



ELECTRIC OVEN

USE AND INSTRUCTION MANUAL
MODD. EKF 412 – EKF 412 U
EKF 412 AL – EKF 412 ALU

rev. 1

TECNOEKA S.r.l.

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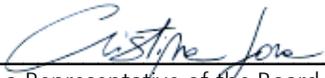


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EU DECLARATION OF CONFORMITY

Annexed document II A, of directive 2006/42/EC

Manufacturer's name	TECNOEKA Srl
Manufacturer's address	Via Marco Polo, 11 - 35010 Borgoricco (PD)
Manager's name of technical file	Minotto Lorenzo
Manager's address of technical file	Via Marco Polo, 11 - 35010 Borgoricco (PD)
Type of product	Electronic oven
Purpose of the product	Cooking food
Model	EKF 412 – EKF 412 U - EKF 412 AL EKF 412 ALU
<p>TECNOEKA Srl declares that the mentioned above products meet the following safety regulations:</p> <p>Machine Directive 2006/42/EC; Electromagnetic compatibility directive 2014/30/EU</p>	
<p>TECNOEKA Srl declares that the mentioned above products meet the following harmonised standards:</p> <p>EN 60335-1 ; EN 60335-2-42 EN 55014-1 ; EN 61000-3-2 ; EN 61000-3-3 ; EN 62233</p>	
<p>TECNOEKA Srl declares that the mentioned above products meet the following directives:</p> <p>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 2011/65/EU; Directive on waste from electrical and electronic appliances 2012/19/EU.</p>	
<p>TECNOEKA Srl declares that the mentioned above products meet the (EC) 1907/2006 Regulation</p>	
Borgoricco, 01/02/2016.	 Signature of a Representative of the Board of directors (CRISTINA LORA)

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1. Technical service

A technical check-up once or twice a year helps prolong the life of the appliance and guarantees better operation. Make sure that assistance is carried out solely and exclusively by qualified personnel. For any spare parts orders or for any information about the appliance, always mention the serial number and model (data indicated on the "technical data" plate at the rear of the oven).

2. General warnings

Very important!: keep this instruction book together with the appliance for future consultation. These warnings were drafted for your safety and for that of others. Please read them carefully before installing or using the appliance:

- 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.
- The warehouse inside temperature must not be lower than -9°C; otherwise, the thermostat (regulation and safety thermostat) control devices of the machine will be damaged. Failure to observe this prohibition invalidates any responsibility of the manufacturer of the machine.
- The appliance is intended for professional use and must be utilised by qualified personnel trained to use it.
- Any modification which may be necessary on the electrical system to enable installation of the appliance, must be carried out solely by competent personnel.
- It is dangerous to modify or attempt to modify the characteristics of this appliance.
- Never clean the appliance with direct water jets, because, if any water enters, it could limit the machine's safety .
- Before doing any maintenance or cleaning jobs, disconnect the appliance from the electrical mains and allow it to cool.
- Do not attempt to carry out the periodic controls or any repairs by yourself. Contact the nearest Service Centre and use only original spare parts.
- When the tilting door is wide open, do not put anything on the surface, because the door hinges could be irreparably damaged.

N.B.: Improper or incorrect use and failure to observe the installation instructions shall release the manufacture from all responsibility. In this connection, the directives in the "POSITIONING" paragraph must be strictly observed.

3. Technical specifications

Dimensions of appliance (mm) LxDxH	460x512x462
Weight of appliance (Kg)	25
Maximum load per tray (kg)	0,75
Maximum load (kg)	3
Convection heating element (kW)	2,5
Grill heating element (kW)	/
Max absorbed power (kW)	2,6
Power supply voltage (V~)	230V~ (50/60Hz)
Power cable diameter	3x1,5 mm ²
Type of cable	H07RN-F
Connecting electric cable	Tipo Y
Class	I
Degree of protection against humidity	IPX3
Water pressure (kPa)	100-200 (EKF 412 U – EKF 412 ALU)

The noise level of the appliance in operation is below 70 dB (A).

The "technical data" plate is positioned on the side panel of the appliance.

4. Instructions for the installer

The following instructions are aimed at the qualified installer, to ensure that he carries out the installation, adjustment and maintenance operations as correctly as possible and according to current legal regulations. Any operation must be performed with electrical power cut to the appliance. Before using the appliance, carefully remove the special adhesive film protecting the parts in stainless steel. Do not leave any glue residues on the surfaces. If necessary, remove them at once, with an appropriate solvent.

Fitting the feet - The feet are inside the appliance and must be secured on the four threaded holes on the base.

Positioning - Position the appliance perfectly horizontally on a table or similar support (the table or support must be at least 85 cm above the floor). Position it at a distance of not less than 10 cm from the side and rear walls, to enable natural ventilating air to circulate freely around it. The appliance is ventilated through specific openings on the metal walls of the outer housing, and ensures efficiency and long-life. For this reason it is strictly forbidden to obstruct these ventilation openings, even partially or for short periods. **Failure to observe this specific prohibition releases the manufacturer of the appliance from all responsibility and immediately voids any guarantee rights for the said appliance**, because its constructive conformity has been voluntarily compromised. Furthermore, the appliance is not suitable for embedding and for grouped positioning with other identical appliances.

2 anti-rollover brackets with relative fastening screws are fitted. The brackets have to be fixed to the appliance through the holes present on the back panel for this purpose. The bases of the brackets must be fixed to the base plane supporting the equipment, using screws suitable to the material of the plane itself.

Electrical connection - The appliance must be connected to the electrical mains according to current legal regulations. Before making the connection, make sure of the following:

- the voltage and frequency values of the power supply system match the values on the "technical data" plate affixed on the appliance;
- the limiting valve and the system are able to support the appliance's load (see the "technical data" plate);
- **the power supply system has an adequate earth connection according to current legal regulations;**
- a omnipolar switch with minimum between-contacts aperture of the overvoltage category III (4000 V), sized to the load and conforming to current legal regulations, is fitted between the appliance and the mains in the direct connection to the mains;
- the omnipolar switch used for connection is easy to reach when the appliance is installed;
- **the yellow/green earth wire is not interrupted by the switch;**
- the power supply, when the appliance is operating, must not deviate from the rated voltage value by $\pm 10\%$;
- 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.
- **if the supply cable is damaged then it must be replaced by the manufacturer or by your technical support or by a qualified person to avoid any risk.**

Connection to the water mains - The appliance must be fed with softened drinking water, with hardness from 0.5°f to 3°f (it is obligatory to use a softener to reduce the formation of lime inside the cooking chamber) and pressure in the range from 100 to 200 kPa (1.0 - 2.0 bar).

Connection to the water mains should be made through the threaded 3/4" solenoid-valve on the rear (on the bottom) of the appliance, fitting in between a mechanical filter and an on/off tap (before you connect the filter, allow a certain quantity of water to flow out in order to drain any waste from the pipe).

Connection of power cable - To access the power supply terminal board just remove the side/rear panel of the appliance. Loosen the ring nut of the cable gland at the rear of the appliance and run the cable through it until reaching the terminal board. Arrange the conductors so that the earth conductor is the last to detach from its terminal if the cable goes into a state of faulty traction. Connect the phase conductor to the terminal marked with the letter "L", the neutral conductor to the terminal marked with the letter "N" and the earth conductor to the terminal marked with the symbol \perp . Tighten the ring-nut of the cable gripper and close the terminal board cover. The appliance must be connected to an **equipotential system** whose efficiency must first be checked according to current legal regulations. This connection must be made between different appliances by using the appropriate terminal marked with the symbol \perp . The equipotential conductor must have a minimum diameter of 2,5 mm² The equipotential terminal is at the rear of the appliance.

Safety thermal breaker - The appliance has safety thermal breaker. It protects against excessive dangerous over-temperatures which could be accidentally generated inside the appliance. If the device is tripped, it interrupts electrical power to the appliance and thus prevents it from operating.

5. Use instructions (for the user)

This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge. Unless they have been given supervision or instruction concerning use of appliance by a person responsible for their safety.

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

For first use, we advise you to let the appliance to run load-free at maximum temperature for about one hour. In this way, any unpleasant smells due to thermal insulation and residual work grease are eliminated.

This appliance must be used solely for the purpose for which it was expressly designed, i.e. cooking foods in the oven. Any other use is considered unsuitable.

The appliance can be used: for all oven cooking of deserts, pizzas, meat, fish, vegetables, as well as for gratinating, and for re-conditioning cooled and frozen foods.

When placing food in the cooking compartment, leave a space of at least 40 mm between pans in order not to over-obstruct air circulation.

Do not use pans with higher than necessary edges: edges are barriers which prevent the circulation of hot air.

Warm up the oven before every cooking operation to obtain maximum uniformity.

Do not salt foods in the cooking compartment.

6. Residual risks (for the user)

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.

Place the machine on a bench or similar support, at a height of at least 85 cm from the floor.

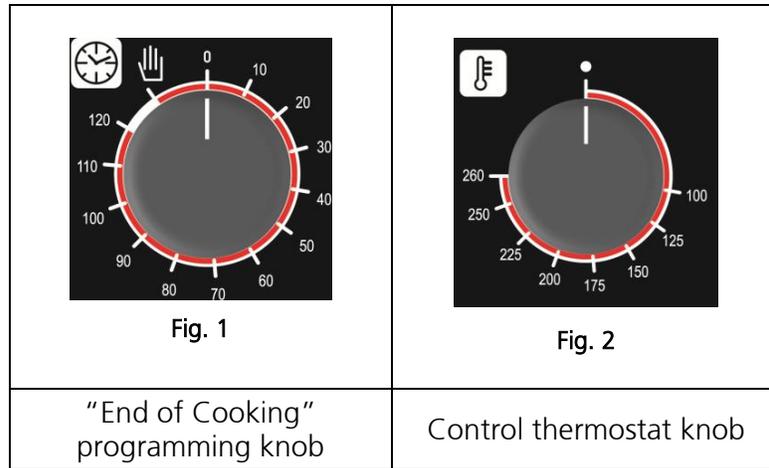
The bench or support must be able to support the weight of the machine and house it correctly.

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.

Do not use the door handle to move the appliance (the glass panel may break).

7. How to use the control panel



<p>- "End of cooking" programmer indicator light</p>	
<p>- Control thermostat indicator light</p>	
<p>- Humidifier knob</p>	

Programming cooking time - To run the oven, turn the programmer knob (Fig. 1) in line with symbol  (continuous operation) or in line with the selected cooking time (up to 120 minutes). In the second case, end of cooking is signalled by the oven switching OFF automatically.

Programming cooking temperature - Turn the knob of the adjustment thermostat (Fig. 2) in line with the temperature selected for cooking.

Control thermostat indicator light - The control thermostat orange indicator light goes OFF whenever the programmed temperature is reached inside the cooking compartment. It lights up again when the thermostat is tripped to re-establish this temperature.

"End of cooking" programmer indicator light - The programmer orange indicator light indicate that the oven is operating and that cooking time is active.

Line indicator light - The green line-indicator light indicates that the oven is electrically connected to the power supply line.

Oven internal light - The light is always on when the oven is operating.

8. Oven cooking

For cooking, before putting food in, warm up the oven to the required temperature. When the oven reaches the temperature, put the food in and check cooking time. Switch off the oven 5 minutes before the theoretical time in order to recover stored heat.

Convection cooking - Activate the oven and turn the thermostat knob in line with the required temperature

Convection cooking + umidifier key - Switch on the oven, turn the adjustment thermostat knob to at least 150°C setting. When this temperature value has stabilised, press the humidification button each time you wish to increase humidity in the cooking chamber..

Defreezing - Activate the oven and turn the thermostat knob to the OFF position.

9. Cooking advice

Traditional cooking - Heat is supplied from above and below and, therefore, it is preferable to use the central guides. If cooking requires extra heat from above and below, use the top or bottom guides.

Convection cooking - Heat is transferred to the foods by pre-heated air, forced to circulate by in the cooking chamber. The heat quickly and uniformly reaches all parts of the chamber, enabling simultaneous cooking of different types of food (providing they have the same cooking temperature), placed on the shelves without mixing tastes and smells. Convection cooking is particularly convenient for rapid defreezing, and for sterilising preserves and drying mushrooms and fruit.

Cooking desserts - Desserts require a very high temperature (usually from 150 to 200°C) and a pre-heated oven (about ten minutes). The oven door must not be opened until at least 3/4 of the cooking time has elapsed. Whipped dough must be difficult to detach from a spoon because excessive fluidity would prolong cooking time to no avail.

Cooking meat - Very tender red meats to be cooked rare, which must be cooked on the outside to keep all their gravy, require short cooking time at high temperature (200-250°C). The gravy ingredients must be placed immediately in the pan only if the cooking temperature is brief, otherwise they should be added during the last half-hour. You can check the degree of cooking by squashing the meat with a spoon: if the meat does not yield, it is correctly cooked. For roast beef and fillet, which must remain pink inside, cooking time must be very brief. Meats may be placed on a plate suitable for oven cooking or directly on the grill, under which you should place a tray to collect the gravy. When cooking has finished, we advise you to wait for 15 minutes before cutting the meat so that the gravy does not come out. Before being served, the dishes may be kept hot in the oven at minimum temperature.

10. Routine cleaning and maintenance

(WARNING: Cut power to the appliance before every operation)

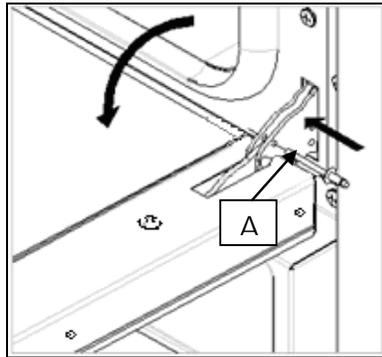
General cleaning - Clean the oven when it is cold. To clean the steel parts, do not use products containing chlorine (sodium hypochlorite, hydrochloric acid, etc) even if diluted. Use specific off-the-shelf products or a little hot vinegar. Rinse thoroughly with water and dry with a soft cloth. Clean the glass door of the oven with hot water only, and do not use rough cloths. Do not allow foods (especially acid foods such as salt, vinegar, lemon, etc) to stagnate on the stainless steel parts, because they could deteriorate. Do not wash the appliance with direct jets of water, because if water enters, this could limit the appliance's safety. Do not use corrosive substances (e.g. hydrochloric acid) to clean the oven's support bench.

Cleaning the oven - It is good practice to clean the oven interior at the end of every day of duty. In this way it will be easier to remove cooking residues, preventing them from burning when the oven is next used. Clean it accurately with hot water and soap or with the appropriate off-the-shelf products.

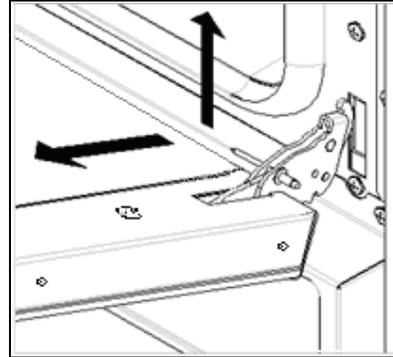
Cleaning flap door (for pre-set ovens)

For more comprehensive oven door cleaning it is recommended to proceed as follows:

- open the door completely;
 - insert the suitable pins supplied in the holes "A" on the two hinges (Fig. 8);
 - slightly lift the door and extract it (Fig. 9);
- Replace the door in its housing operating in reverse order.



(Fig. 3)

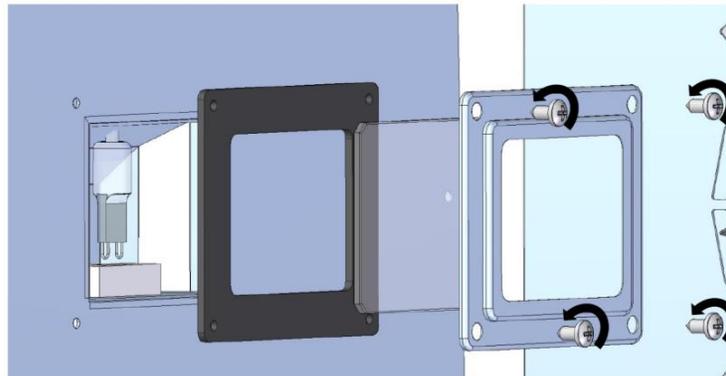


(Fig. 4)

Replacing oven lamp - Electrically switch off the appliance; unscrew the protective glass cap; unscrew the screws that secure the glass support and the relative seal (Fig.5) and replace it with another lamp suitable for high temperatures (300°C), with the following characteristics:

- Voltage 230/240 V
- Power 40 W

The lamp is of the halogen type: it must not be touched with bare hands. Reassemble the glass support and its gasket.



(Fig.5)

11. Technical assistance

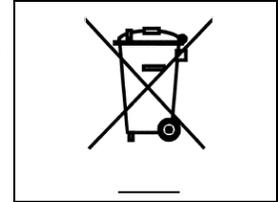
Before leaving the factory, the appliance was completely regulated and tested by expert specialised personnel to guarantee the best operating results.

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.

12. Informations to the consumers

Further to Directive 2012/19/UE, 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.

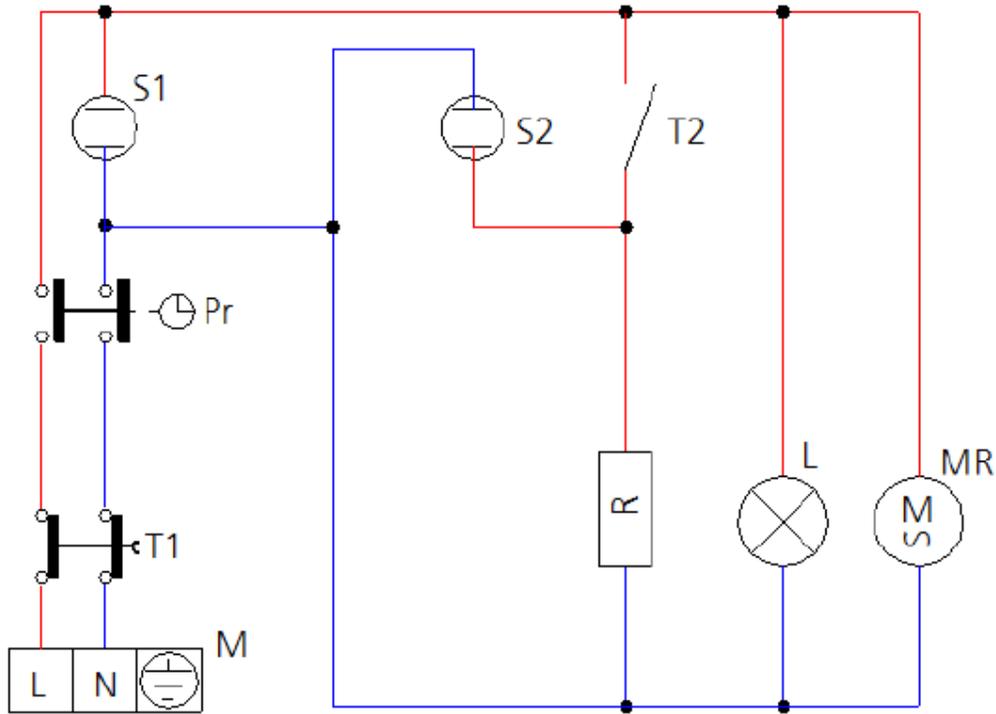


The separate collection of the rubbish and subsequent treatment, recovery and disposal help to produce other equipment using recycled materials, reducing the negative effects on the environment and public health, which would be caused by incorrect management of the rubbish.

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

13. Wiring layouts

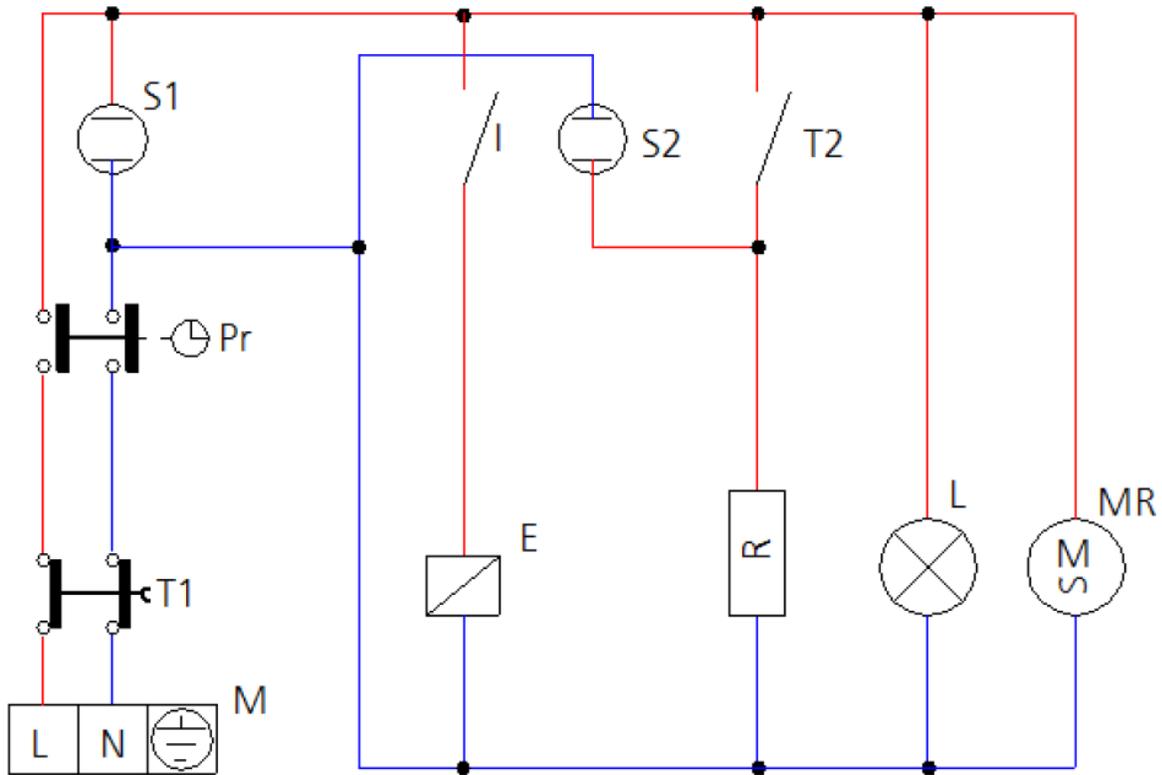
MODD. EKF 412 – EKF 412 AL



Legend

M	Power terminal board	L	Oven lighting lamp
Pr	"End of cooking" programmer	MR	Oven motorised ventilator
T1	Safety thermostat	S1	Humidifier indicator light
T2	Oven thermostat	S2	Programmer indicator light
I	Humidifier switch		
R	Circular heating-element		

MODD. EKF 412 U – EKF 412 ALU



Legend

M	Power terminal board	L	Oven lighting lamp
Pr	"End of cooking" programmer	MR	Oven motorised ventilator
T1	Safety thermostat	E	Humidifier solenoid-valve
T2	Oven thermostat	S1	Humidifier indicator light
I	Humidifier switch	S2	Programmer indicator light
R	Circular heating-element		

14. Established warranty

Tecnoeka's products are exclusively designed for food use and are covered by warranty complying with Laws Regulation article n. 1490 and following) for professional users such as VAT holder customers purchasing from Distributor.

Tecnoeka's products are professional and certified according to the IEC 60335-1 standards and can only be sold to professional users.

With the exclusion of any additional warranty, the Seller will repair, at its sole discretion, only those parts of its products which prove vitiated by an original defect provided that, subject to revocation, the customer has reported the defect within 12 months from 'purchase and reported the defect within 8 (eight) days of the discovery, in writing enclosing a copy of the invoice, receipt or sales receipt proving the purchase.

As well as in the event that the customer is not able to produce the invoice, receipt or sales receipt proving the purchase or are not respected the terms outlined above, the guarantee is expressly excluded in the following cases:

- 1) Any failure or breakage of components caused by transport.
- 2) Damage caused by inadequate electrical, plumbing and gas installation than provided in the installation manual, or by an abnormal function of the same.
- 3) Damage resulting from incorrect installation of the product, or installation not in accordance with the requirements in the installation manual, and in particular damage due to failure of the chimneys and the discharges which this product is connected.
- 4) Product use for purposes other than those it is intended for, as specified and resulting from the technical documentation released by Tecnoeka.
- 5) Damage caused by use of the Product not in accordance with instructions contained in the user and maintenance manual.
- 6) Product tampering.
- 7) Adjustment Operations, maintenance and repair of the product performed by unqualified personnel.
- 8) Use of non-original or not authorized parts by Tecnoeka.
- 9) Damage or defect caused by negligent and / or reckless of the product, or in contrast with the instructions prescribed by the instruction and maintenance manual.
- 10) Damage caused by a fire or other natural events and in any case any damage by accident or addicted to any cause not dependent on the manufacturer.
- 11) Damage to parts subject to normal wear that need to be replaced periodically.

Also excluded from the guarantee: the painted or enameled parts, knobs, handles, mobile or removable plastic parts, light bulbs, glass parts, seals, electronic parts, and all the possible accessories, transport costs from the based consumer, the end user and / or purchaser to the seat of Tecnoeka Ltd. and vice versa. The warranty doesn't include also the oven's replacement costs and the related installation costs. The warranty excludes products purchased as used or purchased from third parties not connected or authorized by Tecnoeka.

TECNOEKA SRL is not responsible for damages, direct or indirect, caused by the product failure, or following to the forced suspension of use of the same.

Warranty repairs do not result in the extension or renewal thereof.

Parts replaced under warranty are in turn a guarantee of 6 months from the date of shipment, attested by a movement document issued by Tecnoeka.

Nobody is authorized to modify the terms and conditions of guarantee or to release other verbal or written.

15. Availability and supply of spare parts

Tecnoeka Srl guarantees the supply of spare parts for a period not exceeding 24 months from the invoice date of the appliance purchased. After that date, availability of spare parts cannot be guaranteed.

16. Applicable laws and court of competent jurisdiction

The supply relationships will be regulated by Italian law, with the express exclusion of the international law norms and the Vienna Convention on the International Sales of Movable Assets dated 11 April 1980. Any disputes will fall under the exclusive jurisdiction of the Padua Court.

The products included on manuals may be subject, without any notice or responsibility for Tecnoeka Srl, to technical and functional design changes aiming at improvements without compromising their essential functional and safety features. Tecnoeka Srl is not responsible for any inaccuracies due to bad printing or transcription errors, that could appear on any tool of presentation and/or technical and commercial description of its products to customers.