power source with a 1.2mm<sup>2</sup> cable for heating element power 1200 and 1500 watt, and 2mm<sup>2</sup> cable for heating element power 2000 watt.



**Distance from appliance location to the power supply should be not more 5m long.**

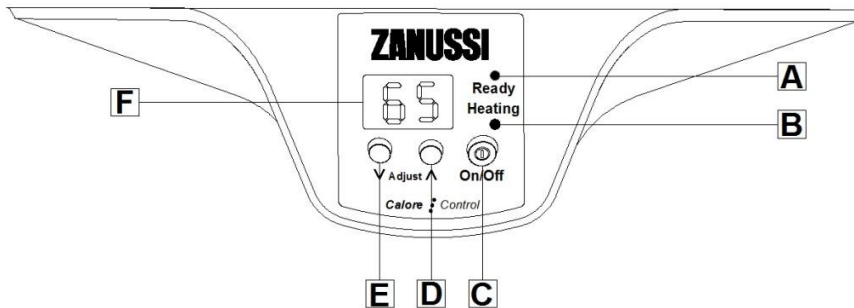
**i** Use a 16 Amp Overload switch to connect your appliance to the power supply, Overload switch can be replaced by 16-20 Amp socket and plug.

- If the appliance is provided with "EARTH" terminal, it must be checked that the electrical installation of the premises or house is equipped with the "EARTH" line.

- If it does not have the standard "EARTH", we recommend installing a differential switch (ELCB/RCCB) with a value of  $\leq 30$  mAmp.

**!** It is strictly forbidden to tamper with or replace parts (including the power supply cable, as only the Technical Support Services are allowed to do it).

## Control Panel



- A** Heating process finish lamp
- B** Heating process start lamp
- C** On/Off button
- D** Temperature increment button
- E** Temperature decrement button
- F** Digital LED screen

## Usage

### • Filling

- Once the water heater has been installed, open the water source valve. Turn on the hot taps. When the water starts to run through it with constant flow, the water heater will be full. Then close the outlet taps and make sure there are no leaks in the installation.

**!** Do not connect the water heater to the main power supply without being sure that it is full of water.

### • Operation

- Turn on the main switch so the appliance has voltage on, the display will be ON

### • Standby mode

- the display of the control unit is lighting ON, show the currently temperature of the water while it is blinking continuously  
 - the two Red and Green indicators will be in Off state (not lighting)  
 - the heater will be in standby mode

### • Adjusting water temperature (operating mode)

- Press the power button on the control panel.  
 - The display will show the currently measured temperature steadily  
 - After 30 second, the control unit will going to ON state, red indicators will lighting on, and one beep sound will be heard from the appliance.  
 - Press Increment or decrement buttons to adjust the desired temperature from 35 °C to 80 °C.

- After the temperature had been adjusted to the desired value, the display will start blinking for 5 second to the setting temperature value, and then get stable to the currently measured temperature.

**i** Each press to the increment / decrement buttons will increase /decrease the setting temperature by 1°C consequently

Long press to the increment / decrement buttons will increase /decrease the setting temperature by 5°C consequently.

- The heating element will heat up the water inside the tank until the water temperature reaches to the setting value, then heater will go to OFF state.  
 - Red indicator will be Off, and green indicator will be ON, and two beeps sound will be heard from the unit  
 - After the water inside the tank gets cooler, and the temperature will be lower than the setting temperature by 5°C, the heating process will start working again and heat the water inside the tank  
 - The operation will repeat continuously in automatic manner as long as the electrical source connected to the water heater.

- In case of main power source goes down or sudden shut-off, The digital control unit will keep (save) the last setting temperature inside its memory, After the main power comes again, the unit will be powered on and going to the operation state (ON state or OFF state) according to the setting temperature and the currently measured temperature.

## Features

### • Digital Control

- The appliance provides the user with a full control of the desired water temperature to satisfy his/her needs.

### • Maintenance free tank

- This appliance tank is not equipped with a magnesium anode, so no need to service the tank periodically.

### • Anti-Burn system

- The appliance will detect any abnormal temperature increase and disconnect the heating element to protect it from damage



*When this occurs, an E2 signal will blink continuously on the appliance LED screen and beep sound will be heard for 60 seconds.*

### • Over heating Protection

- If water temperature increased above 90°C the control unit will stop heating process to protect the user and appliance from overheated water.



*When this occurs, an E3 signal will blink continuously on the appliance LED screen and beep sound will be heard for 60 seconds.*

### • Quad Safety

- The appliance is protected from overheating-overpressure with four types of safety:

1. On board Overheating protection
2. Mechanical thermal fuse
3. Relief valve
4. Non return valve

### • HD polyurethane insulation foam

- High-density polyurethane foam injected between the inner tank and the outer shell.

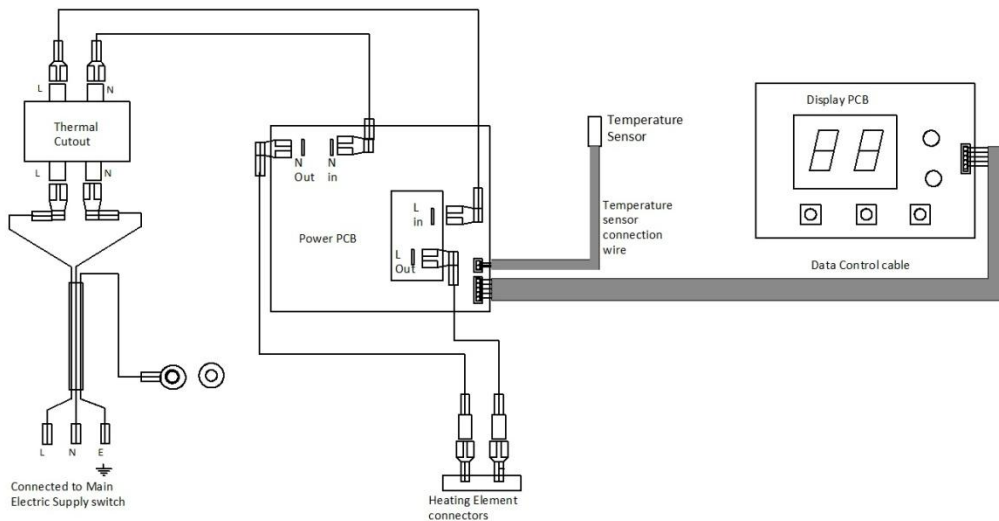
1. To reduce power consumption
2. Keep heat loss controlled

The material of the foam was chosen carefully to give the best performance for a long life.

## Maintenance

The water heater requires no special maintenance, no anode change. The safety limiter, which cuts both phases and leaves the water heater without voltage; protect the appliance from excessive heating due to a possible thermostat fault.

If this case occurred, you must call the Service Center for it to be repaired



Electric circuit

\*The MANUFACTURER reserves the right to modify the characteristics and specifications of its products, without prior notice.

## Care and cleaning

- All the repair and maintenance must be carried out by customer service authorized technicians.
- A clean soft cloth or wet sponge can be used for the cleaning
- Appliance malfunctions should be repaired on its time to keep the performance of it.
- Dissolvent products are not allowed for the cleaning.

## What to do if.....

Certain problems are due to lack of simple maintenance or oversights, which can be solved easily without calling the service technicians, before contacting the local service center please carry out the check listed below.

Problem	Possible cause(s)	Solution
<b>Water leaks</b>	Improperly sealed, hot or cold water source connections	Tighten threaded connections
<b>No hot water</b>	No power to heater	Turn on electrical switch, Check for blown fuses or tripped breaker
<b>Insufficient hot water</b>	Temperature set too low	Raise the temperature set to the desired level
	Cold water mix fast with appliance stored hot water, high water source pressure	Close the inlet water service valve(or the pressure regulator) partially until the problem disappear
	Wrong piping connections	Correct piping
	Wasted hot water	Review and reduce hot water consumption ,
	Long runs of exposed pipe	Insulate piping
	Hot water piping on outside wall	Insulate piping
<b>High operation cost 30(power consumption)</b>	Temperature set too high	Set temperature to a lower desired level
	Wrong piping connections	Correct piping
	Wasted hot water	Review and reduce hot water consumption
	Long runs of exposed pipe	Insulate piping
	Hot water piping on outside wall	Insulate piping
	Leaking Taps	Repair leaking taps
<b>Dripping from safety valve</b>	High water source pressure	Install a 3 or 4 bar pressure regulator valve in the mains connection of the house
<b>E1 appears on LED screen and blink continuously and sound beeps will be heard for 60 seconds</b>	Temperature Sensor wire or socket disconnected or the sensor failure	disconnect the main power source and call service center
<b>E2 appears on LED screen and blink continuously and sound beeps will be heard for 60 seconds</b>	Anti-burn (anti-dry) safety alarm, if the temperature increases than the normal rate	disconnect the main power source and call service center
<b>E3 appears on LED screen and blink continuously and sound beeps will be heard for 60 seconds</b>	High temperature safety temperature increased over 90°C, this is to be in safe in case that the unit fail to disconnect the main power from the heater at its maximum setting temperature (80°C)	disconnect the main power source and call service center

## Technical data

Capacity (Liter)	Power (Watt) 220V ,50/60Hz	Operating Pressure ((bar)10 <sup>6</sup> pascal)	Safety Valve pressure (bar)	Dimensions (mm)	
				K	J
30	1200	(6)0.6	7±1	340	605
40	1200			425	660
50	1200			510	745
60	1200			595	830
80	2000			765	1000

- 1** Fixing Bracket
- 2** Support Bracket
- 3** Safety & Non Return Valve
- 4** Flexible Hoses
- 5** Service Valve
- 6** Cold Water Inlet Pipe
- 7** Hot Water Outlet Pipe
- 8** Polyurethane Insulation
- 9** Water Tank
- 10** Hot Water Outlet Pipe
- 11** Sensor
- 12** Cut out
- 13** Heating Element
- 14** Cold Water Outlet Pipe
- 15** Digital control

