OPEN BURNERS / ELECTRIC OVEN

Description	PRO 800 SERIES	PRO 900 SERIES
M4FN	V01580	V01456

INSTALLATION MANUAL

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MANUAL: EN - 800-900 M4FN
Ind. A – Created on: 09/09/2010
Updated on:

Open burners / Electric oven

SUMMARY

Open burners / Electric oven

1. INSTALLATION

1.1. General points

Installation must be undertaken in compliance with the following instructions and with local codes and bylaws. Ensure you have a suitable and sufficient risk assessment in place.

The user's manual must be given to the user after installation.

1.2. Handling

It is imperative to leave the appliance on its wooden pallet for handling on site until the final installation.

Unpack and check the appliance for damage upon receipt.

In case of damage, mark delivery note accordingly and immediately (within 48 hours) notify the carrier by registered mail with acknowledgement of receipt. Notify your installer.

1.3. Installation

SEE technical sheets.

The appliance must be installed under a suitable mechanical extraction hood, close to the electric supply.

DO NOT INSTALL THIS APPLIANCE EQUIPPED WITH OPEN BURNERS CLOSE TO A FRYER, OR INSERT A NEUTRAL WORK TOP BETWEEN THESE 2 APPLIANCES (RISK OF FIRE IN CASE OF OIL SPLASHES).

If the apparatus is to be installed against a wall or partition, near a piece of furniture or decorative borders, it is recommended that these are made of fireproof material.
If this is not the case, they must be protected by an approved fireproof, insulating material.

All local fire regulations must be adhered to.

If in doubt of fireproof construction of adjacent walls, distance to combustible material shall be no less than 10 cm.

- **Remove all plastic protection.**

Install the flue on top of the appliance and ensure the flue is free of obstruction.

- **Fixed appliance:**
  - Install the feet (they are delivered in a box kept inside the appliance).
  - Adjust height to level the unit to a horizontal working plan of 900 mm.

- **Mobile appliance:**
  - Install the appliance close to the gas mains.

IMPORTANT: The castors with brakes must be locked when the appliance is being connected and during cooking times. Fix all independent half module against the wall.

1.4. Fixing the flue

Unscrew the screws to lower the fixing tabs,
Help yourself with an appropriate tool to push the fixing tabs,
Tighten the screws of the flue cover.

1.5. Gas connections

Installation must be undertaken in compliance with the following instructions and with local codes and bylaws. Ensure you have a suitable and sufficient risk assessment in place.

This appliance is of A-type and shall not be connected to a flue gas pipe.
It requires a fresh air input of 2m3/h per 1 kW.
SEE “Adjusting charts” § 2.

WARNING:

Materials, assembly and welding tools must be in compliance with the standard EN 45 204.

- **Fixed appliance:**

Connect the appliance to the gas mains using 1/2“ NPT pipe and connections. Install a suitable shutoff valve (or valve + pressure regulator) in the supply line, allowing the unit to be isolated from the rest of the cooking range.

- **Mobile appliance:**

Connect a ½“ armoured flexible gas hose equipped with a quick disconnect fitting including automatic gas shut off to the gas connection located in the rear of the appliance. Remember to use the security chain.

- **Before connecting the appliance, make sure that:**

The gas supply pipe is of the correct size for minimum pressure drop as a function of length, elbows, and total unit capacity.

Ensure that the appliance is set for the type of gas supplied (nature/pressure); see data plate on the appliance and label on the gas connection.

1.6. Power connection

For the oven and options (electric ignition, sequential regulation).

Installation must be undertaken in compliance with the following instructions and with local codes and bylaws. Ensure you have a suitable and sufficient risk assessment in place.

WARNING: Use a standardized cable (245 IEC 57 or 245 IEC 66) or other approved cable with the same characteristics.

- **Fixed appliance:**
  The appliance being constantly connected to a fixed electric source, this source will have to be fitted with a suitable leakage currents protective device.

- **Mobile appliance:**
  The appliance being connected to a cable fitted with an electrical plug, the socket should be accessible at all times.

- **Before connection :**
  - Check that the supply voltage is compatible with the voltage of the appliance (see data plate)
  - Check that the electric network is equipped with all-pole circuit breakers having a cross section of 3.5 mm, and complies with the European Standard EN 60335-1 dated of May 2003.

Open burners / Electric oven

The appliance is factory-wired in THREE-PHASE 400 V+E (3~400 V+E).

2. CONVERSION TO OTHER TYPES OF GAS

In case there is a different type of gas on site:

2.1. Changing the injectors

See charts below according to the type of burners:

- Choose the correct diameter according to the nature of the gas,
- Get the right air adjustment for the air ring (“d”).

<u>Change of gas upon installation:</u>

After having replaced the injectors, ensure of the watertightness of the connection between the injector and its support.

2.1.1. Open burner ø110 mm

Air	Gas type & operating pressure	Mark engraved on the injector	Air adjustment d (mm)[2]	Nominal calorific output kW[1]
1	G 20: Pn = 20 mbar	230	3	10
2	G 25: Pn = 20 mbar			
3	G 25: Pn = 25 mbar			
4	G 30: Pn = 29 mbar	135	Max.	
5	G 30: Pn = 50 mbar			
6	G 31: Pn = 37 mbar			
7	G 31: Pn = 50 mbar			

2.1.2. Open burner ø 80 mm

Air	Gas type & operating pressure	Mark engraved on the injector	Air adjustment d (mm)[2]	Nominal calorific output kW[1]
1	G 20: Pn = 20 mbar	190	4	6.5
2	G 25: Pn = 20 mbar			
3	G 25: Pn = 25 mbar			
4	G 30: Pn = 29 mbar	110	Max.	
5	G 30: Pn = 50 mbar			
6	G 31: Pn = 37 mbar			
7	G 31: Pn = 50 mbar			

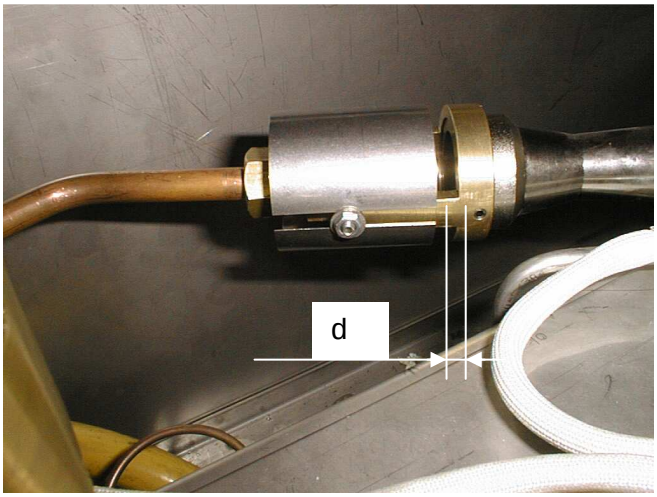
- [1] Measured power over lower calorific power of the gas (HI) for burner.
- [2] Adjustment of measured primary air according to fig. 1.

2.1.3. Pilot light

Air	Gas type & operating pressure	Mark engraved on the injector	Air adjustment
1	G20: Pn = 20 mbar	35	N/A
2	G 25: Pn = 20 mbar		
3	G 25: Pn = 25 mbar		
4	G 30: Pn = 29 mbar	20	N/A
5	G 30: Pn = 50 mbar		
6	G 31: Pn = 37 mbar		
7	G 31: Pn = 50 mbar		

Open burners / Electric oven

2.2. Adjusting the air



Remove the cast-iron pan supports,
Remove the burners caps,
Remove the spillage tray,
You can reach the air ring and injectors.

Unlock the air ring (nut/ring) and push back the air ring to reach the injector.

Change the injector(s) with a 12-mm ring spanner.

Adjust distance “d”, and lock.
Use a 7-mm open-end spanner.

2.3. Checks before connecting electrically the apparatus

Before connecting the apparatus, check that:

- The supply voltage is compatible with the voltage of the apparatus,
- The cable is fixed properly,
- The connections are tight enough,
- The apparatus is well earth wired,
- The section of the cable is of correct size according to the voltage of the apparatus,
- All electric parts are well isolated,
- The fuses are of correct size.

2.3.1. Adjustments

Normally, there is no adjustment to do.

2.3.2. Starting up

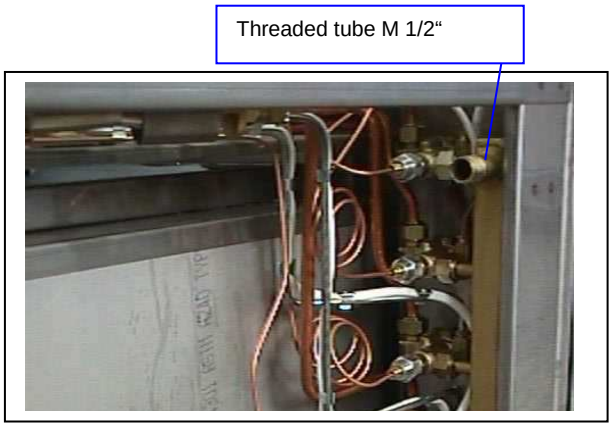
Please see the user’s manual, section “Starting up”

Never heat empty pans.
The oven must be free of all objects.
All the above operations are carried out when the appliance is switched off and cold.

Open burners / Electric oven

- **Connections:**

GAS:



Remove the control knobs,
(screws M 4 mm)

Remove the control panel,
(clipped in its lower part).

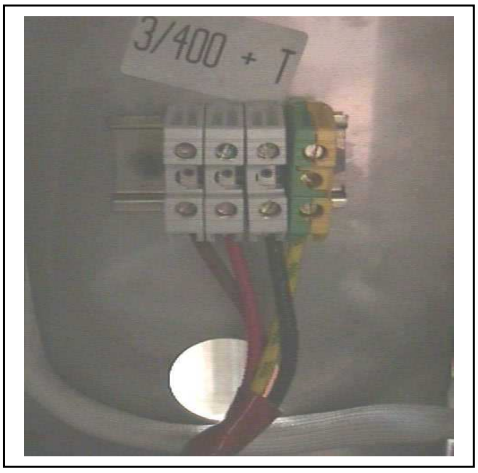
Remove the side panel.

Pull the bottom of the panel up and out.

Connect the appliance to the gas mains using a ½“ M tube.

ELECTRICITY:

- Unscrew the side control panel to remove it,
- Thread connection cable into the chassis, then into the connection box through the rear hole,
- Connect cable to the terminals, and follow the information written on the terminal box.
- Fix the cable along the side of the chassis.



- **Before reassembling the parts, check the electrical equipment is properly insulated (cable).**

The appliance must be earth wired.
It is dangerous to connect the appliance unless it is earthed.
We cannot be held responsible for accidents due to non existent or incorrect earth link connection.

Open burners / Electric oven

WIRING DIAGRAMS:

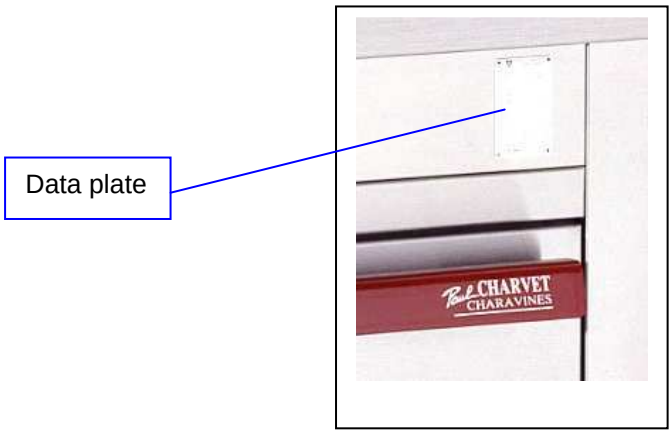
Electric appliance	Voltage	Wiring diagrams #
Electric ignition	1 ~ 230 V + E	SE0001 / 00
Electric oven	3 ~ 400 V + E	SE0011 / 00

3. SERVICING

Any technical action on an appliance must be undertaken by a qualified technician.
The appliance will have to be isolated from the electrical supply for the duration of the work.
Unplug the appliance.

When the appliance is ready for use, ensure the users know how to use it properly (See the “User’s Manual”).
Formerly give the person in charge of the kitchen all documentation needed.
Each appliance has its own data plate.

Transfer all the information written on the data plate to the part of the user's instructions booklet reserved for it.

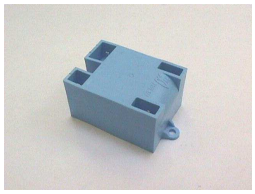
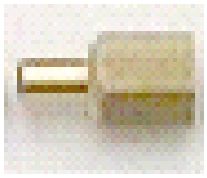
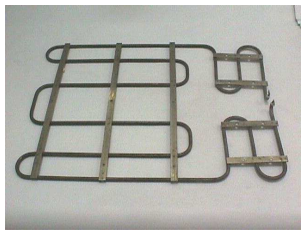


This will ease the communication between you and your client for better service.

WARRANTY:
The warranty is mentioned in our conditions of sale.
This warranty does not cover damage due to faulty installation, misuse or inadequate maintenance.

Open burners / Electric oven

4. BASIC SPARE PARTS LIST

Description	Code	Photograph	Description	Code	Photograph
Electrode(s) Open burner(s)	07010A		Ignition transformer	02161A	
High-temperature connection cable for electrode and transformer	05317A		Injectors for pilot light ϕ 0.20 ϕ 0.35	06988A 06989A	
Thermocouple Open burners Solid top plate	00291A		Thermocouple coil (gas tap)	00325A	
Heating elements 2500 W - 400 V	02063A		Thermostat 300℃	01990A	

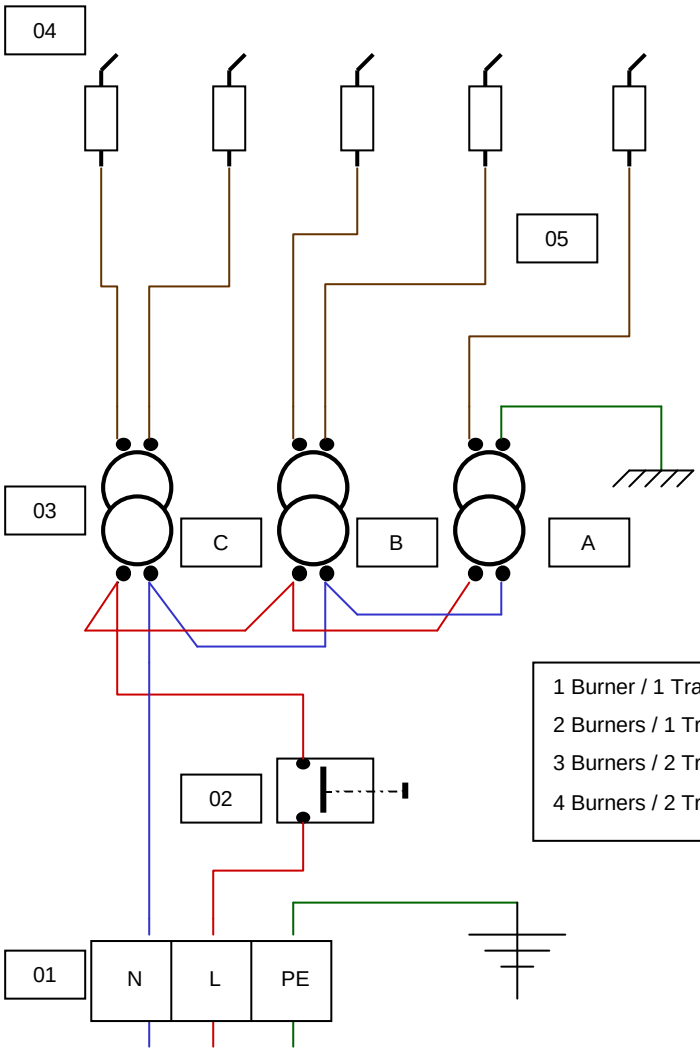
5. SPARE PARTS

Description	Code	Photograph	Description	Code	Photograph
Gas injectors for open burners ø 110 mm Ø 2.30 natural Ø 1.35 Propane	06984A 07146A		Oven switch	00831A	
Gas injector for open burners ø 80 mm Ø 1.90 natural Ø 1.10 Propane	06985A 07145A		Red indicator 400 V	07136A 07137A	

Open burners / Electric oven

6. WIRING DIAGRAMS

ELECTRIC IGNITION: 1-4 BURNERS



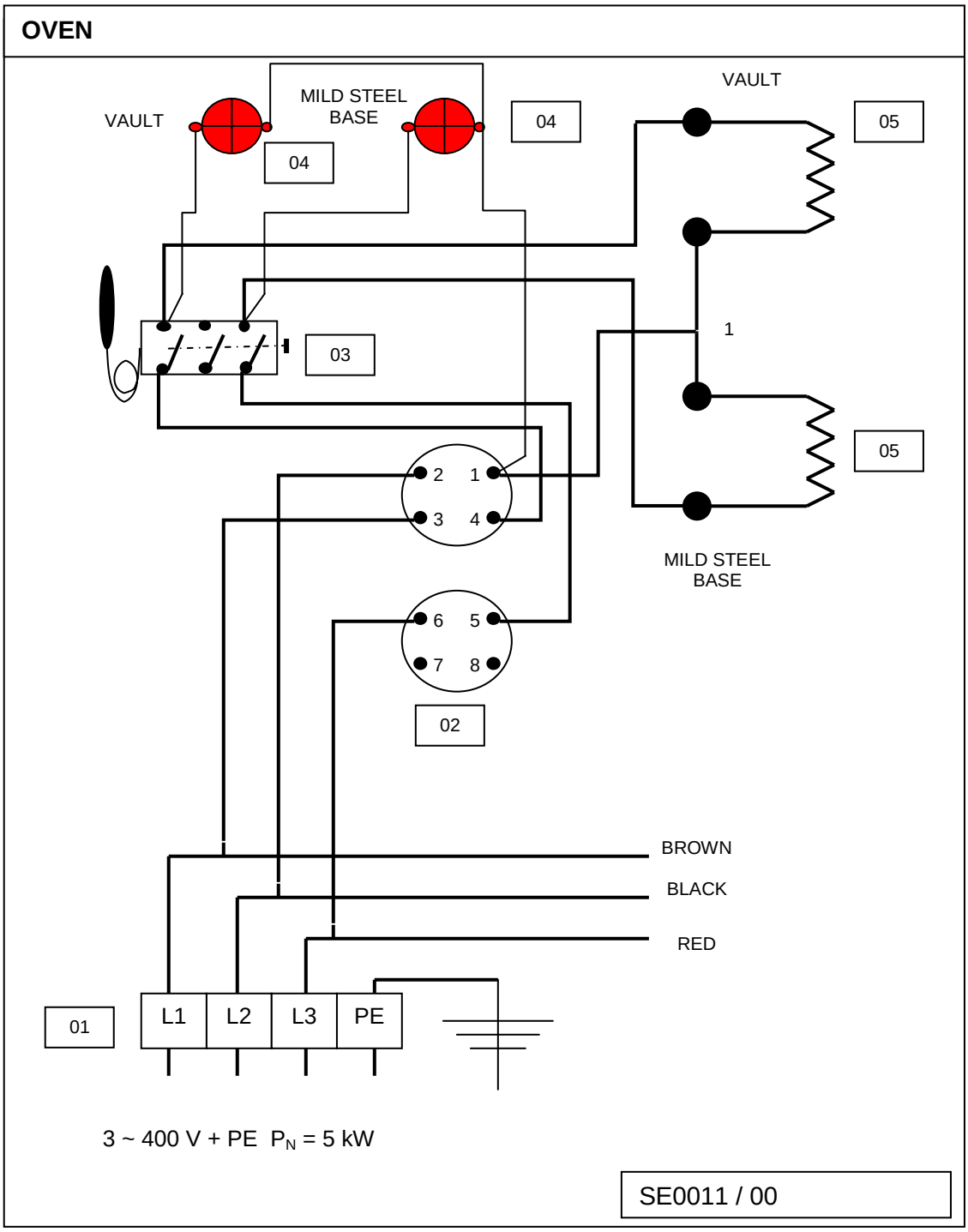
01 Terminals
02 Push button
03 Ignition transformer
04 Electrode
05 High-temperature cable

1 Burner / 1 Transformer mounting A
2 Burners / 1 Transformers mounting B or C
3 Burners / 2 Transformers mounting A and B
4 Burners / 2 Transformers mounting B and C

1 ~ 230V + PE

SE0001 / 00

Open burners / Electric oven



NOMENCLATURE: ELECTRIC OVEN (wiring diagram: SE0011 / 00)

Mark	Code	Description	Quantity
01	02468A	16 mm² terminal (brand: Viking)	3
01	03575A	16 mm² Earth terminal (brand: Viking)	1
02	00831A	Oven switch	1
03	01990A	Thermostat 50-300℃	1
04	07136A	Red indicator 400 V	2
05	02063A	Heating element 2500 W, 400 V	2

OPEN BURNERS / ELECTRIC OVEN

Description	PRO 800 SERIES	PRO 900
M4FN	V01580	V01456

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USER'S INSTRUCTIONS

CHARVET
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MANUAL: EN - 800-900 M4FN
Ind. A – Created on: 09/09/2010
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SUMMARY

Open burners / Electric oven

1. INTRODUCTION

A) Our equipment is for professional use only and must be used by qualified staff.

B) The equipment must be installed in compliance with local codes and bylaws. It must be installed in a kitchen equipped with an adequately sized mechanical extraction system.

C) Appliances may be installed side by side or against walls of non combustible material. Distance to combustible material shall be no less than 10 cm.

D) It is imperative to call for a qualified engineer for all new installations or modifications of existing equipment.

E) This instruction manual is contractual and must be given to the user after installation.

F) WARRANTY: The warranty is mentioned in our conditions of sale. Only a qualified engineer certifies the validity of the warranty. This warranty does not cover damage due to faulty installation, misuse or inadequate maintenance.

Dimensions :

Length: 850 mm
Depth: 900 mm.
Height: 900 mm.

Specifications:

One-piece seam welded 18-10 stainless steel chassis, 1 to 3 mm thick.
18-10 stainless steel top frame, 3 mm thick, with a 55 mm high edge having a 18 mm radius and return to underside.
18-10 stainless steel side panels, 1 mm thick; assembly with no visible screws.
Enameled steel control panel with control symbol markings.
18-10 stainless steel floor, 1 mm thick.
18-10 stainless steel legs, 200 mm high, with adjustable PVC feet, diameter 60.3 mm, adjustment +10/-20 mm.

Top:

4 open burners with pan support 420 x 300 mm and removable enameled spillage tray + pan support adapter in stainless steel wire:
. 2 crown burners (front/rear) ø 110 mm, rated 10 kW
. 2 crown burners (front/rear) ø 80 mm, rated 6.5 kW
Pilot lights with integrated safety thermocouple.
18-10 stainless steel drip tray in front.
Recessed low <> and high heat controls.
Removable spillage tray in enamelled steel.

Base: Electric oven GN2/1 (L: 530 x D: 650 mm x H: 300 mm).

Mild steel base and vault: Heating elements rated 5 kW in total - 3 ~ 400 V + E.
8-position switch: 'vault – 0 – Mild steel base – 0 – Low V+MSB – 0 – High V+MSB – 0 –' & regulation thermostat 50-300℃ + indicators
Mild steel base, 4 mm thick
Insulated stainless steel muffle with stainless steel protection.
Removable 3-position enamelled steel shelf runners with a 70-mm space.
18-10 stainless steel door and indoor with rock wool insulation - handle in enamelled steel on aluminium support.

Option:

Electric ignition of the burners.
Open burners equipped with sequential regulation.

Open burners / Electric oven

2. PRIOR TO STARTING UP

a) Prior to starting up, it is advisable to clean the appliance in order to eliminate all dust and impurities that have accumulated during storage.

b) Remove all plastic protection that wraps the stainless steel panels.

c) Make sure that all controls are in good working condition before turning the gas on.

3. STARTING UP

Overview: All burners come equipped with a safety thermocouple and a permanent pilot light.

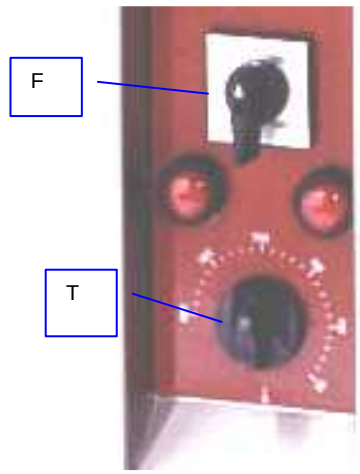
3.1. Open burners

Push and turn the control knob counter-clockwise of desired burner (white square) until the spark symbol.
Keep pushing thoroughly while presenting a flame or pressing the ignition push button (if fitted).
Keep the control knob pressed for 5 to 15 sec. before releasing it.
The pilot light must remain ignited.
Repeat the operation in case of failure.
When the pilot light is on, turn the control knob counter-clockwise to the "full power" position (large flame symbol); the burner is running at its nominal power.
By turning the control knob to the next position (small flame symbol), the burner is on the slow-down position (simmering position).

3.2. Oven

Turn control knob to the desired heating position (VAULT, VAULT + MILD STEEL BASE, MILD STEEL BASE): the ON indicator is alight.

Choose the desired temperature with the thermostat: the regulation indicator is alight.



When the desired temperature is reached, the regulation indicator goes off.

The regulation thermostat will constantly adjust the temperature of the oven.

Cooking temperatures will be reached after 15 min. about of heating process.

Open burners / Electric oven

PRACTICAL ADVICE:

You can cook various types of foods with the oven: foods on baking plates (grilling foods, pastries), in pans (braising) by the use of the position HIGH VAULT/MILD STEEL BASE; VAULT position only for the browning and icing operations.

Level the oven grid depending on the type of foods to be cooked.

The faster the oven heats, the faster cooking temperatures are reached. During non-cooking periods, we advise you to turn the switch to the LOW VAULT / MILD STEEL BASE position (energy-saver mode).

This lowest position is ideal for cooking smooth baked foods (like pastries).

Select the aperture of the air-inlet (located above the oven door) to evacuate cooking steams.

OPEN (pulled)

CLOSED (pushed)

WARNING:

Be careful of steam escaping when opening the oven door after "wet" cooking process. Serious risks of burns!

The oven sides and door, juice drawer and drip tray may be very hot after an intensive use. Either wait or take all the necessary precautions for the cleaning and draining operations.

The top and the sides of the appliance may be very hot after a prolonged and intensive use.

4. SWITCHING OFF

Turn control knobs and oven thermostat to the position: ● & ''0''.
Clean the oven, the oven shelf, the grease collection drawer, and the drip tray after each use - in order to remove food particles and liquids.
At the end of the day, cut off gas supply or/and switch off electricity at the mains (or disconnect from the wall socket).

Open burners / Electric oven

5. MAINTENANCE

Our equipment must not be cleaned with water under pressure or be subjected to a deluge of water splashes.
Avoid water splashes on the burners (otherwise it will clog the exhaust gas orifices).
Check that the appliance is well disconnected at the mains.

5.1. Cleaning of the stainless steel surfaces

Wash with a sponge in soapy water (or any other neutral cleaning product).
Do not use bleach or any other acidic product – even well diluted.
For the tops, use a nylon scouring pad if necessary. Always go with the grain.
After each cleaning, rub with a greased cloth or kitchen paper.
Finger marks can be removed with a cloth dabbed with alcohol.

5.2. Cleaning the open burners

Remove the pan supports, the caps and the drip tray.
Clean, rinse and dry these parts carefully.
Refit in order all the parts.

Dry the pan supports carefully to avoid rusting. Then clean with a greasy cloth.

5.3. Cleaning the oven

Switch off the oven,
Wait until the apparatus has cooled down before doing anything on it,
To avoid fumes due to greases, stains and food particles, we recommend you to clean all the oven internal sides every day,
Wash with a sponge in soapy water (or any other neutral cleaning product),
Remove all accessories (roasting grid, etc.) from the oven as well as the sides and the mild steel base in order to clean them,
Also clean the heating element housing to remove all charred residues,
Grease the mild steel base with cooking oil after cleaning.
Refit in order all the parts.

For best results, have your equipment serviced and cleaned on a regular basis by a qualified installer.

WARNING: Certain parts of this appliance are protected by the manufacturer, and must not be handled by the installer or the user.

Open burners / Electric oven

6. BREAKDOWN

UNSATISFACTORY HEATING: Probable causes
Clogging of the burners, injectors, etc.
Incorrect gas pressure.
Incorrect grading of the injectors.

FAULTY IGNITION:
Clogging of the pilot lights,
Clogging of the thermocouples,
Smashed thermocouple, incorrect pilot light output and positioning, and insufficient pressure on control button.
Faulty electric ignition.
Contact the supplier to replace the faulty parts for further use.

Only a qualified electrician should replace the ignition transformers.

The manufacturer and the installer cannot be held responsible if the user neglects to ask for assistance in case of breakdown.

Open burners / Electric oven

TRANSFER below the information written on the DATA PLATE of your apparatus.

This will help you with maintenance problems and spare parts.