# ELECTRONIC OVEN

## USE AND INSTRUCTION MANUAL

## MOD. KF 1010 UD

rev. 0

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*Prodotti mirati per Ristorazioni, Pasticcerie, Panetterie e Gastronomie*

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CE

# CE DECLARATION OF CONFORMITY

Annexed document II A, of directive 98/37/EC

| | |
|---|---|
| Manufacturer | TECNOEKA Srl |
| Address | Via I. Nievo, 12/B - 35012 Camposampiero (Pd) |
| Type of product | Electronic oven |
| Model | KF 1010 UD |

TECNOEKA Srl declares that the above mentioned products conform to the safety regulations under:

- Low voltage directive 2006/95/EC

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|---|
| CEI EN 60335-1 |
| CEI EN 60335-2-42 |

- Electromagnetic compatibility Directive 2004/108/EC

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|---|
| CEI EN 55014-1 |
| CEI EN 55014-2 |
| CEI EN 61000-3-2 |
| CEI EN 61000-3-3 |
| CEI EN 61000-4-2 |
| CEI EN 61000-4-4 |
| CEI EN 61000-4-5 |
| CEI EN 61000-4-6 |
| CEI EN 61000-4-11 |

- Machine Directive 98/37/EC;
- Directive on the general safety of products 2001/95/EC;
- Directive on the restriction in the use of dangerous substances in electrical and electronic appliances 2002/95/EC;
- Directive on waste from electrical and electronic appliances 2002/96/EC.

Camposampiero, 28/04/09.

Signature of a Representative of the Board of directors

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# Index

# 1. General information

This information has been prepared for your safety and that of others and we strongly advise reading it carefully before installing and using the oven.

This instruction handbook must be kept together with the oven for future use. If the handbook is mislaid please ask for a copy directly from the manufacturer.

1. If, on receipt of the goods, the **packaging** is damaged, write the following on the delivery note: **"I REVERSE THE RIGHT TO CONTROL THE GOODS"**, specify the damage and get the driver to sign in acceptance; send a claim in writing to the seller within 4 calendar days from the date of receipt. No claim shall be accepted after such period.
2. The oven has been exclusively designed for cooking and heating foodstuffs, any other use is improper.
3. This oven has been designed for professional use and must only be used by qualified trained persons. The oven must never be left unattended when it is operating.
4. In the case of faults or poor operations, turn the oven off, close the water supply valve, unplug from the power mains and contact the authorized Service Centre.
5. All the installation and start-up operations must only be carried out by a technically qualified installer, conforming to the manufacturer's instructions in the full respect of national standards in force.
6. When the tilting door is wide open, do not put anything on the surface, because the door hinges could be irreparably damaged.
7. For the periodic maintenance and repair work, contact your nearest Service Centre and ensure only original spare parts are used. Failure to observe this instruction automatically involves losing all rights to the guarantee.

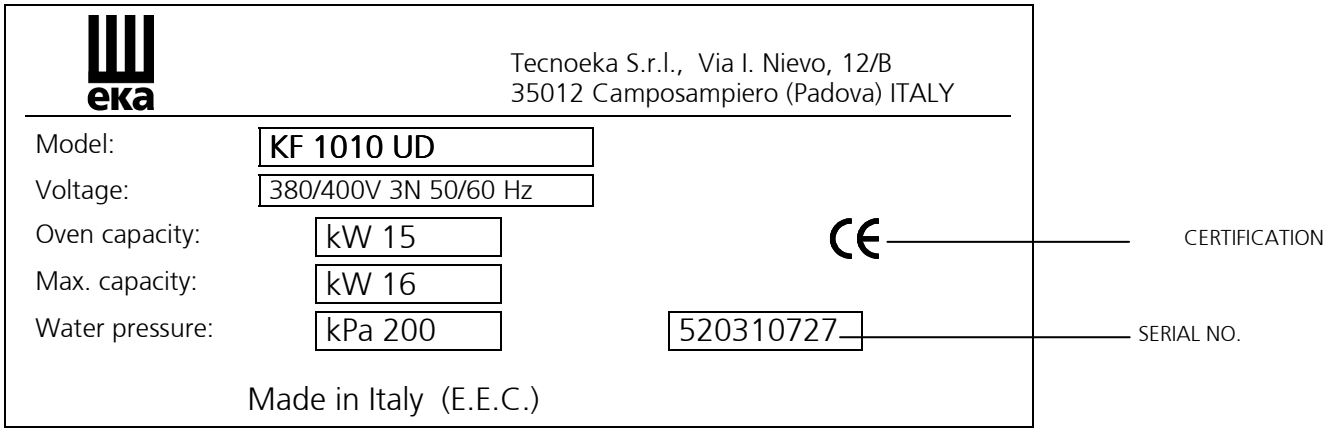
**N.B.: Improper and incorrect use and failure to observe the installation instructions releases the manufacturer from any type of liability.** In this sense, the instructions given in the paragraph "POSITIONING" (paragraph 2.6) must be strictly followed.

## 1.1 Technical specifications

| | | |
|---|---|---|
| **Overall measurements:** | Height (with feet) | cm 1250 |
| | Width | cm 965 |
| | Depth | cm 846 |
| **Weight:** | | Kg 155 |
| **Tray maximal load (GN 1/1):** | | Kg 4 |
| **Total load (12 tray GN 1/1):** | | Kg 48 |
| **Electric capacity:** | 3 convection heating elements | kW 15 |
| **Max. electric capacity:** | | kW 16 |
| **Class:** | I (against electric shocks) | |
| **Water pressure:** | | kPa 100 – 200 |
| **Power supply voltage:** | (50/60 Hz) | **380/400V~ 3PH+N+PE** |
| **Power cable diameter:** | | **5 x 2,5 mm²** |
| **Power cable type:** | | **H07RN-F** |

**The noise level of the appliance when operating is less than 70 dB (A).**

## 1.2 Technical rating plate




**The Technical rating plate is fitted on the rear panel of the oven.**

# 2. Instructions for the installer

The following instructions are addressed to the qualified installer to enable him to perform the correct installation, electric and water connection operations in conformity with current safety legislation in force in the place where the appliance is installed.

The manufacturer will not respond for damage to people, animals and property due to installation errors. Likewise the manufacturer is not responsible for breakage caused to the appliance by incorrect installation.

## 2.1 Storage

If the appliance has been stored in a warehouse at a temperature below 0°C (min. allowed is –15°C), it should be brought to a temperature of at least +10°C before it is turned on.

## 2.2 Transporting the oven

During transport, the appliance must be left in its original wooden cage to protect it against damage.

## 2.3 Unpacking the oven

Remove all the packaging before installation, which is formed of a wooden cage that holds the appliance and cardboard casing to protect it. Check that the appliance has not been damaged during transport and if any damage is discovered immediately inform your retailer and/or the haulier.

## 2.4 Removing the protective film

Before using the appliance, carefully remove the special protective film over the stainless steel parts, without leaving any glue residue on the surfaces. If necessary, remove the residue at once with a suitable non-inflammable solvent (e.g. acetone).

## 2.5 Disposing of the packaging

The packaging must be disposed of in accordance with current legislation in force in the place where the appliance is installed. The various types of materials (wood – paper – cardboard – nylon – metal staples) used for the packaging must be separated and delivered to the specific waste disposal centres. In all circumstances the environmental protection regulations must be strictly adhered to.

## 2.6 Positioning

Check the place where the appliance will be installed to ensure that the passages (doors and corridors) are wide enough (the appliance measurements are given in Fig. 1). The appliance must be positioned in a perfectly horizontal manner on a table (preferably under a suction hood) or other similar surface, **never on the floor.**
We recommend using the support supplied by the manufacturer, otherwise you must take into account the weight of the equipment.

For easier access and to allow the air to circulate freely around the appliance, leave at least 50 cm between the left side and the wall (or other appliances), and at least 10 cm between the back and the wall and the right side and the wall (see Fig. 1). The natural ventilation that is needed to ensure efficient working for the oven is through the openings on the walls of the outer covering (left side and back). Consequently, it is strictly forbidden to obstruct these aeration openings, even partially and even for short periods. **Failure to observe this specific prohibition, shall release the manufacturer from all liability for the appliance and shall immediately cancel any guarantee rights for the said appliance,** because its constructive conformity has been voluntarily compromised.

For the same reason, do not place appliances with heat sources on the left side of the oven; in fact, if the room temperature on that side becomes excessive, the oven turns off for safety reasons.

If the appliance is installed near walls, tops, shelves or other similar items, they must not be inflammable or sensitive to heat, otherwise they must be protected by a suitable fireproof covering.

In all cases, all fire prevention standards must be strictly adhered to.

This appliance cannot be positioned in series with others equipment.

## 2.7 Electric connection

The connection to the main supply must be in conformity with current legislation in force. Before making the electrical connections, make sure that:

- the voltage and frequency values of the power supply system match the values on the "technical data" plate affixed on the rear of appliance;
- the pressure relief valve and the system must be able to support the appliance load (see the data on the technical rating plate;
- the power supply system must be equipped with an efficient earth connection according to current regulations;
- with direct-to-mains connection, a multi-pole switch must be installed between the appliance and the mains with a minimum opening of 3 mm between the contacts, of a sufficient size for the load and conforming to current regulations (e.g. an automatic magnetothermal switch);
- the multi-pole switch that is used for the connection must be easily accessible once the appliance is installed;
- the yellow/green earth wire must not be disconnected by the switch;
- the supply voltage must not differ from the rated voltage level by ±10% when the appliance is operating;
- make sure that after inserting the power supply cord into the terminal block it does not come into contact with any of the cooking range's hot parts.

Installation / connection layout

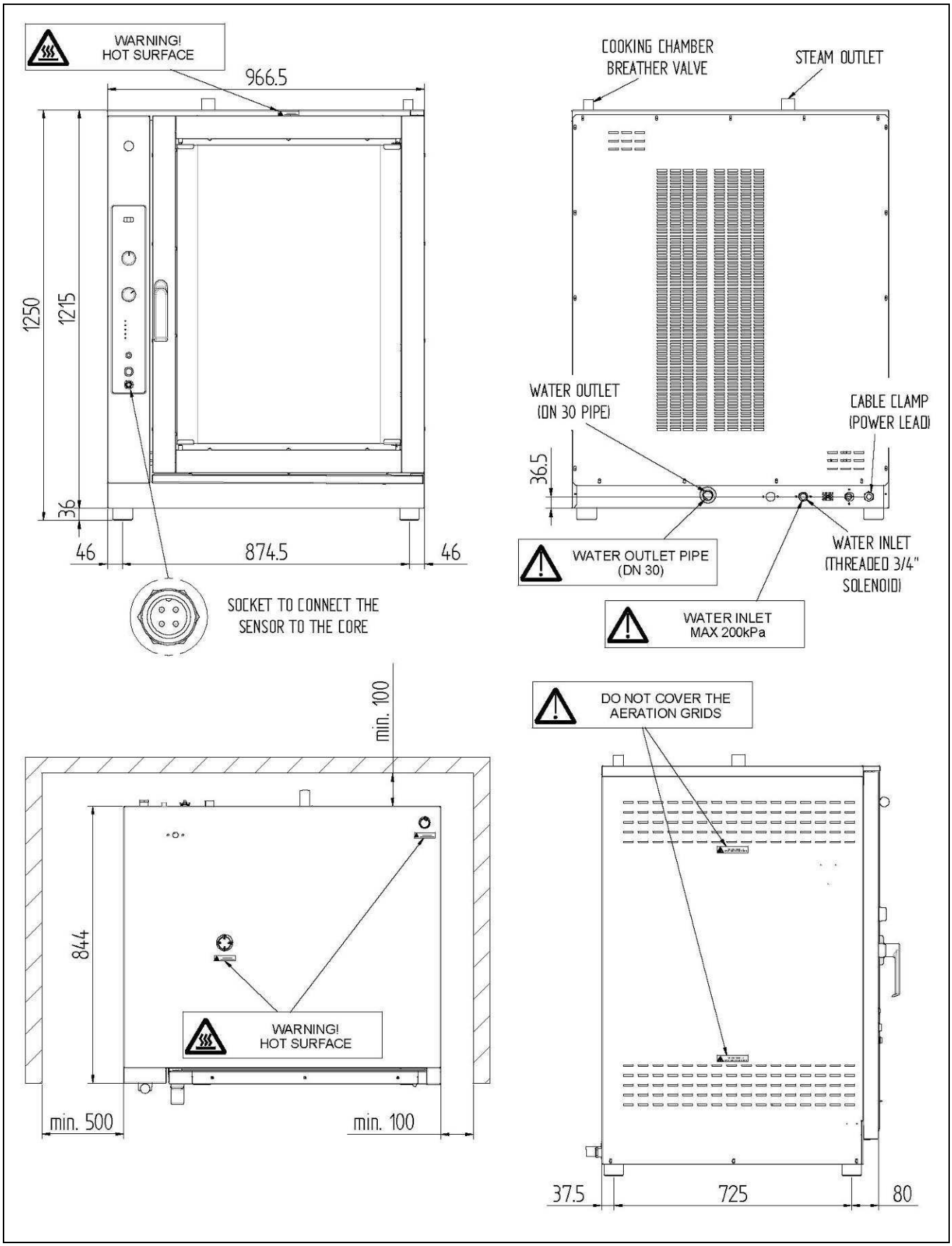
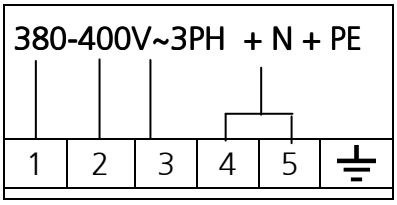



Fig. 1 (Dimensions in mm.)

## 2.8 Connection of power cable

To reach the power terminal board remove the left side of the appliance. Loosen the cable-clamp on the back (at the bottom) of the appliance (see Fig. 1) and pass the cable through up to near to the terminal board. Locate the leads against the terminal board so that the earth lead is the last to detach from its terminal in the event of reverse pulling.

Connect the 3 **phase** leads to the terminals marked **"1" "2"** and **"3"**, the **neutral** lead to the terminal marked **"4"** or **"5"** and the **earth** lead to the terminal marked ⏚ as shown in the following layout:




(this electrical connection layout is also available near the power supply terminal board). Tighten the cable clamp on the back (at the bottom) of the appliance and replace the left side. The cable must correspond to those given in the "Technical specifications" table (paragraph 1.1). The appliance must be connected to an **equipotential system** after checking its efficiency according to current regulations.

This connection must be made between different appliances using the special terminal marked with ⏚. The equipotential lead must have a minimum diameter of 10 $mm^2$. The equipotential terminal is on the rear of the appliance.

## 2.9 Connection to water mains

The oven must be supplied with softened drinking water with a hardness value of 0.5 to 3°F (It is obligatory to use water softener to reduce the formation of scaling inside the cooking chamber). The water pressure must be in the range of 100 to 200 kPa (1.0 – 2.0 bar). If the water pressure exceeds 2.0 bar, install a pressure reducer device upstream. If the pressure is below 1.0 bar, use a pressure pump to increase the level.

The connection to the water supply is done using the ¾" threaded solenoid valve on the back (at the bottom) of the appliance (see fig. 1), fitting a mechanical filter with a cut-off cock (before connecting the filter, allow a certain amount of water to flow out in order to remove any waste from the pipe).

## 2.10 Water outlet

There is a drainage pipe on the back of the appliance (see Fig. 1) for emptying the cooking chamber. A pipe of at least 30 mm internal diameter (DN30) must be connected to this pipe that is resistant to the steam temperature. To avoid throttling, we advise using a rigid pipe without any elbow bends along its length. The pipe must have a constant inclination of at least 5% along its length (the length is that from the outlet pipe from the appliance to the drain and must not exceed 1 meter overall). The outlet pipe must flow into an open drain on the floor (Fig. 2). If not, there must be a difference in height between the outlet pipe on the appliance and the drain of at least 30 cm (see Fig. 3) to ensure the water flows out correctly. In conformity with hygiene regulations in force, the pipe connected to the water outlet pipe on the appliance must not be directly in contact with the outlet point.

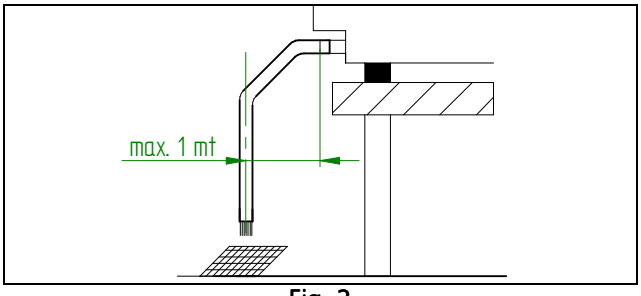



Fig. 2

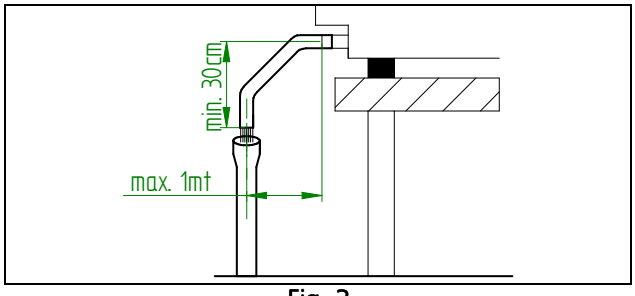



Fig. 3

### 2.11 Thermal breaker safety devices

The appliance is supplied with a manually resetting thermal breaker to protect against excessive, dangerous temperatures which could be accidentally generated inside. If it is tripped, the device cuts off the power supply to the appliance.

### 2.12 Electronic circuit protection

The electronic circuit inside the electric components compartment is protected by fuse.

### 2.13 Disposing of the oven

The appliance is made using recyclable raw materials and contains no toxic or harmful substances for people or the environment. The appliance, and its packaging, must be disposed of in conformity with the current regulations in force in the place of installation. The various materials used for its construction must be separated and delivered to the specialised waste disposal centres. In all cases the environment protection regulations must be strictly adhered to.

## 3. User instructions

### 3.1 General information

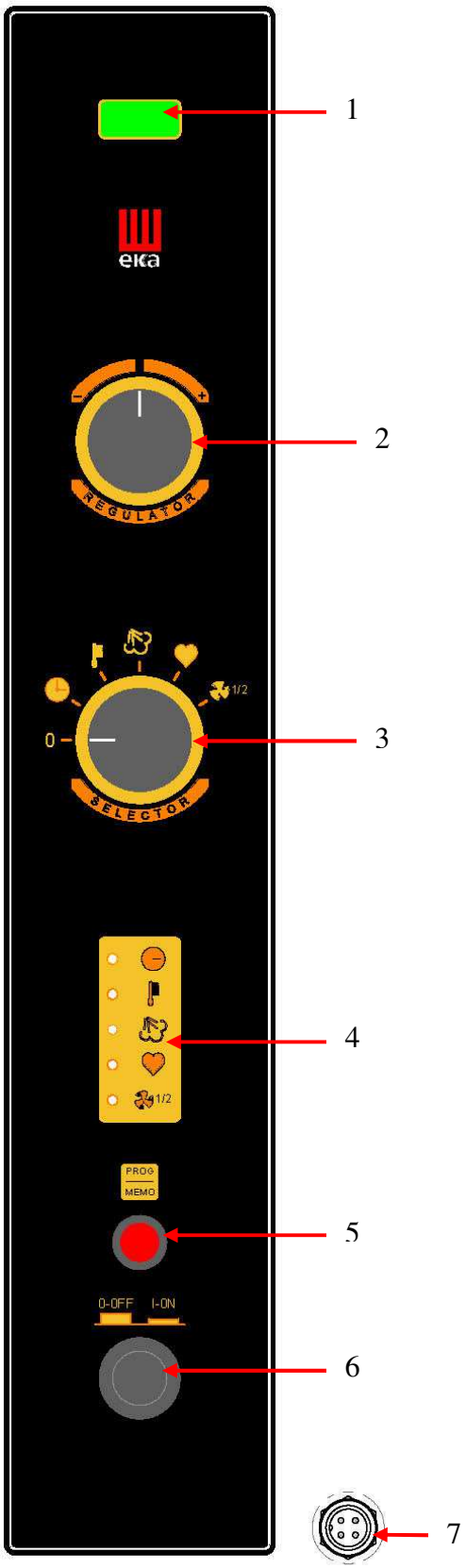
- When using the oven for the first time, we advise you to run it load-free at maximum temperature for about one hour. In this way, any unpleasant smells, due to thermal insulation, and grease residue from assembly are eliminated.
- This appliance must be exclusively used for the purposes for which it was expressly designed, i.e. cooking foods in the oven, any other use is improper.
- The oven can be used for all oven cooking of pastry, bakery and gastronomy products, fresh and frozen, for re-conditioning refrigerated and deep frozen foods, for steam cooking meat, fish and vegetables.
- When placing food in the cooking chamber, allow a space of at least 40 mm between pans to avoid over-obstructing the airflow.
- Do not use pans with edges higher than necessary: the edges act like barriers preventing circulation of hot air.
- Pre-heat the oven before each time it is used to guarantee the best performance.
- For the cooking to be as even as possible, place the food evenly in each pan, considering the size of the pieces, layers or the thickness.
- Do not salt the food when it is in the cooking chamber.
- To check the cooking cycle is proceeding correctly use the internal light in the chamber do not open the door if it is not necessary, to avoid wasting energy and prolonging cooking times.

#### 3.1.1 Residual risks

- After a cooking operation, open the door cautiously, to avoid a violent outflow of heat which could cause burns.
- While the oven is in operation, pay attention to the hot zones (marked on the appliance) of its external surfaces.
- The bench or support must be able to support the weight of the machine and house it correctly.
- To prevent incorrect connection of the appliance, the relevant electrical and water connections are marked by identification plates.
- The appliance contains electrical parts and must never be washed with a jet of water or steam.
- The appliance is electrically connected: before attempting any cleaning operation, cut power to the appliance.

## 3.2 Operating instructions

### 3.2.1 Control panel




1. Display
2. Adjustment parameters knob
3. Selection parameters knob
4. Led active parameter
5. Storing programs push button
6. On/off push button
7. Relay socket for the "Heart probe" (probe "pin") (for prepared ovens)

## 3.3 First ignition

When the oven is electrically powered for the first time, "ER2" appears on the control panel display accompanied by a brief acoustic "*BEEP*".
This way the oven warns the user that the "heart" probe ("needle" probe) is not connected to the relevant socket (for specifically designed ovens), thus the temperature value cannot be regulated.
The message disappears when the "ON/OFF" button is pressed ON and the selected parameter value ("zero") appears (Led on next to the relevant symbol).
If the selector is turned to "0", "OFF" appears on the display. If electrical power is constant, the oven is turned on and off normally with the "ON/OFF" button.

## 3.4 Operation mode

The cooking cycle can be run in "manual" or "programmed" mode.
Each cycle is made up of several cooking parameters: time/temperature/humidity/"heart" temperature (for specifically designed ovens)/half motor speed/half power.

*MANUAL MODE*

To select cooking parameters, turn the selector to the selected parameter (see symbol). To set or change the selected parameter value, rotate the regulator knob clockwise (to increase) or counter-clockwise (to decrease).

The "time" parameter (symbol  ) can be set from 0 hours and 1 minute to 9 hours and 59 minutes. If "INF" appears on the display this mean the timer is not set and the oven will operate continuously until manually turned off by pressing the "ON/OFF" button.

The "temperature" parameter (symbol  ) can be set from 50° C to 270° C.

The "humidity/steam" parameter (symbol  ) can be set from 0 to 100%.

The "temperature at heart" parameter (symbol  ) can be set from 0° C to 100° C (for specifically designed ovens).

**IN ORDER FOR THE "TEMPERATURE AT HEART" *PARAMETER TO WORK,* IT MUST BE SET BEFORE THE COOKING CYCLE STARTS, AND THEN, BEFORE YOU SET THE TEMPERATURE PARAMETER IN THE COOKING CHAMBER.**

The "half motor speed/half power" parameter (symbol 

) can be turned on ("on" appears on the display) or off ("off" appears on the display).

**AT LEAST COOKING TIME AND TEMPERATURE PARAMETERS MUST BE SET FOR THE COOKING CYCLE TO START.**

## 3.5 Cooking cycle ON/OFF

When the door is closed, the cooking cycle automatically starts 5 seconds after setting the two parameters required for cooking (time/temperature).
The lights in the cooking chamber, the resistance and motors turn on.
When the set cooking cycle time has elapsed, the oven automatically turns off, the set parameter values clear on the display and an acoustic signal sounds for 3 seconds. The oven readies for new cooking cycle settings.
The cooking cycle can be stopped at any time by pressing the "ON/OFF" button "OFF".
The display turns off and an acoustic signal sounds for 3 seconds.

## 3.6 Displaying / changing parameters with the cooking cycle ON

When the cooking cycle is on, parameters can be displayed by turning the selector knob to the relevant symbol.
Parameters can be changed by turning the regulator knob.

- "Time" parameter

The cooking cycle count down is displayed (blinking led on symbol  ).

- "Temperature" parameter

The set value (fixed led on symbol  ) is displayed for 3 seconds alternated by the value

measured inside the cooking chamber for 3 seconds (blinking led on symbol  ).

- "Humidity/steam" parameter

The set value is displayed (fixed led on symbol  ).

- "Temperature at heart" parameter

The set value (fixed led on symbol  ) is displayed for 3 seconds alternated by the value read inside the food for 3 seconds.

***"AT HEART" TEMPERATURE CANNOT BE SET OR CHANGED WHEN THE COOKING CYCLE IS ON.***

It can only be displayed if the "needle" probe (connected to the specific socket) is inserted in food.

- "Half motor speed/half power" parameter

"ON" appears on the display is the parameter is on or "oFF" if the parameter is off (fixed led on symbol 

). Remember that halving motor speed (fans) halves the heating power and thus cooking time and the amount to be cooked must be adjusted (different motor noise is perfectly normal at reduced speed).

For the user's convenience, when the selector is turned to "O", the cooking cycle count down will be displayed for 3 seconds alternated by the temperature measured in the cooking chamber for 3 seconds.

## 3.7 Programmed mode

Up to 10 cooking programs (cycles) can be saved.

Each program can be made up of several cooking parameters.

## 3.8 Saving cookin programs

Following the steps below to save a cooking program (with the oven on: "On/Off" button pressed):

- Leave the oven door open (to prevent parameter settings from automatically starting the cooking cycle).
- Set the relevant cooking cycle parameters following the same procedure used for "manual" mode.
- Turn the selector to "o" ("oFF" appears on the display).
- Turn the regulator knob and select the required program number (from P01 to P10).
- Press and hold down the " 

" button for at least 5 seconds: the program is successfully saved with the saved program number blinks on the display.
- The saved program and cooking cycle start when the oven door is closed.
- To cancel a saved program, simply replace it with a new program (with the same number) where new parameters are set for the new cooking cycle. The new program must be saved by pressing the " 

" button.

## 3.9 Cooking with a saved program

Following the steps below to recall a cooking program (with the oven on: "On/Off" button pressed):

- Turn the selector to "O" ("oFF" appears on the display).
- turn the regulator knob and select the required program number.

If the door is closed, the cooking cycle automatically starts 5 seconds after the program number is selected.

When the oven is operating in "programmed" mode, set parameters can be displayed in the same way as with "manual" mode.

For the user's convenience, set parameters can be changed during oven operations in "programmed" mode. At the end of the programmed cooking cycle, changed parameters are automatically "RESET" and return to the values initially saved in the program.

## 3.10 Cooking with the "temperature at heart" function (for prepared ovens)

The temperature can be set inside the core of the food to be cooked, using the special needle core probe. The probe must be pushed into the centre of the food in the thickest part, avoiding the bones. Place the food inside the cooking chamber and pull out the thermal probe lead and

close the oven door. The probe plug must be plugged into the special socket (see Fig. 1) at the bottom of the control panel.
When the "at heart" probe is turned on during the cooking cycle, turning the selector to the "time" parameter (symbol  ), "Prb" will appear on the display (confirmation that the "at heart" probe is on).
For the user's convenience, turn the selector to "O" and "Prb" will be displayed for 3 seconds alternated by the temperature measured in the cooking chamber for 3 seconds.
The cooking cycle ends as soon as the temperature read by the "needle" probe (inserted in food) reaches the value set in the "temperature at heart" parameter (regardless of the value set in the "time" parameter).
The oven automatically turns off, the set parameters reset on the display and an acoustic signal sounds for 3 seconds.
The oven readies for a new cooking cycle.

***Warning***: *Before removing the food from the oven after cooking with the core needle probe. Carefully remove the hot probe from the cooked food, taking care not to leave it hanging out of the cooking chamber as it could cause burns.*
*We advise leaving it to cool down before using it again – to avoid damaging pricks in the food.*
*To prevent any irreparable damage to the thermal piercing probe (core probe) do not use it in high temperature cooking ABOVE 230°C, and ensure that the probe lead is not touching any hot metal surfaces inside the oven.*

## 3.11 Door device

The device stops oven operations (stops the cooking cycle) whenever the door is opened. The cooking cycle resumes where it left off when the door is closed.

## 3.12 Black - out

When power returns after a black-out, the oven automatically resumes operations and the cooking cycle resumes from where it left off.

## 3.13 First ignition

The oven can be used for the first time only after the chamber has been carefully cleaned with a special detergent for stainless steel. The detergent must not contain acid substances (chloride acid, bleach, etc.) or be abrasive. Alternatively the chamber can be washed with warm soapy water or warm water and a drop of vinegar. Rinse well and dry with a soft cloth.

First ignition (without food inside the oven) serves to eliminate any unpleasant smells (which are quite normal) due to the thermal insulation heating up that covers the cooking chamber and any oil residues from assembly of the metal parts.

After turning the power on (close the unipolar switch fitted upstream from the appliance), and the water (open the interception cut-off cock), proceed as follows (see the figure of the control panel):

- **press the on/off push button**;
- **set the time (knob on the symbol  ) at one hour (shown on the display);**
- **set a temperature (knob on the symbol  ) of 270°C for the cooking chamber (shown on the display);**
- **check the door is closed;**
- **the cooking chamber starts automatically to heat up after 5 minutes when the temperature is set.**

When the time is up, the oven turns off automatically and the beeper sounds for 03 seconds.

## 3.14 Cooking techniques

There are three different cooking techniques: steam, convection and convection & humidity.

### 3.14.1 Steam cooking (moist heat)

The climate regulation system which allows dividing the humidity production which should be set at 100 (humidity \ continuous steam) , while the cooking chamber temperature can be set between 105°C and 115°C.

Steam cooking is indicated where a boiled effect is required, and it has the advantage of leaving the nutritional content of the food unaltered (the vitamins and flavour of the food are conserved), the outer appearance (the colour is conserved, no lumps or air bubbles are formed and the surface does not break up) and the weight is conserved, as no liquids are lost from the food during cooking.

### 3.14.2 Convection cooking (dry heat)

The heating elements heat the dry air inside the cooking chamber. This heated air is evenly distributed by the high speed of the fans. This gives an even temperature throughout the cooking chamber and even cooking even when the oven is full.

This means that different types of food can be cooked on the various shelves (as long as they need the same cooking temperature) without flavours and smells being mixed together.

The cooking chamber temperature can be set between 50°C and 270°C.

Besides evenly browning the food without having to turn it, convection cooking can be used to cook au gratin and is particularly convenient for rapid defreezing, for sterilising preserves and drying mushrooms and fruit.

### 3.14.3 Convection + humidity cooking (dry heat + moist heat)

This type of cooking exploits the combination of dry and moist heat. The climate regulation system which can divide the production of humidity (set from 10 to 80 depending on the request).
The cooking chamber temperature can be set between 50°C and 270°C.
The fact of using a hot-moist climate inside the cooking chamber is the most convenient and efficient way of cooking: cooking times are reduced, the surface of the foods remains soft and does not form a crust, there is little weight loss and the fatty mass is reduced.

The special hot-moist climate at low temperatures is ideal for re-conditioning food.

## 4. Cleaning

### 4.1 General information

Before beginning any sort of cleaning work on the appliance, turn the power supply off (at the magnetothermal safety switch) and the water supply (by closing the cut-off cock) and then let the oven cool down completely.
The appliance must be cleaned frequently, preferably daily, to guarantee best operations and long life. The oven is equipped with electrical components therefore for obvious reasons water should not be used in excess for cleaning. However, **it is absolutely forbidden to wash the appliance with water jets, especially if they are pointed towards the aeration vents on the metal surface of the outside casing** (this could cause dangerous infiltrations that would damage the electric parts).

If grease remover detergents are used to clean the stainless steel, ensure they do not contain corrosive acids (no sort of chlorine, even if it is diluted) or abrasive products. Follow the indications given on the product and the warnings about its use, wearing rubber gloves during cleaning.

Do not use iron pads, steel wool or scrapers as they would ruin the surfaces.

Do not leave food on the steel surfaces for a long time that contain acid substances (lemon juice, vinegar, salt, etc.) as they could cause corrosion.

## 4.2 Cleaning the cooking chamber

For hygienic reasons, it is good practice to clean the cooking chamber at the end of each cooking cycle, otherwise it should be cleaned at least once at the end of each day's use.
For easier cleaning, remove the side grills by unscrewing the 4 fixing screws (hold the reeded nut between your thumb and forefinger and turn it in an anti-clockwise direction) and please carry out the following operations:

- spray a special degreasing product for stainless steel on the external walls, on the fan casing (do not spray it through the fan grids) and on the glass inside the door;
- leave the product to work for approximately 20 minutes with the door closed;
- turn the oven on to 70-80°C;
- run a cycle with maximum steam (knob "humidity\steam on 100) for around 15 minutes;
- when the cycle is over, switch the oven off, let the oven chamber cool down and flush with plenty of water (use the shower provided)
- Dry with a soft cloth or run a heating cycle, with the temperature at 150-160°C for about 10 minutes (the cycle can be repeated if necessary).

The side grills and drainage plug must be cleaned separately and then replaced.

When cleaning is terminated, leave the oven door slightly ajar.

## 4.3 Cleaning the fans

The fans must be periodically cleaned with specific anti-limescale products. All the parts must be carefully cleaned, removing all limescale deposits.

To access the fans, remove the fan carter after unscrewing the relative screws (with knurled ring nuts) securing it to the oven chamber.

## 4.4 Cleaning the door seal

For Hygiene and functionality's sake, clean the door seal at the end of each working day. It must be washed carefully with soapy lukewarm water. Rinse and dry with a soft cloth. Any food deposit or residue must be removed carefully, without using any sharp metal tools that might damage the seal irreparably.

## 4.5 Cleaning the door

The glass on the door inside the cooking chamber can be cleaned with the same degreaser as used for cleaning the chamber or a normal glass cleaning product can be used (non toxic). Normal glass cleaning products can also be used to clean the glass on the outside of the door, or simply warm soapy water, rinse and then dry the glass well with a soft cloth.

If dull marks form between the two door glasses, these can be removed by dismantling the external glass.

To do this act on the appropriate hooks for closure of the glass.

After cleaning the glass close the external glass acting on reverse.

## 4.6 Cleaning the external casing

The external steel surfaces should be cleaned with a cloth soaked in warm soapy water or with a drop of vinegar added, they should be rinsed well and dried with a soft cloth.

If you use specific cleaning products, they must correspond to the requirements for cleaning given in the paragraph "General information".

You should also remember that the table the appliance stands on or the surrounding floor should not be cleaned using corrosive acid products (for example muriatic acid), as the fumes that are given off could attack and damage the external steel casing and damage the electrical components inside the unit irreparably.

### 4.7 Periods without use

If the appliance is not used for a long time, it is good practice to unplug it from the mains (at the magnetothermal safety switch upstream from the appliance) and to turn off the water with the cut-of cock on the main supply line. It should be carefully cleaned inside the cooking chamber and outside, taking special care to remove any salt deposits which would cause corrosion to the steel surfaces.

We also advise protecting the appliance with an oily base spray (e.g. Vaseline oil), which forms an effective protective film on the surface of the steel.

A suitable covering would also protect the appliance from the dust.

## 5. Maintenance

### 5.1 General information

A periodic control (at least once a year) of the appliance aids to guarantee long life and correct operations.

Any sort of maintenance work on the appliance must be done exclusively by technically qualified operators who have been trained in the maintenance work on this appliance.

Before beginning any sort of maintenance work on the appliance, turn the power supply off (at the magnetothermal safety switch upstream from the appliance) and let it cool down.

The components that might require maintenance are all accessible by removing the left hand side and the back of the unit.

### 5.2 Changing the lighting lamp in the cooking chamber

The lamp is housed between the two door glasses; to replace it remove the external glass as described in the paragraph: "Cleaning the door".

Open the external glass, unscrew the 2 screws securing the lamp protection cover with the appropriate tool and replace the lamp with another with the same specifications: 12V 35W 300°C (this is a halogen lamp and should not be touched with your bare hands)

### 5.3 Changing the door seal

The door seal has a rigid profile with 4 fixing tabs. The profile must be fitted into the guide on the face of the cooking chamber.

The rectangular seal fits perfectly into the frame of the guide and, therefore, the seal profile fits perfectly onto the face of the cooking chamber.

To change the seal, remove the old one from the guide by pulling hard at the four corners. Clean any dirt from the guide and introduce the new seal (to make this operation easier, we advise dampening the seal profile with soapy water).

### 5.4 Changing the fuse

If the appliance is powered but no displays or leds are alight on the control panel, it could mean that one of the fuse is of the printed circuit board (with microprocessor) is interrupted. To reach the card, remove the left side of the appliance (unscrewing the 3 screws). The fuse holder is clearly visible on the card. To change the fuse, press gently on the cap of the fuse hold and, keeping it pressed, turn it slightly in an anti-clockwise direction to remove it. Replace the fuse with another with the same specifications and then close the fuse holder cap by turning it in the opposite direction.

### 5.5 Resetting the thermal breaker safety device

This device (identified by the relative sticker) can be found on the back of the unit. Reset it by pressing the red button fully down after unscrewing the protective cover and letting the oven cool down. Once done, replace the protective cover.

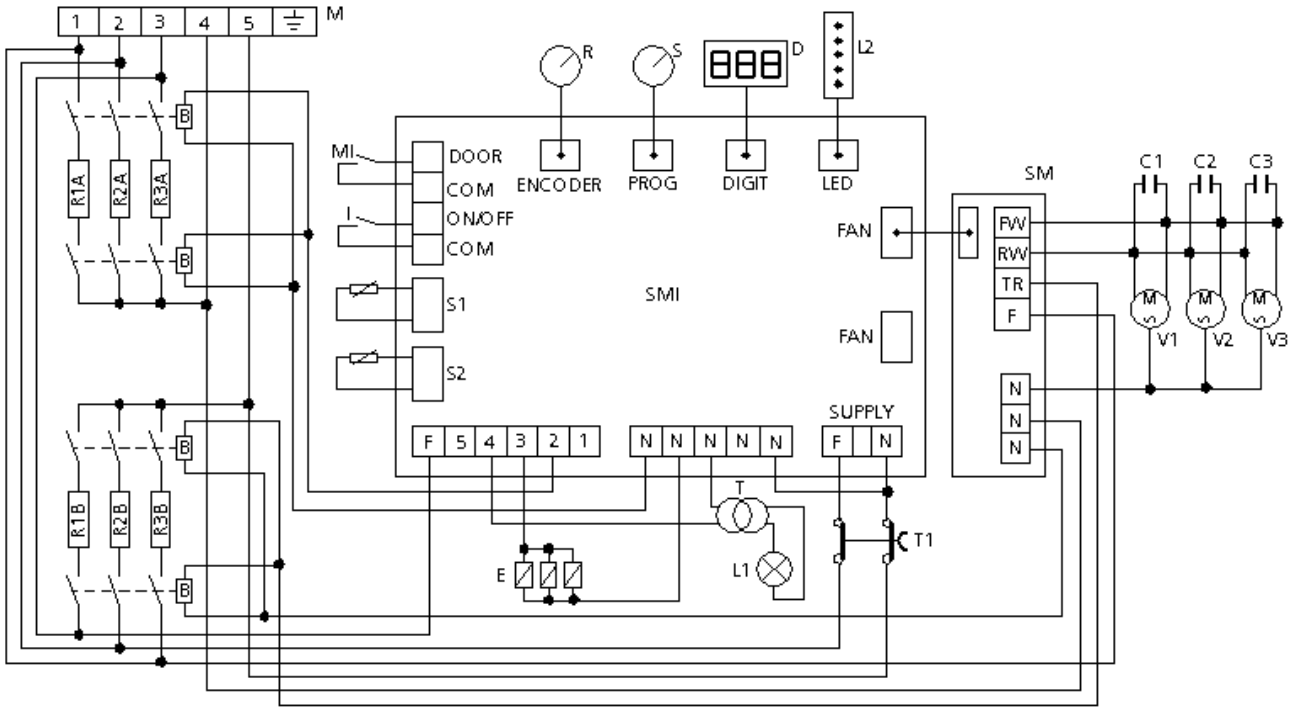
## 5.6 Possible faults

| Type of fault | Cause | Corrective action |
|---|---|---|
| Control panel completely off (the oven does not work) | - Incorrect electric connections to the mains | - Check the mains connection |
| | - No mains voltage | - Restore mains voltage |
| | - Thermal break safety device tripped | - Reset the thermal break safety device |
| | - Electronic card protection fuse (power) burnt | - Change the fuse |
| Cooking cycle set on the ON\OFF button pressed: the oven does not work | - Door open or ajar | - Close the door |
| | - Damaged device (switch) door | - Contact a qualified technician to repair the sensor |
| Humidity Cycle/ steam activated: no humidity is produced in the cooking chamber | - Incorrect connection to water mains | - Check the connection to water mains |
| | - Cut-off cock closed | - Check the cut-off cock |
| | - Blocked water inlet filter | - Clean the filter |
| | - Damaged water inlet solenoid | - Contact a qualified technician to repair the solenoid |
| Door closed: steam comes out of the seal | - Seal not fitted correctly | - Check the seal fitting |
| | - Damaged seal | - Contact a qualified technician to repair the seal |
| | - Handle prong loosened | - Contact a qualified technician to repair the prong |
| The oven does not cook evenly | - One of the motors is blocked or turns slowly | - Contact a qualified technician to repair the motor |
| | - The motors do not go into reverse | - Contact a qualified technician to repair the motor |
| | - Heating element not powered or is damaged | - Contact a qualified technician to repair the element |
| Lighting lamp in the cooking chamber does not work | - Damaged lamp | - Change the lamp |
| | - Damaged lamp feeder | - Contact a qualified technician to repair the feeder |

## 5.7 Possible Alarms

| Type of alarm | Cause | Solution |
|---|---|---|
| The wording **"Er1"** appears on the display and a sound alarme for 3 seconds. Il heating process is disactived. | - Break in the connection between the cooking chamber probe – electronic (power) card | - Check the connection to the electronic card |
| | - Damaged cooking chamber probe | - Contact a qualified technician to repair the probe |
| **"Er2"** is displayed on the display and an alarm is activated for 3 seconds. | - Break in the connection between the cooking chamber probe / electronic (power) card | - Check the connection to the electronic card |
| | - Damaged heart probe | - Contact a qualified technician to repair the probe |
| **"Er3"** is displayed on the display. The heating process of the oven is disactived. | - Overtemperature at risk of damage to electronic card/microprocessor. Heat sources too close to the oven. | - Wait for the temperature of the electronic card enters within the limits of operation. Remove from the oven sources of heat. The oven automatically resumes. |

## 5.8 Wiring layout




### Key

| | | | |
|---|---|---|---|
| M | Power supply terminal board | C1-C2-C3 | Capacitors |
| B | Contactor coil | V1-V2-V3 | Radial motorised ventilators |
| R1-R2-R3 | Circular heating elements | SM | Motorised card |
| MI | Door microswitch | SMI | Microprocessor card |
| I | Power line switch | R | Regulator |
| E | Water solenoid-valve | S | Selector |
| T | 230/12V transformer | D | Display |
| T1 | Safety thermostat | S1 | Cooking chamber probe |
| L1 | Lighting lamp | S2 | Food core probe |

# 6. Technical service

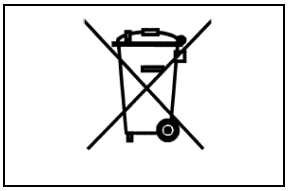
Before leaving the factory, the appliance was completely regulated and tested by expert specialised personnel to guarantee the best operating results.

All repairs and settings must be performed with utmost care and attention, respecting national safety regulations in force. Always contact your retailer or our nearest Service Centre, giving details of the problem, the appliance model and the serial number (on the rating plate on the rear panel).

For any maintenance the user can contact Tecnoeka by calling the telephone numbers on the cover or going to www.tecnoeka.com.

# 7. Informations to the consumers

Further to Directive 2002/96/EC, the symbol of the crossed rubbish skip on the appliance means that at the end of its life, the product must be disposed of separately from the other rubbish. The user must hand the appliance to a specialised waste collection centre for electric and electronic equipment.



The separate collection of the rubbish and subsequent treatment, recovery and disposal help to produce other equipment using recycled materials, reducing the negative effects on the environment and public health, which would be caused by incorrect management of the rubbish.

Should the user dispose of the product abusively, administrative sanctions would be applied.

# 8. The Warranty

Your appliance is covered by warranty. The seller will replace or repair (and his decision will be final), free of charge for the customer, only those parts that are defective due to a manufacturing fault on condition that, under penalty of forfeiture:

- for domestic equipment, the customer notifies the fault within two months from the date when he/she discovered it and anyway within 2 years form the date of purchase;
- for professional equipment, the customer notifies the fault within 8 days from the date when he/she discovered it and anyway within 12 months from the date of purchase,

by registered letter with acknowledgement of receipt and enclosing the invoice or receipt proving the purchase.

Apart from the case when the customer cannot produce the invoice or receipt proving the purchase or when the above-mentioned terms are not complied with, the **warranty is expressly excluded** in the following cases:

1) faults or breakage caused by the transport;
2) wrong or incorrect installation of the product (for instance because of insufficient draught of the flue or exhausts) in light of the instructions given in the user's handbook supplied with the product;
3) inadequate or abnormal electrical, hydraulic and/or gas supplies;
4) carelessness, negligence or incompetence in using the product in light of the instructions given in the user's handbook supplied with the product;
5) use of the product for uses different from the one for which it was built or anyway in a manner not compliant with the instructions given in the user's handbook supplied with the product;
6) tampering with the product;
7) adjustments and/or maintenance and/or repairs carried out by unauthorised personnel and/or with non original spare parts;
8) inadequate or careless maintenance of the product in contrast with the user's handbook supplied with the product;
9) damages caused by fire, natural disasters and accident as well as by any cause not attributable to TECNOEKA SRL.

**The warranty explicitly excludes**: varnished or enamelled parts, knobs, handles, movable or removable plastic parts, bulbs, glass parts, refractories and any accessories.

TECNOEKA SRL cannot be held responsible for any damages, either direct or indirect, caused by the product breaking down or following its non-use.

Any repairs carried out during the warranty do not cause said warranty to be extended or renewed.

Nobody is authorised to modify the terms and conditions of the warranty or to issue new verbal or written warranties.

**The warranty is valid only for appliances installed in the European Union.**

Any dispute shall be settled by the competent Court in Padua.

**Warning for the Buyer:**

1. the cooking appliance is designed only for cooking purposes while the heating appliance is designed only for heating domestic environments;
2. TECNOEKA S.r.l. does not install the appliances; the seller shall be responsible for any installation carried out;
3. TECNOEKA S.r.l. cannot be held responsible for any damages, either direct or indirect, to people, pets or property caused by the appliance breaking down or following its non-use.

The Manufacturer cannot be held responsible for any inaccuracies due to misprints or mistakes in copying in this handbook. The Manufacturer reserves the right to modify the products as he deems fit, also in the interest of the user, without affecting the vital characteristics of functionality and safety.