

07/2015

# **Mod: E22/M150I8(230/3)-N**

**Production code: 393120-SPECIALE(230V/3)**

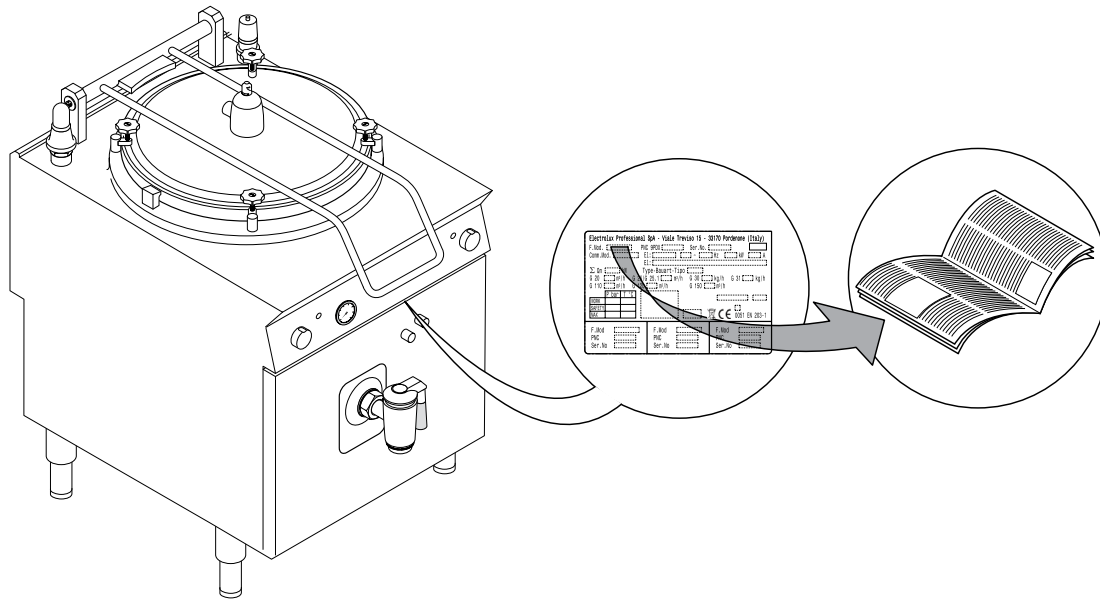


**Diamond**  
catering equipment

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## II. DATAPLATE AND TECHNICAL DATA



### ATTENTION

This manual contains instructions relevant to various appliances. See the dataplate located under the control panel to identify the appliance (see fig. above).

TABLE A - Technical data of gas appliances

| MODELS<br>TECHNICAL DATA   |                 | +9BSGHINF0 | +9BSGHDPF0 | +9BSGHIPF0<br>+9BSGHIPFR | +9BSGHDRF0<br>+9BSGHDRF | +9BSGHIRF0<br>+9BSGHIRFR | +9BSGHDRFC | +9BSGHIRFC |
|----------------------------|-----------------|------------|------------|--------------------------|-------------------------|--------------------------|------------|------------|
| Pot capacity               | in litres       | 60         | 100        | 100                      | 150                     | 150                      | 150        | 150        |
| Cavity capacity (min/max)  | in litres       | 11 / 14    | -          | 17 / 19                  | -                       | 20 / 22                  | -          | 20 / 22    |
| Power supply voltage       | V               | 220-230    | 220-230    | 220-230                  | 220-230                 | 220-230                  | 220-230    | 220-230    |
| Electrical power absorbed  | kW              | 0,1        | 0,1        | 0,1                      | 0,1                     | 0,1                      | 0,1        | 0,1        |
| Frequency                  | Hz              | 50         | 50         | 50                       | 50                      | 50                       | 50         | 50         |
| Phases                     | Nr              | 1+N        | 1+N        | 1+N                      | 1+N                     | 1+N                      | 1+N        | 1+N        |
| Power supply cable section | mm <sup>2</sup> | 1          | 1          | 1                        | 1                       | 1                        | 1          | 1          |
| ISO 7/1 connection         | Ø               | 1/2"       | 1/2"       | 1/2"                     | 1/2"                    | 1/2"                     | 1/2"       | 1/2"       |
| Nominal heat output        | kW              | 14         | 21         | 21                       | 24                      | 24                       | 24         | 24         |
| Type of construction       |                 | A1         | A1         | A1                       | A1                      | A1                       | A1         | A1         |

| MODELS<br>TECHNICAL DATA   |                 | E9BSGHIN40 | E9BSGHIP40<br>E9BSGHIP4R | E9BSGHIR4R<br>E9BSGHIR40 | E9BSGHIR4C | E9BSGHDP40 | E9BSGHDR40<br>E9BSGHDR4C |
|----------------------------|-----------------|------------|--------------------------|--------------------------|------------|------------|--------------------------|
| Pot capacity               | in litres       | 60         | 100                      | 150                      | 150        | 100        | 150                      |
| Cavity capacity (min/max)  | in litres       | 11 / 14    | 17 / 19                  | 20 / 22                  | 20 / 22    | -          | -                        |
| Power supply voltage       | V               | 220-230    | 220-230                  | 220-230                  | 220-230    | 220-230    | 220-230                  |
| Electrical power absorbed  | kW              | 0,1        | 0,1                      | 0,1                      | 0,1        | 0,1        | 0,1                      |
| Frequency                  | Hz              | 60         | 60                       | 60                       | 60         | 60         | 60                       |
| Phases                     | Nr              | 1+N        | 1+N                      | 1+N                      | 1+N        | 1+N        | 1+N                      |
| Power supply cable section | mm <sup>2</sup> | 1          | 1                        | 1                        | 1          | 1          | 1                        |
| ISO 7/1 connection         | Ø               | 1/2"       | 1/2"                     | 1/2"                     | 1/2"       | 1/2"       | 1/2"                     |
| Nominal heat output        | kW              | 14         | 21                       | 24                       | 24         | 24         | 24                       |
| Type of construction       |                 | A1         | A1                       | A1                       | A1         | A1         | A1                       |

TABLE C - Technical data of electric appliances

| MODELS<br>TECHNICAL DATA   |                 | +9BSEHINF0 | +9BSEHIPF0 | +9BSEHIPFR | +9BSEHIRF0 | +9BSEHIRFR | +9BSEHIRFC |
|----------------------------|-----------------|------------|------------|------------|------------|------------|------------|
| Pot capacity               | in litres       | 60         | 100        | 100        | 150        | 150        | 150        |
| Cavity capacity            | Lt (min/max)    | 11 / 14    | 17 / 19    | 17 / 19    | 20 / 22    | 20 / 22    | 20 / 22    |
| Power supply voltage       | V               | 380-400    | 380-400    | 380-400    | 380-400    | 380-400    | 380-400    |
| Frequency                  | Hz              | 50/60      | 50/60      | 50/60      | 50/60      | 50/60      | 50/60      |
| Phases                     | Nr              | 3+N        | 3+N        | 3+N        | 3+N        | 3+N        | 3+N        |
| Nominal heat output        | kW              | 8,5-9,4    | 19,5-21,5  | 19,5-21,5  | 19,5-21,5  | 19,5-21,5  | 19,5-21,5  |
| Power supply cable section | mm <sup>2</sup> | 2,5        | 6          | 6          | 6          | 6          | 6          |

A reproduction of the marking or dataplate on the machine is given below:

#### GAS

|                                                                                                                                                                                              |            |                        |                             |      |       |        |       |     |       |                                                                                                 |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|------------------------|-----------------------------|------|-------|--------|-------|-----|-------|-------------------------------------------------------------------------------------------------|--|
| Electrolux Professional SpA - Viale Treviso 15 - 33170 Pordenone (Italy)                                                                                                                     |            |                        |                             |      |       |        |       |     |       |                                                                                                 |  |
| F.Mod.                                                                                                                                                                                       | _____      | PNC 9PDX               | Ser.No. _____               |      |       |        |       |     |       |                                                                                                 |  |
| Comm.Mod.                                                                                                                                                                                    | _____      | El: _____              | ~ _____ Hz _____ kW _____ A |      |       |        |       |     |       |                                                                                                 |  |
|                                                                                                                                                                                              |            | El: _____              |                             |      |       |        |       |     |       |                                                                                                 |  |
| Σ Qn                                                                                                                                                                                         | _____ kW   | Type-Bauart-Tipo _____ |                             |      |       |        |       |     |       |                                                                                                 |  |
| G 20                                                                                                                                                                                         | _____ m³/h | G 25/G 25.1            | _____ m³/h                  |      |       |        |       |     |       |                                                                                                 |  |
| G 110                                                                                                                                                                                        | _____ m³/h | G 120                  | _____ m³/h                  |      |       |        |       |     |       |                                                                                                 |  |
|                                                                                                                                                                                              |            | G 30                   | _____ kg/h                  |      |       |        |       |     |       |                                                                                                 |  |
|                                                                                                                                                                                              |            | G 31                   | _____ kg/h                  |      |       |        |       |     |       |                                                                                                 |  |
|                                                                                                                                                                                              |            | G 150                  | _____ m³/h                  |      |       |        |       |     |       |                                                                                                 |  |
| <table border="1"> <tr> <td>P bar</td> <td>T °C</td> </tr> <tr> <td>WORK</td> <td>_____</td> </tr> <tr> <td>SAFETY</td> <td>_____</td> </tr> <tr> <td>MAX</td> <td>_____</td> </tr> </table> |            | P bar                  | T °C                        | WORK | _____ | SAFETY | _____ | MAX | _____ |  0051 EN 203-1 |  |
| P bar                                                                                                                                                                                        | T °C       |                        |                             |      |       |        |       |     |       |                                                                                                 |  |
| WORK                                                                                                                                                                                         | _____      |                        |                             |      |       |        |       |     |       |                                                                                                 |  |
| SAFETY                                                                                                                                                                                       | _____      |                        |                             |      |       |        |       |     |       |                                                                                                 |  |
| MAX                                                                                                                                                                                          | _____      |                        |                             |      |       |        |       |     |       |                                                                                                 |  |
| F.Mod                                                                                                                                                                                        | _____      | F.Mod                  | _____                       |      |       |        |       |     |       |                                                                                                 |  |
| PNC                                                                                                                                                                                          | _____      | PNC                    | _____                       |      |       |        |       |     |       |                                                                                                 |  |
| Ser.No                                                                                                                                                                                       | _____      | Ser.No                 | _____                       |      |       |        |       |     |       |                                                                                                 |  |

#### EL.

|                                                                                                                                                                                              |       |           |                             |      |       |        |       |     |       |                                                                                     |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------|-----------|-----------------------------|------|-------|--------|-------|-----|-------|-------------------------------------------------------------------------------------|--|
| Electrolux Professional SpA - Viale Treviso 15 - 33170 Pordenone (Italy)                                                                                                                     |       |           |                             |      |       |        |       |     |       |                                                                                     |  |
| F.Mod.                                                                                                                                                                                       | _____ | PNC 9PDX  | Ser.No. _____               |      |       |        |       |     |       |                                                                                     |  |
| Comm.Mod.                                                                                                                                                                                    | _____ | El: _____ | ~ _____ Hz _____ kW _____ A |      |       |        |       |     |       |                                                                                     |  |
|                                                                                                                                                                                              |       | El: _____ |                             |      |       |        |       |     |       |                                                                                     |  |
| <table border="1"> <tr> <td>P bar</td> <td>T °C</td> </tr> <tr> <td>WORK</td> <td>_____</td> </tr> <tr> <td>SAFETY</td> <td>_____</td> </tr> <tr> <td>MAX</td> <td>_____</td> </tr> </table> |       | P bar     | T °C                        | WORK | _____ | SAFETY | _____ | MAX | _____ |  |  |
| P bar                                                                                                                                                                                        | T °C  |           |                             |      |       |        |       |     |       |                                                                                     |  |
| WORK                                                                                                                                                                                         | _____ |           |                             |      |       |        |       |     |       |                                                                                     |  |
| SAFETY                                                                                                                                                                                       | _____ |           |                             |      |       |        |       |     |       |                                                                                     |  |
| MAX                                                                                                                                                                                          | _____ |           |                             |      |       |        |       |     |       |                                                                                     |  |
| F.Mod                                                                                                                                                                                        | _____ | F.Mod     | _____                       |      |       |        |       |     |       |                                                                                     |  |
| PNC                                                                                                                                                                                          | _____ | PNC       | _____                       |      |       |        |       |     |       |                                                                                     |  |
| Ser.No                                                                                                                                                                                       | _____ | Ser.No    | _____                       |      |       |        |       |     |       |                                                                                     |  |

The meaning of the various information given on it is listed below:

F.Mod. .... factory description of product  
 Comm.Model ..... commercial description  
 PNC ..... production number code  
 Ser.No ..... serial number  
 El: ..... power supply voltage+phase  
 Hz: ..... power supply frequency  
 kW: ..... max. power input  
 A ..... current absorption  
 Power unit El.: ..... power  
 I ..... dust and water protection rating  
 CE ..... CE marking  
 AB ..... gas safety certificate number  
 N ..... certification group  
 0051 ..... notified body  
 EN 203-1 ..... EU standard  
 L ..... Logo INQ/GS  
 Cat ..... Gas Category  
 Pmbar ..... Gas pressure

Electrolux Professional SPA  
 Viale Treviso, 15  
 33170 Pordenone  
 (Italy) Manufacturer

When installing the appliance, make sure the electrical connection is carried out in compliance with that specified on the dataplate.

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### III. GENERAL INSTRUCTIONS

---

- Carefully read the instruction handbook before using the appliance.
- After installation keep the instruction handbook for future consultation.



- **FIRE HAZARD** - Keep the area around the appliance clear and free from combustible materials. Do not keep flammable materials in the vicinity of the appliance.



- Install the appliance in a well-ventilated place to avoid the creation of dangerous mixtures of unburnt gases in the same room
- Air recirculation must take into account the air necessary for combustion, 2 m<sup>3</sup>/h/kW of gas power, and also the “well-being” of persons working in the kitchen.
- Inadequate ventilation causes asphyxia. Do not obstruct the ventilation system in the place where this appliance is installed. Do not obstruct the vents or ducts of this or other appliances.



- Place emergency telephone numbers in a visible position.
- Installation and maintenance must only be carried out by qualified personnel authorised by the manufacturer. For assistance, contact an authorised technical centre. Demand original spare parts.
- This appliance is designed for cooking food. It is intended for industrial use. Any use different from that indicated is improper.
- This appliance must not be used by minors and adults with limited physical, sensory or mental capabilities or without adequate experience and knowledge regarding its use.
- Personnel using the appliance must be trained and instructed regarding the risks involved.
- Do not leave the appliance unattended when operating.
- Turn the appliance off in case of fault or poor operation.
- Do not use products (even if diluted) containing chlorine (sodium hypochlorite, hydrochloric or muriatic acid, etc.) to clean the appliance or the floor under it. Do not use metal tools to clean steel parts (wire brushes or Scotch Brite type scouring pads).
- Do not store or use gasoline or other flammable vapours, liquids or items in the vicinity of this or any other appliance.
- Do not spray aerosols in the vicinity of this appliance while it is in operation.
- Never check for leaks with an open flame.

- The appliance is not suitable for a marine environment.
- Do not allow oil or grease to come into contact with plastic parts.
- Do not allow dirt, fat, food or other residuals to form deposits on the appliance.
- Do not clean the appliance with direct jets of water.
- Do not spray water or use steam to clean the equipment.
- The weighted sound pressure level emitted A does not exceed 70 dB (A).
- This instruction booklet is available in digital format by contacting the dealer or customer care.
- Install a safety circuit breaker ahead of the appliance. The contact opening distance and max. leakage current must comply with the regulations in force.
- The appliance must be earthed; it must be included in an equipotential node by means of the screw located under the appliance frame at the back right hand side. The screw is marked with the symbol .
- It is advisable to have the appliance inspected by an authorised person at least every 12 months. For this purpose, it is advisable to stipulate a servicing contract.
- The symbol  given on the product indicates that it should not be considered domestic waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and the health of persons. For further information regarding the recycling of this product, contact the product agent or local dealer, the after-sales service or the local body responsible for waste disposal.

Failure to observe the above can compromise the safety of the appliance. Failure to observe the above invalidates the warranty.

## IV. THE ENVIRONMENT

### 1. PACKING



The packing materials are environmentally friendly and can be stored without risk or burned in an appropriate waste incineration plant.

Recyclable plastic components are marked with:



**Polyethylene:** outer wrapping, instruction booklet bag, gas nozzle bag.



**Polypropylene:** roof packing panels, straps.



**Polystyrene foam:** corner protectors.

### 2. USE

Our appliances offer high performance and efficiency. To reduce electricity, water or gas consumption, do not use the appliance empty or in conditions that compromise optimum efficiency (e.g. with doors or lids open, etc.); the appliance must be used in a well-ventilated place, to avoid the creation of dangerous mixtures of unburnt gases in the room. When possible, preheat only before use.

### 3. CLEANING

In order to reduce the emission of pollutants into the environment, clean the appliance (externally and when necessary internally) with products that are more than 90% biodegradable (for further information refer to section V "CLEANING").

### 4. DISPOSAL



Do not disperse in the environment. Our appliances are manufactured using more than 90% (in weight) recyclable metals (stainless steel, iron, aluminium, galvanised sheet, copper, etc.).

Make the appliance unusable by removing the power cable and any compartment or cavity closing devices (when present) in order to avoid the risk of someone becoming trapped inside.

## V. INSTALLATION

- Carefully read the installation and maintenance procedures given in this instruction manual before installing the appliance.

- Installation, maintenance and conversion to another type of gas must only be carried out by qualified personnel authorised by the manufacturer.



- Failure to observe the correct installation, conversion and modification procedures can result in damage to the appliance, danger to people, and invalidates the Manufacturer's warranty.

### 1. REFERENCE STANDARDS

- Install the appliance in accordance with the safety regulations and local laws of the country where used.

### 2. UNPACKING

#### ATTENTION!

**Immediately check for any damage caused during transport.**

- The forwarder is responsible for the safety of the goods during transport and delivery.
- Inspect the packs before and after unloading.
- Make a complaint to the forwarder in case of visible or hidden damage, reporting any damage or shortages on the dispatch note upon delivery.
- The driver must sign the dispatch note: the forwarder can reject the claim if the dispatch note is not signed (the forwarder can provide the necessary form).
- Unpack, taking care not to damage the appliance. Wear protective gloves.



- Carefully remove the protective film from metal surfaces and clean any traces of glue with a suitable solvent.
- For hidden damage or shortages becoming apparent only after unpacking, request the forwarder for inspection of the goods within and not later than 15 days of delivery.
- Keep all the documentation contained in the packing.

### 3. POSITIONING

- Handle the appliance with care in order to avoid damage or danger to people. Use a pallet for handling and positioning.
- The installation diagram provided in this instruction manual gives the appliance overall dimensions and the position of connections (gas, electricity, water). Check that they are available and ready for making all the necessary connections.
- The appliance can be installed separately or combined with other appliances of the same range.
- The appliances are not suitable for recess-mounting. Leave at least 10 cm between the appliance and side or rear walls.
- Suitably insulate surfaces that are at distances less than that indicated.
- Maintain an adequate distance between the appliance and any combustible walls. Do not store or use flammable materials and liquids near the appliance.
- Leave an adequate space between the appliance and any side walls in order to enable subsequent servicing or maintenance operations.
- Check and if necessary level the appliance after positioning. Incorrect levelling can cause appliance malfunctioning.

### 3.1. JOINING APPLIANCES

- (Fig.1A) Undo the 4 fixing screws and remove the control panels of the appliances.
- (Fig.1B) Remove the fixing screw nearest the control panel, from each side to be joined.
- (Fig.1D) Bring the appliances together and level them by turning the feet until the tops match.
- (Fig.1C) Turn one of the two plates inside the appliances 180°.
- (Fig.1E) From inside the control panel of the same appliance, join them at the front side, screwing one M5x40 Hex Head screw (supplied) on the opposite insert.
- (Fig.1F) From the rear of the appliances, insert the coupling plate (provided) in the side slots on the back panels. Secure the plate with two flathead M5 screws provided.

### 3.2. FLOOR FIXING

To avoid accidental tipping of built-in half-module appliances installed separately, fix them to the floor carefully following the instructions enclosed with the corresponding accessory (F206136).

### 3.3. INSTALLATION ON BRIDGE, CANTILEVER FRAME OR CEMENT PLINTH

Carefully follow the instructions enclosed with the corresponding accessory. Follow the instructions enclosed with the optional product chosen.

### 3.4. SEALING GAPS BETWEEN APPLIANCES

Follow the instructions enclosed with the optional sealing paste pack.

## 4. FUME EXHAUST

### 4.1 TYPE "A1" APPLIANCES

Position type "A1" appliances under an extraction hood to ensure removal of fumes and steam produced by cooking.

## 5. CONNECTIONS



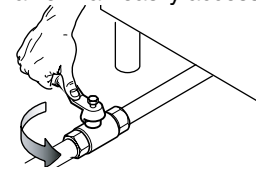
- Any installation work or maintenance to the supply system (gas, electricity, water) must only be carried out by the utility company or an authorised installation technician.
- Refer to the appliance dataplate for the product code.
- See the installation diagram for the type and position of appliance connections.

### 5.1. GAS APPLIANCES

**IMPORTANT!** This appliance is arranged and tested to operate with G20 gas 20mbar; to convert it to another type of gas, follow the instructions in par. 5.1.6. of this section.

#### 5.1.1. BEFORE CONNECTING

- Make sure the appliance is arranged for the type of gas to be used. Otherwise, carefully follow the instructions given in the section: "Gas appliance conversion / adjustment".
- Fit a rapid gas shutoff cock/valve ahead of each appliance. Install the cock/valve in an easily accessed place.



- Clean the pipes to remove any dust, dirt or foreign matter which could block the supply.
- The gas supply line must ensure the gas flow necessary for full operation of all the appliances connected to the system. A supply line with insufficient flow will affect correct operation of the appliances connected to it.
- **Attention!** Incorrect levelling of the appliance can affect combustion and cause malfunctioning.

#### 5.1.2. CONNECTION

- Before connecting the appliance to the gas supply, remove the plastic protection cover from the gas connection on the appliance.
- The appliance is arranged for connection on the bottom right side; countertop models can be connected to the gas supply using the rear connection, after unscrewing the metal closing plug and screwing it tightly onto the front connection.
- After installation, use soapy water to check connections for leaks.

#### 5.1.3. SUPPLY PRESSURE CHECK

Make sure the appliance is suitable for the type of gas available, according to that specified on the dataplate (otherwise, follow the instructions given in the section "Conversion to another type of gas"). The supply pressure must be measured with the appliance operating, using a pressure gauge (min. 0.1 mbar).

- Remove the control panel.
- Remove retaining screw "N" from the pressure point and connect the pressure gauge "O" (fig. 2A and 2B).
- Compare the value read on the pressure gauge with that given in Table B (see handbook Appendix)
- If the pressure gauge gives a reading outside the range of values in Table B, do not switch the appliance on. Consult the gas company.

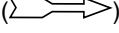
#### 5.1.4. GAS PRESSURE REGULATOR

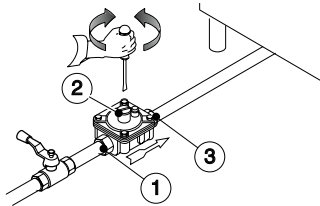
- The section of the gas supply line must be sufficient to ensure the gas flow necessary for full operation of all the appliances connected to the system.

If the gas pressure is higher than that specified or is difficult to regulate (not stable), install a gas pressure regulator (accessory code 927225) in an easily accessed position ahead of the appliance.

The pressure regulator should preferably be fitted horizontally, to ensure the right outlet pressure:

- "1" connection side gas from mains.
- "2" pressure regulator;
- "3" connection side gas towards the appliance;

The arrow on the regulator () indicates the gas flow direction.



**NOTE!** These models are designed and certified for use with natural or propane gas. For natural gas, the pressure regulator on the header is set to 8" w.c. (20mbar).

#### 5.1.5. PRIMARY AIR CHECK (fig. 3A)

The primary air is correctly adjusted when the flame does not "float" with the burner cold and there is no flareback with the burner hot.

- Undo screw "A" and position aerator "E" at distance "H" given in Table B; retighten screw "A" and seal with paint.

#### 5.1.6. CONVERSION TO ANOTHER TYPE OF GAS

The "technical data/gas nozzles" table B gives the type of nozzle to be used in place of those installed by the manufacturer (the number is stamped on the nozzle body).

After replacing, carefully carry out the following check-list:

| Check                                                                          | Ok |
|--------------------------------------------------------------------------------|----|
| • burner nozzle/s replacement                                                  |    |
| • correct adjustment of primary air supply to burner/s                         |    |
| • pilot nozzle/s replacement                                                   |    |
| • minimum flame screw/s replacement                                            |    |
| • correct adjustment pilot/s if necessary                                      |    |
| • correct adjustment of supply pressure (see technical data/gas nozzles table) |    |
| • apply sticker (supplied) with data of new gas type used                      |    |

#### 5.1.7.1 REPLACING MAIN BURNER NOZZLE (fig.3A / 3C)

##### 5.1.6.1 MAIN BURNER NOZZLE REPLACEMENT (FIG.3A)

- Loosen screw "A" and unscrew nozzle "C".
- Remove the nozzle and aerator.
- Replace nozzle "C" with one suitable for the type of gas, according to that given in Table B.
- The nozzle diameter is given in hundredths of mm on the nozzle body.
- Insert nozzle "C" in aerator "E", then fit the two assembled components in their position and screw the nozzle down.

#### 5.1.6.2 PILOT BURNER NOZZLE REPLACEMENT (fig.3B)

- Undo screw coupling "H" and replace nozzle "G" with one suitable for the type of gas (Table B).
- The nozzle identification number is given on nozzle body.
- Retighten screw coupling "H".

#### 5.2. ELECTRICAL APPLIANCES

##### 5.2.1. ELECTRICAL CONNECTION (Fig. 4A).

**IMPORTANT!** Before connecting, make sure the mains voltage and frequency match that given on the dataplate.

- To access terminal block "M", remove the appliance front panel by undoing the fixing screws.
- Connect the power cable to the terminal block as shown in the wiring diagram attached to the appliance.
- Secure the power cable with cable clamp "E".

**IMPORTANT!** The manufacturer declines any liability if the safety regulations are not respected.

##### 5.2.2. POWER CABLE

Unless otherwise specified, our appliances are not equipped with a power cable. The installer must use a flexible cable having characteristics at least equivalent to H07RN-F rubber-insulated type. Protect the cable section outside the appliance with a metal or rigid plastic pipe.

##### 5.2.3. CIRCUIT BREAKER

Install a circuit breaker ahead of the appliance. The contact opening distance and maximum leakage current must comply with the current regulations.

#### 5.3. EQUIPOTENTIAL NODE AND EARTH CONNECTION

Connect the appliance to an earth; it must be included in an equipotential node by means of the screw located at the front right under the frame. The screw is marked with the symbol .

## 6. WATER CONNECTION

**The appliance must be connected to the water system in compliance with the current national regulations and EN1717.**

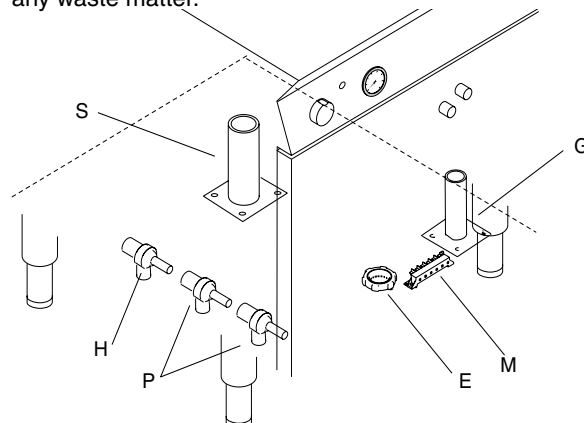
The appliance must be supplied with drinking water at a pressure of 1.5 - 3 bar.

**Attention!** If the water pressure is higher than that specified, use a pressure reducer to avoid damaging the appliance.

For correct installation, water inlet pipe "P" (fig.4A) must be connected to the mains using a mechanical filter and a shutoff cock. Before connecting the filter, allow a certain amount of water to flow in order to clear the pipe of any waste matter.

##### 6.1. AUTOMATIC FILLING PANS

Connect the inlet pipe for automatic water filling in cavity "H" to a deionised water supply system or, alternatively, to an osmotised water supply system. Before connecting, allow a certain amount of water to flow in order to clear the pipe of any waste matter.



## 7. SAFETY AND CONTROL DEVICES

### 7.1. SAFETY THERMOSTAT

Some of our appliance models use a safety thermostat that cuts in automatically when temperatures exceed a set value, shutting off the gas supply (gas appliances) or the electricity (electric appliances).

#### 7.1.1. ACTIVATION

Activation of the limiter in the pans, signalled by indicator “L” on the control panel, signifies an incorrect use (appliance used empty or cavity with low water level) or appliance malfunction. If the limiter cuts in again, contact a specialised technician.

#### 7.1.2. RESETTNG

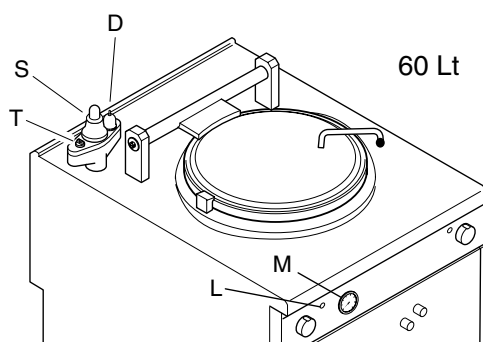
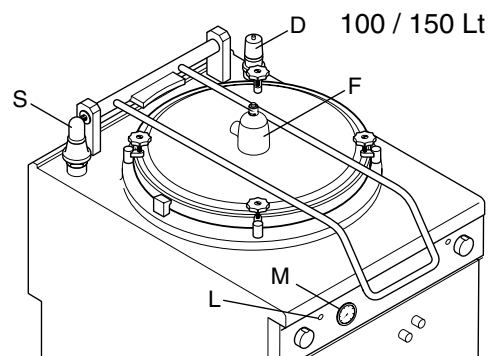
##### Direct pans:

The limiter is reset automatically when the appliance cools down.

##### Indirect pans:

Resetting requires removal of the front panel and must be carried out by a specialised technician (pressing the red button on the safety thermostat body).

**IMPORTANT:** Tampering with the safety thermostat invalidates the warranty



### 7.2. DEVICES FOR PRESSURE CONTROL

#### Indirect version:

- Pressure gauge “M”: indicates the steam pressure inside the cavity.
- Vacuum relief valve “D”: regulates the pressure inside the cavity, guaranteeing the release of air during heating. It also allows air into the cavity during cooling when the pressure tends to fall below the atmospheric value.
- Safety valve “S”: cuts in, releasing steam from the cavity to the outside when the pressure value approaches 0.5 bar.

#### Autoclave version:

- Container steam discharge valve “F”: fitted on the lid, it cuts in when the pressure approaches 0.05 bar inside the container. It also allows air into the container when the pressure tends to fall below the atmospheric value (e.g. during cooling with lid closed).

## 8. BEFORE COMPLETING THE INSTALLATION OPERATIONS

Use soapy water to check all gas connections for leaks. **DO NOT** use a naked flame to check for gas leaks. Light all the burners separately and also together, to check correct operation of the gas valves, rings and lighting. For each burner, adjust the flame regulator to the lowest setting, individually and together; after completing the operations, the installer must instruct the user on the correct method of use. If the appliance does not work properly after carrying out all the checks, contact the local after-sales service centre.

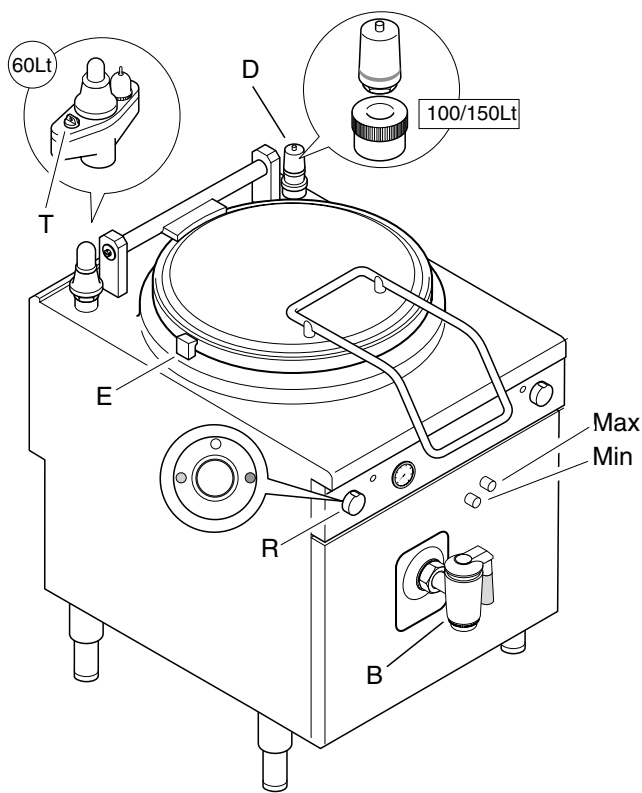
# VI. INSTRUCTIONS FOR THE USER

## 1. BOILING PAN USE

### General precautions

- The appliance is intended for industrial use by trained personnel.
- This appliance must only be used for its expressly designed purpose; i.e. for cooking or preparing foods in a watery medium. Any other use is deemed improper.
- Never use coarse kitchen salt as this, slowly dissolving, could cause corrosion of the bottom of the tank. Therefore it is advisable to use fine salt (grains smaller than 3 mm) adding it to the water only when boiling. If the salt available is coarse, dissolve it first in warm water in a separate container.

**Attention!** Operating the appliance without water in the cavity causes serious damage due to overheating of the s/steel container and the internal parts.



### 1.1. WATER FILLING

- Turn on the automatic switch installed ahead of the appliance and open the water tap;
- Close pan outlet "B";
- Open the pan lid;
- Operate selection knob "R". There are 2 positions:
  - Blue: Add cold water;
  - Red: Add hot water;
- The water will come out dispenser "E".

### 1.2. CAVITY WATER FILLING (indirect versions only)

Note: To fill the cavity, only use demineralised water with the addition of corrosion inhibitor (1 packet for 60-litre pans, 2 packets for 100- and 150-litre pans).

#### 1.2.1. AUTOMATIC FILLING PANS

- Control of the water level inside the cavity and possible automatic filling is activated when the appliance is switched on. Without a minimum level of water in the cavity, appliance heating will not switch on until the level is restored.

**NOTE:** If the pan does not switch on, have a specialised technician check the connection to the water supply and the level control system.

- With first use, automatic water filling takes about 30 minutes to bring the water in the cavity to the minimum level. During water filling, add the corrosion inhibitor by means of vent valve "D".

**NOTE:** For quicker water filling with first use, it is possible to proceed manually through vent valve "D".

#### 1.2.2. MANUAL FILLING PANS

With the appliance cold, periodically check the water level inside the cavity by means of the two minimum ("Min") and maximum ("Max") cocks located on the front panel. If water does not come out when operating the "Min" cock, immediately fill the cavity with water.

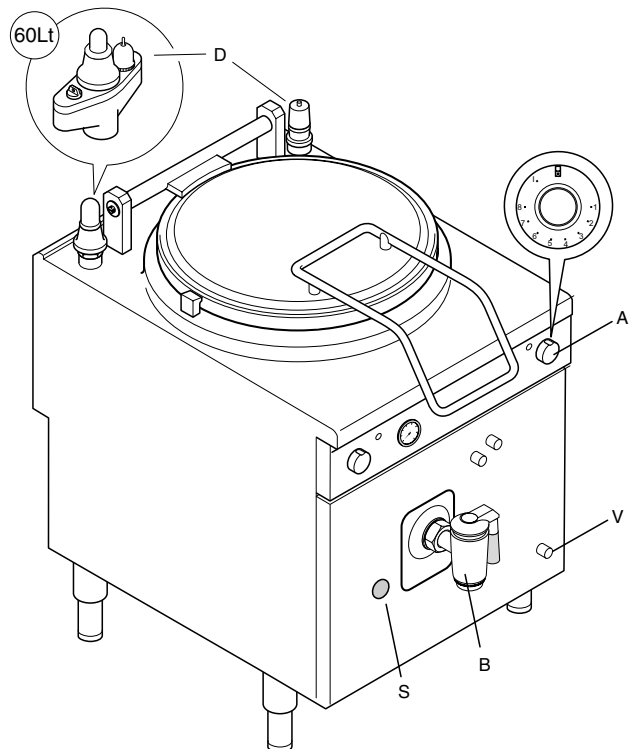
- Remove vent valve "D" by unscrewing the nut at the bottom (for 100- and 150-litre pans) or unscrew cap "T" (for 60-litre pans)

**ATTENTION!** Do not operate when the appliance is on or still hot.

- Open maximum cock "Max";
- Pour demineralised water through the filler hole up to the maximum level (corresponding to water coming out the maximum cock).
- Close maximum cock "Max".
- Carefully retighten vent valve "D" or cap "T".

### 1.2.3. PRESSURE SWITCH (indirect versions only)

The pressure switch maintains an optimum pressure inside the cavity, stopping the heating when the set pressure value is exceeded. This offers energy-saving and a reduction in cavity water consumption.



### 1.3. GAS MODELS

The burner igniter knob “V” (on the front panel) has 3 positions:

- off
- ★ pilot ignition
- 🔥 flame

#### Switching on

- Press and turn knob “V” to “pilot ignition”.
- Press the knob down fully to activate the electric igniter and light the pilot.
- Release the knob a little to deactivate lighting, keeping it lightly pressed for about 20 seconds; when released, the pilot flame must stay alight. If it does not, repeat the operation.

#### 1.3.1. PRESSURE SWITCH

The gas valve has a safety device which prevents immediate (for about 60 seconds) re-lighting if the pilot burner goes out. This ensures the flow of any gas accumulated, and better safety.

- To light the main burner, turn the knob from “pilot ignition” to “flame”.

**NOTE!** In case of emergency, the pilot burner can be lit manually by bringing a flame to it through hole “S” and keeping knob “V” pressed in the “pilot ignition” position.

#### Switching off

- Partially press knob “V” and turn it from “flame” to “pilot ignition” to keep the pilot flame lit for subsequent cooking;
- Partially press knob “V” and turn it to “off” to turn off the appliance.

### 1.4. ELECTRIC MODELS

- Use the switch knob to turn the appliance on and select the cooking power by means of regulator “A”.

#### Switching off

- To turn off the appliance, turn the switch to “off”.

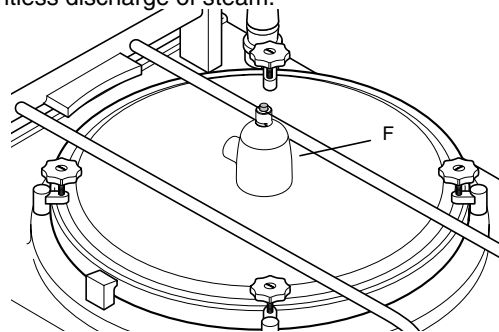
### 1.5. COOKING

- Fill the pan (with indirect versions check the cavity water level);
- Light the burner (gas versions only).
- Turn knob “A” to the required setting according to the quantity and quality of food to be cooked. The positions are:

- 0 : Tank heating off;
- 1...5 : Low - medium power;
- 6...8 : Medium - high;
- I : Maximum power;

**Note!** The choice of a different power level from “I” involves turning heating off and on again. This guarantees energy-saving without compromising cooking.

- **Indirect version:** each time the appliance is switched on, after 10-15 minutes discharge the air from the cavity by pressing vent valve “D”. This guarantees an optimum pressure inside the cavity (better cooking and energy-saving), releasing the air inside.
- **Autoclave version:** when steam starts coming out of steam valve “F”, operate the energy regulator to stop the pointless discharge of steam.



- When cooking is over, switch off the power by turning knob “A” to Off, turn off the pilot burner (for gas versions only).
- Empty and clean the pan by opening outlet “B”.

**Note !** To reduce wear and prevent the breakage of outlet “B”, periodically lubricate it (once a week) using food fats.

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## VII. CLEANING

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### IMPORTANT!

Disconnect the appliance from the power supply before carrying out any cleaning.

### 1. EXTERNAL PARTS

#### SATIN-FINISH STEEL SURFACES (daily)

- Clean all steel surfaces: dirt is easily removed when it has just formed.
- Remove grime, fat and other cooking residuals from steel surfaces when cool using soapy water, with or without detergent, and a cloth or sponge. Dry the surfaces thoroughly after cleaning.
- In case of encrusted grime, fat or food residuals, go over with a cloth or sponge, wiping in the direction of the satin finish and rinsing often: rubbing in a circular motion combined with the particles of dirt on the cloth/sponge could spoil the steel's satin finish.
- Metal objects can spoil or damage the steel: damaged surfaces become dirty more easily and are more subject to corrosion.
- Restore the satin finish if necessary.

#### SURFACES BLACKENED BY HEAT (when necessary)

Exposure to high temperatures can cause the formation of dark marks. These do not constitute damage and can be removed by following the instructions given in the previous section.

### 2. OTHER SURFACES

#### AUTOMATIC FILLING SYSTEM (every 6 months)

Check the system and probes, if necessary removing any deposits using pure vinegar or a solution of chemical detergent (1/3) and water (2/3). This operation must be carried out by a specialised technician.

#### HEATED TANKS/CONTAINERS (daily)

Clean the appliance tanks or containers using boiled water, adding soda (degreasing) if necessary. Use the accessories (optional or supplied) specified in the list to eliminate encrustations or food deposits.

**IMPORTANT** – With electric appliances, make sure no water comes into contact with electrical components: water entering can cause short circuiting and dissipation, tripping the appliance's protection devices.

### 3. SCALE

#### STEEL SURFACES (when necessary)

Remove any scale (stains or marks) left by water on steel surfaces using suitable natural detergents (e.g. vinegar) or chemical (e.g. "STRIPAWAY" produced by ECOLAB).

#### BOILERS OR CAVITIES (every 3-4 months)

- Descale the devices used for holding and heating of water (e.g. cavities of indirect pans) by filling them with pure vinegar or a solution of chemical detergent (1/3) and water (2/3).

#### VINEGAR

- Heat for about 5 minutes
- Allow the vinegar to work for at least 20 minutes.
- Rinse with plenty of demineralised water.

#### CHEMICAL DETERGENT

- Heat for about 3 minutes
- Allow the solution to work for at least 10 minutes.

### 4. IDLE PERIODS

If the appliance is not going to be used for some time, take the following precautions:

- Close the cocks or main switches ahead of the appliances.
- Go over all the stainless steel surfaces vigorously with a rag moistened with paraffin oil in order to create a protective film.
- Periodically air the premises.
- Have the appliance checked before using it again.
- To prevent too rapid evaporation of accumulated moisture with consequent breakage of elements, switch electric appliances on at minimum heat for at least 45 minutes before reuse.

### 5. INTERNAL PARTS (EVERY 6 MONTHS)

**IMPORTANT! Operations to be carried out only by specialised technicians.**

- Check the internal parts.
- Remove any deposits of dirt inside the appliance.
- Check and clean the discharge system.

**NOTE !** In particular ambient conditions (e.g. **intensive** use of the appliance, salty environment, etc.) the above-mentioned cleaning should be more frequent.

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## VIII. MAINTENANCE

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### 1. MAINTENANCE

All components requiring maintenance are accessible from the front of the appliance, after removing the control panel and front panel. Disconnect the power supply before opening the appliance

#### 1.1. BRIEF TROUBLESHOOTING GUIDE

Even with correct use of the appliance, malfunctions can occur.

- *The pilot burner does not light.*

**Possible causes:**

- Igniter not properly fixed or connected,
- The ignition or igniter cable are damaged.
- Insufficient pressure in gas pipes,
- Blocked nozzle,
- Faulty gas valve.

- *The pilot burner goes out.*

**Possible causes:**

- The pilot burner is not heating the thermocouple sufficiently,
- The gas valve knob is not being pressed enough.
- Lack of gas pressure at the valve,
- Faulty gas valve.

- *The main burner does not light*

**Possible causes:**

- Loss of pressure in gas pipe
- Blocked nozzle or faulty gas valve
- Burner with gas outlet holes clogged.

#### INSTRUCTIONS FOR REPLACING COMPONENTS (to be carried out only by an authorised installer).

Remove the front panel to access the:

##### GAS VALVE

- Unscrew the pilot and thermocouple pipe, unscrew the gas inlet and outlet unions.
- For installation carry out the same procedure in reverse order.

##### PILOT BURNER, THERMOCOUPLE, IGNITER ASSEMBLY

- To replace the igniter and thermocouple loosen the fixing screws and remove the components.
- To replace the pilot burner undo the gas pipe and the two screws, remove the pilot burner assembly
- Replace the components, proceeding in reverse order to refit the parts.

##### MAIN BURNER

- Unscrew the gas connection from the nozzle holder
- Undo the screws fixing the burner to the support
- Remove the pilot burner assembly by undoing the screws
- For installation, carry out the same procedure in reverse order, making sure that when positioning the burner, the centring pins located at the back of the burner enter their special seats.

#### 1.2. MAINTENANCE SCHEDULE

- It is advisable to have the appliance inspected by an authorised person at least every 12 months. For this purpose, it is advisable to stipulate a servicing contract.

#### 1.3. SPOUT GREASING

- At the end of each day disassemble the internal part of the spout, remove any food residuals, and grease the conical surface with KluberNontrop-PLB DR grease.