

# ***Corberó***

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## **ELECTRICAL WATER HEATER**

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USER MANUAL

**CTEV350 / CTEV500 / CTEV800 / CTEV1000**

## Dear Customer,

First of all, congratulations for choosing a nature and technology friendly CORBERO product.

Aspiring to present products above and beyond your expectations, which is manufactured meticulously at CORBERO' s modern plants and rigorously quality-controlled, into your use. This operating manual will guide you through the use of your appliance. You will see that your appliance is equipped with the most advanced technological solutions and quite easy to use.

The life of your appliance will prolong if you perform necessary care and maintenance procedures.

We hope you enjoy using your appliance.

## Important Information on Safety

This operating manual includes important information on getting your appliance started, and its safety, intended use, cleaning and maintenance.

Always keep this operating manual with your appliance. Whenever you lend your appliance, give this operating manual as well.

Read the operating manual carefully before using your appliance to prevent burns, electric shocks, fire or injury risk, and follow the instructions on operating your appliance, troubleshooting and cleaning.

The water heater must be mounted by CORBERO Authorized Service.

The water heater must absolutely be grounded.



**WARNING: Denotes death or severe injury risk.**



**CAUTION: Denotes injury or property damage risk.**

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## **Safety Warnings**

### **Safety Information on the Installation of the Appliance**

**WARNING:** Using voltage of your water heater is 230 Volt.

**WARNING:** Make sure that safety valve is installed on to the cold water inlet. Safety valve has been set during the manufacturing of the product. The setting mechanism should not be intervened. High pressure water will flow from safety valve. This is not a fault and is required according to safety standard.

**WARNING:** The water heater must absolutely be grounded. If you use your water heater without plug, absolutely run your appliance after connecting to grounded power line by means of fuse; if you use your water heater with plug, absolutely run it by inserting into the grounded plug. **Manufacturing company shall not be responsible for any damage due to operating without grounding.**

**WARNING:** Do not operate your water heater without making sure that it is filled with full of water. If water is flowing when

you open the hot water tap, it means that the appliance is full of water.

**WARNING:** When the water heater will be mounted and operated for the first time, ask an authorized CORBERO service for help.

**WARNING:** Avoid installing the water heater in places where there is a risk of freezing.

**WARNING:** Do not use electricity extension cables or multipliers.

**WARNING:** This appliance is not intended to be used by those with physical, sensorial and mental disability (including children) or with lack of experience and knowledge unless they are given supervision and method by a person, who is responsible for the safety of the appliances, about using the appliance.

**WARNING:** If the power cable is damaged, it should be replaced by the CORBERO authorized service staff in order to avoid a dangerous situation.

- Installation and repairs should always be done by Authorized Service.
- Producing company shall

not be held responsible of any damage due to operations conducted by unauthorized persons.

**WARNING:** Your water heater has been manufactured for domestic use, and can be used only at home and for specified purposes. It is not suitable for commercial or common usage.

**WARNING:** The water hotter than 50°C during usage can cause scalding or even death due to serious scalding. Please keep in mind that children, elderly and disabled people are more vulnerable to the risk of burning.

### **Safety Information on the Use of the Appliance**

**WARNING:** The limiting thermostat will disable the resistance in case of excessive temperatures in the boiler or the failure of temperature setting thermostat.

**WARNING:** You can switch ON and OFF the water heater using the V-Automated switch. V Automated Switch acts as a fuse.

**WARNING:** Safety valve is

installed on to the cold water inlet of the water heater. This will prevent the draining of the water inside in case of a water cut.

**CAUTION:** The following conditions must be observed while installing and using the safety valve.

- As water may drip from the drainage tip, this pipe should be left open to the atmosphere. In order to prevent the dripping waters from causing any harm to the environment, you can connect it to a sewage drain by means of a hose.
- The appliance should be operated with intervals in order to prevent limescale accumulation and confirm that it is not blocked.
- While connecting the safety valve to the appliance, make sure that the drainage tip is downwards.
- Operation of the appliance for purposes other than its intended purpose may cause damage or dangerous conditions and renders the warranty void. Damages occurred due to these envi-

ronments are compensated by the user.

- In order to prevent overloading of the electrical circuit, do not operate any other high-power appliance on the same circuit. Do not connect with extension cables or multi plugs. If you neglect, it may cause electric shocks and damages in the product.
- This appliance can be used by children at the age of 8 years old or above and by those with physical, sensorial and mental disability or with lack of experience and knowledge, provided that they are given supervision and instruction about safely use of the appliance and that the hazards caused by the appliance are understood by them.
- The safety valve used in the appliance might leak at the drainage section if the mains input water pressure exceeds the maximum operating pressure. This is normal. When the pressure reduces, the leakage will stop.
- As corrosion may be speed up if the water inside the appliance is discharged and the appliance stays empty for a long time, the reservoir should not stay water-free for a long time.
- Children should not be allowed to play with the appliance.
- Cleaning and user maintenance should not be done by unattended children.
- Packaging materials are dangerous for children. Keep all packaging materials out of the reach of children.
- Before use, check the functions of your appliance accurately.
- The appliance should be used only if it is plugged in a power cable and it has no visible damages on its body.
- Check the power cable for damages regularly. Do not strain the power cable of the appliance. Do not put any object on the power cable.
- If the power cable is damaged, it should be replaced by the authorized service recommended by the producer in order to avoid any

danger.

- If the mains water operating pressure exceeds the maximum operating pressure, a pressure reducer should be connected to the cold water line before the safety valve. The pressure reducer should be away from the appliance and close to the counter as much as possible.

**Never use your appliance under the following conditions:**

- If the appliance or the power cable is damaged,
- If the appliance does not function properly,
- If the electrical components of the appliance are visibly damaged,
- If the appliance is wet, has fallen into water or any other liquid, exposed to water flooding incident, its electrical components have come into contact with water,
- If strange noises, smoke or smell emanate from the appliance.

If any of the cases mentioned above is detected, shut down your appliance immediately,

disconnect the power supply connection and contact with the authorized service.

- A damaged appliance or damaged parts of the appliance may cause severe injuries and fire.
- There is no parts within the appliance, with which the user can intervene. The risk of electric shock occurs when electrical connections within the appliance are touched and when the mechanical structure of the appliance is changed. In case of any failure, do not attempt to repair it yourself. Otherwise, the appliance shall be void of warranty.
- Use of accessories not recommended by the producer may cause injuries and damages in the appliance.
- Do not touch or run the appliance with wet and moist hands.
- If the appliance will not be used for a long time, disconnect the power supply from the fuse.

Make sure that the appliance is turned off and the power is cut

from the fuse/power switch at the following conditions:

- Before installation,
- Before cleaning and maintenance,
- Before repairs.
- Do not drink the water drained off from the appliance. Otherwise, severe health problems may occur.
- If the appliance will be re-mounted at a new location, contact with the authorized service.

### **Safety Information to Take into Consideration During Cleaning and Maintenance**

- To prevent risk of electric shock, turn off the appliance, shut down its fuse or switch gear before cleaning.
- All maintenance and service works should be performed by the authorized CORBERO services.
- Magnesium bar used against the corrosion inside the drum should be checked every year and if it worn out, it should be replaced by the authorized service.
- To get the optimum per-

formance from your electrical water heater, it is recommended to perform the cleaning of the limescale that may form on the resistance due to the water hardness and the high temperatures should be removed in every two years regularly by the Authorized Service. This procedure should be performed on heating resistance.

- All above-mentioned procedures should be performed by CORBERO Authorized Service.
- Hot water, ammoniac and non-alcohol containing liquid detergents should be used. Otherwise the surface may get damaged.
- Clean and maintain the appliance as stated in the "Cleaning and Maintenance" section.
- Do not use chemicals. Do not use substances such as gasoline, thinner etc.
- Using powder detergent may result in scratches on the surface of the water er.



## **Safety Information to Take into Consideration During Handling and Transportation**

While handling the appliance, make sure that all electrical connections are removed and all water inside is discharged. Place or hold the appliance in a way to avoid damaging during handling.

## **Installation**

**WARNING:** The water heater should be installed by CORBERO Authorized Service according to “Installation Instructions”.

**WARNING:** The appliance should not be mounted on the stairs, exits and hallways of the building.

If you need to use a fuse when installing the appliance, use a fuse with the specifications shown in the technical data.

Your appliance is not suitable for being used outside the building.

## **Choosing the Mounting Position**

- Do not install the appliance in non-ventilated and humid

areas.

- Do not place the appliance to areas that are under direct sun light.
- Do not place the appliance in areas where partially dangerous substances such as steam, dust or gas are present.
- Do not connect the appliance directly to the electricity sources which are not protected from the sudden voltage spike.

## **Liability Limitation**

All technical information, instructions for use, operating and maintenance of the appliance included in this manual are the most up to date information on your appliance. Manufacturer does not assume any responsibility for damages and injuries that may occur as a result of non-compliance with the instructions given in this manual, using the appliance for purposes other than its intended use, unauthorized repairs, unauthorized modifications on the appliance and using spare parts that are not approved by the manufacturer.

# Technical Specifications

Model		<b>CTEV350</b>	<b>CTEV500</b>	<b>CTEV800</b>	<b>CTEV1000</b>
Capacity	Lt.	35	50	80	100
Water Temperature Setting Range	°C	0-85	0-85	0-85	0-85
Voltage	V	220-240	220-240	220-240	220-240
Current	A	5	9	9	9
Resistance Power	W	1200	2000	2000	2000
The Highest Operating Pressure of Safety Valve	Bar	10(-0.5,+0)	10(-0.5,+0)	10(-0.5,+0)	10(-0.5,+0)
Water Connection	Inch	1/2	1/2	1/2	1/2
Protection Class		IP24	IP24	IP24	IP24
Anti-Corrosive System	Enameled Interior Drum and Magnesium Bar				
Product Sizes	mm	Ø427*482	Ø427*612	Ø427*872	Ø427*1035

Technical specifications and this manual are subject to change without prior notification.



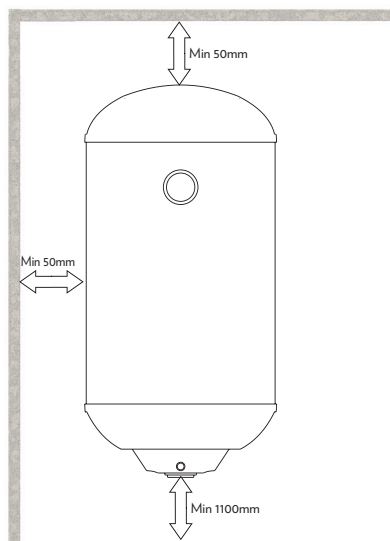
This appliance conforms to Regulation on Supervision of the Waste Electric and Electronic Appliances.



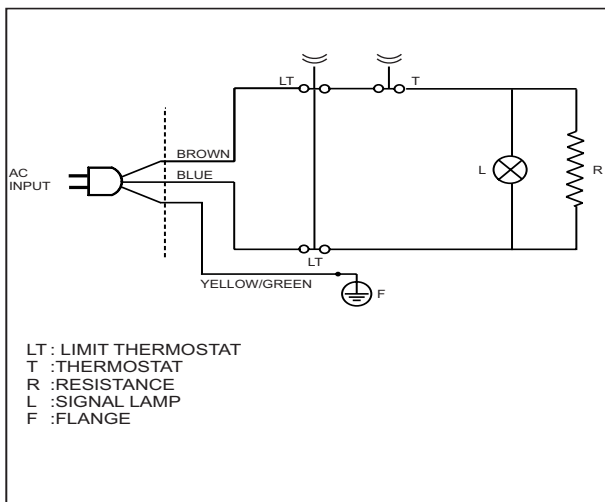
This product complies with the Europe CE Directives no. 2014/30/AEU(Electromagnetic Compliance Regulation) and 2014/35/EU (Low Voltage (LVD) Regulation)

## Installation Distances

The distances specified in the chart below should be applied in the installation of the appliance.

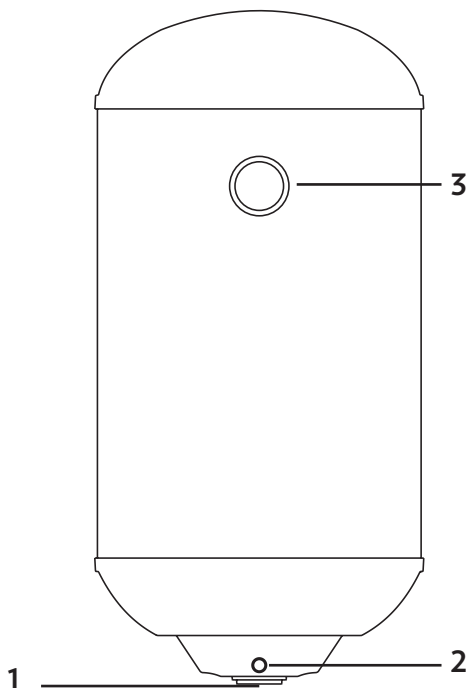


## Circuit Diagram



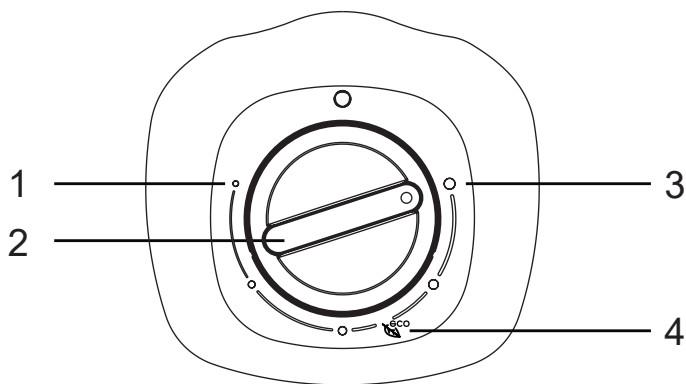
## General View

The images in the user manual are for informational purposes only about the parts of the device. Parts may differ depending on the device model. Pictures are representative.



- 1. ON/OFF and temperature setting button
- 2. Status indicator
- 3. Temperature indicator

## Controls and Indicators



- 1. Lowest temperature
- 2. ON/OFF and temperature setting button
- 3. Highest temperature
- 4. Eco setting

## Functions and Features of the water heater

### Strength against corrosion

The inner drum of your water heater, including the water input and output pipes are enamel plated following the welding operation are fully protected against corrosion. The heater resistance is protected against corrosion with Magnesium bar.

### Strength against water pressure

Water heater's inner drum is tested under 12 bar pressure considering the water mains pressure.

### Effective Heat Isolation

The water heater is isolated using a 50mm thick polyurethane heat isolation material between the main body sheet and the water drum. Thank to this material the water in it will be heated rapidly and cools down slowly.

### Limiting Thermostat

The limiting thermostat will disable the resistance in case of excessive temperatures in the drum or the failure of temperature setting thermostat.

### V Automated Switch


You can switch ON and OFF the thermostat using the V-Automated switch. V - Automated Switch acts as a safety device. It will disconnect the product from the mains in case of an electrical short circuit or the product is switched OFF. The provided V-Automated

Switch should be installed by an authorized service technician only.

### Safety Valve

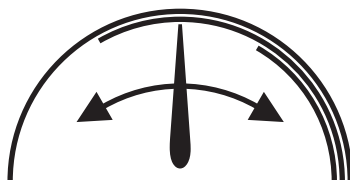
Safety valve is installed on to the cold water inlet of the water heater. A kind of safety, this valve will prevent the draining of the water inside in case of a water cut. Also the same valve will discharge water from the drain tip in case of overpressure in the boiler.

### Economy Mode

The water hotter than 50°C during usage can cause scalding or even death due to serious scalding. The temperature which is most favorable for human health and energy economy is about 55°C. This temperature is indicated on the front panel of the product with a  icon. You can operate the product in an economical way setting the temperature setting knob to eco icon.

### Thermometer

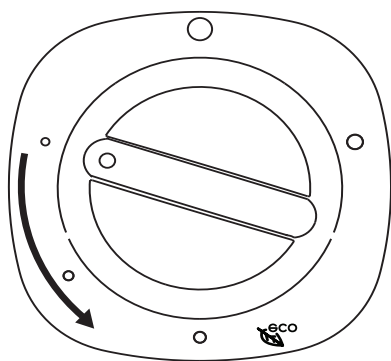
After starting the appliance, the thermometer indicator on the appliance will start moving clockwise. Low water temperature is indicated with a single line while the maximum water temperature is indicated with 3 lines. Upon decrease in water temperature, the indicator will move counter-clockwise.



## Operating

Your water heater is controlled with the button at the bottom. During installation and before first use, if you take the time to take a look at the position and use of the button that turns the product on/off and adjusts the temperature, it will be easier for you in the next uses.

After your water heater is installed and made ready for use by the authorized service agent, you can turn the on/off button on the control panel at the bottom of the appliance as shown below to turn it on.



- Ensure that the water heater is filled with water before first use.
- Switch on the V Automated switch.
- To heat the water to the desired temperature, turn the temperature adjustment button counterclockwise to align the mark on the button to the desired temperature value. The resistor will be enabled and start heating the water, and the lamp will turn red.
- If you increase the temperature, the lamp on the display panel will turn

led and the resistor will be enabled. Once the temperature reaches the desired value, the thermostat will disable the resistor and the lamp will go off.

- If the temperature drops the set value, the resistor will be re-enabled to bring the water to the set value.
- If you want to decrease the temperature value or turn off the appliance, turn the temperature adjustment button clockwise.
- Since the water in the reservoir will cool down when you turn off the appliance after using it, there will be more power and time consumption for the next heating process.

## Practical and Useful Information

- The sediments and limescale accumulated at the below section of the water heater will prevent direct contact between the water and the heating elements. Accumulation of sediments and limescale at the bottom of the water boiler should be prevented. The water boiler should be drained at regular intervals.
- Heat required amount of water in your water heater. Install the water heater away from the appliances such as refrigerator and deep-freezer. Otherwise operation frequency will increase.
- Ensure that isolation is installed to prevent heat loss from the boiler and installation.
- The water heater should be located max. 6 m away from the points of

use. Installation on a farther location will cause a drop at the efficiency of heat transfer. Also the water piping should be isolated.

- When the device is not going to be used for a prolonged time set the thermostat to the lowest setting.

## **Suggestions for Operation**

- Do not place items that are vulnerable to water beneath the water heater.
- Take below precautions if you will not use the product for a prolonged time.
  - Disconnect the product from the mains supply.
  - Switch off the water valves and disconnect the water connection.

## **Cleaning and Maintenance**

### **Disconnect from the electrical mains before handling any operation.**

- Install a transparent drain hose to the drain output of the safety valve located at the cold water input of the water heater at a location away from freezing.
- Pressure will increase with the operation of the water heater. Dripping of water at the safety valve is normal.
- Drain water from the boiler setting the safety valve latch to upright position. To check the operation of the safety valve, it is recommended to set the latch to upright position once a month to see if water flows out.
- If water is drained through safety valve, do not operate until water

comes from the hot water tap.

- To get the optimum performance from your electrical water heater, limescale that may form on the resistance due to the water hardness and the high temperatures should be removed regularly by the Authorized Service.

## **Recommendations on Energy Saving**

- It is recommended to operate the product in Eco mode (55°C) to extend the life of the product and save energy.
- To get the best possible performance from the product the heating element (resistance) should be cleaned and the magnesium bar for corrosion protection should be replaced once in every 2 years. The cleaning and replacement should be performed by an authorized service.
- Anode and heater should be checked annually in regions with higher water hardness.

## Troubleshooting

Before calling the service ensure that the failure is not related with a temporary electrical black out or water cut.

In case you observe an abnormality in your appliance, you may try to solve the problem according to the instructions below. If your appliance does not still operate properly, contact the Call Center. You may access the authorized services list and contact information from the web site.

PROBLEM	REASON	SOLUTION
Water heater is not operating	Switch is off.	Turn on the switch.
	Power cut.	Wait for the power to be back.
	Building's main fuse is blown.	Fix the fuse.
Water heater is not heating the water.	Water heater is not operating correctly.	Call the authorized service.
Water heater is heating the water too late.	Voltage may be low.	Use an appropriate voltage regulator.
	Limescale may be formed on the resistance.	Call the authorized service.
Noisy operation.	Limescale may be formed on the resistance.	Call the authorized service.
	Limescale or sand can be present within the safety valve.	Call the authorized service.
	System pressure can be distributed irregularly.	Install a pressure regulator.
Water heater heats water excessively (water steam comes out).	There might be too much limescale in the product.	Call the authorized service.
Water drips from the safety valve.	This is normal.	Connect the provided hose from the valve to water drainage.



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## CERTIFICADO DE GARANTÍA

Imprescindible la presentación de la factura de compra acompañada del presente certificado de garantía.

### Riesgos cubiertos.

Este aparato está garantizado contra cualquier defecto de funcionamiento, siempre que se destine a uso doméstico, procediéndose a su reparación dentro del plazo de garantía y sólo por la red de SAT autorizados.

Nuestros electrodomésticos Corberó cuentan con la garantía legal del fabricante que cubre cualquier avería o defecto durante 36 meses, desde su fecha factura de 1 de enero del 2022. En caso de que fuera necesario, nosotros nos ocupamos de cualquier posible incidencia siempre que se deba a un componente defectuoso o fallo de fabricación.

### Excepciones de garantía.

- Que la fecha del certificado no coincida con la fecha de venta de la factura original.
- Averías producidas por golpe, por caída o cualquier otra causa de fuerza mayor.
- Si el aparato ha sido manipulado por personal no autorizado.
- Las averías producidas o derivadas como consecuencia de un uso inadecuado, por defectos de instalación, por introducir modificaciones en el aparato que alteren su funcionamiento.
- Puestas en marcha, mantenimiento, limpiezas, componentes sujetos a desgaste, lámparas, piezas estéticas, oxidaciones, plásticos, gomas, carcasas y cristales.
- Los hornos microondas (a excepción de los integrables) y los hornos sobremesa en el caso de cualquier incidencia de funcionamiento, deben de llevarse al servicio técnico más próximo por parte del cliente. No se recojen ni reparan en el domicilio.
- Garantía termos eléctricos. Garantía de 3 años incluyendo los costes de desplazamiento y mano de obra que correspondan de la reparación del producto, teniendo que tener un mantenimiento una vez cada 12 meses. Especialmente si Ud. ha instalado un aparato a gas, tenga presente como titular de la instalación, la obligatoriedad de realizar una revisión completa de los equipos, (según Real Decreto 238 / 2013, del 5 Abril. RITE. IT3, M. Lo termos eléctricos y calderas que incluyen depósitos acumuladores de agua caliente, para que se aplique la prestación de la Garantía, es obligatorio que el ánodo de magnesio esté operativo y que realice la función de protección adecuadamente. Para ello es recomendable que el ánodo se revise bianualmente por el Servicio Oficial y sea renovado cuando fuera necesario. Periodicidad que deberá ser anual en aquellas zonas con aguas críticas (contenido de  $\text{CaCO}_3$  superiores a 200mg/L, es decir a partir de 20ºfH de dureza). Depósitos sin el correcto estado del ánodo de protección, no tienen la cobertura de la garantía. Independientemente del tipo de depósito o producto, todas las válvulas de sobrepresión de calefacción o a.c.s., deberán ser canalizadas para evitar daños en la vivienda por descargas de agua. La garantía del producto no asume los daños causados por la no canalización del agua derramada por esta válvula.

**“ESTAS EXCEPCIONES ANULAN LA GARANTÍA, SIENDO LA REPARACIÓN CON CARGO AL CLIENTE”**

Periodo amparado en aparatos según ley de garantías en la venta de bienes de consumo Ley vigente es “RD 7/2021”

**Servicio Técnico Oficial: 911 08 08 08**

## CERTIFICATE OF GUARANTEE

The presentation of the purchase invoice accompanied by this guarantee certificate is essential.

### Covered Risks.

This appliance is guaranteed against any malfunction, provided that it is intended for domestic use, proceeding to its repair within the warranty period and only by the authorized SAT network.

Our Corberó appliances have the manufacturer's legal warranty that covers any breakdown or defect for 36 months, from the invoice date of January 1, 2022. If necessary, we take care of any possible incident whenever it is due to a defective component or manufacturing fault. Warranty Exceptions

### Warranty Exceptions

- That the date of the certificate does not coincide with the date of sale of the original invoice.
- Faults produced by blow, by fall or any other cause of force majeure.
- If the device has been manipulated by unauthorized personnel.
- Faults produced or derived as a consequence of improper use, installation defects, or modifications to the device that alter its operation.
- Start-up, maintenance, cleaning, components subject to wear, lamps, aesthetic parts, oxidation, plastics, rubbers, housings and crystals.
- Microwave ovens (with the exception of built-in ones) and tabletop ovens in the event of any incident of operation, they must be taken to the nearest technical service by the customer. They are not collected or repaired at home.
- Electric thermos guarantee. 3-year warranty including travel and labor costs that correspond to the repair of the product, having to have maintenance once every 12 months. Especially if you have installed a gas appliance, keep in mind as the owner of the installation, the obligation to carry out a complete review of the equipment, (according to Royal Decree 238 / 2013, of April 5. RITE. IT3, M. Lo thermos electrical and boilers that include hot water storage tanks, for the benefit of the Guarantee to apply, it is mandatory that the magnesium anode is operational and that it performs the protection function adequately. For this, it is recommended that the anode be checked biannually by the Official Service and is renewed when necessary. Periodicity that must be annual in those areas with critical waters (CaCO<sub>3</sub> content greater than 200mg/L, that is, from 20°fH of hardness) Deposits without the correct state of the protection anode are not covered by the warranty. Regardless of the type of tank or product, all heating or DHW overpressure valves must be channeled to avoid damage and in the house due to water discharges. The product warranty does not cover damages caused by not channeling the water spilled by this valve.

**"THESE EXCEPTIONS VOID THE WARRANTY, THE REPAIR BEING CHARGED TO THE CUSTOMER"**

Period covered in devices according to the law of guarantees in the sale of consumer goods. Current law is "RD 7/2021"

**Official Technical Service: 911 08 08 08**