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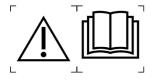


#### MIXED CONVECTION/STEAM OVENS

KH0623 - KH0623W - KH061 - KH061W - KHG061-KHG061W- KH101 - KH101W - KHG101 - KHG101W-KT0623 - KT0623W - KT061 - KT061W - KTG061-KTG061W - KT101 - KT101W- KTG101 - KTG101W



**ENGLISH: Installation, Operation and Maintenace Manual** 



ver. 07/2016



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#### Dear Customer,

Thank you for purchasing one of our products.

This oven is part of a series of electrical equipment designed for the food sector. Our ovens are easy to use, ergonomic and enable cooking control, while boasting a pleasant and modern design.

The oven has a 12 month warranty that covers any manufacturing defects from the date indicated on the Bill of Sale. The warranty covers normal operation of the oven and does not include consumables (lamps, seals etc..) and damages caused by incorrect installation, wear, maintenance, repair, incorrect cleaning and descaling, tampering and improper use.

KOMPATTO installation, use and maintenance manual

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## **1. INSTALLATION**

#### 1.1. General and safety warnings

- Read this manual thoroughly before installation and use of the oven, since it gives important instructions regarding its safe installation, use and maintenance.
- Keep the manual in a location that can be easily accessed by the operators for further consultation.
- Always include the manual if the oven is transferred; if necessary, request a new copy from the authorized dealer or directly from the manufacturer.
- As soon as the packaging is removed, make sure the appliance is in good condition and there was no damage caused during transport. Never install or use a damaged appliance; if in doubt, contact the after-sales technical assistance or your local dealer immediately.
- Since the packaging material is potentially dangerous, it must be kept out of the reach of children or animals and disposed of correctly in compliance with local regulations.

- Before installing the equipment, check that the plants are compliant with the regulations in force in the country of use and with that stated on the information plate.
- Installation or maintenance different to those indicated in the manual can cause damage, injury or fatal accidents.
- Installation, extraordinary maintenance and repair operations on the equipment must only be performed by professionally qualified personnel and following the manufacturer's instructions.
- During assembly of the equipment, the transit or permanence of staff not assigned to installation is not allowed in the work area.
- The appliance has been designed to cook foodstuffs in closed environments and must be used only for this function. Any different use must therefore be avoided as it is considered improper and dangerous.
- The appliance must only be

used by personnel who have been appropriately trained in its use. To avoid the risk of accidents or damage to the equipment, it is essential that the staff is constantly trained with regard to safe operation.

- The appliance must not be used by persons with reduced physical, sensory or mental capacities or by those who do not have the necessary experience or knowledge unless they are supervised or instructed in the use of the equipment by a person who is responsible for their safety.
- The appliance must be placed in a suitably ventilated room to prevent the excessive accumulation of harmful substances in the air.
- Children must be supervised to ensure they neither play with or use the appliance.
- During operation, pay attention to the hot areas on the exterior surfaces of the equipment which, during operation, can exceed 60°C.
- The use of hearing protection is not necessary since the sound pressure level of the oven is lower than 70 dB(A).

- In the event of failure or malfunctioning, the equipment must be deactivated; any repairs must only be performed by an assistance centre authorized by the manufacturer and original spare parts must be used.
- Disconnect the appliance from the electric power supply before performing any installation or maintenance intervention.
- Interventions, tampering or modifications not expressly authorised, which do not respect that stated in this manual, will make the warranty null and void.
- Do not place other heat sources, such as fryers or cooking plates, near to the oven.
- Do not deposit or use flammable substances near the equipment.
- In the event of prolonged nonuse, the electricity, water and gas must be turned off.
- Before commissioning the appliance, make sure that all parts of the packaging have been removed, making sure they are disposed of

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in compliance with current legislation.

- Before connecting the equipment verify that the power cord is not damaged. in that case the cable must be replaced by an assistance centre or by professionally qualified personnel.
- Any changes to appliance installation that become necessary must be approved and performed by authorized technicians.
- The appliance is intended for professional use only.
- No changes of any kind are permitted to the wiring of the equipment.
- Failure to comply with the previous warnings can compromise both your safety and the safety of the equipment.
- When the cooking chamber is hot, be careful when opening the door. BURNS HAZARD!!
- The trays and grills must be extracted from the hot oven using heat-resistant protective gloves for the hands.

- Use protective glasses and suitable gloves during cooking chamber cleaning operations.
- ATTENTION: the floor near to the oven could be slippery.
- The information plate provides important technical information: these are essential if interventions requested must be for maintenance or repairs of the appliance; therefore, it must not be removed, damaged or modified
- The version of the gas ovens conform to the Gas Directive 2009/142/EEC and have therefore been issued with a CE certificate by a notified body.
- The equipment complies with the essential requirements of the Machinery Directive 2006/42/EC.
- The equipment complies with the essential requirements of the Electromagnetic Compatibility Directive 2014/30/EC.
- The equipment complies with the essential requirements of the Low Voltage Directive 2014/35/EC.

## 1.2. Positioning

The appliances have been designed to be installed indoors and cannot be used outdoors neither be exposed to rain.

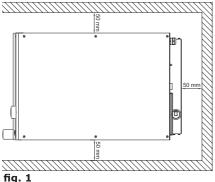
The location designated for oven installation shoult have a solid, flat and horizontal surface, able to safely support both the weight of the appliance-support group and that the maximum rated load.

The appliance must be placed in a suitably ventilated room to prevent harmful the excessive accumulation of harmful substances in the air.

The oven should be installed exclusively on a stable support.

Unpack the appliance and make sure it is intact. Arrange the operation area being careful not to place it on top of or against walls, bulkheads, partition walls, partitions, kitchen furniture or coating made in flammable material.

We recommend you strictly comply with fire-prevention regulations in force.



Make sure there is a minimum clearance of 50 mm on all sides between the oven and the wall or the other equipment (**fig. 1**).

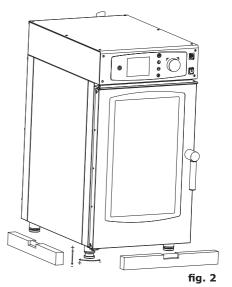
All materials used for packaging are environmentally friendly; they can be stored without any risk or be disposed of according to local regulations in force.

The oven should be levelled: to adjust the height of the leveling feet proceed as shown in **fig. 2**, using a spirit level.

Unevenness or inclinations of a certain degree can compromise the operation of the oven.

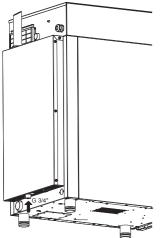
Remove the entire protective film from the external panels of the appliance, detaching it slowly to remove all traces of adhesive.

Make sure that all openings and holes designed for heat intake/discharge are not obstructed.



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#### 1.3. Water connection



The water pressure must be of maximum (600 kPa) 6 bars. If the pressure of mains water is greater than this value, it is necessary to install a pressure reducer upstream of the oven.

The minimum water pressure for the proper operation of the oven must be above 3 bar (only ovens with self-cleaning).

The oven has an inlet for softened water on the rear bottom side of the oven. We always recommend installing a water softener-descaler to bring the hardness of the water entering the appliance to values between 3 ° and 9 ° F.

fig. 3

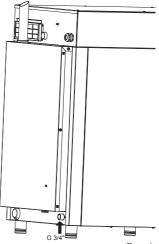
Before connection, drain off a sufficient

amount of water to clean the pipe from metal residues.

Connect the "Water" pipeline to water mains and install a shut-off valve and a filter on the pipe.

Ensure that the shut-off valve is positioned so that it can be easily operted by the operator at any time.

Caution: if the water supply pipe gets damaged, it should be replaced with a new one while the old damaged one should not be used again.



fi	g	•	4

рН	7÷8,5				
TDS	40÷150ppm				
Strenght	3,9°f (1,5÷5°d, 2,1÷6,3°e, 30÷90ppm)				
Langelier index (recommended) (**)	<0.5				
Content of salts and metal ions					
	Chlorine	<0.1 mg/l			
Required	Chlorides	<10 mg/l			
	Sulphates	<30 mg/l			
	Iron	<0.1 mg/l			
Recommended (**)	Copper	<0.05 mg/l			
	Manganese	<0.05 mg/l			

(\*\*) Different values of these parameters can cause corrosion when combined with a wrong use and environment.

## 1.4. Drain connection

The oven is equipped with a water drain; this device is placed at the bottom of the rear part of the appliance and has a tube with diameter of 40 mm.

Connect the pipe of the draining device (**fig. 5**, **ref. A**). The draining system consists of a trap; it is advisable to connect the pipe to an open funnel.

Make sure the internal trap is full of water, otherwise fill it up with water through the drin present in the cooking chamber.

#### **1.5. Electrical connection**

The electrical system shall be fitted with an efficient earthing system, as required by the

regulations in force. You can ensure the electrical safety of the appliance only in the presence of a compliant electrical system.

	NF	2	XXXX	XX/X	X/XX	
POWER SUPP	LY	4	00	V 3N	50 ŀ	lz
OVEN POWER kW	,6	BC	DILER PO	NER kW	1,0	
TOT POWER k	7,	9	CE		IP	
Fig. 6						

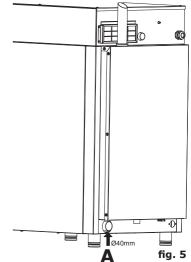
ensures disconnection. Its contacts should have a minimum opening distance that enables complete disconnection under the conditions of overvoltage category III, according to installation rules; this device should also be located so that it can be easily used by the operator at any time.

Turn the master switch, to which the power plug will be connected, to position 0 (zero). Make the socket cable section checked by qualified staff to make sure it suits the the power absorbed by the device.

The electric oven is supplied with cable 400V 3N; , while the gas oven is supplied with 1N 230V.

The standard machine is supplied with a power cable already connected.

The feed voltage, when the machine is  ${\scriptstyle 10}$ 



Before wiring, check the voltage and frequency of the power grid to ensure that they comply with appliance rated values given on the technical data plate (fig. 6).

For direct connection to the mains, you should placed between the appliance and the network a device, sized according to the load, which

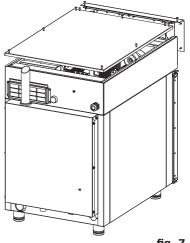


fig. 7

	ADDV ZN 50/60H-	ZHU0/UC C VUCZ	7 ZON EN /ENH-	250V 2 50/60Hz
		208V 3 50/60Hz		208V 2 50/60Hz
	L1 L2 L3 N	L1 L2 L3 ±	- - - - - - - - - - - - - - - - - - -	L1 L2 +
	1 2 3 4 <del>5</del> 1	→ → → → → → → → → → → → → → → → → → →	1 2 3 4 5 =	1 2 3 4 5
KP0623(W)		//	C 2	3 X 2.5 mm <sup>2</sup>
KT0623(W)		//		3 X 12 AWG
(111/200		1	2	3 X 4 mm <sup>2</sup>
(M)CZQUHY		//	4 X C	3 X 10 AWG
KP061(W)	л < оп 2	4 X 2.5 mm <sup>2</sup>	CV 	//
KH061(W) KH061(W)	шш с.7 к с	4 × 12 AWG		//
KP101(W)		4 X 6 mm <sup>2</sup>	Ň	//
KT101(W)	### + × C	4 x 8 AWG		//
(///) + U + I ///	н v л2	//	~ ~	//
(m) 10	mm + x c	4 x 8 AWG		//

#### tab. 1

operating, should not vary in relation to the rated voltage by more than  $\pm$  10%.

The applinace must be included into an equipotential system whose efficency is checked in compliance with the standards in force. For the connection use the clamp, placed on the frame and marked with the symbol **fig. 8**, to which you should connect a cable with the minimum section of 10 mm<sup>2</sup>.



fig. 8

### 1.6. Connecting the gas (gas ovens only)

#### Nota bene:

The oven is calibrated originally for operation with the type of gas specified on placing the order.

The type of gas for which the oven is adjusted is given on the technical plate positioned on the appliance (**Fig. 9**, **ref. A**).

During the inspection, make sure that the factory calibrations on the burners are appropriate for the specific type of installation, through the analysis of the gases produced by combustion (CO2 and CO) and the verification of the heat output.

Specifically, with the oven operating at full regime, the values of undiluted CO at the exhaust must remain within 1000 ppm. Should there be any undiluted CO beyond this parameter, the burner adjustments must be checked exclusively by a technician authorised by the manufacturer, who will make the necessary changes to the devices which take care of the combustion and to their parameters

					CAT		G30	G31	G20	G25	COUNTRY	
					II <sub>2H3+</sub>	P mba	r 28-30	37	20	1	IT-ES-IE-PT GB-GR-CH	
Œ					11 2H3B/P	P mba	r 30	30	20	1	LT-DK-FI-EE-NO LV-C2-SK-SI-SE	
ТҮ	PE		$\mathbf{A}_1$	B <sub>11</sub>	II <sub>2E+3+</sub>	P mba	r 28-30	37	20	25	FR-BE	
MOD					II <sub>2H3B/P</sub>	P mba	r 50	50	20	1	AT-CH	
NB					II <sub>2ELL3B/P</sub>	P mba	r 50	50	20	20	DE	
nn					II <sub>2L3B/P</sub>	P mba	r 30	30	1	25	NL	
Σ(	Ĵn			k₩	11 <sub>2E3+</sub>	P mba	r 28–30	37	20	1	LU	
G3	0	G2	20	G25	I <sub>3В/Р</sub>	P mba	r 30	30	1	1	MT-IS-HU-CY	
					۱ <sub>3+</sub>	P mba	ır 28–30	37	1	1	CY	
kg/ł	۱	m³	/h	m³∕h	1 <sub>2E</sub>	P mba	r /	1	20	1	PL	
PREDISPOSTO A GAS – PREVI AU GAZ PRESET FOR GAS – EINGESTELLI AUF GAS PREDISPUESTO A GAS – PREDISPOSTO À GÁS Ambar												
						k₩	IP	EN	203	-1	MADE IN ITAL	Y
											Fig.	9

#### Installation prescriptions

The oven installation and commissioning operations must be performed by qualified staff only in compliance with rules and regulations in force.

The gas plants, the electric connections and the places of installation of the appliances must be in compliance with the regulations and the standards in force.

Remember that the air necessary for combustion of the burners is 2 m<sup>3</sup>/h per kW of power installed.

In businesses open to the public, accident-prevention regulations must be complied with along with fire-prevention safety and anti-panic regulations.

The connection to the gas supply fitting can be made using flexible metal hoses; placing a type-approved cut-off cock in an easily accessible point.

Make sure that the flexible metal hose, for connection to the gas inlet fitting, does not touch the hot parts of the oven and that it is not subjected to twisting or extension.

Use fixing straps that are in compliance with the installation regulations.

#### Checks to perform before installation

Check on the technical plate on the left-hand side of the oven that the appliance has been tested and approved for the type of gas that the user's premises (**Fig. 9**, **ref. A**).

Check, using the data on the technical plate (**Fig. 9**), to make sure that the pressure reducer capacity is sufficient for the appliance supply.

Do not install section reducers between the reducer and the appliance.

It is recommended to install a gas filter upstream from the pressure regulator in order to ensure optimal operation of the oven.

the gas supply diameter of 3/4"

Connect the oven to the gas supply plant via a tube with diameter of 3/4" T and internal section no smaller than 20 mm (**Fig. 10**).

Envision cocks or drain valves with an internal diameter no smaller than the fitting tube mentioned above.

After connecting the pipe, make sure that the joints and couplings have no leaks. To do this, use soapy water or specific foamy product to identify the leak.

It is good practice to have the periodic maintenance of the gas ovens performed every year by an authorised technician; on this occasion the flue gases will be analysed and the heat output will be checked.

## 1.7 Smoke exhaust

In compliance with the installation regulations, the ovens must be used in premises suitable for the evacuation of combustion products.

The oven drain can be connected via a forced evacuation system, such as a hood with mechanical extractor (**Fig. 11**). In this case, the gas supply to the appliance must be controlled directly by this system and must cut-off whenever the suction flow rate drops below the values prescribed. When the

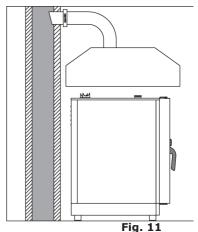
appliance is installed under the extraction hood, check that the following indications are respected:

a) the volume extracted must be higher than that of the flue gases generated (see current regulation);

b) the material with which the hood filter is made must resist the temperature of the flue gases which, on exiting the conveyor, can reach 300° C;

c) the end part of the appliance evacuation pipe must be positioned inside the base perimeter projection of the hood;

d) the gas supply must be restored manually following a block caused by insufficient suction.



## 1.8 Gas oven operating values (for gas versions only)

#### Gas consumption

	K×G061(W)	K×G101(W)
G30 kg/h	0,43	0,87
G20 m³/h	0,58	1,16
G25 m³/h	0,68	1,35

#### Nominal heat input

Modello	KHG061(W)	KTG061(W)	KHG101(W)	KTG101(W)
Tensione	1N 230V	1N 230V	1N 230V	1N 230V
Frequenza (Hz)	50/60 Hz	50/60 Hz	50/60 Hz	50/60 Hz
Potenza assorbita (kW)	1.400	400	1.800	800
Portata termica nom. (kW)	5,5	5,5	11	11
Sezione cavo alimentazione (mm <sup>2</sup> )	1x1,5	1x1,5	1x1,5	1x1,5

#### Gas pressure

Country	<b>/</b>	Category	Gas type	Pressure (mbar)		
AL	ALBANIA	II2H3+ II2H3B/P	G20 - G30/G31 G20 - G30/G31	20 - 28-30/37 20 - 30/30		
AT	AUSTRIA	II2H3B/P	G20 - G30/G31	20 - 50/50		
BE	BELGIUM	II2E+3+	G20/G25 - G30/G31	20/25 - 28-30/37		
BG	BULGARIA	II2H3B/P	G20 - G30/G31	20 - 30/30		
СҮ	CYPRUS	II2H3+ 2H3B/P	G20 - G30/G31 G20 - G30/G31	20 - 28-30/37 20 - 30/30		
HR	CROATIA	II2H3B/P	II2H3B/P	G20 - G30/G31		
DK	DENMARK	II2H3B/P III1a2H3B/P III1e2H3B/P	II2H3B/P III1A2H3B/P III1E2H3B/P	G20 - G30/G31 G110 - G20 - G30/G31 G150.1 - G20 - G30/G31		
EE	ESTONIA	II2H3B/P	II2H3B/P	G20 - G30/G31		
FI	FINLAND	II2H3B/P	II2H3B/P	G20 - G30/G31		
FR	FRANCE	II2E+3+	II2E+3+	G20/G25 - G30/G31		
DE	GERMANY	II2ELL3B/P	II2ELL3B/P	G20 - G25 - G30/G31		
GR	GREECE	II2H3+ II2H3B/P	II2H3+ II2H3B/P	G20 - G30/G31 G20 - G30/G31		
IE	IRELAND	II2H3+	II2H3+	G20 - G30/G31		
IS	ICELAND	I3B/P	I3B/P	G30/G31		
IT	ITALY	II2H3+ III1a2H3+	II2H3+ III1a2H3+	G20 - G30/G31 G110 - G20 - G30/G31		
LV	LATVIA	II2H3B/P	II2H3B/P	G20 - G30/G31		
LT	LITHUANIA	II2H3+ II2H3B/P	II2H3+ II2H3B/P	G20 - G30/G31 G20 - G30/G31		
LU	LUXEMBOURG	I2E	I2E	G20		
МТ	MALTA	I3B/P	I3B/P	G30/G31		
NO	NORWAY	II2H3B/P	II2H3B/P	G20 - G30/G31		
NL	NETHERLAND	II2EK3B/P II2L3B/P	II2EK3B/P II2L3B/P	G20 - G25.3 - G30/31 G25 - G30/G31		
PL	POLAND	II2ELwLs3B/P II2E3B/P	II2ELWLS3B/P II2E3B/P	G20 - G27 - G2.350 - G30/G31 G20 - G30/G31		
РТ	PORTUGAL	II2H3+	II2H3+	G20 - G30/G31		
GB	UNITED KINGDOM	II2H3+	II2H3+	G20 - G30/G31		
cz	CZECH REPUBLIC	II2H3+	II2H3+	G20 - G30/G31		
MK RO	REPUBLIC OF MACEDONIA ROMANIA	II2H3+ II2H3B/P II2H3B/P	II2H3+ II2H3B/P II2H3B/P	G20 - G30/G31 G20 - G30/G31 G20 - G30/G31		
		II2E3B/P II2L3B/P	II2E3B/P II2L3B/P	G20 - G30/G31 G25 - G30/G31		
SK	SLOVAKIA	II2H3+ II2H3B/P II2H3B/P	II2H3+ II2H3B/P II2H3B/P	G20 - G30/G31 G20 - G30/G31 G20 - G30/G31		

SI	SLOVENIA	II2H3+ II2H3B/P	II2H3+ II2H3B/P	G20 - G30/G31 G20 - G30/G31
ES	SPAIN	II2H3+	II2H3+	G20 - G30/G31
SE	SWEDEN	II2H3B/P III1e2H3B/P III1ab2H3B/P	II2H3B/P III1e2H3B/P III1ab2H3B/P	G20 - G30/G31 G150.1 - G20 - G30/G31 G110/G120 - G20 - G30/G31
СН	SWITZERLAND	II2H3+ II2H3B/P	II2H3+ II2H3B/P	G20 - G30/G31 G20 - G30/G31
TR	TURKEY	II2H3+ II2H3B/P	II2H3+ II2H3B/P	G20 - G30/G31 G20 - G30/G31
HU	HUNGARY	II2HS3B/P I2H I3B/P	II2HS3B/P I2H I3B/P	G20 - G25.1 - G30/G31 G20 G30/G31

## 1.9. Oven commissioning

Before putting the oven into operation, you should carefully carry out all the necessary checks to ascertain the conformity of the equipment and installation of the appliance as provided by law and according to the technical and safety instructions given in this manual.

The compliance of the following must also be checked:

- The temperature in the oven installation area must be greater than +4° C.
- The cooking chamber must be empty.
- All packaging must be entirely removed, including the protective film applied on the oven walls.
- The vents and air slots must be open and free of obstructions.
- Any pieces of the oven that were removed for installation must be replaced.
  The general electrical switch must be closed and the water and gas
- The general electrical switch must be closed and the water and gas cut-off cocks upstream of the appliance must be open.

## 1.10. Oven testing

The oven should be tested by completing a cooking cycle to verify that the equipment works properly, without any anomalies or problems.

Turn on the oven using the master switch **T1** (fig. 12-pag. 16).

Set a cooking cycle with temperature to 150 ° C, time set to 10 min. and humidity to 25%. Press the key T2 (**fig. 12**) "Start/Stop".

Carefully check the points given in the following list:

- By pressing the power button T5 (**fig. 12**), the lights in the cooking chamber light up and after 45 seconds, if not turned off before pressing the button again, will turn off automatically.
- The oven will stop if the door is opened and starts to work when the door is closed.
- The thermostat that regulates the temperature in the cooking chamber is triggered when the set temperature is reached and the heating element is shut off temporarily.
- The fan motor reverses the direction of rotation automatically;

reversal takes place every 3 minutes (time varies depending on the cooking time).

- For the oven's with two fans in the cooking chamber, the motors have the same direction of rotation.
- Check for water leaks in the direction of the fan fitted on the tube that inputs moisture in the cooking chamber.
- At the end of the cooking cycle the oven emits a sound warning.

## 2. INSTRUCTIONS FOR USE

## 2.1. Identification of controls

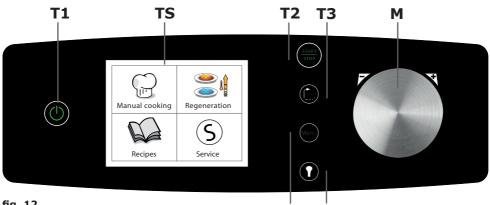


fig. 12

**T4 T5** 

#### STARTUP AND SHUTDOWN **T1**:

it allows you to turn the oven on and off by pressing it for a few seconds.

#### **T2**: **START/STOP KEY**

it enables starting and stopping the cooking cycle. This key can be: On: cooking in progress;

cooking not in progress or stopped; Off:

cooking is in waiting state (door open, error Flashing: messages or confirmation of operations).

#### **T3**: ESC KEY:

it allows the user to return to the previous page.

#### **MENU KEY: T4**:

it enables the user to return to the main menu.

#### **T5**: **LIGHTING KEY:**

to turn on the lighting system in the cooking chamber

#### **TS**: **TOUCH SCREEN:**

touch screen. The operating parameters of the appliance are set and displayed on this screen

#### **M**: **DIAL WITH ENCODER:**

The dial is used to set the values on the screen. If the dial is pressed, the value entered is confirmed.

## 2.2. Preliminary information

The appliance was designed to cook food indoors and should only be used for this function: any other use should be avoided as it is considered improper and dangerous.

During operation, supervise the appliance.

Before cooking, run a pre-heating cycle for the oven at a temperature of about +30 ° / +40 ° C higher than necessary.

The "touch-screen" fitted on the oven provides quick and intuitive access to all functions. The parameters and settings of each function can be set by choosing the function on the display, selecting the desired value by turning the dial **M** and confirming this value by pressing the button or the dial **M**. By pressing the dial **M** you can silence the alarms.

When switched on, the display shows the main menu where you can choose between manual cooking, recipes, service or regeneration\* (\*for KH models only).

The control panel of the oven is equipped with a single dial **M** (**fig. 12**) to insert or modify the operating parameters of the appliance. This knob can also be pressed to select a function or confirm a certain parameter. The dial acts upon a digital encoder and, therefore, it has a continuous rotation (there is no limit switch). The parameters set via the encoder vary: clockwise (increase) or counterclockwise (decrease).

At this point the oven is ready for use, in "stand-by" mode, waiting for user input.

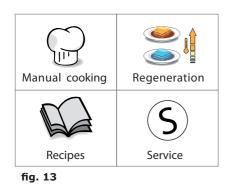
The lighting time inside the cooking chamber varies depending on the value set (see **section 6.4. Page 36**). If the oven's door is opened, the lighting system shuts down temporarily; when the door is closed, the lights turn on again.

The **T2 Start/Stop** key can either start a cooking cycle or end a cooking cycle in progress. If the cooking cycle is interrupted prematurely using the key **T2**, no sound warning is generated. This key also silences the cooking cycle end signal.

After switching off the oven by pressing and holding down the master switch T1, the water shut-off valve located upstream of the unit will be closed.

When turning off the oven, it may happen that the ventilation of the technical compartment at the top, above the cooking chamber, is running continuously to finish the cooling cycle.

### 2.3.1 Main menu of high efficiency ovens with boiler: KH....



After turning on the oven by pressing the button **T1** on display appears the main menu (**fig. 13**) where you can choose whether to proceed with the manual programming of the cooking (**manual cooking**), saved cooking programs (**recipes**), pot or tray regeneration programs (**regeneration**) or acess the Service menu.

To access any of the above functions, select on the touch screen the desired unction by pressing on it.

#### 2.3.2 Main menu for ovens with direct steam: KT....



fig. 14

After turning on the oven by pressing the button **T1** on display appears the main menu (**fig. 14**) where you can choose whether to proceed with the manual programming of the cooking (**manual cooking**), saved cooking programs (**recipes**), or acess the **Service** menu.

To access any of the above functions, select on the touch screen the desired unction by pressing on it.

## **3. MANUAL SETUP 3.1. Cooking mode selection**

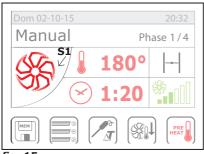
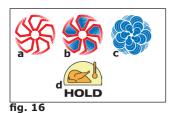


fig. 15



#### **CONVECTION MODE:**

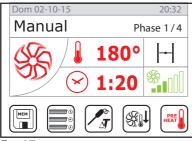
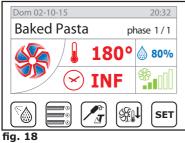


fig. 17

## COMBI MODE:



Once you have accessed the manual setup you can start defining the cooking parameters such as: cooking mode, ventilation, time, moisture, etc.

By pressing the icon **S1** once, a pop-up window will be displayed (fig. 16) showing the cooking modes available:

**a**: CONVECTION (cooking with hot air only)

**b**: COMBI (mixed cooking - convection/ steam)

c: STEAM (cooking with steam only)

d: HOLD (hold/aging mode)

Now all you have to do is select the desired cooking mode by pressing the relative icon.

In this mode it is possible to set:

• the cooking temperature between 30 and 300°C (ovens KH...) and between 50 and 300°C (ovens KT..)

- the timer from 1 to 120' or infinite
- core probe temperature
- cooking ΔT
- position of throttle valve
- ventilation.

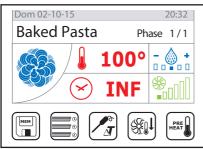
In this mode it is possible to set:

 the cooking temperature between 30 and 270°C (ovens KH...) and between 50 and 270°C (ovens KT..)

- the timer from 1 to 120' or infinite
- core probe temperature
- cooking  $\Delta T$
- percentage of moisture during cooking
- ventilation.

20

#### **STEAM MODE:**



In this mode it is possible to set:

• the cooking temperature between 30 and 120°C (ovens KH...) and between 50 and 120°C (ovens KT..)

- the timer from 1 to 120' or infinite
- core probe temperature
- cooking ΔT
  - steam tuner (steam quality).

fig. 19

## 3.2. Setting the tempeature and automatic pre-heating

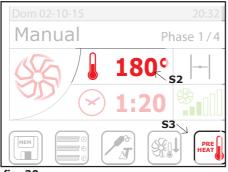


fig. 20

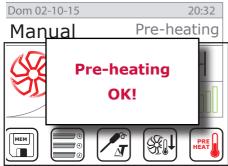


fig. 21

#### **IMPORTANT!**

Select on display the temperature setup **(S2 - fig. 20)** and choose the temperature turning the dial **M** clockwise to increase the temperature or counterclockwise the decrease it.

Confirm by pressing the dial  ${\bf M}$  or the display  ${\bf S2}.$ 

Once you have set the cooking temperature, the pre-heating function of the oven can be selected by pressing the key **S3 (fig. 20).** Pre-heating is active if the icon **S3** is red.

The oven automatically determines the pre-heating temperature, bringing the oven to a **temperature 22% higher than that set** for cooking.

When the pre-heating temperature is reached, the oven generates an acoustic signal and on display appears the pop-up window (**fig. 21**).

During the automatic pre-heating phase the oven should be empty. Wait for the pre-heating cycle to complete and than load the oven.

## 3.3. Time setting

To set the cooking time of each single stage (part of the program), select it by pressing the display **S4 (fig.22)**. Set the time turning the dial M clockwise to increase the time or counterclockwise to decrease it.



fig. 22

pre-heating cycle.

Confirm the set value by presisng the key  ${f S4}$  again or by pressing the dial  ${f M}$  of the encoder.

The oven can manage cooking cycles from 1' to 120' or infinite.

The **infinite** position can be found by turning the dial **M** counterclockwise.

The cooking time is calculated from the moment in which you press the key **T2 "Start" (fig. 12-page 16)** and, however, after the completion of the automatic

The time is temporarily interrupted when the door is opened or due to a minor alarm.

In case of major alarm, however, the cooking cycle is permanently interrupted and once you have solved the problem that caused the alarm, it cannot be resumed. In this case, you should set a new cooking cycle.

When the time set elapses, the oven stops automatically in "stand-by" condition and generates an audio signal that lasts about 15 seconds.

## 3.4. Setting the fan speed



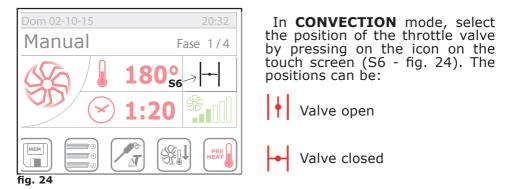
fig. 23

In **CONVECTION** or **COMBI** cooking mode, select the fan speed setup page on display (**S5 - fig. 23**) and choose the desired speed turning the dial **M** clockwise to increase the value or counterclockwise to decrease it.

Confirm by pressing the dial **M** or the display **S5**.

The fan/fans of the oven features/ feature 6 rotational speeds that can be set by the user.

### 3.5. Manual adjustment of the butterfly valve



The valve has the task of maintaning or expelling the moisture outside the oven. When the valve is open, the higher the fan speed, the greater the evacuation of moisture from the cooking chamber.

#### 3.6. Manual humidifier



In **CONVECTION** or **COMBI** mode, if you press the icon on the touch screen (**S7 - fig. 25**) you can manually add moisture during cooking.

The pressure enables direct injection of water on the fan that is further vaporized in the cooking chamber.

Water is injected as long as the icon is pressed.

**3.7.** Setting the percentage of moisture in the COMBI cooking mode



In **COMBI** mode, select the setting of moisture percentage during cooking (**S8 - fig. 26**) and select the desired degree turning the dial **M** clockwise to increase the value and counterclockwise to decrease it.

Confirm by pressing the dial  ${\bf M}$  or the display  ${\bf S8}.$ 

The moisture level can be set gradually, by 5% (0-5-10-15-20%..).

## 3.8. The steamtuner function



In **STEAM** cooking mode, it is possible to operate the **steam tuner** control (**S9 - fig. 27**).

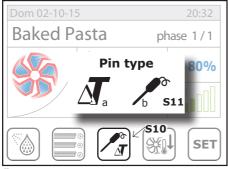
The selector in middle position indicates the average adjustment of steam hydration. The quality of the steam inroduced inside the cooking chamber can be adjusted by pressing keys + or -, depending on the type of cooking desired.

The sign – indicates a dryer and soft steam suitable for baking pastries, fish or leafy greens.

The sign + indicates a concentrate steam suitable for cooking food with particularly hard fibre: for example potatoes or carrots.

The **steam-tuner** does not modify the amount of steam inside the cooking chamber, that remains at 100% at all times.

### 3.9. Coooking with core probe - $\Delta t$



#### fig. 28

Select the option **Probe**/ $\Delta$ **T** an press the relative key **S10** (**fig. 28**); on display appears a selection window **S11** (**fig. 28**) with two options: **a**=  $\Delta$ T (Delta-T), **b**=probe. Select the desired mode by pressing on display **S10** (**fig. 28**).

Depending on the selected mode, on display will be activated the rectangle for selecting the temperature. The probe mode determines the cooking time based on the temperature measured by

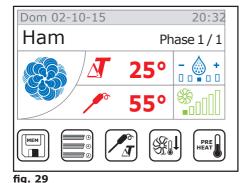
the probe in the middle of the product: once you have selected the temperature of the room and of the probe, the cooking cycle will stop when the temperature of the product recorded by the probe reaches the set value.

The  $\Delta \mathbf{T}$  mode, instead, determines the temperature of the cooking chamber based on the temperature measured by the core probe: by setting a value  $\Delta \mathbf{T}$  equal to 25°, the temperature inside the chamber remains steadily 25° higher than that measured by the probe in the middle of the product. The cooking will stop when the temperature of the product measured by the cooking probe reach the set value.

Set the desired temperature by turning the dial  $\mathbf{M}$  of the encoder clockwise; confirm the selection by pressing the dial  $\mathbf{M}$ .

#### HOW TO POSITION THE PROBE TO THE CORE:

The probe should be placed in the food so that the tip is located in the center of the thickest part of the product.



#### USING THE AT COOKING MODES:

The ΔΤ cooking modes are particularly recommended to cook roasted meat of medium/large size or ham. During this type of cooking the temperature in the cooking chamber is steadily maintained lower than during conventional cooking but with longer times thus increasing the tenderness of the final product and decreasing the loss of weight of the food at the same time,

We recommend you set the following  $\Delta T$  temperatures:

- 30°C to roast red meat with a core temperature between 45°C and 55°C;
- $\bullet$  25°C to roast white meat with a core temperature between 75°C and 85°C.

## 3.10. Multilevel cooking with RACK CONTROL

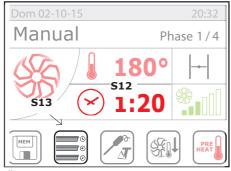


fig. 30

Example:

- level 1 = 10 minutes
- level 3 = 60°C core probe
- level 4 = 7 minutes

Set the timer or core probe temperature to the desired level by selecting

Select the **RACK CONTROL** mode pressing the relative key **S13**fig. **30**;

**Note:** The key **S13** will be displayed only if the time **S12** is set to infinite (**INF**).

Once the oven is set to **RACK CONTROL** mode, you can set the time or core probe temperature up to 6 values in relation to the various levels present inside the oven. the relative level. A pop-up will be displayed, enabling you to select the timer (**a**) or core probe (**b**) mode. Select the desired mode, and set the value by turning the dial **M**. Confirm by pressing the dial **M** or the pop-up.



fig. 31

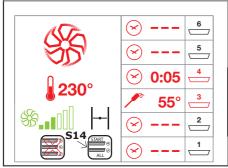


fig. 32

ON the left side of the screen it is possible to set or modify the cooking parameters (mode, temperature, fan, etc.)

THE **RACK CONTROL** can be used in two different modes:

• with oven in **STOP** mode (programming);

• with oven in **START** mode (cooking already started).

Setting the values of various levels with the oven in **STOP** mode; one you have pressed the **Start** button (**T2 page 16**) the oven will start cooking with the values set for: cooking mode, temperature, etc. .. set (with the relative automatic preheating cycle, if set). The operator should then manually start the timer/control of core temperature for each level by pressing on the pan icon ( $\bigcirc$ ) related to the desired level. When a level has been activated the icon will turn red  $\bigcirc$ .

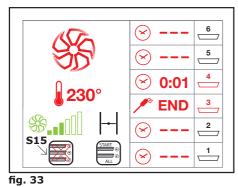
YOU can start all the levels at once by pressing the corresponding key **S14 fig. 32**.

If you use the **RACK CONTROL** mode, instead, with the oven set to **START**, after you have set the timer or core probe temperature value, the dedicated control will start automaticall, once you have confirmed the value set.

Upon reaching the set core temperature or at the end of the time set on the relative level, on display appears the writing **END** and the oven emits an acoustic signal. At this point you can open the oven door and remove the pan and close the door. The relevant level will reset automatically.

**Note:** when a level is completed and the writing **END** appears on the relative level, the oven **does not** enter the **Stop** mode, but continues the set cooking cycle.

To exit the **RACK CONTROL** mode, press the key **S15 fig. 33** for 3 seconds.



**Note:** the values of the various levels in **RACK CONTROL** mode cannot be memorized; however, in the case you exit this module by accident, you can access it again (without changing the cooking parameters) by pressing the button **S13 fig. 30 page 24** and without losing the parameters set for the various levels

### 3.11. Maintenance

The **HOLD** function keeps the food hot upon cooking cycle completion. For example, at the end of a night-time cooking cycle, the products are kept at a safe temperature until the operator returns into the kitchen.



fig. 34

#### regulations.

Set the hold mode by pressing the cooking mode button **S16 fig. 34** and select the hold icon **d** (fig.16). Then set the temperature (up to 120 ° C) and the relative humidity.

**Note:** in order to ensure proper hygienic preservation of the products, we recommend you keep the latter above 60°C and, however, **in compliance with local health and sanitary** 

It is also recommended to set a maintenance moisture between 20 and 30% for cooking roasts and between 90 and 100% for casserole cooking.

## 3.12. Automatic cooling during cooking

The **AUTOMATIC COOLING** during cooking enables setting a cooling phase inside the cooking chamber between two phases of the cooking program (see section **3.14 pag. 28**), for example, between a browning and a low-temperature cooking phase.

Note: the automatic cooking icon (ref. e fig. 36) is visible only from

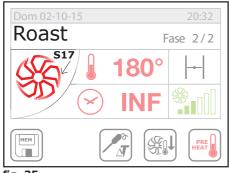


fig. 35

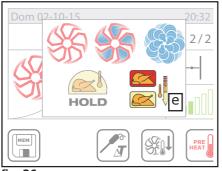
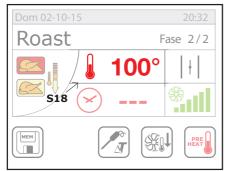


fig. 36





#### phase 2.

Set the automatic cooling by pressing the cooking mode icon (**S17** fig. **35**) and select the cooling icon (**e - fig. 36**). Then set the cooling temperature by pressing the temperature icon (**S18** fig. **37**) and turning the dial **M**. Confirm by pressing the dial **M** or the pop-up.

Note: in AUTOMATIC COOLING mode the "time" cannot be set because this phase will last until the temperature inside the cooking chamber reaches the set value. In order to speed up the automatic cooling process, we recommend you keep the fan speed unchanged as well as the position of the throttle valve in relation to those proposed by the oven automatically.

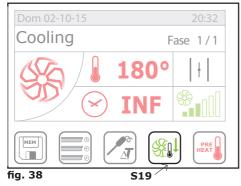
The automatic cooling can be set up to  $100^{\circ}$ C.

This phase should be carried out with the door close. If the door is opened during the **AUTOMATIC COOLING**, the phase is interrupted.

After reaching the set cooling temperature, the oven automatically switch to the next phase (if any).

## 3.13. Manual cooling of the cooking chamber

The cooling function allows the operator to quickly reduce the temperature in the cooking chamber.



To run a cooling cycle in the cooking chamber, the oven shoud be set to *Stop* mode. Select the cooling key (**S19** fig. **38**), press *Start* (**T2** page **16**) and open the door.

Note: for safety reasons, the cooling function can be enabled only with the door close. The door can be opened only after having pressed the Start button.

By default, the oven sets a cooling temperature up to 50  $^{\circ}$  C inside the cooking chamber;HOWEVER, you can set a different value following the procedure described in the cooking temperature setting section (page **20**).

Upon reaching the cooking temperature, the oven stops cooling and emits an acoustic signal.

## 3.14. Programming a recipe with severa cooking phases

Every single cooking phase described above can be stored for composing a cooking program with multiple phases.

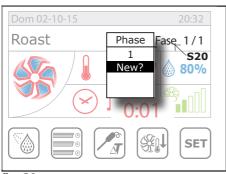


fig. 39

After setting the first phase, press the key **S20 - Phase**. Thus you will access the hidden menu (**fig. 39**).

Turn the dial **M** clockwise showing the writing "**New**" and confirm by pressing the dial **M** or click directly on the word "**New**".

Now you can enter the cooking parameters of the second phase.

IF you repeat the steps above, you can enter into the same cooking program up to 9 different phases.

Note: if the time set for the timer is infinite (*INF*), it shall not be possible to add a new phase.

## **3.15.** Memorizing and managing the recipes.

THE cooking program created inside the electronic recipe book of the oven can be saved.



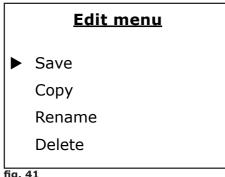
Once you have finished creating a cooking program, press the key **S21** *MEM* fig. **40** to access the recipe management page (fig. 41).

Turn the dial M select "Save" and press the dial to confirm.

Now select the group (fig. 42) in which to save the program: Starters, Meat, Fish, Greens, Bread, Dessert.

fig. 40

Once you have chosen the group in which to save the recipe, you must enter the name of the recipe (**Es. Roast Beef**) and press "**MEM**".



From the recipe management menu you can perform actions such as: **Copy:** copy the recipe

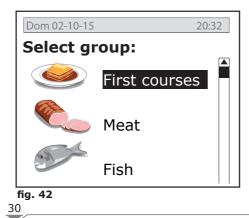
**Rename:** change the name of the recipe

**Delete:** delete a part or the entire recipe.

To delete the stored program go to the phase from which you intend to delete, enter the recipe management ménu (S21 fig. 40) and select the option: **Delete**.

fig. 41

Note: the part of the program will be deleted starting from the selected phase, together with the next phases.



For example, if a program has 7 phases and you delete phase 3, the following phases: 4, 5, 6 and 7 will be deleted as well.

If you want to delete the whole program, delete the phase 1, and all the phases will be deleted.

Note: when attempting to delete entire cooking program, an а confirmation pop-up window is displayed to avoid deleting the unintentionally. program Select Yes to confirm or **No** to cancel.

## **4.REGENERATION PROGRAM**(ONLY VERSION KH..) **4.1. Preliminary Information**

This function is provided only for version KH....

The Regeneration function was developed to regenerate (therefore take to service temperature) pre-cooked and blast frozen products in positive  $(+1^{\circ}C + 4^{\circ}C)$ .

#### It is the duty of the operator to verify that the regeneration temperature at the core of the food corresponds to that indicated by the local sanitary regulations.

The regeneration menu allows you to perform a timed regeneration (indicated for the regeneration of ready meals or small products) or with core probe (for regeneration of larger food such as whole roasts).

Furthermore, regeneration can be:

- normal: recommended for most of the products
- **soft:** indicated for the regeneration of delicate products or low-temperature cooking
- **crispy:** to give the product a crispy crust; suitable for the regeneration of fried and breaded products.

**Note:** if you select the **soft** regeneration, in order to ensure a gentle regeneration of the product, you can double the regeneration time with respect to the normal regeneration time.

## 4.2. Setting the timed regeneration

Access the main page and enter the regeneration program.



Then set the regeneration time by pressing the key S22 fig. 43 and turn the dial M. Confirm the time selected by pressing the dial M.

Now press the *Start* button (**T2** fig. **12** Page **16**) to start the program. Wait for the initial pre-heating phase to complete and then load the oven.

#### fig. 43

**Note:** generally, for pot regeneration, the time varies from 6 to 10 minutes, depending on the quantity of product present on the plate itself.

## **4.3.** Set the regeneration with probe at the core

Access the main page and enter the regeneration program.

Select the pin probe function by pressing the key **S24** fig. **44**. The program will automatically propose a final core temperature of 60  $^{\circ}$ .

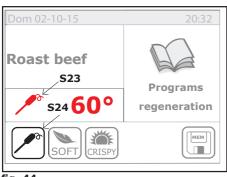


fig. 44

YOU can change the core regeneration temperature by pressing the key **S23** fig. **44** and turn the dial **M**. Confirm the selected value by pressing the dial **M**.

Now press the *Start* button (**T2 fig. 12 page 16**) to start the program.

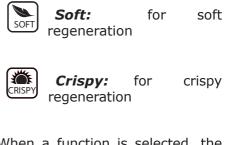
**!Wait for the initial preheating phase to complete and then load the oven!** 

## 4.4. Special regeneration functions

To set the **Soft** or **Crispy** regeneration, proceed as described in sections **4.2** e **4.3** . to set the time or core temperature and click the button:



fig. 45



When a function is selected, the button turns red.

Note: each function disables the

other functions. For example, you cannot regenerate food with the function *Soft*, *Crispy* or *Normale* simultaneously.

Now press the *Start* button (**T2 fig. 12 page 16**) to start the program.

# ! Wait for the initial pre-heating phase to complete and then load the oven. $!_{32}$

#### 4.5. Save - Edit - Delete a regeneration program

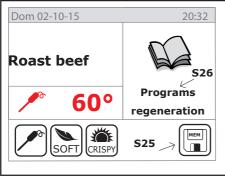


fig. 46

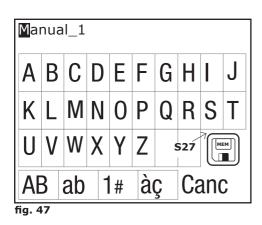




fig. 48

YOU can save the regeneration programs to use them again for another cycle.

Once you have set the duration of regeneration or the core temperature and selected the special functions **SOFT** or **CRISPY**, if needed, press the key **S25 fig. 46** and enter the name of the program using the keyboard **fig. 47**. Confirm the name by pressing **Mem** (**S27 fig. 47**).

Now press the **Regeneration programs** button (**S26 fig. 46**) to display all the programs saved (**fig. 48**).

Once the desired program is selected, pressing the **Mem** key (**S25 fig. 46**) it is possible to **modify or delete** the regeneration program.

Ii's possible to **make changes** to time, temperature, or choice of Soft or Crispy functions.

The **rename** function allows you to change the program name.

The **copy** function creates a program with a different name from another existing program.

With the **delete** function the regeneration program is finally deleted.

These functions can be found in the **Edit menu** as for recipe programming (**fig. 41 pg. 29**)

## **5.** RECIPE MENU

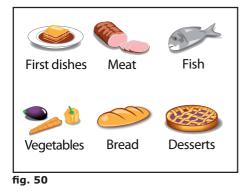
## 5.1. How to navigate through the recipe menu

The recipe menu gives you access to the cooking programs stored in the memory of the oven.

Select the recipe menu from the main page.



fig. 49



Select the reference group (**fig. 50**), for example meat, if you wish to make a roast, and then choose the desired program by turning the dial clockwise to reach the desired program. The clockwise or counterclockwise rotation of the dial moves the cursor, highlighting the selected program in black.

Confirm the selected value by pressing the dial M

Now start the cooking program by pressing *Start*.

You can create a new recipe directly from the recipe menu:

Enter the desired group (**fig. 50**) and turn the dial **M** clockwise until you reach the last option: *New recipe*.

Then enter the name of the program and press "*End*".

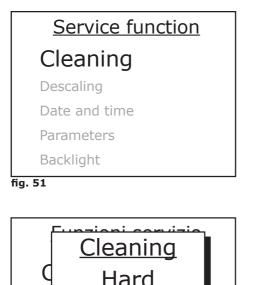
Set the cooking parameters following the steps given in **chapter 3**.

After programming, you must save the program as described in section **3.15**.

## 6. SERVICE MENU

## 6.1. Self-cleaning

The self-cleaning function of the ovens equipped with this function can be accessed by entering the *Service* menu from the main menu.



Normal

Soft

When you select the "**SOFT**", wash before the "CHANGE TANK", the program asks "**MAKE DRY? YES NO** ", unlike the HARD AND NORMAL washings, in fact, this feature is optional.

Select the cleaning option from

the menu by pressing the dial **M**.

Now select the type of selfcleaning (**fig. 52**) based on how

Press **Start** to start the cleaning

At this point the program

prompts "CHANGE TANK? YES or NO". This feature allows

you to choose the amount of detergent to be loaded from

cleaner hose is full or empty; consequently it will vary the

suction time of the first dose of

depending on the

dirty is the inside of the oven.

program.

the tank,

deteraent.

In addition to the automatic wash you can select the **RINSE** function. You can select this function from the menu **Fig. 52** and activate it by pressing the **START** button. This function does not use detergent but only water and the duration is 8 minutes.

**Note:** before starting the selfcleaning program, verify that the detergent pipe is completely immersed in the detergent bin and that there is a sufficient amount of product inside.



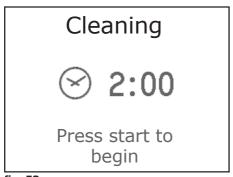


fig. 53

**Note:** in the case the room temperature is higher than 150 ° C, the oven automatically proposes the cooling cycle for the cooking chamber (see section **3.13 page 28**). Run the cooling mode and then restart the cleaning cycle.

#### **IMPORTANT:**

Use exclusively approved detergents: OVEN LIQUID DEGREASER (by TF), to clean the oven. The use of unapproved detergents shall void the warranty of the oven.

#### WARNING:

Do not open the door of the oven during cleaning.

#### **IMPORTANT:**

The cleaning nozzle should be cleaned periodically in a dishwasher.

Loosen the screws **A** (Fig.54) and remove the nozzle, pulling it downwards.

After cleaning, re-insert the nozzle into its slot by pushing it upwards and tighten the screw **A**.

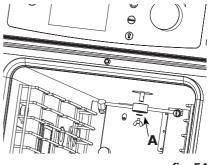


fig. 54

## 6.2. Boiler descaling (for models KH..only)

Ovens equipped with high performance boilers (model **KH**...) should be descaled periodically to keep the latter efficient and reduce the risk of damage.



Ask your installer for advice on intervention frequency. Make sure that the conditions of water hardness comply with the recommended parameters (60-120 ppm). **In case of water hardness greater than 120 ppm, it is recommended to install a water softener upstream of the oven**.

Perform descaling by accessing the **Service** menu. Use the dial **M** to select the option **Descaling** and press **Start**.

The oven will start to empty the boiler and then the operator will be asked to introduce 0.4 L of vinegar through the steam inlet of the cooking chamber (left innner side). Descaling will start automatically. The oven shuts down upon completion

#### 6.3. Date and time



The **Date and time** functions enables adjusting the time and date on oven's display.

Access this function from the **Service** > **Date and time** menu and set the values using the dial **M**; turn it clockwise and counterclockwise to access the various options (*day*, *month*, *year*, *hour*, *minutes*), select the desired option using the dial **M** and change the value turning the dial. Press the dial to confirm.

Once you have set the value, press **Menu** or **Esc** to return to the main page.

# 6.4. Adjust the duration of lighting in the cooking chamber

YOU can adjust the duration of lighting in the cooking chamber using the option *Parameters* in *Service* menu.

Press the dial on the option *Parameters* first and then confirm (without



fig. 57

having set any password) by pressing the dial.

The oven will display the relative parameter with the current lighting time in seconds. Set the time from 0 to 225 seconds.

**Note:** If you set the value to **254** seconds, the light will turn on when you press **Start** and will turn off upon cooking cycle completion.

# 6.5. System info

The **System info (fig. 58-59)** refer to the version of the control software currently installed on the oven.

In addition to the serial number of the oven, you can consult the System info to find out the working hours of the boiler from last descaling.

## Sevice function

Descaling

Date and time

Parameters

Backlight

System Info

fig. 58

#### Service function

Date and time

Parameters

Backlight

System Info

Language

fig. 60

## 6.7. Advanced services

The **Advanced services (fig. 61)** function, protected by numerical and selectable via M dial, provides access to test functions reserved to qualified technical staff.

# System info

Keypad: Ver 366 Rev 000 RevE2 000 06 / 12 / 13 Base: Ver 244 Rev 005 05 / 09 / 12 SR.N.: 0002154/12/13

Boiler: 2hr

fig. 59

#### 6.6. Language

Using this function it is possible to change the language of oven's menu.

#### Service function

Parameters

Backlight

System Info

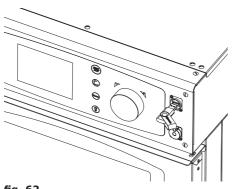
Language

Advanced Services

fig. 61

#### 6.8. HACCP recording

The recording function HACCP enables recording a file in **txt** format, containing the cooking chamber and core probe temperatures for all cooking cycles performed with the oven, to an USB flash drive



The HACCP function only works with USB flash drive inserted in the oven (fig. 62).

Ask your installer to activate this feature.

fig. 62

#### 6.9 Import/Export recipes

Insert a flash drive in the USB port located on the control panel (fig. 59) to activate the recipe import /export functions

#### Service function

System Info

Language

Advanced Services

- ▶Import Recipes
- Export Recipes

fig. 63

The Import recipe (fig. 63) function enables loading in oben's memory the recipes previously set on PC or exported from another oven.

The Export recipe (fig. 63) function enables loading on an USB flash drive the recipes previously saved in oven's memory.

# **7.** MAINTENANCE

#### 7.1. Cleaning

Before performing any cleaning or maintenance work unplug the appliance.

At the end of the working day, clean the appliance, both for reasons of hygiene and to prevent operating faults.

The oven should never be cleaned with direct water or high pressure jets. Moreover, the appliance should not be cleaned with wire sponges, ordinary steel brushes or scrapers; eventually, you can use stainless steel wool, wiping the appliance in the direction of sheet metal grain. Wait for the cooking chamber to cool down.

Remove the tray holder panels.

Clean the debris that can be removed manually and put the removable parts in the dishwasher.

To clean the cooking chamber use warm soapy water. Subsequently, all concerned surfaces must be rinsed thoroughly and make sure you have removed any detergent residue.

To clean the outer parts of the oven, use a damp cloth and a mild detergent.

During the annual inspection, conducted by a qualified technician, remove the deflector and wash it with soapy water.

#### 7.2. Technical compartment ventilation filter

In order to keep the electronic components of the oven at a safety temperature , you should clean the ventilation filter periodically, **at least once a month**.

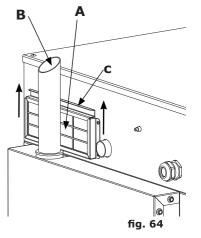
The filter is located on the rear side of the oven(**ref. A fig. 64**).

Proceed as follows:

- 1. Grab the filter tab (**ref. c fig. 64**), and lift it, sliding the filter upward from its housing.
- 2. Remove the filter from its mould, wash it with warm water and mild soap and dry it with a clean cloth.
- 3. Place the filter inside its mould and slide it inside its housing.

#### WARNING:

If the oven enters Hi Temp alarm state, the most probable cause is an excessive dirt accumulation on the filter. <u>Therefore, clean the filter immediately</u>.



#### 7.3. Moisture drain

Moisture drain (ref. B fig. 64 page 39) ejects the vapors produced inside the cooking chamber.

Check that it is always perfectly clean and free from obstructions.

#### 7.4. Cleaning glass

The door window can be cleaned either on the outside and on the inside. Turn the latch that locks the internal window (**fig. 65**) ande, once you have opened the window, clean it with a suitable detergent. Never use abrasive materials.

The glass should then be closed properly and locked in place by turning the special latch.



fig. 65

#### 7.5.Adjustment of the door closure hinges

Should it be required, the door hinges can be adjusted to optimize closure and tightness of the door seal on oven's cooking chamber.

The hinges of the door should be adjusted so as to ensure maximum sealing of oven's door during the cooking cycles. You can adjust both the top and the bottom hinge **(fig. 66 fig. 67)**.

To adjust the tightness of the door, if necessary, loosen the bolts (ref. a-b fig. 66 and fig. 67) and move the door in the desired position (fig. 68).

After the adjustment, tighten the bolts again.

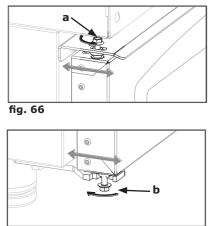
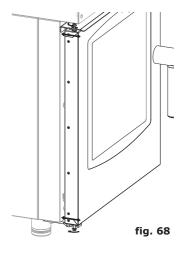


fig. 67



# 8. CONTROL AND SAFETY DEVICES

#### 8.1. Door micro switch

The door microswitch is the device which stops the cooking cycle of the oven when the door is opened.

Once te door is closed, the regular cycle is resumed.

Do not operate this device manually with the oven door open.

#### 8.2. Motor thermal breaker

The fan motor is equipped with a built-in thermal protection which stops operation in case of overheating.

The motor restarts automatically as soon as its temperature is lowered, returning within the safety range.

#### 8.3 Safety thermostat of the cooking chamber

If the temperature in the cooking chamber reaches  $350 \circ C$ , the thermostat disconnects the power supply to the heating elements of the oven. This safety device can be reset only by a qualified support service

technician because it requires further checks.

# 9.CHECKS THAT CAN ONLY BE PERFORMED BY AN AUTHORIZED TECHNICIAN

Cut off the power supply before proceeding with any adjustment or intervention.

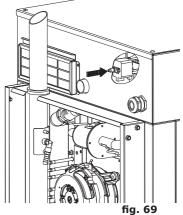
#### 9.1. Reset The Safety Thermostat

Loosen the screws that fix the control panel and open it, making it rotate to the left on its guides (**pag.69**).

Locate the thermostat, positioned in the lower left side of the technical compartment and press the red button until a mechanical sound ("click") is heard, which will confirm the closure of the contacts (**fig. 69**).

The thermostat can be triggered due to mechanical stresses to which the oven can be subjected during transport.

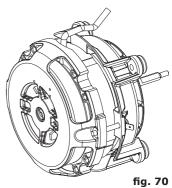
Continuous intervention of the safety thermostat indicates a malfunction of the device and makes it essential to investigate the causes.



#### 9.2. Motor Circuit Breaker Protection

The motor circuit breaker is reset automatically and, if this occurs, check the cleanliness of the slits, the efficiency of the cooling devices and the regular and frictionfree rotation of the motor.

It is recommended to cut off the power supply.



#### 9.3. Protection Fuses

The protection fuses are used to protect the circuit boards of the oven against overvoltage. These are found in the bottom part of the technical compartment, near to the safety thermostat rearm button.

#### 9.4. Flame Control

#### **Caution:**

The flame control only functions correctly if the oven electric connection has been performed respecting the position of the phase and neutral. Between phase and  $\pm$  there must be a difference in potential of 230V.

#### 9.5. Spare Parts Management

The parts should be replaced exclusively by an authorized service centre.

To identify the codes of spare parts, contact a service representative.

Once the parts required have been identified, the after-sales service will send a written order to the manufacturer, specifying clearly the model of the device, its serial number, the voltage and frequency of power supply, and also the code and a description of the parts concerned.

Only original spare parts must be used for protection of the health of the user and consumer.

# 10. ALARMS DESCRIPTION

If an alarm is triggered, on temperature and time display is shown the name of the alarm triggered.

The alarms managed are the following:

NAME	DESCRIPTION	ACTIONS	SOLUTION
Chamber probe	Chamber probe failure	Cooking cycle block; automatic reset.	Replace the chamber probe.
Core probe	Pin probe failure	Manual reset.	Replace the pin probe.
Safety motor	Motor alarm	Cooking cycle block; automatic reset.	Check alarm repetitivity (possible failure thermal "clikson" inside motor) Verify motor thermal conctact state with I-O Check. check the side aeration in the oven and ther proper operation of technical compartment fan coolers. Conctact the help centre if the alarm persist.
Inverter	Motor Inverter Alarm	Cooking cycle block; automatic reset.	Cut off the power and power again. Check inverter code. If the problem persists, contact the support centre.
Chamber safety switch	Chamber thermal breaker	Cooking cycle block; automatic reset.	Check the safety thermostat. If the problem persists, contact the support centre.
Hi temp	Temperature inside the technical compartment is too high	Cooking cycle block; automatic reset.	Check the cleanliness of the ventilation filter, the perimeter ventilation of the oven (slots) and the correct operation of the components cooling fans.
No water	There is no water to generate steam	Cooking cycle block; automatic reset.	Check the connection to water pipeline and make sure the shut-off valve is open. Verify the correct operation of pressure switch.
Communication	Main board communication failure	Cooking cycle block.	Cut off the power and power again. If the problem persists, contact the support centre.
E23 - No drain	The water in the boiler is not drained correctly	Cooking cycle block.	Cut off the power and power again. If the problem persists, contact the support centre.
E22 - Power fail	Electric power supply is interrupted	Cooking cycle block.	Press M for 1 second.
E19 - Probe 4	Moisture control probe 4 alarm	Cooking cycle block.	Replace the moisture control probe 4
E20 - Probe 5	Moisture control probe 5 alarm	Cooking cycle block.	Replace the moisture control probe 5

#### **11. DISPOSAL OF THE APPLIANCE**

At the end of its life span, the appliance must be disposed of in accordance with legal obligations.

The symbol in **Fig. 71** specifies that, at the end of its life span, the appliance must be disposed of according to the indications of the European Parliament Directive **2012/19/EU** dated **04/06/2012**.

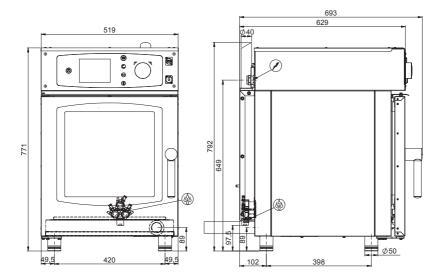


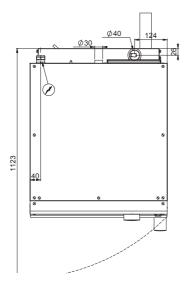
fig. 71

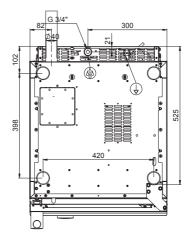
#### Information regarding disposal in nations of the European Union

The European Community Directive regarding WEEE equipment has been implemented differently by each nation, therefore if his appliance is to be disposed of, we suggest you contact the local authorities or the dealer to find out the correct method of disposal.

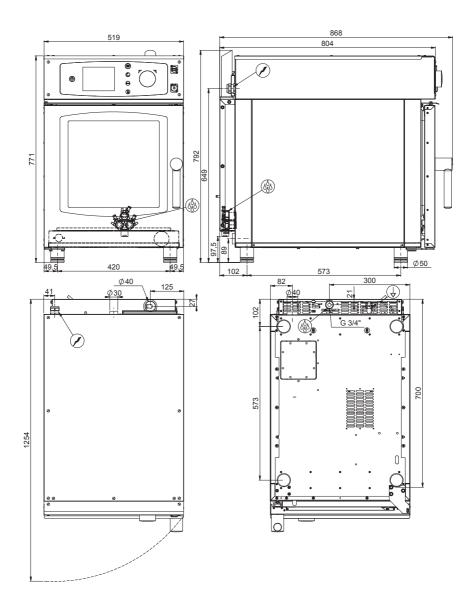
#### 12. TECHNICAL DATA SHEETS 12.1. KH0623(W) - KT0623(W)





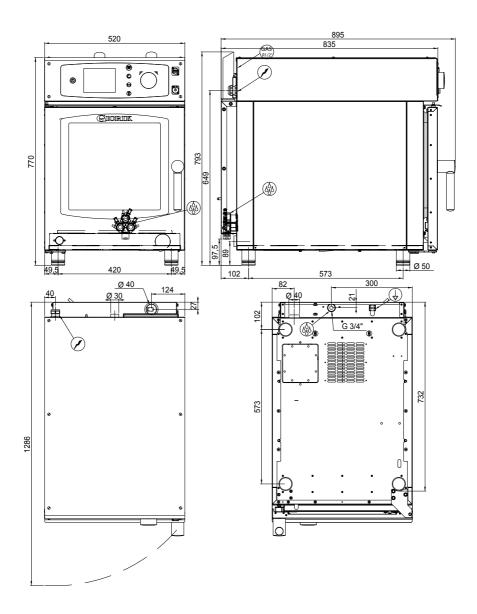


#### 12.2. KH061(W) - KT061(W)

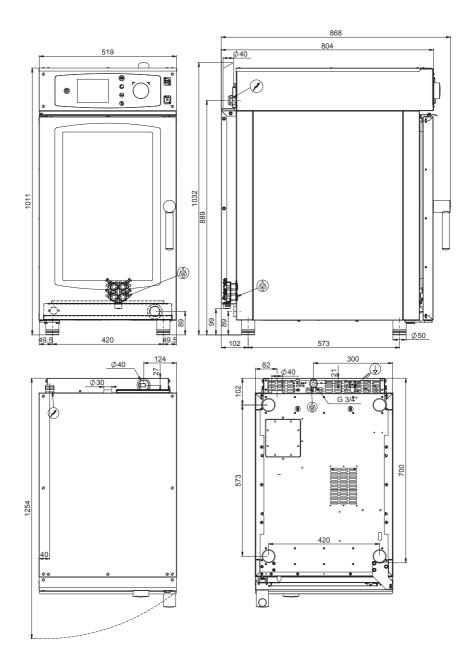


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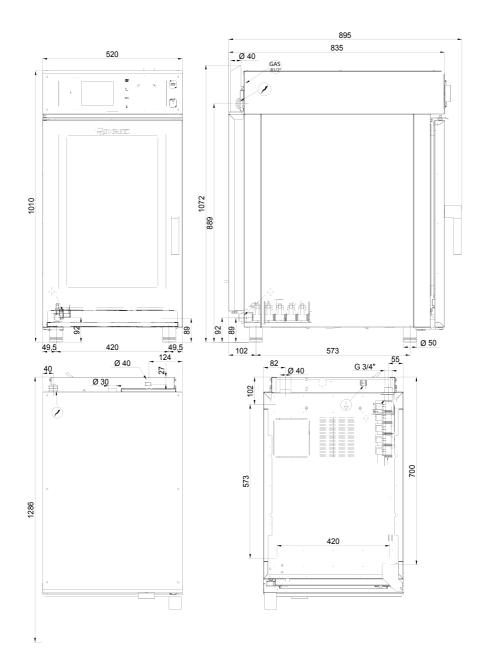
# 12.3. KHG061(W) - KTG061(W)



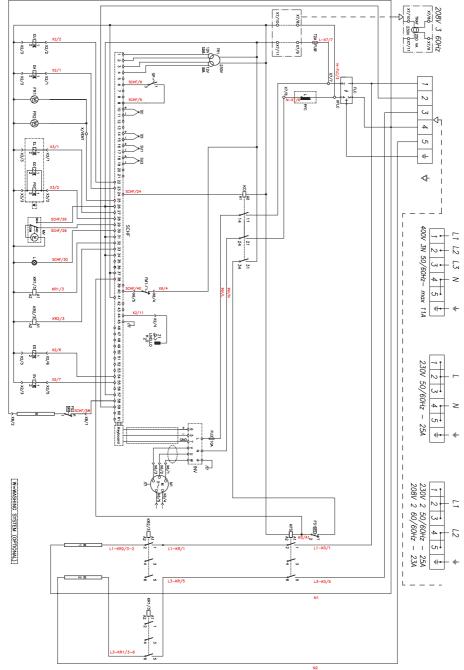
#### 12.4. KH101(W) - KT101(W)



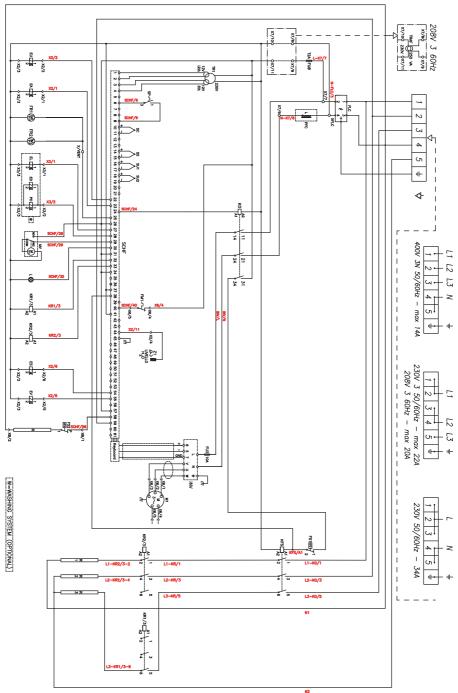
# 12.5. KHG101(W) - KTG101(W)



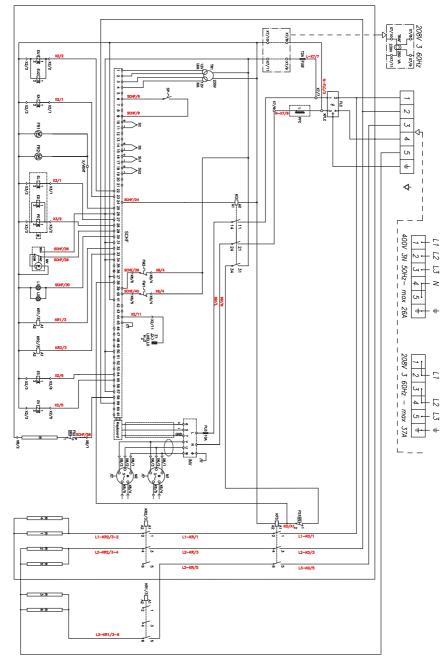
#### 13. WIRING DIAGRAMS 13.1. KH0623(W)



# 13.2. KH061(W)



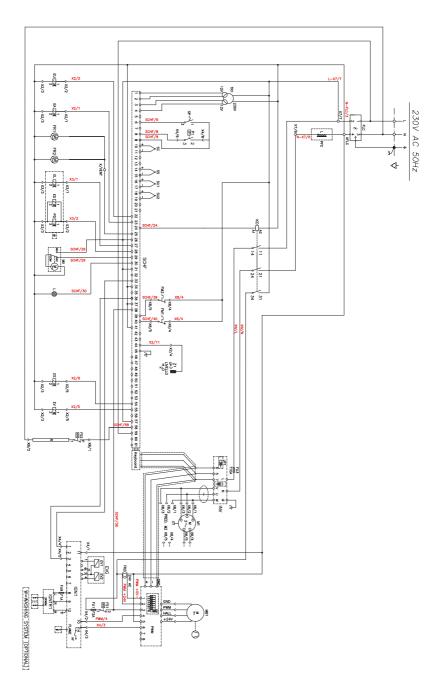
#### 13.3. KH0101(W)



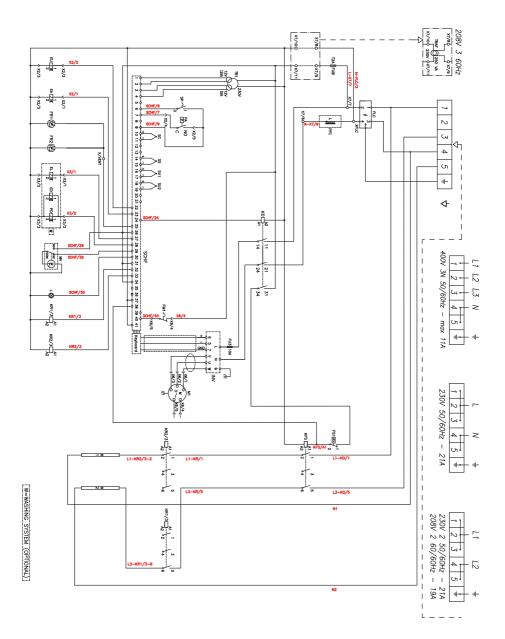


53

# 13.4. KHG061(W)-KHG101(W)

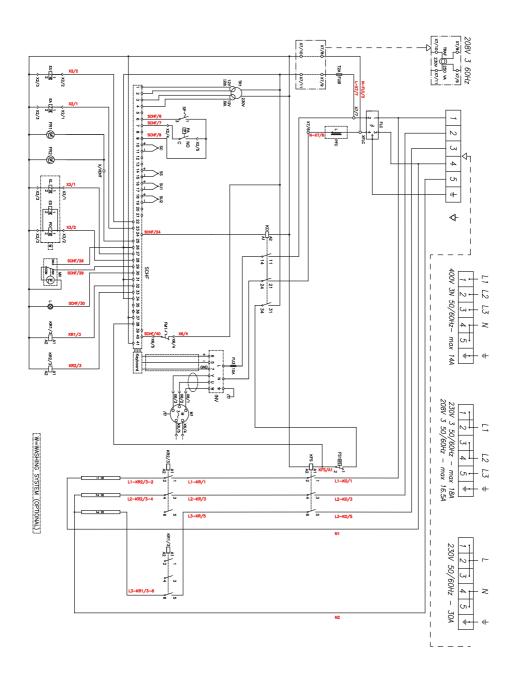


#### 13.5. KT0623(W)

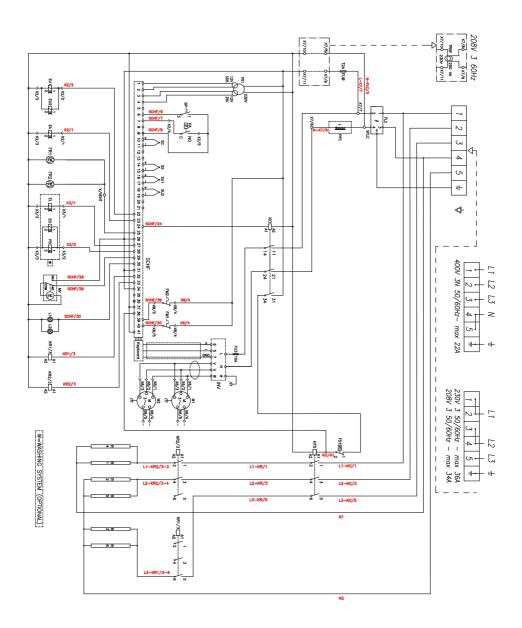


55

# 13.6. KT061(W)



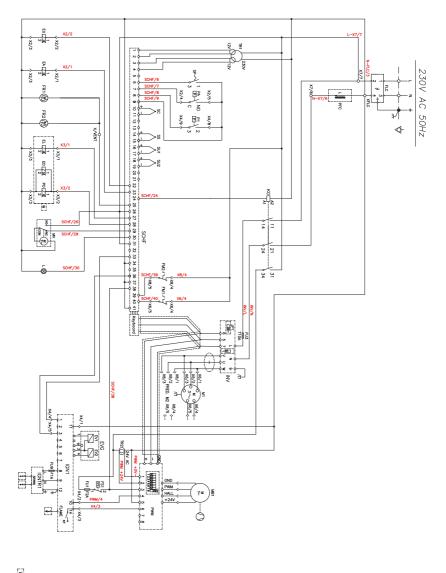
#### 13.7. KT101(W)



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# 13.8. KTG061(W)-KTG101(W)



W=WASHING SYSTEM (OPTIONAL)

#### LEGEND

C,C1,,,	Capacitor	
	Electrovalve for humidifier	
EA	Steam kill solenoid valve	
EL	Washing electrovalve	
ES	Boiler discharge electrovalve	
ESH	Shower activation electrovalve	
EV	Boiler load electrovalve	
EVG	Gas solenoid valve	
FM1,FM2	Motor thermic protection (incor.)	
FU1,FU2	Fuse	
FLC	Filter E.M.C.	
FR1,FR2	Cooling fan	
FS1	Chamber safety thermostat	
FS2	Bolier safety thermostat	
IGN, IGN1, IGN	Burner control	
	Motor inverter	
K0	Inverter relay	
KFS	Auxiliary contactor	
Keyboard	Keyboard electronic card	
KR1/3,	Contactor for heater element	
L1, L2	Chamber lighting lamp	
M1, M2	Motor	
MB1,MB2	Gas Blower	
MS	Discharge valve motorized	
MV	Humidity discharge valve	
P1,P2	Burner air pressure switch	
PA	Water pressure switch	
PB	Rinse pump	
PFC	PFC	
PD	Detergent pump	
PL	Washing pump	
PWM	Gas blower speed control board	
R,R1,R2	Resistance	
S0	Main switch	
SC	Chamber probe	
SCHF	Oven control electronic card	
SP	Door microswitch	
SS	Core Probe	
SU1, SU2	Umidity probe	
TR1	Trasformer 230V/12V, 12VA - 5VA	
TR2,TR3	Trasformer 230V/24V AC	
X./	Power plug	
Z1	Boiler level control probe	

THE MANUFACTURER SHALL NOT BE HELD LIABLE FOR ANY DAMAGES DUE TO IMPROPER INSTALLATION, TAMPERING WITH THE APPLIANCE, MISUSE, IMPROPER MAINTENANCE, FAILURE TO COMPLY WITH APPLICABLE STANDARDS AND INTENDED USE.

THE MANUFACTURER RESERVES THE RIGHT TO MAKE CHANGES TO THE PRODUCT AT ANY TIME IT DEEMS NECESSARY OR USEFUL.