



Morella Forni



ovens manufacturers in Genoa since 1969

RANGE **Evento**

“ FRV 100 ” “ FRV 125 ”

VENTILATED TURNING BEDPLATE ELECTRIC OVEN
INSTALLATION AND MAINTENANCE INSTRUCTIONS.

rev.12 - 21

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Technical Assistance: contact your local dealer or the manufacturer.
The manufacturer reserves the right to change, at any time and without prior notice,
the contents of this instruction manual.



FRV 125
COLOSSEUM



FRV 100



FRV 100

DICHIARAZIONE DI CONFORMITA'



DECLARATION OF CONFORMITY

In accordo con : - la Direttiva Bassa Tensione Reg. **2014/35/UE**,
- la Direttiva E.M.C. Reg. **2014/30/UE** (Compatibilità Elettromagnetica),
- la Direttiva **2006/42 CE** (macchine),
- il regolamento **CE 1935/2004** (materiali ed oggetti destinati ad avvenire in contatto con prodotti alimentari).

*According to the Low Voltage Directive **2014/35/EEC**, the EMC Directive **2014/30/EEC**, the Safety of machinery **2006/42 EEC**, with the rules **CE 1935/2004** (materials and articles intended to come into contact with foodstuffs)*

Tipo di apparecchio - *Type of equipment* : Forno rotante elettrico ventilato - *Rotary electric ventilated oven*

Marchio commerciale - *Trademark* : Morello Forni

Modello - *Type of designation* : FRV

Costruttore - *Manufacturer* : Morello Forni S.a.s. di Morello Marco & C.

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Le norme armonizzate o le specifiche tecniche (designazioni) che sono state applicate in accordo con le regole della buona arte in materia di sicurezza in vigore nella CEE sono:

The following armonised standard or technical (designations) which comply with good engineering practice in safety matters in force within the EEC have been applied:

Norme o altri documenti normativi
Standards or other normative documents

Rapporto collaudo - Schede tecniche
Test report - Technical files

EN 60204.1
EN 60335.1, 60335.2.36
Emission: EN50081.1
Immunity: EN50082.1

In fase di emissione - *on progress*

Informazioni ulteriori *Additional informations*

In qualità di costruttore e/o rappresentante autorizzato della società all'interno della CEE, si dichiara sotto la propria responsabilità che gli apparecchi sono conformi alle esigenze essenziali previste dalle direttive su menzionate.

As the Manufacturer's authorised representative established within EEC, we declare under our sole responsibility that the equipment follows the provision of the Directives state above.

Data e luogo di emissione
Date and place of issue

Nome e firma di persona autorizzata
Name and signature of authorised person

.....
(Capo Tecnico - *Technical Director*)

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(*) LEGAL DISCLAIMER :

MORELLO FORNI ITALY S.r.l. reserves the right to modify oven technical data and specs at any time, and without prior notice.
Said data and specifications are purely indicative and in no way binding

CHAPTER 1

GENERAL CONTENTS

1.1 TESTING AND WARRANTY

The unit has been tested in the manufacturer's plant in compliance with current laws and regulations and is supplied ready to use.

The warranty is valid 12 months from the date of delivery of the oven and covers the reparation of all defective parts. Visible defects and dissimilarities in the order, if existing, must be reported to the manufacturer within 5 days from the date of receipt of the oven in order to be accepted.

All other defects that become evident after the receipt of the oven must be reported within five days from the date of occurrence or, at any rate, within a maximum of 6 months as stated in the warranty. The purchaser shall be entitled to claim for the reparation or the replacement of the defective parts only, as the warranty does not cover any whatsoever direct or indirect damage.

However, the reparation or replacement of defective parts must be requested within the maximum limit stated in the warranty, unless otherwise provided for in applicable laws and regulations.

Defective materials shall be repaired or replaced in the manufacturer's plant. Therefore, the purchaser shall return said materials carriage free to the manufacturer, who shall in turn return them carriage forward to the customer.

1.2 PREMISE

This manual is supplied in order to provide all the instructions for a correct use and maintenance of the oven, and the maximum safety of users.

The description of the following professional qualifications and related duties are provided for further clarification.

Installer: qualified technician in charge of the installation and commissioning of the oven in accordance with the instructions of this manual.

User: any person who is familiar with the content of the manual and who uses the oven for the intended use and in accordance with the instructions provided. Users are always expected to carefully read and consult the manual. Users are recommended to specifically and frequently read and refer to paragraph **1.5 Safety Precautions**.

Technician responsible for ordinary maintenance: qualified technician trained to perform ordinary maintenance operations in accordance with the instructions of this manual.

Technician responsible for extraordinary maintenance: qualified technician trained to perform extraordinary maintenance on the unit.



This symbol, which is present in some parts of this manual, highlights an important warning that should be followed for safety purpose.

The manufacturer disclaims all responsibility for damages originating from the improper and incorrect use of the oven or from the failure to comply with the instructions of this manual.

This manual should be stored in an accessible location that is known to all users (installer and technicians responsible for ordinary and extraordinary maintenance).

This manual cannot be reproduced and/or transmitted, in whole or in part, with any whatsoever means or media.

1.3 CUSTOMER'S DUTIES

The customer shall be responsible for the following:

- Correct and safe installation of the oven received
 - Power supply
 - Connection to the flue
- Consumables for cleaning
- Ordinary maintenance

1.4 OVEN DESCRIPTION

An electric furnace, covered by a varnished metal shell that contains a refractory material heavy composite structure; it is heated with a digitally controlled electrical resistances system (Fig.1).

The furnace front and its access door are made of metallic materials resistant to high temperatures; the front control panel in stainless steel encloses the board with the digital control instrumentation.

1.5 SAFETY PRECAUTIONS

Before turning the oven on, it is always advisable to read the instructions of this Operation and Maintenance Manual, which is to be regarded as AN integral part of the product and should always be stored in a safe place. If this manual becomes unreadable or damaged, it is possible to request a duplicate copy from the manufacturer by specifying the model and date of supply of the oven.

GENERAL SAFETY PRINCIPLES:

- Always complete the recommended installation procedure before turning the oven on.
- Avoid touching the oven with wet hands or feet.
- Avoid inserting screwdrivers or other objects in the protection grilles of the oven or between moving parts.
- Do not disconnect the oven from the power supply by pulling the power cord out of the outlet.
- Do not allow children or youths below 18 or unskilled people to use the oven.
- Always disconnect the oven from the power supply before cleaning or servicing it.
- Always turn the oven off without attempting any reparations in the event of permanent and/or temporary failure.
- The oven should always be repaired by qualified technicians.



FIG.1

1.6 CONTACTING THE TECHNICAL ASSISTANCE

All technical problems or servicing requests should be addressed to the supplier of the oven.

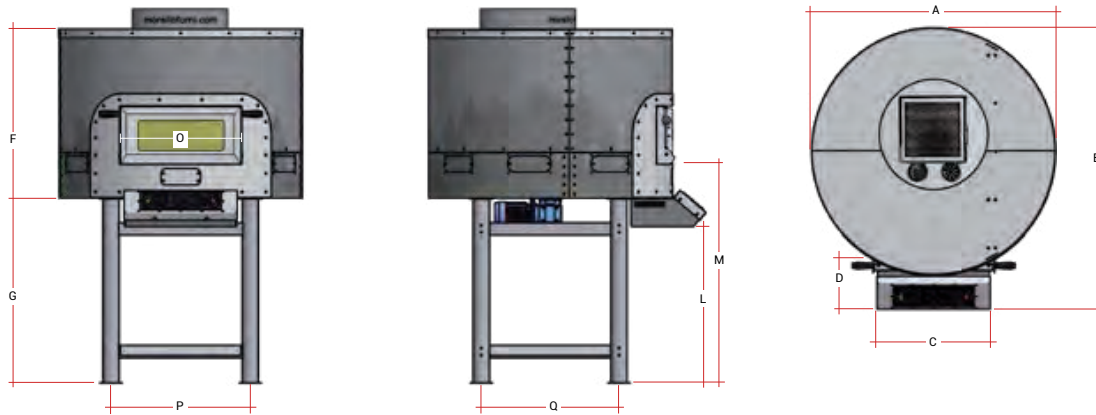
1.7 ORDERING SPARE PARTS

All spare parts can be ordered from the supplier of the oven, who has a list of spare parts.

CHAPTER 2. INSTRUCTIONS FOR INSTALLERS

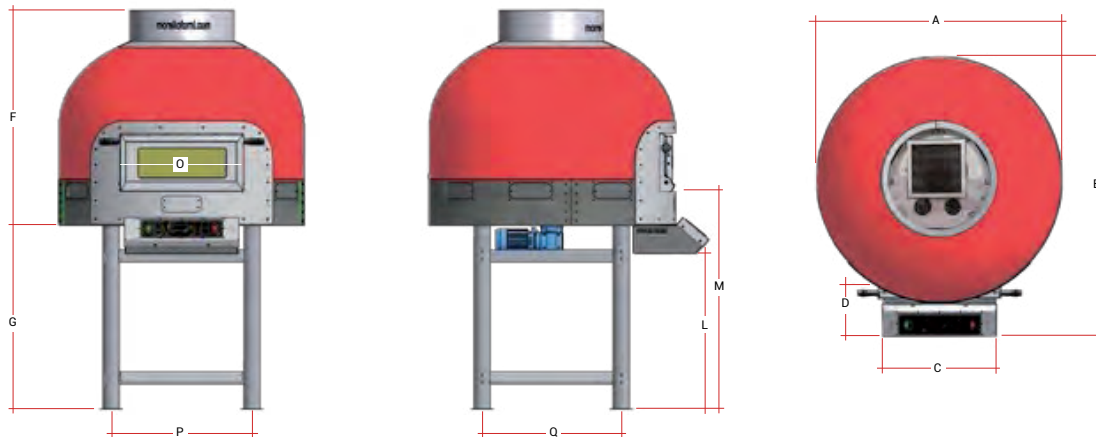
2.1 WEIGHT AND DIMENSIONS

The section below shows a layout of the unit, with its installation heights and dimensions in centimeters (FIG.2, 3, 4).

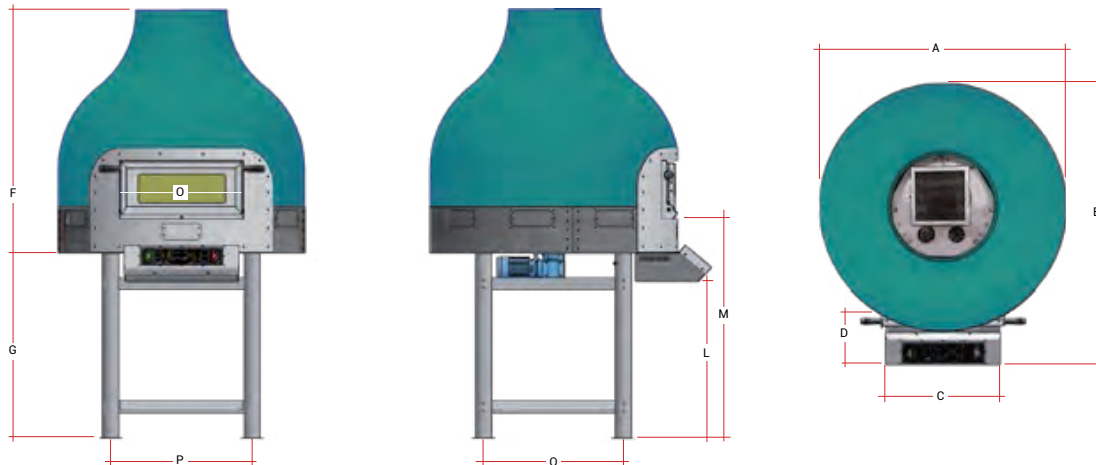


Mod./Ref.	A	B	C	D	F	G	L	M	O	P	Q	peso/weight (kg)
FRV100	120	147	56	33	97	90	72	112	56	70	70	650
FRV125	162	180	98	35	105	80	80	122	65	90	110	1550

FIG.2



Mod./Ref.	A	B	C	D	F	G	L	M	O	P	Q	peso/weight (kg)
FRV100	120	147	56	33	105	90	72	112	56	70	70	650
FRV125	162	180	98	35	120	80	80	122	65	90	110	1850



Mod./Ref.	A	B	C	D	F	G	L	M	O	P	Q	peso/weight (kg)
FRV100	120	147	56	33	110	90	72	112	56	70	70	650
FRV125	162	180	98	32	135	80	80	122	65	90	110	1900

2.2 RECEIPT OF THE OVEN

Upon receipt of an oven manufactured by "MORELLO FORNI", it is necessary to carefully read this manual before performing any handling or installation operation.

The oven has been designed with the utmost attention and must be handled very carefully by the carrier. All handling operations must be performed with efficient and appropriate unloading and installation equipment. The oven is supplied with a disassembled support base due to the extremely high center of gravity that could cause hazards and damage during transportation.

Extract the oven from its box by removing the supports and the rods of the elements that support the wooden crate anchored to the oven.

The oven should be handled only with equipment suitable to support its weight.



FOR THE SAFETY OF OPERATORS, IT IS ADVISABLE TO ALLOW THIS OPERATION TO BE PERFORMED BY QUALIFIED TECHNICIANS ONLY. ATTENTION! THE CENTER OF GRAVITY OF THE OVEN IS SITUATED HIGH ABOVE THE GROUND.



The metal frame of the oven is designed to be handled with a transpallet. The metal frame of the crane is designed to be handled with many types of equipment. The special and reinforced HANDLING AND LIFTING POINT enables the oven to be handled and lifted with a suitable transpallet trolley, as shown in FIG.8.



**WARNING !
THE OVEN CANNOT
BE TILTED ON ANY
SIDE !**

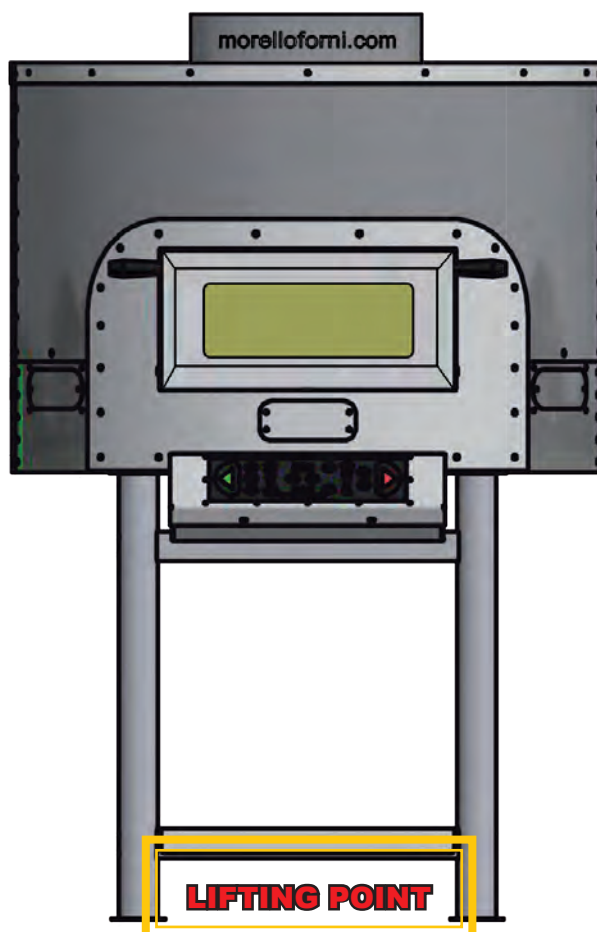


FIG.3

2.3 GENERAL RECOMMENDATIONS

The oven can only be used to cook food. The sections below describe the main components of the oven. The area below the oven must always be accessible and free from all possible obstructions.. THE MANUFACTURER DISCLAIMS ANY RESPONSIBILITY FOR DAMAGES ORIGINATING FROM ACCIDENTS, FAULTS OR FROM THE FAILURE IN FOLLOWING THIS MANUAL'S INSTRUCTIONS .

Always perform all electric connections in accordance with safety law requirements and install a cut-off switch to protect the oven from electric discharges and users from potential hazards.

Always make sure that the voltage and power supply are suited to the power absorbed by the oven.

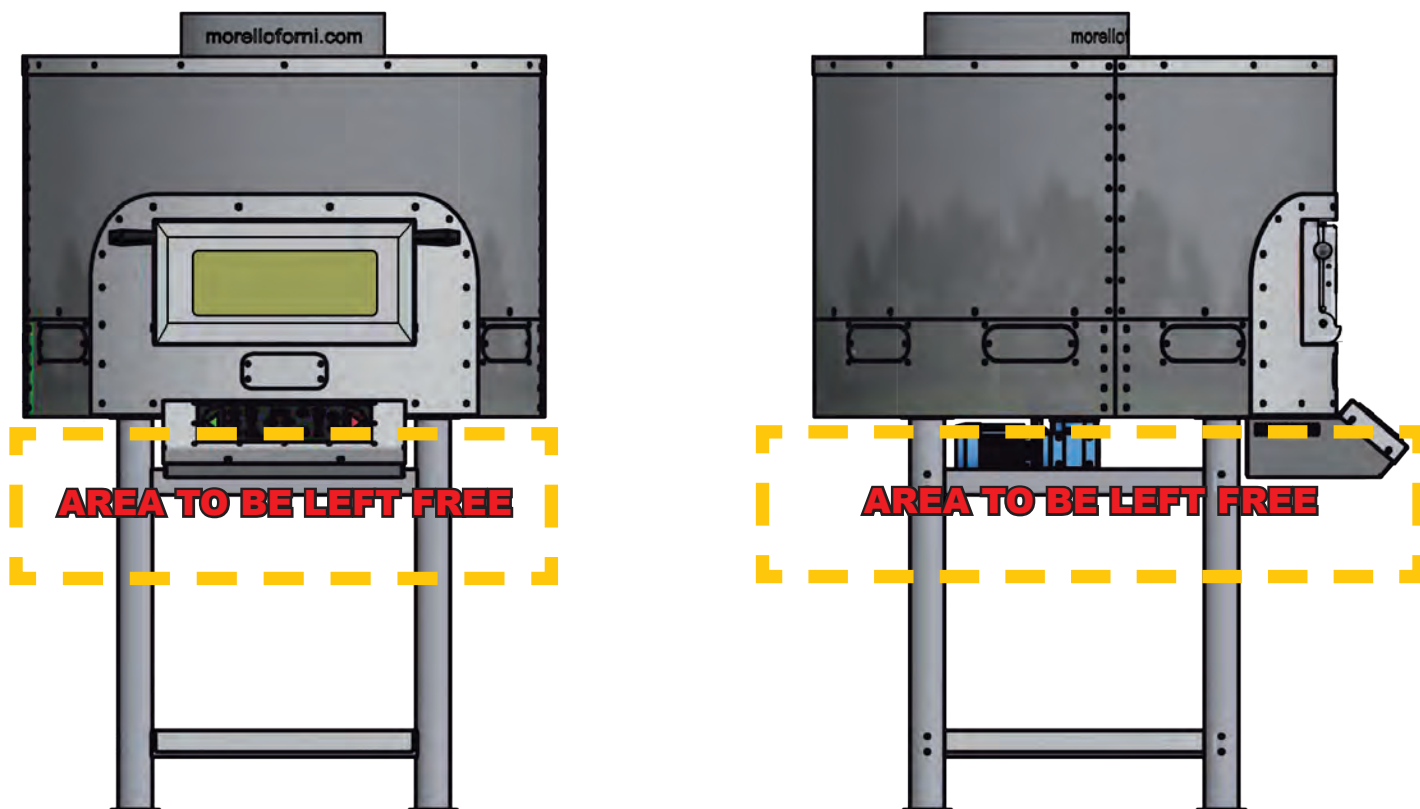


FIG.4

2.4 INSTALLING THE OVEN

The furnace can be placed in any type of environment; we recommend that it be installed indoors. The part underneath the motor and the control console must remain free of any type of obstruction and be accessible for ordinary maintenance operations (FIG. 9), avoiding any form of occlusion that may prevent the necessary air circulation, which is essential for the furnace to function properly.

2.5 RECOMMENDATIONS FOR EXTERNAL COATING

The oven can be coated with several materials, except for the front control panel and other areas that must be left free, as shown in the layout below (Fig.10).

Always follow the recommended instructions and do not hesitate to contact the manufacturer for further information.



**PLEASE RESPECT FOLLOWING INSTALLATION DISTANCES
TO AVOID ANY DAMAGE TO OVEN'S EXTERNAL FINISH
AND INTERNAL COMPONENTS**



FIG.5

CHAPTER. 3 INSTALLATION

3.1 ELECTRIC CONNECTIONS AND POWER ABSORPTION

The oven must be connected to the power mains by a qualified and authorized technician.

FRV 100 model must be connected to the mains through a 380 V, three-phased five-pole 3L+1N+PE, 32 Amperes, 50 Hz;

FRV125 model must be connected to the mains through a 380 V, three-phased five-pole 3L+1N+PE, 63 Amperes, 50 Hz.

To enhance safety, always observe the following instructions:

- Always use the power cord supplied with the oven for its connection to the power supply.
- Verify that the power supply has the same rating of the oven.
- If outlet and plug are incompatible, replace the outlet with a suitable and approved model.
- Never use adapters or multiple plugs.

IMPORTANT

always connect the oven to an electric network system with a suitable grounding system and cutoff switch compliant with current safety law requirements.

3.2 ELECTRIC RATINGS (*)

TABLE 1	ELECTRICAL OVEN RATINGS FRV RANGE	
	FRV 100	FRV 125
MODEL		
Maximum Power Consumption	15 kW	24 kW
Temperature Maintaining Average Power Consumption	2.5 kW	5 kW

3.3 WIRING DIAGRAMS INFORMATION

The wiring diagrams for FRV 100 and FRV 125 ovens are shown on the last two pages of this manual.



WIRING DIAGRAMS ARE DESIGNED TO BE USED BY QUALIFIED TECHNICIANS DURING MAINTENANCE OPERATIONS.

3.4 COMPONENTS

1. Shunt trip release . . . . .	.MF.03.008
2. Manual motor protector switch . . . . .	.MF.03.007
3. Voltage monitoring . . . . .	.MF.03.006
4. Three Phase Solid State Relays Bedplate . . . . .	.MF.03.055
5. Three Phase Solid State Relays Dome	MF.03.053
6. Electrical resistance Bedplate . . . . .	.MF.03.021
7. Electrical resistance Bedplate	MF.03.021
8. Electrical resistance Bedplate	MF.03.021
9. Electrical resistance Bedplate	MF.03.021
10. Electrical resistance Bedplate	MF.03.021
11. Electrical resistance Bedplate	MF.03.021
12. Electrical resistance Dome (kit of 6 pieces)	MF.03.010
13. Transformer 24V dc	MF.01.002 / 02.080
14. Inteltouch MF-R . . . . .	.MF.01.007
15. Engine for gear reductor	MF.03.002
16. Independent cooling fan	MF.03.002.02
17. Inverter . . . . .	.MF.02.027
18. PLC	MF.01.003
19. Dome temperature probe	MF.03.061
20. Bedplate temperature probe	MF.01.004
21. Door switch . . . . .	.MF.03.022
22. Light bulb . . . . .	.MF.03.035
23. Light bulb holder	MF.03.036
24. Motor fan inverter . . . . .	.MF.03.048
25. Motor fan . . . . .	.MF.03.020
26. Motor fan capacitor . . . . .	.MF.03.020.01
27. Electronics' shelf cooling Fan	MF.03.019
28. Fuse 0,8 A	MF.11.051
29. Fuse 1 A	MF.11.052
30. Fuse 1,6 A	MF.11.052
31. Fuse 6,3 A	MF.11.055
32. Fuse 2,5 A . . . . .	.MF.11.053

3.5 TECHNICAL AIR EXTRACTION RATINGS (*)

TABLE 2	EXHAUST VOLUME FRV RANGE	
	FRV 100	FRV 125
MODEL		
Air Volume	600 m3 h	700 m3 h

(*) Installer must guarantee, in any case, the correct and total extraction of steam produced during baking.

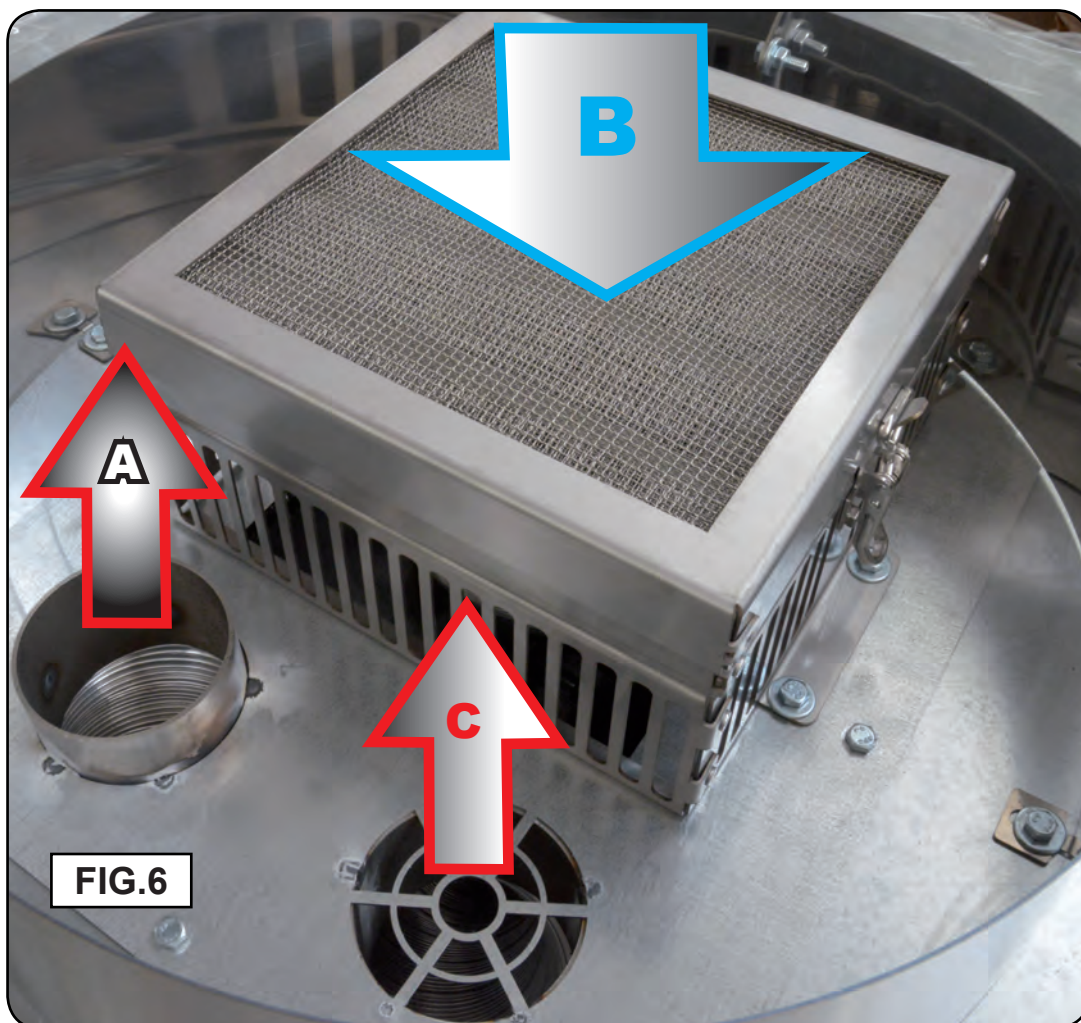


WARNING!!
NEVER PLACE THE FRV OVEN UNDER A HOOD,
TO ALLOW PROPER COOLING OF ITS MOTORFAN

3.6 DISCHARGE OF BAKING STEAM PRODUCTS

3.6.1 - FRV 100

The furnace is equipped with a manifold to discharge steam that might be produced during baking (A in Fig.11) which can be connected to a chimney. Manifolds B and C are respectively air inlet and outlet to cool the motorfan assembly. Make sure that the manifolds B and C are always free of any obstruction, to ensure the necessary air circulation, essential for the furnace to function properly.



WARNING!!
THE MOTOR AIR MANIFOLDS (B and C in Fig.11) MUST NOT BE CONNECTED
TO ANY TYPE OF CHIMNEY, THEY MUST REMAIN FREE!



FIG.7



WARNING !!

THE INTAKE MOTOR FAN SQUARE FILTER REQUIRES CLEANING AT REGULAR INTERVALS, ACCORDING TO MAINTENANCE SCHEDULE. TO PULL OUT THE FILTER, OPEN THE TWO HINGES (SHOWN ABOVE), THEN RAISE ITS FRAME. IF YOU ARE USING LIQUID DETERGENT TO CLEAN THE FILTER, DRY IT COMPLETELY, BEFORE ASSEMBLING IT BACK AT ITS PLACE.

3.6.2 - FRV 125

The FRV 125 STANDARD “COLOSSEUM”, above, has a single manifold to discharge steam that might be produced during baking - its diameter is 10 cm. The installer must guarantee an average exhaust volume of 1000 m³/h.

It is possible to place the oven under a hood.

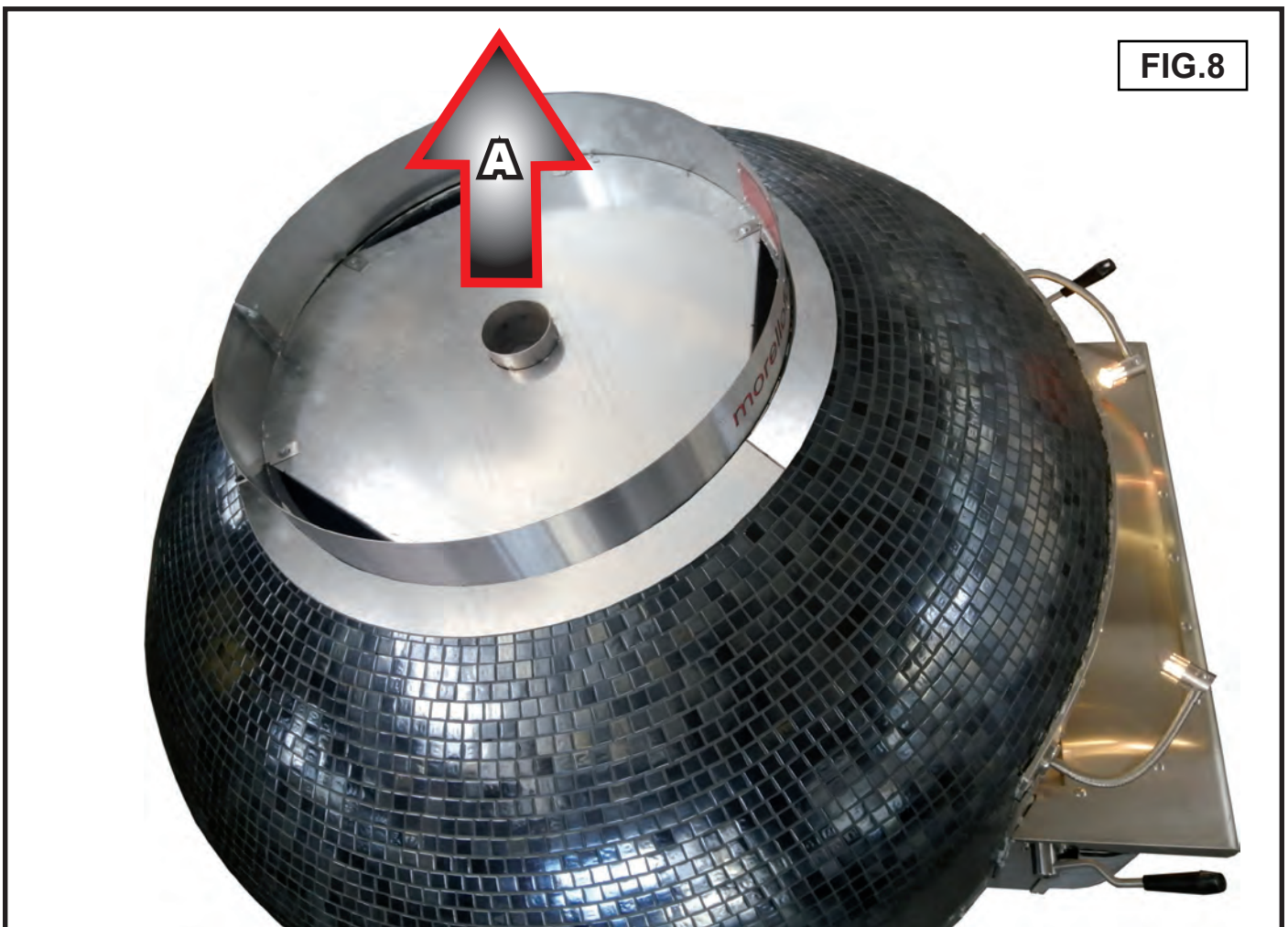


FIG.8

CHAPTER 4 PROGRAMMING AND CONTROL SYSTEM “INTELTOUCH-MF10”

Control panel “Inteltouch MF10” is an advanced digital board control that enables the User to launch and monitor oven main function.

“Inteltouch MF10” system, by acoustic warning, changes in icon light, colors, numeric signs, can display oven status and programs.

User can activate or change functions by easy and direct One-touch, by following instruction listed below.

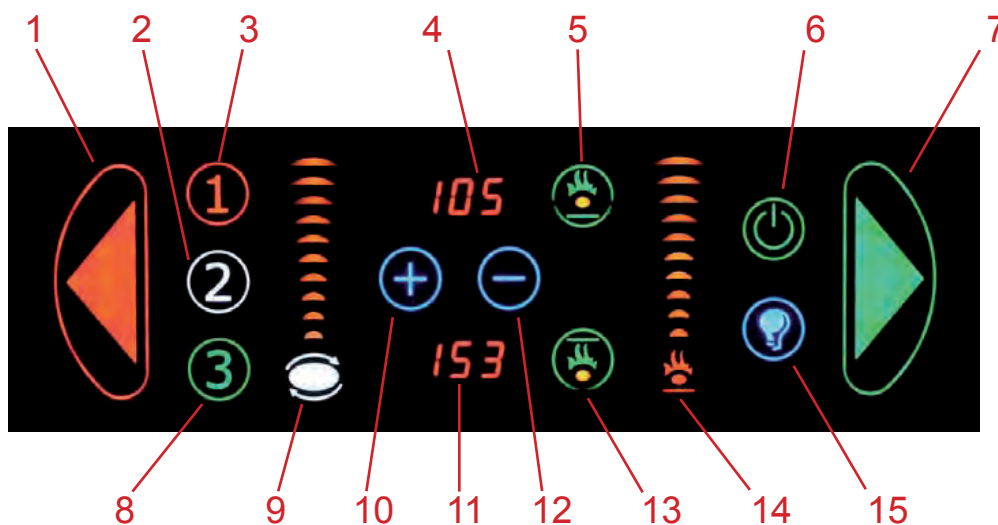
4.1 OVEN START UP

Once plugged, control panel shows stand-by mode:



One touch on icon (6) “ON-OFF” activates touch keyboard, as well as dome and bedplate temperature sensor and relating status for thermostatic control readiness system.

Start button changes its Color from red to green to show activated status (and viceversa when shutting down).



- | | |
|--|--|
| (1) Bedplate clockwise rotation command. | (9) Bedplate rotation speed command |
| (2) Cooking program # 2 command | (10) Increase value command |
| (3) Cooking program # 1 command | (11) Bedplate temperature indicator |
| (4) Dome temperature indicator | (12) Decrease value command |
| (5) Dome burner command | (13) Bedplate burner command |
| (6) ON-OFF Switch | (14) Internal Ventilation adjustment command |
| (7) Bedplate counterclockwise rotation command | (15) Light On-Off switch |
| (8) Cooking program # 3 command | |

4.2 ROTATING BEDPLATE COMMANDS.

ROTATION DIRECTION SELECT

Both buttons **(1) Red arrow** button and **(7) Green Arrow** button change the bedplate's rotation direction. Touching once on red (or green) arrow starts rotation in the same direction of the arrow - arrow icon will blink to confirm rotation is on.

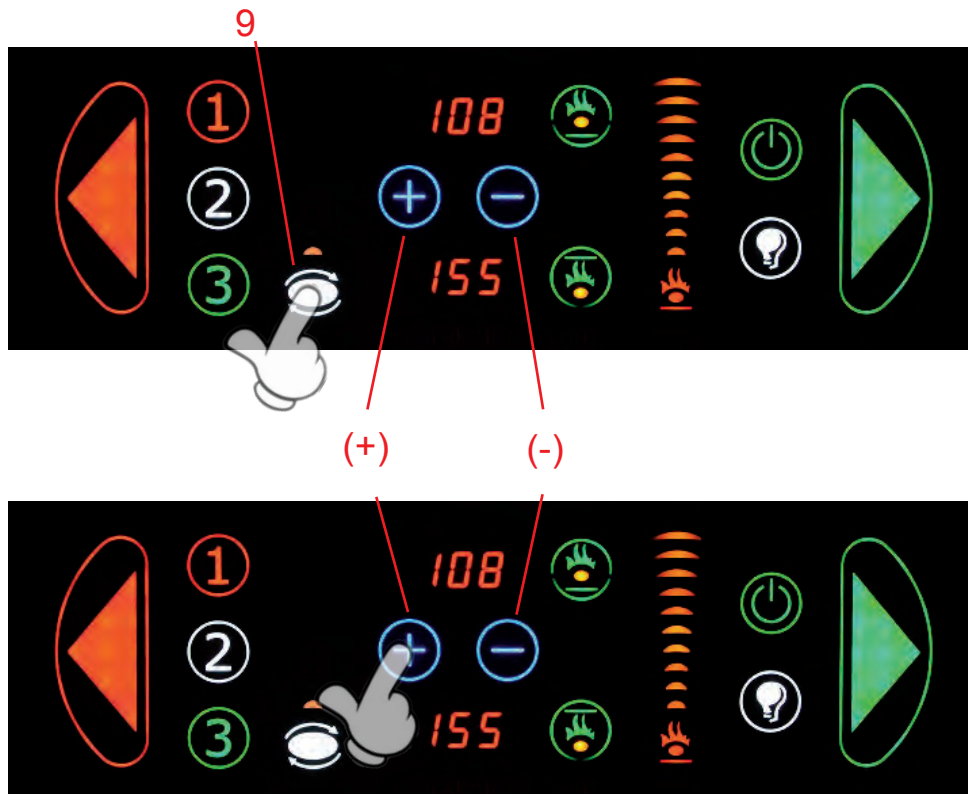
Touching once on opposite arrow changes rotation direction - without stopping the rotation. Touching again on the blinking arrow stops the bedplate from rotating.



ROTATION SPEED

Rotation speed can be set, when bedplate is rotating and (1) Red arrow button or (7) Green Arrow are blinking, by touching once the **(9) Bedplate rotation speed control** icon, and after it starts blinking following a beep sound, you can increase speed by touching **(10) Value increase button** , and decrease speed by touching **(12) Value decrease button**. Yellow marks above the rotation icon (9) will light up, following the increase or decrease of the rotation speed, from minimum to maximum.

After 5 seconds without any further touch, selected speed becomes set, and icon (9) stops blinking.



NOTE: PID - Automatic electric power management system

The FRV range of electric ovens comes equipped with a heating power management software, to limit electric consumption as much as possible, and improve performances consequently.

4.3 HEATERS COMMANDS DESCRIPTION

It is possible to activate independently dome and / or bedplate electrical heaters by means of their specific “enable and switch on/off” icons (5) and (13). Pressing once icon (5) “Dome heater icon” or (13) ”Bedplate heater icon”, will select heater to be enabled and switched on. Actual heater start-and-stop is managed by oven’s own Thermostatic System:

Green Icon - selected heater is enabled.

Red Icon - selected heater is disabled.

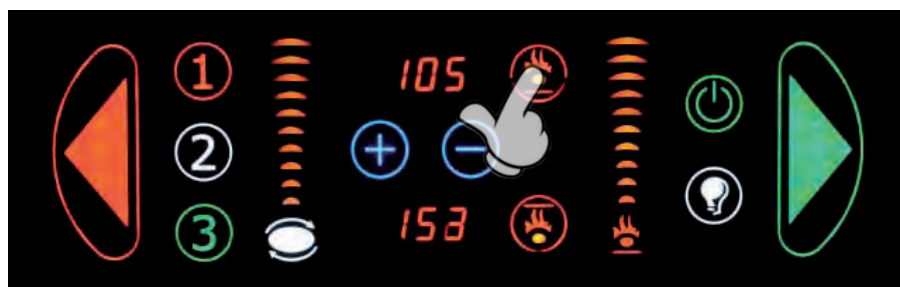
Depending on dome or bedplate set temperatures, each heater - when enabled by oven’s operator - will automatically start and stop to maintain selected temperature value.

A Yellow led marker is located in the middle of each heater’s command icon; it lights up to indicate need for thermostatic Intervention - i.e. when dome or bedplate need to be heated to reach set temperature - and will switch off when set temperature is reached.

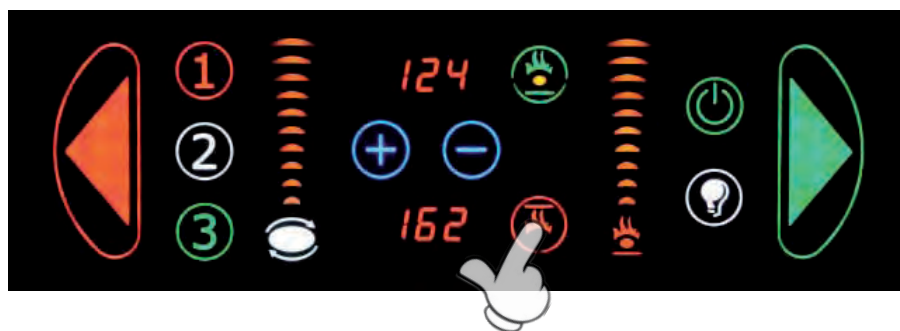
NOTE : Dome or Bedplate Heaters are functioning ONLY AND IF their Yellow Led is lit AND heater icon IS green (enabled).

Here are a few panel sample images, to better explain thermostatic management logic:

let’s suppose Dome temperature is set to 130 °C; and Bedplate temp is set on 160° C



- Dome Heater: Disabled
- Dome Heater led: on
- Dome Heater status: OFF
-
- Bedplate Heater: Disabled
- Bedplate Heater led: on
- Bedplate Heater status: OFF



- Dome Heater: Enabled
- Dome Heater led: on
- Dome Heater status: ON
-
- Bedplate Heater: Disabled
- Bedplate Heater led: off
- Bedplate Heater status: OFF



- Dome Heater: Enabled
- Dome Heater led: on
- Dome Heater status: ON
-
- Bedplate Heater: Disabled
- Bedplate Heater led: off
- Bedplate Heater status: OFF

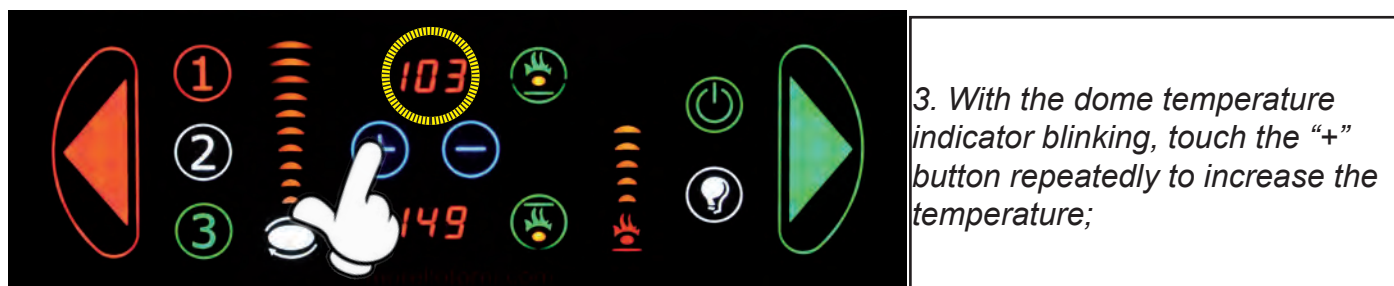
4.4 DOME OR BEDPLATE TEMPERATURE ADJUSTMENT

It is possible to adjust the baking temperature of the dome and / or the bedplate, by touching once on the corresponding dome (4) or bedplate (11) Temperature Indicator; the same indicator will blink, and beep once, to confirm that you have entered the Temperature changing mode. Press the Increase (10) or Decrease (12) keys until the desired temperature is reached.

After 5 seconds from last touch, the Temperature Indicator will stop blinking, showing a steady temperature indication, storing the last temperature set (no longer visible on the indicator, as now it is showing the temperature at this moment).

EXAMPLE :

Let's suppose that user wants to increase the temperature of the dome from 103 ° C to 118 ° C:



4.5 DOME OR BEDPLATE ELECTRIC POWER ADJUSTMENT

It is also possible to adjust the electrical power, independently, used by dome or bedplate heating elements, while in the dome (4) or bedplate (11) temperature modification mode.

To enter the power modification mode:


- Touch the dome (or bedplate) temperature indicator two times, when the temperature is not blinking;
- (If temperature is blinking), touch the temperature indicator only once, while it's blinking.

The Power modification mode entry is confirmed with a single "BEEP", and the blinking "POT" indication, in place of the dome Temperature indication; It is now possible to adjust the power, to the corresponding dome (or bedplate) elements, in percentage from 0%, to 100%.

After 5 seconds from the last touch, the "POT" Indicator will return to normal mode (current temperature indication), storing the last percentage power value set.

EXAMPLE:

Let's suppose the user wants to adjust the power percentage of the dome elements from 80% to 90%:



1. The dome temperature shows 103 °C steady. Touch the temp.indicator TWICE; the touch interface confirms the commands with two "BEEP"s, one for each touch of the temperature indicator.



2. A blinking "POT" message appears, indicating the power modification mode is on. The bedplate temperature indicator reads "080", that is 80% of electrical power.



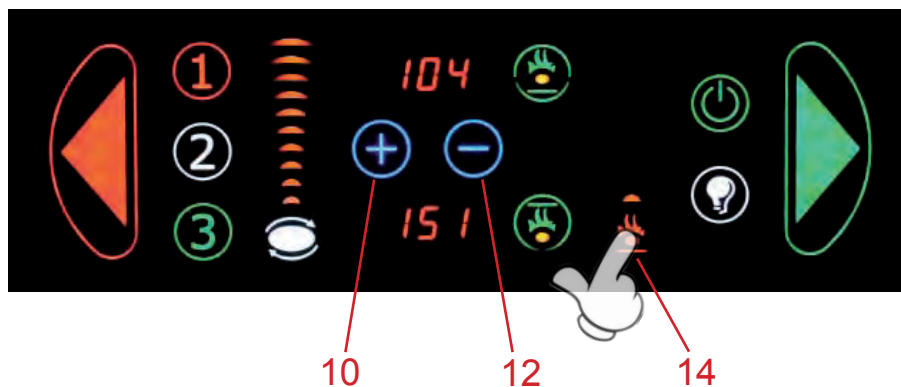
3. It's now possible to adjust the DOME electric power percentage (from 80% to 90%, for example); While "POT" indicator blinks, touch repeatedly the "+" key to increase the % power setting of the dome elements;



2. Once the desired power percentage is displayed, stop touching. After 5 seconds from the last touch, the "POT" indicator stops blinking and shows Temperature digits, storing the new power percentage.

4.6 AIR CIRCULATION INSIDE THE FURNACE ADJUSTMENT

Air circulation inside the furnace is managed by a modulating control system, and can be adjusted continuously from a minimum to a maximum level with one touch on the Internal Ventilation adjustment (14) icon, confirmed by its blinking that indicates setting mode has been entered; Then, by pressing the “+” (10) and “-” (12) keys, fan speed can be increased or decreased as preferred. Air Ventilation level is indicated by an orange colored series of marks on a scale, increasing with every touch of icon (10) from minimum (icon #14 top image) to maximum (icon #14 bottom image). After 5 seconds from last touch command, Scale and icon stop blinking, Air Circulation parameter is stored, and ventilation is maintained.



4.7 OVEN LAMP

Ovens' furnace Lighting System (optional) is controlled via Light On-Off switch (15) icon. One touch on it will switch on the light, and icon color will change from blue to white.



4.8 COOKING PROGRAMS

Rotating bedplate equipped ovens have proven being an excellent choice, amongst professionals, to shorten baking time, and production consequently.

Thanks to oven's own characteristics, the higher the bedplate rotation speed, the better the food-oven thermal exchange and the more homogeneous temperatures will be, resulting in quicker and more uniform baking. Therefore, it is better to bake at higher bedplate speeds than those used for product batching-in and churning-out.

To reduce oven user workload, three Cooking program Fast Selection icons have been inserted on the touch panel, identified by icons "1", "2" and "3" (in panel description image, respectively #3, #2 and #8). Each icon recalls a different working program, customized on user needs and based on 3 parameters:

- **U -1 : Baking phase rotation speed**
- **t -1 : time Gap between product batch-in and churn-out (Cooking Time)**
- **A -1 : Program End Warning Beeps**

4.9 PROGRAMMING EXAMPLE.

Let's suppose we want to program our FRV using storing position "1". Our program parameters shall be:

- Average baking time for a medium topped pizza : 3 mins.
- Batch in time : about 30 sec.
- Churn out time : about 30 sec.
- Time Gap between above operations : about 2 mins.
- Program End Warning Beeps : 5

To Store above parameters in Program #1 (icon "1"):

- Press more than 5 sec. icon "1", entering programming mode, **Program Step #1 - Bedplate Speed.**

Icon will start blinking, while Dome temperature indicator (4) changes to "U-1".

User has entered bedplate speed programming step. Bedplate temperature indicator (11) shows set speed value, ranging from 0 to 20, which user can modify by pressing "+" (10) or "-" (12) icons (let's suppose a set value of 20 for this example's sake).



**PLEASE NOTE:
EVERY COOKING PROGRAM CAN BE STOPPED AND CANCELED
AT ANY TIME BY PRESSING SAME PROGRAM RECALL ICON**

- Pressing a second time icon “1” within 5 seconds from last touch, User enters **Program Step #2 - Time Gap between batch-in and churn-out (Cooking Time).** Dome temp monitor will blink “t-1”, user can adjust Time Gap parameter by same “+” or “-” icons, while Bedplate Temperature Indicator (11) keeps blinking and showing parameter value in seconds (now supposing a programmed cooking time of 120 sec for this example).



- A third press of same icon, within 5 seconds from last touch, and user enters final **Program Step #3 - Program End Warning Beeps.** Dome Temp indicator (4) blinks “A-1”, while Bedplate temperature Indicator (11) shows set number of beeps. User can now choose between 0 and 10 beeps, by pressing “+” (10) or “-” (12) icons. (again, for the sake of this example, let’s suppose setting 5 beeps at the program’s end).



After waiting about 5 seconds, the system saves the program and makes it available to user at any short touch of icon “1”.

User can record other two baking programs and rotation speeds onto buttons (2) and (3) which can be also settled selecting max time (999) for recorded rotation speeds to recall by correspondent icon.

4.10 COOKING PROGRAM USE EXAMPLE

Before starting a program, user will need to set a low bedplate speed, to be able to batch-in and churn-out easily. Then, user batches in all desired product to be baked. Once done, user touches icon “1”, recalling program (above) stored in memory position #1. Bedplate will pick up speed (program started) until reaching programmed value, that will be maintained for the programmed cooking time (in our example 120 sec). After this time, Oven Panel will beep 5 times, alerting user first product batch is cooked, and will repeat cooking program again after 30 seconds, during which user can churn out first batch and put in a second one.

User can STOP AND CANCEL program at any time by pressing same Program Icon (“1” in this case).

**APPENDIX A .
FRV 100
Maintenance task**

CARRY OUT, AT INDICATED REGULAR INTERVALS, FOLLOWING MAINTENANCE TASKS :

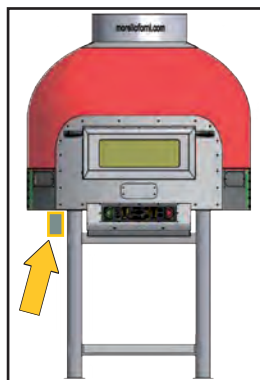
**> EMPTY THE EXTERNAL METAL DIRT CYLINDER -
EVERY END OF DAILY ACTIVITY**

WARNING ! THE CYLINDER CAN BE HOT, IF INCORRECTLY INSTALLED !

The bedplate rotation system allows, by means of brushes located under it, collecting all dirt and debris, falling into the gap between the edge of the rotating bedplate and the fixed part of the chamber's floor, into an external metal container, fit under the oven's body, left side - as seen in following photos.

Empty the cylindrical container at the end of the daily service:

2. Locate the metal container under the oven's body, left side :



2. Slide out the cylinder as shown: please note the open rim of the cylinder, which allows to slide it back in its position, once emptied.



3. Once taken out, empty the container, then slide it back in.



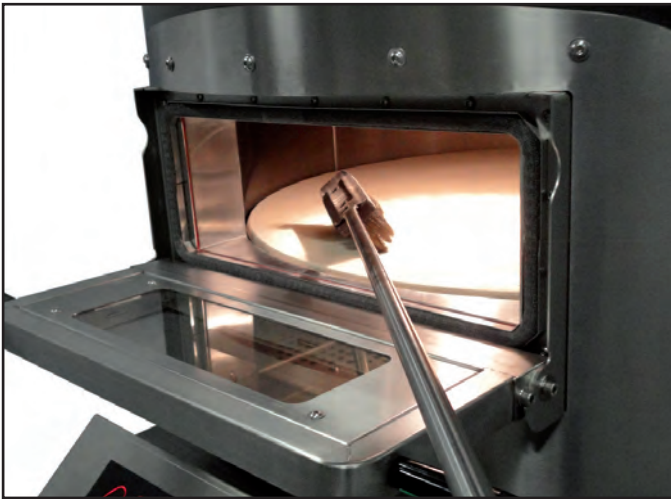
**WARNING!
GRAB THE CONTAINER ONLY WITH GLOVES OR THERMAL PROTECTION !
THE STAINLESS STEEL CYLINDER CAN BE HOT. MAKE SURE TO SLIDE IT IN
FROM ITS OPEN RIM, WHEN PUTTING IT BACK IN PLACE.**

FRV 100 Maintenance task

> COOKING TOP BRUSHING EVERY 4-5 PIZZA BATCHES - ACCORDING TO THE QUANTITY OF FLOUR USED



1. Engage bedplate's rotation, by touching either the green or red arrow icons on the touch screen interface :



2. Put the brass brush shovel in the bedplate's center, as shown; then pull the brush outward, to allow all dirt and debris falling into the groove outside of the bedplate's rim.
This allows all dirt to fall under the bedplate, from where it is collected into the external container.



3. Gently slide out the external container, as instructed at page 1, and empty it.

WARNING !
THE CONTAINER CAN BE HOT -

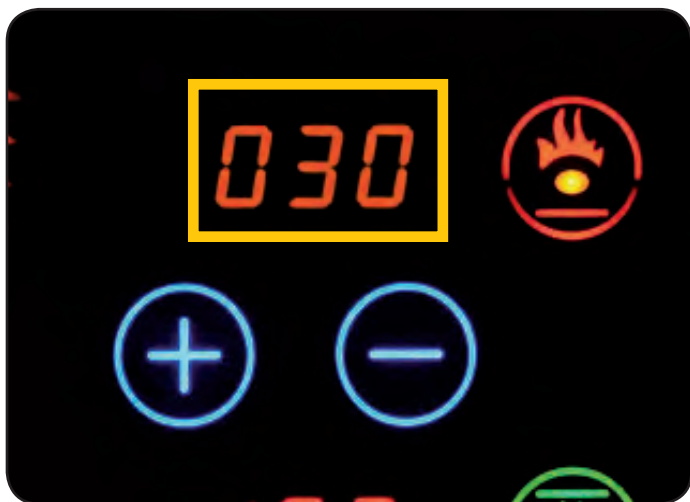
FRV 100 Maintenance task



> **TOUCH SCREEN CLEANING**

The control screen is equipped with the temporary touch detection block (tactile command), which, when activated by the user, disables the activation or deactivation of the oven functions for 30 seconds.

To engage the TIMED TOUCH LOCK function of the screen controls, touch and keep pressing the dome temperature indicator for 20 seconds.



To confirm the activation of the screen lock, the screen will "BEEP" once, and will show a countdown of 30 seconds, during which it will be possible to clean the screen, without any effect to the control of the oven.



To clean the screen, wipe it with a soft cloth, slightly damp, as shown.

After 30 seconds, at the end of the countdown, the touch screen will become effective again, and touching any icon or digit will have the usual control effect.

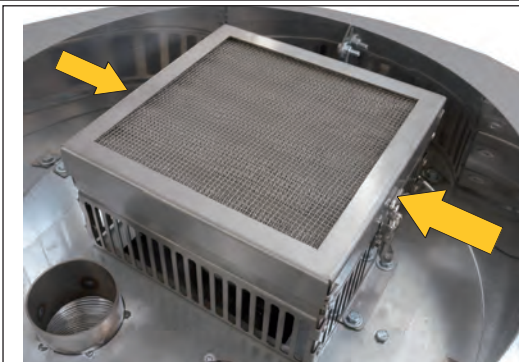
WARNING !
NEVER CLEAN THE TOUCH SCREEN OR THE STAINLESS STEEL SHELF WITH A SOAKED OR EXCESSIVELY DAMP CLOTH.
TOO MUCH WATER CAN DAMAGE THE SCREEN

FRV 100 Maintenance task

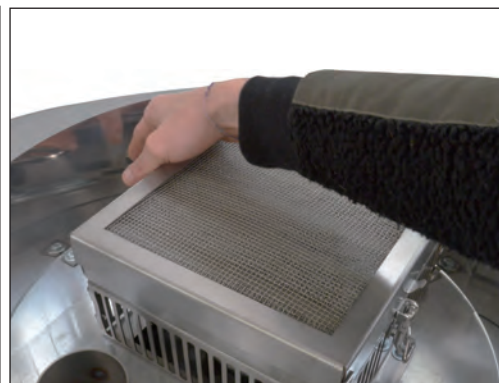
> MOTORFAN AIR INTAKE FILTER CLEANING **EVERY 30 DAYS**

The oven is equipped with a manifold that breathes air in from the environment, to cool down the motorfan - the inlet pipe is protected by a square filter, which prevents dirt from entering the fan, and clogging it. It is therefore necessary to clean the filter at least once a month - the cleaner the filter, the better the motor fan will cool.

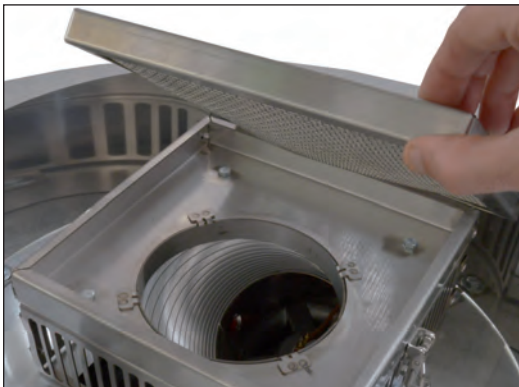
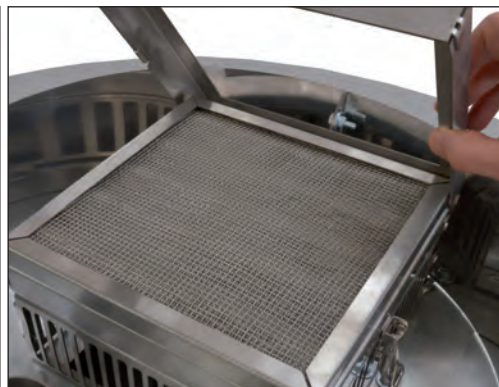
1. Access the top part of the oven to see the inlet square filter of the motorfan, held in position by a frame and its two hinges:



2. Release both hinges, as shown :



3. Lift the frame, then take out the filter for cleaning.



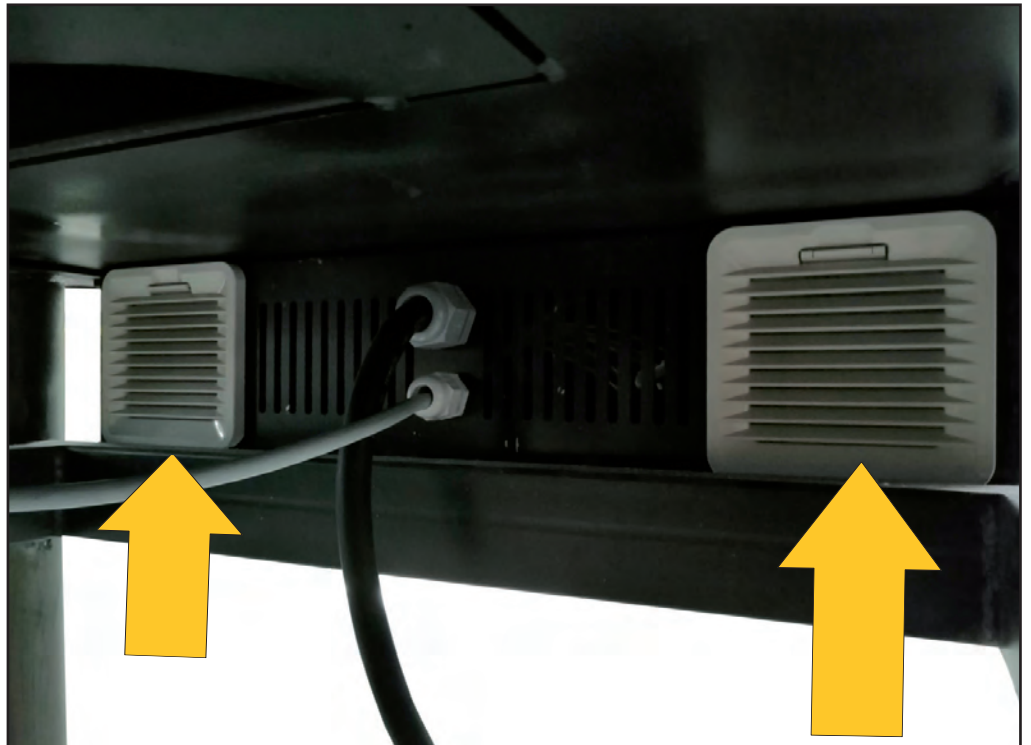
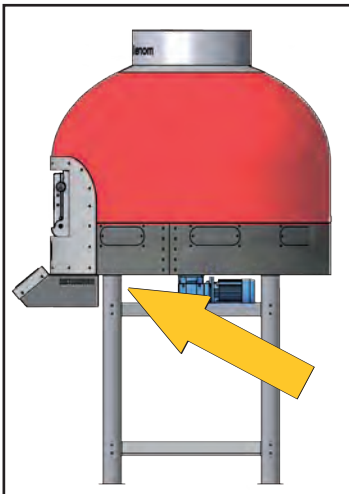
**REMOVE AND CLEAN THE METAL FILTER, WITH COMPRESSED AIR OR LIQUID.
IN THE LATTER CASE, MAKE SURE THE FILTER IS COMPLETELY DRY
BEFORE MOUNTING IT BACK.**

FRV 100 Maintenance task

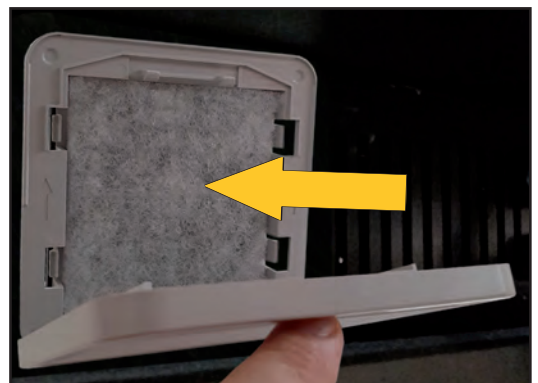
ELECTRONICS'S SHELF COOLING FAN AIR FILTER CLEANING **EVERY 2 MONTHS**

Behind the touch screen shelf you will find two cooling fans, providing cooling airflow over electronic components; each fan has its own filter, held in place by a white frame; to maintain the correct air flow inside the shelf, filters must be cleaned at least every 60 days

1. On the back of the electronic components' shelf, there are two square white frames, being the rear part of two fans as shown in the photo on the right:



2. To access the left fan filter, push the lid on the white frame as shown, then open it by tilting downwards - gently remove the filter, shown by the yellow arrow, and clean it as gently as possible. Put it back and close the frame.



3. In the same way, push the lid of the right fan frame, as shown, then open it by tilting downwards - gently remove the filter, indicated by the yellow arrow, and clean it as gently as possible. Put it back and close the frame.

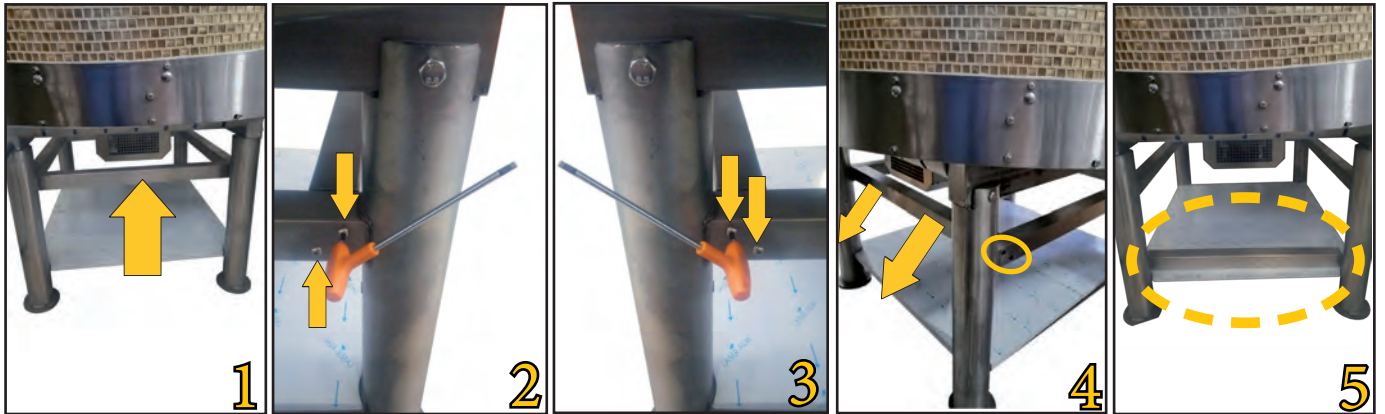


FRV 125 Maintenance task

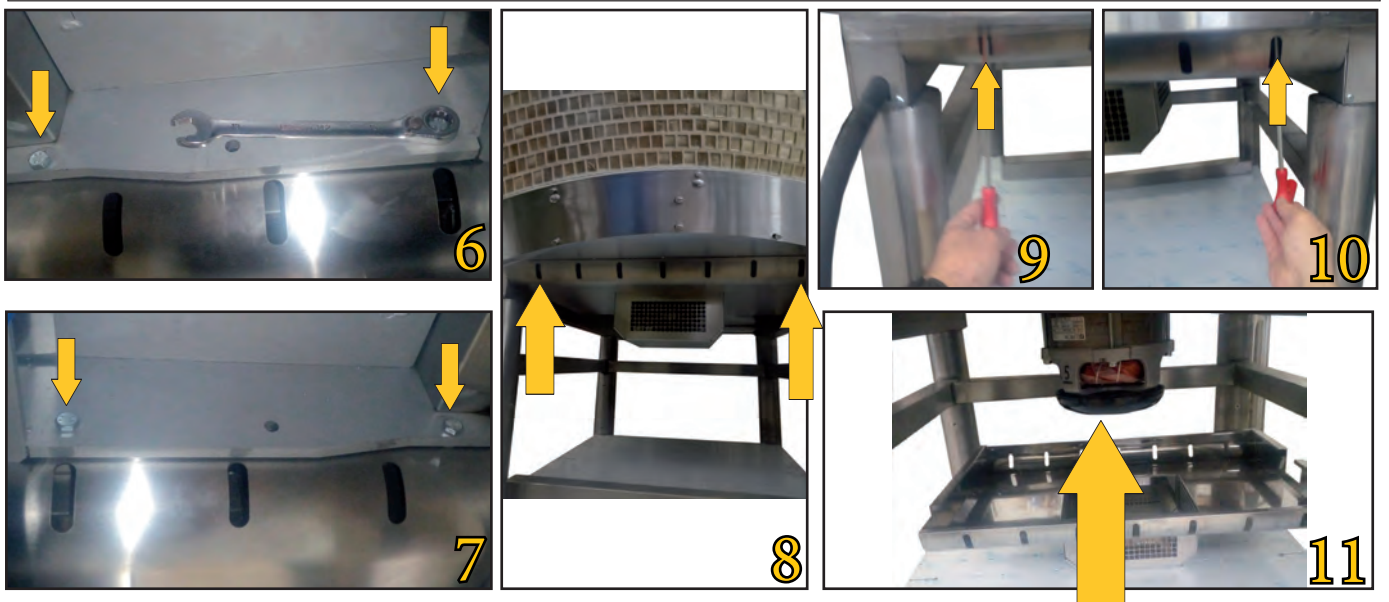
TO BE CARRIED OUT EVERY SIX MONTHS :

> CLEANING THE FAN COMPARTMENT

Remove the protection panel under the oven, according to below listed instructions, to reach the motor fan and clean it from any dirt:



Remove the bar, indicated by the arrow (photo 1), in the rear part of the oven stand, by unscrewing the four M6 Allen screws, two on each side (photo 2,3,4,5). Moving under the oven, then unscrew the 4 bolts size 13 indicated by arrows, two on the left and two on the right of the blue motor (photos 6, 7); then remove the two Allen screws (photo 8,9,10) found on the front of the panel, inside the indicated slots, in order to be able to lower the protection panel of the fan motor.



**ONCE PANEL HAS BEEN REMOVED, CLEAN THE DUST OR DIRT OVER THE MOTOR BODY.
ONCE DONE, RE-ASSEMBLE THE PROTECTION PANEL,
BY CARRYING OUT THE ABOVE STEPS FROM 11 TO 1**

APPENDIX B. PROGRAMMED STARTUP INSTRUCTIONS

Following instructions describe how to program the delayed startup of your FRV oven.



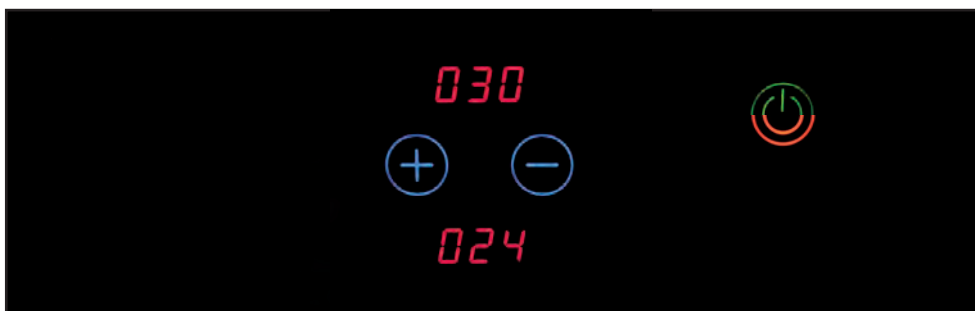
1. Before powering off - set the power on temperatures / power level

Before switching off your FRV, set the desired power on dome and bedplate temperatures (as per instructions pages 23, 24), THEN LEAVE ON BOTH HEATERS' COMMANDS



2. Press and keep pressing the power icon (6)

While switching your oven off, keep pressing on the power on icon, to engage delayed start - the icon (6) will keep flashing in green and red color, signalling the engaged delayed mode

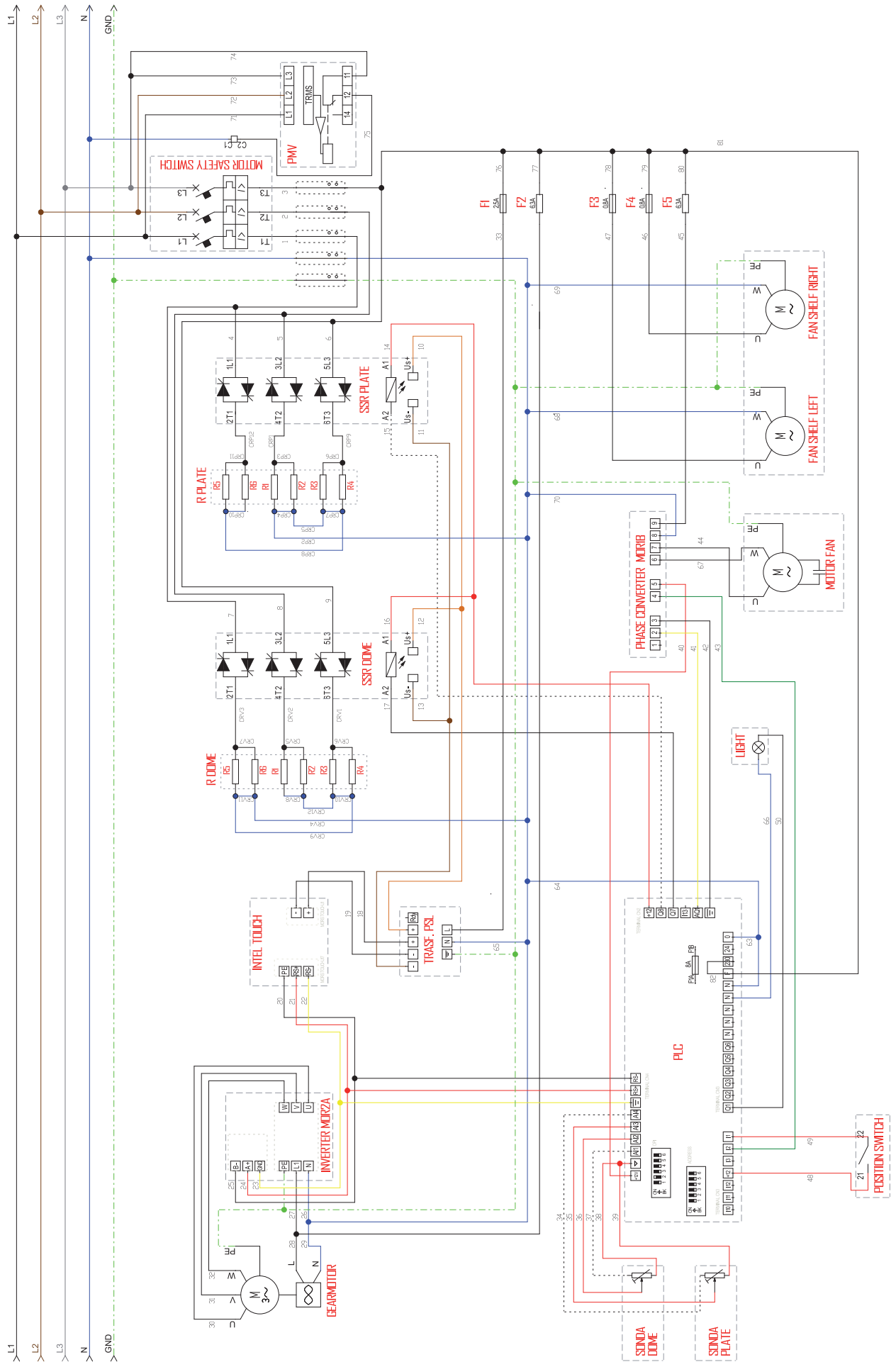


3. Set the desired number of hours to the power up

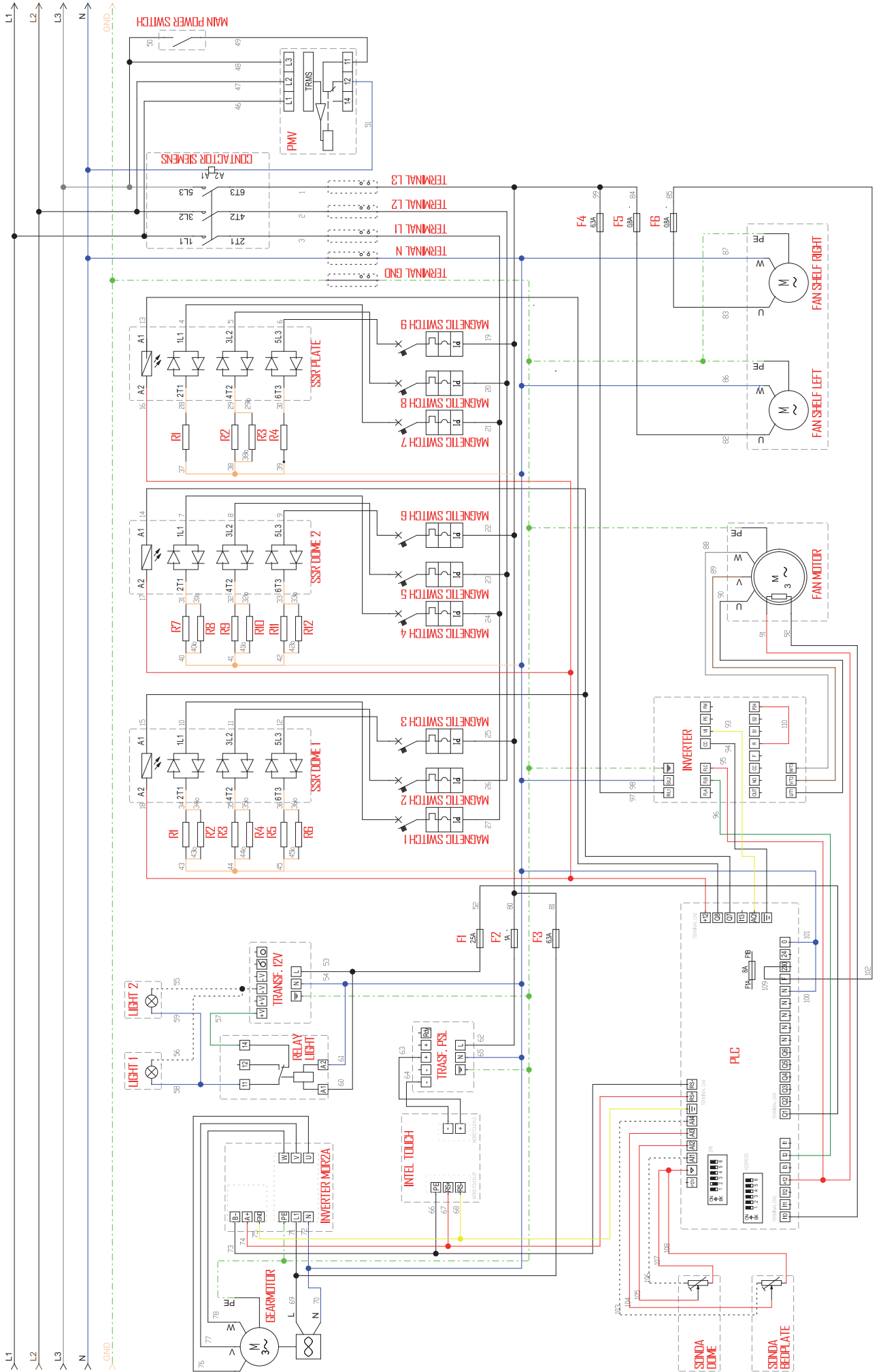
Dome temperature digits will change to indicate the number of hours to the power up - you can change the indication, with (10) "+" and (12) "-" icons. After five seconds from the last touch, the FRV control system starts the countdown to the power-on. Bedplate temperature digits show minutes remaining to the power up.

WARNING : DO NOT SWITCH OVEN OFF AFTER SETTING PROGRAMMED STARTUP !

FRV 100 WIRING DIAGRAM

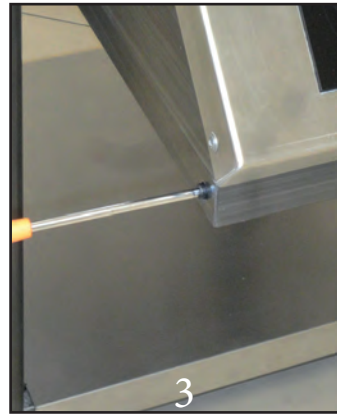
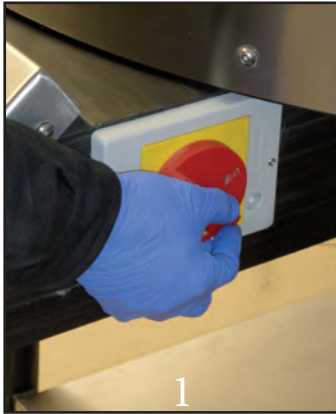


FRV 125 WIRING DIAGRAM





Cambio fasi di alimentazione - Serie FRV
Power phase lead switch - FRV Range



Se non udite un segnale acustico di conferma dell'accensione, ed il pannello touch non si accende (fig.2), seguite la procedura qui illustrata :

1. Svitare le due viti di ritenuta pannello elettronica (fig.3,4)
2. Accompagnate l'apertura del pannello con i componenti, quindi individuate il relè di sicurezza (fig.5), e controllate se il led verde è acceso fisso, o lampeggia (fig.6);
3. Se lampeggia, è necessario cambiare la posizione dei conduttori di alimentazione all'interno della spina trifase del cavo d'alimentazione, come descritto qui di seguito:
4. Aprire la spina trifase premendo leggermente con un cacciavite nel foro indicato (fig.7), quindi svitare la spina per estrarla dal coperchio rosso (fig.8)
5. Svitare la vite piatta di ritenuta del conduttore di fase, per liberarlo (fig.10,11) e ripetere con il conduttore a fianco (fig.11,12)

- SEGUE A PAG.2 -

If no beep is heard upon switching your FRV on, nor touch screen lights up, execute following instructions:

1. Unscrew two opposing hex bolts, to reveal electronics panel (pic.3, 4), gently open it up.
2. Take a look at green led on voltmeter relay (pic.5,6), check if it's steady on or blinking (pic.6);
3. If blinking, you must switch power phase wires' positions inside the socket, as follows :
4. Get the power socket, lightly press with a screwdriver (fig.7), then turn gently plug to reveal power wires (fig.8);
5. Unscrew flat holding screw to free wire (fig.10,11), then repeat for the close other (fig.12, 13);

- FOLLOWS NEXT PAGE -



Cambio fasi di alimentazione - Serie FRV
Power phase lead switch - FRV Range



13



14



15



16



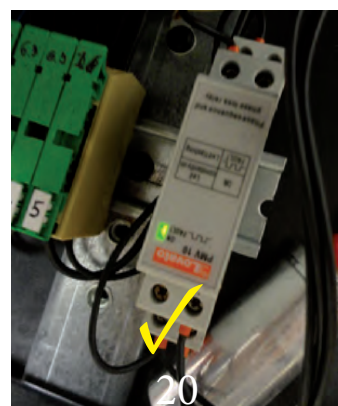
17



18



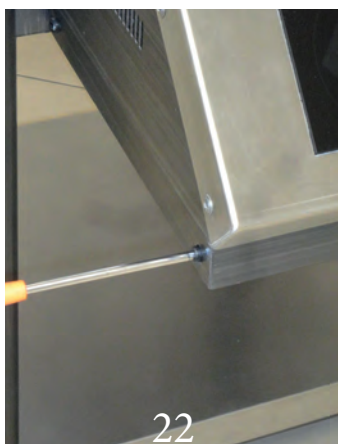
19



20



21



22



23



24

6. Ricollegare il secondo conduttore estratto al posto del primo (fig. 13, 14) , e viceversa (fig 15,16);

7. Rimontate la spina di alimentazione (fig.17,18);

8. Ricollegate la spina alla presa trifase, ed abilitate il passaggio di corrente tramite interruttore di sicurezza della presa stessa.

9. Ruotate l'interruttore di accensione del il forno (fig.1) :
- Se udite un segnale acustico, procedete al passo 11 ;
- Se non udite alcun segnale, procedete al passo 10.

10. Se il led verde del relè lampeggia ancora (fig.19), ripetere i passi dal 5 al 9, scambiando la posizione di un' altra coppia di conduttori delle fasi di alimentazione, e riportate ad accendere, fino ad udire il segnale acustico che conferma la corretta alimentazione dell'elettronica.

11. Se led verde è acceso fisso (fig.20), le fasi sono posizionate correttamente; richiudete il pannello dell'elettronica, tramite le sue due viti di bloccaggio (fig.21,22), quindi ruotate l'interruttore(fig. 23) per accendere il forno, come da normale procedura.

6. Reconnect wires switching their positions, as shown (pic.13,14,15,16)

7. Assemble back the power plug (pic.17,18)

8. Plug into power socket;

9. Switch on oven by rotating gently red switch (pic.23):
- If beep is heard >> go to step 11;
- If no beep is heard >>> step 10

10. Check voltmeter relay's green LED; if still blinking (pic.19), repeat steps 5 to 9, until you hear a beep when switching on, and green LED is steady on >> step 11.

11. If voltmeter relay's green LED is steady on (pic.20), you can close panel (pic.21,22) and normally switch oven on.