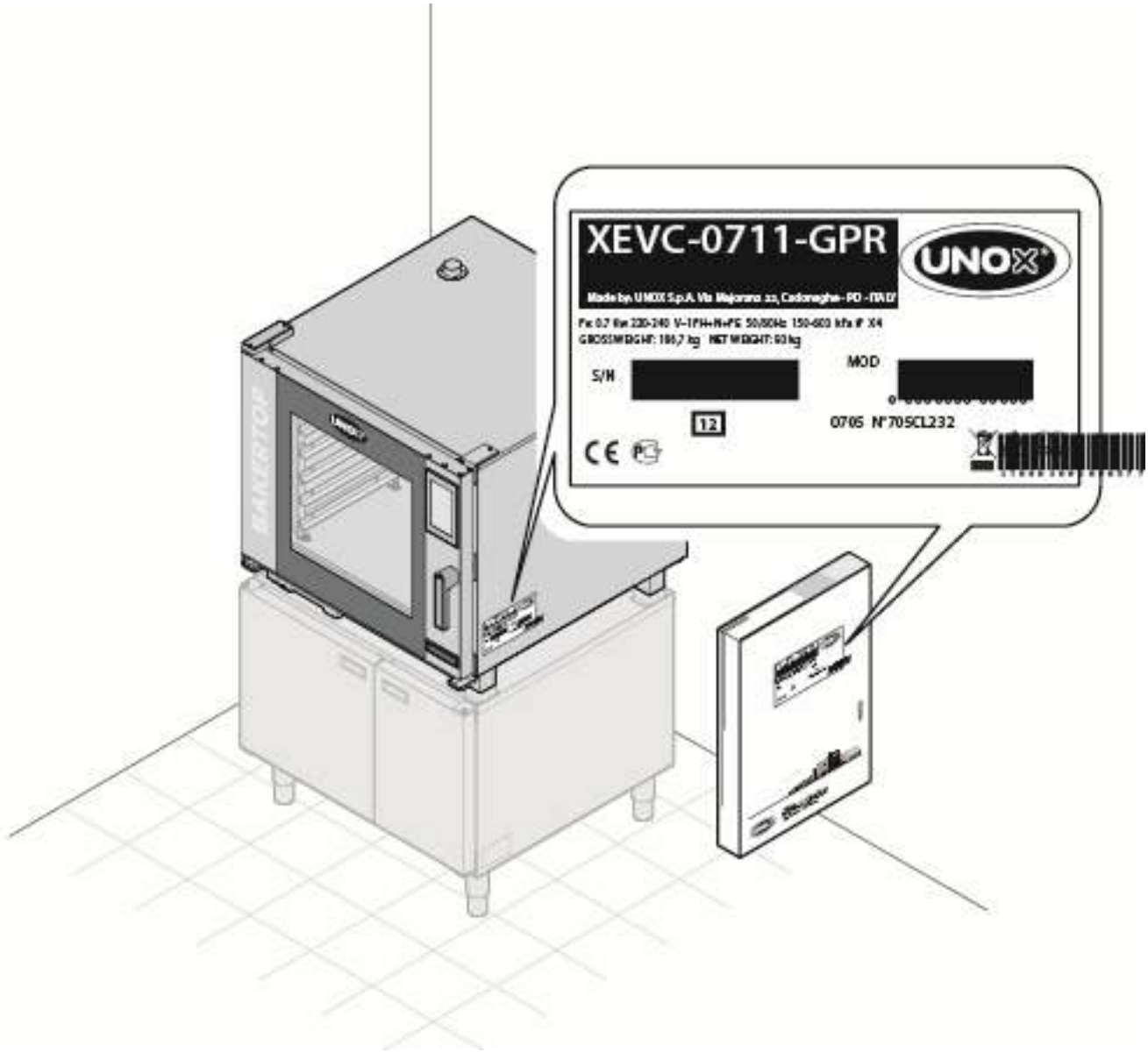
S6 SERVICE MANUAL

English

INDEX

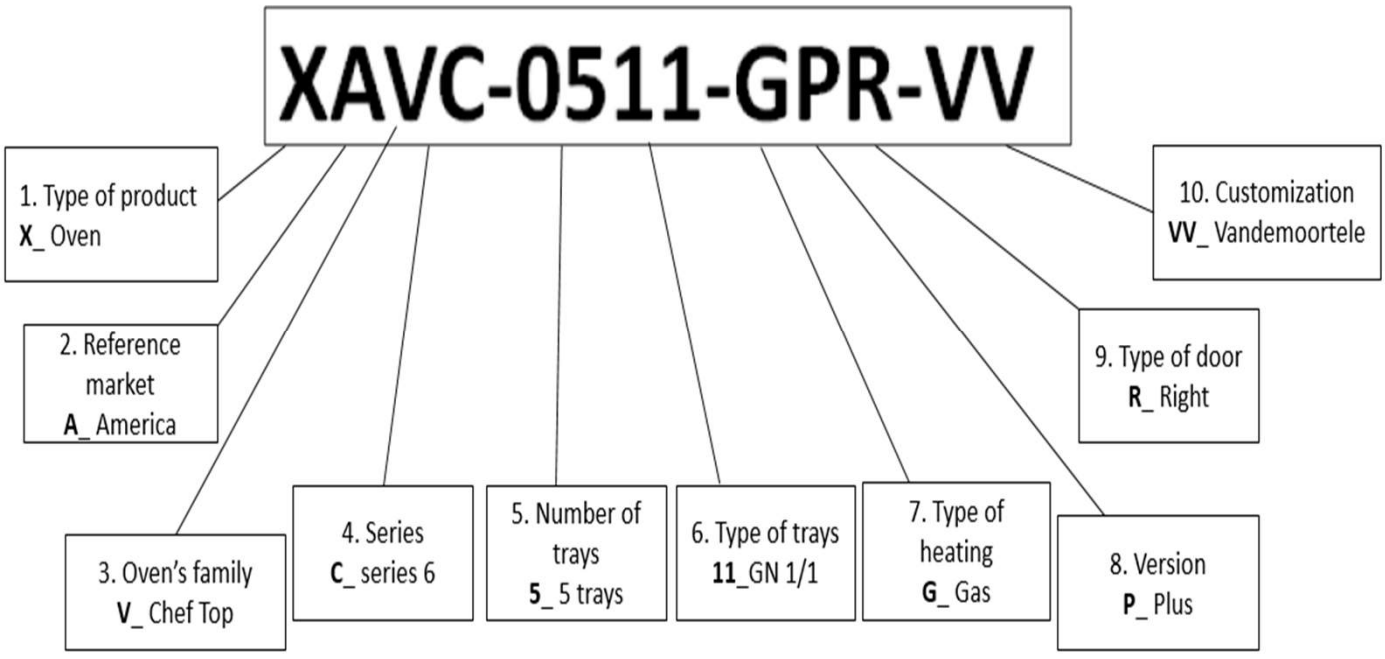
Reading the Chef Top and Baker Top Label

The label is always placed on the right side of the oven



The product ID provide the following information

1. Type of product
2. Reference market (Europe, USA, Japan, Marine);
3. Oven's range (ChefTop, BakerTop, ChefLux, BakerLux, Compact);
4. Series
5. Number of trays
6. Type of trays
7. Heating type (Electric, Gas, Electric High Voltage; Single-phase);
8. Version;
9. Door's side opening;
10. Customizations



The letters which compose the different codifications are the following ones

Domain	Codification	Description
Type of product	X	Oven
Reference Market	E	Europe
	A	America
	J	Japan
	M	Marine
Family	V	ChefTop
	B	BakerTop
	G	ChefLux
	K	BakerLux
	C	Compact
Series	A	Series 4
	B	Series 5
	C	Series 6
	...	...
Number of trays	3	3 trays
	4	4 trays
	5	5 trays
	6	6 trays
	7	7 trays
	10	10 trays
	16	16 trays
	20	20 trays
Type of trays	11	GN1/1
	23	GN2/3
	21	GN2/1
	EU	600X400 (Pasticceria Europea)
	FS	Full Size
	HS	Half Size
	QS	Quarter Size
	13	Compatibile GN1/3
-	-	
Heating type	E	Electric
	G	Gas
	H	Electric High Voltage
	M	Singlephase
Control/Version	P	Plus
	1	One
	M	Manual
Door's side opening	R	Right
	L	Left
	D	Drop down
Possible Customizations	AD	Aldi
	VV	Vandemoortele
	EG	Engefood
	WL	Walmart
	...	
	AU	Australia

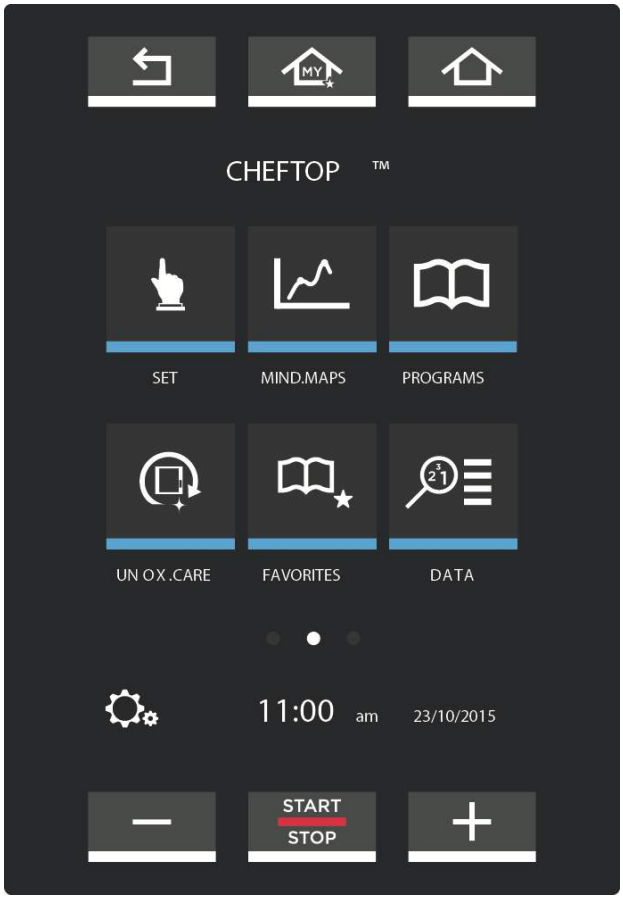
Chef Top – Baker Top MIND.Maps **One** and **Plus**

Two different touch screen control panels are available and identify the two oven's versions: ONE and PLUS.

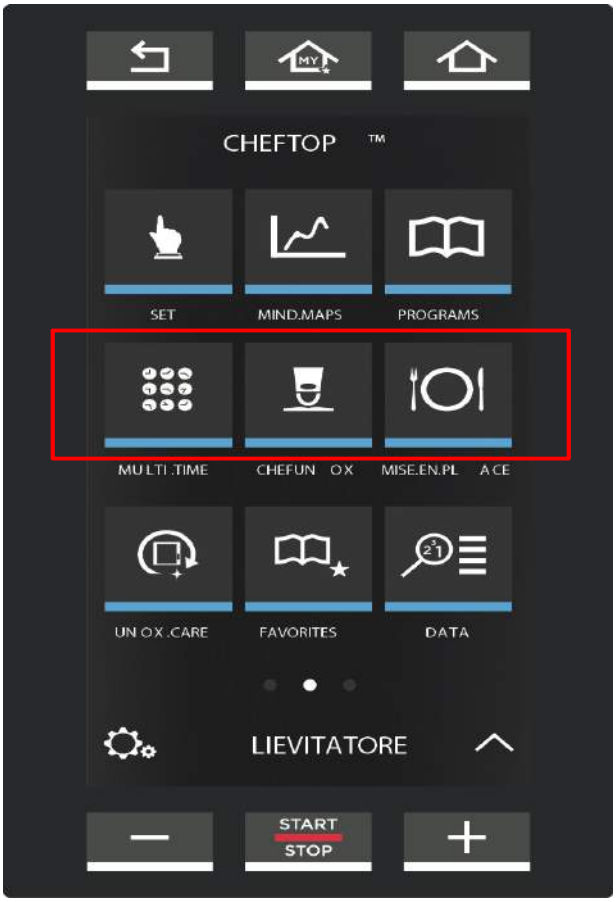
Let's then compare the two ones and investigate every single icon and its command functions.

Additional features of "PLUS" Version which are not displayed in "ONE" Version

One



Plus



Touch screen control features

One and **Plus** icons

SET
Allows to manually set a new cooking program

MIND.MAPS
Allows to set cooking parameters by means of a parametric curve displaying temperature, humidity, ventilation, time, etc.

PROGRAMS
Allows to enter a list of cooking programs previously set thanks to the MENU SET or to create a new cooking program and memorize it

UNOX.CARE
Allows to enter washing programs, Unox.Pure settings and planned oven maintenance

FAVORITES
Allows to recall favorite programs and enter the receipts more frequently used

DATA
Allows to enter consumption and HCCP data.

Plus only icons

MULTI.TIME

Allows to put several trays into the oven setting up to ten different time of cooking

CHEF.UNOX

Allows to enter a list of receipts previously recorded by Unox, the parameters of which could be modified by the user according to their needs

MISE EN PLACE

Allows to put in the oven several trays at different time but having them prepared at the same hour.

Cooking time
(from 0 min to 9h:59min:59sec and inf)
Cooking ends when time is over

Chamber temperature
(from 30° to 260°C)

DRY.Maxy™
Extraction of humidity in the chamber

Speed of air streams

Preheating STEP function

RESTART
Recalls the last 10 cooking programs with their names, if previously memorized. If didn't, time and date of cooking programs are displayed.

STEP from 1 to 9 setting

Memorization of set parameters

Buzzer
activates/disables the acoustic sound at the end of every STEP
Green = sound activated
white= sound disabled

STEP 1/1 **STEP**
Indicates the number of the STEP user is processing

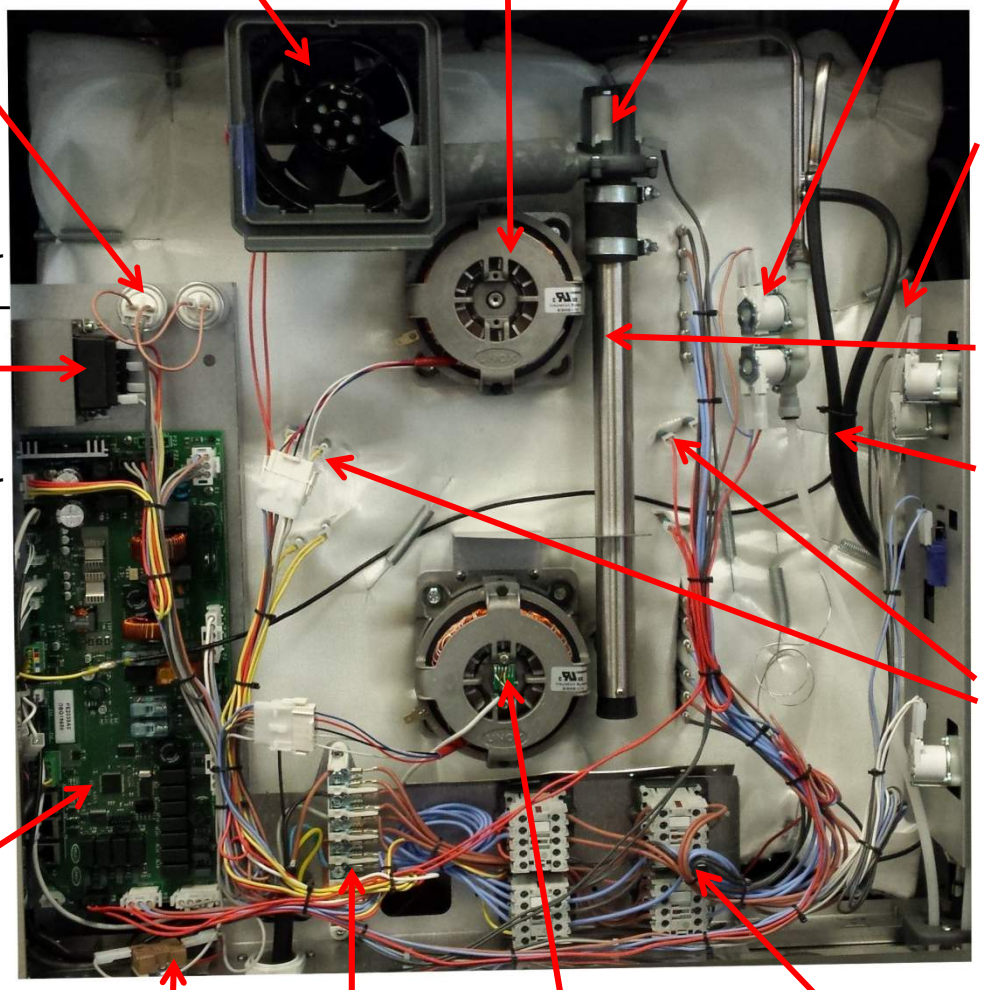
Core Temperature
Needs to be inserted deep inside the product: the cooking ends when the core temperature has been reached

ΔT **DELTA T Temparature**
(from 0° C to 120°C)

STEAM.Maxi™
Injection of humidity into the chamber

Speed of Fan stops when the chamber reaches the set temperature

Electric oven components description



New Motor: 250w with EU power supply, 400w with US powr supply

New Dry Maxy housing

New Steam solenoid

220V cooling fan

6.3µF capacitors only

New Washing circuit

90KVA EU transformer with 12Vac – 21Vac outputs, **60KVA US** transformer with single 12Vac output

New Dry Maxy pipe

New EPDM liquid pipes

2 breaking elements per motor: 75ohm (yellow wires), **New** 27.5ohm (red wires)

New power board

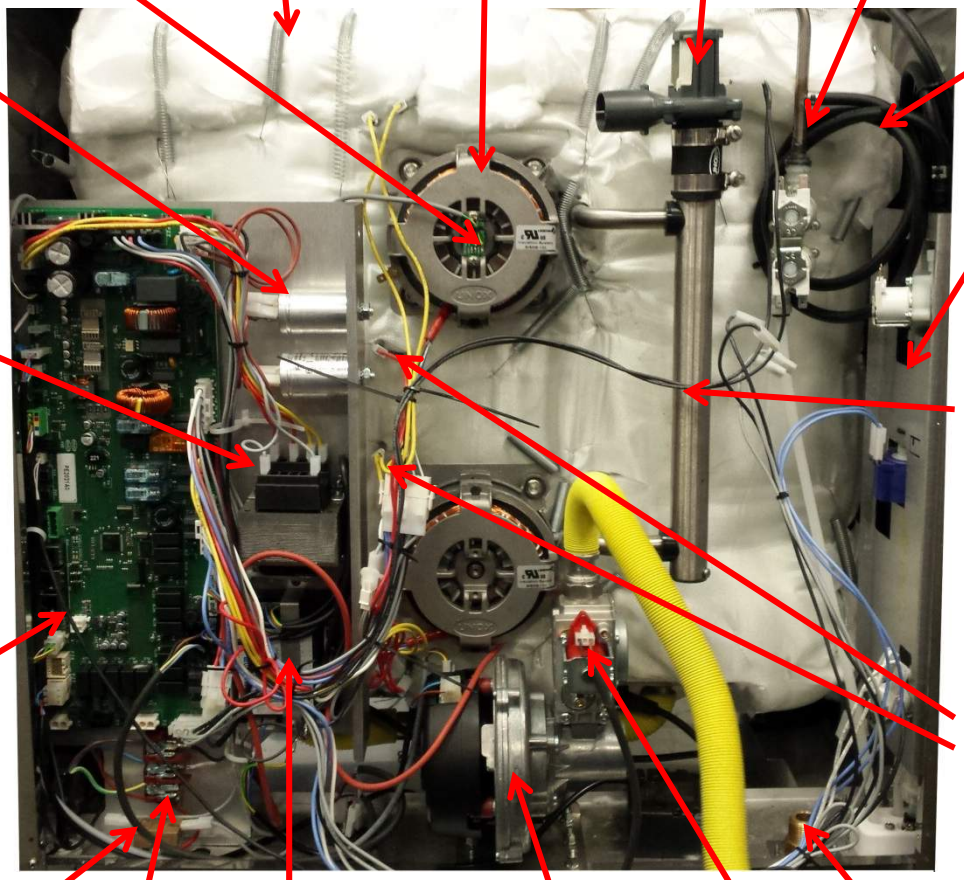
One way 330°C safety thermostat

Terminal board

New revolutions sensor: clockwise and anticlockwise rpms reading

16Amp or 25 Amp contactors

Gas oven components description



220V cooling fan

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New Steam solenoid

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New Dry Maxy pipe

2 breaking elements per motor: 75ohm (yellow wires), **New** 27.5ohm (red wires)

New power board with integrated gas circuit

One way 330°C safety thermostat

Terminal board

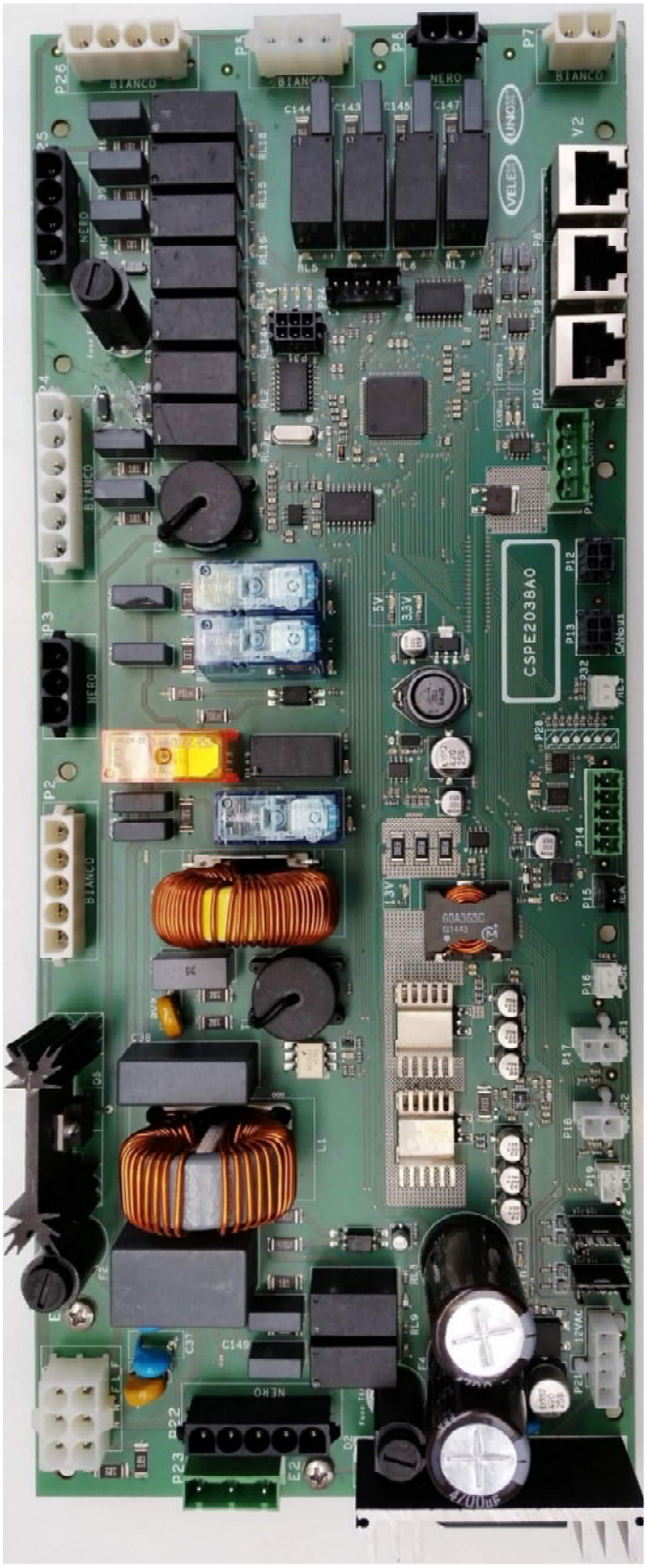
New blower control box: single to the EU version with separate igniter, double to the US version with integrated igniter

New gas blower

New gas valve

3/4¨ internal gas fitting

Power board layout – EU version
Electrical oven power board and output descriptions



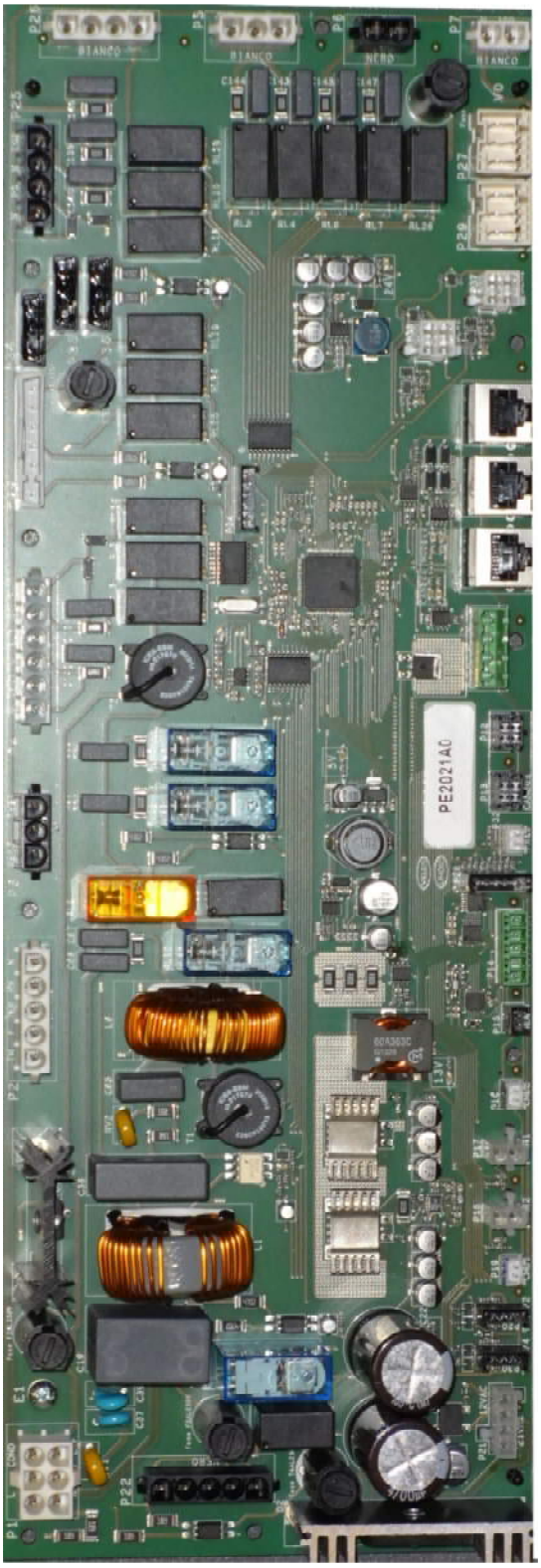
OUTPUTS					
NAME	OUTPUT DESCRIPTION	ACTIVATED BY	VOLTAGE	MAX CURRENT PROVIDED	PHISICAL OUTPUT
TL_1	67% heating elements branch – contactors output	Relay	230 Vrms	120 mA	✓
TL_2	33% heating elements branch – contactors output	Relay	230 Vrms	120 mA	✓
EV_1	9 l/h steam coil	Relay	230 Vrms	60 mA	✓
EV_2	9 l/h steam coil	Relay	230 Vrms	60 mA	✓
VENT	Dry maxy coil	Relay	230 Vrms	35 mA	✓
PD	Detergent pump	Relay (smd diod on track)	230 Vrms	370 mA	✓
PS	Aromatize pump	Relay (smd diod on track)	230 Vrms	185 mA	✓
EL_1	Washing solenoid – tap water	Relay	230 Vrms	30 mA	✓
EL_2	Washing solenoid – treated water	Relay	230 Vrms	30 mA	✓
EG_1	Rotor arm solenoid 1	Relay	230 Vrms	30 mA	✓
EG_2	Rotor arm solenoid 2	Relay	230 Vrms	30 mA	✓
ABB	Drain valve solenoid	Relay	230 Vrms	30 mA	✓
FAN	Cooling fan	Relay	230 Vrms	260 mA	✓
RES_1	Breaking element group 1	Relay	230 Vrms	-	✓
RES_2	Breaking element group 1	Relay	230 Vrms	-	✓
MOT_FWRW	Motor's rotation side output	-	-	-	✓
STBY	Neutral interruption	-	-	-	
DCO_1	13Vdc auxiliary output	Open collector	13 Vdc	500 mA	✓
TRIAC	Triac activation output	triac	230Vrms	8 A	✓
SR_1	Solid state relay output 1	-	-	-	✓
SR_2	Solid state relay output 2	-	-	-	✓
SR_T	SR_1 and SR_2 outputs commutation time	-	-	-	

INPUTS						
NAME	INPUT DESCRIPTION	INPUT TYPE	RANGE	RESOLUTION	PRECISION	PHYSICAL INPUT
CMB_1	Fan guard side temperature probe	PT100 Analogic	0 – 300 °C	0.1°C	+/- 0.5 °C	✓
CMB_2	Inner glass side temperature probe	PT100 Analogic	0 – 300 °C	0.1°C	+/- 0.5 °C	✓
BRD_TEMP	Probe on board	NTC Analogic	0 – 100 °C	5°C	+/- 5 °C	
HEART_1	Single point core probe or first multi point probe point	PT100 Analogic	0 – 300 °C	0.1°C	+/- 0.5 °C	✓
HEART_2	Second multipoint probe point	PT100 Analogic	0 – 300 °C	0.1°C	+/- 0.5 °C	✓
HEART_3	Third multipoint probe point	PT100 Analogic	0 – 300 °C	0.1°C	+/- 0.5 °C	✓
HEART_4	Fourth multipoint probe point	PT100 Analogic	0 – 300 °C	0.1°C	+/- 0.5 °C	✓
TAC_1	Revolution sensor 1 (rpms)	Analogic	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
TAC_2	Revolution sensor 2 (rotation side)	Analogic	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
TAC_3	Revolution sensor 3 (rpms)	Analogic	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
TAC_4	Revolution sensor 4 (rotation side)	Analogic	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
VAC	Voltage on board	Analogic	0 – 260 V_{RMS}	1 V	+/- 5 V	
IAC_MOT	AC Motor's absorbed current	Analogic	0 - 8 A_{RMS}	1 mA_{RMS}	+/- 20 mA_{RMS}	
IAC_LOAD	AC loads absorbed current	Analogic	0 - 1.5 A_{RMS}	1 mA_{RMS}	+/- 10 mA_{RMS}	
VDC	DC current on BUS	Analogic	0 – 15 V	1 mV	+/- 10mV	
IDC	DC current	Analogic	0 – 7 A	1 mA	+/- 5mA	
AC_FREQ	AC power supply frequency	Analogic	0 - 50 - 60 Hz	-	-	
MOTDIR_1	Motor's rotation side (from TAC1 -TAC2)	Digital	-	-	-	
MOTDIR_2	Motor's rotation side (from TAC1 -TAC2)	Digital	-	-	-	
DOOR_1	Magnetic door switch	Digital	-	-	-	✓
DOOR_2	Magnetic trolley switch	Digital	-	-	-	✓
ALL_TS	Safety thermostat alarm	Digital	-	-	-	

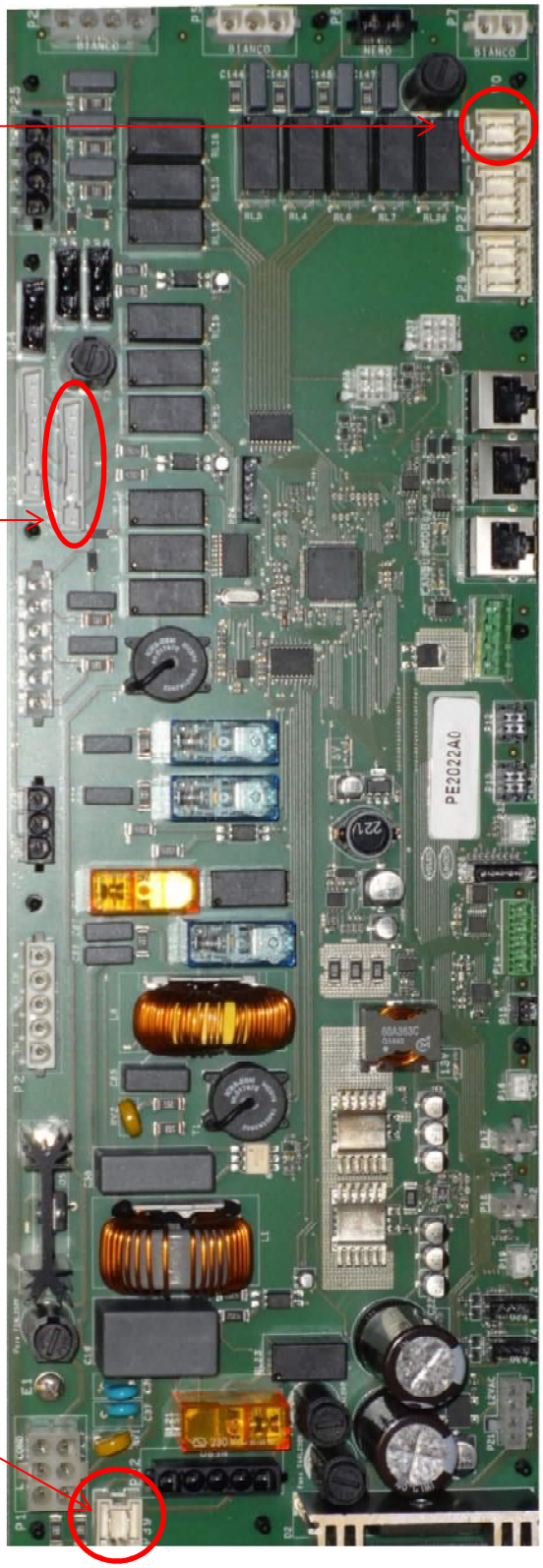
INPUTS						
NAME	INPUT DESCRIPTION	INPUT TYPE	RANGE	RESOLUTION	TOLERANCE	PHYSICAL INPUT
ALL_TM	Motor's thermal protection alarm	Digital	-	-	-	
INCP_1	Auxiliary contact 1 - dry contact	Digital	-	-	-	✓
INCP_2	Auxiliary contact 2 - dry contact	Digital	-	-	-	✓
INCP_3	Auxiliary contact 3 - dry contact	Digital	-	-	-	✓
IN_PRES	Auxiliary contact 4 - dry contact	Digital	-	-	-	✓

Power board layout – EU/US version
Gas oven power board and output descriptions

PE2021A0 – GAS EU



PE2022A0 – GAS US



P40 – Blower/s 120V supply

P41 – Burner control output

P39 – Blower/s 120V supply

OUTPUTS PE2022A0					
NAME	OUTPUT DESCRIPTION	Activated by	Voltage	Current	PHYSICAL OUTPUT
TL1	67% heating elements branch – contactors output	Relay	230 Vrms		✓
TL2	67% heating elements branch – contactors output	Relay	230 Vrms		✓
EV1	9 l/h steam coil	Relay	230 Vrms		✓
EV2	5 l/h steam coil	Relay	230 Vrms		✓
VENT	Dry Maxy coil	Relay	230 Vrms		✓
PD	Detergent pump	Relay (smd diod on track)	230 Vrms		✓
PA	Citric acid pump	Relay (smd diod on track)	230 Vrms		✓
PS	Aromatize pump	Relay (smd diod on track)	230 Vrms		✓
EL	Washing solenoid – tap water	Relay	230 Vrms		✓
EL1	Washing solenoid – treated water	Relay	230 Vrms		✓
EPA	Acid pump washing coil	Relay	230 Vrms		✓
EG1	Rotor arm solenoid 1	Relay	230 Vrms		✓
EG2	Rotor arm solenoid 2	Relay	230 Vrms		✓
MVP	Pollo cabinet motor's activation	Relay	230 Vrms		✓
ABB	Cooling drain valve solenoid	Relay	230 Vrms		✓
FAN	Cooling fan	Relay	230 Vrms		✓
RES1	Breaking element group 1	Relay	230 Vrms	-	✓
RES2	Breaking element group 1	Relay	230 Vrms	-	✓
MOT1	Triac activation output	Triac	230 Vrms		✓
MOT2	Motor's rotation side output	-	-	-	
STBY	Neutral interruption	-	-	-	
SR1	Solid state relay output 1	Open collector	13 Vdc	-	✓
SR2	Solid state relay output 2	Open collector	13 Vdc	-	✓
DCO1	13Vdc auxiliary output	Open collector	13 Vdc	500 mA	✓
TF	Phase dimmer output	-	-	-	
POWER_1	SSR 1 tON	-	-	-	

OUTPUTS					
NAME	OUTPUT DESCRIPTION	Activated by	Voltage	Current	PHYSICAL OUTPUT
POWER_2	SSR 1 tON	-	-	-	
POWER_T	SR_1 and SR_2 outputs commutation time	-	-	-	
GPWR	230V Burner control supply	Relay	120 Vrms		✓
GRST	Burner control alarm reset	Relay (Dry contact)	-	-	✓
GHD	Burner control heat demand	Relay (Dry contact)	-	-	✓
BLPWR	230V blower supply	Relay	120 Vrms		✓
BL1RPM	Blower 1 rpms	-	-	-	-

INPUTS						
NAME	INPUTS DESCRIPTION	INPUT TYPE	RANGE	RESOLUTION	PRECISION	PHYSICAL INPUT
CMB1	Fan guard side temperature probe	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
CMB2	Inner glass side temperature probe	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
BOARD	Probe on board	Analogico NTC	0 – 100 °C	5°C	+/- 5 °C	
HEART	Single point core probe or first multi point probe point	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
HEART_2	Second multipoint probe point	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
HEART_3	Third multipoint probe point	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
HEART_4	Fourth multipoint probe point	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
PT100_AUX	Auxiliary temperature probe	Analogico PT100	0 – 300 °C	°C	+/- °C	✓
TAC1	Revolution sensor 1 (rpms)	Analogico	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
TAC2	Revolution sensor 2 (rotation side)	Analogico	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
TAC3	Revolution sensor 3 (rpms)	Analogico	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
TAC4	Revolution sensor 4 (rotation side)	Analogico	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
VAC	Voltage on board	Analogico	0 – 260 V_{RMS}	1 V	+/- V	
IAC1	AC Motor's absorbed current	Analogico	0 - 8 A_{PK}	1 mA	+/- mA	
IAC2	Secondary loads AC current	Analogico	0 - 1.5 A_{PK}	1 mA	+/- mA	
VDC	DC current on BUS	Analogico	0 – 15 V	1 mV	+/- mV	
IDC	DC current	Analogico	0 – 7 A	1 mA	+/- mA	
FREQ_RETE	AC power supply frequency	Analogico	0 - 50 - 60 Hz	-	-	
MOTDIR1	Motor's rotation side (from TAC1 -TAC2)	Digitale	-	-	-	
MOTDIR2	Motor's rotation side (from TAC3 –TAC4)	Digitale	-	-	-	
DOOR	Magnetic door switch	Digitale	-	-	-	✓
DOOR2	Magnetic trolley switch	Digitale	-	-	-	✓
AL_TERM	Safety thermostat alarm	Digitale	-	-	-	
AL_MOT	Motor's thermal protection alarm	Digitale	-	-	-	
INCP1	Auxiliary contact 1 - dry contact	Digitale	-	-	-	✓

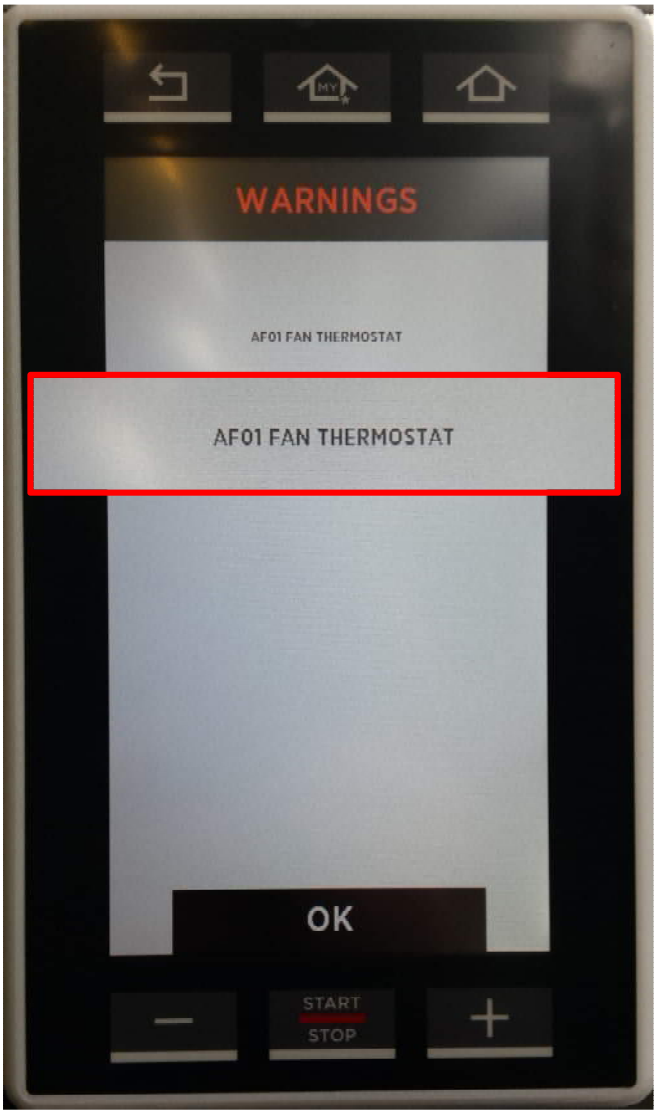
INPUTS						
NAME	INPUTS DESCRIPTION	INPUT TYPE	RANGE	RESOLUTION	PRECISION	PHYSICAL INPUT
INCP2	Auxiliary contact 2 - dry contact	Digital	-	-	-	✓
INCP3	Auxiliary contact 3 - dry contact	Digital	-	-	-	✓
PRES	Auxiliary contact 4 - dry contact	Digital	-	-	-	✓
GALL	Burner control gas alarm	Digital	-	-	-	✓
BL1TAC	Blower revolution sensor 1	Analogic	30 – 10K RPM	1 RPM	+/- 1 RPM	✓
BL2TAC	Blower revolution sensor 2	Analogic	30 – 10K RPM	1 RPM	+/- 1 RPM	✓

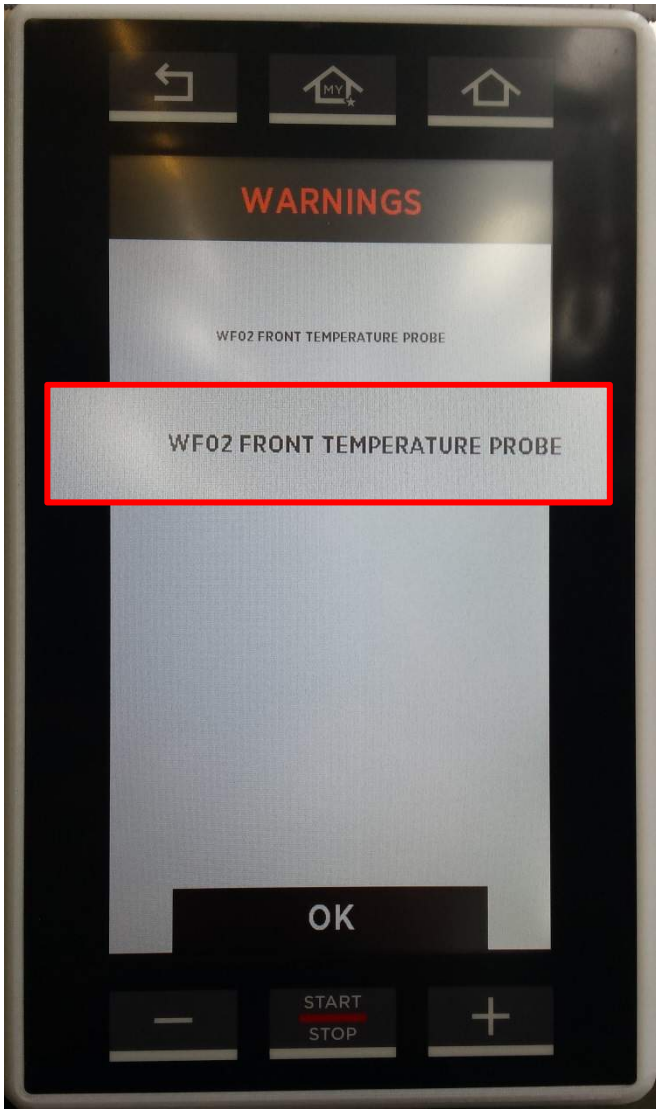
Auto-diagnostic messages

Alarms or Warning messages regarding the oven or installed peripherals accessories are all displayed to the control panel.

- Warning messages are signal malfunctions that nevertless allow the appliance and peripherals accessories to operate, through a restricted set of funcions. The "OK" icon on the screen clears all warning listed to the control panel.

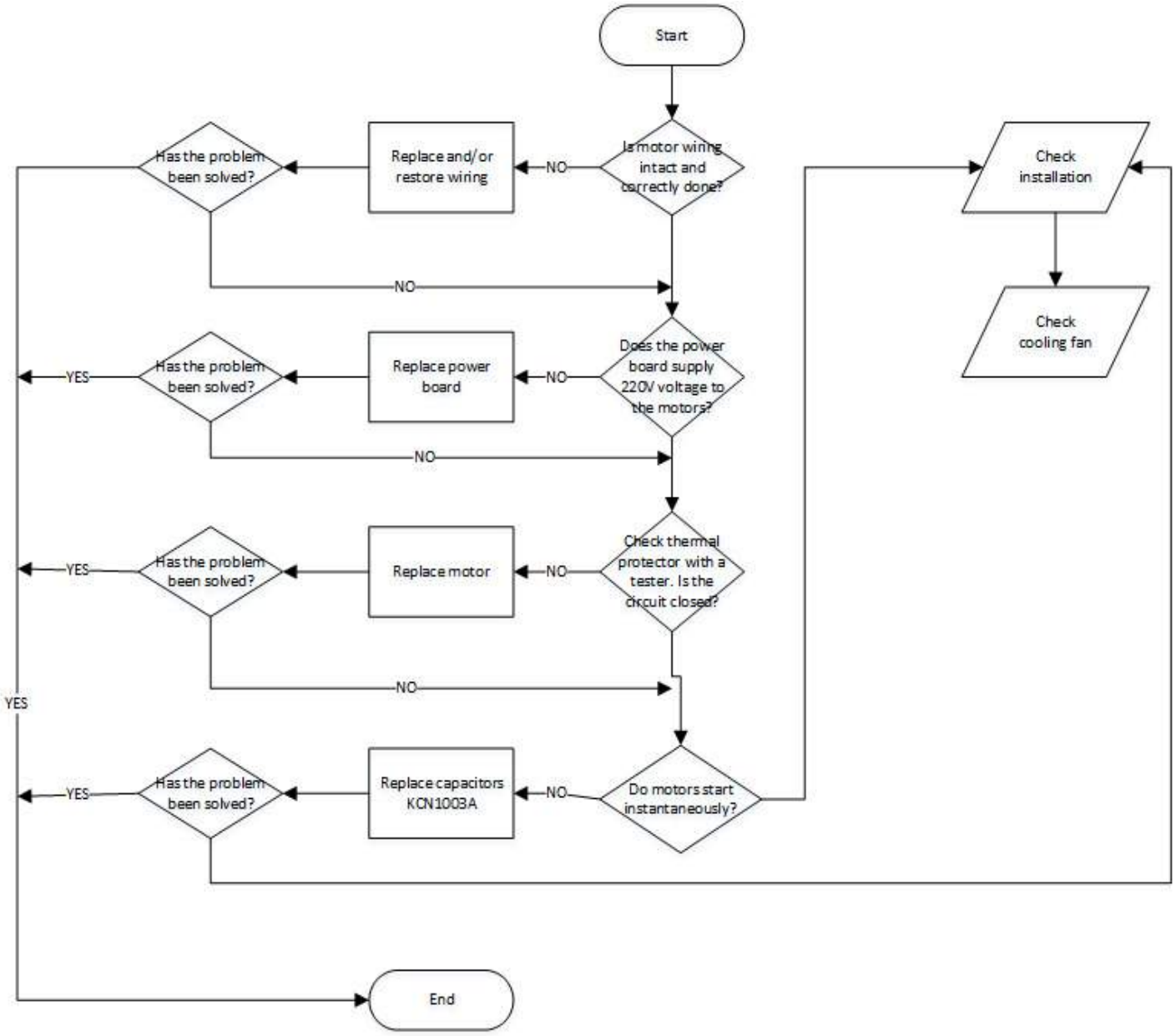
- Alarm messages identify situations that fail to allow any appliance/peripheral accessories operation whatsoever, and therefore must be put in STOP mode. If the alarm messages strictly refer to the peripherals accessories, the oven can still be used.



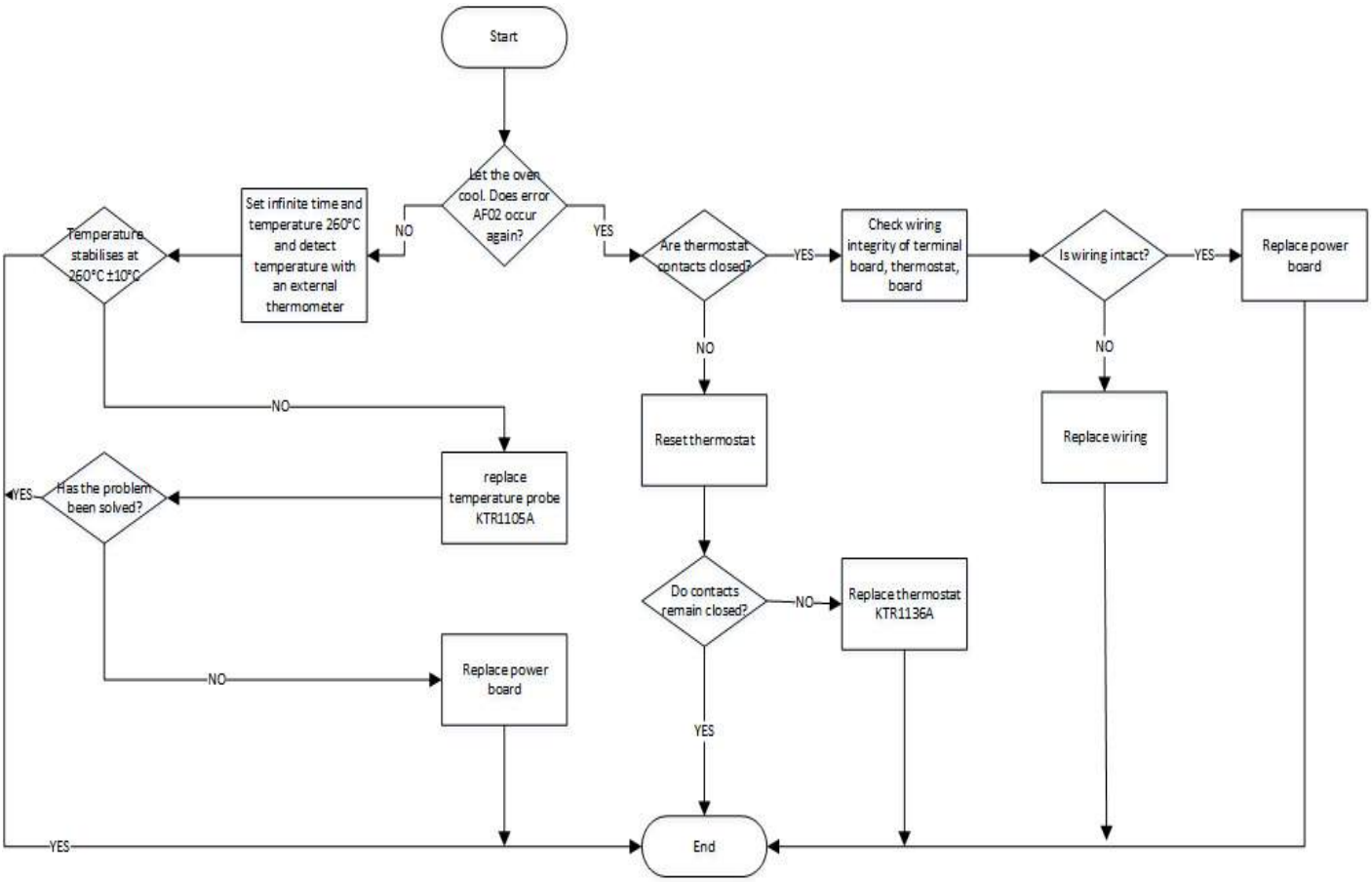


Trouble shooting flow charts

AF01	
Motor thermic alarm	
Oven stops any process	
Cause	**Solution**
Motor over heating	Cool down the motor and check the over heating causes
Wiring	Check/replace wiring connections
Motor's thermo-protector damaged	Replace the motor
Power board damaged	Replace the power board
Capacitor damaged	Replace the capacitor

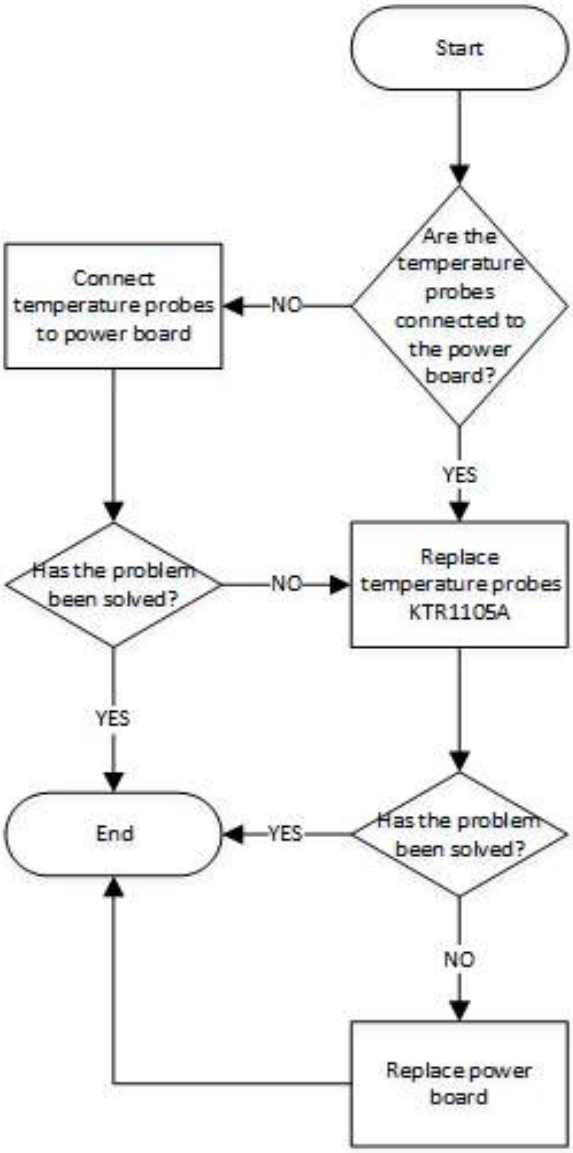


AF02	
Safety thermostat alarm	
Oven stops any process	
Cause	Solution
Temperature> 320°C	Check over heating causes
Wiring damaged	Replace wiring
Safety thermostat damaged	Replace safety thermostat
Power board damaged	Replace power board

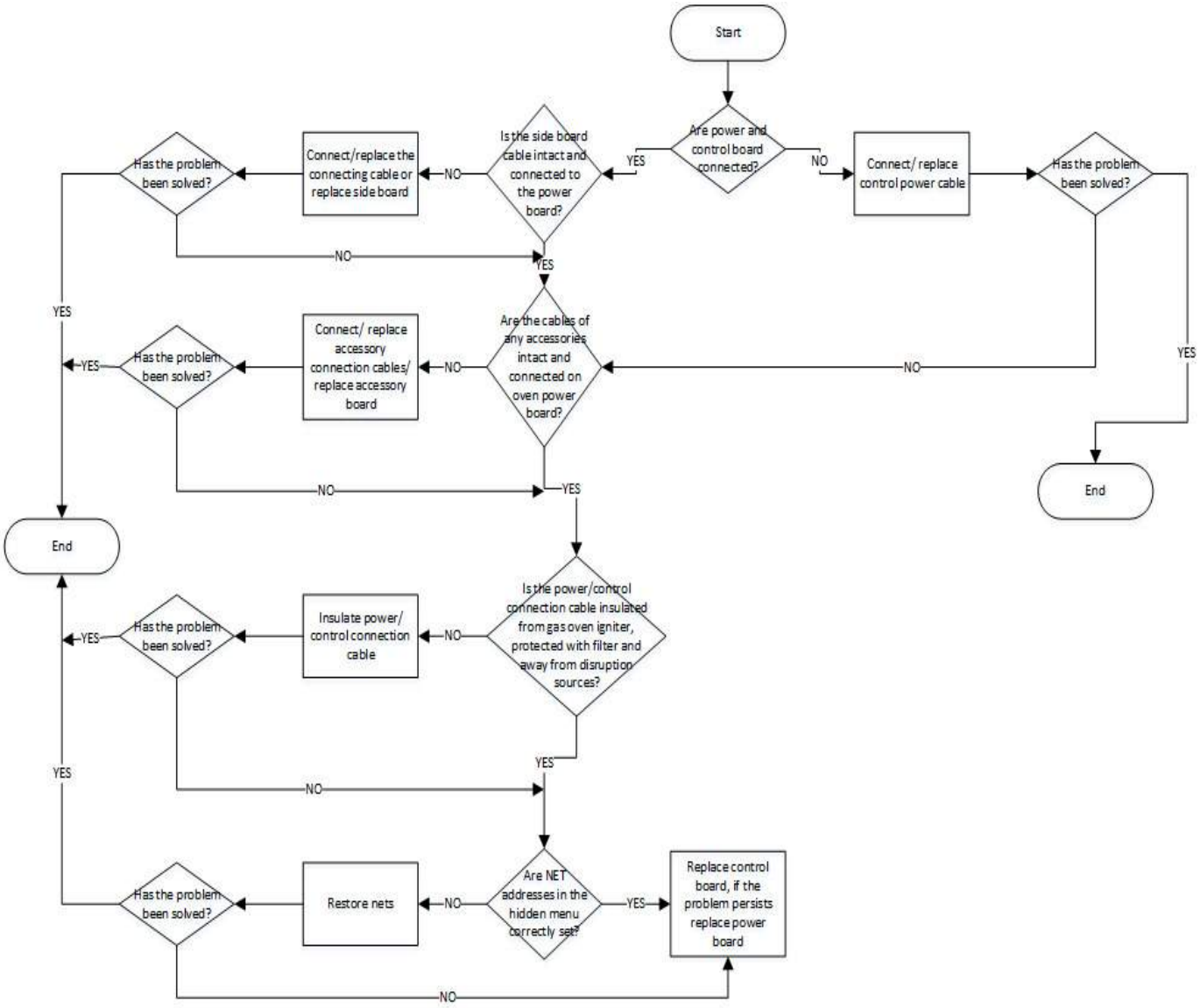


AF03	
Oven's temperature probe alarm	
Oven stops any process	
Cause	**Solution**
Temperature probes not connected /damaged	Connect/replace temperature probes
Power board damaged	Replace power board

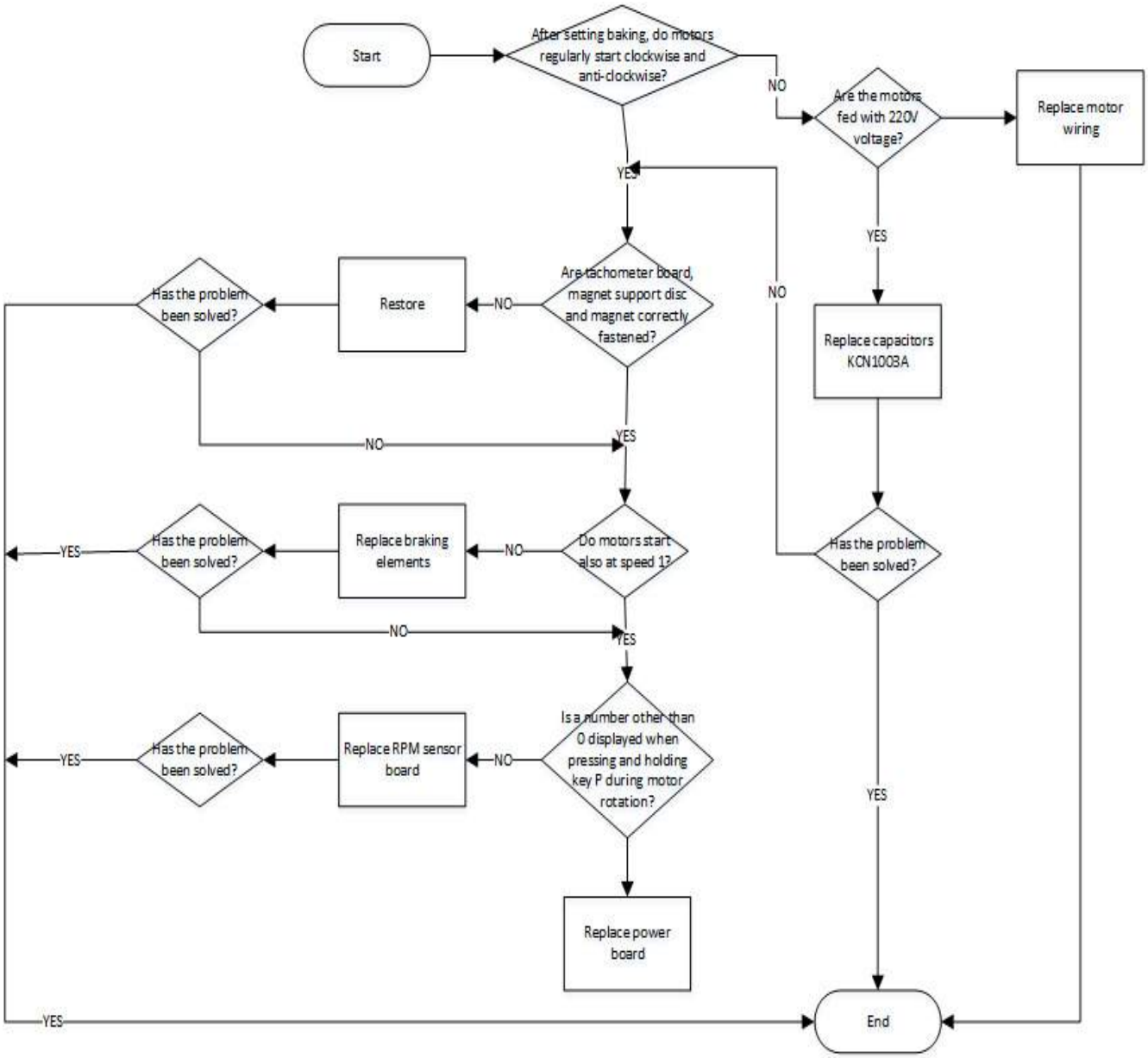
PT100 Impedance table			
°C	Ohms	°C	Ohms
10	103,90	125	147,95
20	107,79	150	157,31
25	109,73	175	166,61
50	119,40	200	175,84
75	128,98	225	184,99
100	138,50	250	194,07



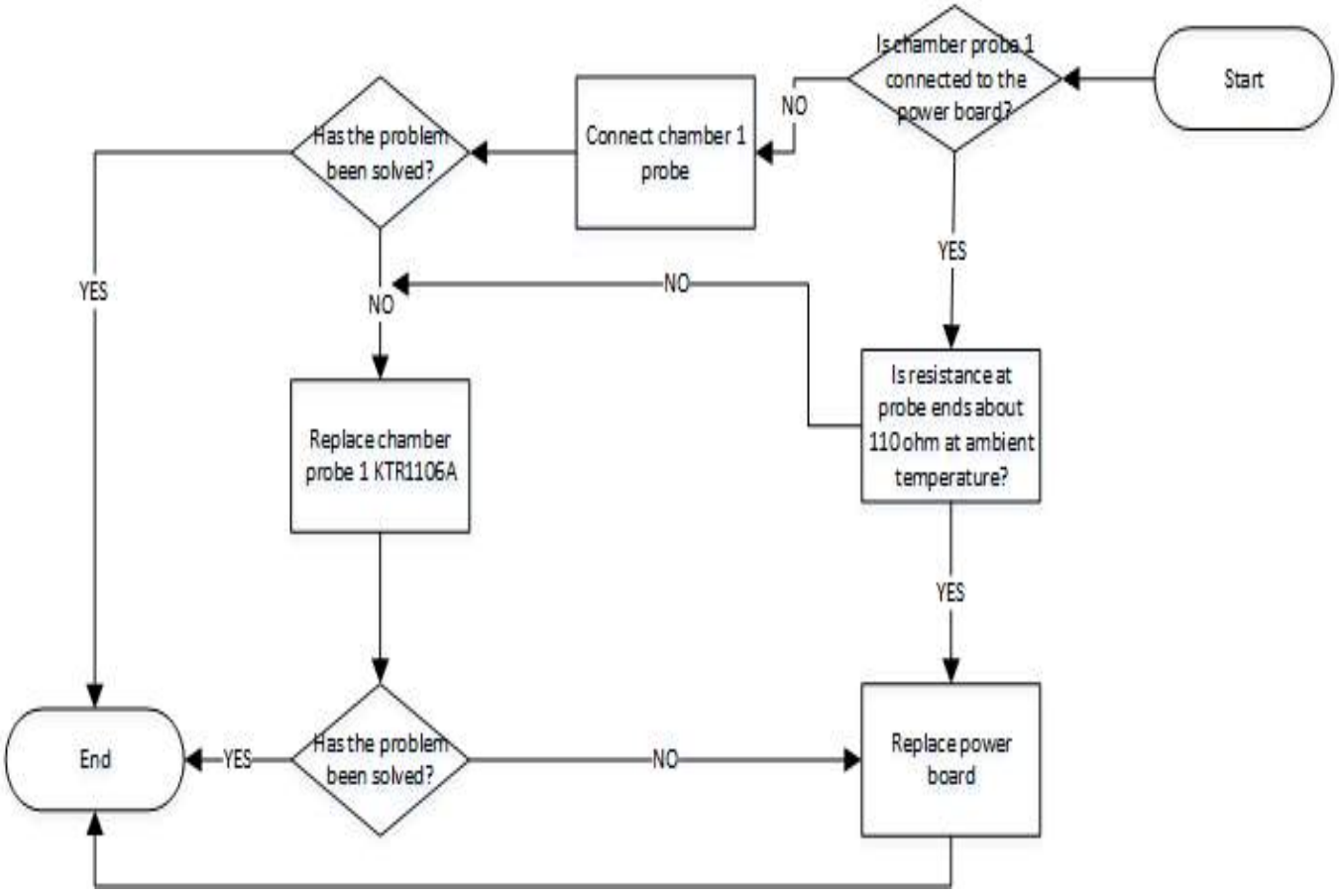
AF04	
Loss of communication alarm	
Oven stops any process	
Cause	Solution
RJ45 cable control board/power board lateral board not connected/damaged	Check/replace wiring
High electric interference	Remove causes of interference
Control board damaged	Replace control board
Power board damaged	Replace power board
Accessories not connected	Replace wiring/board of accessories



AF08	
Motor rotation stop alarm	
Oven stops any process	
Cause	Solution
Tachometric probe not connected or damaged	Collegare o sostituire sonda tachimetrica
Motor connection	Connect motors
Capacitor damaged	Replace capacitor
Breaking elements not connected or damaged	Connect or replace breaking elements
Motors damaged	Replace motors
Power board damaged	Replace power board

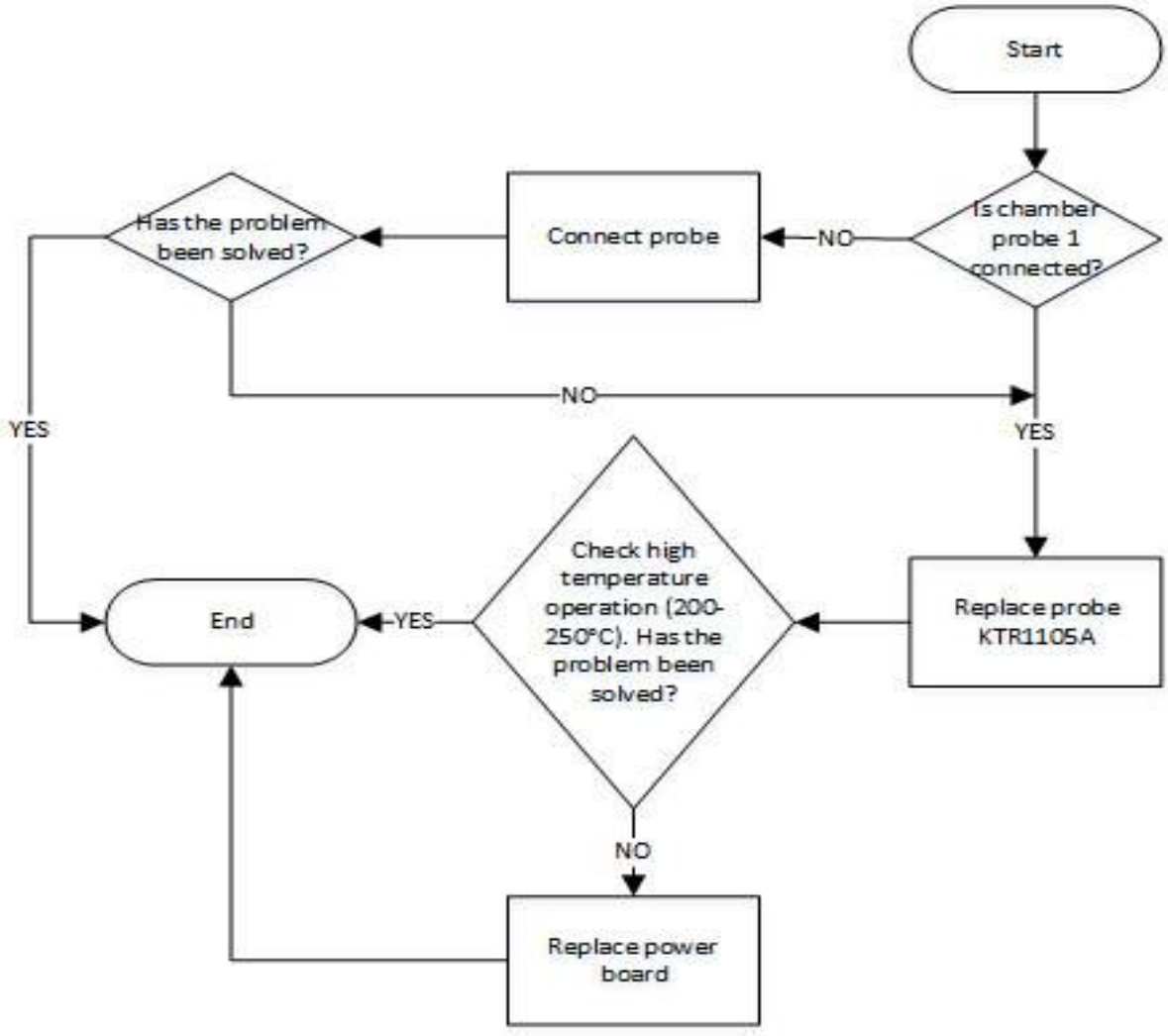


AF13	
Chamber temperature too high (>340°C)	
Oven stops any process	
Cause	Solution
Temperature probe 1 damaged	Replace temperature probe 1
Power board damaged	Replace power board
Contactor closed	Replace contactor

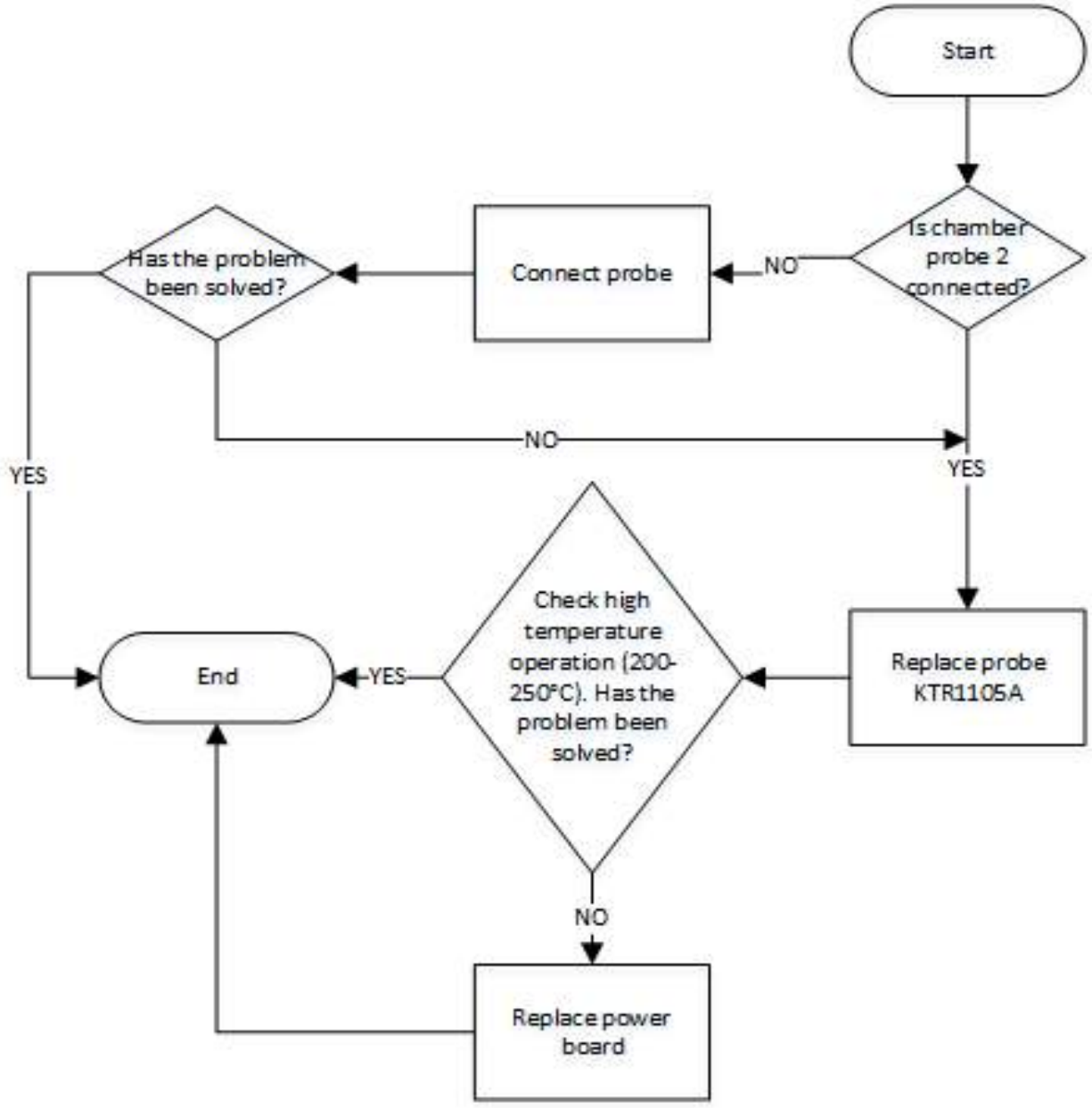


AF23	
Gas ignition problem	
The oven do not perform the burner's ignition	
Cause	Solution
Wrong throttle regulation/nozzle in case of LPG	Adjust throttle/install the LPG nozzle and adjust the throttle
Gas pressure too low/lack of gas input	Regulate gas pressure/open the gas supply
Lack of primary air in the burner	Regulate primary air inflow
Igniter not connected or damaged	Connect or replace the igniter
Burner control board damaged	Replace Burner control board
Power board damaged	Replace power board

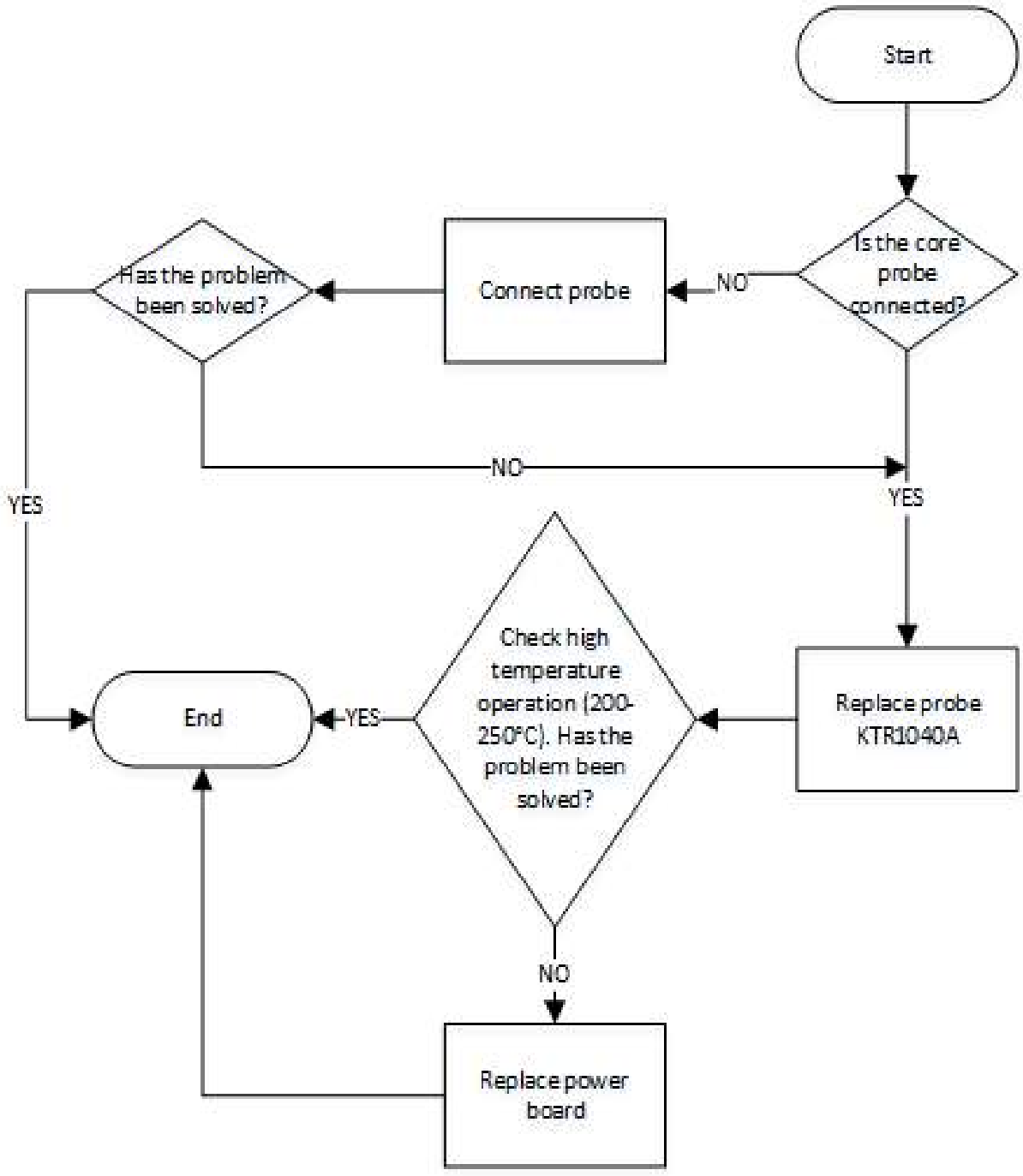
WF01	
Temperature probe 1 warning	
The oven continues to work using the other temperature probe	
Cause	**Solution**
Probe not connected or damaged	Connect or replace the probe
Power board damaged	Replace power board



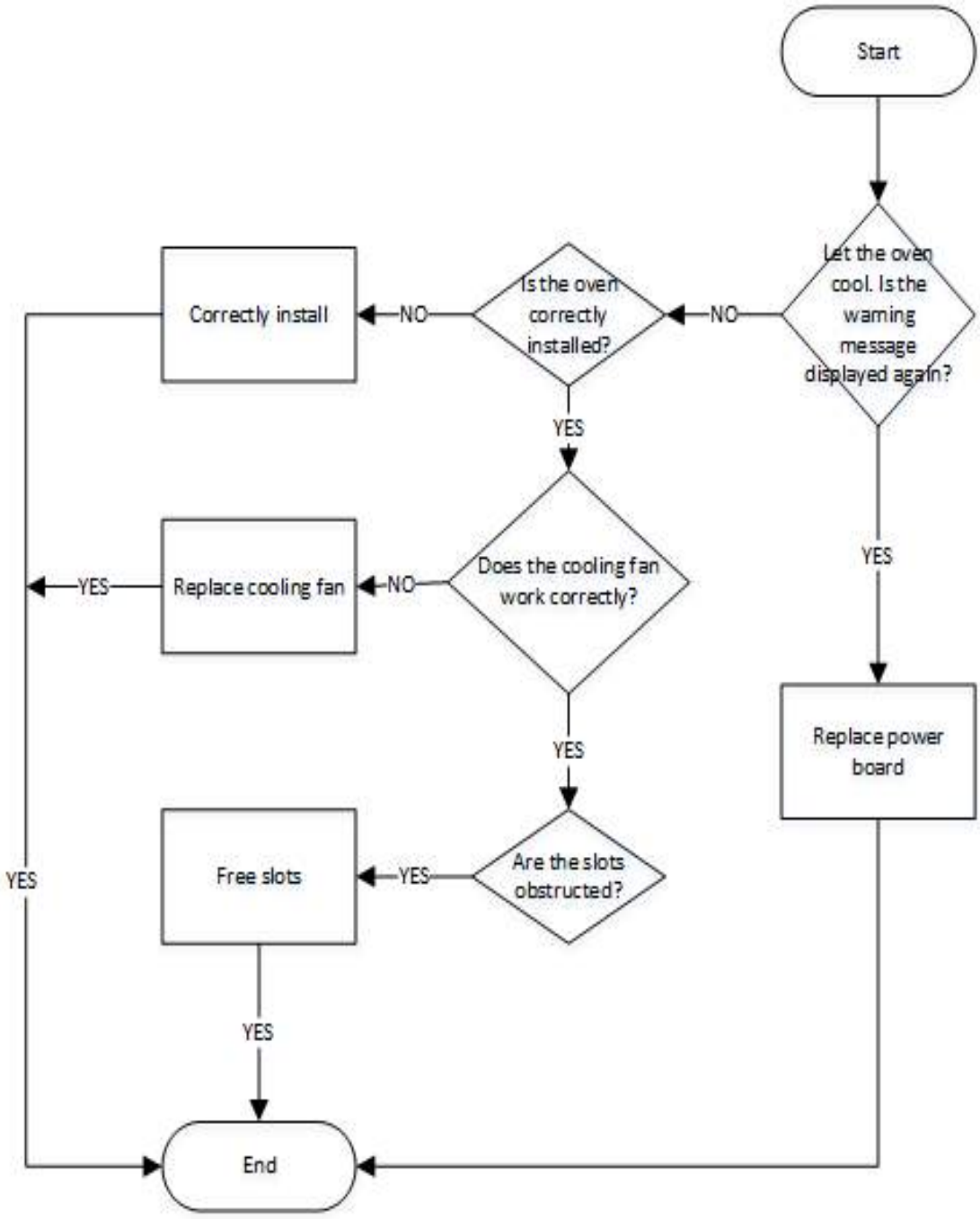
WF02	
Temperature probe 2 warning	
The oven continues to work using the other temperature probe	
Cause	Solution
Probe not connected or damaged	Connect or replace the probe
Power board damaged	Replace power board



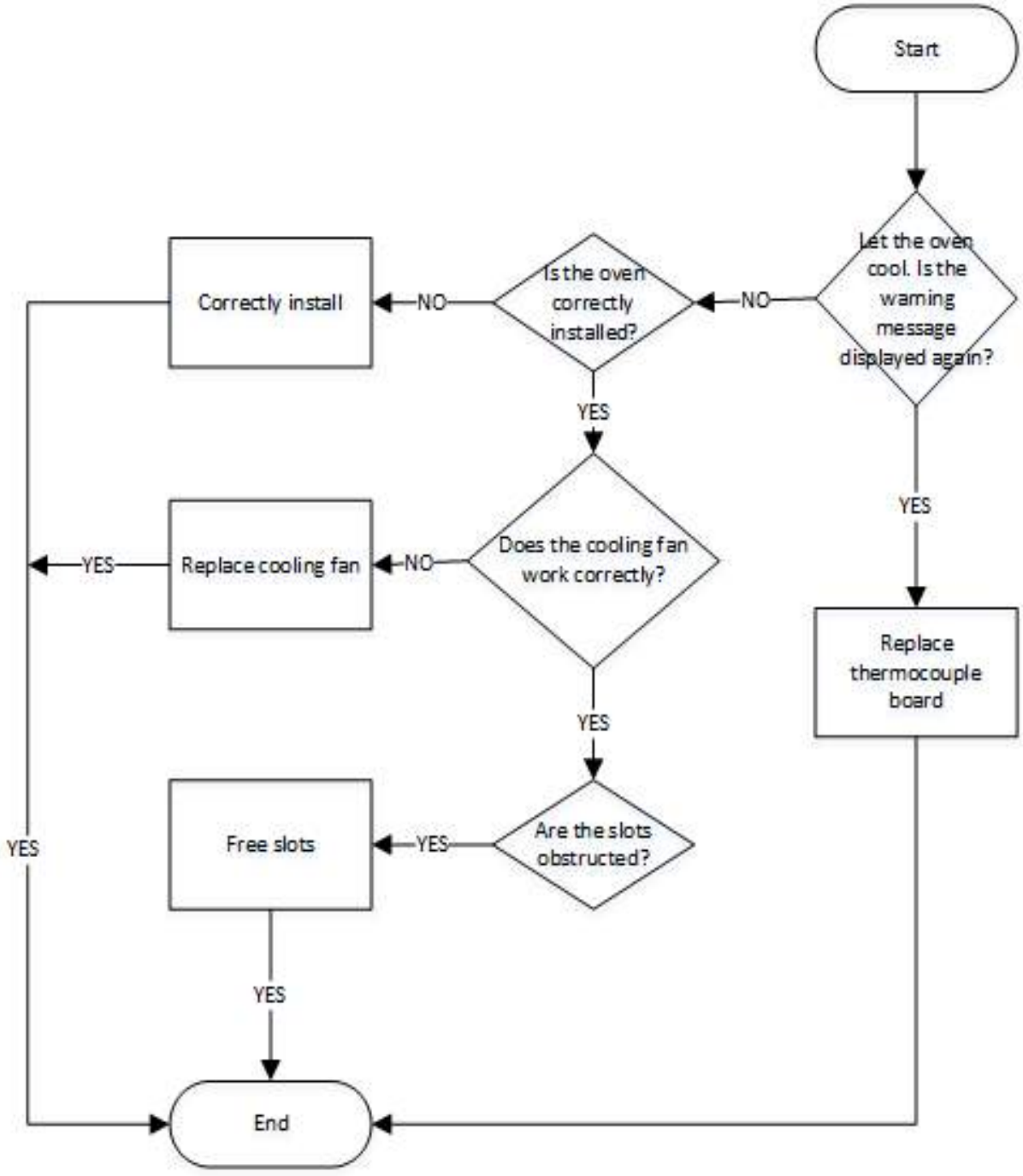
WF03	
Core probe warning	
The oven stops every program that uses the core probe	
Cause	Solution
Probe not connected or damaged	Connect or replace the probe
Power board damaged	Replace power board



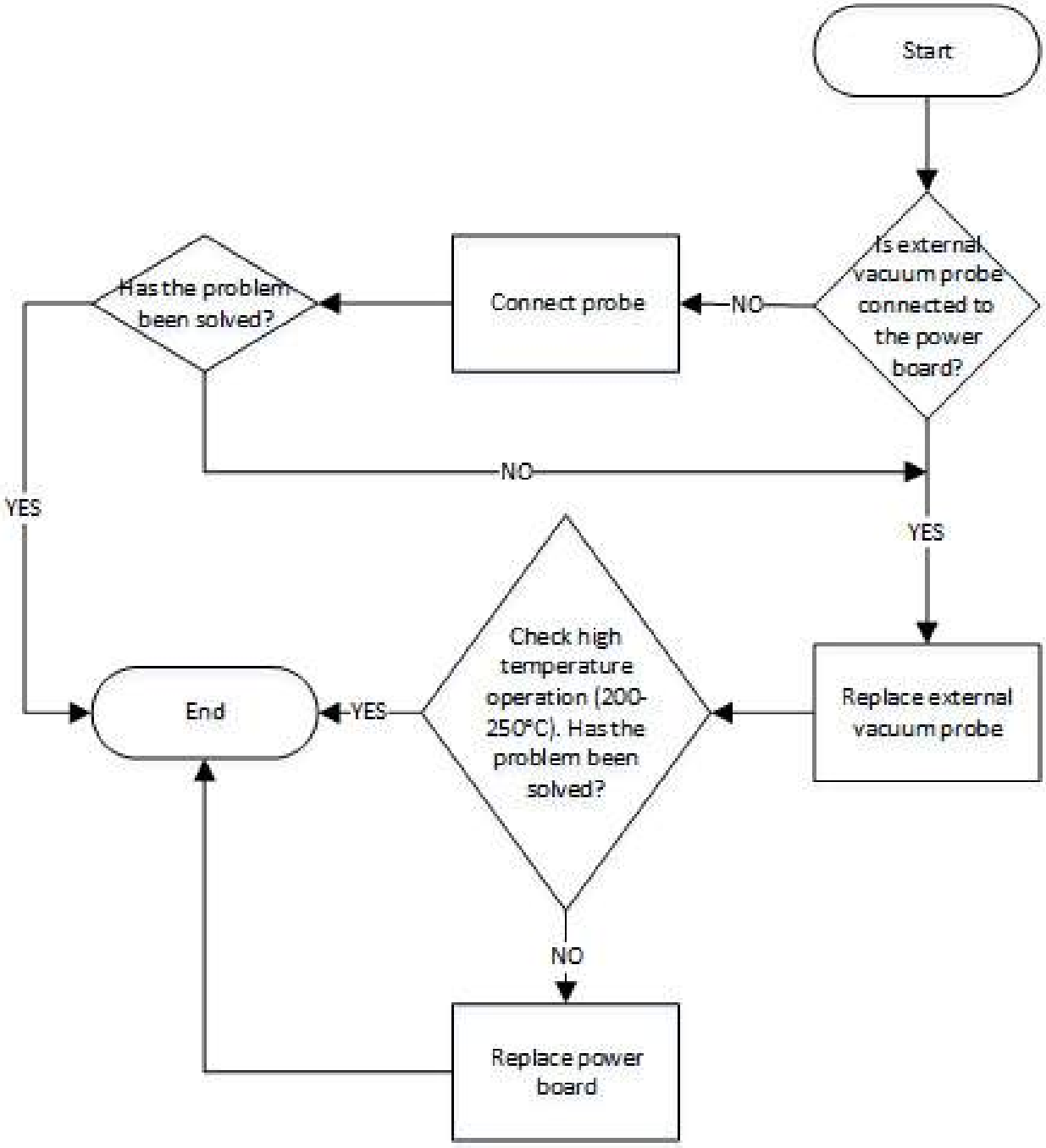
WF06	
Power board temperature warning	
The oven continues to work	
Cause	Solution
Board temperature over 70°C	Check for over heating causes
Board damaged	Replace the board



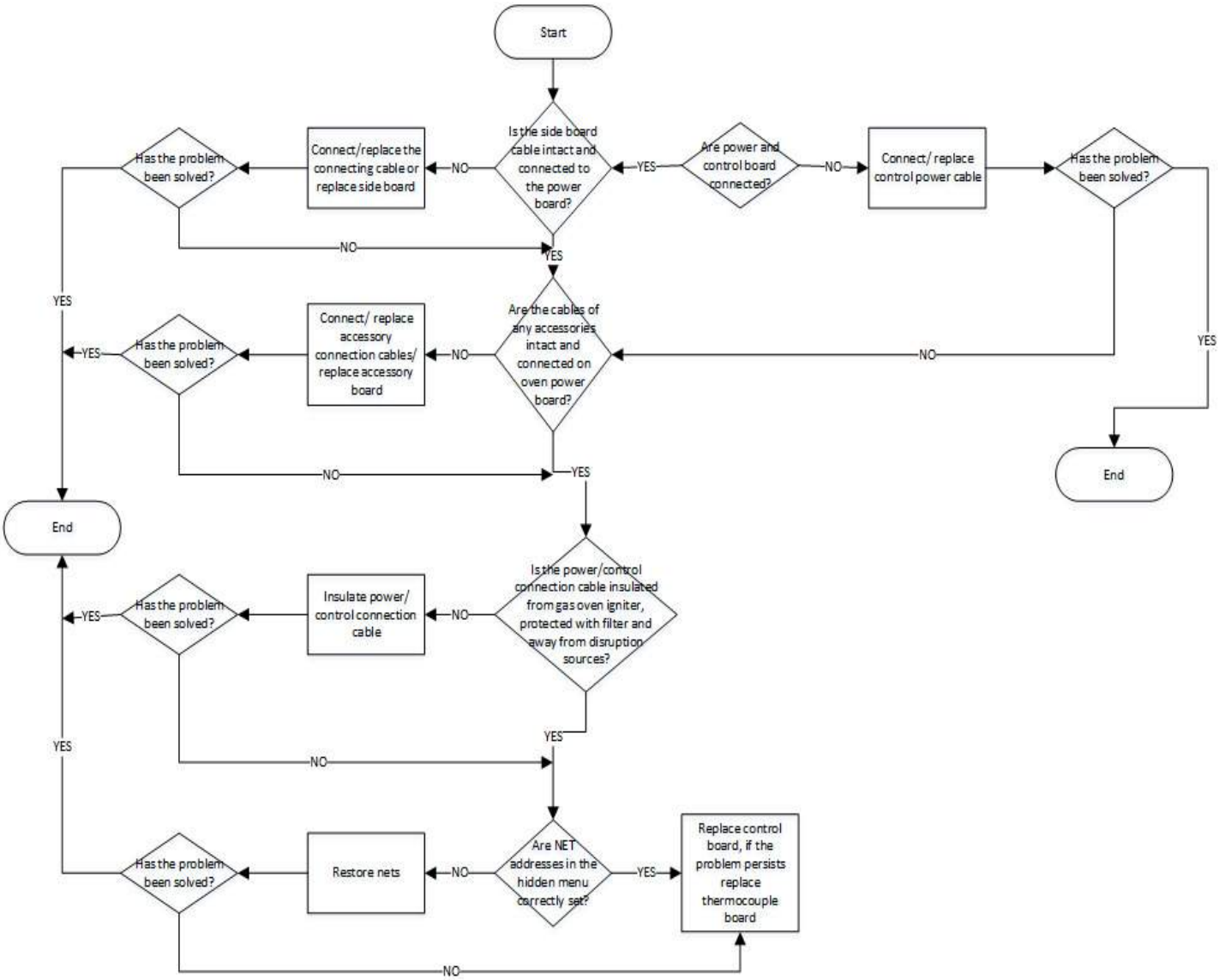
WF12	
Thermo-couple board temperature warning	
The oven continues to work	
Cause	Solution
Board temperature over 70°C	Check for over heating causes
Board damaged	Replace the board



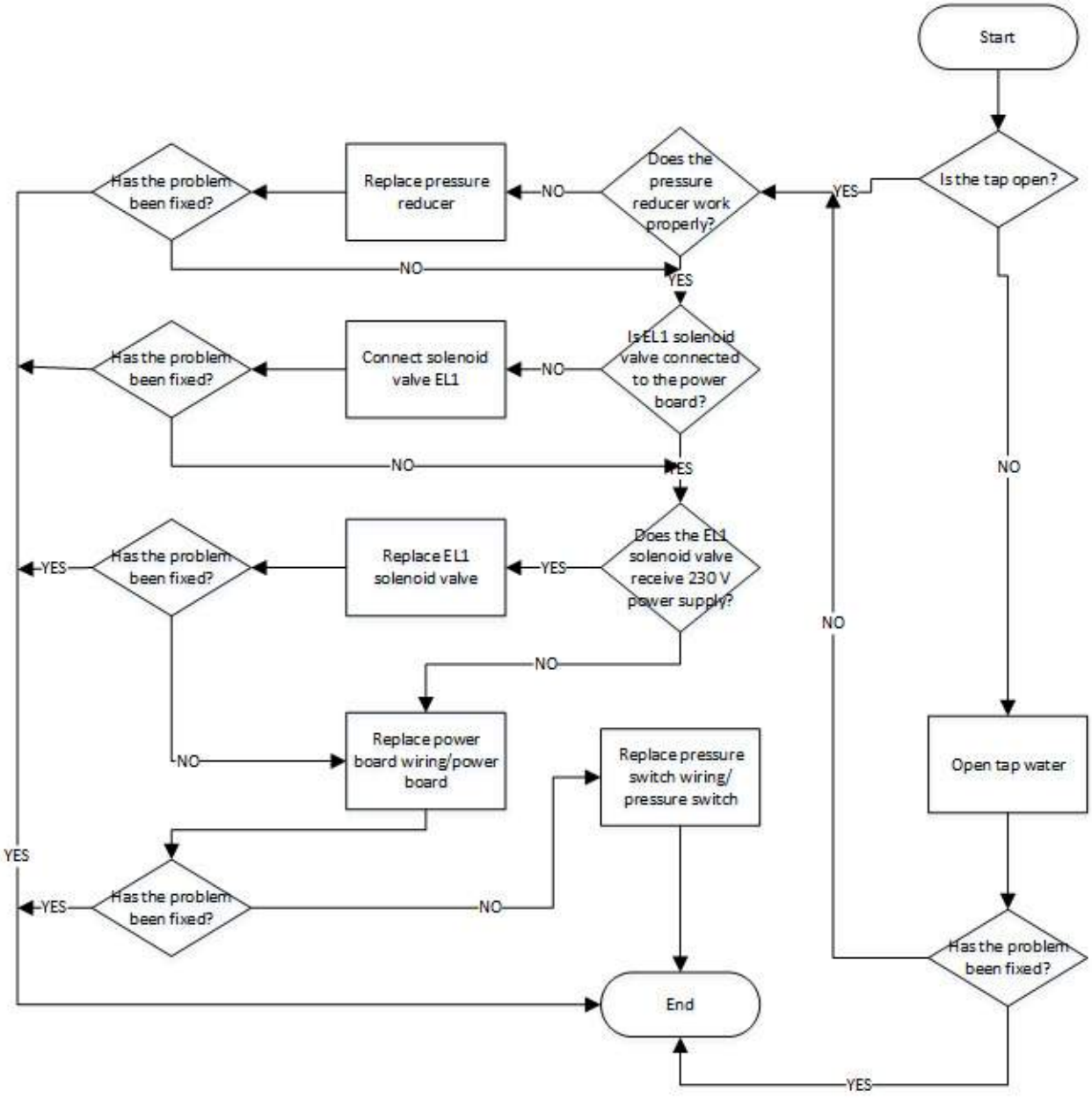
WF13	
External sous-vide probe 1 warning	
The oven continues to work using the other temperature probe	
Cause	Solution
Probe not connected or damaged	Connect or replace the probe
Power board damaged	Replace power board



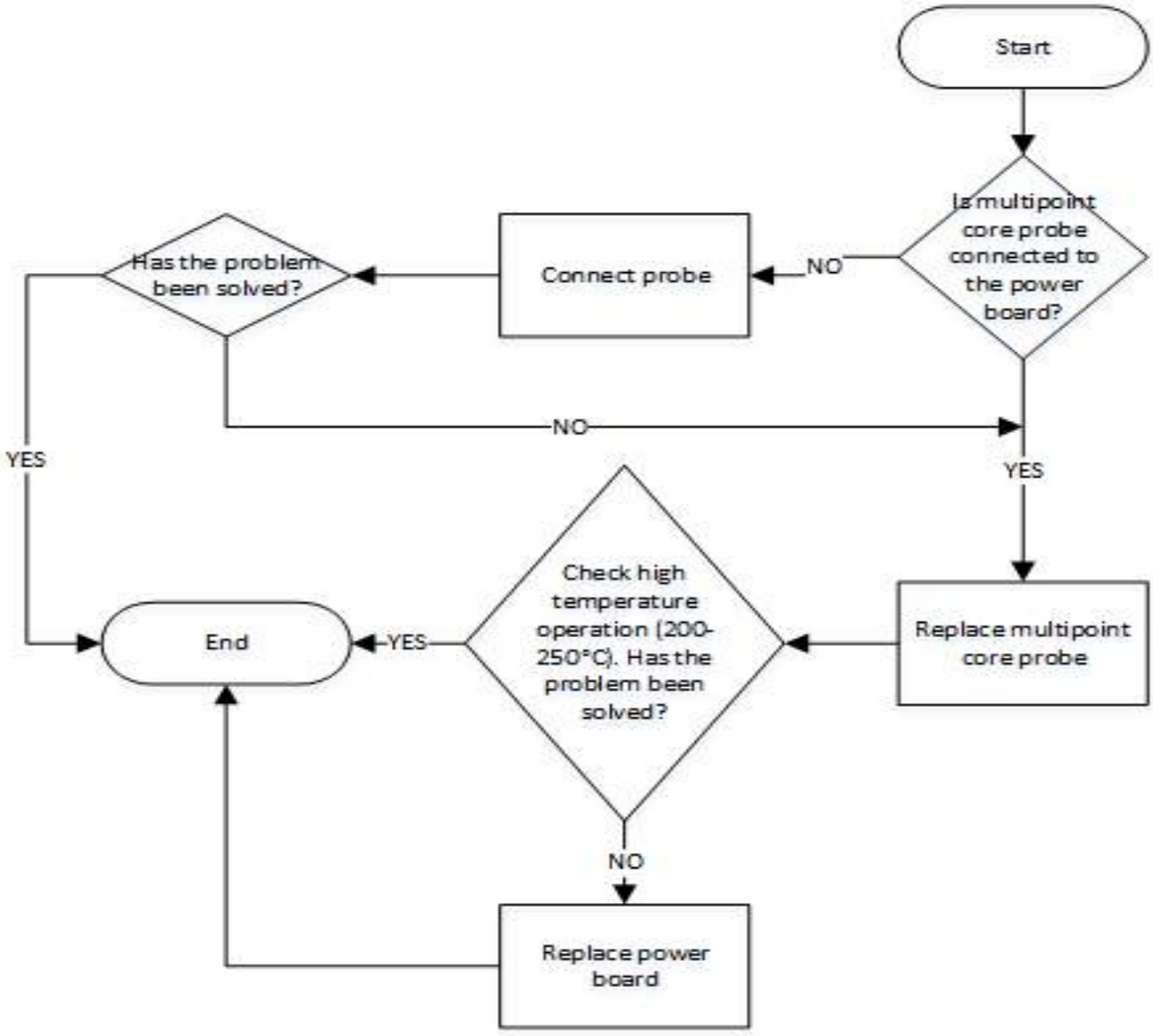
WF15	
Loss of communication thermo-couple alarm	
Oven stops any cooking program	
Cause	Soluzioni
RJ45 cable power board/thermo-couple board not connected/damaged	Check/replace wiring
High electric interference	Remove causes of interference
Control board damaged	Replace control board
Power board damaged	Replace power board
Accessories not connected	Replace wiring/board of accessories



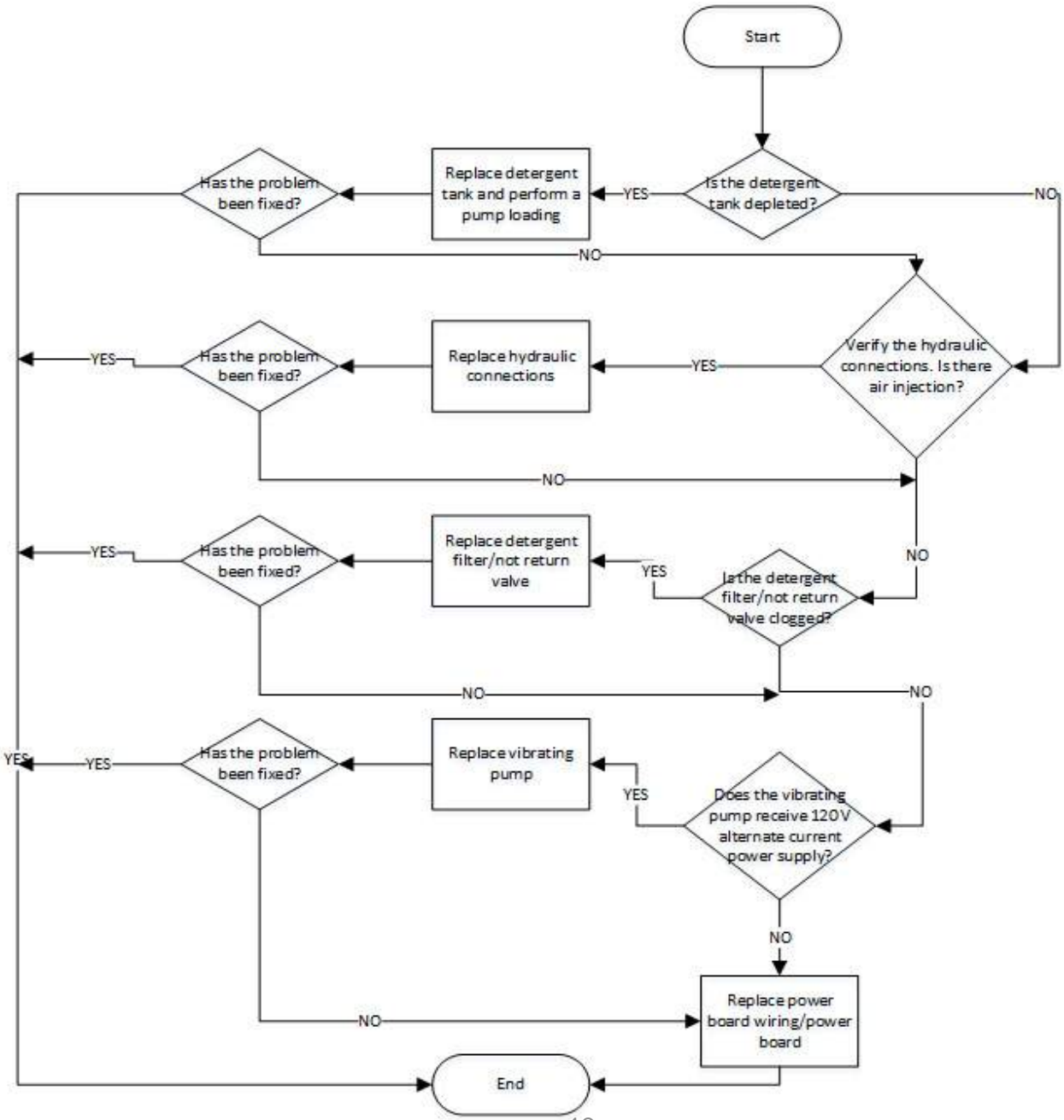
WF16	
Lack of water	
Oven stops any washing program	
Cause	Soluzioni
Lack of water input	Open the tap
Pressure reducer damaged	Replace pressure reducer
Solenoid valve EL1 not connected/damaged	Replace solenoid valve EL1
Power board wiring/power board damaged	Replace power board wiring/power board
Pressure switch wiring damaged	Replace pressure switch wiring/pressure switch



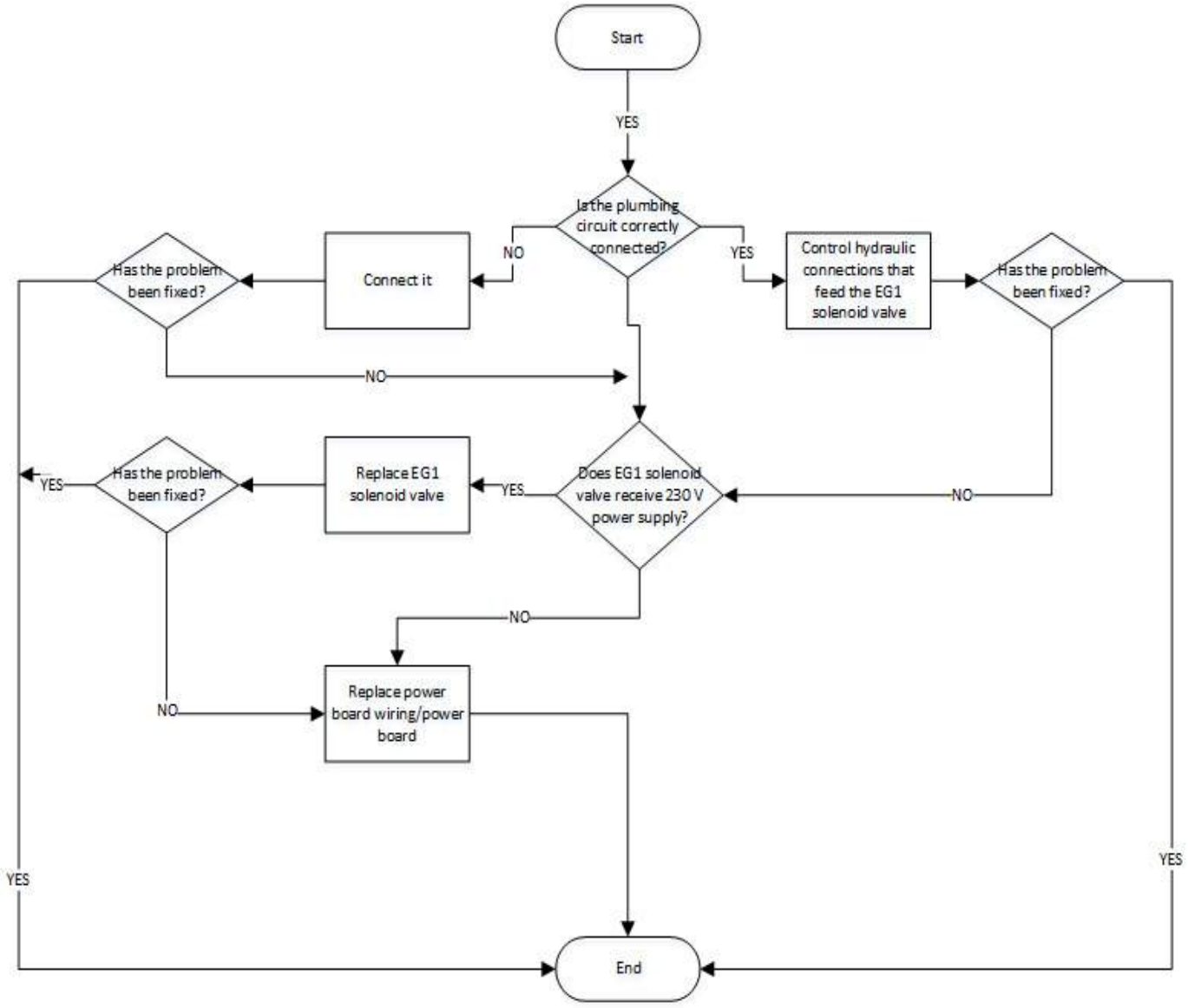
WF17	
External sous-vide probe warning	
The oven continues to work	
Cause	Solution
Probe not connected or damaged	Connect or replace the probe
Power board damaged	Replace power board



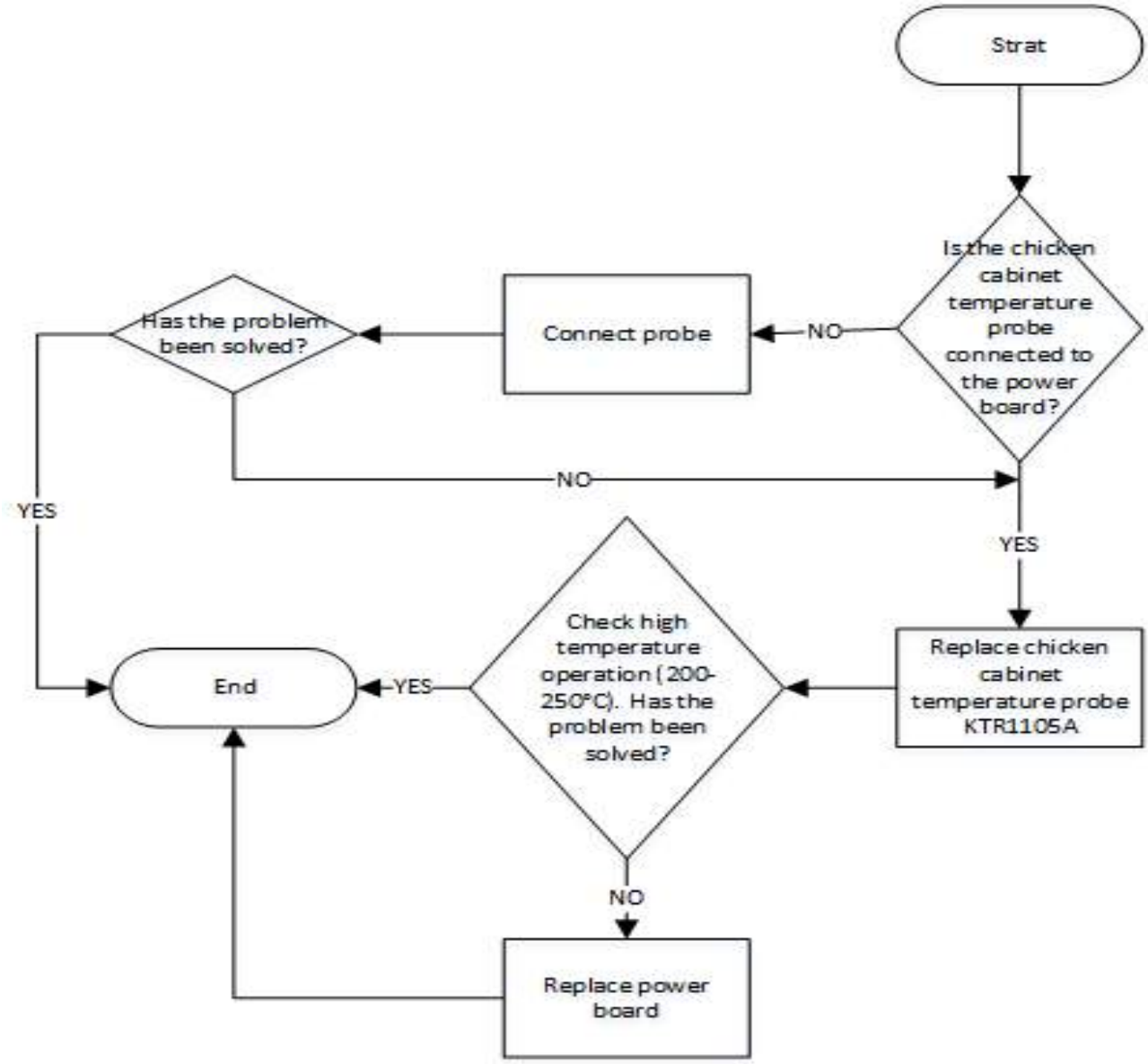
WF19	
Lack of detergent	
Oven stops any washing program	
Cause	Soluzioni
Detergent depleted	Replace detergent tank
Plumbing circuit damaged	Replace damaged pipes of the plumbing circuit
Detergent filter clogged	Replace detergent filter
Not return valve damaged	Replace not return valve
Vibrating pump damaged	Replace vibrating pump
Power board wiring/power board damaged	Replace power board wiring/power board



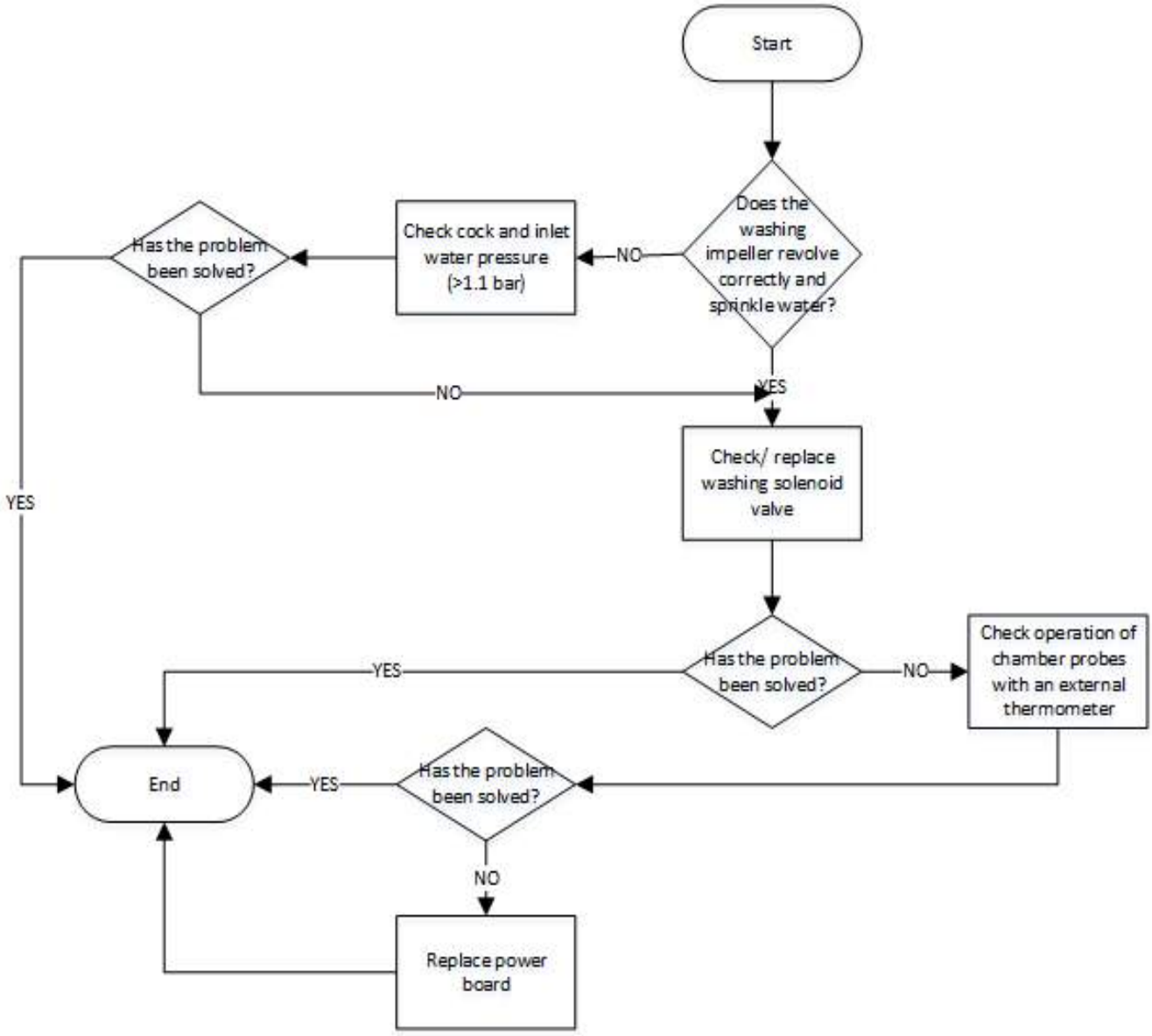
WF20	
EG1 solenoid valve warning	
Oven stops any washing program	
Cause	Soluzioni
Wrong/damaged plumbing circuit connections	Replace plumbing circuit connections
EG1 solenoid valve damaged	Replace EG1 solenoid valve
Power board connection/power board damaged	Replace power board wiring/power board



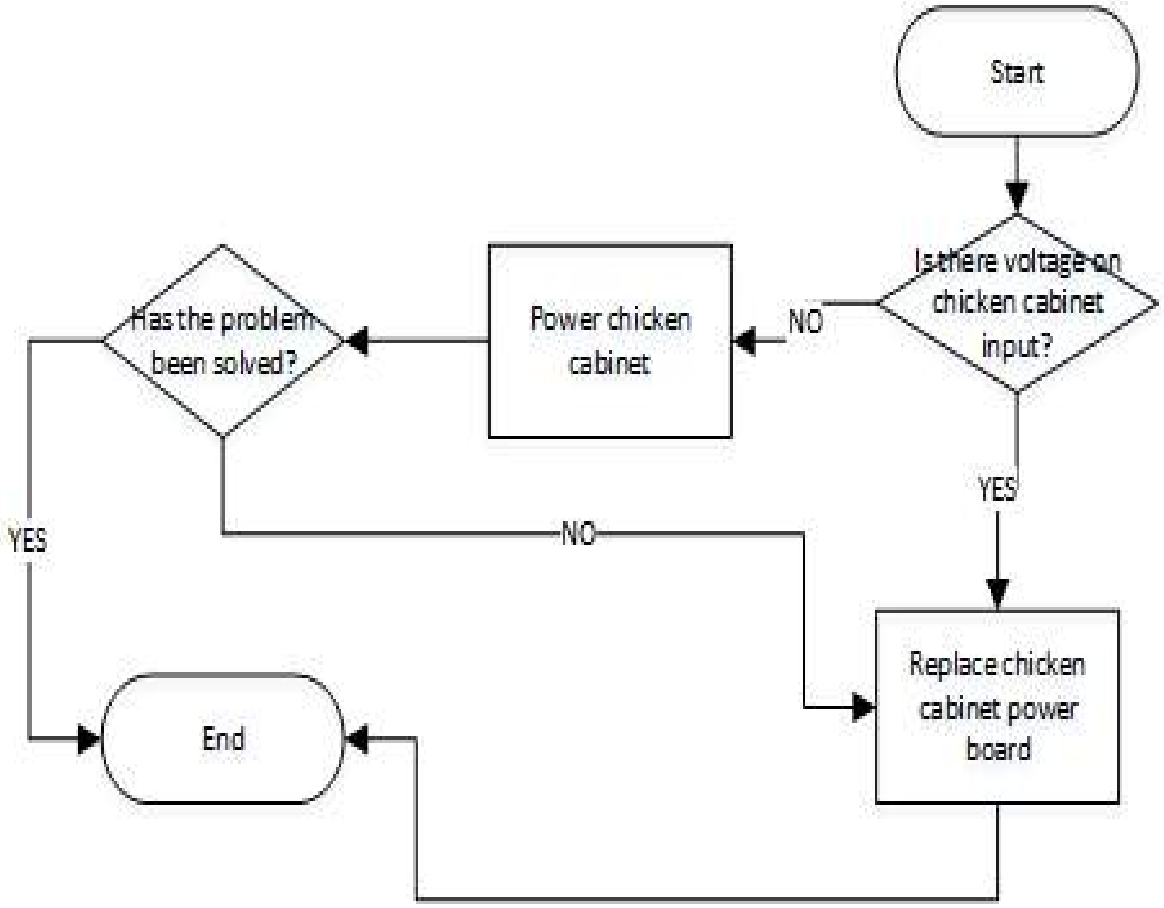
WF21	
Pollo cabinet temperature probe warning	
The oven continues to work but the pollo valve is not warmed	
Cause	Solution
Probe not connected or damaged	Connect or replace the probe
Pollo cabinet board damaged	Replace pollo cabinet



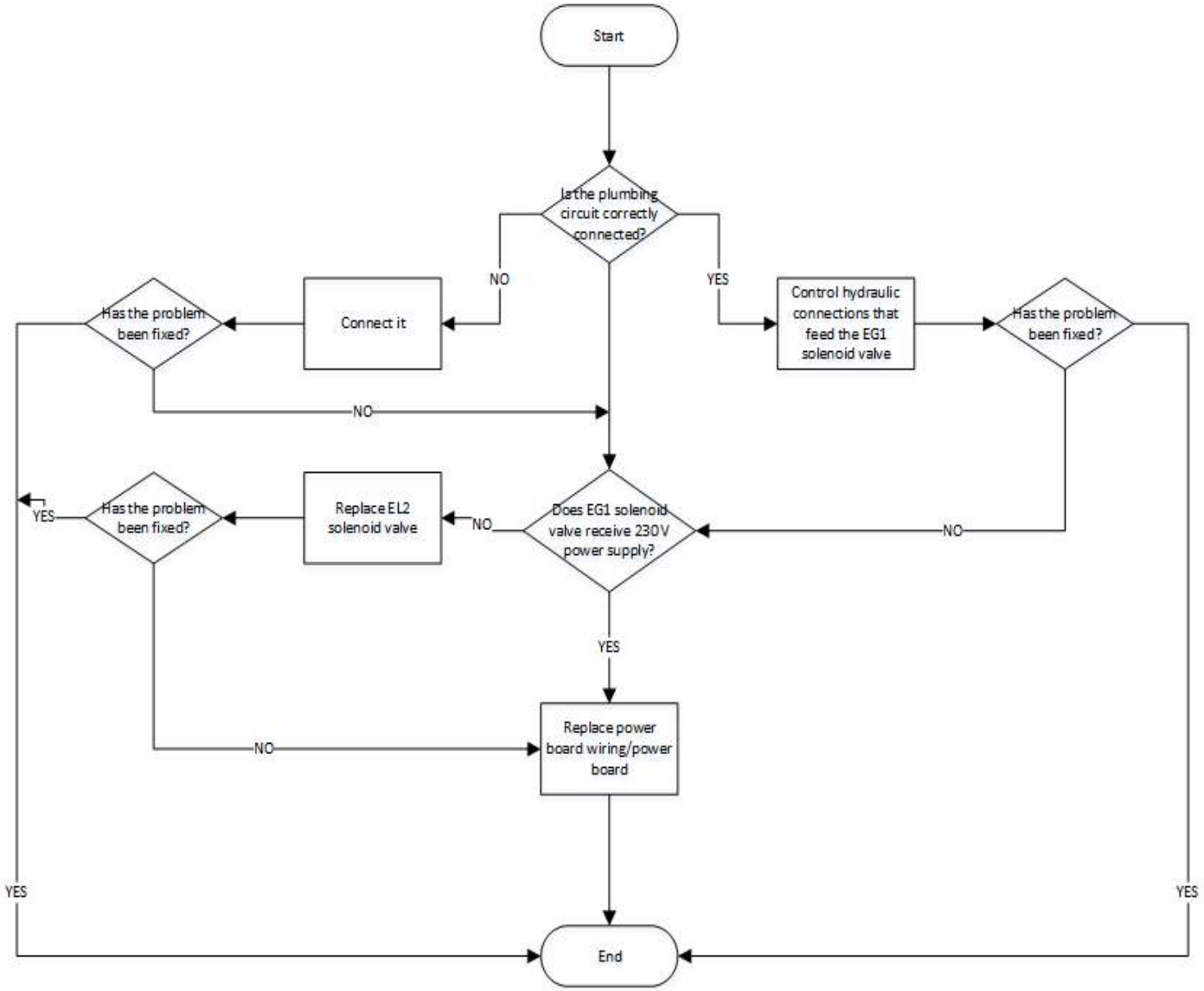
WF23	
Lack or scarcity of water	
Oven stops any washing program	
Cause	Solution
Water pressure too low	Regulate input water pressure
Water system connection	Control connection
Pressure switch damaged	Replace pressure switch
Power board damaged	Replace power board



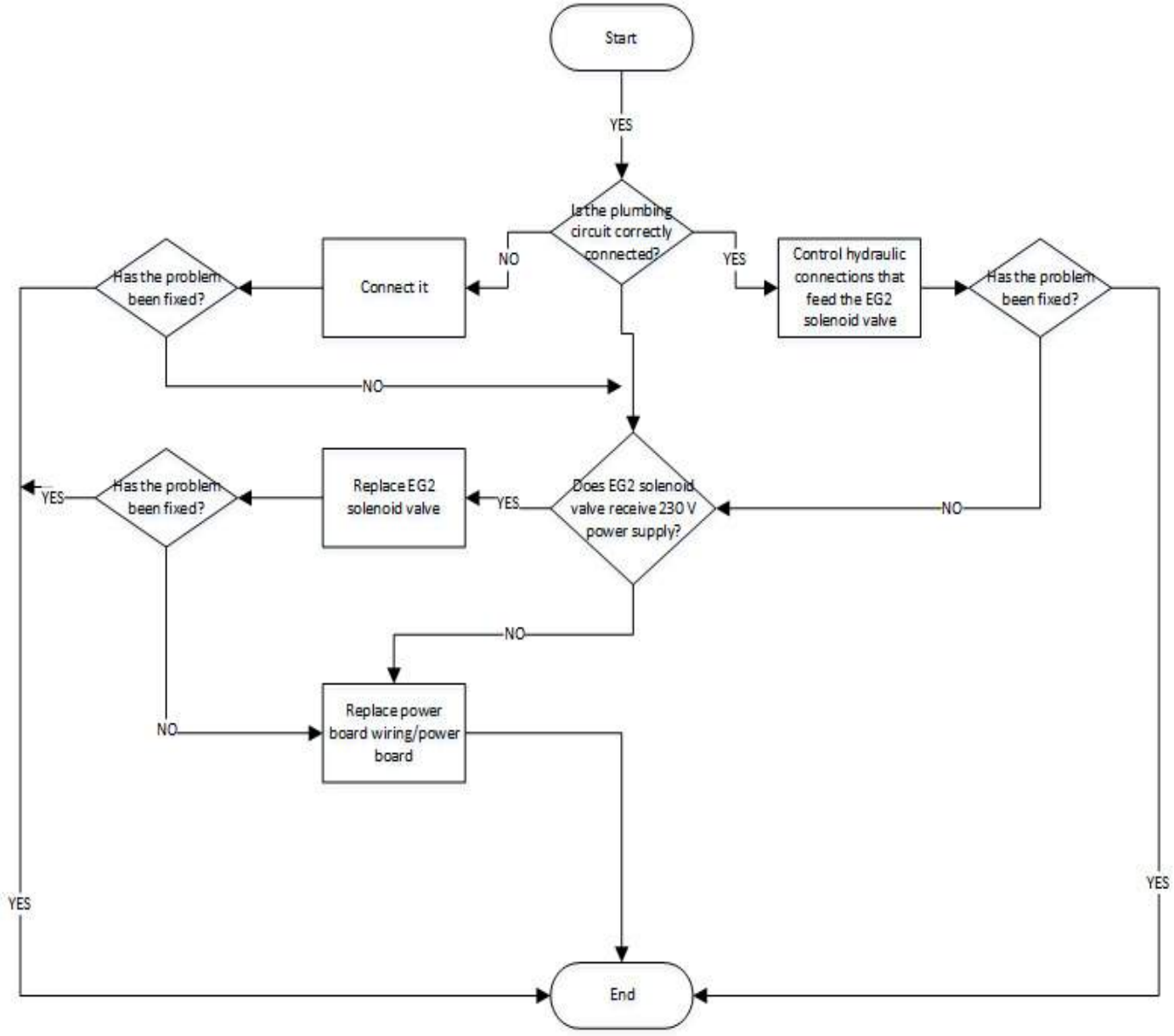
WF24	
Lack of power to the Pollo cabinet	
The oven continues to work, but it is not possible to use the Pollo cabinet	
Cause	Solution
Missing power supply	Restore the power supply
Pollo cabinet power board damaged	Replace Pollo cabinet power board



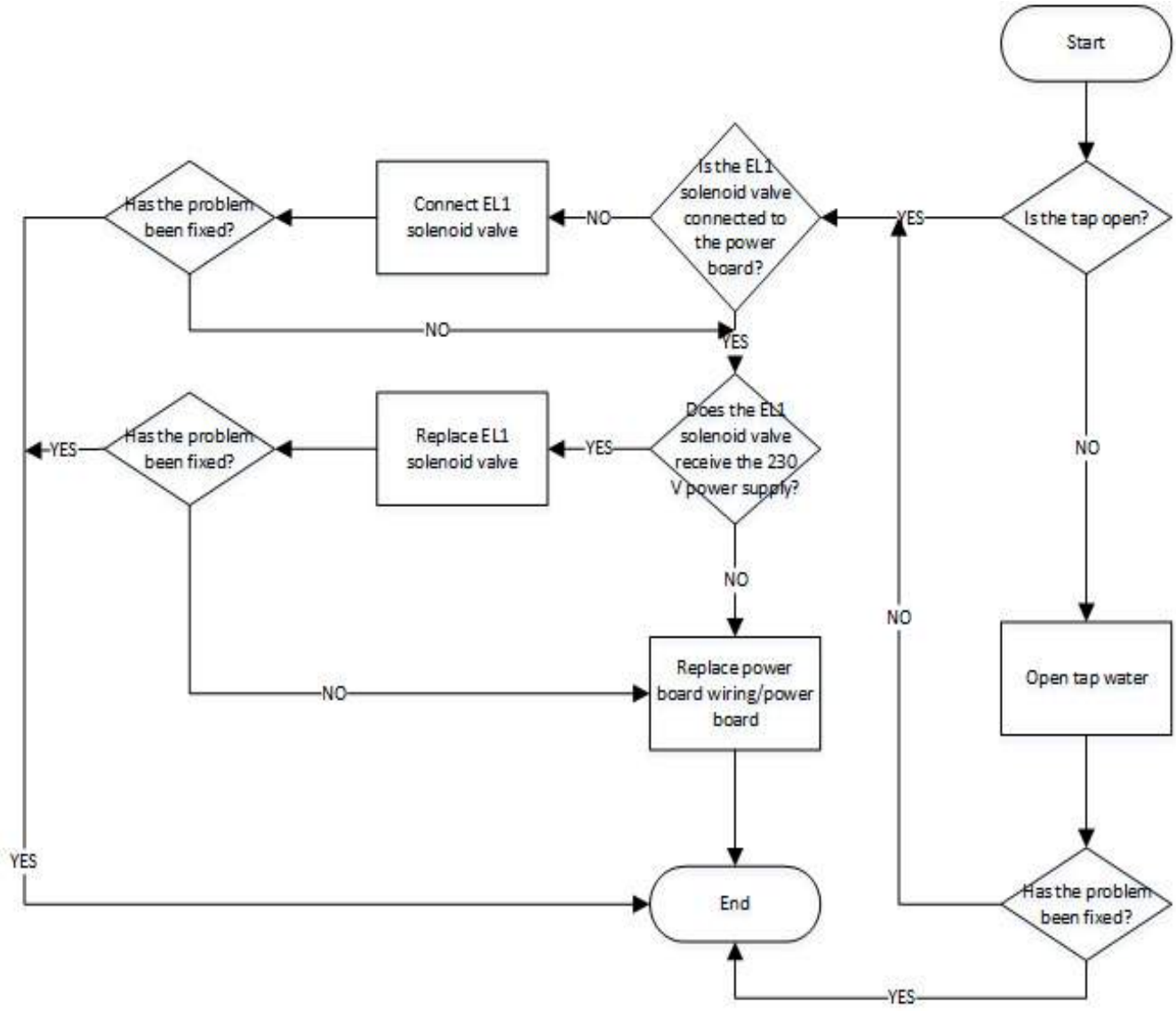
WF25	
EL 2 fan guard solenoid valve warning	
The oven stops any washing program	
Cause	Solution
Wrong/damaged plumbing circuit connections	Replace plumbing circuit connections
EL2 solenoid valve damaged	Replace EGL2solenoid valve
Power board connection/power board damaged	Replace power board wiring/power board



WF26	
EG2 solenoid valve warning	
Oven stops any washing program	
Cause	Solutions
Wrong/damaged plumbing circuit connections	Replace plumbing circuit connections
EG2 solenoid valve damaged	Replace EG2 solenoid valve
Power board connection/power board damaged	Replace power board wiring/power board



WF16	
Lack of water during the rinsing process	
Oven stops any washing program	
Cause	Solutions
Lack of water input	Open the water tap
Pressure reducer damaged	Replace pressure reducer
Solenoid valve EL1 not connected/damaged	Replace solenoid valve EL1
Power board wiring/power board damaged	Replace power board wiring/power board



Malfunction symptoms

Sympthom	Service Cause	Service Solution
Insufficient steam (with STEAM.Maxi)	The humidity solenoid valve is blocked; syphon is missing/incorrectly installed; the door seal is damaged/deteriorated, grit in pipelines	Check/replace humidity solenoid valves; check/adjust/replace the drain syphon; check/replace the door seal
The product does not dry adequately	Venturi lines seized (open or closed, perhaps due to absorption levels), seals damaged (door and humidity/washing pipelines), solenoid valves damaged/malfunctioning	check/replace Venturi valves, check/replace seals, check/replace damaged/malfunctioning valves
The product over-dries (rare)	Venturi lines seized (open or closed, perhaps due to absorption levels), seals damaged (door and humidity/washing pipelines), solenoid valves damaged/malfunctioning	check/replace Venturi valves, check/replace seals, check/replace damaged/malfunctioning valves
The product does not rise sufficiently during cooking	Venturi lines seized (open or closed, perhaps due to absorption levels), seals damaged (door and humidity/washing pipelines), solenoid valves damaged/malfunctioning, braking resistors damaged, heating element relays seized/stuck	check/replace Venturi valves, check/replace seals, check/replace damaged/malfunctioning valves, check/replace damaged braking resistors, check/replace oven power board
The product burns on the outside	temperature sensors not calibrated/damaged, incorrect settings of cooking parameters	compare/replace temperature sensor/s, contact AMC or a trusted Chef for the recommended parameters
does not reach the set temperature	phase disconnection, damage to one or more heating element sections, a TL stuck in open position	restore terminal board connection, check/replace heating element unit, check/replace TL
Temperature slow to increase	phase disconnection, damage to one or more heating element sections, a TL stuck in open position	restore terminal board connection, check/replace heating element unit, check/replace TL
Uneven cooking in same tray	excessive load, load positioned incorrectly	reduce the load as specified in the oven technical data sheet, contact AMC or a trusted Chef for appropriate tray sizes and/or product positioning
Uneven cooking among trays	no syphon on drain, drymaxi open, door seal damaged, temperature sensor	intercept the oven drain by inserting a syphon, check/replace dry.Maxy, check/replace door seal, check/replace temperature sensor
The oven is noisy	possible contact between casing and fan due to loosened nuts or bending of casing	check/replace bent casing, secure fixing nuts on motor shaft
The oven vibrates	fan unbalanced, limescale on fan	replace fan
The oven emits smoke	residue and scale of unclean chamber	deep clean the oven when possible In the event of damage to electrical or mechanical parts (motor, fan, heating elements) replace with new parts
The oven does not clean sufficiently	No or low consumption of detergent (pump or incorrect mn parameter settings), irregular presence of washing water (exceeding temperature controls envisaged in cycles), unsuitable detergent product, no generation of steam	Check/replace detergent primer hose-pump, check hidden menu parameters (SSE, TPD), check/replace parts of or entire untreated water circuit (3/4", mechanical filter, pressure reducer) check/replace washing water solenoid valve, replace product with a suitable version, check/replace steam valve

The oven sets on fire inside the cooking chamber	residue and scale in unwashed chamber, control relays TL1,TL2-TL"x" constantly in NC status with oven not in running status, TL1, TL2-TL"x" activated without motor rotation, 380V voltage applied to heating element branches, internal blades of contactors "welded"	deep clean the oven when possible In the event of damage to electrical or mechanical parts (motor, fan, heating elements) replace with new parts, replace power board for TL1-TL2 control relays that are damaged/seized in open position, replace heating elements and/or contactors if voltage of linked 380V has damaged the latter
The oven (gas) makes a banging sound	delay in discharge on ignition plugs, low discharge voltage on ignition plugs, excess suction on gas fume channels, excess ventilation around the burner, incorrect burner settings (nozzle with diameter larger than specified value)	replace igniter in the case of delayed discharge and/or low voltage, reduce forced suction on burner fume outlet, reduce natural or forced ventilation around the burner area, apply correct settings to the gas system according to current standards and instructions supplied by the manufacturer
The oven (gas) makes a whistling noise	incorrect adjustment of the burner primary air outlet (normally closed or partially closed) impurities in the adjustable primary air outlet (which may cause slight turbulence)	Open the primary air outlet completely, on both natural gas and LPG models; check and if necessary clean the primary air outlet
The oven (electric) heating elements are red in the chamber	control relays TL1,TL2-TL"x" constantly in NC status with oven not in running status, TL1, TL2-TL"x" activated without motor rotation, 380V voltage applied to heating element branches, internal blades of contactors "welded"	replace power board, replace contactors
The oven chamber base is full of water	oven drain or kitchen drain blocked, oven drain positioned below the height of the kitchen drain	balance out/align the oven drain outlet with the kitchen drain point, unclog blocked drain removing any cooking residue/impurities
The oven is white	no softener (excess limescale in chamber), presence of salt on side panels (cooking residue)	check effective hardness of the inlet water, install a suitable filter
The oven has rusted	mains water untreated (brine-salt water), non-alkaline acid "detergent" product	try to brush the oven chamber interior with polishing paste or with a simple Scotch-brite pad, then wash thoroughly with neutral detergent Install a suitable water treatment filter; use suitable detergent
The oven has buckled inside	Flue/exhaust fumes and liquid drain obstructed by air transit (implosion on cooling)	if the chamber can be restored to the original condition, immediately clear the fume exhaust lines above the oven chamber. If the chamber cannot be restored to its original condition contact a local service centre for assistance.
Water is leaking from the oven	chamber seal possibly damaged/torn, liquid drain and/or relative pipelines not adequately sealed, water filling hose not inserted correctly, H2O inlet pressure exceeding 6 bar, possible leakage from internal components (to be inspected)	check/replace the damaged/torn chamber seal, seal drain pipelines, reduce the inlet water pressure to values as stated in the instruction manual and technical data sheet, check/replace leaking water circuit sections
The door does not close	handle terminal not aligned with the door latch, lower door bracket bent/buckled under door weight/impact, upper door bracket incorrectly aligned with side panel, handle loose, handle terminal damaged, door latch damaged or not aligned	level the door on the upper oven hinge (contact a local Service centre for assistance), replace the lower or upper bracket of the bent/damaged door, secure the self-locking screws on the handle, replace/align the damaged/loose door latch.

The display does not turn on	No power supply from the terminal board, board power fuses blown, 12V or 21V power not supplied from transformer, power-control cable disconnected, power-control cable detached/cut, display board needs to be replaced	check and restore power supply voltage, replace safety fuses, check/replace transformer, reconnect/replace damaged power-control cable, replace display board
The USB stick does not load the cooking programs	USB stick damaged (replace), USB stick not programmed (no directories), USB interface board disconnected, USB interface board damaged (soldering failure on USB socket, board with interrupted traces), control board software infected or unsuitable	replace USB stick, program USB stick with software Ovex Net 3.0, connect the USB interface board, replace the USB interface board, update the oven control board software
I felt the electric current	the earthing wire is not connected, the oven is not efficiently earthed, there is no residual current circuit breaker upline of the thermal cut-out, the circuit breaker does not correspond to data plate specifications	connect/restore the earthing wire, install a residual current circuit breaker according to current standards, check whether the circuit breaker is the correct type
The washing impeller does not rotate	internal washing impeller seal damaged (replace impeller), 2 bar pressure reducer obstructed or damaged (with pressure drop), pressure upline of reducer less than 1.5 bar, washing solenoid valve/s partially closed or obstructed.	replace washing impeller, check/replace pressure reducer , increase (via the pump) the water circuit inlet pressure (water IN), check/replace washing valve
The washing impeller leaks during cooking	washing solenoid valve not completely closed	replace washing valve
The washing impeller leaks during washing	washing solenoid valve not completely closed	replace washing valve
The oven consumes too much detergent	the tank is positioned at a height above the detergent primer pump, unsuitable detergent, software error, faulty pump, pump powered at voltages over 110-130V	position the detergent tank at a height below that of the oven, use suitable detergent, check and if necessary update oven software, replace detergent pump, check and if necessary replace power-washing system board connecting wiring
The oven door seal breaks after a short time	accidental error of client with trays, knives, various kitchen utensils	take care when handling trays or utensils with sharp edges
Trays are difficult to insert	chamber slightly imploded, tray size non-standard or out of tolerance range	if the chamber can be restored to the original condition, immediately clear the fume exhaust lines above the oven chamber. If the chamber cannot be restored to its original condition contact a local service centre for assistance.
Trays are difficult to remove	chamber slightly imploded, tray size non-standard or out of tolerance range	if the chamber can be restored to the original condition, immediately clear the fume exhaust lines above the oven chamber. If the chamber cannot be restored to its original condition contact a local service centre for assistance.
The oven does not turn on	See "The display does not turn on"	check and restore power supply voltage, replace safety fuses, check/replace transformer, reconnect/replace damaged power-control cable, replace display board
The trays drop inside the oven	tray/rack supports damaged/corroded, tray support screws loose, tray size non-standard or out of tolerance range	check/replace complete tray supports, tighten tray support screws, use trays recommended by Unox
The oven cooks differently with different loads	incorrect distribution of products in trays, leak from one or more steam valves, drymaxy in normally open status	contact AMC or a local retailer for assistance, check/replace steam water valves, check/replace dry-Maxy valve and/or oven power board

Two identical ovens cook the same recipe differently	the maximum load (kg) of product to be cooked has been exceeded (see product technical data sheet), incorrect cooking parameter settings, the oven is not powerful enough (electrical or heating power), check for presence of syphon on drain, flue duct connection, opening or steam or Venturi valves, condition of door seal, absorption of current or gas pressures involved, gas calibration	reduce the load as specified in the oven technical data sheet, contact AMC or a trusted Chef for the cooking parameters to be used, check/install the syphon on the oven drain section, check/restore the flue duct connection, check/replace water or Venturi valves, check/replace door seal, check or correct the terminal board electrical connection and/or gas inlet connection

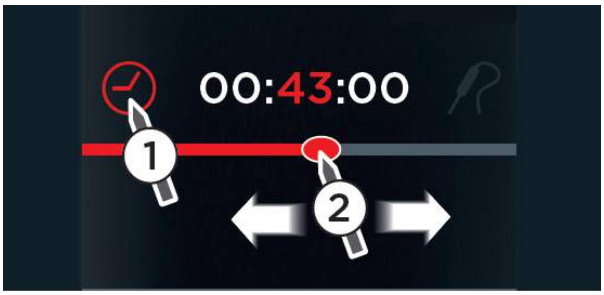
Note

Cooking program setting

As for to set a cooking program with the Set Menu, two different devices are available:

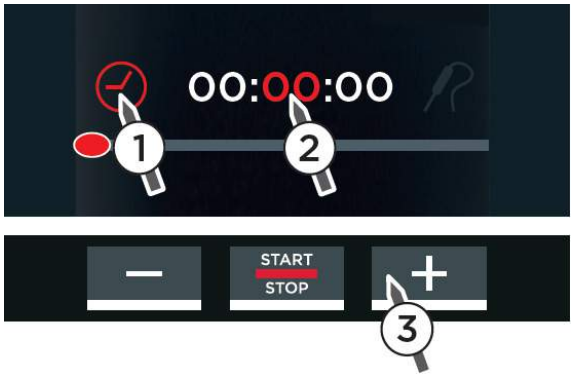
CURSOR MODE

1. When positioning on the parameter to adjust, it changes color;
2. When touching the horizontal bar, it enlightens. Drag the cursor till the parameter displays the desired value. If not use for more than 3 seconds, the cursor will disappear.



KEYS MODE

1. When positioning on the parameter to adjust, it changes color;
2. Select the value to set (if it concerns time, enter separately hours, minutes and seconds);
3. Use icons “+” and “-” to adjust the desired value.



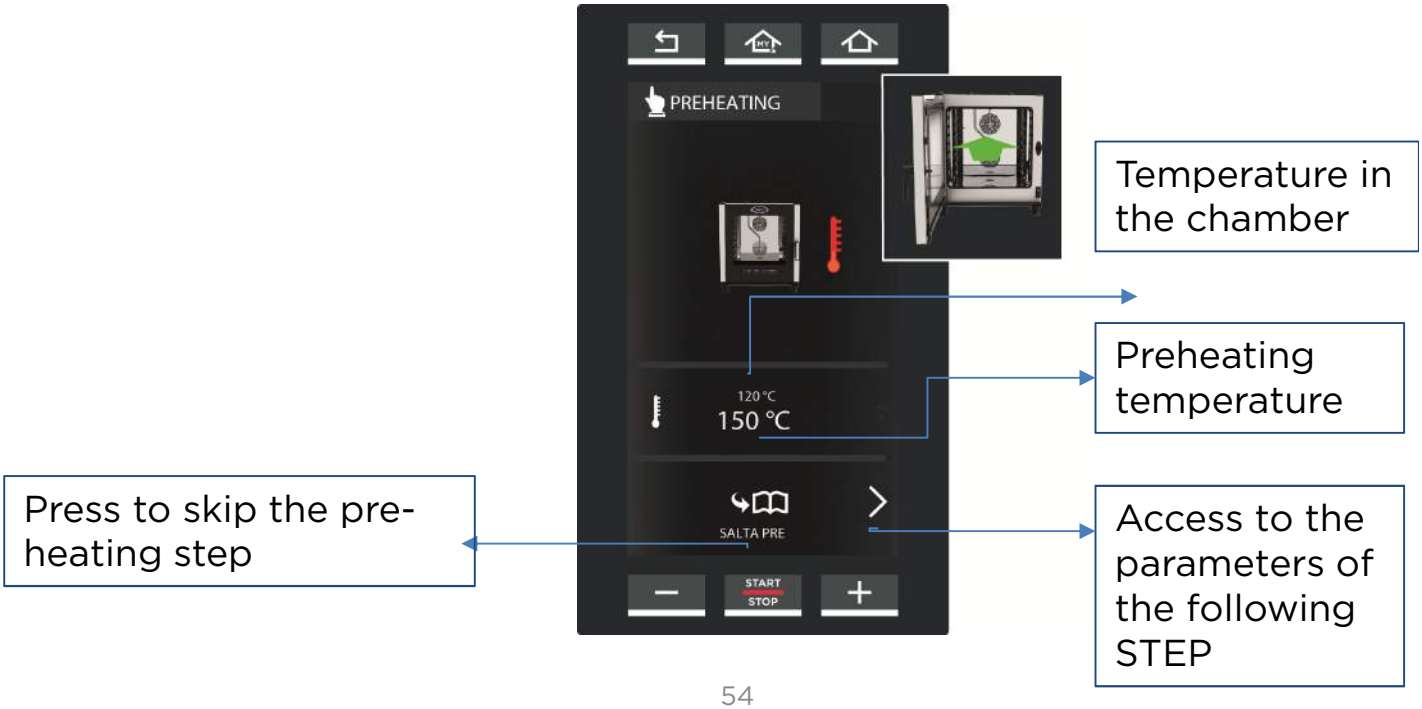
To set the PREHEATING step, proceed as following

1. select symbol <
2. select the temperature icon
3. use + and – buttons to set the desired value

It is also possible to skip the preheating step by means of the icon

The START/STOP button immediately launches the cooking process

If a preheating step has been entered, the display will show you as follows:



At the end of the preheating step:

- an acoustic signal reveals the conclusion of the step;
- an icon exhorts you to put trays in the oven;
- the oven automatically moves to STEP 1.

To set the following STEP of the cooking program (from 1 to 9), press symbol >
from the preheating- or Menu Set-page. At the top right of the page, the STEP in progress will appear.

Accordingly the way user sets parameters, the display of the cooking program will change.

TIME

1

CORE PROBE

2

TIME AND CORE PROBE

3

Cooking ends when time is over or when the core temperature set has been reached. The end is recalled from the acoustic signal.

At this moment, you can:
- Save the cooking program
- Repeat it
- Repeat the last step by modifying the time
- Repeat the last step after moved the core probe to another piece of food
- Repeat the last step by modifying the core probe's temperature

If you do not want to save the cooking program, select the icon  to return to the home page.

*Acoustic signals can be mute by pressing the  icon at the top right of the screen (green= activated; white= deactivated).

Remarks
At the end of cooking, if you select  icon, it is possible to access to electrical and hydro-consumption data and to obtain HACCP data.

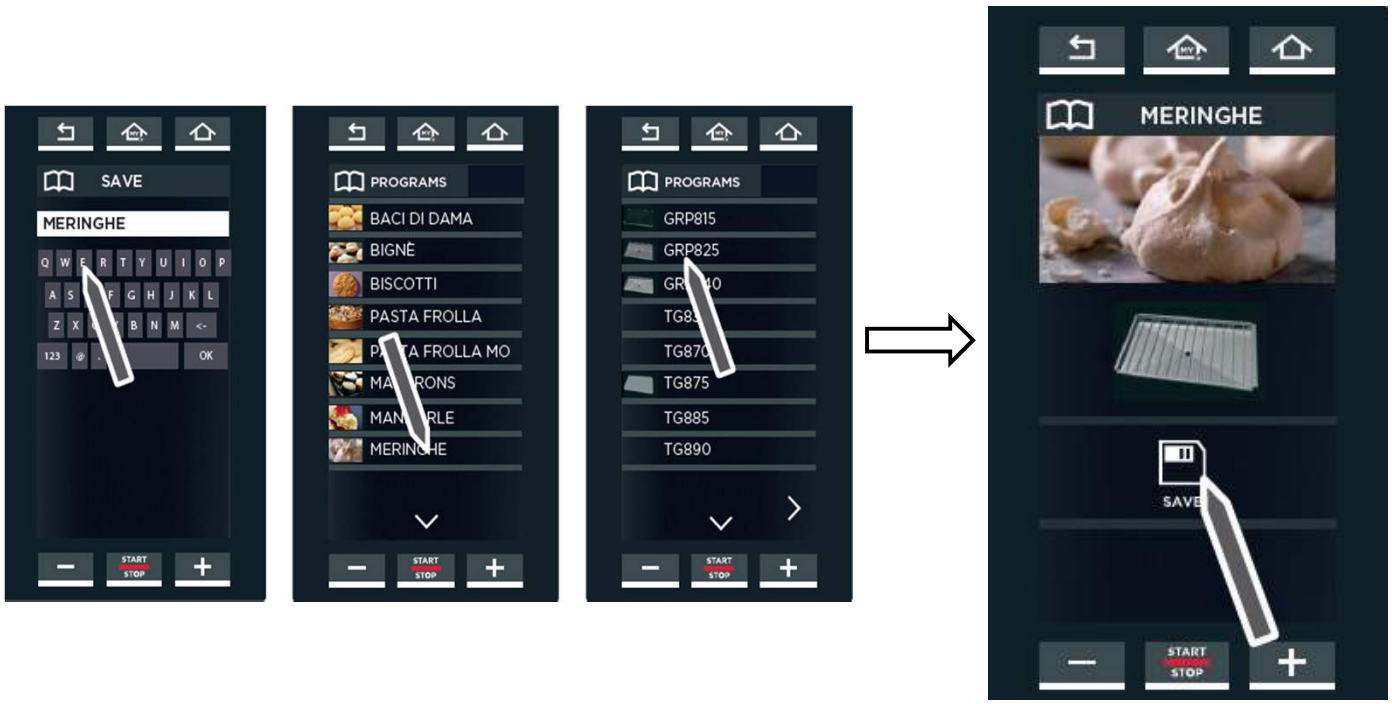
Saving a cooking program gives the possibility to repeat it plenty of time.

You can save your recipe pressing **«SAVE»** command:
- After having set parameters (time, temperature, etc.);
- At the end of a cooking.

Before saving a cooking program, it is also possible to:
- Give your recipe a name (ex. MACARONS) and confirm it with "OK";
- assign your recipe a photo choosing it from those available;
- Assign your recipe a pan choosing it from those available;
- Save it with the just-set parameters (name, photo, etc.)

When pressing "SAVE" button, you can even choose the position in which you want your recipe to be classed.
If a position has already been used, you will be asked to confirm the overwriting.

The images report the saving process



Browse the 16 available positions with < and >
Browse the 16 available groups with ∨ and ∧

The recipe you save will be classed in a list. When choosing a recipe from the list, you may also:

1. Visualize/modify the cooking program;
2. Create a similar cooking program (with similar parameters)
3. Delete the memorized cooking program
4. Launch the cooking program with START/STOP

To recall an already-saved recipe, simply press the RESTART icon to access to the last cooking programs or use the «Programs» Menu.

MIND MAPS allows to

- Set a new parametric curve with the module “NEW MIND MAPS SET”;
- Recall an already-memorized cooking program via “MY MIND MAPS” menu.

To set a new parametric curve:

- Press the icon «NEW MIND MAPS SET»;
- Use the nib to trace the curve selecting the icon of the parameter you want to enter;

The parametric curve’s graph will present:

- The Y axis concerning temperature, extraction/injection of humidity, speed of air stream;
- The X axis concerning time o the core probe temperature;

Note:

- Red values identify extraction;
- Blue values identify injection

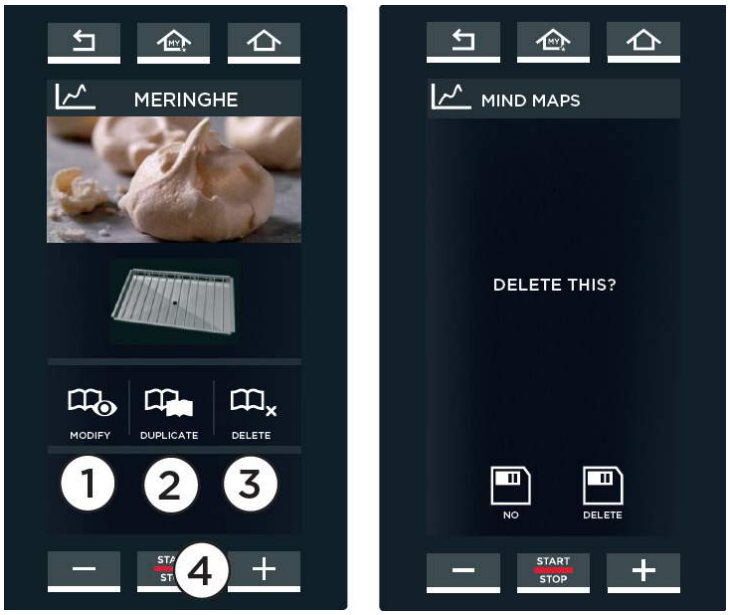
With the core probe set, the graph will display a dotted line ---- . Below this line, it is not possible to trace any curve.

MY MIND MAPS recall an already-saved cooking program

To access to the list of memorized cooking:

- Enter «MIND MAPS» menu;
- Select "MY MIND MAPS" icon to visualize the list

1. Visualize/modify the cooking program;
2. Create a similar cooking program (with similar parameters)
3. Delete the memorized cooking program
4. Launch the cooking program with START/STOP



User programs

Allows to enter a list of cooking programs previously set (MY PROGRAMS) or to create a new cooking program and memorize it (NEW PROGRAMS).

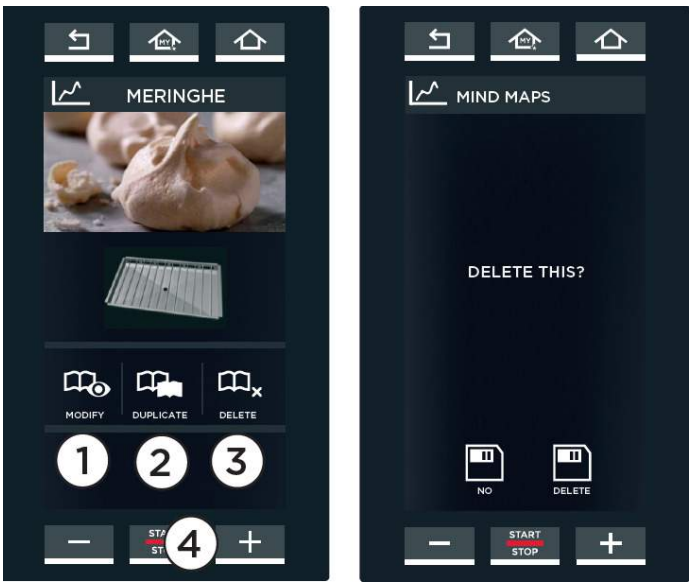
MY PROGRAMS: How to recall a cooking program

- Select “PROGRAMS” icon
- Choose “MY PROGRAM” and the list of previously memorized recipe will appear

Recall the cooking programs with < and >
Recall the 16 groups available with ∨ and ∧

As for the MY MIND MAPS menu, when choosing one of the cooking program from the list, you can:

1. Visualize/modify the cooking program;
2. Create a similar cooking program (with similar parameters)
3. Delete the memorized cooking program
4. Launch the cooking program with START/STOP



NEW PROGRAMS: Setting and save a new recipe

In this section it is possible to set, launch and save a new recipe.

As for to set parameter, follow the same procedure described for the MENU SET.

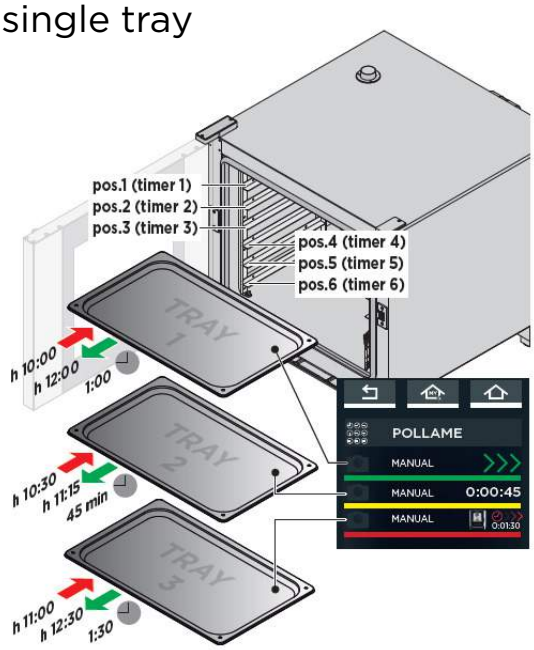
Multitime

- Create and save a new Multi.Time cooking by “NEW MULTI.TIME”
- Recall an already-saved cooking by “NEW MULTITIME”
- Recall a saved menu by “MY MENU”

Thanks to Multi.Time it's possible to set a cooking program with constant temperature and insert several trays in the oven having different cooking sime.
With Multi.Time the oven:

- manage up to ten different timers
- Set a specific timer for each single tray

An acoustic signal
Informs when each timer is over



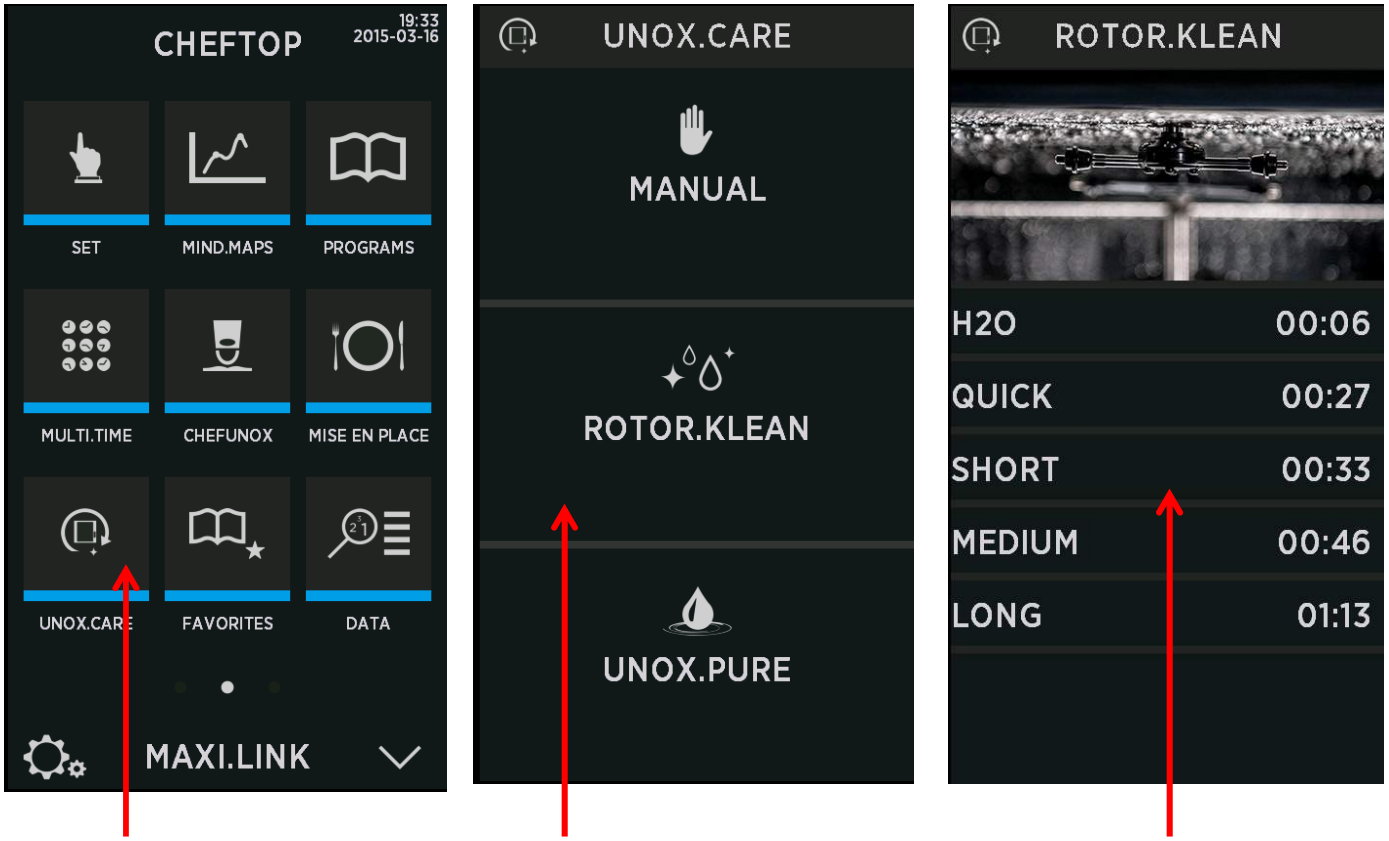
The setting of a new cooking program follows the same procedure described in the Menu Set.
A preheating step is expected for every cooking cycle.

<u>No necessary to:</u>

- Set different STEP
- Set time

Memorization and modification of a Multi.Time program follows the same procedure as for the User programs.

Washing program setting

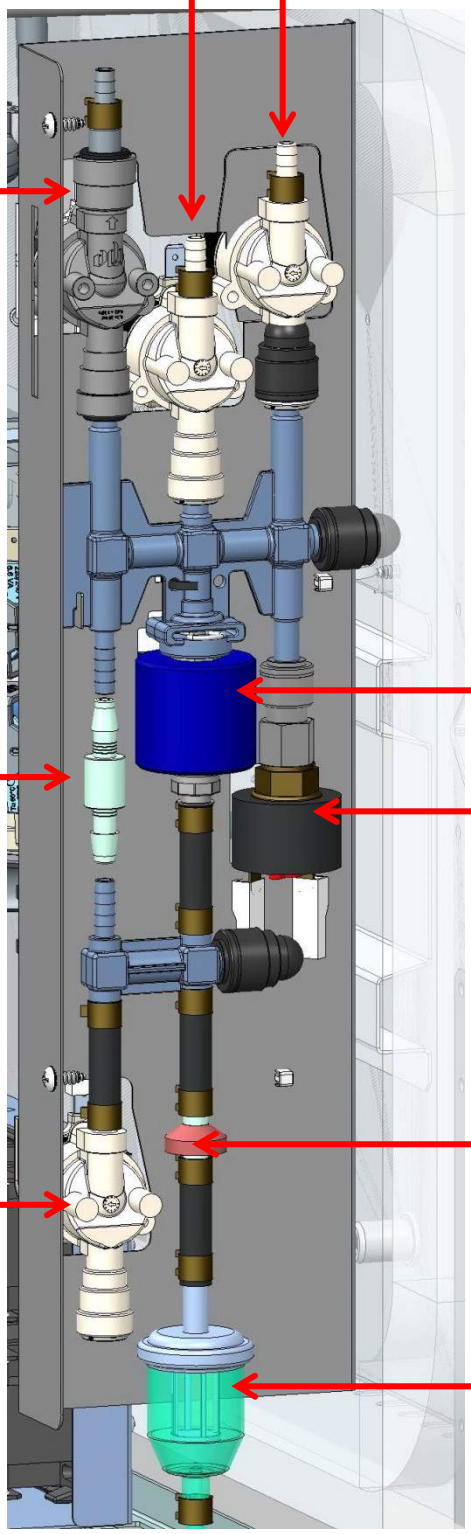


Washing completed

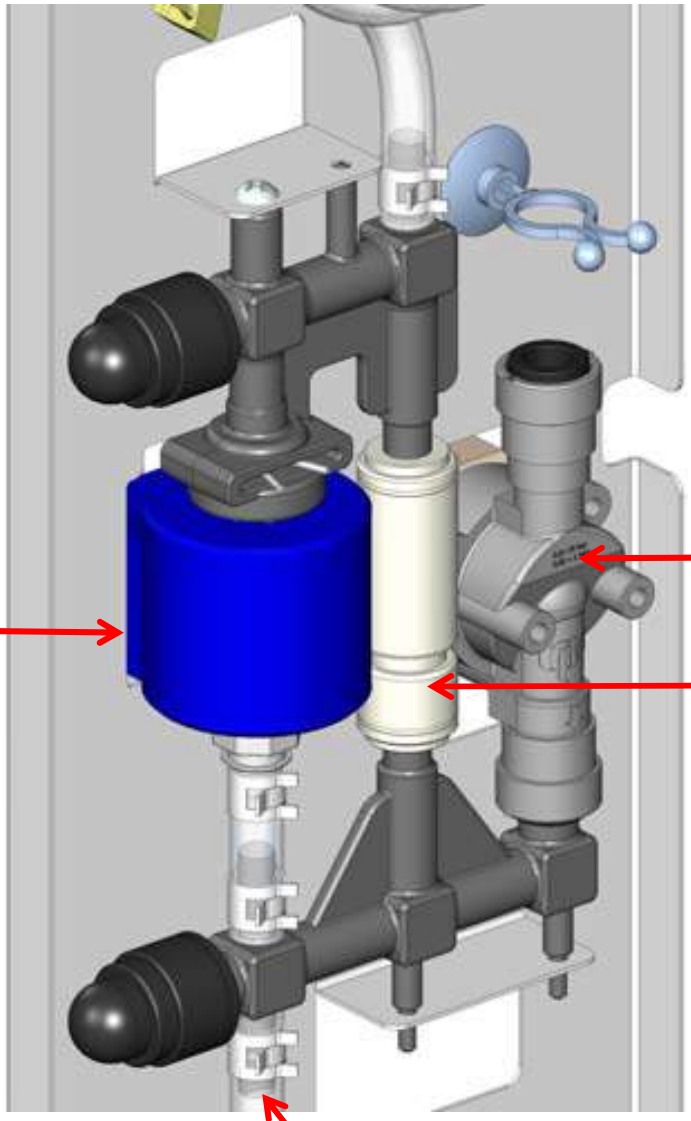
Washing in progress (remaining time less than 1 minute)

Washing in progress (remaining time more than 1 minute)

Washing circuit – Plus version



Washing circuit – One version



Consumptions chart

Single rotor arm - PLUS				
	Long	Med	Short	Quick
Duration (min)	103	62	41	30
Detergent consumption (g)	400	200	100	50
Water consumptions (l)	30	19	13,5	13,5

Double rotor arm – PLUS (ovens with 1 to 3 motors)				
	Long	Med	Short	Quick
Duration (min)	126	73,	46	41
Detergent consumption (g)	532	266	133	67
Water consumption (l)	30	19	13,5	13,5

Double rotor arm – PLUS (ovens with 5 motors)				
	Long	Med	Short	Quick
Duration (min)	127,8167	74,11667	47,26667	41,03333
Detergent consumption (g)	550	285	150	90
Water consumption (l)	30	19	13,5	13,5

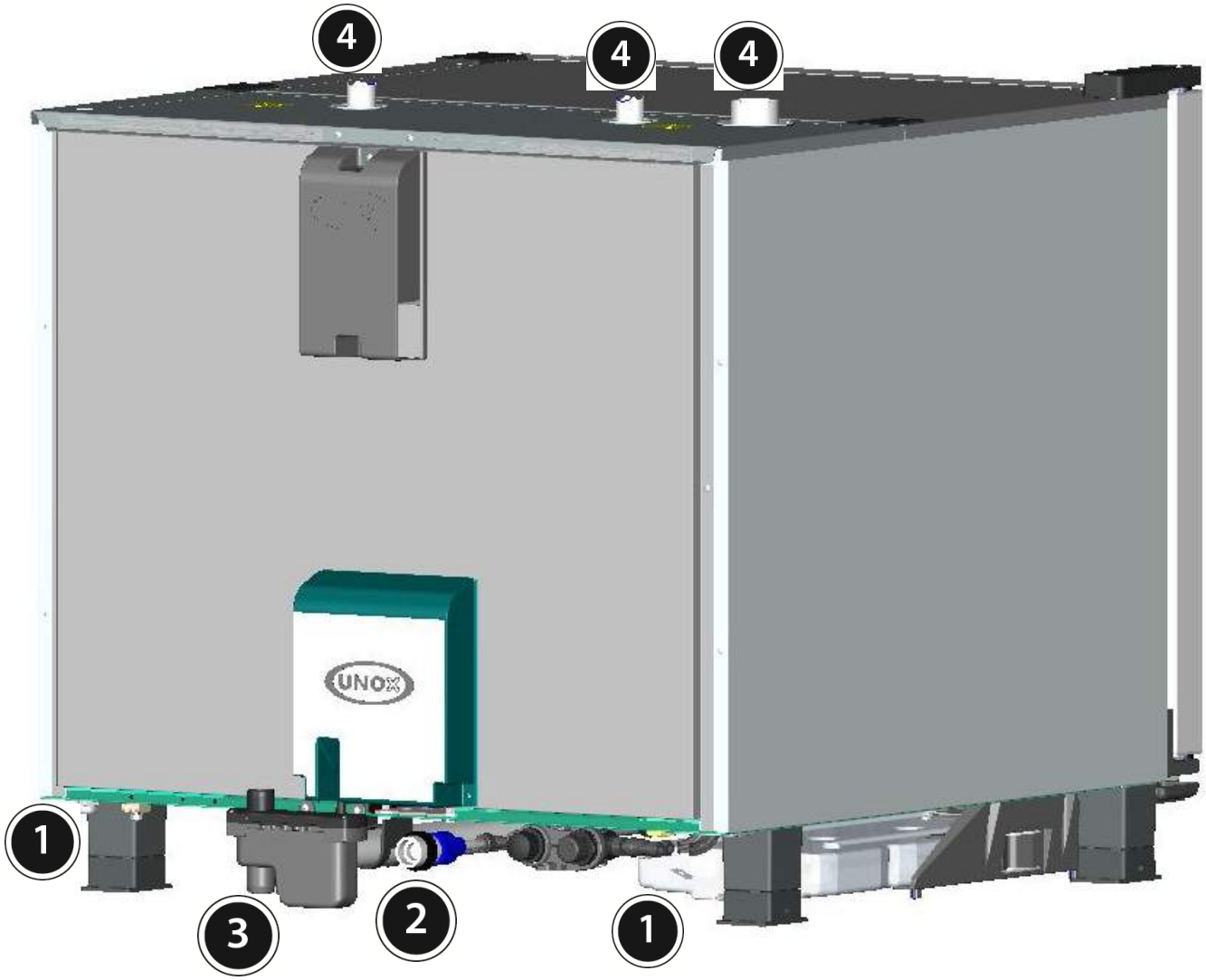
Single rotor arm - ONE				
	Long	Med	Short	Quick
Duration (min)	93	57	38	21
Detergent consumption (g)	400	200	100	50
Water consumption (l)	30	19	13,5	13,5

Doble rotor arm – ONE (1000xbc)				
	Long	Med	Short	Quick
Durata (min)	93,18333	56,78333	38,58333	21,66667
Consumo detergente (g)	400	200	100	50
Consumo acqua girante (l)	30	19	13,5	13,5

Oven installation

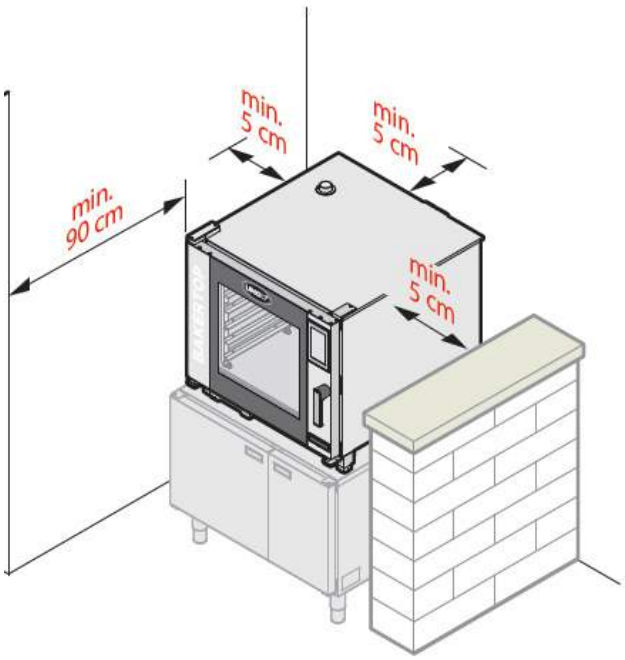
Kitchen positioning

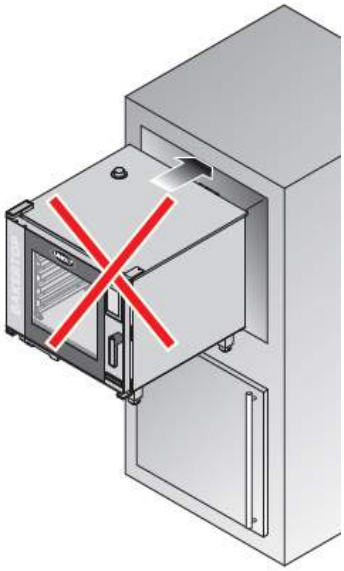
1. Electric/gas connections
2. Water inlet
3. Water Outlet
4. Exhausts (gas and steam/smoke)

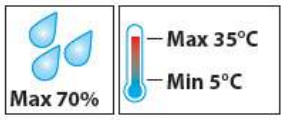


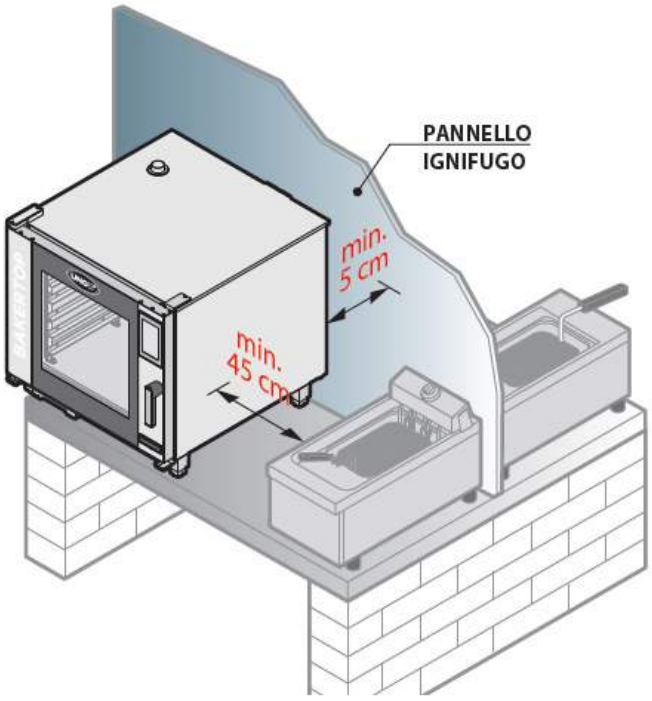
Kitchen positioning

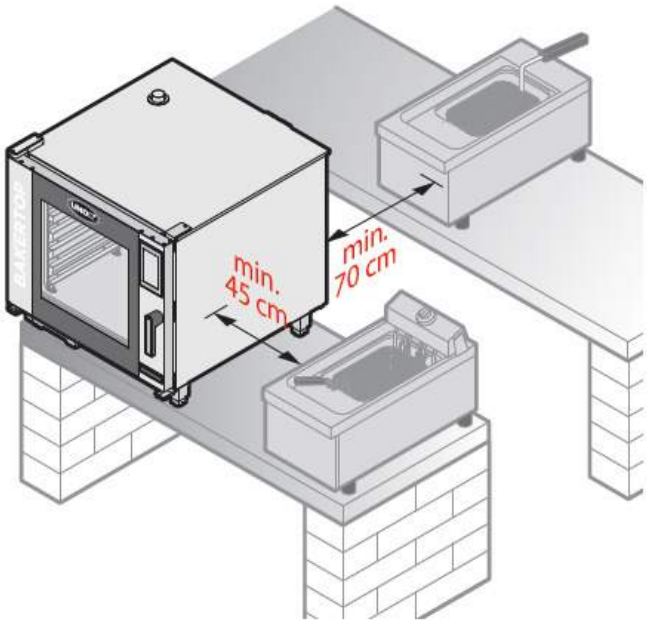
Distances











		Model	Installation type	Width (mm)	Depth (mm)	Height (mm)	Weight (Kg)
Chef Top	Electric	XECC-0523-E1R	CounterTop	535	720	649	50
		XECC-0523-E1L	CounterTop	535	720	649	50
		XECC-0513-EPR	CounterTop	535	920	649	50
		XECC-0513-EPL	CounterTop	535	920	649	50
		XEVC-0311-E1R	CounterTop	740	840	538	46
		XEVC-0311-E1L	CounterTop	750	840	675	58
		XEVC-0511-E1R	CounterTop	750	840	675	58
		XEVC-0511-E1L	CounterTop	750	840	675	58
		XEVC-0511-EPR	CounterTop	750	840	675	58
		XEVC-0511-EPL	CounterTop	750	840	675	58
		XEVC-0711-E1R	CounterTop	750	840	843	76
		XEVC-0711-E1L	CounterTop	750	840	843	76
		XEVC-0711-EPR	CounterTop	750	840	843	76
		XEVC-0711-EPL	CounterTop	750	840	843	76
		XEVC-1011-E1R	CounterTop	750	840	1010	86
		XEVC-1011-E1L	CounterTop	750	840	1010	86
		XEVC-1011-EPR	CounterTop	750	840	1010	86
		XEVC-1011-EPL	CounterTop	750	840	1010	86
		XEVC-2011-EPR	Floor	882	1159	1863	226
		XEVC-2011-EPL	Floor	882	1159	1863	226
		XEVC-0621-EPR	CounterTop	860	1201	843	128
		XEVC-0621-EPL	CounterTop	869	1201	843	128
		XEVC-1021-EPR	Floor	860	1201	1140	153
		XEVC-1021-EPL	Floor	860	1201	1140	153
		XEVC-2021-EPR	Floor	882	1247	1863	198
		XEVC-2021-EPL	Floor	882	1247	1863	198
	Gas	XEVC-0511-GPR	CounterTop	750	840	675	86
		XEVC-0511-GPL	CounterTop	750	840	675	86
		XEVC-0711-GPR	CounterTop	750	840	843	96
		XEVC-0711-GPL	CounterTop	750	840	843	96
		XEVC-1011-GPR	CounterTop	750	840	1010	105
		XEVC-1011-GPL	CounterTop	750	840	1010	105
		XEVC-2011-GPR	Floor	882	1159	1863	243
		XEVC-2011-GPL	Floor	882	1159	1863	243
		XEVC-0621-GPR	CounterTop	860	1201	843	178
		XEVC-0621-GPL	CounterTop	860	1201	843	178
		XEVC-1021-GPR	Floor	860	1201	1140	183
		XEVC-1021-GPL	Floor	860	1201	1140	183
		XEVC-2021-GPR	Floor	882	1247	1863	298
		XEVC-2021-GPL	Floor	828	1247	1863	298

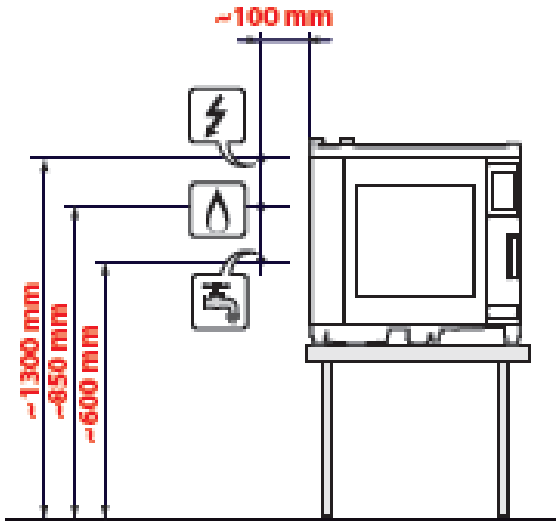
		Model	Installation type	Width (mm)	Depth (mm)	Height (mm)	Weight (Kg)
Baker Top	Electric	XEBC-04EU-E1R	CounterTop	860	1024	675	86
		XEBC-04EU-E1L	CounterTop	860	1024	675	86
		XEBC-04EU-EPR	CounterTop	860	1024	675	86
		XEBC-04EU-EPL	CounterTop	860	1024	675	86
		XEBC-06EU-E1R	CounterTop	860	1024	843	100
		XEBC-06EU-E1L	CounterTop	860	1024	843	100
		XEBC-06EU-EPR	CounterTop	860	1024	843	100
		XEBC-06EU-EPL	CounterTop	860	1024	843	100
		XEBC-10EU-E1R	CounterTop	860	1024	1163	126
		XEBC-10EU-E1L	CounterTop	860	1024	1163	126
		XEBC-10EU-EPR	CounterTop	860	1024	1163	126
		XEBC-10EU-EPL	CounterTop	860	1024	1163	126
		XEBC-16EU-E1R	Floor	882	1159	1863	220
		XEBC-16EU-E1L	Floor	882	1159	1863	220
		XEBC-16EU-EPR	Floor	882	1159	1863	220
		XEBC-16EU-EPL	Floor	882	1159	1863	220
	Gas	XEBC-06EU-GPR	CounterTop	860	1024	843	105
		XEBC-06EU-GPL	CounterTop	860	1024	843	105
		XEBC-10EU-GPR	CounterTop	860	1024	1163	142
		XEBC-10EU-GPL	CounterTop	860	1024	1163	142
		XEBC-16EU-GPR	Floor	882	1159	1863	243
		XEBC-16EU-GPL	Floor	882	1159	1863	243

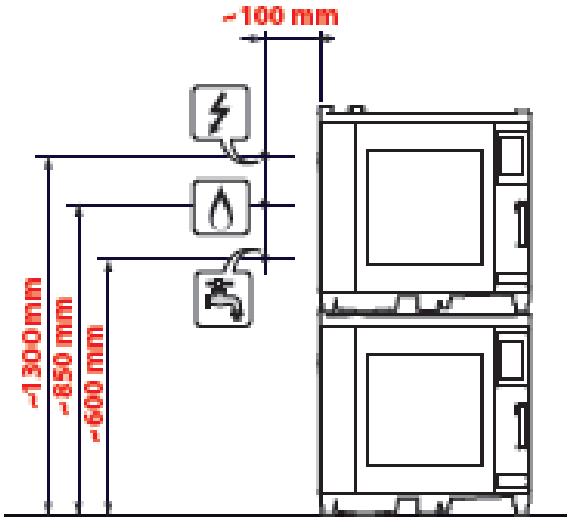
Main sources on the wall

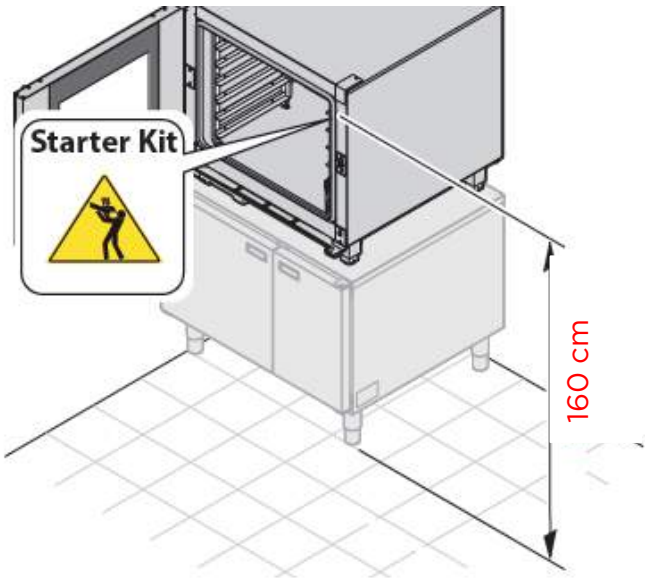
Electrical source

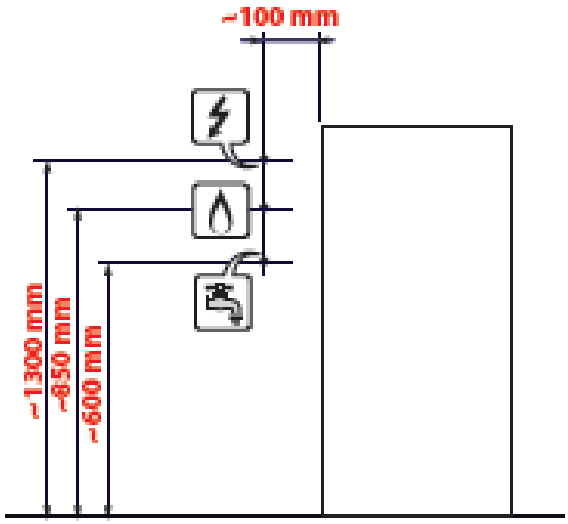
Water source

Gas source

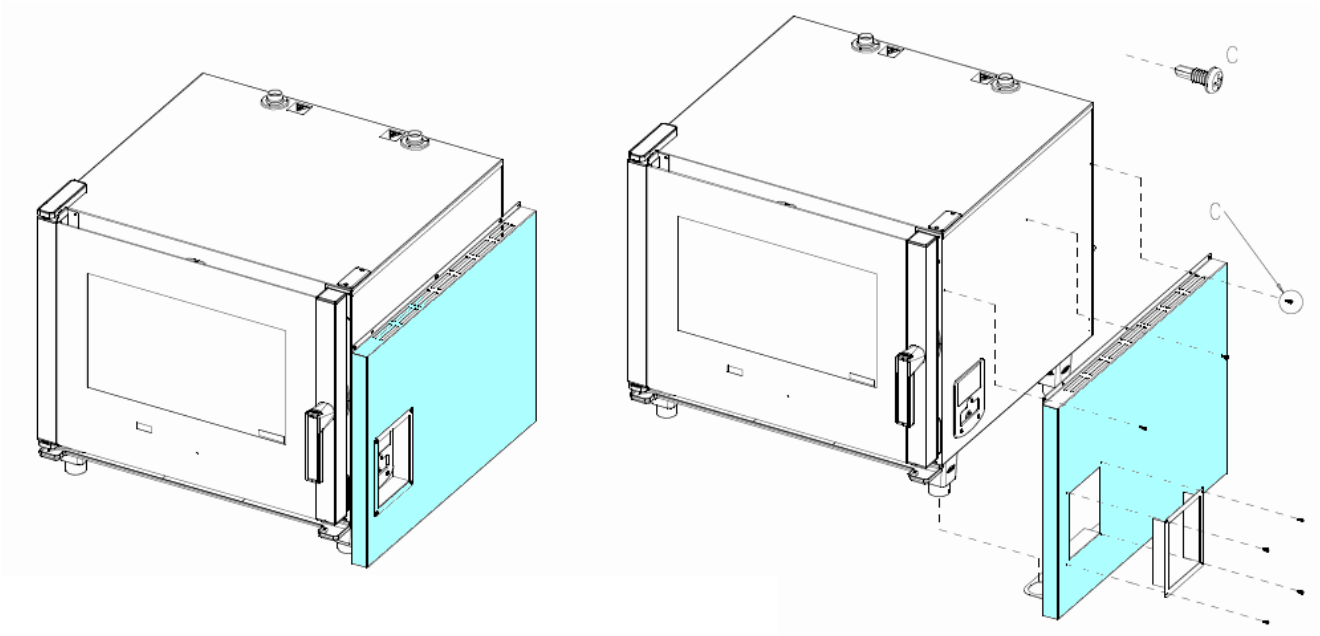




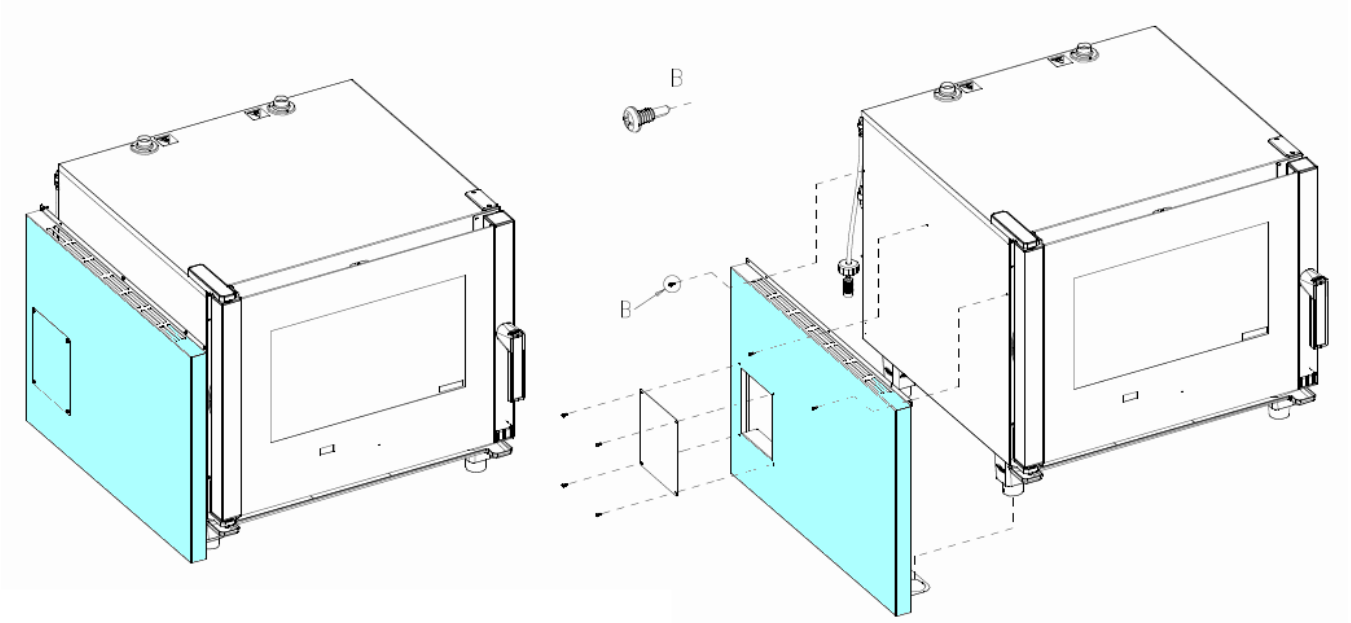




In case it is not possible to respect the minimum distance from external heating sources prescribed please install the lateral panel XC698

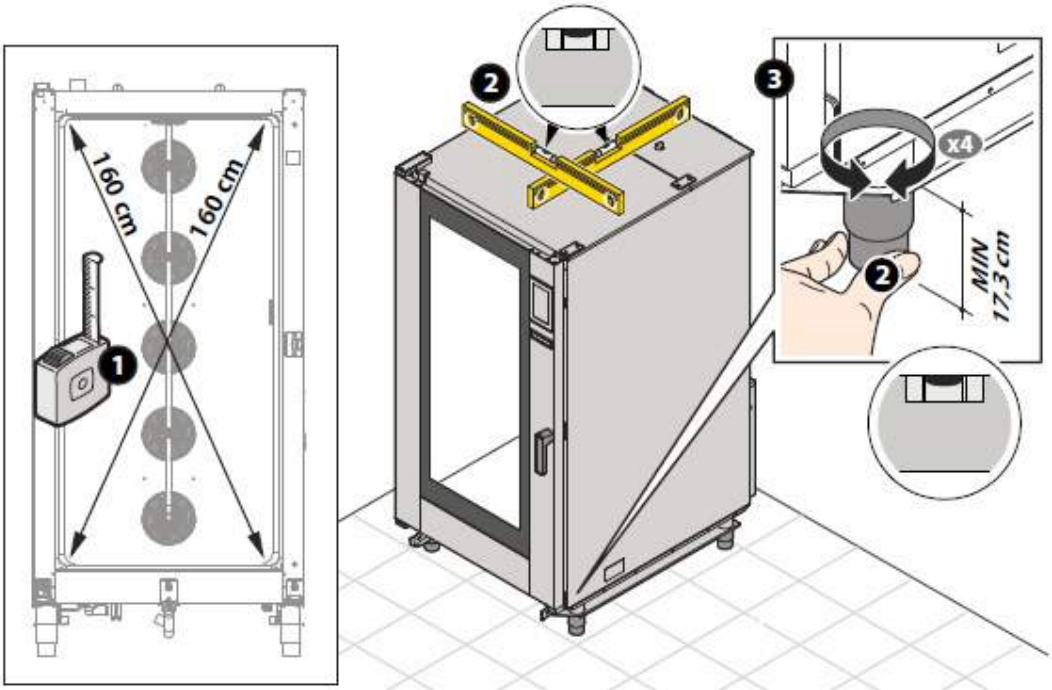


XC698 to the right hand side

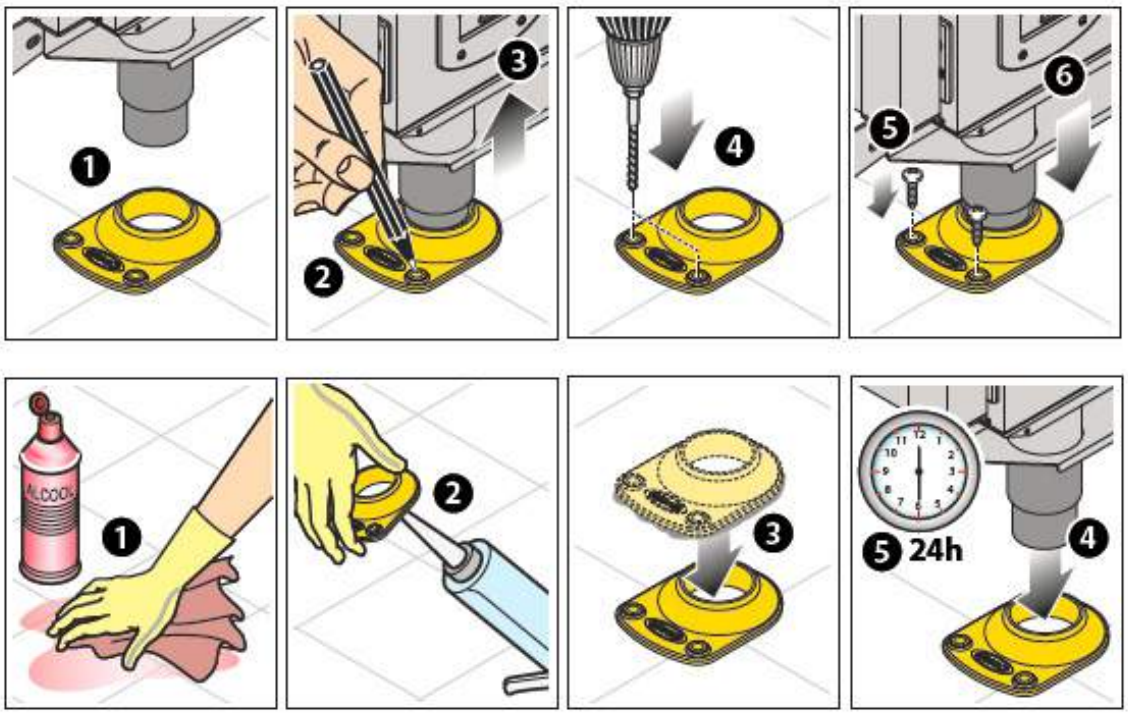


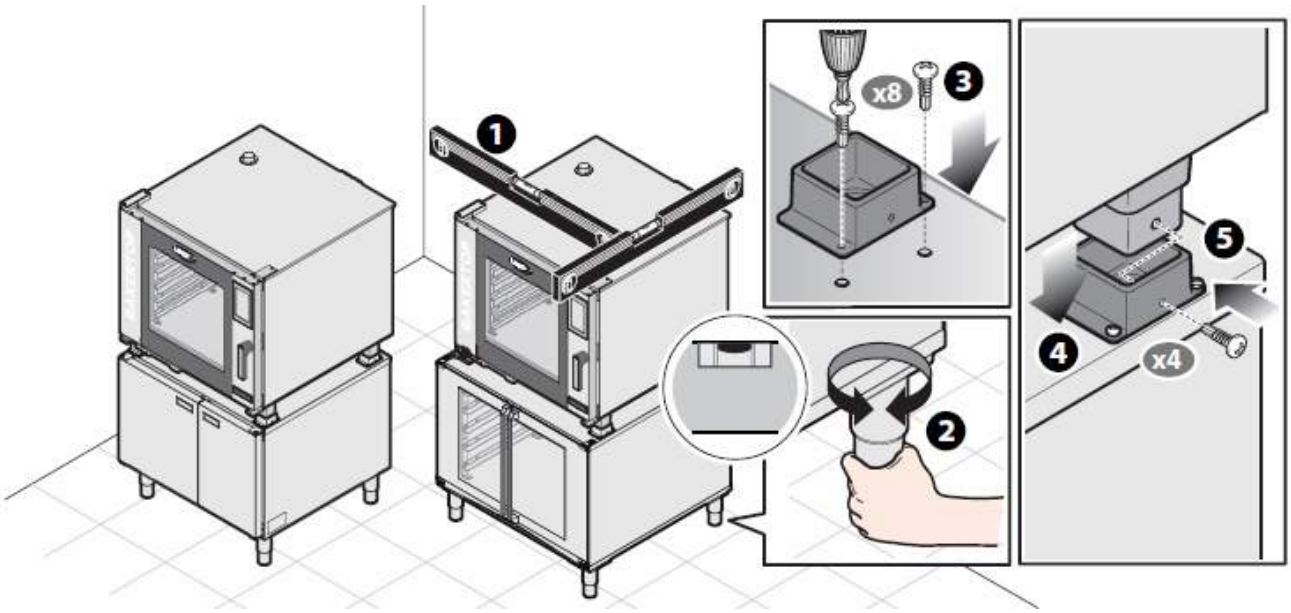
XC698 to the left hand side

The position and anchoring of the oven must be verified by means of a spirit or digital level. For BIG ovens, the chamber's diagonal lines must be checked as well (see the below picture)

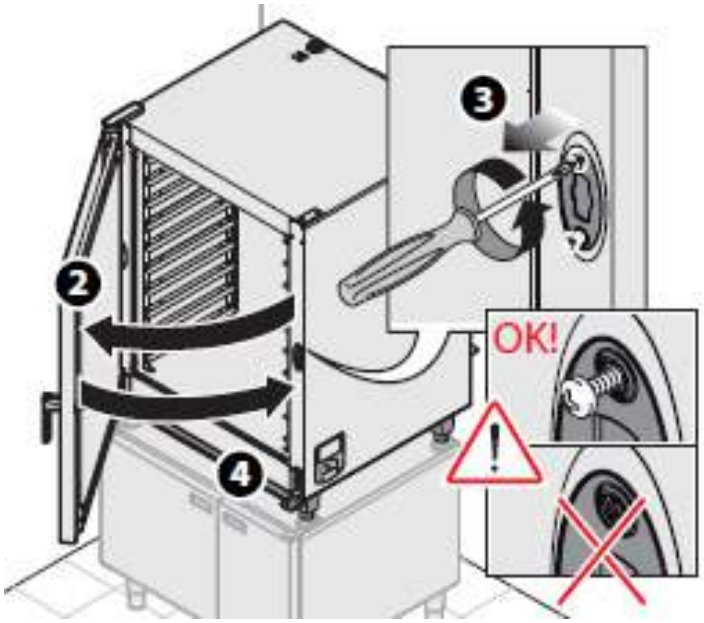


It is mandatory to have the oven correctly anchored to the ground. As a consequence, the anchoring kit (already included in the packaging as shown in the picture here below) is at your disposal. As an alternative, it is possible to fix the oven to Unox substructures



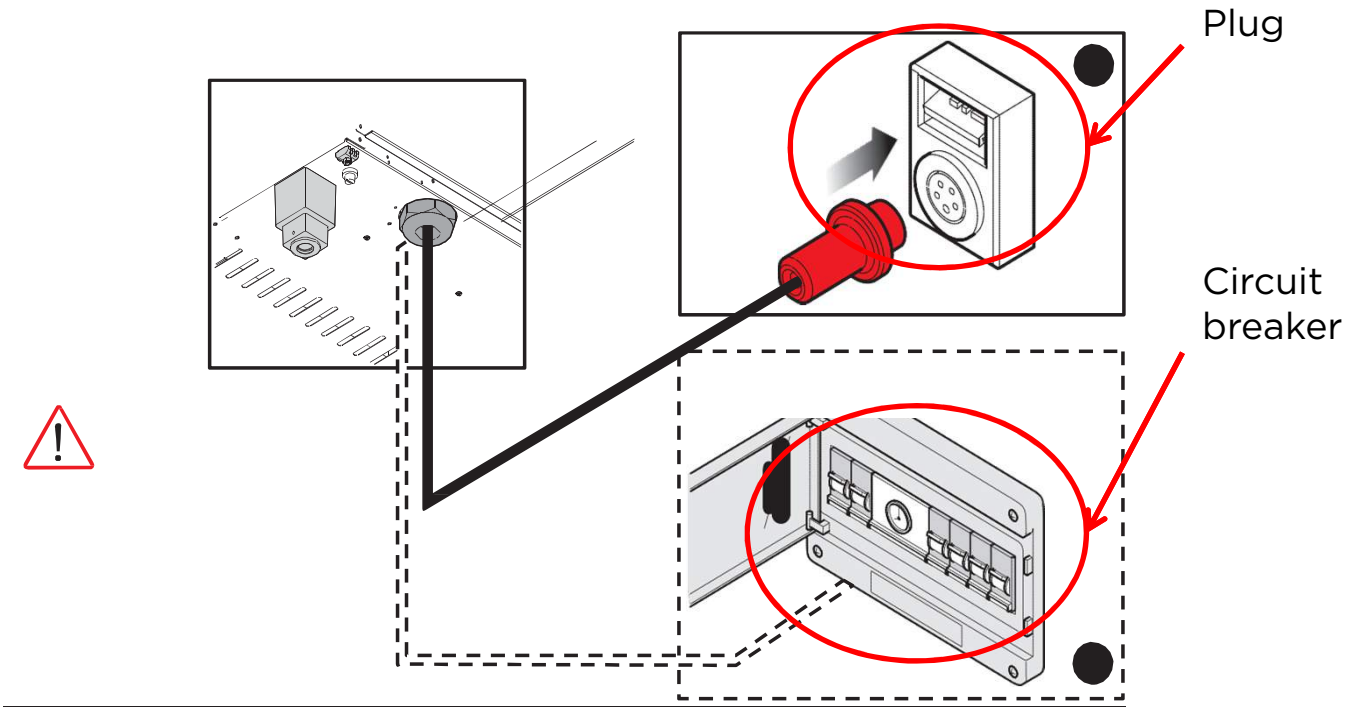


Once the oven has been properly positioned, proceed by checking if the door handle rightly close. If it is not the case, adjust the closure latch as show in the picture loosening the latch fixing screws but without entirely remove them



Pertaining to the electric connection, please consider the following aspects:
Circuit breaker suitable with the technical data of the oven;
Power source cable section;
Phase's consumption in Ampere;
Plug connection and possibly direct connection to the circuit breaker.

An example of single-phase and multi-phase plug and circuit breaker is shown in the picture below



With regards to gas connection, please take note of the following points:

- Gas typology, GPL or methane;
- injector;
- Gas parameters on the hidden menu (CO_2 and CO);
- Input pipe;
- Input pressure of the gas valve (output pressure shall be 0 mbar)

As regard the water connection the characteristics of the incoming water must be as follows:

- Be drinking water;
- Maximum temperature 30°C;
- Incoming pressure 1,5÷6 bar.

To check the hardness and conductivity of the water and therefore to establish if an UNOX.Pure filter or UNOX.Pure-RO (reverse osmosis) kit needs to be used, a water test needs to be carried out as described in the following pages.

- Measure the total conductivity using the electronic instrument and read the value on the display. The value shown represents the total hardness of the water due to the presence of calcium carbonates, magnesium and metallic, chloride, sodium ions, etc., measured in µS/cm;
- Carry out the temporary hardness test, only with calcium carbonate and magnesium. The test is carried out by taking 5 ml of water and adding one drop at a time the solution until the solution becomes a bright yellow color;
- The number of drops that are used represent the hardness in German Degrees (°D). This value is multiplied by 30 to provide the hardness in µS/cm;
- Detract the value calculated with the number of drops x 30 from the value measured with the electronic instrument;
- Confront the result with the required limits of hardness for incoming water.

XXX µSiemens/cm

YYY drops = Y °D

4) Subtract the KKK µSiemens/cm from the XXX µSiemens/cm

XXX – KKK = JJJ

Conclusion

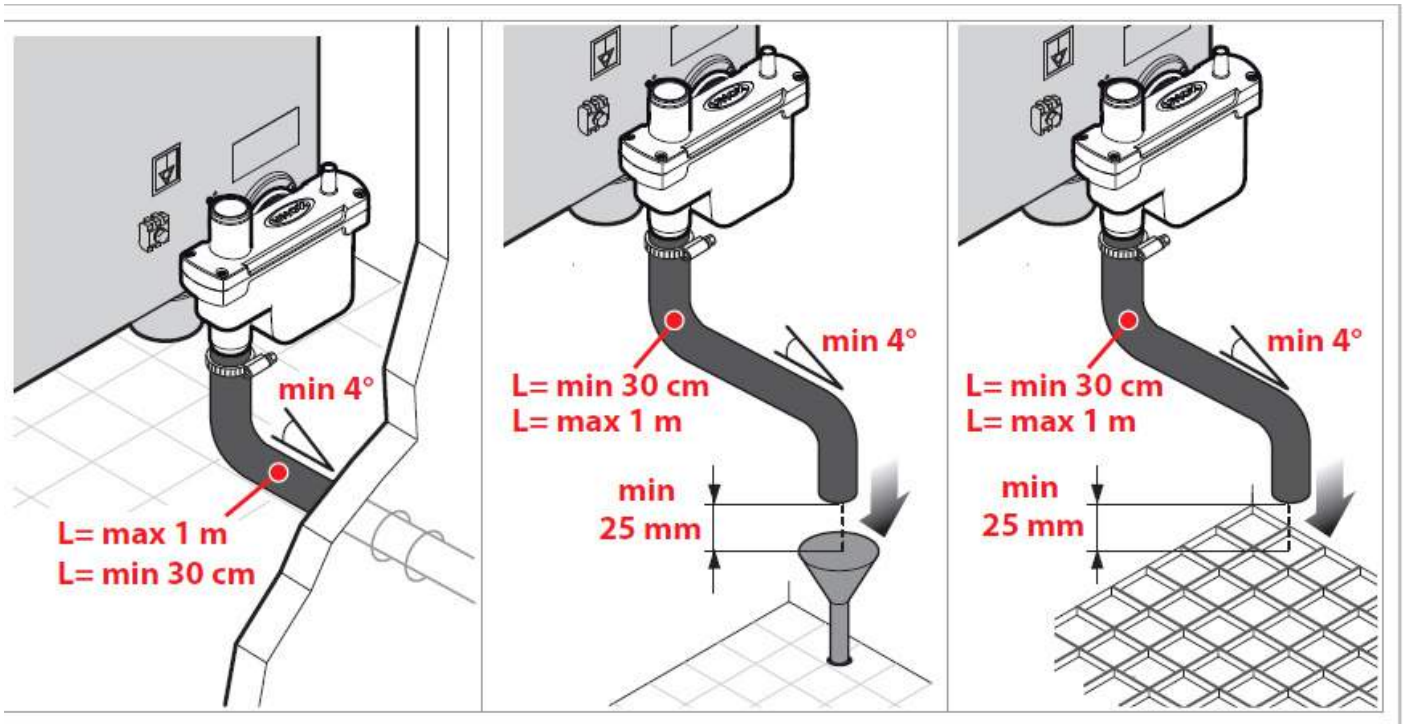
- If JJJ it's < than 150 µSiemens/cm, the oven do not require a Reverse osmosis unit to threat the incoming water for steaming. In that case,
    - if the Y value is inferior than 4°D as hardness (or 7°F), the oven do not require the Unox Pure neither.
    - If the Y value is higher than 4°D as hardness (or 7°F), the oven require the Unox Pure filter.

- If JJJ it's > than 150 µSiemens/cm, the oven require the Reverse Osmosis system only (no Unox Pure needed).

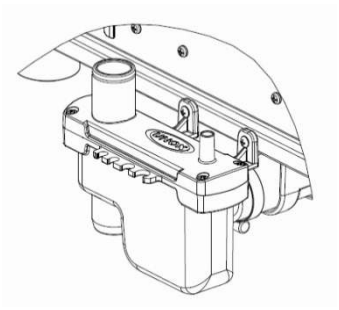
Conversion Chart

1°D = 0.64 ppm TDS
1°D = 1.8 °F
1°D = 30 µSiemens/cm

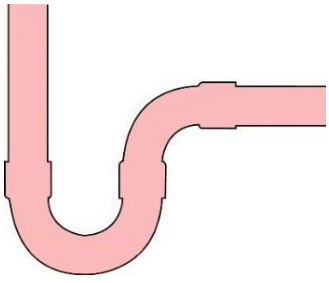
The installation of the siphon is essential to stop cold air from coming back up into the cooking chamber and causing problems with the cooking result. The drain must have the characteristics shown in the below images and the cup must have an internal diameter of 40 mm



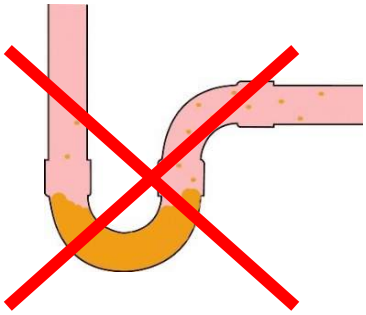
It is recommended to do not install the U-trap in presence of grase or oil to drain to the floor.



XC673



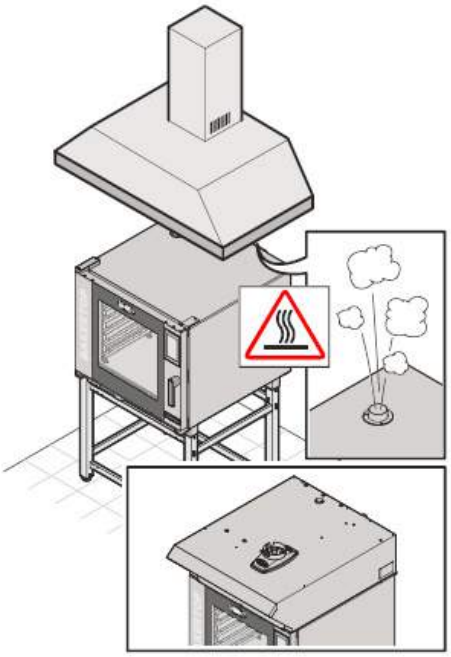
U-Trap



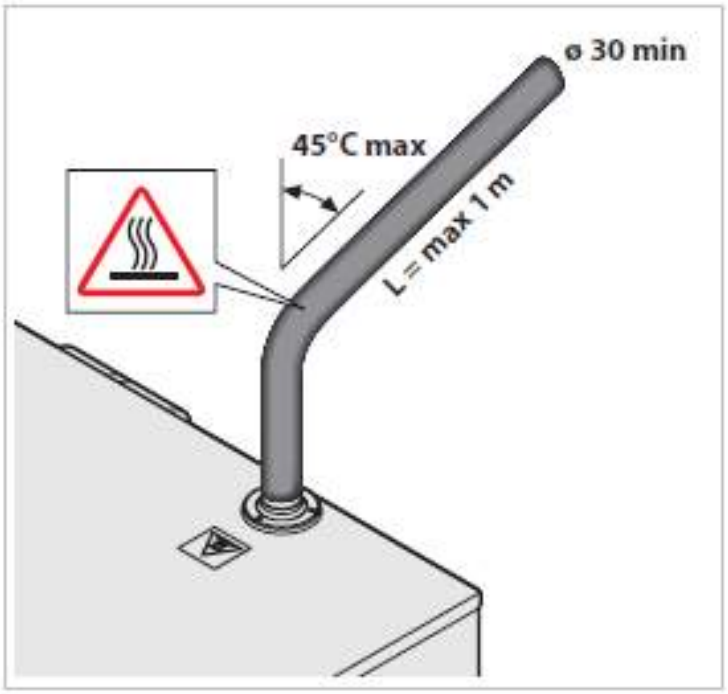
Don’t use in presence of grease or oil to drain

For the evacuation of the cooking fumes for electric ovens the following methods can be used:

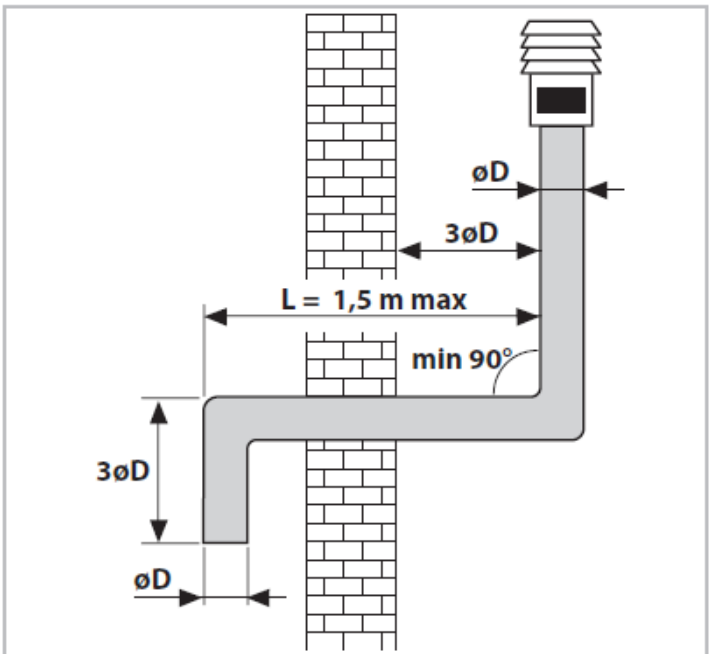
- UNOX hood installed on top (only for electric ovens);
- With the kitchen hood;
- With an extended pipe that leads the oven fumes to the kitchen hood;
- With the UNOX steam condenser.



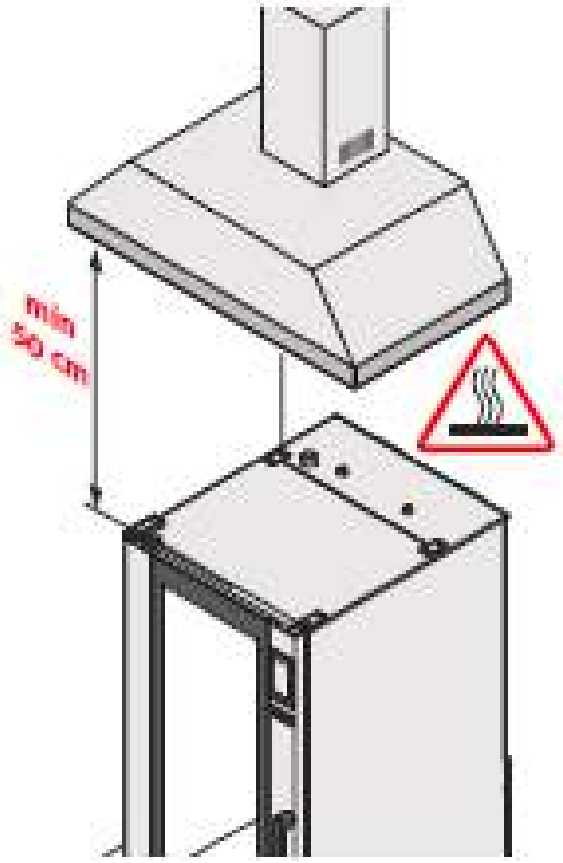
Evacuation of fumes via a pipe. The pipe must be a tube with no air suction or forced ventilation. It must be independent for each appliance, free of kinks and with the geometric specifications as shown below



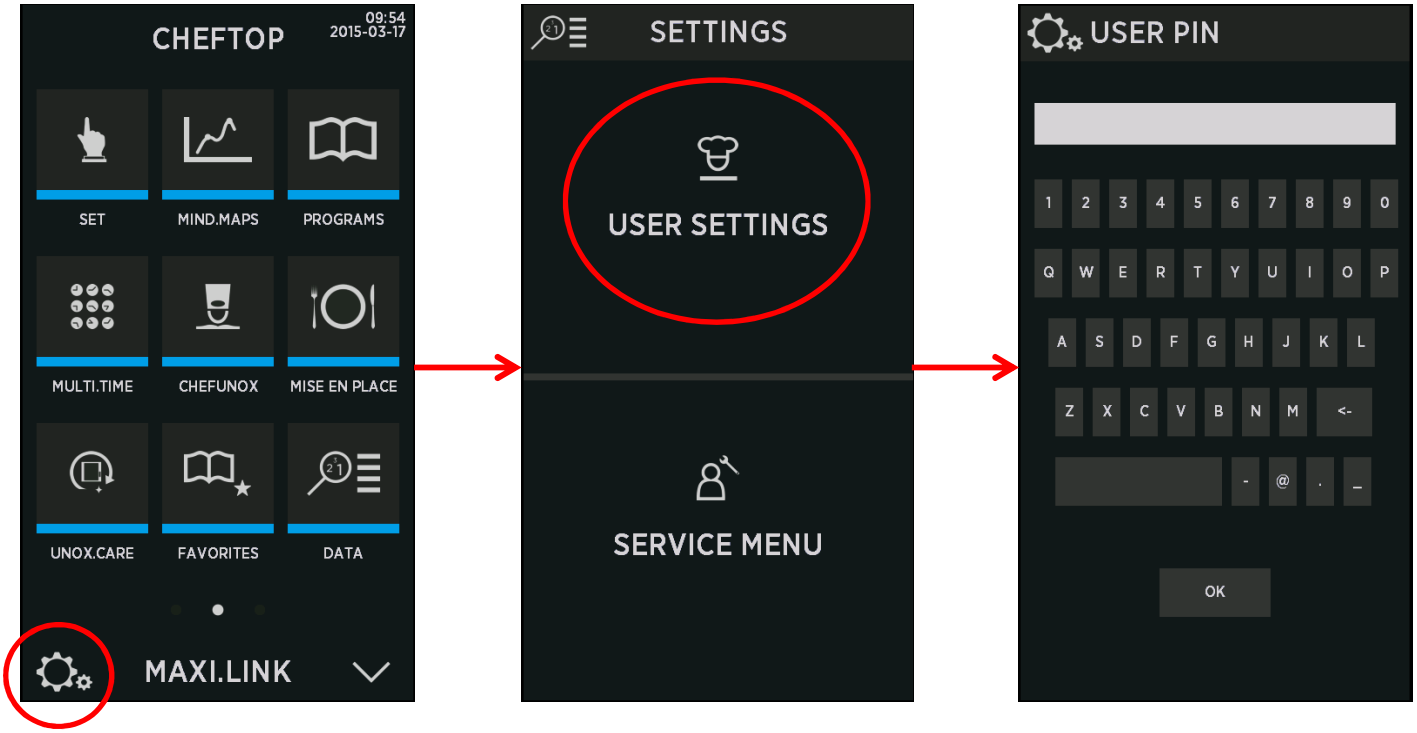
For evacuation via an external flue, it must have the characteristics as specified below:



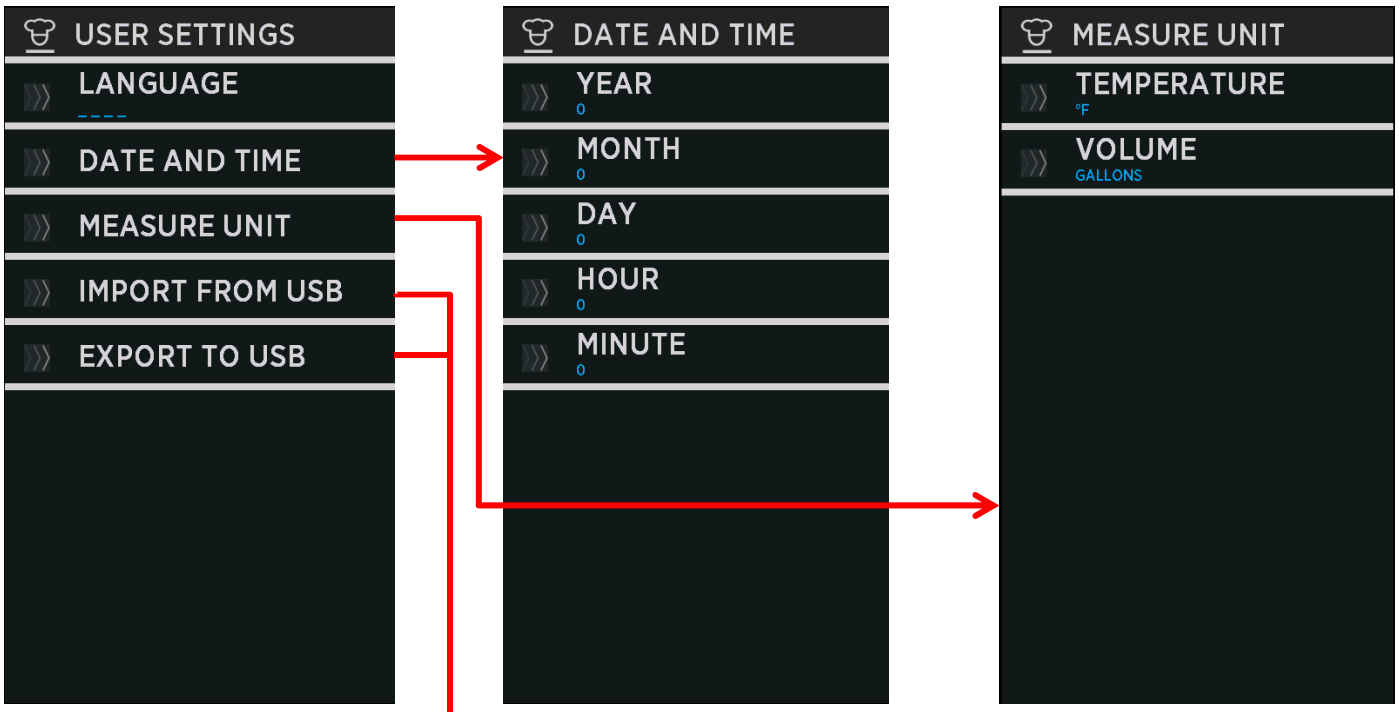
For evacuation via a hood a distance of 50 cm must be maintained. A shorter distance could lead to the build up of toxic unburnt gas



User settings

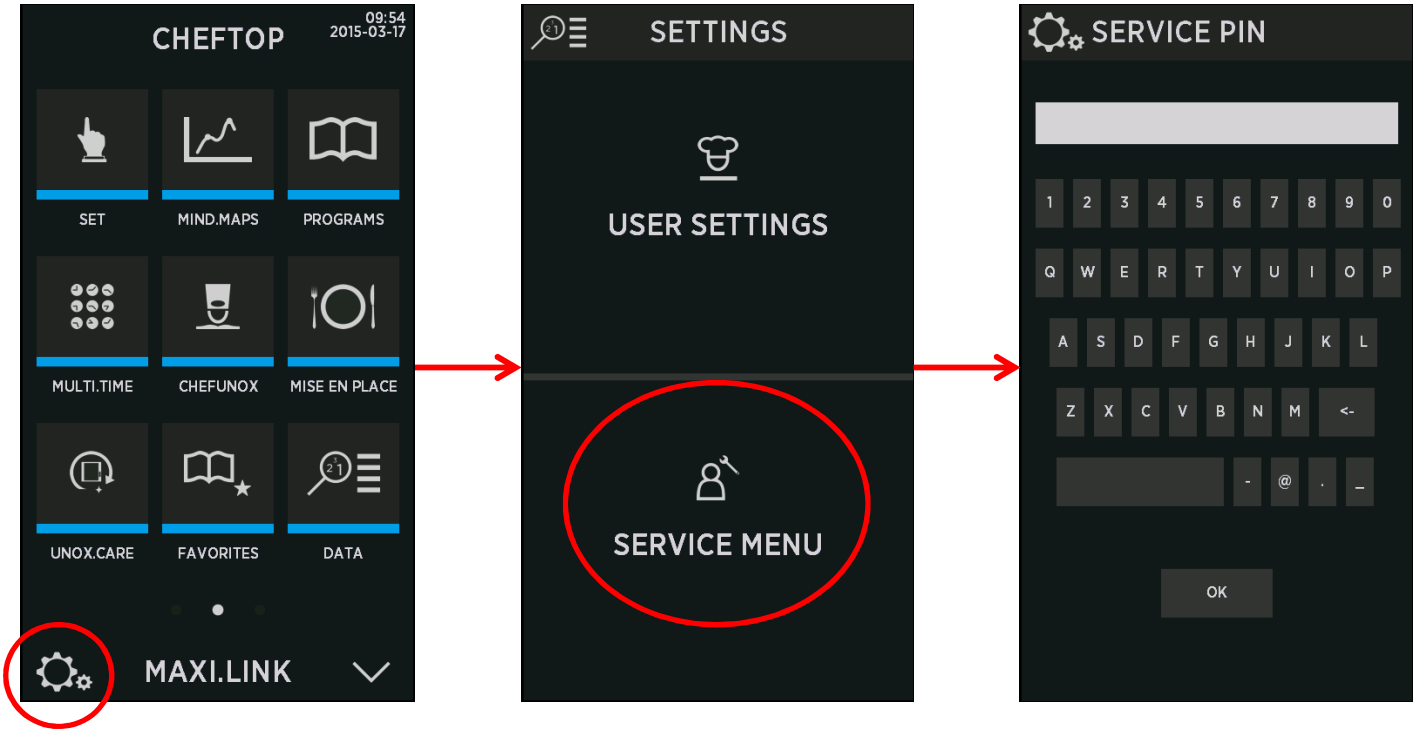


Tap the user pin code then press OK

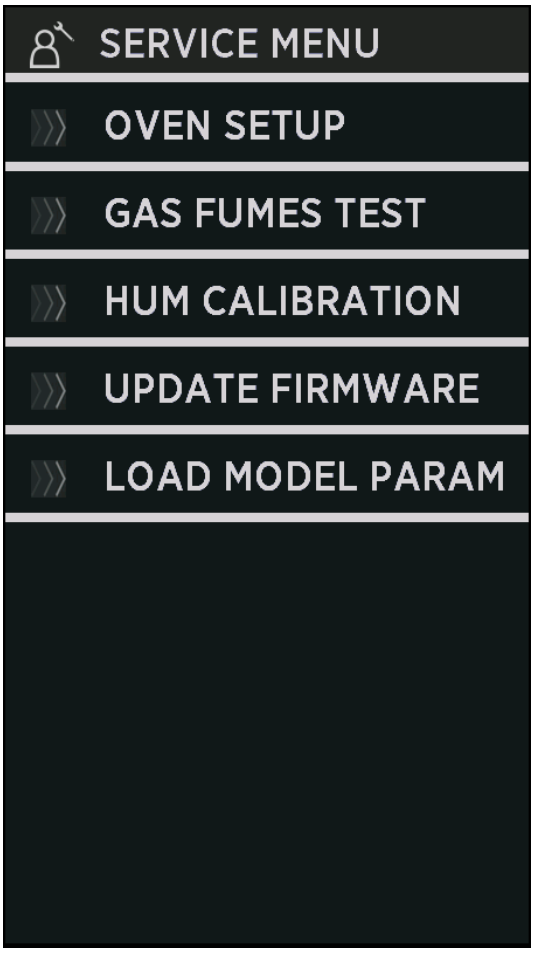


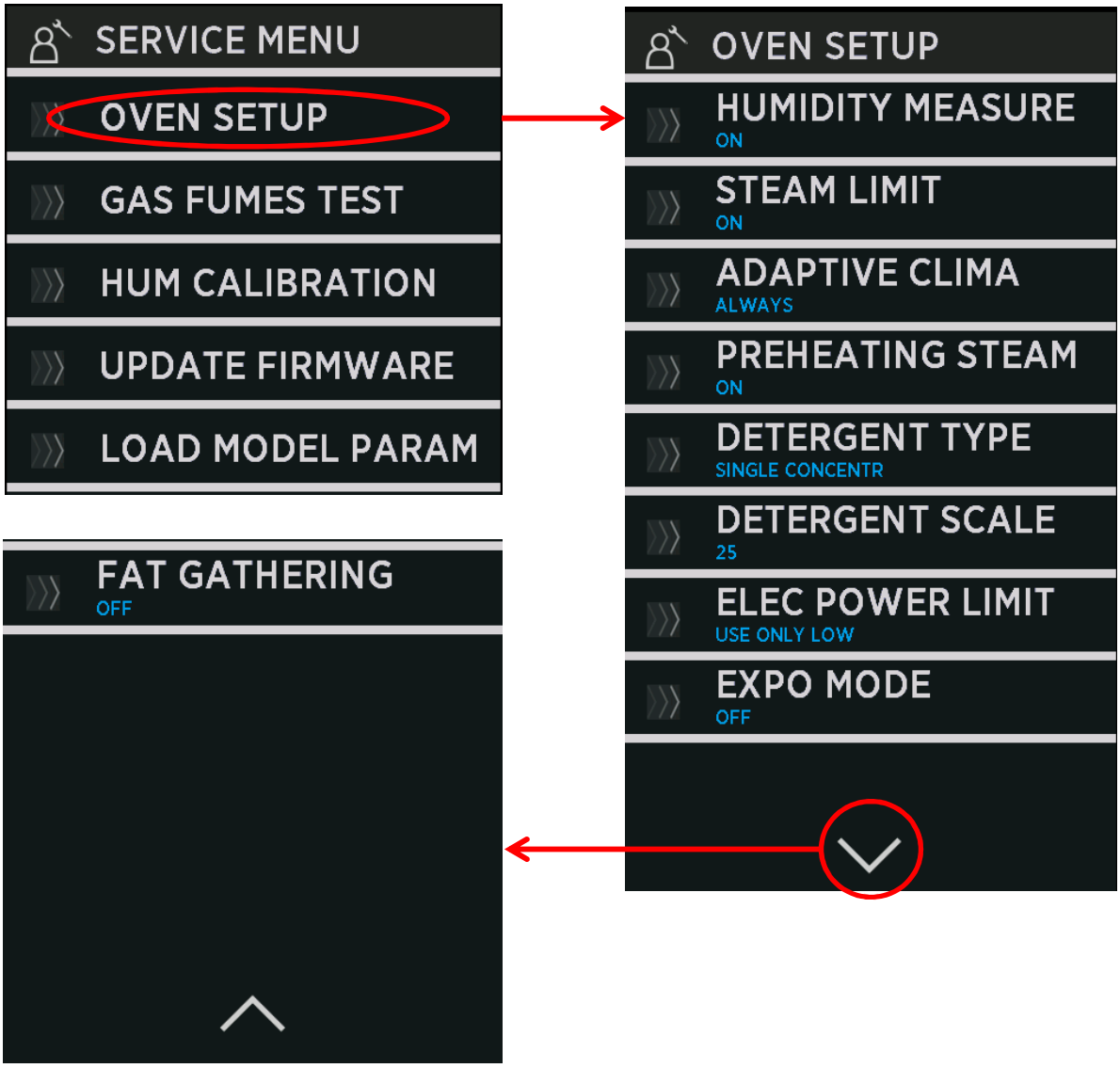
Import and export cooking programs from the USB

Service Menu

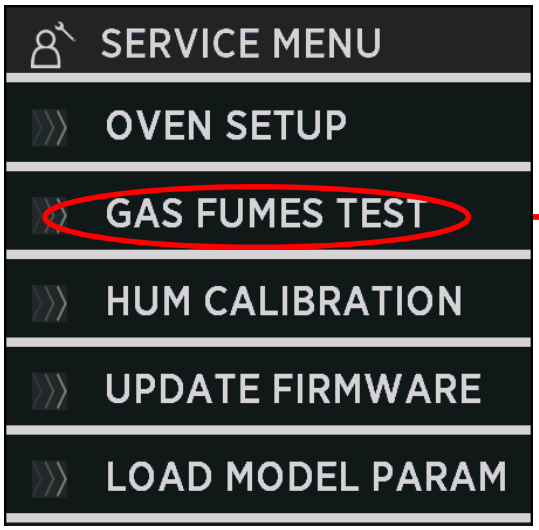


Tap the Service PIN the press OK

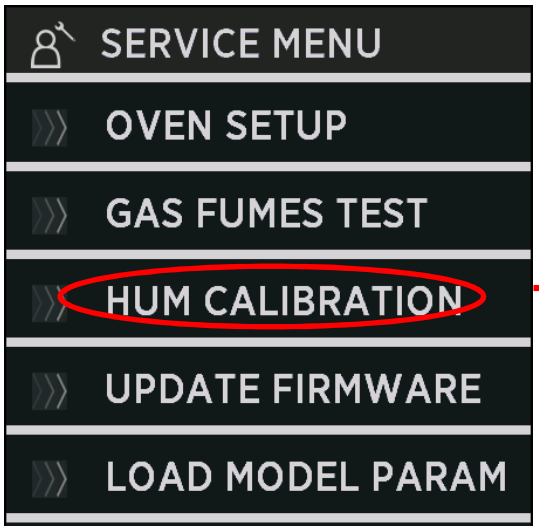




Parameter name	Description
HUMIDITY MEASURE	Enable or disable the humidity control during the cooknig processes
STEAM LIMIT	Degrease the % of injected steam while increasing the temperature setpoint
ADAPTIVE CLIMA	Adapt the required hudidity condition to the oven automatically based to the food loaded
PREHEATING STEAM	Inject steam while the unit is preheating the cooking chamber
DETERGENT TYPE	Allow the selection of single or double chemical concentration to perform the best washing cycle
DETERGENT SCALE	Allow the reduction or increase of the detergent quantity taken per each washing cycle
ELEC. POWER LIMIT	Allow the selection of single or double chemical concentration to perform the best washing cycle
EXPO MODE	Deactivate the heating element
FAT GATHERING	Allow the fat collection from the bottom pollo cabinet



GAS FUME TEST perform the activation of the burner to the minimum and maximum power conditions and allow, at the end of the process, to input the CO and CO_2 data as mandatory required at the first oven installation.

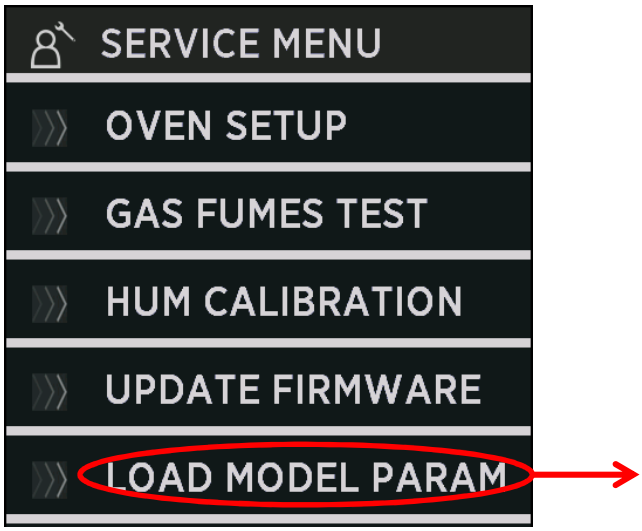


HUM CALIBRATION perform the humidity calibration of the cooking chamber based to the clima conditions of the kitchen. To be mandatory performed at the first oven installation.

UPDATE FIRMWARE
To perform the software upgrade it's necessary to:

- Save the *.bin* file to the FIRMWARE directory of the Unox usb stick
- Plug the stick to the oven (port below the control panel) then press "UPDATE FIRMWARE"

The upgrading process will take about 1 minute. At the end, the control panel will reboot automatically with the new software.



LOAD MODEL PARAM allow the selection of the OVEN or secondary ACCESSORY to quickly set up the relative Service Menu parameters

Note

Gas components

Premix system

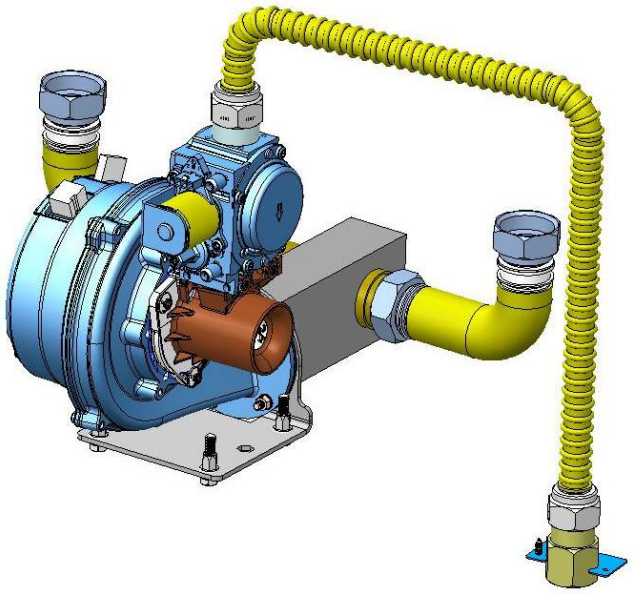
- The blower create the air-gas mixture to be provided to the burner;
- By means of the venturi the blower produces a pressure decrease;
- On the base of the pressure decrease the blower pull a different quantity of gas from the connected gas valve;
- The mix enter into the burners where takes place the ignition of the flame

EU version

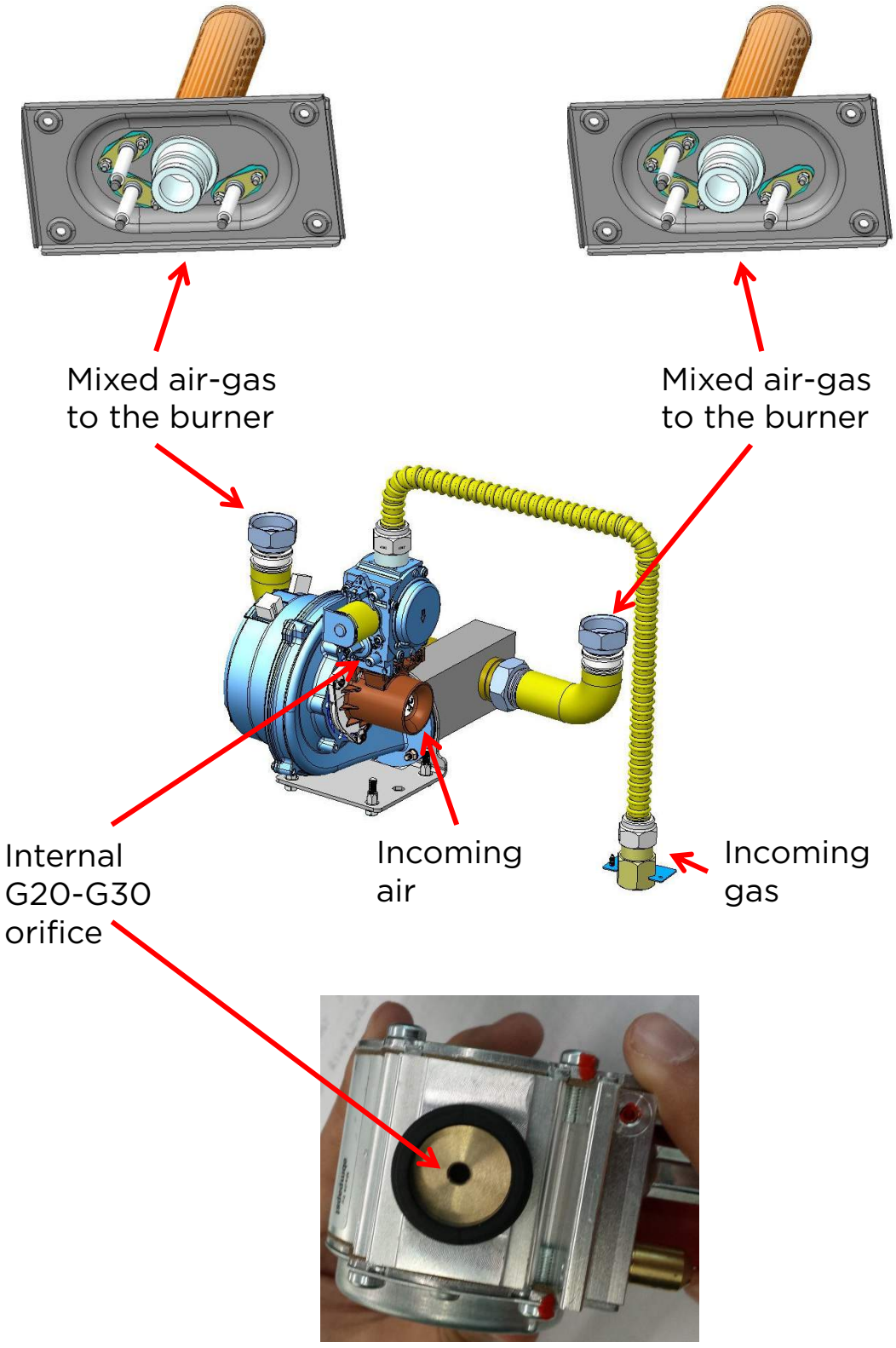
- 1 gas valve with single or double blower depending on the model
- 2 burners
- Single 26Kw igniter, 230 V input
- 2 start up plug
- 1 flame detection plug per each torch

US version

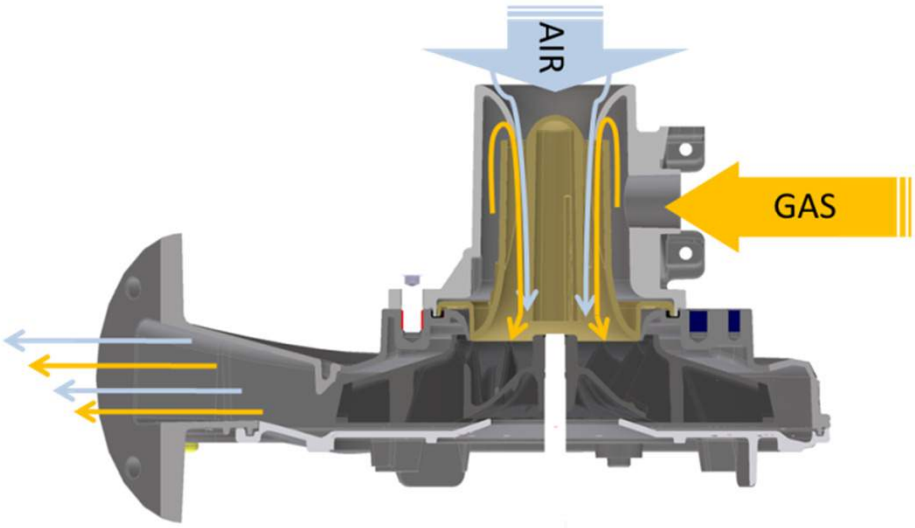
- Single or double gas valve with single or double blower depending on the model
- 2 burners;
- Single 26Kw igniter integrated to the burner control box per each burner. 230V input
- 2 start up plug per each burner
- 1 flame detection plug per each burner

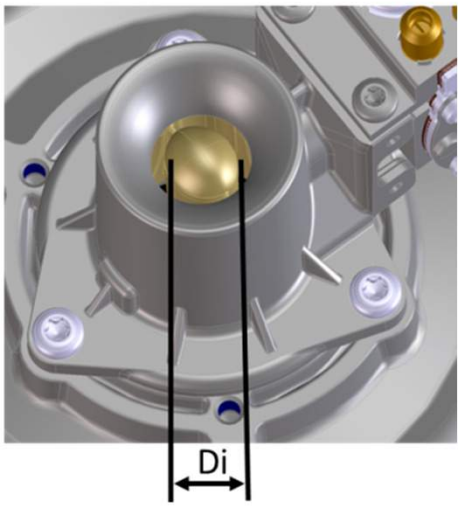


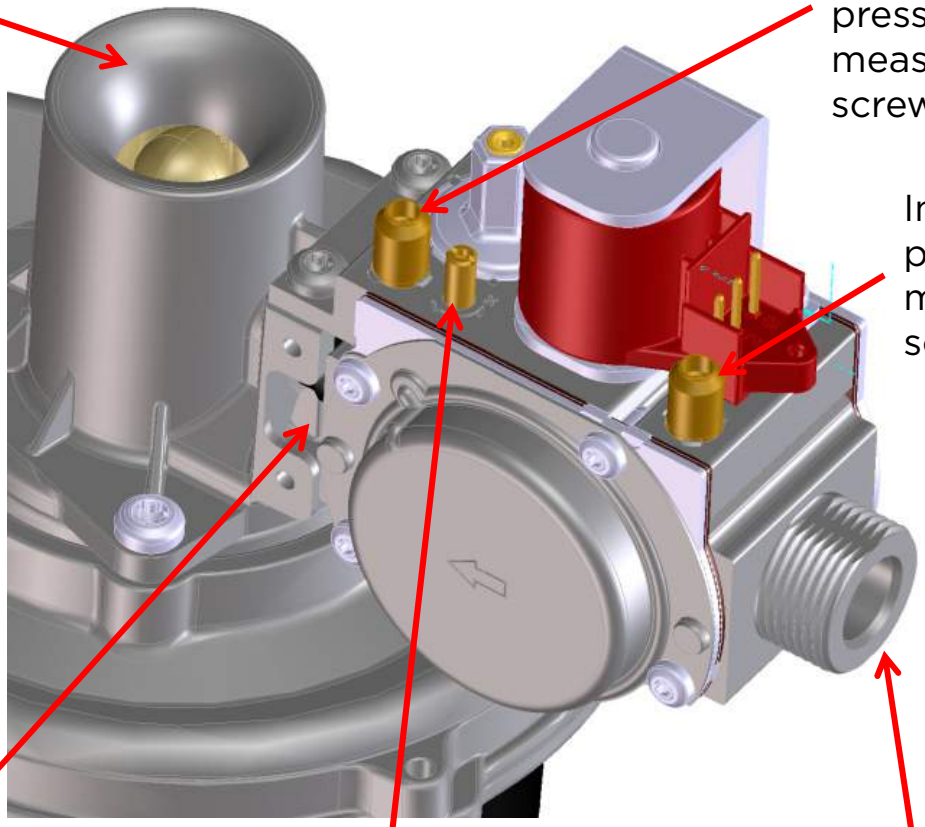
Gas system composition



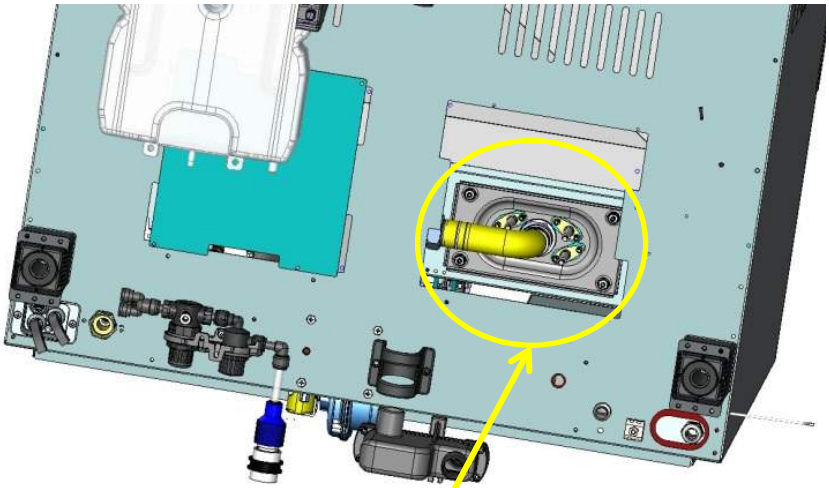
Premix blower



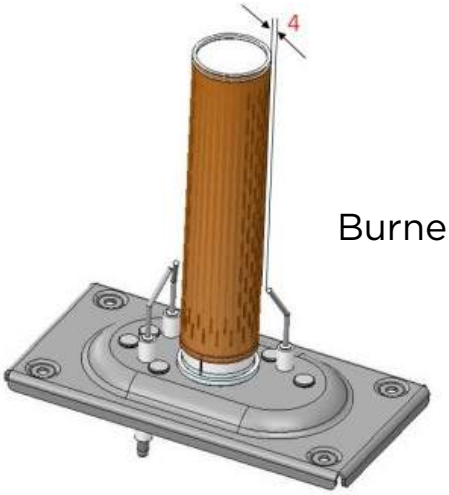




Bottom view – burner fitted to the exchanger



(Burner's access only from the bottom of the unit)

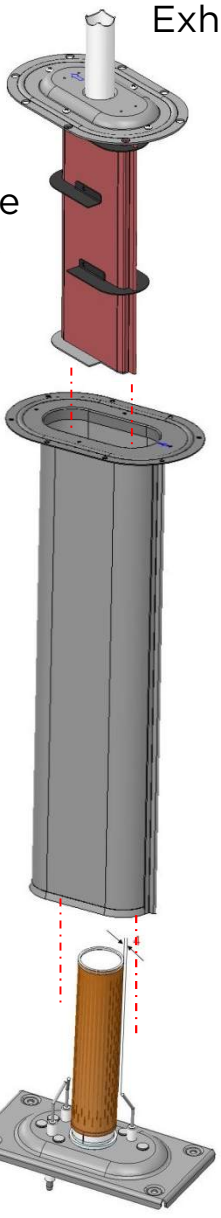


Burner

Exhaust

Internal baffle with smoke's labirnt

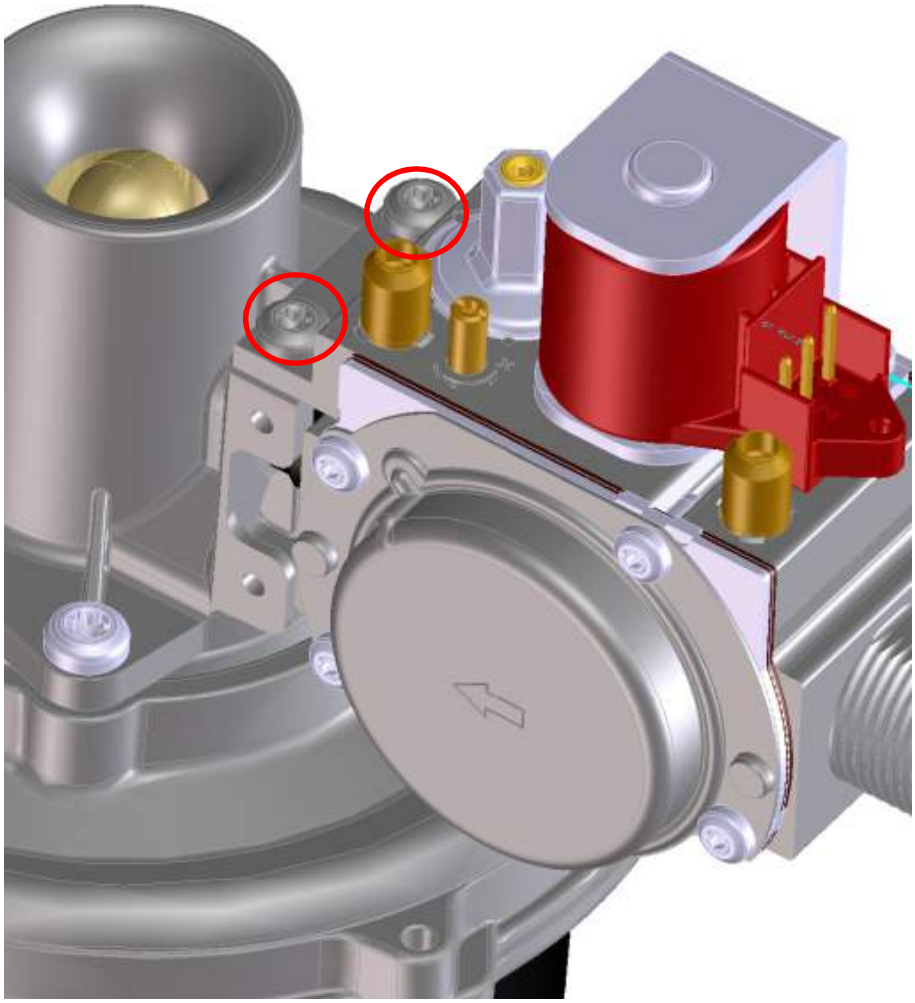
Heat exchanger

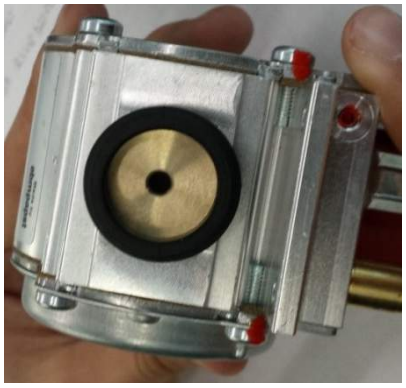


Burner

Replace the injector

- Remove the highlighted screws
- Disconnect the valve from the blower
- Remove the black gasket
- Take off the gasket and the injector from the groove
- Install the gasket back
- Reassemble the valve on the blower.

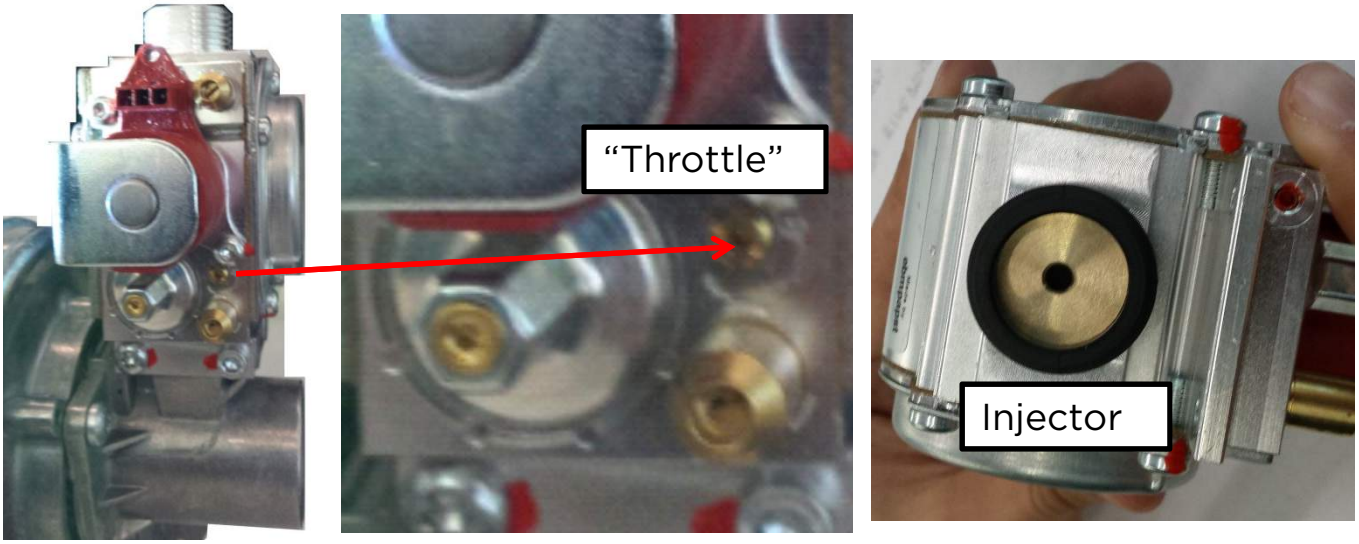




Exhaust smokes analysis

- In the very first installation it's necessary to calibrate the gas valve according with the exhausts smokes, using the proper analyzer to reach the required CO_2 and CO emissions;
- The oven is set from the factory to be used with Natural gas G20 (methane CH4). To calibrate the proper air-gas mixture it's necessary to adjust the "throttle" screw (picture below, it regulate the gas flow rate)
- The proper CO_2 emissions shall be 9,4 % v/v, the proper CO emissions shall be < 100 ppm;
- With LPG gas it's necessary to:
  - install the proper injector (will be provided as spare in the oven);
  - adjust the "throttle" accordingly

NOTE: it's not necessary to adjust the incoming airflow of the blower.



DEFAULT SETUP FROM FACTORY:
NATURAL GAS G20

Before the exhausts analysis:

- Place the probe of the gas exhausts analyzer (TEST t330-1 LL V3 recommended) to the top flues
- Start up the oven and set the maximum power (temperature 260° C recommended), wait for the emission stabilization

During the exhausts analysis:

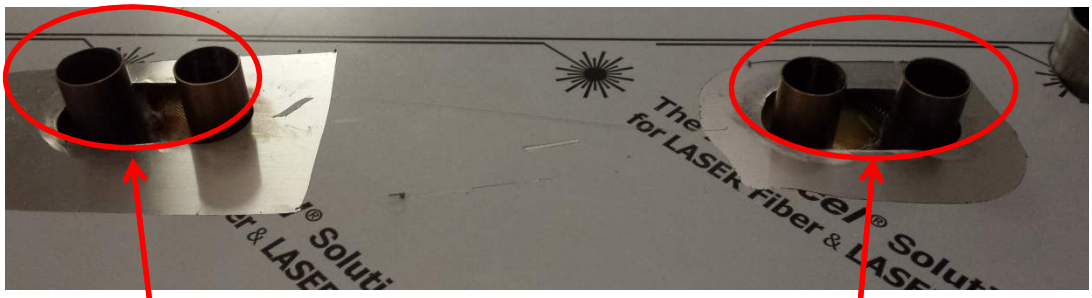
- Balance the CO_2 and CO emissions adjusting the throttle screw while measuring the emissions;

Exhausts reading procedure

The exhaust analysis will be performed in two steps, in which the blower speed rotation will be automatically changed. At the end it's necessary to save the following data to the oven control panel:

- CO_2 values: (CO_2 % @ blower speed 1, CO_2 % @ blower speed 2);
- CO values: (CO [ppm] @ blower speed 1, CO [ppm] @ blower speed 2);

NB: To the ovens with double blowers it's necessary to perform the analysis in both the exhaust chimneys then save the above required data to the control panel.

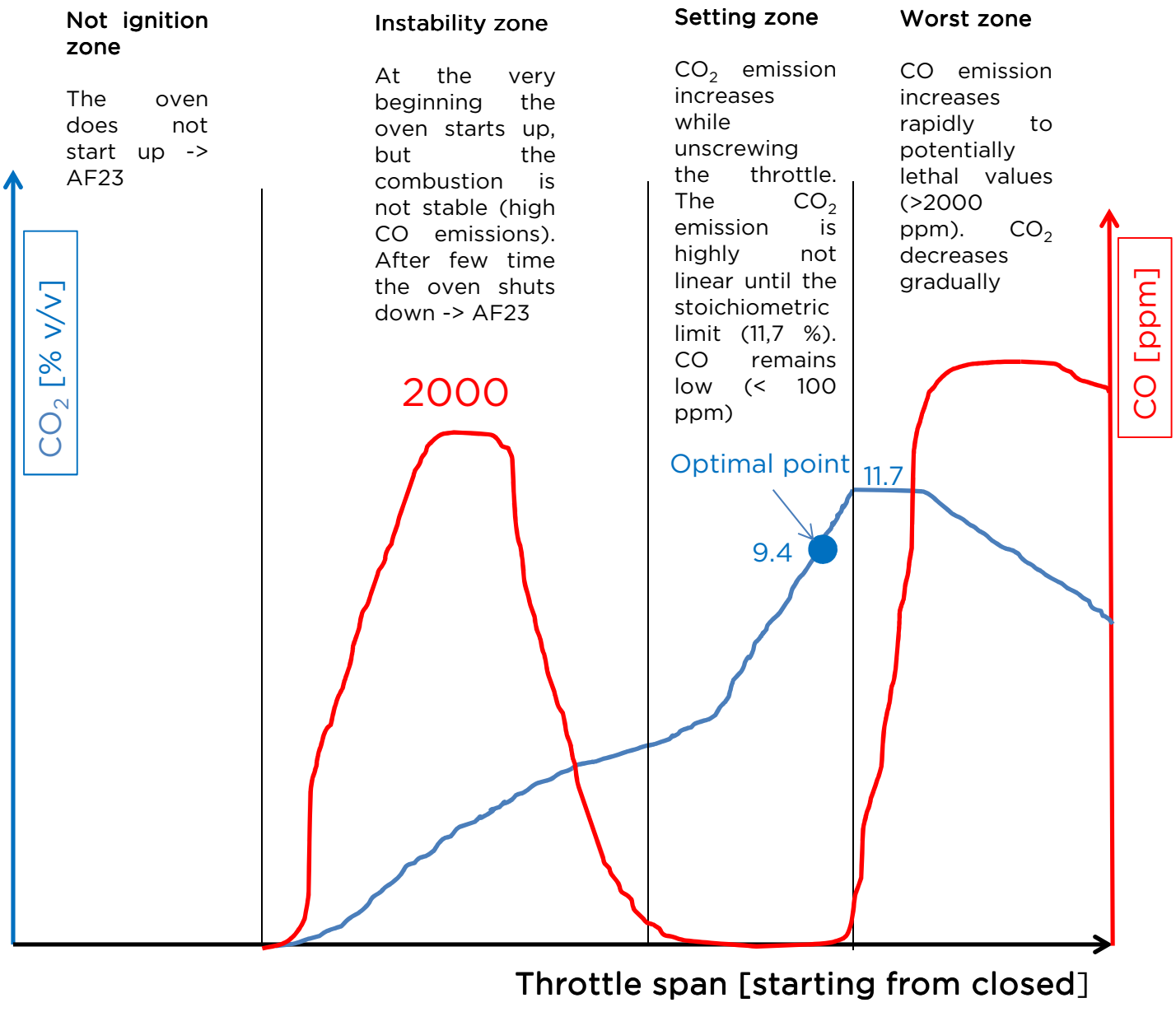


Whenever working on any gas component like:
Gas valve, gas blower and / or changing connected type of gas a detailed
flue gas analysis MUST be done using adequate CO and CO_2 measuring equipment! This shall ONLY be done by trained technicians!
Always check appliance for possible gas leakages!

The combustion could be:
Stoichiometric, when using the theoretical quantity of oxygen. The combustion will issue the maximum CO_2 percentage in volume:

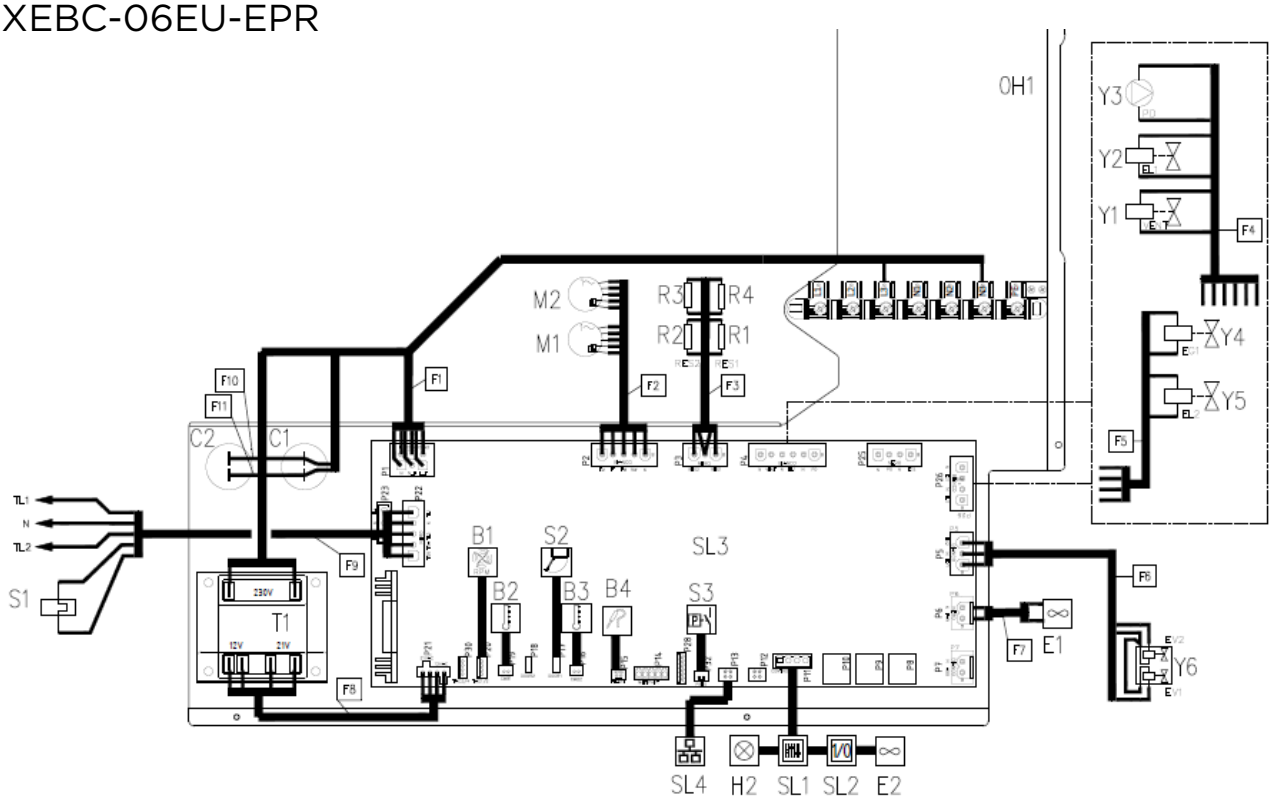
- **11,7 %** v/v with methane (CH_4);
- **14 %** v/v with butane (C_4H_{10});
- **13,8 %** v/v with propane (C_3H_8);

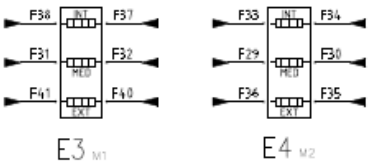
Lean, that means excess of oxygen compared with the injected gas. In that case the CO_2 values < the stoichiometric ones and low CO emissions;
Rich , that means lack of oxygen compared with the injected gas quantity. In that case the CO_2 values < the stoichiometric ones and high CO emissions;
CONCLUSION: It's necessary to perform a lean combustion to obtain CO_2 %v/v = 9,4%±e%.

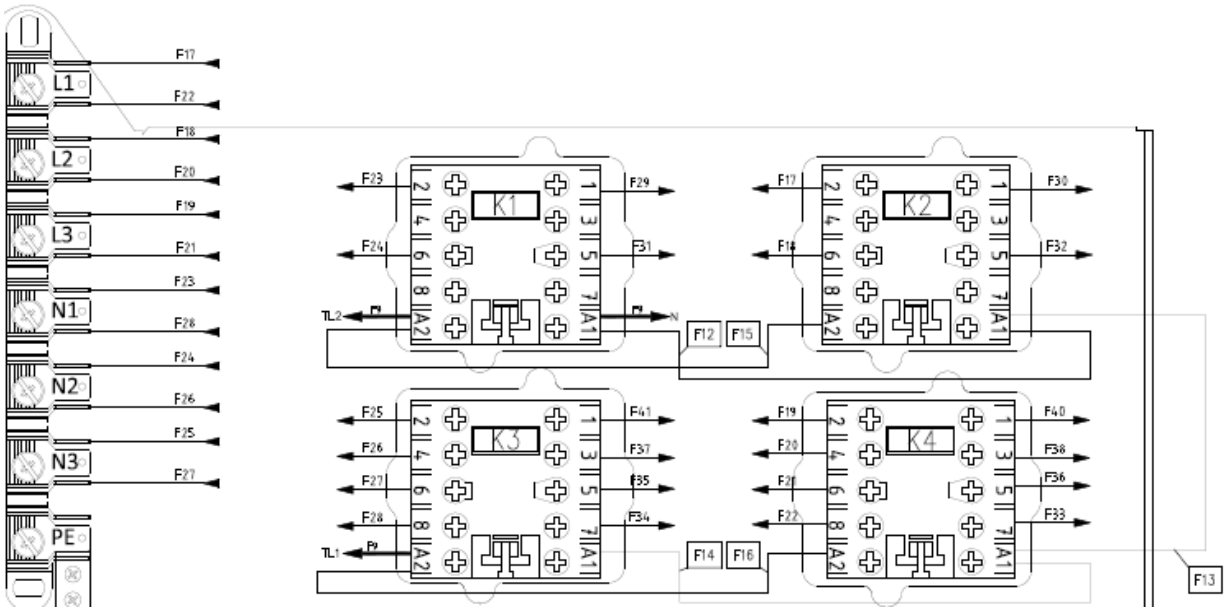


Circuit diagrams

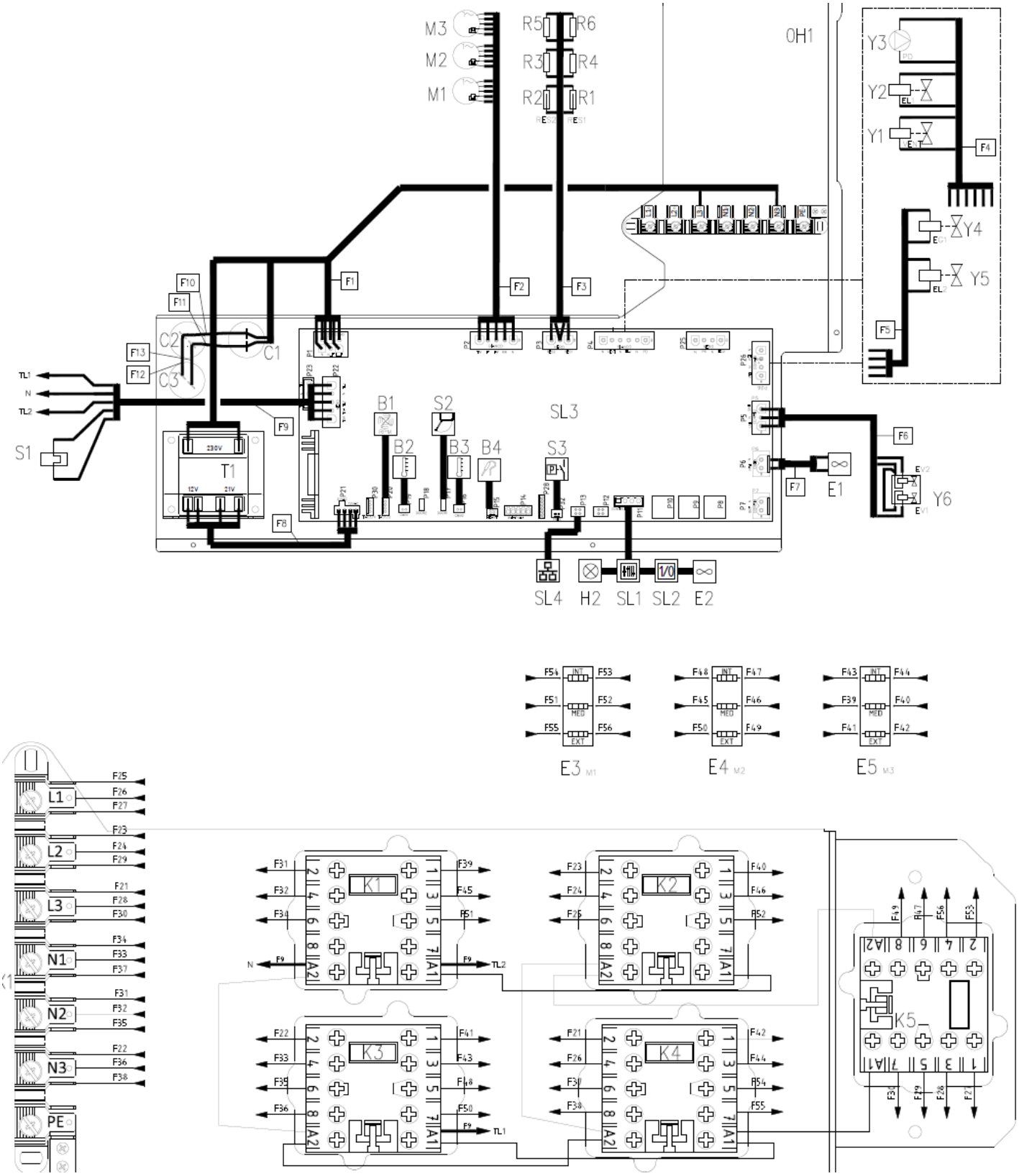
XEBC-06EU-EPR







XEBC-10EU-EPR



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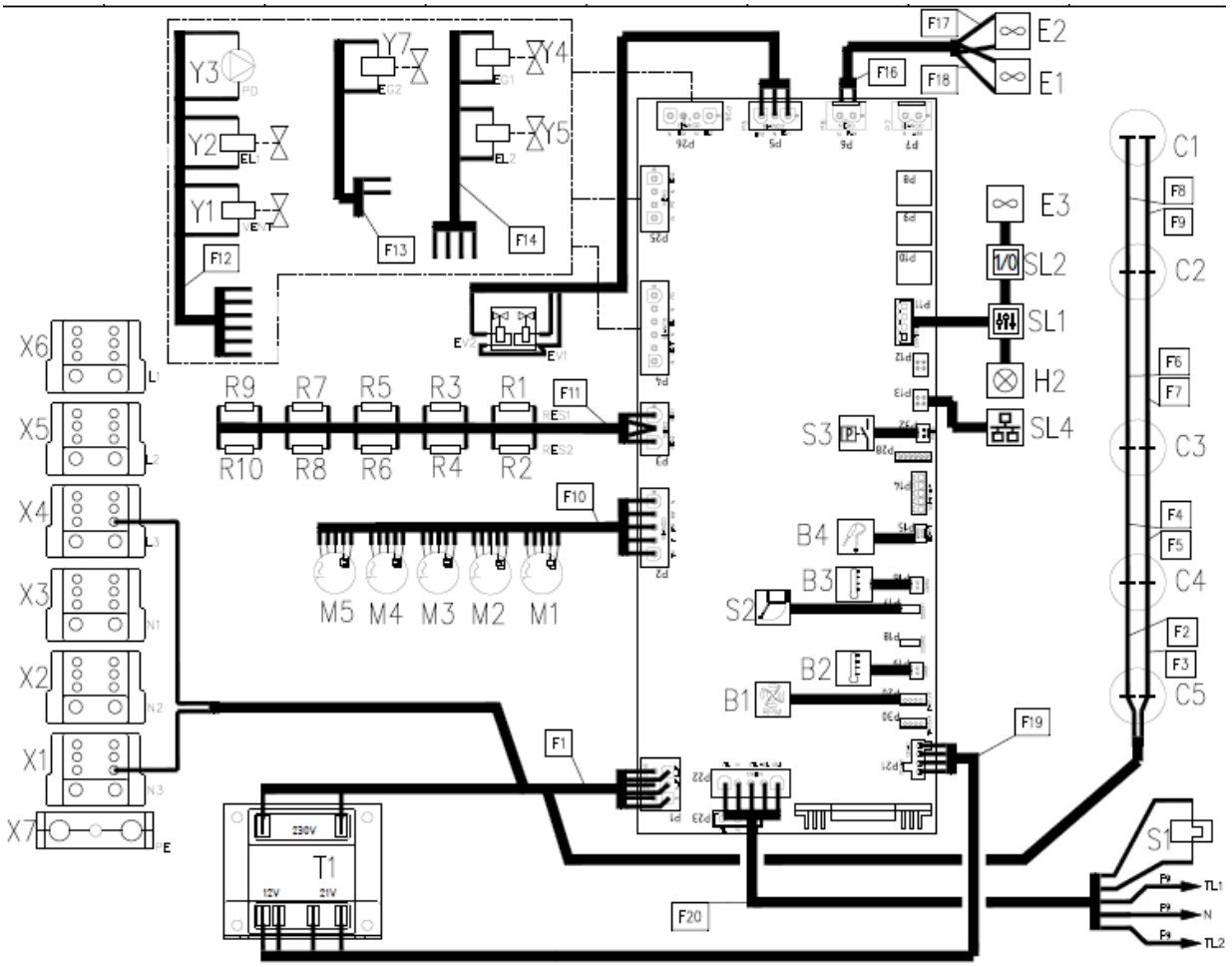

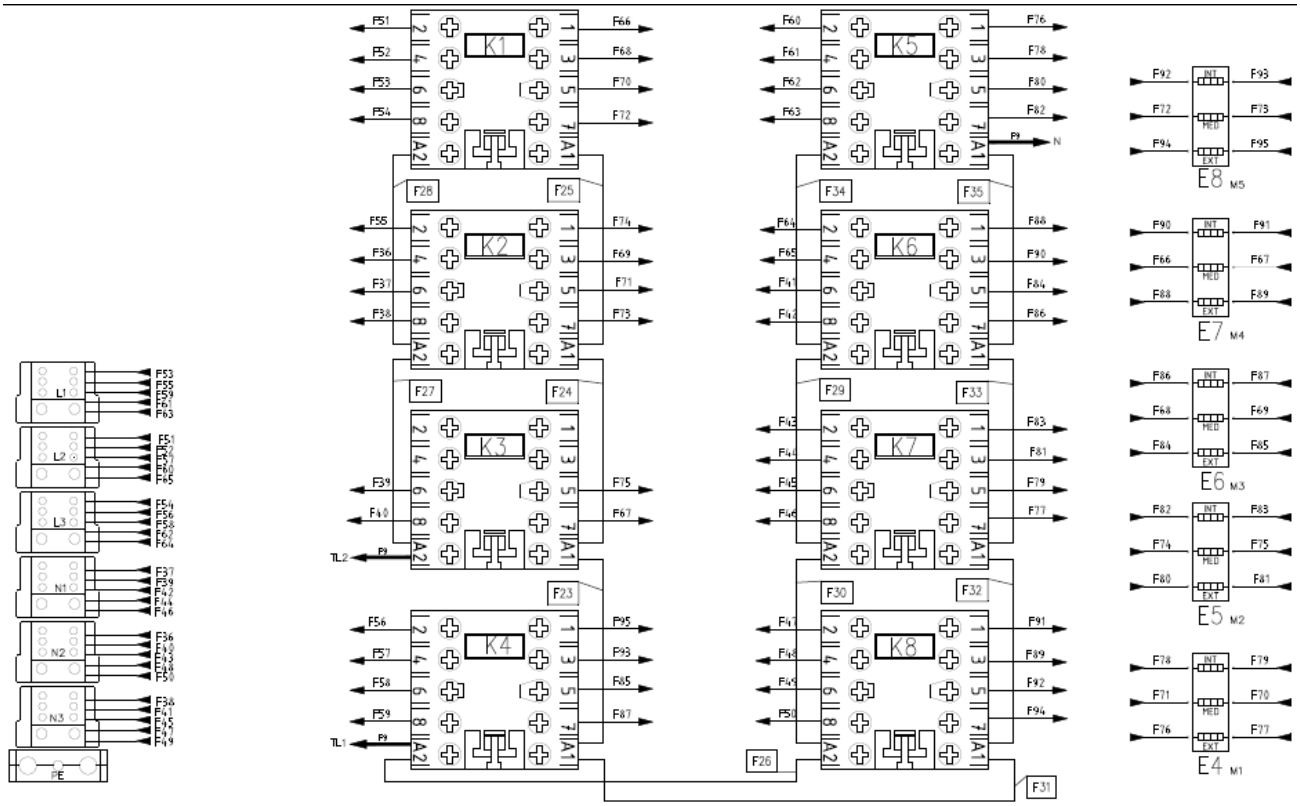

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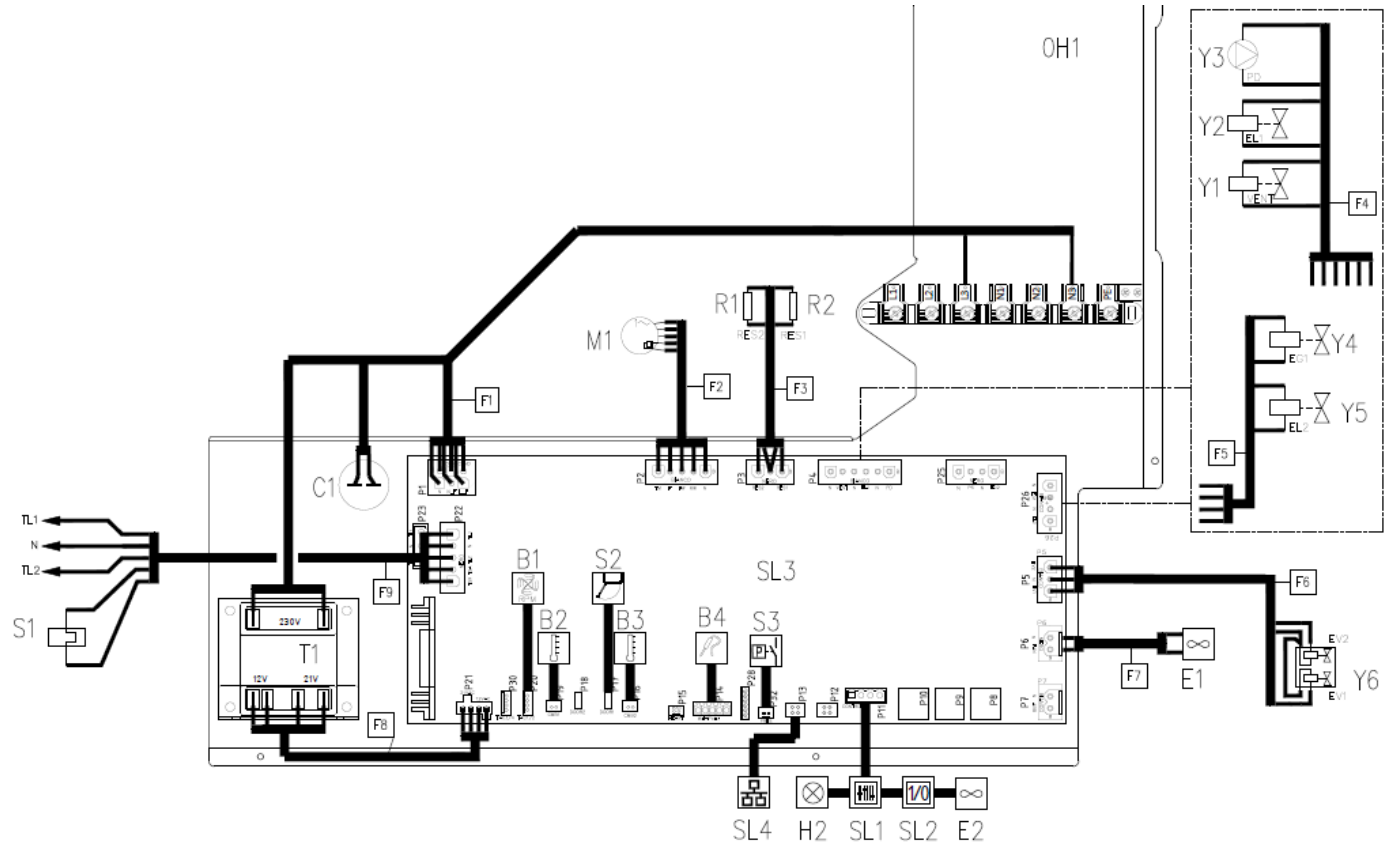

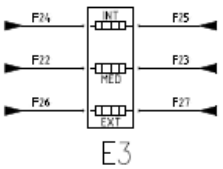

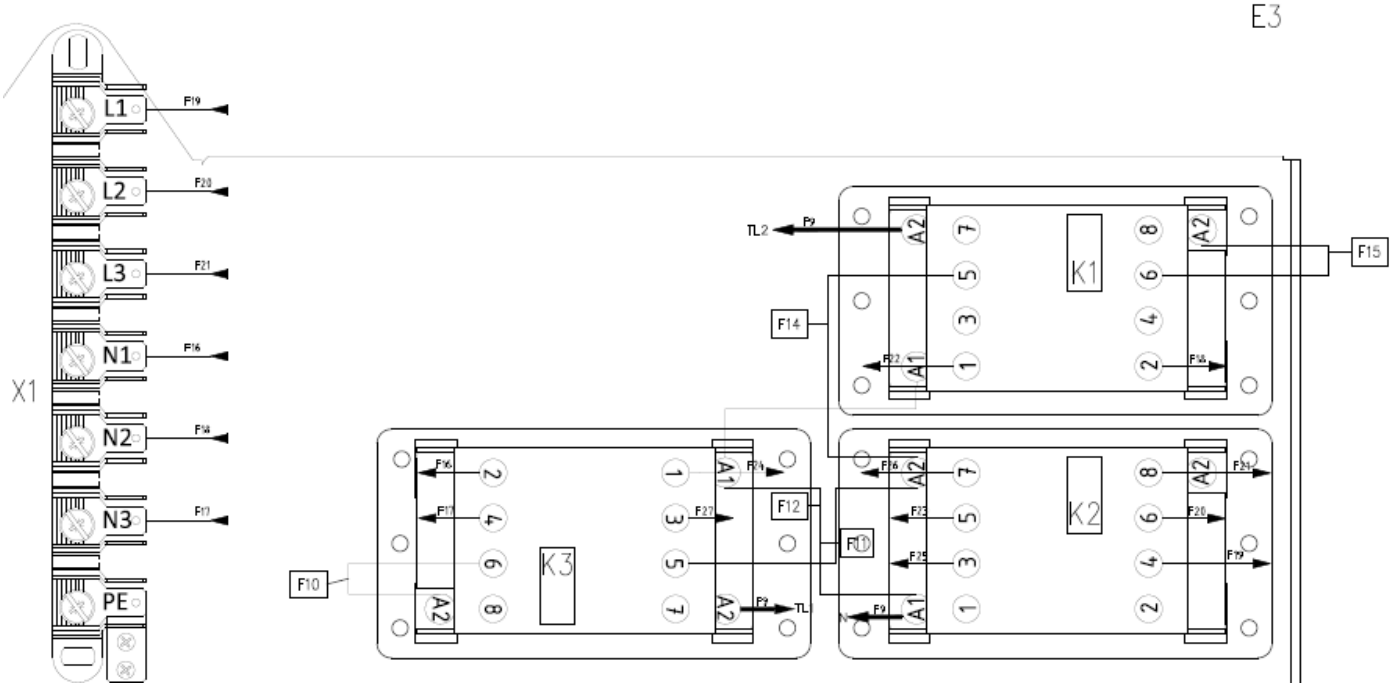

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