BAKERLUX SHOP.Pro™

SERVICE MANUAL

HOW TO USE THIS MANUAL

This manual covers general information and troubleshooting of the oven range BAKERLUX SHOP.Pro.

This manual is split into twelve parts and each part is divided into different sections in order to present information and data in a user-friendly way.

The electronic version of the manual is available in PDF format and allows to access to the content by clicking the mouse on the text or on the page numbers marked in blue.

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① Introduction

The new LINE.Miss™ range is composed of the following models, as reported in **Table 1**.

SHOP.Pro range overview

	STEFANIA	ARIANNA	ELENA	ROSSELLA	VITTORIA	CAMILLA
LxPxA (mm)	600x669x427	600x669x491	800x811x416	800x811x491	800x811x682	800x811x952
FLAP DOOR						
HINGED DOOR						
Number of trays	3	4	3	4	6	10
Type of tray	460x330	460x330	600x400	600x400	600x400	600x400
Total absorption	2.95 kW	3.45 kW	3.45 kW	6.9 kW	10.3 kW	15.5 kW
Voltage	1F/230V	1F/230V	1F/230V	3F/220V-240V 3F/380V-415V	3F/220V-240V 3F/380V-415V	3F/220V-240V 3F/380V-415V
Type of plug	schuko	schuko	schuko	w/o plug	w/o plug	w/o plug

Each model may be equipped with DROPDOWN opening or SWING DOOR opening, except for CA-MILLA and VITTORIA models, which come only with SWING DOOR opening.

Each model is available in four different versions, as described in **Table 2**.
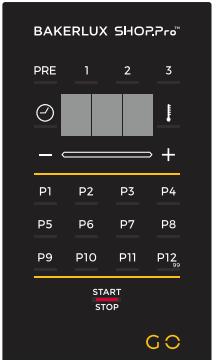
SHOP.Pro different version

GO	LED	TOUCH	MASTER

1.1. GO VERSION

Table 3 shows the main features of the GO version.
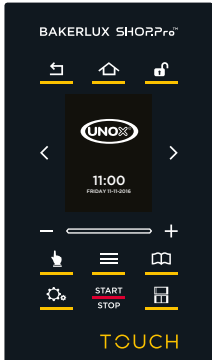
Table 3
GO version main features

COOKING STEP-COOKING STEP	3 + PREH
FAN SPEED	1
PROGRAMS	99
HUMIDITY	NO
MAX TEMPERATURE	260 °C
ADAPTIVE.Cooking	NO
USB	NO
INTERNET	NO
PROVER	NO
AUT. DOOR OPENING	NO

1.2. LED VERSION

Table 4 shows the main features of the LED version.

Table 4
LED version main features
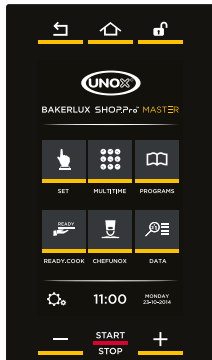
COOKING STEP	3 + PREH
FAN SPEED	2
PROGRAMS	99
HUMIDITY	YES*
MAX TEMPERATURE	260 °C
ADAPTIVE.Cooking	NO
USB	NO
INTERNET	NO
PROVER	YES
AUT. DOOR OPENING	NO

* 20% by 20% increasing

1.3. TOUCH VERSION

In **Table 5** the main features of the TOUCH version are reported.

Table 5
TOUCH version main features

COOKING STEP	9 + PREH
FAN SPEED	2
PROGRAMS	100
HUMIDITY	YES*
MAX TEMPERATURE	260 °C
ADAPTIVE.Cooking	NO
USB	YES
INTERNET	OPTIONAL
PROVER	YES
AUT. DOOR OPENING	NO

* 20% increase for each value set

1.4. MASTER VERSION

Table 6 shows the main features of the MASTER version.

Table 6
MASTER version main features

COOKING STEP	9 + PREH
FAN SPEED	2
PROGRAMS	1000+
HUMIDITY	YES*
MAX TEMPERATURE	260 °C
ADAPTIVE.Cooking	SI
USB	YES
INTERNET	OPTIONAL
PROVER	YES
AUT. DOOR OPENING	YES

* 20% increase for each value set
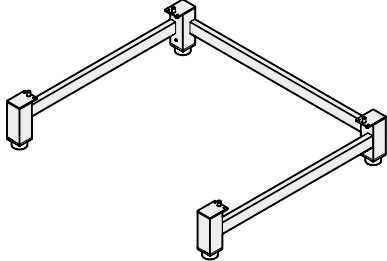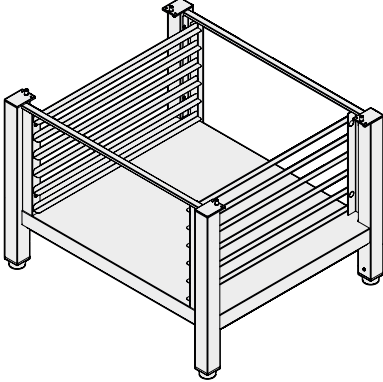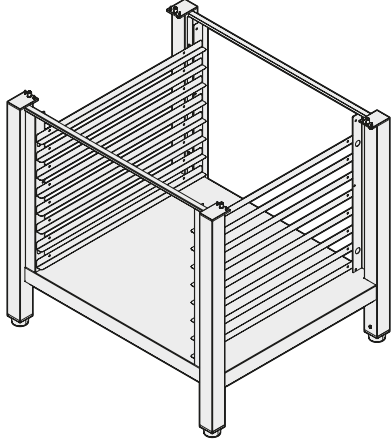
1.5. ACCESSOIRES

The new BAKERLUX SHOP.Pro can be used in combination with a wide variety of accessories, as listed below.

1.5.1. STAND

Table 7 lists range of stands available.

FLOOR STAND	MEDIUM STAND	HIGH STAND
H 117,5 mm	H 462 mm	H 738 mm
2 TYPE:	2 TYPE:	2 TYPE:
800	800	800
600	600	600

1.5.2. STACKING KIT
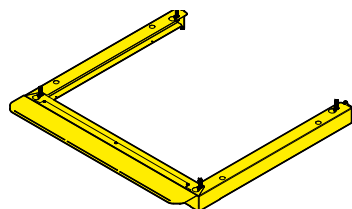
The new stacking kit is fast and easy to install. The new C-shape profile shown in **Fig. 1** makes stacking very easy, fast and safe. With its 60 mm high design, this item looks very clean and appealing, and creates a harmonic link between the two units.
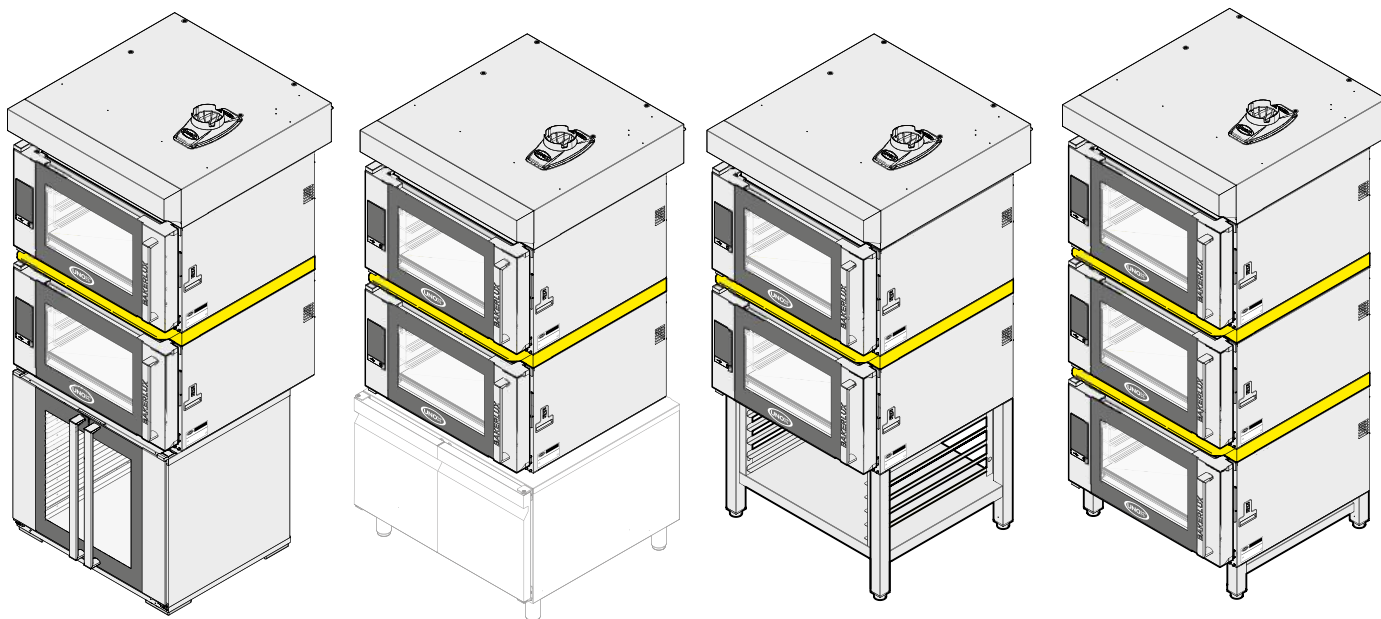
Fig. 1
SHOP.Pro stacking ki

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1.5.3. HOOD

The new hood design highlights three main features, as shown in **Fig. 2**:

- No screw visible at the front;
- Hood edge positioned at the same level as the oven door;
- New front grid for exhaust fumes intake.

Fig. 2
Hood design

1.5.4. PROVER

The prover features a new design, as shown in **Fig. 3** It is available with 8 or 10 trays.

Fig. 3
New prover design

Notes

② Product ID

2.1. OVEN PRODUCT ID

The product ID provides the following information
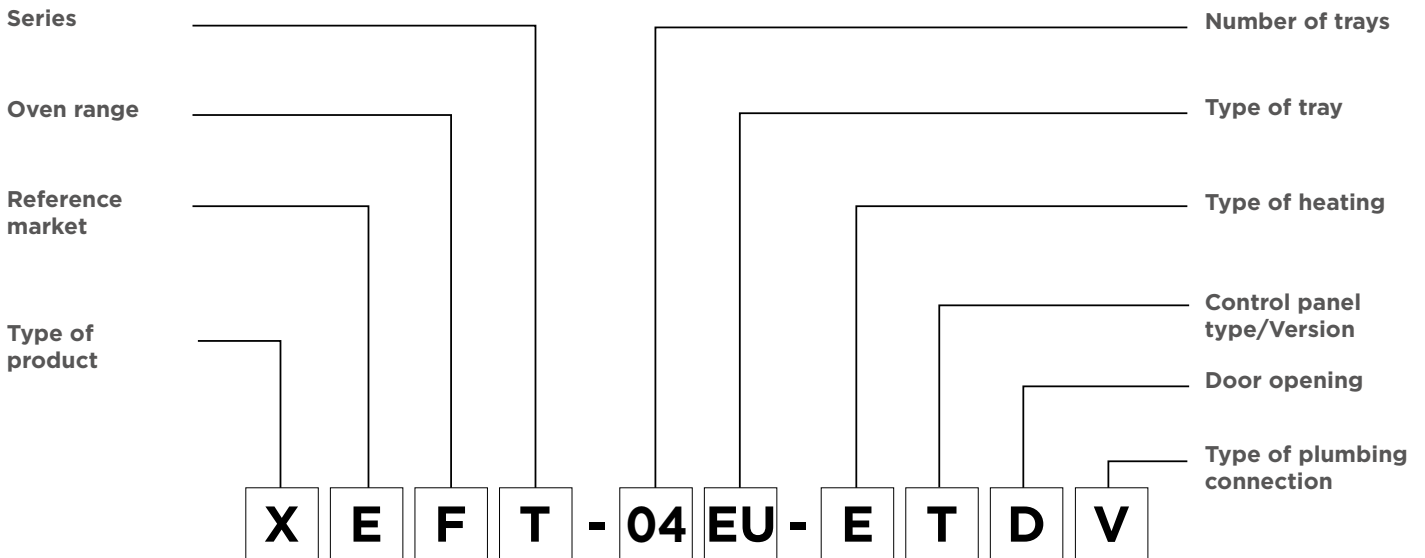
The letters that make up the various different codes are:

TYPE	CODE	DESCRIPTION
Type of product	X	Released product
Reference market	E	E= Europe, A= America, J= Japan
Oven range	F	**BAKERLUX SHOP.Pro™**
Series	T	Series
Number of trays	03	3 cooking trays
	04	4 cooking trays
	06	6 cooking trays
	10	10 cooking trays
Type of tray	EU	600x400
	FS	Full Size
	HS	Half Size
Type of heating	E	Electric
Control panel type/Version	G	Go
	L	Led
	T	Touch
	M	Master
Door opening side	R	Hinged door that opens to the right
	L	Hinged door that opens to the left
	D	Door with flap opening
Type of plumbing connection	V	Solenoid valve
	P	Pump
	N	None

In **Table 9** the complete list of the ovens

Table 9
Complete list of the ovens

MODELS	CONTROL L BOARD	DOOR R + SOLENOID	DOOR R + WATER PUMP	DOOR R + NO WATER	DOOR L + SOLENOID	DOOR L + WATER PUMP	DOOR L + NO WATER	DOOR D + SOLENOID	DOOR D + WATER PUMP	DOOR D + NO WATER
CAMILLA 10 600x400	MASTER	XEFT-10EU-EMRV	XEFT-10EU-EMRP	XEFT-10EU-EMRN	XEFT-10EU-EMLV	XEFT-10EU-EMLP	XEFT-10EU-EMLN	N.A.	N.A.	N.A.
	TOUCH	XEFT-10EU-ETRV	XEFT-10EU-ETRP	XEFT-10EU-ETRN	XEFT-10EU-ETLV	XEFT-10EU-ETLP	XEFT-10EU-ETLN	N.A.	N.A.	N.A.
	LED	XEFT-10EU-ELRV	XEFT-10EU-ELRP	XEFT-10EU-ELRN	XEFT-10EU-ELLV	XEFT-10EU-ELLP	XEFT-10EU-ELLN	N.A.	N.A.	N.A.
	GO	N.A.	N.A.	XEFT-10EU-EGRN	N.A.	N.A.	XEFT-10EU-EGLN	N.A.	N.A.	N.A.
VITTORIA 6 600x400	MASTER	XEFT-06EU-EMRV	XEFT-06EU-EMRP	XEFT-06EU-EMRN	XEFT-06EU-EMLV	XEFT-06EU-EMLP	XEFT-06EU-EMLN	N.A.	N.A.	N.A.
	TOUCH	XEFT-06EU-ETRV	XEFT-06EU-ETRP	XEFT-06EU-ETRN	XEFT-06EU-ETLV	XEFT-06EU-ETLP	XEFT-06EU-ETLN	N.A.	N.A.	N.A.
	LED	XEFT-06EU-ELRV	XEFT-06EU-ELRP	XEFT-06EU-ELRN	XEFT-06EU-ELLV	XEFT-06EU-ELLP	XEFT-06EU-ELLN	N.A.	N.A.	N.A.
	GO	N.A.	N.A.	XEFT-06EU-EGRN	N.A.	N.A.	XEFT-06EU-EGLN	N.A.	N.A.	N.A.
ROSSELLA 4 600x400	MASTER	XEFT-04EU-EMRV	XEFT-04EU-EMRP	XEFT-04EU-EMRN	XEFT-04EU-EMLV	XEFT-04EU-EMLP	XEFT-04EU-EMLN	XEFT-04EU-EMDV	XEFT-04EU-EMDP	XEFT-04EU-EMDN
	TOUCH	XEFT-04EU-ETRV	XEFT-04EU-ETRP	XEFT-04EU-ETRN	XEFT-04EU-ETLV	XEFT-04EU-ETLP	XEFT-04EU-ETLN	XEFT-04EU-ETDV	XEFT-04EU-ETDP	XEFT-04EU-ETDN
	LED	XEFT-04EU-ELRV	XEFT-04EU-ELRP	XEFT-04EU-ELRN	XEFT-04EU-ELLV	XEFT-04EU-ELLP	XEFT-04EU-ELLN	XEFT-04EU-ELDV	XEFT-04EU-ELDP	XEFT-04EU-ELDN
	GO	N.A.	N.A.	XEFT-04EU-EGRN	N.A.	N.A.	XEFT-04EU-EGLN	N.A.	N.A.	XEFT-04EU-EGDN
ELENA 3 600x400	MASTER	XEFT-03EU-EMRV	XEFT-03EU-EMRP	XEFT-03EU-EMRN	XEFT-03EU-EMLV	XEFT-03EU-EMLP	XEFT-03EU-EMLN	XEFT-03EU-EMDV	XEFT-03EU-EMDP	XEFT-03EU-EMDN
	TOUCH	XEFT-03EU-ETRV	XEFT-03EU-ETRP	XEFT-03EU-ETRN	XEFT-03EU-ETLV	XEFT-03EU-ETLP	XEFT-03EU-ETLN	XEFT-03EU-ETDV	XEFT-03EU-ETDP	XEFT-03EU-ETDN
	LED	XEFT-03EU-EL-RV	XEFT-03EU-EL-RP	XEFT-03EU-EL-RN	XEFT-03EU-ELLV	XEFT-03EU-ELLP	XEFT-03EU-ELLN	XEFT-03EU-ELDV	XEFT-03EU-ELDP	XEFT-03EU-ELDN
	GO	N.A.	N.A.	XEFT-03EU-EGRN	N.A.	N.A.	XEFT-03EU-EGLN	N.A.	N.A.	XEFT-03EU-EGDN

MODELS	CONTROL BOARD	DOOR R + SOLENOID	DOOR R + WATER PUMP	DOOR R + NO WATER	DOOR L + SOLENOID	DOOR L + WATER PUMP	DOOR L + NO WATER	DOOR D + SOLENOID	DOOR D + WATER PUMP	DOOR D + NO WATER
ARIANNA 4 460x330	MASTER	XEFT-04HS-EMRV	XEFT-04HS-EMRP	XEFT-04HS-EMRN	XEFT-04HS-EMLV	XEFT-04HS-EMLP	XEFT-04HS-EMLN	XEFT-04HS-EMDV	XEFT-04HS-EMDP	XEFT-04HS-EMDN
	TOUCH	XEFT-04HS-ETRV	XEFT-04HS-ETRP	XEFT-04HS-ETRN	XEFT-04HS-ETLV	XEFT-04HS-ETLP	XEFT-04HS-ETLN	XEFT-04HS-ETDV	XEFT-04HS-ETDP	XEFT-04HS-ETDN
	LED	XEFT-04HS-ELRV	XEFT-04HS-ELRP	XEFT-04HS-ELRN	XEFT-04HS-ELLV	XEFT-04HS-ELLP	XEFT-04HS-ELLN	XEFT-04HS-ELDV	XEFT-04HS-ELDP	XEFT-04HS-ELDN
	GO	N.A.	N.A.	XEFT-04HS-EGRN	N.A.	N.A.	XEFT-04HS-EGLN	N.A.	N.A.	XEFT-04HS-EGDN
STEFANIA 3 460x330	MASTER	XEFT-03HS-EMRV	XEFT-03HS-EMRP	XEFT-03HS-EMRN	XEFT-03HS-EMLV	XEFT-03HS-EMLP	XEFT-03HS-EMLN	XEFT-03HS-EMDV	XEFT-03HS-EMDP	XEFT-03HS-EMDN
	TOUCH	XEFT-03HS-ETRV	XEFT-03HS-ETRP	XEFT-03HS-ETRN	XEFT-03HS-ETLV	XEFT-03HS-ETLP	XEFT-03HS-ETLN	XEFT-03HS-ETDV	XEFT-03HS-ETDP	XEFT-03HS-ETDN
	LED	XEFT-03HS-ELRV	XEFT-03HS-ELRP	XEFT-03HS-ELRN	XEFT-03HS-ELLV	XEFT-03HS-ELLP	XEFT-03HS-ELLN	XEFT-03HS-ELDV	XEFT-03HS-ELDP	XEFT-03HS-ELDN
	GO	N.A.	N.A.	XEFT-03HS-EGRN	N.A.	N.A.	XEFT-03HS-EGLN	N.A.	N.A.	XEFT-03HS-EGDN

L

R

D
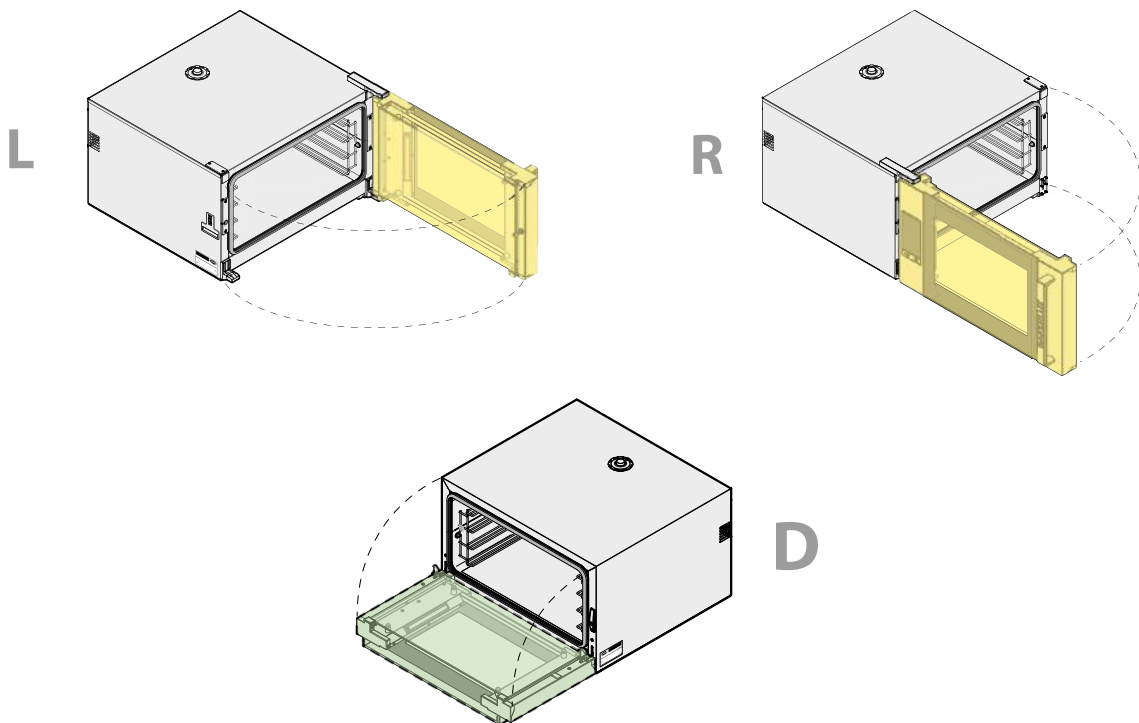
2.2. ACCESSORY PRODUCT ID

The SHOP.Pro ovens may come equipped with a wide variety of accessories, such as.
- Hoods;
- Prover;
- Stand;
- Stacking kit;
- Accessories kit.

The meaning of each digit is described in **Table 10**.

Table 10
Code description

RELEASED PRODUCT	SALES MARKET	FAMILY	TYPE	SERIES	HOOD TYPE / NUMBER OF TRAYS	TRAYS TYPE	ACCESSORY FEATURES
X	E (Europe) A (U.S.A.) J (Japan) M (Marine)	K (Accessory)	H (Hood) C (Condenser) P (Prover) R (Stand) Q (Stacking kit) L (Lateral support)	T (Bakerlux SHOP.Pro)	HC (Water condensation) AC (Air condensation)	EU (600x400) FS (Full Size) HS (Half Size) EF (EU+FS) EH (EU+FS+HS)	M (Manual) C (Controlled) H (High) M (Medium) F (Floor) E (Electric)

Table 11
Reports the complete list of the SHOP.Pro accessories.

MODELS	TYPE	CODE	CODE	ELECTRIC
HOOD	Ventless	XEKHT-HCHS	XEKHT-HCEU	YES
	Waterless	XEKHT-ACHS	XEKHT-ACEU	YES
	Recessed	XEKHT-RCHS	XEKHT-RCEF	NO
	Condenser	XEKCT-HCEH-M		YES
PROVER	Normal	XEKPT-08HS-C	XEKPT-08EU-C	YES
	High	XEKPT-10HS-C	XEKPT-10EU-C	YES
STAND	High	XWKRT-08HS-H	XEKRT-08EU-H	NO
	Medium	XWKRT-06HS-M	XEKRT-06EU-M	NO
	Floor	XWKRT-00HS-F	XWKRT-00EF-F	NO
STACKING KIT	Standard	XWKQT-00HS-E	XWKQT-00EF-E	NO
	Specific for ROSSELLA	N.A.	XWKQT-04EF-E	NO
ACCESSORIES KIT	UNOX.Link LAN	XEC011		YES - Only low voltage
	UNOX.Link WiFi	XEC012		YES - Only low voltage
	Buzzer	XEC015		YES - Only low voltage
	UNOX.Pure filtering system	XHC003		NO
	Refill UNOX.Pure filtering system	XHC004		NO
	Bakery.Pure.50 filtering system	XHC010		NO
	Refill Bakery.Pure.50 filtering system	XHC011		NO
	UNOX.Finest filtering system	XHC012*		NO
	Refill UNOX.Finest filtering system	XHC013*		NO
	Pump	XHC016		YES
	Water tank for oven	XHC020	XHC021	NO
	Water tank for oven placed on a stand	XHC022	XHC023	NO
	Water tank for oven placed on a prover	XHC024		NO
	Wheels (only prover-stand)	XUC012		NO
	Feet H100	XUC025	XUC035	NO
	Feet H150 for prover	XUC045		NO

* Only for: China, Australia, USA (BAKERLUX Shop.PRO™ 6 - 10 trays)

③ STEAM.Plus

BAKERLUX SHOP.Pro LED, TOUCH and MASTER are capable of producing steam. Steam production is based on an opening and closing cycle of the steam injection system - that lasts 16 seconds if the oven has a solenoid valve - and 20 seconds if the steam pump is installed. The minimum activation time of the steam injection system is 2 seconds with steam valve and 1 second with steam pump.

UNOX STEAM.Plus™ technology performs every type of steaming process, even the most delicate ones, starting from a temperature of 35 °C (95 °F). This result is obtained thanks to the steam production. The result is identical, if not even better, to that obtained when using a boiler combi-oven.
It is possible to set a steam value in the range 0 – 100% with 20% increasing steps.

3.1. STEAM SOLENOID VALVE

to oven

to water line
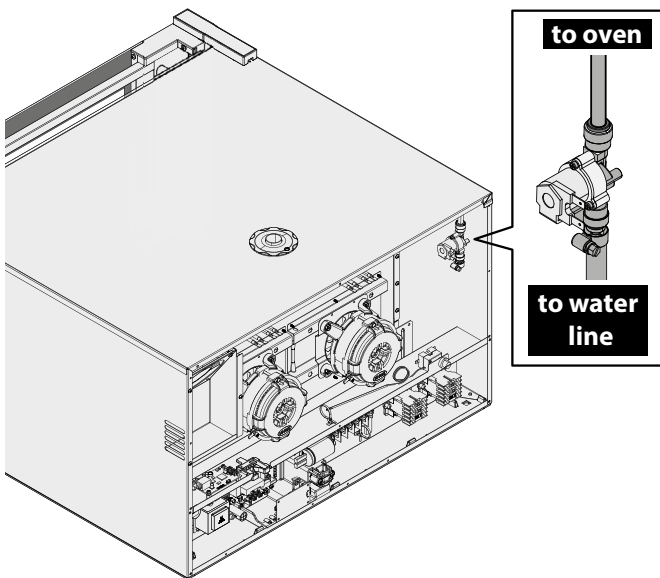
The valve supply is 230 V AC and the valve consists of a single body, as shown in **Fig. 4** This allows us to adjust the water flow rate according to the climate conditions within the cooking chamber, by opening and closing the water flow.
Based on the steam value set, the oven will apply a different line among those available in the steam table.

Fig. 4
Solenoid valve for steam production

3.2. STEAM PUMP

to oven

to water line
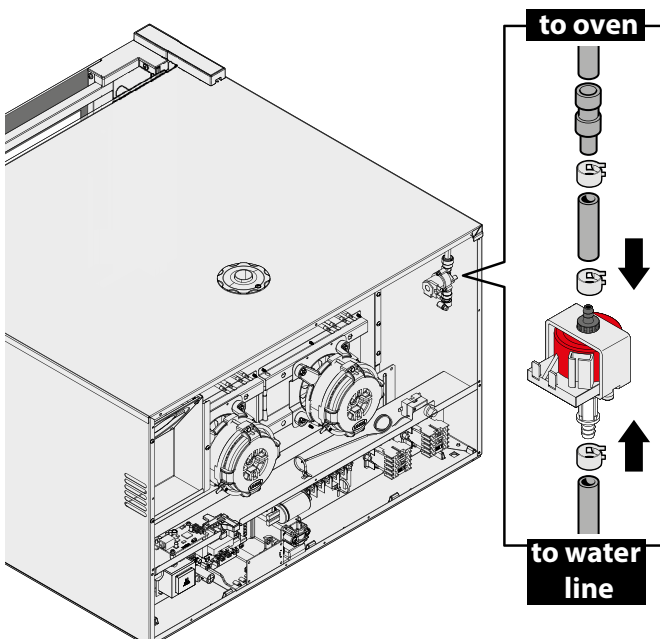
The pump shown in **Fig. 5**, has a 230 VAC. The technical characteristics of the pump are listed in table below.

Fluid	Water
Power	16 W
Non-return valve	Built-in non-return valve
Thermal protection	Thermal cut-off body
Water flow rate	20 – 30 cc/min
Max pressure	1 bar

Fig. 5
Steam pump

Based on the steam value set, the oven will apply a different line among those available in the steam table.

When the oven is equipped with pump, a water tank may be installed as shown in **Fig. 6**.
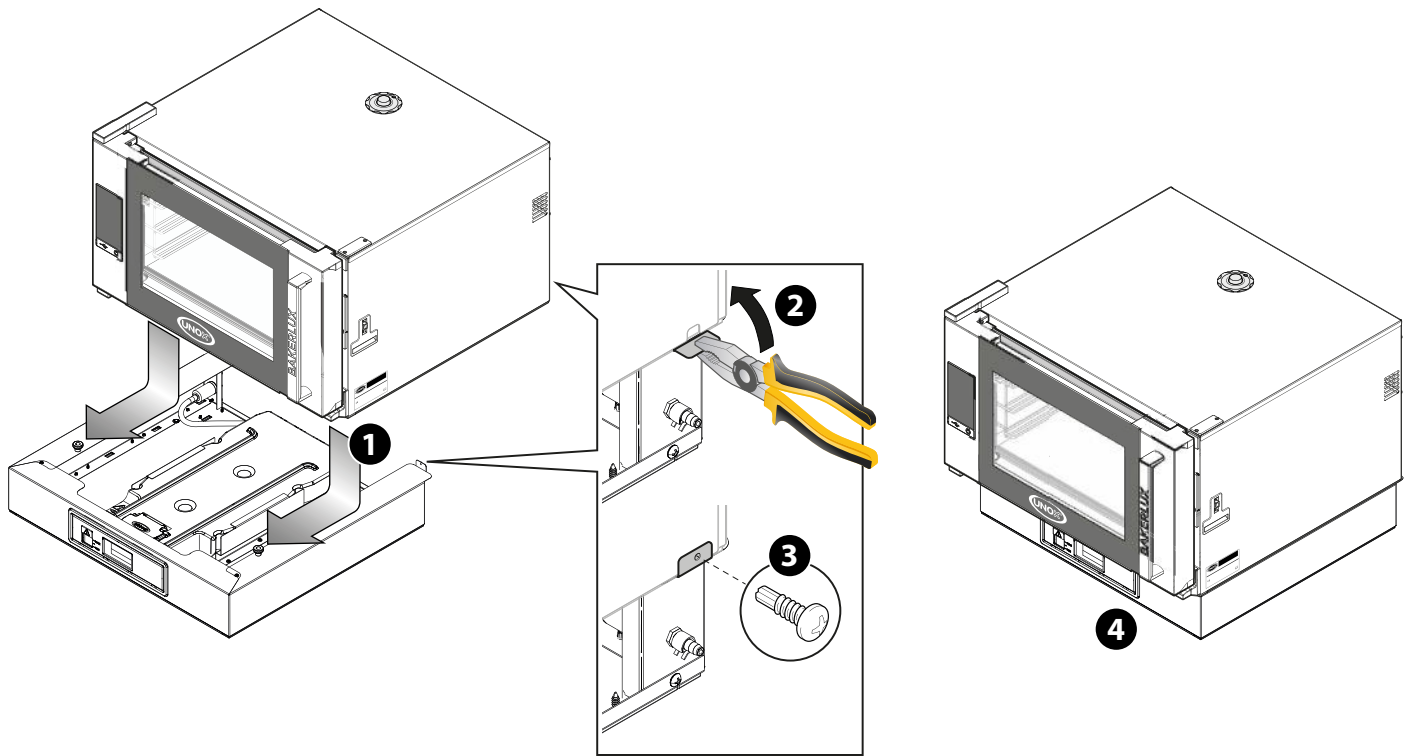
Fig. 6
Water tank

As an alternative, the oven may take water in from an external collection pan, as shown in **Fig. 7**.
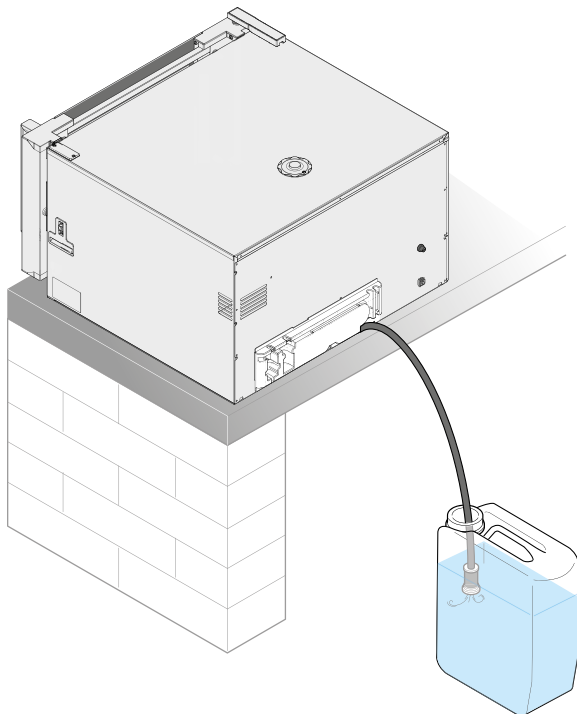
Fig. 7
External collection pan

Steam production is limited by decreasing 100% of the maximum water injection to a lower value.

3.3. CLIMATE CONTROL IN MASTER AND TOUCH MODELS

The different methods for steam injection are managed based on the STEAM SUPPLY parameter. The oven can manage only an OPEN LOOP control system. Each oven is equipped with one solenoid valve or a pump for steam production.

3.3.1. TEMPERATURE-BASED LIMITATION

Based on the temperature set, steam production will be limited.

The aim is to prevent the steel of the cooking chamber from undergoing thermal shocks and to reduce the quantity of water injected at low temperature, since steam production is reduced in this condition.

This limitation feature is active when the LIMIT STEAM (TEMPERATURE) parameter is set to ON.
For instance, if the temperature is 110 °C (230 °F), if you set the STEAM.Plus to 50%, steam production will be 50% of the maximum quantity available. At 85 °C (185 °F) instead, the actual steam production will amount to 25%.

3.3.2. SPEED MOTOR-BASED LIMIT

The motor speed limits the quantity of steam that can be produced. At lower speeds, the quantity of water that can be vaporized by the fans is lower than at maximum speed.
This limitation is active when the LIMIT STEAM (FAN SPEED) parameter is set to ON.

3.3.3. MULTI.TIME-BASED LIMITATION

If a MULTI.Time™ program is running and there are no timers active, the oven will limit steam injection to 10%. This limitation feature is active when the LIMIT STEAM (IDLE) parameter is set to ON.

3.3.4. COOKING TIME-BASED LIMITATION

The cooking time set limits the quantity of steam that can be produced.

The timer is started once again when the program cycle has been completed and when the door is open.

3.3.5. STEAM INJECTION ADJUSTMENT IN MASTER MODELS

The parameter STEAM TUNING adjusts the steam quantity injected as follows:

- BOOST ➡ adjusts the steam quantity to the higher value, that corresponds to the subsequent line in the steam table. For instance, setting the value to 80% the oven will inject 100% steam;
- OFF ➡ the oven follows the corresponding line in the steam table;
- LIMIT ➡ adjusts the steam quantity to the lower value, that corresponds to the previous line in the steam table. For instance, setting the value to 80% the oven will inject 60% steam;
- MINIMIZE ➡ adjusts the steam quantity to the lower value, that corresponds to the second line before the value set in the steam table. For instance, setting the value to 80%, the oven will inject 40% steam.

3.4.CLIMATE CONTROL IN LED OVENS

In these models, it is possible to set a steam value in the range 0 – 100% with 20% increasing steps.

The oven does not inject water if:
* An alarm is displayed;
* The motor is not spinning;
* The temperature is below 90 °C (194 °F).

3.4.1. MWL PARAMETER FOR STEAM LIMITATION

The MWL parameter can be set in the range -2 - +1. Using this parameter, the steam value set may be increased or decreased by 20% per step.. For instance, if the value set is MWL = -1 and the steam setting is 60%, the oven will actually inject 40% steam.

3.4.2. TEMPERATURE LIMITATION

According to the greater between the temperature point set and the actual cooking chamber temperature, steam production will be limited.
The aim is to prevent the steel in the cooking chamber from undergoing thermal shocks and to reduce the quantity of water injected at low temperatures, since the production of steam is quite limited in that condition.

3.4.3. COOKING TIME LIMITATION

The cooking time limits the quantity of steam that can be produced.

3.5. PLUMBING CONNECTION

Use the new coupling kit provided with the appliance for connection to the water mains, as shown in **Fig. 8**.

🛈 Connections and couplings that have been used before must not be used again.

Before connecting the water pipe to the appliance, flush it out with water in order to remove any residues or deposits from the inside. A shut-off valve should be positioned between the water mains and the appliance.

Plumbing connection to the **left**

Plumbing connection to the **right**

Plumbing connection to the **left**

Plumbing connection to the **right**
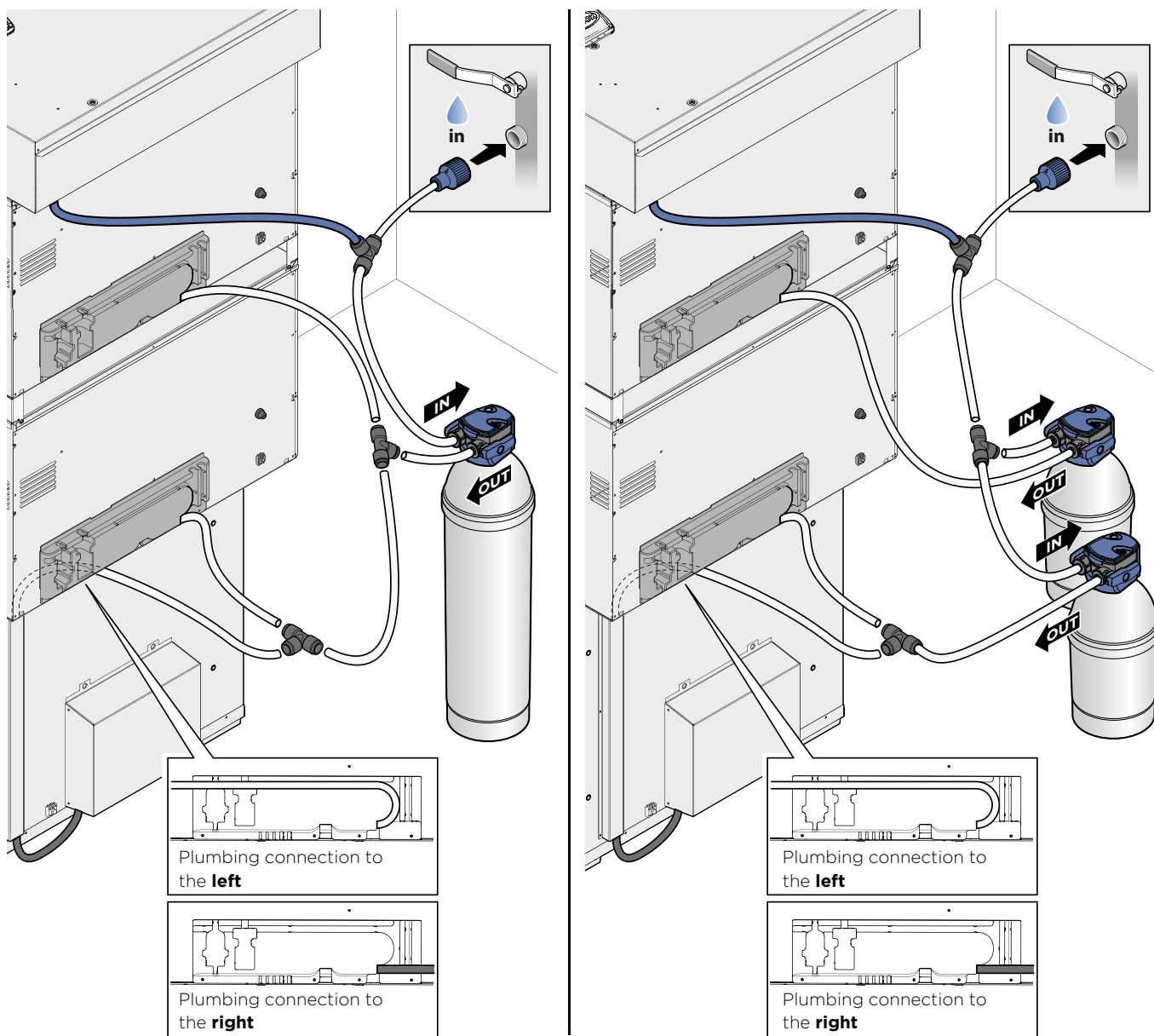
Fig. 8
Plumbing connection

Notes

④ AIR.Plus

AIR.Maxi™ technology ensures optimal air distribution and consequently also heat distribution within the cooking chamber. Multiple auto-reversing fans and high-speed motors provide uniform cooking cycles in all pans: from those at the bottom of the oven to those at the top. The possibility of choosing between 2 air speeds allows any type of product to be cooked perfectly, from the most delicate items to products that require high temperatures and a high heat transfer rates.
The new motor + fan assembly is different based on the range and of the market of use, as reported in **Table 12**.

Table 12
Motor + fan assembly
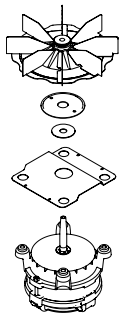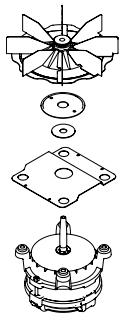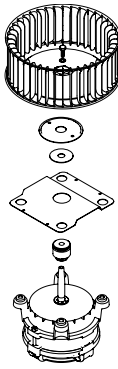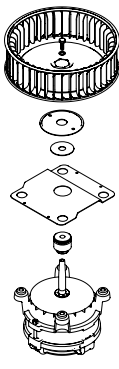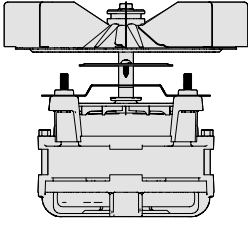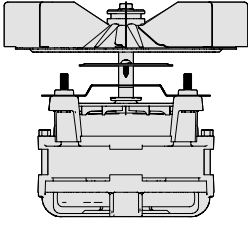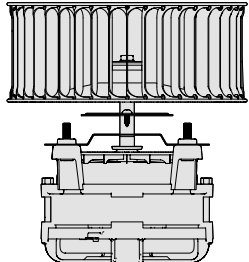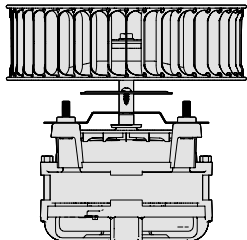
Motor type		C			
Sub-motor type		**C3**	**C4**	**C1**	**C2**
View	**Exploded view**				
	Lateral view				
Use	Ovens range	New Bakerlux 600		New Bakerlux 800	New Bakerlux 800
	Market	EU-USA-JAP	USA	EU-JAP	USA

Table 13
Motor and fan technical characteristics

		STEFANIA		ARIANNA		ELENA	ROSSELLA	VITTORIA	CAMILLA
Motor type	Electric motor	KMT1019A (@ 120 VAC)	KMT1012A	KMT1019A (@ 120 VAC)	KMT1012A	KMT1012A	KMT1012A	MT1012A0	KMT1012A
	Fan	D200 – H40		D200 – H40		D200 – H80 (H60 x USA)	D200 – H80 (H60 x USA)	D200 – H80	D200 – H80
	Speed resistor	65 ohm	230 ohm	65 ohm	230 ohm	121 ohm	121 ohm	121 ohm	121 ohm

4.1. MOTOR
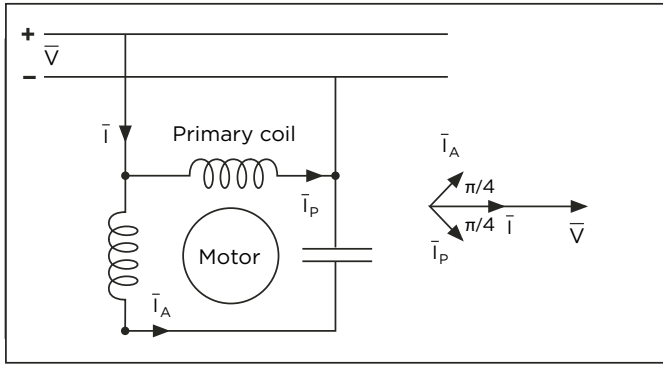
IIn the convection oven, the motors are used for forcing air circulation around the food at different speeds. The motor used is a single phase and asynchronous motor, and uses a system of capacitors and a triac device integrated in the power board to reverse the rotating direction. The stator winding is powered by a sinusoidal voltage and is crossed by a sinusoidal current that generates an alternative sinusoidal e.m.f. (electromotive force). The sinusoidal current produces an alternate magnetic field; this could be considered as two magnetic fields with the same value that overlap. This value corresponds to half the greatest value of each alternate field. This new magnetic field spins with an angular speed of the same value, but with an opposite sign with respect to the original fields. This way, two torques are generated (same value but opposite sign), therefore if the rotor is stationary, the motor will not start. If the motor starts in a direction, it will continue to run in that direction accelerating up to top speed. This phenomenon occurs because the field torque, spinning in the same direction as the motor, is greater than the other one. For motor start-off, UNOX AIR.Plus technology uses a capacitor. The motor has a high starting torque. The aim of the capacitor is to create a difference of $\pi/2$ in the sinusoidal phase, thus feeding the turns inside the motor. This way, a double phase rotating field is created as shown in **Fig. 9**.

UNOX motors are equipped with two turns: one is the primary and the other is the auxiliary one and vice versa, depending on the one that the electrical current will pass through first. The triac on the power board is designed to switch the current between the two turns, thus assuring that the rotation direction is reversed. In the wiring diagram for the BAKERLUX SHOP.Pro ovens, the motors are connected in parallel. For each motor, a capacitor is installed and connected in series to the motor itself and in parallel to the other capacitors.

4.2 BRAKING ELEMENT

The asynchronous single-phase motor runs at maximum speed at standard voltage, normally 230 V AC 50 Hz for the European market, 208-240 V AC 60 Hz for the US. With this voltage supply, the motor runs at about 2700-3000 RPM. In order to slow down the motor, UNOX uses a braking element integrated with the heating element: this element is connected in series with the motor and is capable of delivering the supply voltage to the motor itself. The braking element has the technical specifications listed in **Table 13**.

The oven handles 2 different speeds.

4.2. VENTILATION IN MASTER AND TOUCH MODELS

2 different speeds can be set:

• 1, minimum speed;
• 2, maximum speed.

4.2.1. REVERSING OF ROTATION DIRECTION AND BRAKING PROCEDURE

The motor reverses the rotation direction every 100 seconds. The braking procedure consists of the following steps, as reported in **Table 14**.

Table 14
Reversing of rotation direction and braking procedure

STEP	STATUS	TIME	MOTOR ACTI-VATION (RL1)	BRAKING ELE-MENT ACTIVA-TION (RL7)	INVERSION OF POLARITY (RL6)
0	Motor running	0	√	-	-
1	Motor is slowing down	0 ➡ 2 seconds	-	-	-
2	Motor braking	2 ➡ 15 seconds	√	√	√
3	Motor braking	15 ➡ 22 seconds	-	-	-
4	Motor fully stopped	22 seconds	-	-	-

4.2.2. 4.3.2 SPEED LIMITATION

When the temperature is set to a value below 50 °C the oven cannot run at speed 1 (minimum speed).

4.3. VENTILATION IN LED MODELS

2 different speeds can be set:

* 1 ➡ minimum speed;
* 2 ➡ maximum speed.

The motor is stopped if the oven is in alarm mode or when the door is opened.
The motor reverses the rotation direction every 92 seconds. The operation cycle consists of:

1. 80 seconds operation following a specific rotation direction;
2. 12 seconds to activate the braking element, switch the power supply polarity to the motor and fully stop the motor;
3. After this time lapse, the motor will start running again in the opposite direction.

When the fan speed is set to 1, the motor will not reverse the rotation direction.

The motor cannot run at speed 1 when the temperature set is below 90 °C.

Following an alarm or door opening, the motor can anticipate the inversion of the rotation direction if the previous operation cycle ends in less than 10 seconds.

Notes

5 Temperature control

5.1. HEATING ELEMENT
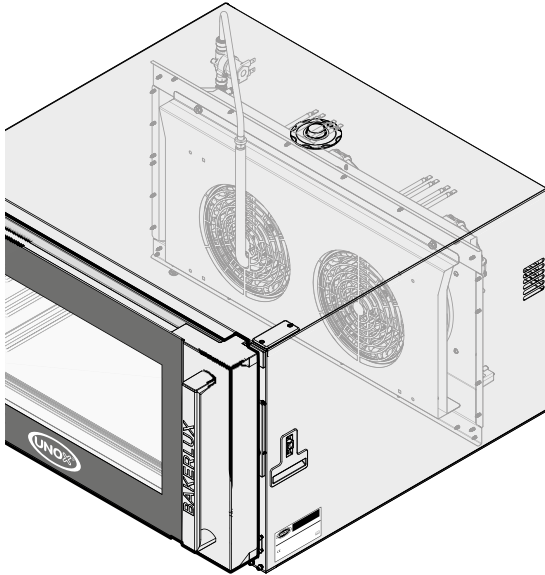
The power system in the electric oven is composed of heating elements with multiple turns, as shown in **Fig. 10**.

Each heating element is equipped with two turns. The external turn has a white ceramic sealing, the internal turn has a blue ceramic sealing as shown in **Fig. 10**. The technical characteristics of the element are reported in Appendix 1 Heating element technical data.

BAKERLUX SHOP.Pro models can only activate all the turns and deactivate all of them simultaneously (0% - 100%).
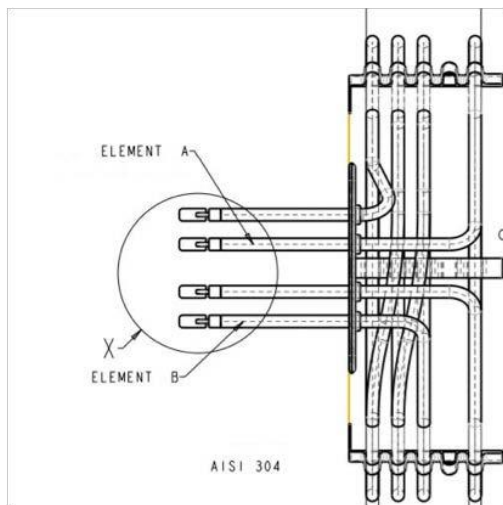
Fig. 10
Heating element

5.2. TEMPERATURE CONTROL IN MASTER AND TOUCH MODELS

Activation of the heating element occurs as described in **Table 15**.

Table 15
Heating element activation

State	ΔT
IDLE	≤ 0.5°C
REQUEST	≥ 2.5°C

5.2.1. LIMITATIONS

The oven turns off the heating element when the motor reverses the rotation direction and at the same time the temperature of the cooking chamber is greater than 180 °C.

The contactor is deactivated for at least 2 seconds between two consecutive activations.

5.3. TEMPERATURE CONTROL IN GO AND LED MODELS

Activation of the heating element follows the logic below:
- The heating element is powered until the temperature of the cooking chamber is lower than T_{set};
- The heating element is powered off until the temperature of the cooking chamber is greater than T_{set} – DF1

In addition to the temperature setting logic, the heating elements are activated as follows:

- When powered, the heating element should remain activated for at least 2 seconds;
- When not powered, the heating element should remain deactivated for at least 5 seconds. The time lapse will be 2 seconds if deactivation of the element is caused by an alarm or door opening.

5.4. APPENDIX 1 HEATING ELEMENT TECHNICAL DATA

Table 16
Model power

MODEL ID	MODEL NAME	NR OF MOTOR	AREA	CONN TYPE	Vn F-F	P_{tot}	Pheat	L1	L2	L3	In	Imax [A]	CIRCUIT BREAKER [A]
					[V]	[W]	[W]	I [A]	I [A]	I [A]	I [A]	LINE: 3FN-3F	
XAFT-03HS-Mxxx	STEFANIA	1	USA 120	1F	120	1440	1220	12				12	15
XAFT-03HS-Exxx		1	USA 240	1F	240	3250	2940	13,5				13,5	20
XAFT-03HS-Exxx		1	USA 208	1F	208	2520	2210	12,1				12,1	20
XEFT-03HS-Exxx		1	EU	1F	230	2970	2700	12,9				12,9	16
XEFT-04HS-Exxx	ARIANNA	1	EU	1F	230	3470	3200	15				15	16
XAFT-04HS-Exxx		1	USA 240	1F	240	3755	3485	15,7				15,7	20
XAFT-04HS-Exxx		1	USA 208	1F	208	2890	2410	13,9				13,9	20
XEFT-03EU-Exxx	ELENA	1	EU	1F	230	3470	3200	15				15	16
XAFT-03FS-Exxx		1	USA 240	1F	240	3755	3485	15,7				15,7	20
		1	USA 208	1F	208	2890	2410	13,9				13,9	20
XJFT-03EU-Exxx			JP	1F									
XEFT-04EU-Exxx	ROSSELLA	2	EU	3FN	230 Y400	6900	6400	13,91	13,91	2,17	11,74	13,91	16
		2	EU	3F	230	6900	6400	24,3	15,2	15,2		24,3	25
		2	EU	1F	230	6900	6400	30				30	32
XAFT-04FS-Exxx		2	USA 240	3F	240	7570	6970	25,2	16	16		25,2	35
		2	USA 208	3F	208	5840	5240	21,9	14,2	14,2		21,9	35
		2	USA 240	1F	240	7570	6970	31,7				31,7	35
XJFT-04EU-Exxx		2	USA 208	1F	208	5840	5240	28,4				28,4	35
		2	JP	3F	200	7000	6400	27,8	18,1	18,1		27,8	32
XEFT-06EU-Exxx		2		1F	200	7000	6400	35				35	40
XEFT-10EU-Exxx	VITTORIA	2	EU	3FN	230 Y400	10300	9800	12,61	17,39	14,78	4,13	17,39	20
		2	EU	3F	230	10300	9800	26,15	23,77	27,91		27,91	32
	CAMILLA	3	EU	3FN	230 Y400	15450	14700	21,3	21,3	25,6	3,3	25,6	32
		3	EU	3F	230	15450	14700	37	39,9	39,9		39,9	40

Table 17
Heating element vs model

Heating element vs model	Power [W]	Voltage [V]	Braking element [W]	Stefania	Arianna	Elena	Rossella	Vittoria	Camilla	Note
RS1281	1230	120	220							USA-120
RS1282	2700	230	210	x						
RS1283	3200	230	210		x					
RS1284	3200	230	400			x	x			
RS1286	4900	230	400					x	x	
RS1287	3200	200	420		x					Japan
RS1288	3200	200	400				x			Japan

Notes

(6) Cooling fan in GO and LED models

The back-cooling fan works based on the oven status and power board temperature condition. The possible statuses are described in **Table 18**.

Table 18
Back-cooling fan activation

Oven status	Power board temperature condition	Cooling fan activation
Standby	T_{board} > TFN parameter	ON
	T_{board} < TFN – DFN parameter	OFF
Not cooking	T_{board} > TFN – 15 °C	ON
	T_{board} < TFN – 15 °C - DFN	OFF
During cooking		Always ON

(7) Cooling fan in TOUCH and MASTER models

When the oven is turned on the back-cooling fan is always running.

⑧ ADAPTIVE.Cooking

The ADAPTIVE.Cooking™ technology automatically adjusts the time and temperature previously set by the operator using a patented algorithm based on the thermal loss caused by door opening and by the amount of food loaded. ADAPTIVE.Cooking™ works only if the cooking program has an initial preheating step. The cooking programs can be:

• manually set by the operator;
• recalled from the list of programs already saved by the operator, MY PROGRAM icon;
• CHEFUNOX programs.

The parameter HUMIDITY MEASUREMENT is set to ON by default in the SERVICE MENU.

When the HUMIDITY MEASUREMENT is set to OFF, the algorithm cannot adjust time and temperature properly due to the fact that the heat exchange is affected by the climate conditions inside the cooking chamber. **Fig. 11** shows how the ADAPTIVE.Cooking™ technology works: the red area corresponds to the heat loss (e.g. after door opening) and the green areas to the heat delivered. As expected, the red area equals the sum of the green areas.

A: START PREHEATING
B: DOOR OPEN
C: START COOKING PROGRAM
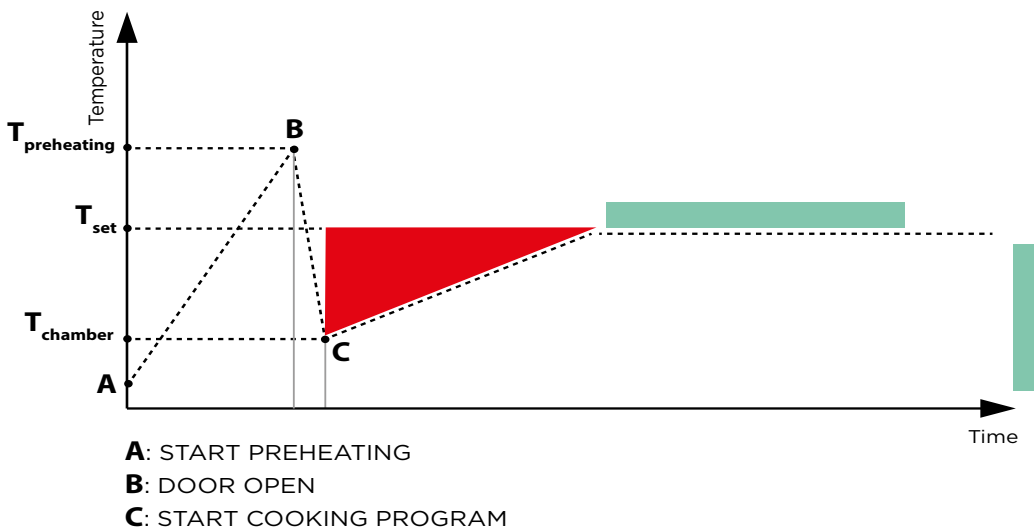
Fig. 11
ADAPTIVE.Cooking technology

9 Power board layout

9.1. GENERAL DESCRIPTION

PE2100A0 and PE2102A0 are boards that are used for the following purposes:
- manage the oven load (contactors, motors, solenoid valve, etc.);
- read the measurements taken by the different sensors (temperature probes, door switch, etc.)
- powering the low voltage of the entire system;
- communicate via CANBUS with the control board and possible bridge boards.
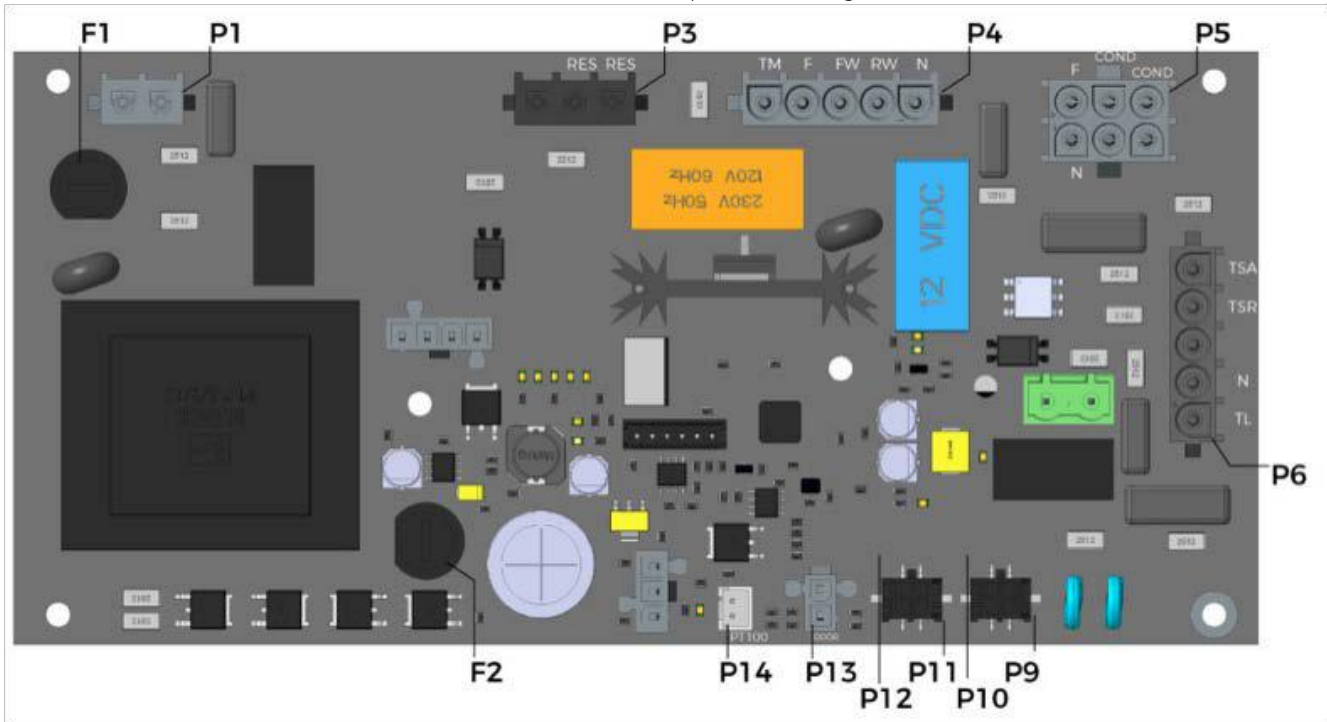
Fig. 12
PE2100A power board layout
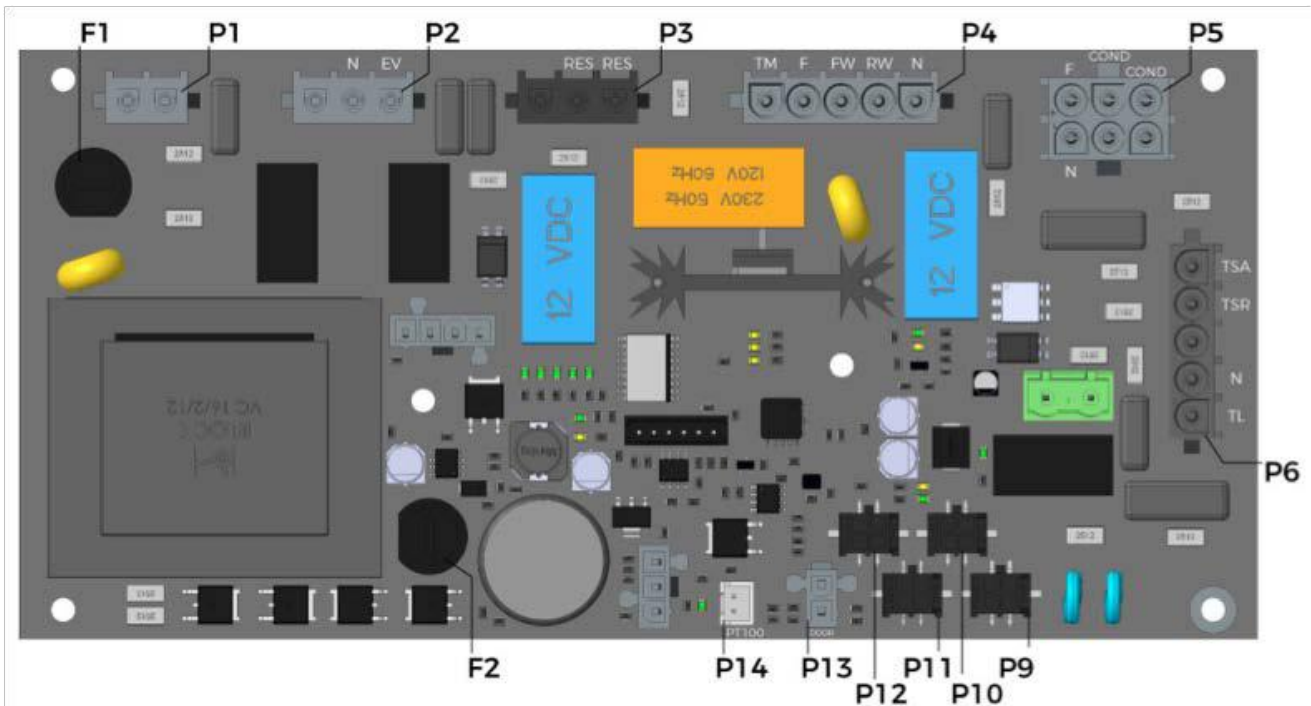
Fig. 13
PE2102A0 power board layout

In each electrical oven, the power board is powered by the third phase (L3) of the terminal block. UNOX SHOP.Pro ovens come with different power boards according to their features.
Table 19 below sums up the power boards installed in UNOX SHOP.Pro devices.

SHOP.Pro range	Power board
GO	PE2100A0
LED	PE2102A0
TOUCH	PE2102A0
MASTER	PE2102A0

Table 19
SHOP.Pro power boards

The main differences between PE2100A0 and PE2102A0 are reported in **Table 20**.

Power board	Transformer size	Steam valve or steam pump socket	Braking element socket	Number of CANBUS sock ets
PE2100A0	10 VA	-	-	2
PE2102A0	16 VA	√	√	4

Table 20
PE2100A0 vs PE2102A0

9.2. TRANSFORMER CONNECTION

Fig. 14
Wiring diagram

The transformer is electronic and included in the power board. The primary turn of the transformer is powered at 230 VAC. The secondary turn of the transformer translates the 230 VAC into 12 VAC. F1 fuse (size: 160 mA – 250 V, type: Fast Acting) is between the power board and the transformer primary turn.

When the transformer is shorted, F1 blows to protect the circuits of the power board. The power board receives the low voltage from the secondary turn of the transformer.

F2 fuse (size: 2 A – 250 V, type: Time Delayed) is between the transformer secondary turn and the power board. When one or more low voltage components are shorted, F2 blows to protect the secondary turn of the transformer, see **Fig. 14**.

9.3.OUTPUT

NAME	LOAD DESCRIPTION	ACTUALIZA-TION	VOLTAGE	CURRENT (MAX N°LOAD)	TYPE OF LOAD	N° MAX LOAD	HARD-WARE OUTPUT
TL	Contactors	RL4	240 Vrms	120 mA	A	4	•
EV	Steam sole-noid valve Steam vibra-tion pump with diode included	RL3	240 Vrms 240 Vrms	60 mA	B C	2 2	•
FAN	Cooling fan	RL2	240 Vrms	260 mA	E	4	•
RES	Braking ele-ment num-ber 1	RL7	240 Vrms	-	-	3	•
MOT2	Motor direc-tion	RL6	240Vrms	8A	F	3	•
MOT1	Motor triac control (ON/OFF)	Triac	240 Vrms	8 A	F	3	•
BUZZ	Boost buzz-er 12V	Mosfet	12Vcc		G	1	•
LATCH	Automatic door open-ing	Mosfet	12Vcc		-	1	•
VENT	DRY.Maxi	RL5	240 Vrms			1	•

REF.	DESCRIPTION	I	V	F	P	Q	S	PF	L @ 100Hz	R @ 100Hz	Z @ 100Hz	DCR	X/R	θ
A	Contactors	30 mA	230 V -	50 Hz	2 W	6 Var	6.5 Va	0.31	13 H	2 kΩ	9.4 kΩ	770 Ω	4.42	77.2°
B	Steam valve	30 mA	230 V -	50 Hz	4.7 W	4.5 Var	6.5 Va	0.72	9 H	4.7 kΩ	7.4 kΩ	4.3 kΩ	1.19	50°
C	Vibrating pump		230 V -	50 Hz	16W							1210 Ω +/- 7%		
E	Cooling fan	130 mA	230 V -	50 Hz	21 W	19 Var	28 Va	0.75	3.4 H	1.1 kΩ	1.6 kΩ	626 Ω	1.11	48.1°
F	Motor	1.62 A	240V	60 Hz	388W	-	-	-	-	30.5	-	-	-	-
G	External buzz-er 12V	10 mA	12Vcc	cc										

Legend

I	Load current consumption
V	Voltage applied to the load
F	Frequency
P	Load active power
Q	Load reactive power
S	Load apparent power
PF	Power Factor (PF=P/S)
L @ 100Hz	@ 100Hz measured inductance
R @ 100Hz	@ 100Hz measured resistance
Z @ 100Hz	@ 100Hz measured impedance
DCR	Measured resistance in DC
X/R	Q=|X/R| (X=reactance, R=resistance)
θ	Angle between real axis and the impedance vector

9.4. INPUT

NAME	INPUT DESCRIPTION	TYPE OF INPUT	RANGE	SENSITIVITY	ERROR	HARDWARE INPUT
CMB1	Temperature probe	Analogic PT100	0 – 300 °C	1°C	+/- 1 °C	•
BOARD	Board temperature probe	Analogic NTC	0 – 100 °C	5°C	+/- 5 °C	•
VDC	Direct voltage	Analogic	0 - 18Vdc	0,01 V	+/- V	
IDC	Direct current	Analogic	0 – 5 A	1 mA	+/- mA	
AC_FREQ	Frequency of the network voltage	Analogic	0 - 50 - 60 Hz	-	-	
DOOR	Door switch	Digital	-	-	-	•
ALL_TS	Safety thermostat	Digital	-	-		•
SYNC	Network sync and motor thermal protection	Digital	-	-	-	•
VAC	Power supply alternate voltage	Analogic	0 – 270 Vac	-	-	

9.5.COMMUNICATION SOCKET

Power board comes with:
- 1 CANBUS door to communicate with the control board (P09);
- 3 CANBUS doors to communicate with the accessory boards (P10, P11, P12).

9.6. POWER SUPPLY

PARAMETER	NOMINAL VALUE	MINIMUM VALUE	MAXIMUM VALUE
VOLTAGE POWER SUPPLY	230 VAC	180 VAC	280 VAC
NETWORK FREQUENCY	-	50 Hz	60 Hz

9.7. SOCKET TABLE

SOCKET NUMBER	SOCKET TYPE	N° PIN	LABEL	DESCRIPTION		
P5	INARLOCK 6P 2F (Bianco)	1	N	Board power supply (neutral)		
		2				
		3				
		4	L	Board power supply (phase)		
		5	FW	Capacitor for the motor startup		
		6	RW	Capacitor for the motor startup		
P4	INARLOCK 5P 1F (Bianco)	1	N_M	Motor neutral		
		2	RW	Motor power supply -counter clock wise spinning		
		3	FW	Motor power supply -clock wise spinning		
		4	L_F	Phase 230 Vac		
		5	TM	Motor thermal protection input		
P6	INARLOCK 5P 1F (Nero)	1	TL1	Contactor outptut		
		2	N_F	TL1 neutral		
		3				
		4	TSA	Safety thermostat outward		
		5	TSR	Safety thermostat comeback		
P3	INARLOCK 3P 1F (Nero)	1	RES1	Braking element		
		2	N_F	Motor neutral		
		3				
P2	INARLOCK 3P 1F (Bianco)	1	EV1	Output steam solenoid valve		
		2	N_F	EV1 and VENT neutral		
		3				
P1	INARLOCK 2P 1F (Nero)	1	FAN	Cooling fan output - phase		
		2	N_F	Cooling fan output - phase		
P7	CPM 2P 1F (Verde)	1	TL1	Contactor output		
		2	N	TL1 neutral		
P9	MOLEX Microfit 4P	1	CANBUS1	L	Accessory board 1 connection (CANBUS)	
		2		12Vcc		
		3		GND		
		4		H		
P10	MOLEX Microfit 4P	1	CANBUS2	L	Accessory board 2 connection (CANBUS)	
		2		12Vcc		
		3		GND		
		4		H		
P11	MOLEX Microfit 4P	1	CANBUS3	L	Accessory board 3 connection (CANBUS)	
		2		12Vcc		
		3		GND		
		4		H		
P12	MOLEX Microfit 4P	1	CANBUS4	L	Accessory board 4 connection (CANBUS)	
		2		12Vcc		
		3		GND		
		4		H		
P14	JST XHP-2	1	CMB1 (PT100)	IN	Cooking chamber temperature probe	
		2		GND		
P13	MOLEX Minifit 2P	1	DOOR	IN	Door switch 1	
		2		GND		
P15	MOLEX Minifit 3P	1	BUZZ	Command 12V	Buzzer output	
		2				
		3		GND		
P16	MOLEX Minifit 4P	1	LATCH (LOCK)	12V	Automatic door opening	
		2				
		3		Command 12 V		
		4		GND		

9.8. FUSES LIST

N° FUSE	NOMINAL CURRENT	NOMINAL VOLTAGE	activation SPEED	PROTECTED CIRCUIT
F1	160 mA	250V	Fast (F)	Primary of the transformer
F2	2 A	250V	Time delay (T)	Secondary of the transformer

9.9. MECHANICAL DIMENSION

DIMENSION X	210 mm
DIMENSION Y	100 mm
MAXIMUM HEIGHT	45 mm
FIXING HOLES DIAMETER	4,06 mm

9.10. WORKING PARAMETER

PARAMETER	MINIMUM VALUE	MAXIMUM VALUE
OPERATING TEMPERATURE	+10 °C	+70 °C
STORAGE TEMPERATURE	-10 °C	+70 °C
OPERATING HUMIDITY	-	80%
STORAGE HUMIDITY	-	90%

9.11. REGULATIONS

PE2100A0 and PE2102A0 are designed in compliance with the following regulations:

Directive:
low voltage: 73/23/CEE
electromagnetic compatibility: 89/336/CEE

General regulations:
electromagnetic compatibility - emissions: CEI EN50081-1
electromagnetic compatibility - immunity: CEI EN50082-1.

🔟 Hood and prover board layout

10.1. GENERAL DESCRIPTION

PE2115A0 is a board that is used for the following purposes:
• - manage the load of the hood or prover (contactors, motors, solenoid valve, etc.);
• - read the measurements taken by the different sensors (temperature probes, door switch, etc.)
• - power the low voltage of the entire system
• - communicate via CANBUS with two independent power boards.
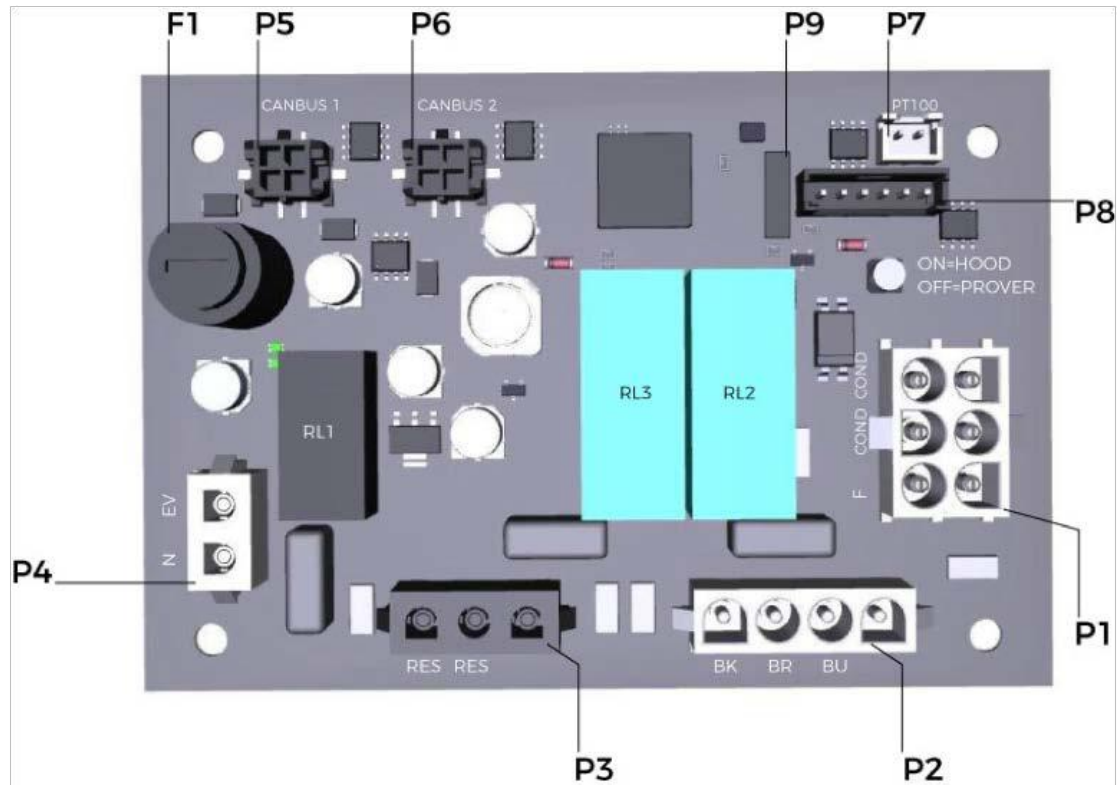
On the board, deep switch P9 manages the type of accessory controlled by the board. When the board is not powered, it is possible to change the status of the switch as follows:
• OFF ➡ PROVER
• ON ➡ HOOD.

10.2. TRANSFORMER CONNECTION

The transformer is electronic and included in the power board. The primary turn of the transformer is powered at 230 VAC. The secondary turn of the transformer translated the 230 VAC current into 12 VAC. F1 fuse (size: 1 A – 250 V, type: Time Delayed) is the DC section.

When the transformer is shorted, F1 blows to protect the circuits of the power board.

The power board receives the low voltage from the secondary turn of the transformer, see Wiring diagram.
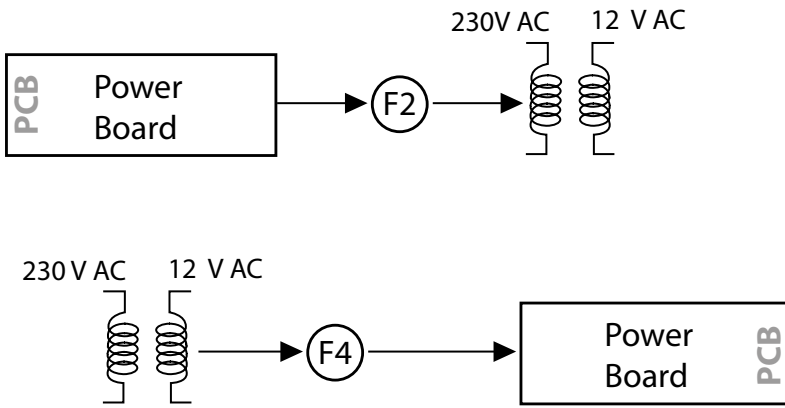
Fig. 16 Wiring diagram

10.3. OUTPUT

NAME	LOAD DESCRIPTION	ACTUALIZA-TION	VOLTAGE	CURRENT (MAX N°LOAD)	TYPE OF LOAD	N° MAX LOAD	HARDWARE OUTPUT
RES_B	Braking ele-ment	Relè	240 Vrms	5 A	B		•
EV	Solenoid valve	Relè	240 Vrms	30 mA	A		•
LOAD	Hood mo-tor/prover heating ele-ment	Relè	240 Vrms	1,5 A			•

REF.	DESCRIPTION	I	V	F	P	Q	S	PF	L @ 100Hz	R @ 100Hz	Z @ 100Hz	DCR	X/R	θ
A	Solenoid valve	30 mA	230 V ~	50 Hz	4.7 W	4.5 Var	6.5 Va	0.72	9 H	4.7 kΩ	7.4 kΩ	4.3 kΩ	1.19	50°
B	Heating element	5 A	230 V ~	50 Hz	1200 W	-	-	-	-	-	-	-	-	-
C	Fan	1,5 A	230 V ~	50 Hz	280 W	-	-	-	-	-	-	-	-	-

Legend

I	Load current consumption
V	Voltage applied to the load
F	Frequency
P	Load active power
Q	Load reactive power
S	Load apparent power
PF	Power Factor (PF=P/S)
L @ 100Hz	@ 100Hz measured inductance
R @ 100Hz	@ 100Hz measured resistance
Z @ 100Hz	@ 100Hz measured impedance
DCR	Measured resistance in DC
X/R	Q=|X/R| (X=reactance, R=resistance)
θ	Angle between real axis and the impedance vector

10.4.INPUT

NAME	INPUT DESCRIPTION	TYPE OF INPUT	RANGE	SENSITIVITY	ERROR	HARDWARE INPUT
CMB1	Prover or hood temperature probe	Analogic PT100	-50 -/ +350 °C	0,5°C	+/- 0,5 °C	•
BOARD	Board temperature proble	Analogic NTC	0 – 100 °C	5°C	+/- 5 °C	

10.5.COMMUNICATION SOCKET

The power board comes with:

- 2 CANBUS doors to communicate with the power board

The board may be simultaneously connected to two power boards when in hood mode. In prover mode, it must be connected to one power board only.

10.6.POWER SUPPLY

PARAMETER	NOMINAL VALUE	MINIMUM VALUE	MAXIMUM VALUE
VOLTAGE POWER SUPPLY	12 V_{DC}	10 V_{DC}	18 V_{DC}

10.7. SOCKET TABLE

SOCKET NUMBER	SOCKET TYPE	N° PIN	LABEL		DESCRIPTION
P4	INARLOCK 2P (bianco)	1	EV		Solenoid valve - phase
		2	N		Solenoid valve - neutral
P3	INARLOCK 3P (nero)	1	RES		Motor braking element
		2	RES		Motor braking element
		3			N/C
P2	INARLOCK 4P (bianco)	1	BK		Motor phase / contactor output
		2	BR		Phasing motor output
		3	BU		Neutral
		4			N/C
P1	INARLOCK 6P 2F (bianco)	1	N		Neutral input
		2			N/C
		3			N/C
		4	F		Phase input
		5	COND		Phasing motor capacitor
		6	COND		Phasing motor capacitor
P5	MOLEX Microfit 4P	1	CAN-BUS1	L	Power board connection 1
		2		12Vcc	
		3		GND	
		4		H	
P6	MOLEX Microfit 4P	1	CAN-BUS2	L	Power board connection 2
		2		12Vcc	
		3		GND	
		4		H	
P7	JST XHP-2	1	PT100	IN	Temperature probe prover/hood
		2		GND	
P8	AMP Modu II 6P	1÷6	-		Programming socket M0/M3
P9	DIP Switch SPST	1÷2	-		ON=HOOD, OFF=PROVER

10.8. LIST OF FUSES

N° FUSE	NOMINAL CURRENT	NOMINAL VOLTAGE	ACTIVATION SPEED	PROTECTED CIRCUIT
F1	1A	250V	Time delay (T)	DC section

10.9. MECHANICAL DIMENSION

DIMENSION X	115 mm
DIMENSION Y	78 mm
MAXIMUM HEIGHT	35 mm
FIXING HOLES DIAMETER	4,06 mm

10.10.   WORKING PARAMETER

PARAMETER	MINIMUM VALUE	MAXIMUM VALUE
OPERATING TEMPERATURE	+10 °C	+70 °C
STORAGE TEMPERATURE	-10 °C	+70 °C
OPERATING HUMIDITY	-	80%
STORAGE HUMIDITY	-	90%

10.11.   REGULATIONS

PE2115A0 is designed in compliance with the following regulations:
Directive:
• low voltage: 73/23/CEE
• electromagnetic compatibility: 89/336/CEE

Notes

Software upgrading procedure for MASTER models

11.1.USB STICK CONFIGURATION

1 To upgrade the control, power and Internet connection boards proceed as follows:

• Go to the Infonet section of Unox website, www.unox.com, and select "UNOX SOFTWARE" from the menu on the left side;
• download the software by clicking on the link corresponding to the oven version;
• save the file to a folder on your PC desktop;
• use the UNOX oven USB stick to upgrade the software.

If you do not have the UNOX oven USB stick, you can use any USB with:
• 4-16 GB storage capacity;
• FAT32 type formatting.

2 Insert the USB stick into your PC.

3 Unzip the folder just saved on your desktop.

4 Open the USB stick, copy the UNOXDIR folder from the unzipped file and paste it in the USB

11.2. FORCED UPGRADE PROCEDURE

If the regular upgrade procedure does not work and if you have to replace the control panel and recover the original SD card, proceed as follows:

1 Make sure you have the latest software available saved in the folder "FIRMWARE" of your USB stick.

2 Rename the software 2112.bin as 2112_F.bin
If you are replacing the control board, follow steps "3" and "4" otherwise skip to step "5".

3 Remove the SD card from OLD panel.

4 Insert this SD card into the NEW control panel.

5 PLUG the USB stick with the renamed file and then SWITCH ON the oven by pressing the power button.

6 Turn on the oven and wait until the forced upgrade procedure is complete.

7 Upgrade the parameters of the model with the standard procedure described above, starting with section "Load parameter file procedure".

8 Following the forced upgrade procedure, the oven will automatically change the name of the software file to 2112_.bin.
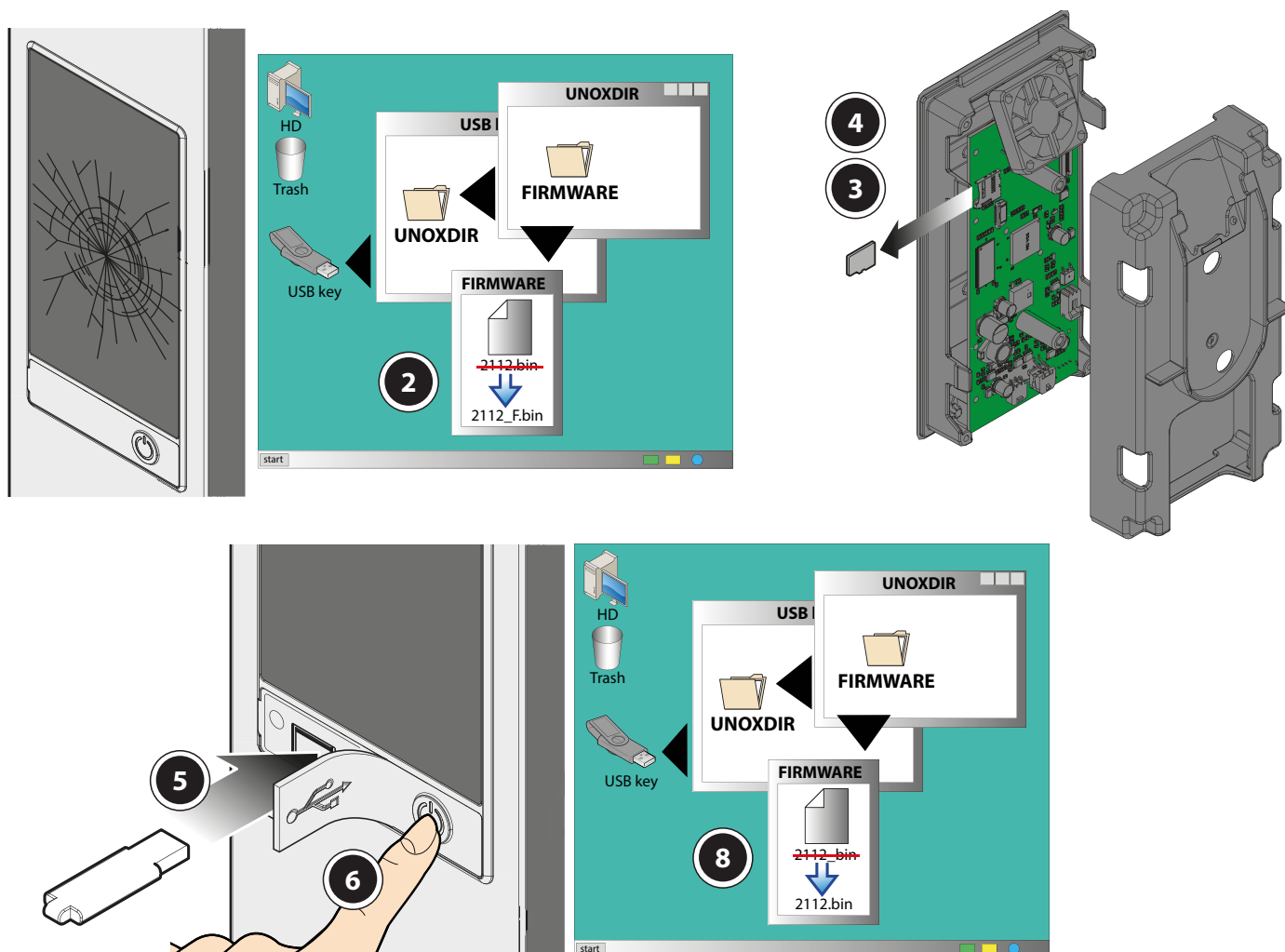
11.3. REGULAR SOFTWARE UPGRADE PROCEDURE

1 Turn on the oven;

2 Connect the USB drive to the USB port

3 Press "SETTINGS" (gear icon);

4 Enter the service menu (pin: 99857);

5 Press "UTILITIES"

6 Press "UPDATE FIRMWARE";

7 Select the board you want to upgrade. A status bar will appear on the display. Once the upgrading procedure is completed, unplug the USB stick and reboot the oven manually by pressing the power button.
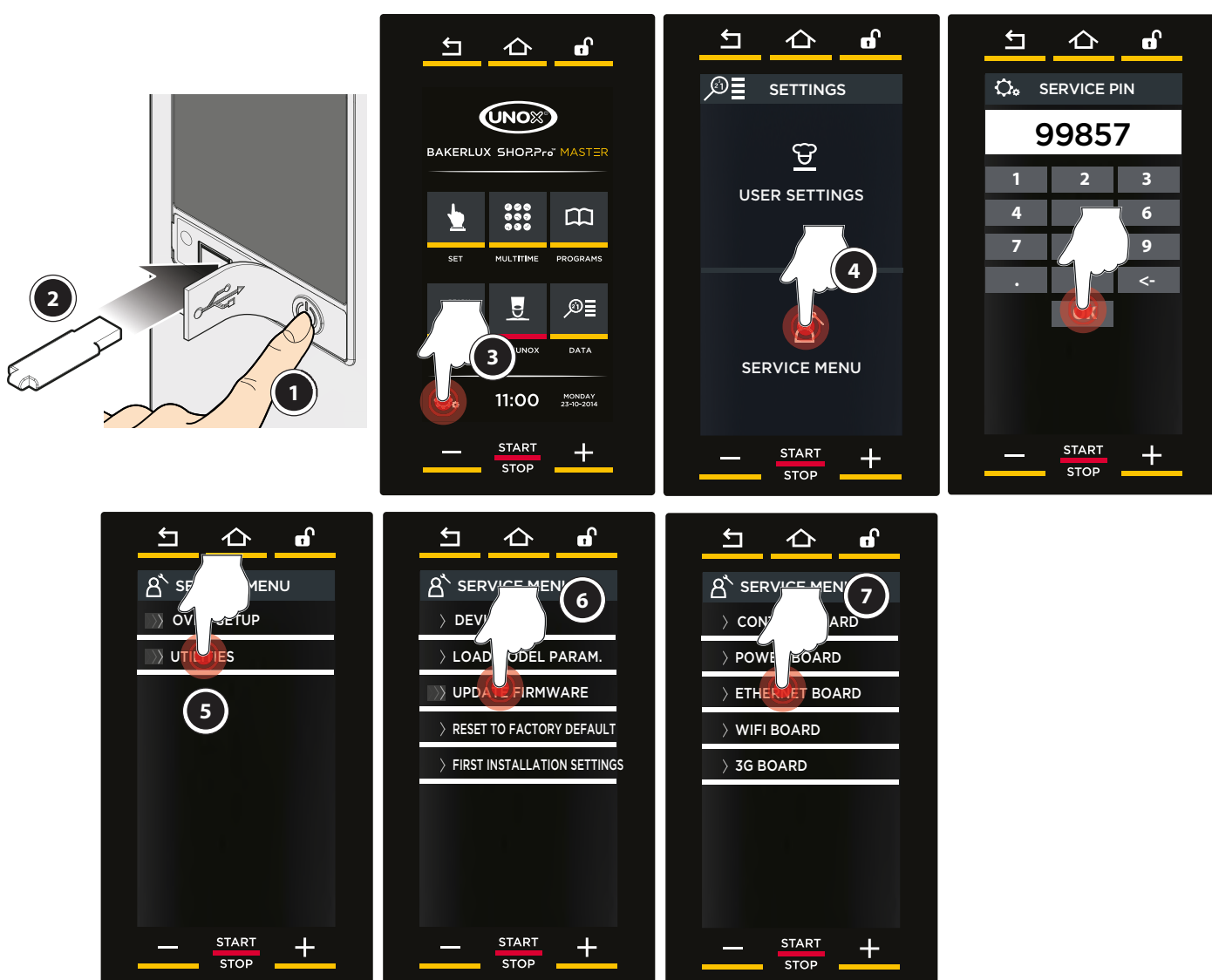
11.4. LOAD THE PARAMETER FILE PROCEDURE

1 Connect the USB stick to the USB port.

2 Press "SETTINGS" (gear icon).

3 Enter the user menu (pin: 99857)

4 Press "UTILITIES

5 Press "LOAD MODEL PARAM" to load the model parameters and enter the oven model (i.e. XEFT-04EU-EMRV.0).

6 Press "OK" to save the model parameters.

(12) Software upgrade procedure for TOUCH models

12.1. USB STICK CONFIGURATION

(1) To upgrade the control, power and Internet connection boards proceed as follows:

- go to the Infonet section of Unox website, www.unox.com, and select "UNOX SOFTWARE" from the menu on the left side;
- download the software by clicking on the link corresponding to the oven version;
- save the file to a folder on your PC desktop;
- use the UNOX oven USB stick to upgrade the software.

If you do not have the UNOX oven USB stick, you can use any USB with:

- 4-16 GB storage capacity;
- FAT32 type formatting.

(2) Insert the USB stick into your PC.

(3) Unzip the folder just saved on your desktop.

(4) Open the USB stick, copy the UNOXDIR folder from the unzipped file and paste it in the USB.

Notes

12.2. FORCED UPGRADE PROCEDURE

If the regular upgrade procedure does not work and if you have to replace the control panel and recover the original SD card, proceed as follows:

1 Make sure you have the latest software available saved in the folder "FIRMWARE" of your USB stick.

2 Rename the software from 2109.bin to: 2109_F.bin If you are replacing the control board, follow steps "3" and "4" otherwise skip to step "5".

3 Remove the SD card from OLD panel.

4 Insert this SD card into the NEW control panel.

5 PLUG the USB stick with the renamed file and then SWITCH ON the oven by pressing the power button.

6 Turn on the oven and wait until the forced upgrade procedure is complete.

7 Upgrade the parameters of the model with the standard procedure described above, starting with section "Load the parameter file procedure".

8 Following the forced upgrade procedure, the oven will automatically change the name of the software file to 2109_.bin. Therefore, rename the file if you are going to use the file in the regular procedure:

2109_.bin -> to 2109.bin.
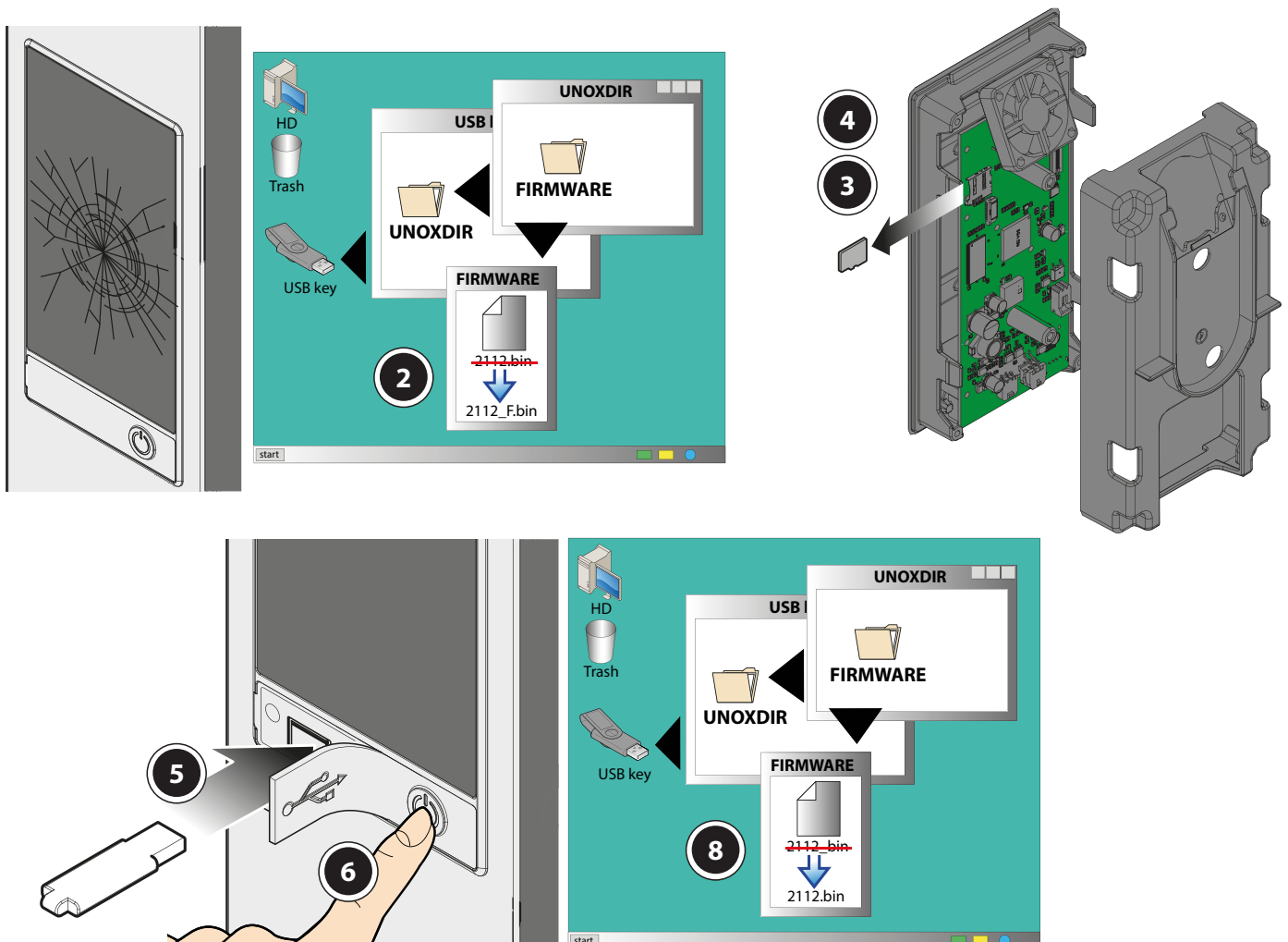
12.3. REGULAR SOFTWARE UPGRADE PROCEDURE

1 Turn on the oven;

2 Connect the USB drive to the USB port;

3 Press "SETTINGS" (gear icon);

4 Enter the service menu (pin: 99857);

5 Press "OPTIONS";

6 Press "UPDATE FIRMWARE";

7 Select the board you want to upgrade. A status bar will appear on the display. Once the upgrade procedure is complete, unplug the USB stick and reboot the oven manually by pressing the power button.
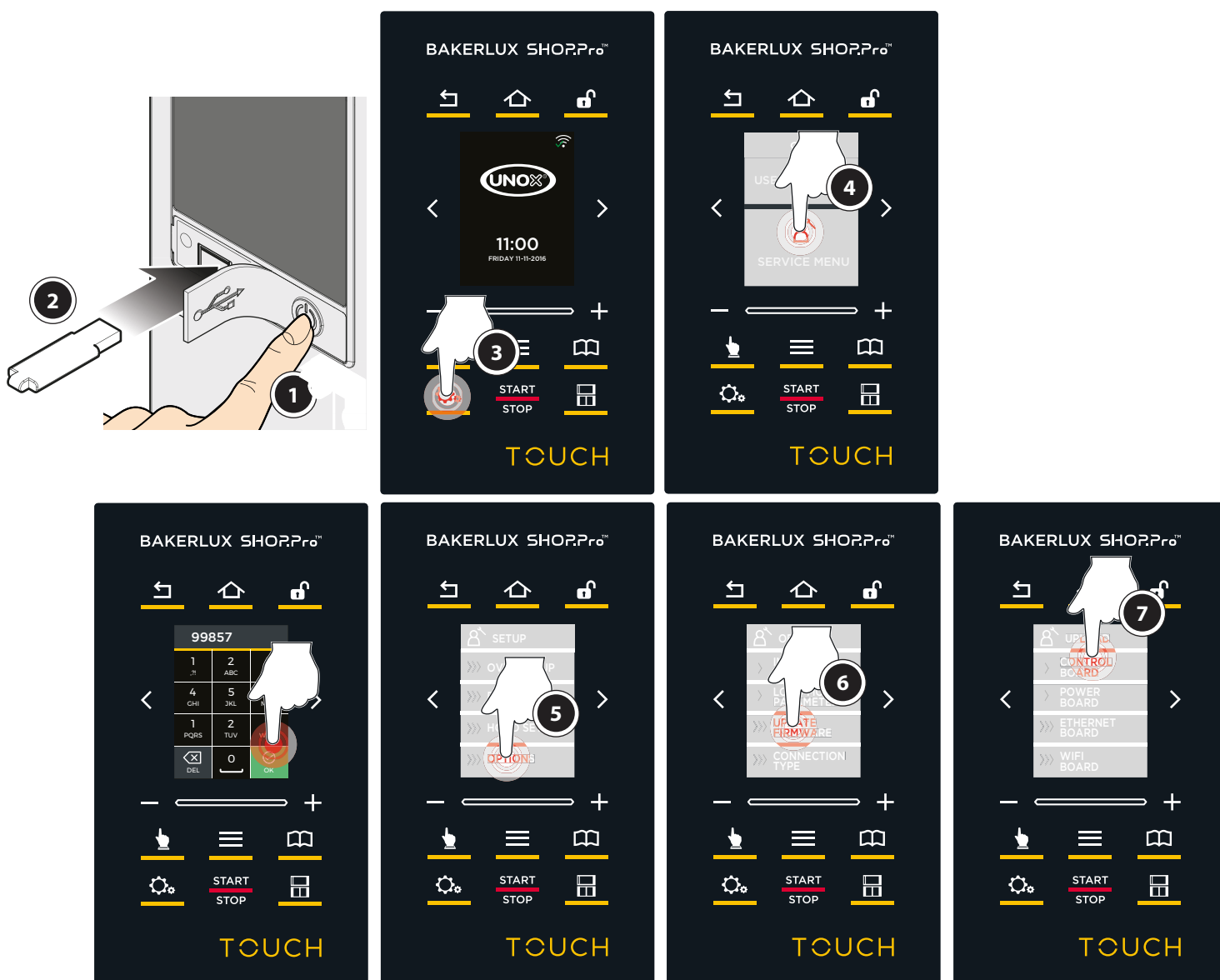
12.4. LOAD THE PARAMETER FILE PROCEDURE

1 Connect the USB stick to the USB port.

2 Press "SETTINGS" (gear icon).

3 Enter the service menu (pin: 99857)

4 Press "OPTIONS".

5 Press "LOAD MODEL PARAM" to load the model parameters and enter the oven model (i.e. XEFT-04EU-ETDV.0).

6 Press "OK" to save the model parameters.

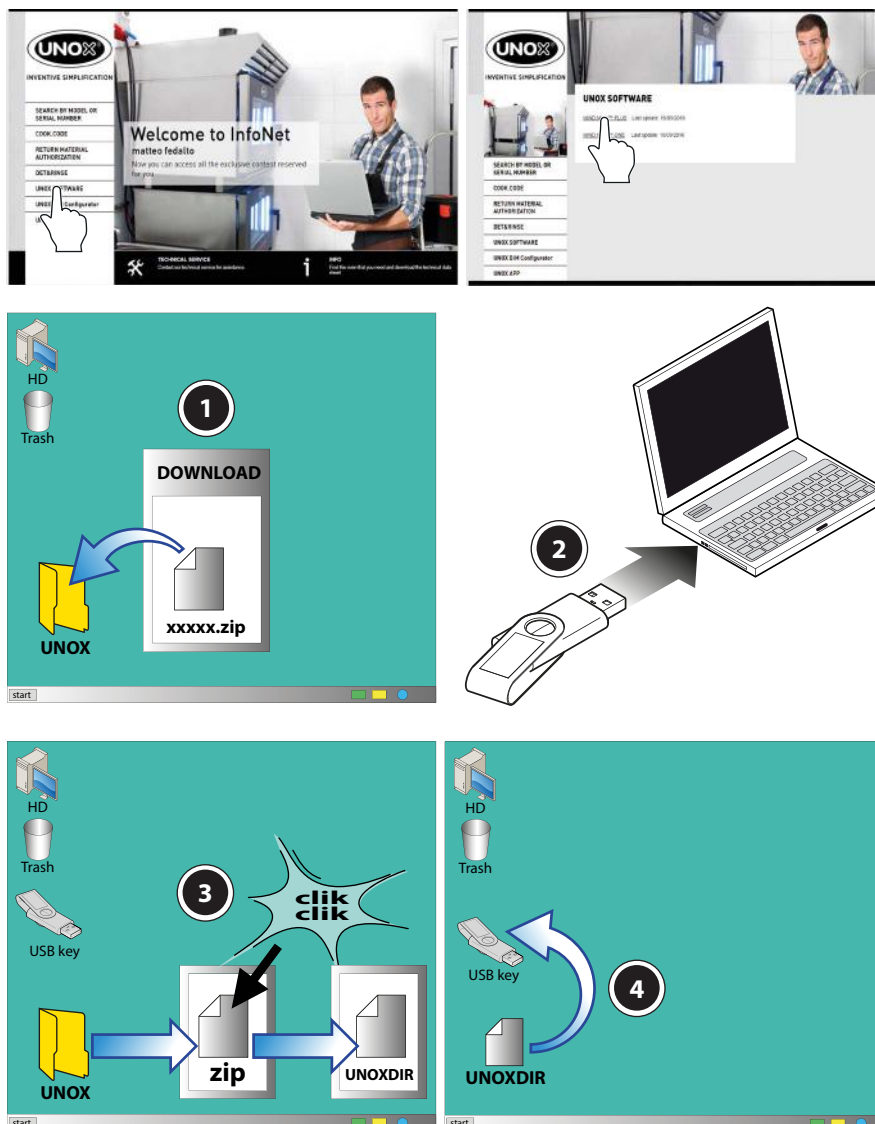# (13) Software upgrade procedure for GO and LED models

13.1. USB STICK CONFIGURATION

(1) To upgrade the control, power and Internet connection boards proceed as follows:

- go to the Infonet section of Unox website, www.unox.com, and select "UNOX SOFTWARE" from the menu on the left side;
- download the software by clicking on the link corresponding to the oven version;
- save the file to a folder on your PC desktop;
- use the UNOX oven USB stick to upgrade the software.

If you do not have the UNOX oven USB stick, you can use any USB with:
- 4-16 GB storage capacity;
- FAT32 type formatting.

(2) Insert the USB stick into your PC.

(3) Unzip the folder just saved on your desktop.

(4) Open the USB stick, copy the UNOXDIR folder from the unzipped file and paste it in the USB.

13.2. SOFTWARE UPGRADE PROCEDURE

It is possible to upgrade the software only by using the external USB board PE2126A0. The FIRMWARE folder should contain the following files:

- 2105.bin for the GO version;
- 2107.bin for theLED version.

To upgrade the software, proceed as follows:

(1) Turn off the oven power supply;

(2) Plug the external USB board to the oven power board to one of the free sockets, choosing fromP09, P10, P11, P12;

(3) Plug the USB stich to the external USB board;

(4) Turn on the oven power supply.

The software upgrade procedure will start automatically. At the end, the control board will reboot automatically.

Following the software upgrade procedure, check, from the hidden menu, whether the software version is the latest one installed. To check the software version, proceed as follows:

1 Press the keys P4, P4, P5, P6 in sequence to enter the hidden menu.

2 The display will show number 1, that corresponds to the power board. Press the "+" button to select number 10, that corresponds to the control board;

3 Press button "STEP 1" to enter the parameter list. FRW, i.e. the firmware, will be displayed;

4 Press button "STEP 2" to view the parameter value. This should correspond to the latest software version installed. If the software version does not correspond, perform the SOFTWARE UPGRADE PROCEDURE once again. Check the software version saved to the FIRMWARE folder in UNOXDIR;

5 Press P1 button to quit the menu.

(14) Internet connection

14.1. SCOPE

The aim of this procedure is to provide documentation about how to connect the BAKERLUX SHOP. Pro ovens to internet

14.2. FIELD OF APPLICATION

This procedure applies to BAKERLUX Shop.PRO™ ovens.

14.3. DESCRIPTION

14.3.1. HARDWARE INSTALLATION

In case of a Ethernet or WiFi connection, the proper kit has to be purchased and installed (check the kit documentation for installation instructions):

KIT CODE	DESCRIPTION	OVEN RANGE
XEC011	Ethernet connection kit	BAKERLUX Shop.PRO™
XEC012	WiFi connection kit	

⊕ In addition to the control board firmware, you should update also the Ethernet/WiFi board firmware as usual.

14.3.2. NETWORK REQUIREMENTS

The network name and its relative password cannot contain commas.

Ehernet connection: Ethernet cables cat 5E minimum, patch cable type is required. A patch cable is an Ethernet cable where both ends are wired to one of the specifications (either T568A or T568B, but not both). Since both ends are terminated in the same fashion, a patch cable is often called a "straight-through"

cable. A crossover cable is an Ethernet cable where one of the ends is wired according to the T568A specification, whereas the other end is wired according to the T568B specification.
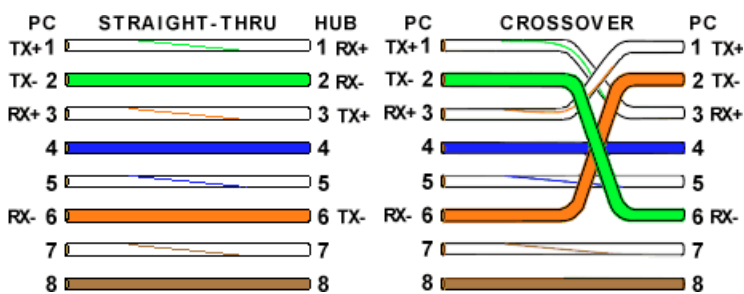
WiFi connection:

Protocols supported: 802.11b/g/n

Encryptions supported:
* WPA-Personal (AES or TKIP)
* WPA2-Personal (AES or TKIP)
* Wireless networks without encryption (FREE), excluded public networks that require a browser authentication

Maximum number of WiFi networks that can be displayed in the oven display: 11

Encryptions not supported: WEP (Wired Equivalent Privacy)

Please perform the following checks:
* The name of the network and the password cannot contain commas
* The name of the network and the password are correctly visualized on the display (you can compare what you see at UNOX display with what you see at your mobile phone
* The parameter WIFI TYPE is supposed to be FREE for free WIFI only and WPA for limited access WIFI
* The oven does not work with networks that the browser makes you pass through a website in which you have to register or insert the password.

In order to 'unlock' the Wi-Fi bridge board you can:
* Input manually the name of the network
* Cancel and rewrite the password
* Go back to the main menu by pressing "HOME" button in order to get the "Saving" message on the screen.

* Unplug the oven (Unplugging it) and wait for at least 10-15 seconds before turning the unit on.

14.3.3. OVERALL SCHEMA
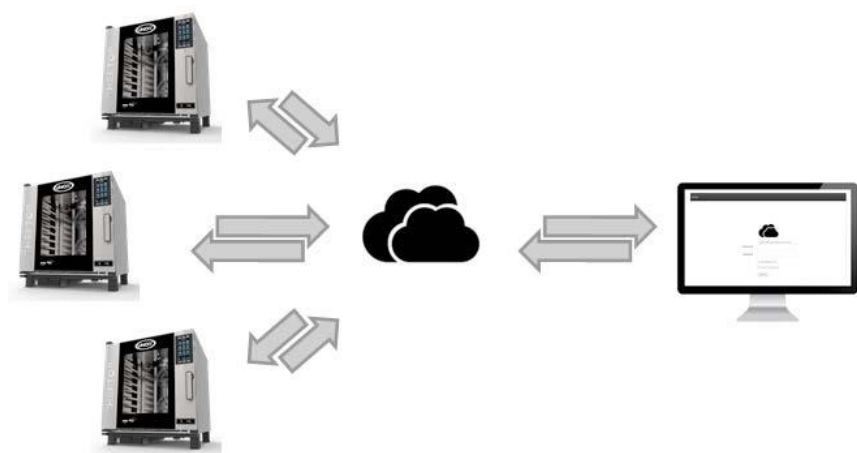
The oven will receive and send all the data to a Unox cloud server located in Italy, using the outgoing HTTP traffic (TCP) with the 80 port of the cloud server.

The 80 port of the cloud server is the standard gate used by every device, sometimes it could be blocked to prevent to surf the internet with a browser. In that case after the connection test the oven would give the E12 alarm. If the 80 port is blocked by the admin of the network proceed as follow: run a connection test of the oven and take note of the MAC address. Ask to the admin of the network to unlock the access to the network for that specific MAC address.

The oven will send to the cloud server all the warnings and alarms, and when cooking the core probe, chamber temperatures and time every 30 seconds.

The customer will be able to access the data stored in the cloud server and interact with the oven through a web application developed by Unox. When the internet connection fails, the server doesn't store the data recorded during the connection loss (this will be fixed with a future firmware release).

14.4. FIRMWARE UPDATE

14.4.1.

Update the firmware of the control board and of the internet connection board kit by using the procedure on **page 40** (MASTER) or **page 44** (TOUCH).

14.5. OVEN CONFIGURATION

14.5.1. DATE AND TIME SETTINGS

After the firmware update, the user will be asked once to set the time zone at the very beginning (when you power on the oven).
This setting can be always accessed in:
Settings > User Settings > Date and Time

* Select the **TIME ZONE** option
* Select the **CONTINENT** (e.g. Europe) and then the **COUNTRY** (e.g. Austria) where the oven is located.

> ⓘ If the country has more than one time zone, it will be asked also for the specific city.

Select **DAYLIGHT SAVING TIME** and set it to:
- **AUTOMATIC** (Recommended - it will be updated automatically from internet)
or
- **MANUAL**.

Select AUTOSET DATE AND TIME and set it to:
- ON (Recommended - date and time will be updated automatically from internet)
or
- OFF (date and time has to be set manually).

14.5.2. CONNECTION PARAMETERS SETTING

These parameters have to be correctly set in order to establish an internet connection with the cloud server. The settings can be accessed in:
Settings > User Settings > Network

DHCP (on/off)

This has to be set accordingly with the **current internet network configuration**.

If **ON**, the oven will ask to the network all the network parameters (IP address, netmask, gateway, DNS) so the user won't have to enter them manually.

If **OFF**, the user will have to fill manually IP address, netmask and gateway. These address should be asked to the network administrator (e.g. who have set the internet network in the first place).

It's recommended to leave the DHCP mode to **ON** unless there are specific network restrictions that require to set the parameters manually.

If the network has a MAC address filter enabled, check the oven MAC address performing a connection test (see above) and ask to the network admin to allow this MAC address to access the network

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ENTERNET CONNECTION: Ethernet connection requires no other settings, go to **CONNECTION TEST**

WIFI CONNECTION: Press **WIFI NAME** to start a search for available connections (for a list of network protocols supported, refer to **NETWORK REQUIREMENTS**) and then select the **WiFi** network to join.
Set the **WIFI PASSWORD** (if required)
Pay attention to upper/lowercase letters (lowercase letter can be accessed pressing the keyboard button on the top right of the screen).

14.5.3. CONNECTION TEST

After having set the **TIME ZONE** and **CONNECTION PARAMETERS**, perform a **CONNECTION TEST** in order to check if the internet connection has been established.
The connection test is performed in background every 30 min so Unox can check always if the oven is connected.

Once pressed connection test, the display will show 4 intermittent lighting dots and a completion percentage.

The test can take from few seconds to 3-5 minutes, depending on both the internet connection and the kit installed.

If all the text in the result page is white, everything is working properly.

If there is some text highlighted in red, the oven is not correctly connected to the internet; please see to the troubleshooting guide below

14.6. TROUBLESHOOTING

E01: OVEN MODEL MISSING **E02**: OVEN SERIAL MISSING	The last firmware update was not performed correctly. Please refer to Service.
E03: WAITING IP ADDRESS FROM DHCP **E05**: WAITING NETMASK FROM DHCP **E07**: WAITING GATEWAY FROM DHCP **E09**: WAITING DNS FROM DHCP	(Only if DHCP mode is set to "ON") The oven is still waiting for the IP, Netmask, Gateway and DNS addresses from the internet network. Ask assistance to the network admin and try to set manually the addresses setting the DHCP mode to "OFF"
E04: IP ADDRESS MISSING **E06**: NETMASK MISSING **E08**: GATEWAY MISSING **E10**: DNS MISSING	(Only if DHCP mode is set to "OFF") Some of the addresses were not inserted manually
E11: DNS IS NOT WORKING	Probably the DNS address is not set correctly. Please ask to the network admin
E12: OUTGOING TRAFFIC IS BLOCKED OR GATEWAY IS INCORRECT OR THE CLOUD IS NOT WORKING	The oven is not receiving response from Unox. This can be caused by outgoing traffic blocked by a firewall. Ask to the network admin, specifying that the oven uses only the HTTP traffic with TCP and the destination port is 80). The gateway is not set correctly or is not forwarding traffic. Ask to the network admin

Ethernet connection: MAC Address 0 ➡ install the last control board and internet board FW version available in Infonet and try again   the internet connection. If the error persists, replace the Ethernet connection board

Wi-Fi connection: MAC Address 0 ➡ Wi-Fi board is not executing the input of the control panel and it doesn't communicate its MAC   address.

Proceed with the following test:
- 1. Verify that during the network scan, the oven sees correctly the Wi-Fi network (the name of the network shall be the same as you can see with your mobile or laptop);
- 2. Check the rightness of the Wi-Fi password. Verify that the password doesn't include the comma that is a symbol not allowed;
- 3. Quit the SERVICE MENU pressing the HOME button. Be sure that the write SAVING appears on the screen. Wait for a minute, then turn off the power supply;
- 4. Wait for 20 seconds then turn on power supply and turn on the oven. Run again a connection test;
- 5. If the problem persists, replace the Wi-Fi board.

Notes

15 Fault messages guide

Auto-diagnostic messages

Alarm 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.

OVEN AF01 – Motor thermal protection alarm

AF01/A01 motor thermal protection alarm (it triggers at 150 °C / 302 °F)

NO

Turn off the power supply,disconnect the P4 socket and test the electrical continuity between pin 4 and 5 which corresponds to F and TM respectively as labeled on the back power board with the multimeter set to ohm

Test 1

Do you have the electrical continuity on the P4 socket?

NO → Unplug each motor from the circuit and check the continuity between the white cables of the motor with the multimeter set to ohm

YES → Replace the power board

Do you have the electrical continuity?

NO → Replace the motor that has the thermal protection circuit open

YES → Measure the electrical continuity of the cable harness from the P4 socket to the motor plug. Measure the continuity PIN to PIN with the multimeter set to ohm

Do you have the electrical continuity?

NO → Replace the cable harness

YES → Restore the cable harness and test the oven

Does the alarm persist?

NO → End

YES → Replace the power board

OVEN AF02 – Safety thermostat alarm

AF02/A02 safety thermostat alarm

Wait for the cooling down of the oven

Has the safety thermostat triggered? It triggers at 320 °C (608 °F)

— YES → Reset the thermostat and analyze the possible causes such as oven installation,external heating sources chamber probe defectiveness, contactors blocked, power board damaged

— NO → **Test 1**
Turn on the power supply. Disconnect P6 socket of the contactor and test the electrical continuity between pin 4 and 5 that are those in corrispondence of the TSA and TSR labels on the power board with the multimeter set to ohm

Do you have the electrical continuity?
— YES → Replace the power board
— NO → Measure the electrical continuity of the safety thermostat as shown in the picture

Test 2
Measure the electrical continuity of the safety thermostat as shown in the picture

Do you have the electrical continuity?
— NO → Replace the safety thermostat
— YES → Measure the electrical continuity of the cable from the P6 socket to the safety thermostat plug. Measure the continuity PIN to PIN.

Do you have the electrical continuity in the wiring?
— NO → Replace cable harness
— YES → Restore the cable harness and test the oven

Does the alarm persist?
— YES → Replace the power board
— NO → END

AF03 – Temperature probe damaged alarm

AF03/A03 temperature probe damaged

Turn off the power supply. Open the back of the oven and check if the temperature probe is connected to the socket P14

Is it connected?

— NO → Connect it and test the oven

— YES → Disconnect and test it with the multimeter set to ohm. The right value should be about 110? at 25°C (77 °F) → Test 1

YES → (to Disconnect and test it...)

Does the alarm persit?

NO → End

Do you have the right value of the resistance in Ω?

— NO → Replace the damaged temperature probe

YES → Replace the power board

OVEN AF04 – Communication error with power board

AF04/A04 communication error with power board

Does the oven restart?
- YES → Does the alarm appear again?
  - NO → End
  - YES → Is there any plugs connected to P10, P11 or P12 sockets?
- NO → Is there any plugs connected to P10, P11 or P12 sockets?
  - YES → Disconnect any plugs from P10, P11 and P12 connectors
    - Does the oven restart?
      - NO → Measure the electrical continuity of the control/power board cable connected to P09 socket, PIN to PIN with the multimeter set to ohm

        Test 1

        Do you have the electrical conductivity?
        - NO → Restore the connection and test the oven. If the alarm persists replace first the control board. If you do not fix the problem put back the old control board and replace the power board
        - YES → Replace control/power board cable

        Test 1

      - YES → Measure the electrical continuity of the cable previously connected to P10, P11 or P12 socket PIN to PIN with the multimeter set to ohm

        Do you have the electrical conductivity?
        - NO → Replace the cable
        - YES → Measure the electrical continuity of the cable PIN to PIN on the same socket with the multimeter set to ohm

          Test 2

          Do you have a short circuit?
          - NO → Replace the board of the connected accessory
          - YES → Replace the cable

Remember to recover the SD card from the old control panel and insert it in the new one.
Make the forced software upgrading

OVEN WF06/U01 – Power board over heating warning

WF06/U01 power board over heating warning

Does the back cooling fan run?

— NO → Test the back cooling fan by measuring the power supply on the connection of the cooling fan, with the multimeter set to VAC. Does the back cooling fan receive the 230 V AC power supply?

— YES → Replace the back cooling fan

Test 1

NO → Replace the power board

— YES → Check the direction of the air flux

Test 2

Is it from the inside to the outside of the unit?

— NO → Reverse the position of the back cooling fan inside its case

— YES ↓

Is the oven close to an external heating source?

— YES → Move the oven far away the external heating source

— NO ↓

Measure the temperature in the back side of the oven near the power board (with the back panel closed) with an external certified probe

Is the temperature over 70 °C (158 °F)?

— NO → Replace the power board

— YES ↓

Test the oven and investigate the possible causes of overheating such as oven installation, external heating sources

WF33 – SD card corrupted

WF33 - SD card corrupted

Turn off and turn on by pressing the power button for at least 3 times

Does the alarm persist?

YES → Replace the SD card of the panel and follow the procedure for the forced upgrade

NO → End

PROVER A08 Lack of power

```
                                    ┌──────────────┐
                                    │  A08 lack of │
                                    │    power     │
                                    └──────┬───────┘
                                           │
                                           ▼
                                    ╱──────────────╲
                                   ╱    Do you      ╲
                                  ╱   have power      ╲
                     ┌─── YES ───╱  supply to the prover╲─── NO ───┐
                     │          ╲ measuring it by using╱           │
                     │           ╲ the multimeter set ╱            │
                     ▼            ╲ to V AC on P1     ╱             ▼
              ╱──────────────╲     ╲   socket?      ╱       ┌──────────────┐
             ╱   Is the       ╲     ╲──────────────╱        │ Check the    │
   ┌── YES ─╱  prover power     ╲── NO ──┐                  │ electric     │
   │        ╲  board fuse fine? ╱        │                  │ power system │
   │         ╲                 ╱         │                  │ of the       │
   │          ╲───────────────╱          │                  │ customer     │
   ▼                                     ▼                  └──────────────┘
┌──────────────┐              ┌──────────────┐
│ Replace the  │              │ Replace the  │
│ hood power   │              │    fuse      │
│   board      │              └──────────────┘
└──────────────┘
```

PROVER WL02/U07 power board prover temperature

```
                              ┌──────────────────┐
                              │ AL01/A07 Chamber │
                              │ temperature probe│
                              │      alarm       │
                              └────────┬─────────┘
                                       │          ⚙ Test 1
                                       ▼
                                ╱──────────────╲
     ┌──────────────┐          ╱      Is        ╲
     │ Connect the  │         ╱   chamber probe   ╲
     │ probe to the │◄── NO ──╱  connected to the  ╲
     │ power board  │         ╲  prover power board╱
     └──────────────┘          ╲   socket P7?     ╱
                                ╲──────────────╱
                                       │
                                      YES
                                       ▼
                               ┌──────────────┐
                               │ Measure the  │
                               │ impedance of │
                               │ the probe    │
                               │ with the     │
                               │ multimeter   │
                               │ set to ohm   ◣│
                               └──────┬───────┘
                                      ▼
  ┌──────────────┐             ╱──────────────╲
  │ Replace the  │            ╱    Do you      ╲
  │ temperature  │◄── NO ────╱  have 110 ohm at ╲── YES ──┐
  │ probe and    │           ╲  about 25 °C (77  ╱        │
  │ test the     │            ╲     °F)?        ╱         │
  │ prover at    ◣│            ╲──────────────╱           │
  │ 50 °C (122°F)│                                        ▼
  └──────┬───────┘                               ┌──────────────┐
         ▼                                        │ Replace the  │
   ╱──────────────╲                               │ power board  │
  ╱   Does the     ╲── YES ──────────────────────►└──────────────┘
  ╲  alarm persist?╱
   ╲──────────────╱
         │
        NO
         ▼
  ┌──────────────┐
  │     End      │
  └──────────────┘
```

PROVER AL02/A09 Lack of communication

```
                    ┌──────────────────────┐
                    │   AL02/A09 lack of   │
                    │    communication     │
                    └──────────┬───────────┘
                               │
            ┌──────────────────▼──────────────────┐
            │ Connect the connection cable         │
            │ that is between the oven             │
            │ power board and the prover           │
            │ power board, to a different          │
            │ socket of the oven power             │
            │ board (P9,P10, P11, P12) and of      │
            │ the prover board (P5, P6)            │
            └──────────────────┬──────────────────┘
                               │
                          ╱─────────╲
                  YES    ╱  Does the  ╲   NO
           ┌────────────┤   alarm      ├────────────┐
           │             ╲  persist?  ╱             │
           │              ╲─────────╱               │
           │                                        │
      ╱─────────╲                              ┌─────────┐
     ╱  Replace  ╲                             │   End   │
 YES╱ the         ╲  NO                        └─────────┘
 ┌──┤ connection   ├──────────┐
 │   ╲cable. Does  ╱          │
 │    ╲the alarm  ╱           │
 │     ╲persist? ╱            │
 │      ╲───────╱             │
 │                            │
┌──────────────────┐    ┌─────────┐
│ Replace first the│    │   End   │
│ prover power     │    └─────────┘
│ board. If you do │
│ not fix the      │
│ problem put back │
│ the old power    │
│ board and        │
│ replace the oven │
│ power board      │
└──────────────────┘
```

PROVER AL01/A07 Chamber temperature probe alarm

```
                        WL02/U07 power
                         board prover
                          temperature

                              ↓

                           Let the
                           prover to
        ──YES──         cool. Is the warning        ──NO──
        │              message displayed                   │
        ↓                     again?                        ↓
  Replace the                                            Has
  prover power                                         the prover
                                          ──YES──   been installed        ──NO──
                                          │        following the UNOX           │
                                          ↓          guidelines?                ↓
                                       Is the                            Install the prover
                          ──YES──  water tap open?  ──NO──                following The
                          │                              │              installation manual
                          ↓                              ↓
                        Measure                      Open the tap
                        with the
                    multimeter set to V AC
      ──YES──    if the power board supplies 230   ──NO──
      │          V AC to the connector of the water      │
      ↓            solenoid valve, P4. Is the            ↓
    Does            solenoid supplied?              Replace the back
  the flux of                                       power board
  water cross the
  solenoid valve? (Check   ──NO──
  if Inside the prover          │
  chamber you see               ↓
  water out of the         Replace the water
  injector)                solenoid valve

      YES
       │
       ↓
  Replace the back
  power board
```
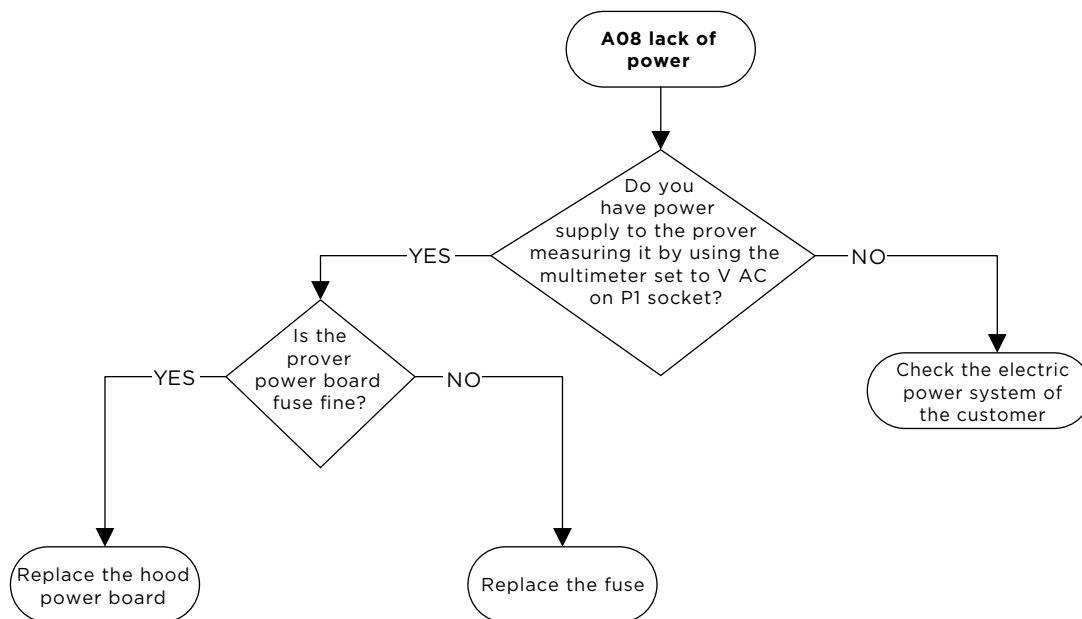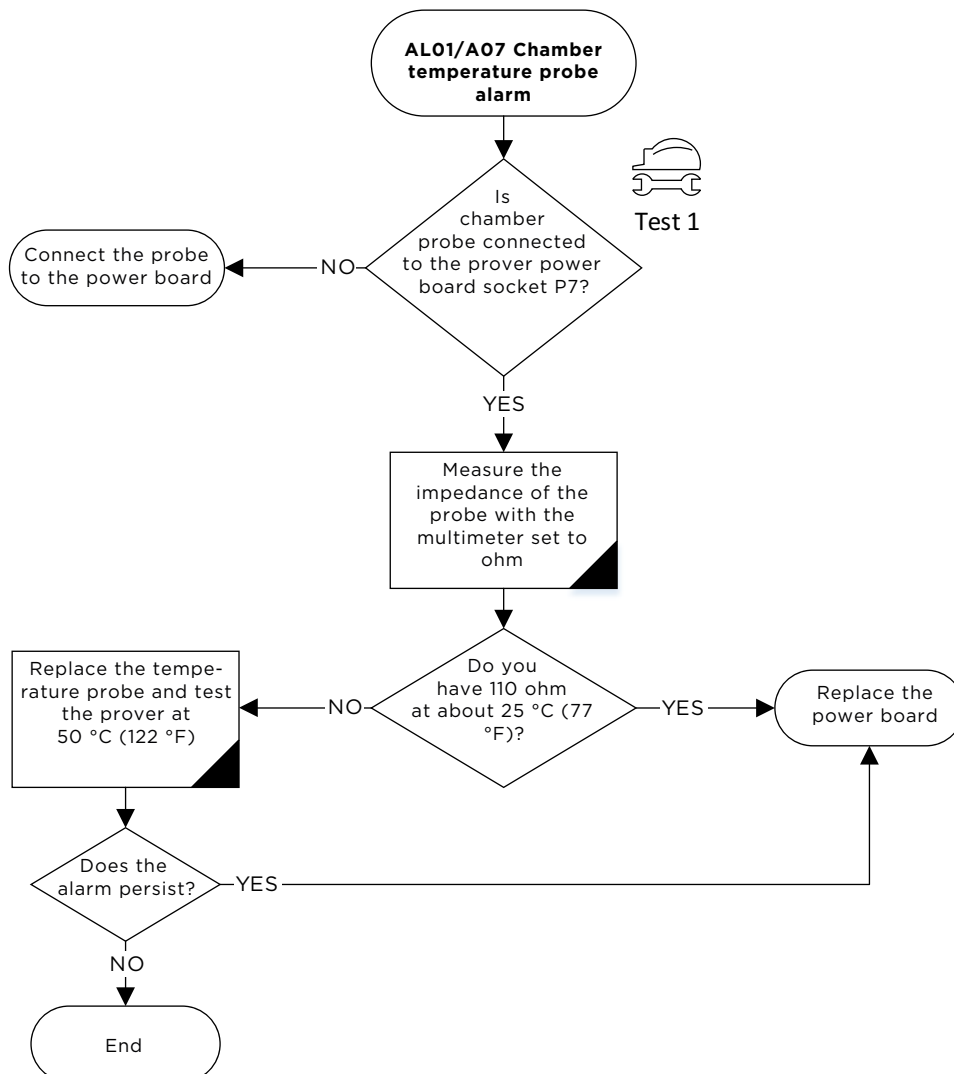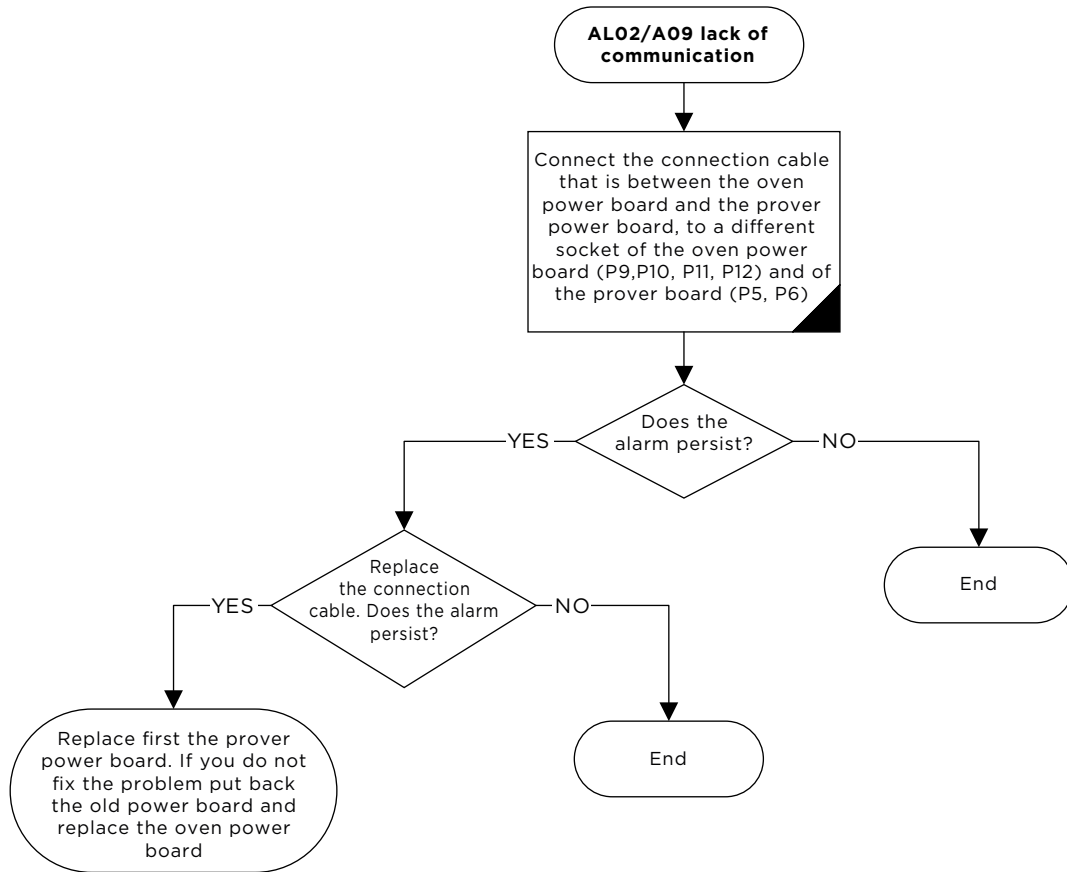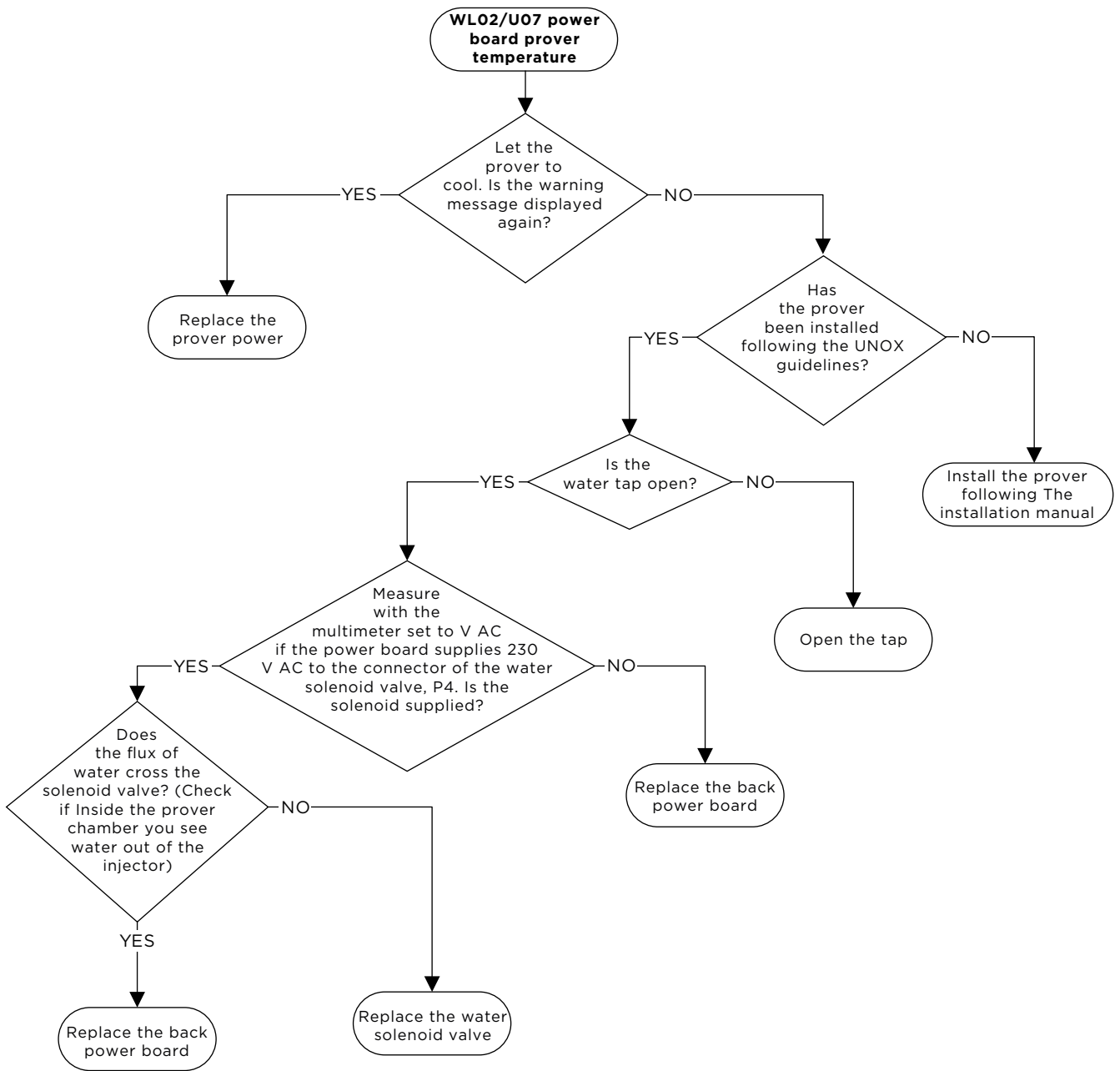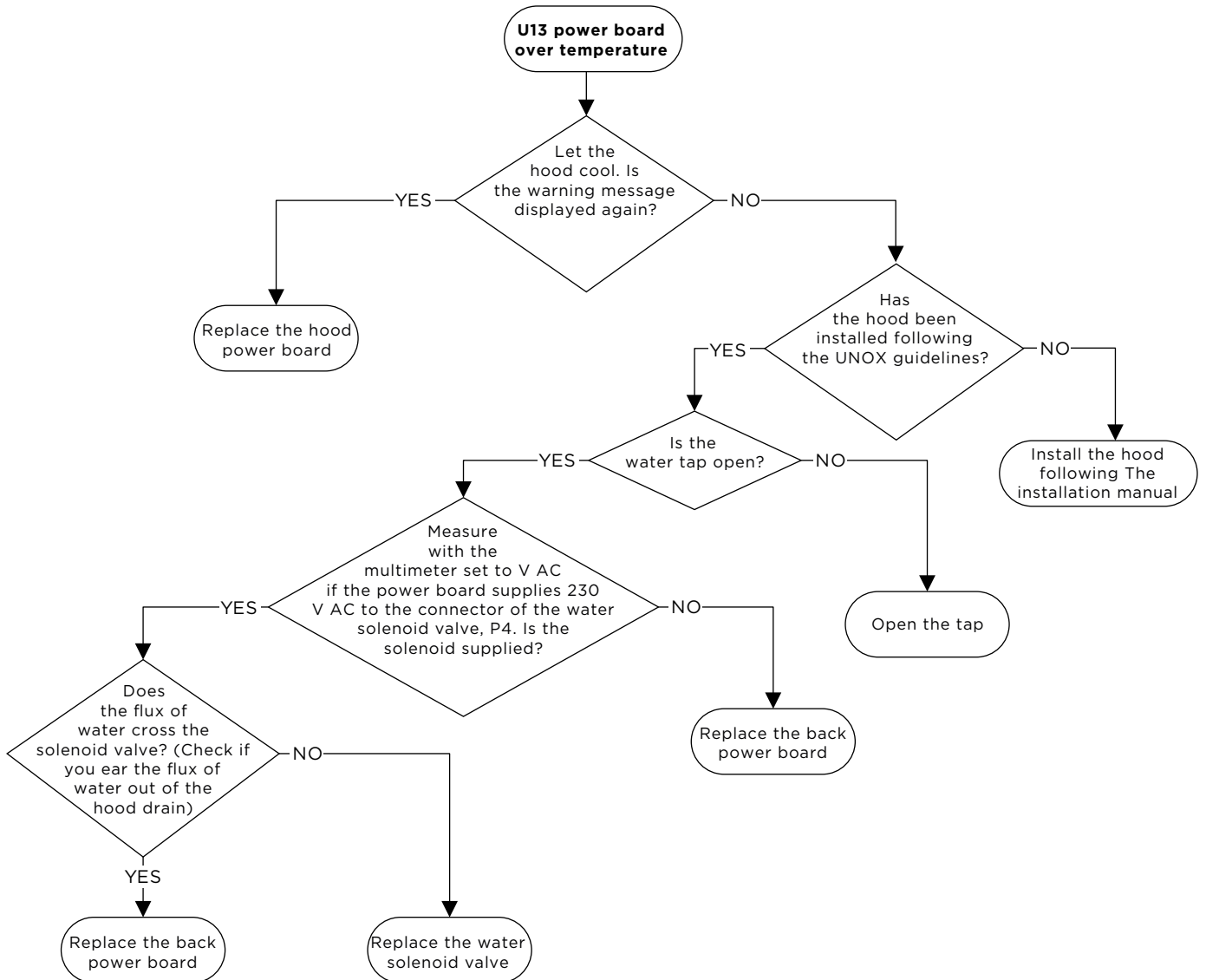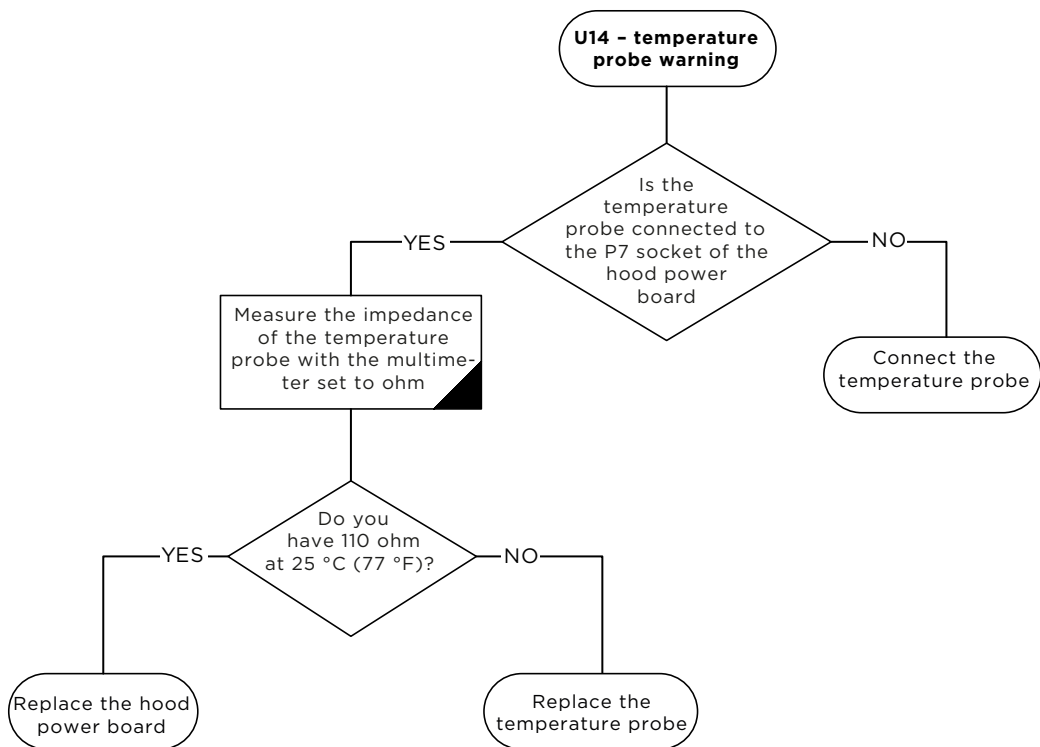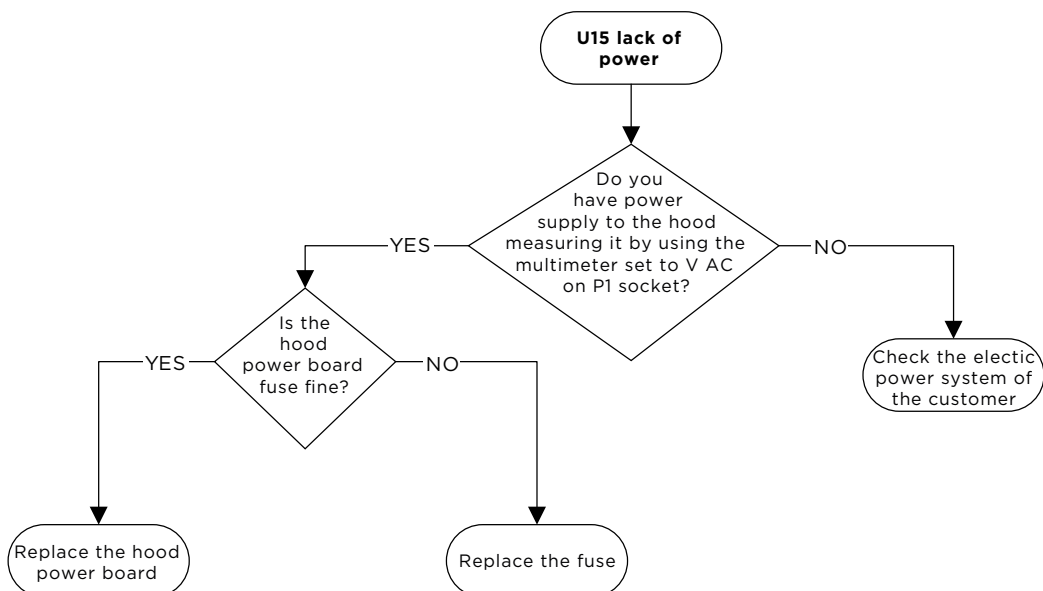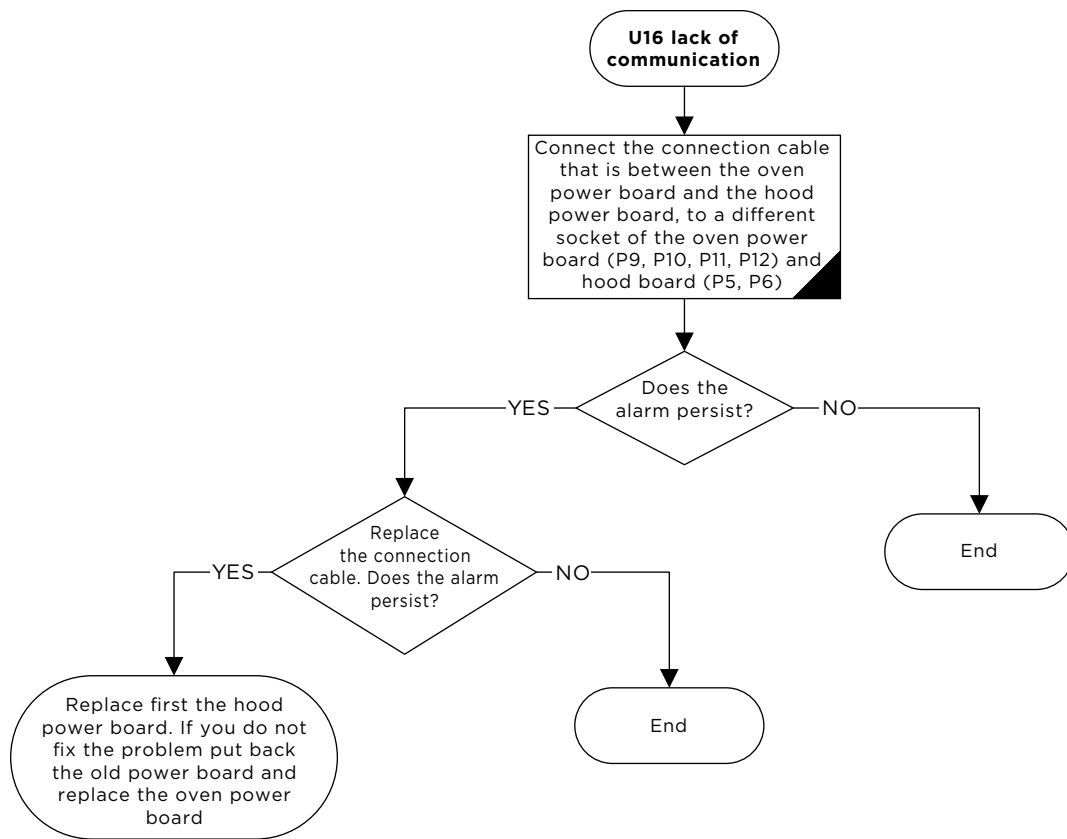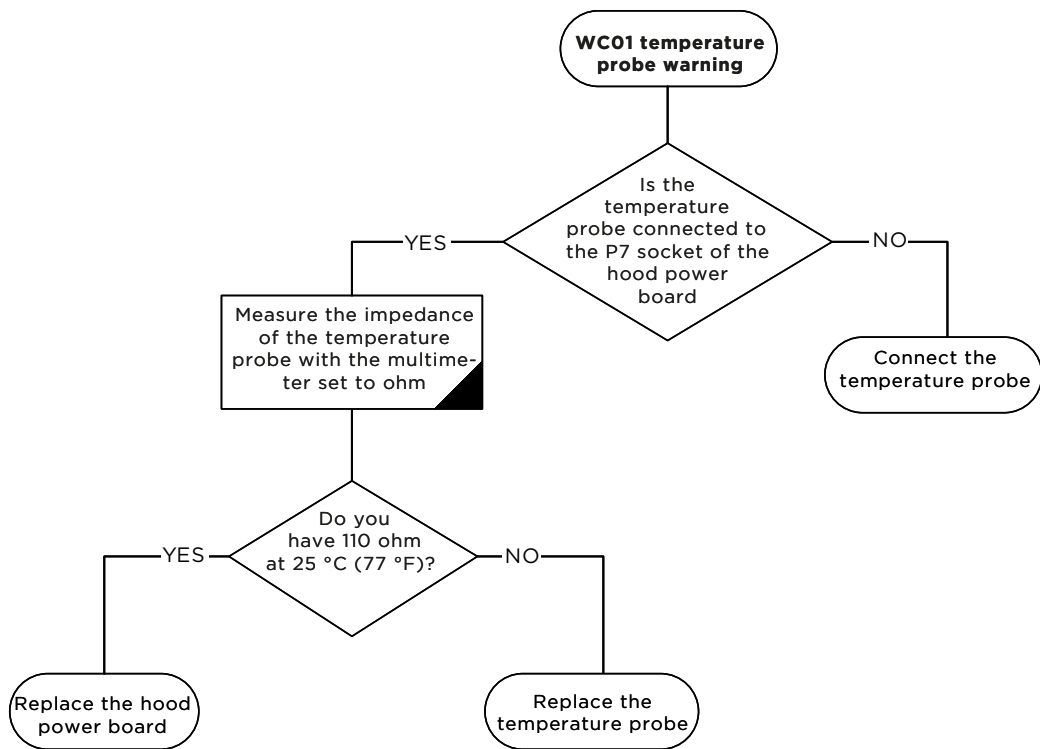
HOOD U13 Power board over temperature

U13 power board over temperature

Let the hood cool. Is the warning message displayed again?

YES → Replace the hood power board

NO → Has the hood been installed following the UNOX guidelines?

YES → Is the water tap open?

NO → Install the hood following The installation manual

Is the water tap open?
YES → Measure with the multimeter set to V AC if the power board supplies 230 V AC to the connector of the water solenoid valve, P4. Is the solenoid supplied?
NO → Open the tap

Measure with the multimeter set to V AC if the power board supplies 230 V AC to the connector of the water solenoid valve, P4. Is the solenoid supplied?
YES → Does the flux of water cross the solenoid valve? (Check if you ear the flux of water out of the hood drain)
NO → Replace the back power board

Does the flux of water cross the solenoid valve? (Check if you ear the flux of water out of the hood drain)
YES → Replace the back power board
NO → Replace the water solenoid valve

HOOD # U14 Temperature probe warning

U14 – temperature probe warning

Is the temperature probe connected to the P7 socket of the hood power board

— YES → Measure the impedance of the temperature probe with the multimeter set to ohm

— NO → Connect the temperature probe

Do you have 110 ohm at 25 °C (77 °F)?

— YES → Replace the hood power board

— NO → Replace the temperature probe

HOOD # U15 Lack of power

U15 lack of power

Do you have power supply to the hood measuring it by using the multimeter set to V AC on P1 socket?

— YES → Is the hood power board fuse fine?

— NO → Check the electic power system of the customer

Is the hood power board fuse fine?

— YES → Replace the hood power board

— NO → Replace the fuse

HOOD **U16 Lack of communication**

```
┌─────────────────────┐
│  U16 lack of        │
│  communication      │
└─────────────────────┘
          │
          ▼
┌─────────────────────────┐
│ Connect the connection  │
│ cable that is between   │
│ the oven power board    │
│ and the hood power      │
│ board, to a different   │
│ socket of the oven power│
│ board (P9, P10, P11,    │
│ P12) and hood board     │
│ (P5, P6)                │
└─────────────────────────┘
          │
          ▼
      ◇ Does the
        alarm persist? ◇
   YES ─┘          └─ NO
    │                  │
    ▼                  ▼
◇ Replace         ┌────────┐
  the connection  │  End   │
  cable. Does the └────────┘
  alarm persist? ◇
 YES ─┘      └─ NO
  │             │
  ▼             ▼
┌──────────┐  ┌────────┐
│ Replace  │  │  End   │
│ first... │  └────────┘
└──────────┘
```

Connect the connection cable that is between the oven power board and the hood power board, to a different socket of the oven power board (P9, P10, P11, P12) and hood board (P5, P6)

Does the alarm persist?

YES — NO

Replace the connection cable. Does the alarm persist?

YES — NO

End

Replace first the hood power board. If you do not fix the problem put back the old power board and replace the oven power board

End

WC01 Temperature probe warning

WC01 temperature probe warning

Is the temperature probe connected to the P7 socket of the hood power board

YES

NO

Measure the impedance of the temperature probe with the multimeter set to ohm

Connect the temperature probe

Do you have 110 ohm at 25 °C (77 °F)?

YES

NO

Replace the hood power board

Replace the temperature probe

WC02 Power board over temperature

HOOD

WC02 power board over temperature

Let the hood cool. Is the warning message displayed again?

YES → Replace the hood power board

NO → Has the hood been installed following the UNOX guidelines?

YES → Is the water tap open?

NO → Install the hood following The installation manual

Is the water tap open?
- YES → Measure with the multimeter set to V AC if the power board supplies 230 V AC to the connector of the water solenoid valve, P4. Is the solenoid supplied?
- NO → Open the tap

Measure with the multimeter set to V AC if the power board supplies 230 V AC to the connector of the water solenoid valve, P4. Is the solenoid supplied?
- YES → Does the flux of water cross the solenoid valve? (Check if you ear the flux of water out of the hood drain)
- NO → Replace the back power board

Does the flux of water cross the solenoid valve? (Check if you ear the flux of water out of the hood drain)
- YES → Replace the back power board
- NO → Replace the water solenoid valve

WC05 Fumes temperature too hight

```
                          ┌──────────────┐
                          │  WC05 fumes  │
                          │ temperature  │
                          │   too high   │
                          └──────┬───────┘
                                 │
                                 ▼
                            ◇ Is the water ◇
              ──── YES ──── ◇ tap open?    ◇ ── NO ──▶ ┌──────────────┐
             │              ◇              ◇           │ Open the tap │
             │                 ◇        ◇              └──────────────┘
             ▼
        ◇ Measure with ◇
        ◇ the multimeter ◇
        ◇ set to V AC if ◇
        ◇ the power board ◇
        ◇ supplies 230 V AC ◇ ── NO ──▶ ┌──────────────┐
        ◇ to the connector ◇            │ Replace the  │
        ◇ of the water ◇                │ Hood power   │
        ◇ solenoid valve P4. ◇          │ board        │
        ◇ Is the solenoid ◇             └──────────────┘
        ◇ power on? ◇
             │
            YES
             │
             ▼
        ◇ Does the ◇
        ◇ flux of water ◇
        ◇ cross the water ◇
        ◇ solenoid valve ? ◇ ── NO ──▶ ┌──────────────┐
        ◇ (Check if you ear ◇          │ Replace the  │
        ◇ the flux of water ◇          │ water        │
        ◇ out of the hood ◇            │ solenoid     │
        ◇ drain) ◇                     │ valve        │
             │                         └──────────────┘
            YES
             │
             ▼
        ◇ Measure the ◇
        ◇ impedance of ◇
        ◇ the temperature ◇
        ◇ probe with the ◇ ── NO ──▶ ┌──────────────┐
        ◇ multimeter set ◇           │ Replace the  │
        ◇ to ohm. Do you ◇           │ temperature  │
        ◇ have 110 ohm at ◇          │ probe        │
        ◇ 25 °C (77 °F)? ◇           └──────────────┘
             │
            YES
             │
             ▼
        ┌──────────────┐
        │ Replace the  │
        │ hood power   │
        │ board        │
        └──────────────┘
```

HOOD WC07 Lack of communication

```
┌─────────────────────┐
│   WC07 lack of      │
│   communication     │
└─────────────────────┘
           │
           ▼
┌─────────────────────────┐
│ Connect the connection  │
│ cable that is between   │
│ the oven power board    │
│ and the hood power      │
│ board, to a different   │
│ socket of the oven      │
│ power board (P9, P10,   │
│ P11, P12) and the hood  │
│ board (P5, P6)          │
└─────────────────────────┘
           │
           ▼
        Does the
YES ── alarm persist? ── NO ──→ End
 │
 ▼
    Replace
    the connection
YES ─ cable. Does the alarm ─ NO ──→ End
 │    persist?
 ▼
┌─────────────────────────┐
│ Replace first the hood  │
│ power board. If you do  │
│ not fix the problem put │
│ back the old power      │
│ board and replace the   │
│ oven power board        │
└─────────────────────────┘
```

⑯ Problem solving guide

Check the following point if:

Symptom	Problem	Solution
The oven does not turn on	F1 fuse of the power board blown	Replace the fuse, 160 mA Fast acting. If the problem persists replace the power board
The oven does not turn on	F2 fuse of the power board blown	Disconnect the low voltage loads sockets: P9, P10, P11, P12, P13 and P14 and replace the fuse (2A – 250 V Time Delay), connect the above sockets one by one until you find the shorted component, therefore replace it. If the fuse continues to blow replace the power board
The oven does not turn on	Power board damaged	Measure on P9 socket between the blue and brown wires the voltage with the multimeter set to VAC. If the power board does not supply 12 VDC to the control panel replace the power board.
The ground fault circuit interrupter (GFCI) triggered	When you turn on the power supply the GFCI triggers immediately	The transformer has an electrical leakage, therefore replace the power board.
The ground fault circuit interrupter (GFCI) triggered	When the control board reboot the GFCI triggers	The back-cooling fan supplied at 230 V AC has an electrical leakage, therefore replace the back-cooling fan
The ground fault circuit interrupter (GFCI) triggered	When the oven is running a cooking program the GFCI triggers	Proceed as follow: Set a cooking program, t = inf, T = 30 °C, v = 2 and run the oven. • If the GFCI triggers, it means that at least one motor has an electrical leakage. Test between the black and red wire of the motor socket and the body of the oven with the multimeter set to ohm if there is a ground fault and eventually replace the damaged motor; If the GFCI does not trigger set T = 260 °C and run the oven. • If the GFCI triggers it means that at least one heating element has an electrical leakage. Test between the cable harnesses of each connector of the heating elements and the ground with the insulation resistance tester, if there is a ground fault, eventually replace the damaged heating element; If you run the oven at T = 260 °C the GFCI does not trigger, set STEAM. Plus to 100 % and run the oven. • If the GFCI triggers, it means that the steam solenoid valve has an electrical leakage. Test between the cable harnesses of the solenoid valve and the ground with the multimeter set to ohm, if there is a ground fault, eventually replace the damaged solenoid valve.
The circuit breaker triggered	When the control board reboots the circuit breaker triggers	The back-cooling fan supplied at 230 V AC is shorted, therefore replace back-cooling fan

Symptom	Problem	Solution
The circuit breaker triggered	When the oven is running a cooking program the circuit breaker triggers	Set a cooking program, t = inf, T = 30 °C, v = 2 and run the oven. • If the circuit breaker triggers, it means that at least one motor is shorted. Test between the black and red wire of the motor socket if there is electrical continuity with the multimeter set to ohm and eventually replace the motor with the fault; If the circuit breaker does not trigger set T = 260 °C and run the oven. • If the circuit breaker triggers it means that at least one heating element is shorted. Test between the cable harness of the heating element coils if there is electrical continuity with the multimeter set to ohm, eventually replace the damaged heating element; If with T = 260 °C the circuit breaker does not trigger, set STEAM.Plus to 100 % and run the oven. • If the circuit breaker triggers it means that the steam solenoid valve is shorted. Test between the cable harnesses of the solenoid valve if there is electrical continuity with the multimeter set to ohm, eventually replace the faulty solenoid valve.
The electrical oven does not heat	A phase is missing	Try to plug the oven to another socket and run the oven. If the oven works properly call an electrician, otherwise follow the next steps
The electrical oven does not heat	Either the heating elements or the contactors are damaged	Measure the amp consumption of the oven with the clamp meter directly on the terminal block. • If the phase consumption does not match the technical data available on Infonet, check if the contactors close the circuit. • If they do not close the circuit, check between A1 and A2 PIN with the multimeter set to V AC if the power board supplies 230 V AC to the contactor coil. • If the power board does not feed the contactors replace it, otherwise replace the contactors; Measure the amp consumption of each heating element turns. • If you find 0 A in at least one coil replace the element
The oven does not cook evenly	The gasket is damaged	Replace the gasket
The oven does not cook evenly	The chimney is clogged	Clean the chimney with a metal brush
The oven does not cook evenly	The motors do not invert the sense of rotation	Measure the resistance of the braking element with the multimeter set to ohm. Do you have the right resistance value according to the technical data? • If not, replace the braking element • If yes, replace the power board

Symptom	Problem	Solution
The oven does not cook evenly	The temperature probe is not calibrated	If you measure a difference lower or equal of 5 °C, between the real temperature of the cooking chamber and the temperature set, with a calibrated temperature probe placed close to the one of the oven, you can apply an OFFSET. See the section "BAKERLUX™ Service and User Menu" to know how to apply the offset. Therefore, if Tset - Tchamber = +3.1 °C (for instance Tset = 180 °C and Tchamber = 176,9 °C) you should set -31 in the probe offset to compensate. Thus 0.1 °C equals to 1 in scale of values.
The oven does not cook evenly	The temperature probe is damaged or the power board is defected	Measure the resistance of the probe circuit with the multimeter set to ohm. Do you have 110 ff at 25 °C (77 °F)? • If not, replace the damaged temperature probe • If yes, replace the power board
The cooking chamber has spots and smears on stainless steel and glasses	The inflow water hardness is too high accordingly with UNOX specification	If the inflow water quality is not in compliance with the technical data reported in the manual, install the proper water treatment system
The cooking cabinet has spots of rust on stainless steel	The chloride content in the inflow water is too high accordingly with UNOX specification	If the inflow water quality is not in compliance with the technical data reported in the manual, install a UNOX.Pure-RO. Polish the steel surface with a polish paste
The oven does not produce steam	The inflow water pressure is not enough	Measure the inflow water pressure with a pressure gauge. Do you have a value within the range 1.5 < p < 6 bar? • If not, the water pressure is not in compliance with the UNOX specification • If yes, measure the pressure downstream the pressure reducer with a pressure gauge. Do you have a pressure equal to 2,3 bar? - If not, replace the pressure reducer - If yes, go on with the troubleshooting
The oven does not produce steam	The oven does not pump in water	Is the tap water open? • If not, open the tap water • If yes, do you have power supply to the steam solenoid measuring with the multimeter set to V AC? - If not, replace the power board - If yes, is the steam pipe clogged? • If yes, clean the pipe and check the water quality • If not, replace the steam solenoid
The control panel is blank	The oven is in stand-by mode	When the oven is not running, every 15 minutes it goes in stand-by mode: the control panel is blank while the LED bar is turned on. To wake up the oven it is enough to touch the control panel on any point, except on the physical button in case of MASTER models. If for any reason the display does not turn on, press the power button to reboot the oven manually

Symptom	Problem	Solution
The control panel is blank	The control panel is not powered or damaged / the USB board is damaged	Remove the control panel and measure between the black and yellow PIN of the main connector with the multimeter set to V DC, if you have 12 V DC. Do you have the right voltage? • If yes, replace the control board • If not, open the back of the oven and measure the voltage between black and yellow wires of the P09 socket with the multimeter set to V DC. Do you have 12 V DC? - If yes, replace the control-power board cable harness - If not, verify the F2 fuse. Is it fine? • If yes, replace the power board • If not, replace first the fuse that maybe is defected and then the power board
The control panel is completely white	The LCD screen is damaged	Replace the control panel
The brightness of the control panel is very low	The LCD screen is damaged	Replace the control panel
The color of the panel is very faded	The LCD screen is damaged	Replace the control panel
There are some vertical or horizontal lines on the control panel	The LCD screen is damaged	Replace the control panel
The control panel does not respond	The LCD screen is damaged	Replace the control panel
The control panel flickers	The LCD screen could be damaged	Wait for about 5 minutes. If the issue persists, replace the control panel
The buzzer does not sound	The control panel is defected	Replace the control panel
Contactors are chattering	Some metal dust is on the contact / the relay on the power board is defected	Measure between PIN A1 and A2 of the contactor the power supply, with the multimeter set to V AC. Do you have a stable value of voltage, around 230 V AC? • If not, replace the power board • If yes, try to set any cooking program and open and close the door while the oven is running. Does the issue persist? - If yes, try to clean the contact of the contactors with compressed air. Does the issue persist? - If yes, replace the contactors

⑰ Shop Pro service and user menu

UNOX BAKERLUX SHOP.Pro ovens allow end users and techincians to adjust parameters in order to satisfy and match customer needs and requests. This presentation aims to describe the different options and values available for each parameter.

Service menu PIN: **99857**

User menu PIN: **4456**

17.1. SERVICE MENU GO-LED OVENS

To enter the hidden menu the oven should be in stand-by, therefore without any cooking program running.To enter the menu proceed as follows:

• Press the sequence of keys P4, P4, P5, P6 to enter the hidden menu.
• The display will show the number 1 that corresponds to the power board. Press "+" button to select the number of the electronic board that you desire;
• Press "STEP 1" button to enter the list of parameter. The display will show FRW that means firmware. It is possible to browse the parameter by pressing + or -;
• Press "STEP 2" button to see the value of the parameter. Press + or – to change the parameter set;
• Press the segment display for 5 seconds to memorize. You will hear a beep;
• Press P1 button to quit the menu.

Net address

Each electronic board is identified with a different net address. The net addresses are reported in the table below:

Net address	Electronic board
1	Oven power board
10	Oven control board
11	Prover power board
13	Hood power board

Oven setup: Parameters based on the model

PARAMETER	NET ADDRESS	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
H2O	10	This parameter determines if the EV output of the power board supplies the steam valve or the steam pump	1 -> steam valve 0 -> steam pump	Depending on the model
DEG	10	It determines the unit of measurement of the temperature	1 -> Fahrenheit 0 -> Fahrenheit	

Oven setup: Options

PARAMETER	NET ADDRESS	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
PRG	10	It prevents the manual setting of the oven	1 -> the oven could be used only with saved programs 0 -> the oven could be used also in manual mode	0
LOC	10	It prevents to modify the saved cooking program	1 -> saved cooking programs could not be modified 0 -> saved cooking programs could be modified	0
MAS	10	It set the maximum temperature that could be set	0-260 °C	260°C
STB	10	Time in minutes before the oven goes in stand-by		1
FOB	10	Frequency of the buzzer		40
MWL	10	Through this parameter, it is possible to increase or decrease the steam value set with step of 20%. For instance, if you set MWL = -1 and the steam set is 60% the oven injects actually 40% of steam	-2/+1	0
TMP	10	It sets the holding temperature after every cooking program. Furthermore the oven starts at infinite time and temperature equal to TMP simply by pressing START even if no cooking program has been set	-2/+1	0°C
TMF	10	It is equivalent to TMP, but the temperature is in Fahrenheit degrees	0-500 °F	0°F
PAS	10	It allows to start quickly a cooking program as soon as any P button (P1-P11) is pressed without pressing the START button	1 -> activated 0 -> deactivated	0

Oven setup: Restricted options

PARAMETER	NET ADDRESS	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
RES	10	Expo mode	1 -> the heating elements are supplied 0 -> the heating elements are not supplied	0
OF1	10	Offset of the chamber temperature probe (expressed in Celsius degrees and multiply by 10)	-50 / 50	0
DF1	10	Negative temperature of hysteresis when the oven regulating		
DF1	10	Temperature at which the cooling fan starts		40°C
DFN	10	Negative temperature of hysteresis of the cooling fan		

17.2. SERVICE MENU MASTER-TOUCH OVENS

Service Menu consists of 2 different sections:

-OVEN SETUP: it contains all the parameters concerning the oven working

-UTILITIES: it contains all the PARAMETERs for the proper installation of the unit and for updating the software.

According to the accessories connected to the unit, the SERVICE MENU will display addidtional parameters.

Oven setup: CLIMA

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
LIMIT STEAM (TEMPERATURE)	The quantity of steam produced by the oven is adjusted according to the temperature set in the cooking program. By increasing the temperature set, the quantity of injected water is reduced	OFF, ON	ON
LIMIT STEAM (FAN SPEED)	The quantity of steam produced by the oven is adjusted according to the fan speed set in the cooking program. By decreasing the fan speed, the quantity of injected water is reduced	OFF, ON	ON
LIMIT STEAM (IDLE)	When no timer is activated in MULTI.Time™ mode, the quantity of steam produced by the oven corresponds to a 20 % of STEAM.Maxi™	OFF, ON	ON
STEAM EROGATION	It allows to set if the oven is equipped with the steam valve or the steam pump	USE EV, USE PUMP	USE EV
STEAM TUNING	It allows to manage the steam production by scaling the row of the steam table in the following way: • BOOST: scale the steam quantity to the higher quantity corresponding to the successive line of the steam table. For instance, by setting 80% the oven injects 100% of steam; OFF: the oven follows the corresponding line of the steam table; • LIMIT: scale the steam quantity to the lower quantity corresponding to the previous line of the steam table. For instance, by setting 80% the oven injects 60% of steam; • MINIMIZE: scale the steam quantity to the lower quantity corresponding to the second line before of the set of the steam table. For instance, by setting 80% the oven injects 40% of steam.	BOOST, OFF, LIMIT, MINIMIZE	OFF

Oven setup: OFFSET

PARAMETER	DESCRIPTION	POSSIBLE VALUES	DEFAULT
CHAMBER PROBE OFFSET	Offset of the chamber temperature probe (expressed in Celsius degrees and multiply by 10)	from -50 to +50	0

If you have a gap in the temperature reading it is possible to adjust the offset of the probes. Pay attention to fact that the parameter range is +50 to -50 that equals to +5 °C to -5 °C. Therefore if Tset - Tchamber = +3.1 °C (for instance Tset = 180 °C and Tchamber = 176,9 °C) you should set -31 in the back/bottom probe offset to compensate. Thus 0.1 °C equals to 1 in scale of values.

PAY ATTENTION TO THE FACT THAT IF THE OVEN IS SET IN FAHRENHEIT THE PARAMETER IS STILL IN CELSIUS. REMEMBER TO CONVERT EACH TEMPERATURE VALUE IN CELSIUS BEFORE MAKING THE CALCULATION

Oven setup: PREHEATING

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
DELTA TEMP PRECOOL	ΔT = Tch - Tsp at which the pre-cooling function is stopped	10 to 40	10
MINIMUM TEMP PRECOOL	ΔT = Tch – Tsp at which the pre-cooling function is activated	60 to 260	70
MAX PREHEATING HOLDING	Time of permanence at the set temperature (heating elements ON)	1 to 60 (minutes)	6
DRY TIME AFTER PRECOOL	Dry phase time after a pre-cooling step. The ventilation is set to the maximum value	0 to 1800 seconds	60

Oven setup: OPTIONS

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
EXPO MODE	Activate/Deactivate the heating elements (in the electric units) or the gas system	ON/OFF	OFF
NUMBER OF TRAYS	This parameter indicates the number of trays of the model	3/4/5/7/10/16/20	IT DEPENDS ON THE NUMBER OF TRAYS OF THE MODEL

Optional device setup: HOOD SET UP

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
HOOD HALT DELAY	Number of minutes after cooking program the hood is stopped	From 0 to 60	0
HOOD TEMP THRESHOLD	Minimum limit temperature which activates the steam condenser (Celsius degrees)	From 0 to 80	40
HOOD FAN DURING COOKING	It allows to switch off the hood motor during cooking. The motor switches on at the end of the cooking program	ON/OFF	ON

Optional device setup: PROVER SET UP

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
CHAMBER PROBE OFFSET	Celsius degrees offset of chamber probe (each 0.1 °C corresponds to 1 unit in the parameter)	From -50 to 50	0

UTILITIES

PARAMETER	DESCRIPTION
DEVICE INFO	Shows model, s/n, electronic boards installed and FW versions of each board
UPDATE FIRM-WARE	Update function for all board firmwares
RESET TO FAC-TORY DEFAULT	Reset all the parameters to the factory value
LOAD MODEL PARAMETER	Load the corresponding parameters of the model of oven by using the file in the USB stick plugged.
FIRST INSTALLA-TION SETTINGS	It allows to start the assisted installation procedure
INSTALLATION INFO	Shows the information about the installation date and time, site and installer
CLOUD MAIN SERVER	It shows the site address of the UNOX cloud for the internet connection

17.3. USER MENU MASTER-TOUCH OVENS

User Menu consists of 8 different parameters:
1. LANGUAGE
2. DATE AND TIME
3. UNIT OF MEASURE
4. NETWORK
5. CONSUMABLE PRICES 6. USB
7. UNOX.CARE
8. OPTIONS

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
LANGUAGE	It allows to change the language of the oven	ENGLISH, ITALIAN,FRANCAIS, ESPANOL, DEUTSCH, CESKY, РУССКИЙ, KOREAN, SRPSKI, CHINESE, SLOVENSKY, PORTU-GUÊS, JAPANESE, ROMANA, DANSK, SVENSKA, POLSKI, SLOVENŠČINA, NEDERLANDS, БЪЛГАРСКИ, ΕΛΛΗΝΙΚΑ, MAGYAR, TÜRK, HRVATSKI, EESTI	O
DATE AND TIME	It allows to select date, time, time zone, daylight saving time function and auto-set of date and time	-	-
UNIT OF MEASURE	It allows to set the unit of measure of the following quantity: • Temperature • Volume • Thickness • Weight • Energy • Currency	TEMPERATURE -> °C - °F VOLUME -> LITRES – GALLONS THICKNESS -> mm – Inches WEIGHT-> kg – lbs ENERGY -> kWh – BTU Steam.BOOST SUPPLY -> g – cc – fl.oz CURRENCY	°C LITRES mm kg kWh g
NETWORK	It allows the internet connection of the oven	-	-
CONSUMABLE PRICES	It allows to set an unitary value of the following quantity: •ENERGY PRICE •WATER PRICE - In this way the oven in the consumption data section will show you the cost of the programs run		

PARAMETER	DESCRIPTION	POSSIBLE OPTIONS	DEFAULT
USB	It allows to EXPORT PROGRAMS, IMPORT PROGRAMS, IMPORT PICTURES, EXPORT HACCP	-	-
UNOX.CARE	It allows to activate/reset the liter counter of the UNOX.PURE and UNOX.PURE-RO. To activate the liter counter of the UNOX.Pure it is necessary the PIN attached to the external brown box of the kit	UNOX.PURE REMAINING VOLUME WATER HARDNESS ACTIVATE COUNTER INOX.PURE-RO REMAINING VOLUME ACTIVATE COUNTER RESET COUNTER	-

Oven setup: OPTIONS

PARAMETER	DESCRIPTION	POSSIBLE VALUES	DEFAULT
CONSUMPTION DATA IN CURRENCY	It allows to translate the quantity of the consumption data in cost	ON/OFF	OFF
LOCK PROGRAM VIEW	It avoid to see the program parameters	ON/OFF	OFF
LOCK USER PROGRAMS	It locks the user programs preventing anyone to change the program parameters	ON/OFF	OFF
LOCK MANUAL COOKING	It locks the manual cooking function deactivating the relative icon on the display	ON/OFF	OFF
GRAPHICAL USER INTERFACE	It makes possible to customize the home page of the display showing, hiding, skipping, locking and deactivating the icons	ON/OFF	OFF
SHOW FULL MENUS	The oven shows you the full list of parameter independently by the model	ON/OFF	OFF
ADAPTIVE.Cooking	It makes possible to choose the mode of intervention of the ADAPTIVE.Cooking. When it is set to ASK EVERYTIME the ADAPTIVE.Cooking system will ask you: "ADAPTIVE.Cooking will optimize your cooking process by automatically adjusting your settings" then you can choice between YES NOW, YES ALWAYS, NO NOW, NO NEVER. When it is set to NEVER, ADAPTIVE.Cooking will never act. When it is set to ALWAYS, it will intervene every time	ASK EVERYTIME/ NEVER/ALWAYS	ASK EVERY TIME
SECONDS TO SHOW SLIDES IN COOKING	It specifies the timing of the setting view after pressing the "VIEW/MODIFY" function while cooking. If the parameter is set to 0, the setting view remains displayed. To avoid unintentional interaction with the oven while cooking, UNOX recommends not to change the factory default set in order to have the following view	0,10	5
BUZZER AT THE END OF COOKING	Duration in seconds of the buzzer sound emitted at the end of a cooking program	From 5 to 3600 s	45
VOLUME	It allows to set the frequency of the buzzer	HIGH, MEDIUM, LOW	HIGH
AUTOMATIC DOOR	It allows to set the automatic door opening at the end of the cooking program	ON,OFF	ON

(18) Hood

The ventless hood cleans, removes odors and cools down the fumes exhausted by the chimney. In addition, a suction system takes in the fumes when the door is open.

18.1. HOOD IN TOUCH AND MASTER MODELS

18.1.1. HOOD MOTOR ACTIVATION

- The hood motor has 2 fan speeds:
- Low speed, when the oven is cooking. The hood motor may remain stationary during cooking, depending on the setting of the HOOD FAN DURING COOKING parameter. This parameter allows the hood motor to be turned off during cooking. The motor switches on at the end of the cooking program;
- High speed, when the oven completes cooking and when the door is open.

18.1.2. CONDENSER WATER VALVE ACTIVATION

The hood water valve will be activated in the following cases:
- During cooking, $T > T_{th}$ (fumes temperature threshold). activation of the water valve depends also on the HOOD HALT DELAY parameter setting. This parameter regulates the number of minutes the hood will be stopped following the cooking program;
- The oven is not cooking and $T > T_{th} + 10$ °C

The hood water valve will not be activated in the following cases:

- During cooking, $T < (T_{th} – 1$ °C);
- The oven is not cooking and $T < (T_{th} + 10$ °C $– 1$ °C).

T_{th} is managed by the HOOD TEMPERATURE THRESHOLD parameter, which sets the minimum limit temperature that activates the steam condenser (Celsius degrees).

18.2 HOOD IN GO AND LED MODELS

18.1.3. HOOD MOTOR ACTIVATION

The hood motor has 2 fan speeds:
- Low speed, when the door is closed and the oven is working;
- High speed, when the door is open;

The hood motor will be stopped in all the other cases (when the door is closed or open and the oven is not cooking).

18.1.4. CONDENSER WATER VALVE ACTIVATION

- The hood will inject water into the condenser if alarm AF14– temperature probe failure is not active and in the following cases:
- During cooking, Tmeasure > CP1 parameter;
- The oven is not cooking and Tmeasure > CP1 + 10 °C.
CP1 sets the minimum limit temperature that activates the steam condenser (Celsius degree).

(19) Prover

From ancient tradition to today master bakers, proving is an essential process for preparing bread, pizza, croissants and a wide variety of baked products. The BAKERLUX SHOP.Pro provers will allow you to obtain the very best results by injecting water manually.

19.1. PROVER WITH TOUCH AND MASTER CONTROL PANEL

The prover temperature can be set between 20 and 50 °C.

19.1.1. TEMPERATURE CONTROL

The temperature is read every 20 seconds.
The heat requested is:
* 100% during t_{on} (FRES = 1, MOT = 1);
* 0% during 20 s – t_{on} (FRES = 0, MOT = 0).

19.2. CLIMATE CONTROL

Steam injection is manual, it is therefore necessary to press and hold the button provided on the screen. By pressing the button, the valve will inject water for 5 seconds.
The prover cannot inject steam if the oven is equipped with a steam pump.

19.3. PROVER WITH LED CONTROL PANEL

The time and temperature setting of the prover is similar to the oven setting.
With the prover, it will not be possible to set the steam value in percentage, but it will be possible to press and hold the steam button to inject water manually for a desired time period (minimum 2 seconds).

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