



SERIE 700 / 900 / 1100

GB Electric-heated fryers

INSTRUCTION FOR INSTALLATION, ADJUSTEMENT, USE AND MAINTENANCE

Cod. 827730192

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1 - INSTRUCTIONS FOR INSTALLATION

1.1 Identifying the models

	Serie 700	Serie 900	Serie 110
Fryer with 1 basin of 10 litres	803134115		
Fryer with 1 basin of 15 litres	803134225	803144225	
Fryer with 1 basin of 20 litres	803134325	803144325	803244325
Fryer with 2 basins of 10 litres	803134425	803144425	
Fryer with 2 basins of 15 litres	803134645	803144645	
Fryer with 2 basins of 20 litres	803134745	803144745	803244745

1.2 Technical data

The technical data of these ranges are indicated in the **Table T1** (refer to the Enclosures).

2- GENERAL INSTRUCTIONS

Read the instructions of this handbook carefully because they supply important information on installation, use and maintenance safety.

Keep this handbook carefully for any further reference of the various operators.

The installation of this equipment must exclusively be carried out by qualified installers according to the manufacturer's instructions and to the safety rules in force.

The Manufacturer declines any liability if these rules are not complied with.

N.B. - This equipment complies with the CEI standard 61-50.

2.1 Installation

- After unpacking, check that the equipment is intact. In case of any doubt, do not switch on the equipment and call immediately a professional engineer.
- Arrange the packing elements far from children, because they can be dangerous.

2.2 Positioning

- The equipment must definitively be installed in the position it occupies in the kitchen, preferably under an exhausting hood for a proper recirculation of air.
- The equipment must be installed only in rooms with a good ventilation.
- The equipment must be positioned at least 10 cm far from any wall surrounding it. In case of fire-proofing, or thermally insulated walls, this distance can also be reduced.
- These fryers can be installed separately, or assembled with other equipment of our line.
- This fryer is not available in built-in version.

2.3 Assembling

- Remove the protection film from the outer panels. Clean these surfaces from probable residual adhesive using a proper solvent.
- Level the apparatus turning the proper adjustable feet.
- In stand-alone version, the fryers having a width of 20 and 40 cm must be fixed to the floor with the proper flanges (Fig. 5).

2.4 Aligning the equipment (Fig. 2)

Operate as follows:



- Remove the control board.
- Arrange the apparatuses side by side and level at the same height.
- Fasten the apparatuses with the proper screws, as shown in the fig. 2.

2.5 Electrical connections

- The fryer must be connected to the mains according to the safety rules in force.
- Before connecting the equipment, make sure that the values of its rating plate coincide with those of the mains.
- The power cord must be flexible and its characteristics must not be lower than those of the type insulated with rubber H05RN-F; furthermore it must be protected by a stiff plastic or metallic pipe. This cable must be connected to the terminal board, as it is shown in the electric diagram; then it must be fastened with the proper cable-clamp.
- A protection circuit breaker, with a contact opening of at least 3 mm, must be mounted before the equipment and near it. This switch must have a proper capacity (refer to the attached table T1) and it must be installed in the permanent electric system of the building. This switch must guarantee a protection against direct and indirect contacts of alive parts and against fault currents to the ground, according to the standards in force (maximum allowable leakage current: 1 mA/kW).

2.6 Grounding and bonding of the equipment

The electrical safety of this equipment is guaranteed when this is connected correctly to an efficient grounding system, as it is provided in the safety rules in force. Therefore, ground the equipment to the general grounding system, through the terminal

marked with  on the terminal board. Moreover, bond the equipment with the proper screw marked with the symbol .

3 - STARTING

3.1 Checking the operation

- Before starting the equipment, switch on the main power switch installed before the fryer.
- Follow the instructions of use provided in the specific paragraph.
- Explain the operation of the equipment to the user, referring to the service handbook.
- Check the efficiency of the room ventilation systems.
- If necessary, refer to the paragraph 4 "**Check of some malfunctions**";
- Check whether the data of the rating plate of the equipment correspond to those of the mains.

Warning: during the operation, take extreme care in handling the hot areas of the outer surface.

4 - CHECK OF SOME MALFUNCTIONS

Some malfunctions can occur during the normal operation of the equipment:

4.1 Heating is not enabled

- The temperature control thermostat is faulty.
- Intervention of the safety thermostat.
- The contactor controlling the resistors is faulty.
- The microswitch for the rotation of resistors is faulty, or it is assembled in a wrong position.
- There is no power supply.

4.2 Heating is not sufficient

- One or more elements of the heating resistor are faulty.
- A phase of the power supply is missing

4.3 Intervention of the safety thermostat

- The operating thermostat is faulty.
- The OIL level is insufficient.

For the reset of the thermostat, refer to the paragraph 5.1.

5 - REPLACING SOME COMPONENTS

These operations must be carried out by authorized and qualified professionals.

Before carrying out any repair and/or maintenance operation, disconnect the power supply of the equipment turning off the main switch installed before the range.

The sealed components must not be tampered with.

5.1 Operating and safety thermostats (fig. 3)

Before enabling the safety thermostat again, eliminate the reasons provoking the overheating: examine the functioning of the operating thermostat, the resistors, the oil level, etc. Then carry out the following operations:

- remove the control board
- press the red pushbutton of the thermostat **TS** (fig. 1)
- check whether the electric circuit is closed.

Replace the safety and operating thermostats through the following operations:

This operation must be carried out when the oil of the fryer is cold.

Disconnect the main switch inserted before the equipment.

Open the door of the equipment.

Drain the oil from the basin according to the procedure described at the paragraph 6.6.

Unscrew the tight stuffing box from the capillary tube of the thermostat, applied to the flange of the resistor, using the proper wrench **T**, as it is shown in the fig. 3.

Release the bulb of the thermostat inside the basin, from the element fixing it to the resistor.

Grasp the end of the bulb of the concerned thermostat, with some pliers, and push it to outside. If necessary, beat the pliers slightly with a hammer; extract the bulb from the basin.

Remove the control board and disconnect the electric wiring from the component. The switch and the thermostat are axially assembled through the insertion of a proper connection flange: remove this flange to release the two components.

Replace the component, insert the bulb of the thermostat into the basin again and connect to the resistors, through the proper devices.

Insert the stuffing box and tighten the tight nipple with the wrench **T** (fig. 3).

Reassemble the component, connect the electric wiring again and apply the control board again.

Close the drain cock and fill the basin checking that there are no leakage, especially from the tight stuffing box.

5.2 Heating resistors (Fig. 3)

This operation must be carried out when the oil of the fryer is cold.

Disconnect the main switch inserted before the equipment.

Open the door of the equipment.

Drain the oil from the basin according to the procedure described at the paragraph 6.6.

Remove the knob of the control for the rotation of the resistors.

Remove the control board.

Unscrew the 2 tight stuffing boxes from the capillary tubes of the operating and safety thermostats, applied to the flange of the resistor, using the proper wrench **T**, as it is shown in the fig. 3.

Release the bulbs of the thermostats inside the basin, from the element fixing them to the resistor.

Grasp the end of the bulb of the concerned thermostat, with some pliers, and push it to outside. If necessary, beat the pliers slightly with a hammer; extract the bulb from the basin. During this operation take the utmost care not to damage the capillary tube or the bulb.

Unscrew the dowel **G** (fig. 3) of the fixing nut **D**.

Remove the lever do the control for the rotation of the resistors.

Unscrew the fixing nut **D** with the proper wrench **E**.

Now the resistor can be extracted from the basin.

Check whether the slots of the sealing rings **A** (fig. 3) of the new component are perfectly clean; insert the new rings into these slots and lubricate with the grease HD 91 supplied by our company.

Clean the supporting seat of the resistor in the concerned basin, carefully.

Insert the resistor in this seat with the utmost care.

Screw down the nut **D** tightly.

Lock this nut with the dowel **G**; go on assembling carrying out the previous operations backwards.

Close the drain cock and fill the basin checking that there are no leakage.

5.3 Contactor and microswitch for the rotation of resistors

These components are accessible when the control board has been removed.

The contactor is snapped on a proper slide; release it moving the metallic tongue inserted on the base of the contactor.

The microswitch is fastened to the base with some screws.

Once released the component, disconnect the electric cables and carry out the substitution.

5.4 Main switch

Remove the control board.

Disconnect the wiring of the component

Extract the knob and remove the screws fastening the switch-thermostat unit onto the control board.

The switch and the thermostat are axially assembled through the insertion of a proper connection flange: remove this flange to release the two components.

Replace the component and reassemble carrying out the same operations backwards.

5.5 Warning lights

Remove the control board.

Disconnect the wiring of this component.

Replace the component and reassemble carrying out the same operations backwards.

6 - USE AND MAINTENANCE

6.1 Warning

This equipment has been designed for professional aims, therefore it must be operated exclusively by trained personnel.

It must exclusively be used to fry food; consequently any other use is improper.

Before switching on the cooker, clean all its surfaces in contact with food, with the utmost care.

ATTENTION ! Never switch on the fryer when its basins have no oil. When using cakes of fat, first of all melt them adjusting

the temperature to the MINIMUM (turn the knob M of the fig. 1 to the position corresponding to the minimum temperature). Never exceed the maximum level of oil marked inside the basin.

It is better to attend the equipment during the operation, because possible faults of the safety devices could provoke the overheating of the oil contained in the basin, that becomes inflammable at high temperatures.

Dip the basket with the food to fry, slowly into the boiling oil taking care that the froth being generated does not overflow from the rim of the basin. If this happen, stop dipping the basket for some seconds. The installation and possible transformation of these fryers for other supply voltages (when possible) must be carried out only by authorized and qualified installers.

In case of troubles, disconnect the main power switch, installed before the equipment.

For any repair, call the authorized After-Sales Service and require only original spare parts.

Not complying with these instructions may seriously compromise the safety of this equipment; the manufacturer declines any liability in case these warnings are not complied with.

6.2 Safety devices

Any basin of these fryers is provided with two safety devices: a safety thermostat and a microswitch for the rotation of the resistors.

When the maximum control temperature is exceeded, the safety thermostat disconnects the power supply. When this occurs, turn off the main power switch and call an After-Sales Centre.

The resistor must be installed in a perfectly horizontal position, otherwise the microswitch does not enable the power supply preserving the resistor from possible damages.

6.3 Use of the fryer (fig. 1)

Any basin of these fryers is equipped with a control knob **M** (fig.1) of the control thermostat/main switch, with a green LED indicating "current on" and with a yellow LED indicating "heating enabled".

The knob **M** of the control thermostat is marked with the following symbols:

0	Heating off
50	Minimum temperature
100-150	Intermediate temperature values
200	Maximum temperature

-Before switching on the heating, fill the basin with oil until its level is above the minimum mark and below the maximum (fig. 4).

-Check that the resistors are in horizontal position; if necessary, rotate them with the knob available inside the compartment under the basins.

-Turn the knob **M** to the position corresponding to the desired temperature. The two, green and yellow LEDs will be on. As the desired temperature is reached, the yellow LED gets off.

6.4 Disconnecting the heating

-Disconnect the heating, turning the knob **M** (fig. 1) to **0**: the green and yellow LEDs will get off.

6.5 Switching off the fryer in case of fault

-In case of any fault, stop the equipment operation turning all the knobs **M** (fig. 1) to **0**.

-Turn off the main switch, installed before the equipment.

-Call an authorized After-Sales Service Centre.

6.6 Draining the oil

-The oil drain cock **S** (fig. 1) - one cock per basin - is installed inside the compartment under the cooking basins, in a safe position so that it cannot accidentally be opened during the operation.

-When draining the basin, put the proper tray (or other vessels being able to contain the quantity of oil to be drained at high temperature) under the drain cock.

7 - CLEANING AND MAINTENANCE

-Before carrying out any cleaning operation, check that the main power switch, installed before the equipment, is off.

-Wash the surfaces of stainless steel with water and non abrasive detergents, every day; then rinse abundantly and wipe carefully.

-The complete cleaning of the basin (after all the oil has been drained - refer to the point 6.6) is easier thanks to the possibility of rotating the resistor.

For this operation, open the door of the compartment under the basin and turn the rotation knob.

-When cleaning stainless steel, never use detergents with abrasive substances, nor steel wool, brushes or scrapers of common steel.

-Clean the floor under the fryer with non corrosive products.

-Do not wash the equipment with water jets.

When the equipment must not be used for long time, comply with the following instructions:

-Disconnect the main power switch, installed before the equipment.

-Clean all the surfaces carefully.

-Protect the surfaces of stainless steel laying off a light film of white mineral oil with a cloth.

-Ventilate the rooms periodically.

-Check the equipment periodically (at least once a year); this check must be carried out by qualified professional personnel. Drawing up a maintenance contract is recommended.

8 - LIST OF SPARE PARTS

-Resistors of 6.8 kW - 400 V (3 x 2266 W), for fryers of 10 litres

-Resistors of 10.2 kW - 400 V (3 x 3400 W), for fryers of 15 litres

-Resistors of 15 kW - 400 V (3 x 5 kW), for fryers of 20 litres

-Main two-pole switch

-Single-pole thermostat for temperature control

-Safety three-pole thermostat of manual reset

-Microswitch for the rotation of resistors

-Oil drain cock

-Control knobs

-Green and yellow warning lights (LEDs)

-Three-pole contactor with coil of 230 V-50 Hz

T1

Modelli Modelle Models Modèles Modellen	Litri Litre Liter	kW	A	V	Cavo Cable Kable HO7RN-F mm²
Serie 550					
803244325	20	15	21,7	400V~3N	n° 5 x 2,5 mm ²
803244745	2 x 20	30	43,4	400V~3N	n° 5 x 6 mm ²
Serie 700					
803134115	10	6,8	9,8	400V~3N	n° 5 x 1,5 mm ²
803134225	15	10,2	14,7	400V~3N	n° 5 x 1,5 mm ²
803134325	20	15	21,7	400V~3N	n° 5 x 2,5 mm ²
803134425	2 x 10	13,6	19,6	400V~3N	n° 5 x 2,5 mm ²
803134645	2 x 15	20,4	29,5	400V~3N	n° 5 x 4 mm ²
803134745	2 x 20	30	43,4	400V~3N	n° 5 x 6 mm ²
Serie 900					
803144225	15	10,2	14,7	400V~3N	n° 5 x 2,5 mm ²
803144325	20	15	21,7	400V~3N	n° 5 x 2,5 mm ²
803144425	2 x 10	13,6	19,6	400V~3N	n° 5 x 2,5 mm ²
803144645	2 x 15	20,4	29,5	400V~3N	n° 5 x 4 mm ²
803144745	2 x 20	30	43,4	400V~3N	n° 5 x 6 mm ²
Serie 700					
803134115	10	6,8	17,8	230V~3	n° 4 x 2,5 mm ²
803134225	15	10,2	25,6	230V~3	n° 4 x 4 mm ²
803134325	20	15	37,7	230V~3	n° 4 x 6 mm ²
803134425	2 x 10	13,6	34,2	230V~3	n° 4 x 6 mm ²
803134645	2 x 15	20,4	51,3	230V~3	n° 4 x 10 mm ²
803134745	2 x 20	30	75,4	230V~3	n° 4 x 6 mm ²
Serie 900					
803144225	15	10,2	25,6	230V~3	n° 4 x 4 mm ²
803144325	20	15	37,7	230V~3	n° 4 x 6 mm ²
803144425	2 x 10	13,6	34,2	230V~3	n° 4 x 6 mm ²
803144645	2 x 15	20,4	51,3	230V~3	n° 4 x 10 mm ²
803144745	2 x 20	30	75,4	230V~3	n° 4 x 6 mm ²

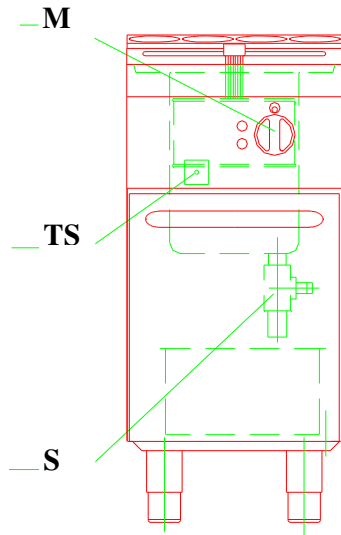


Fig.1 - Abb.1

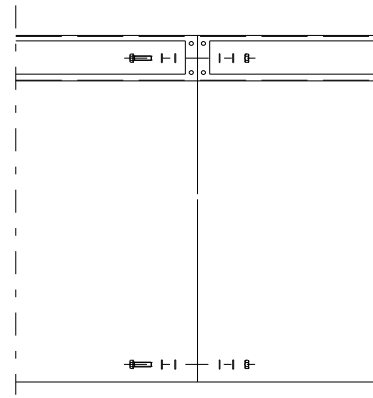


Fig.2 - Abb.2

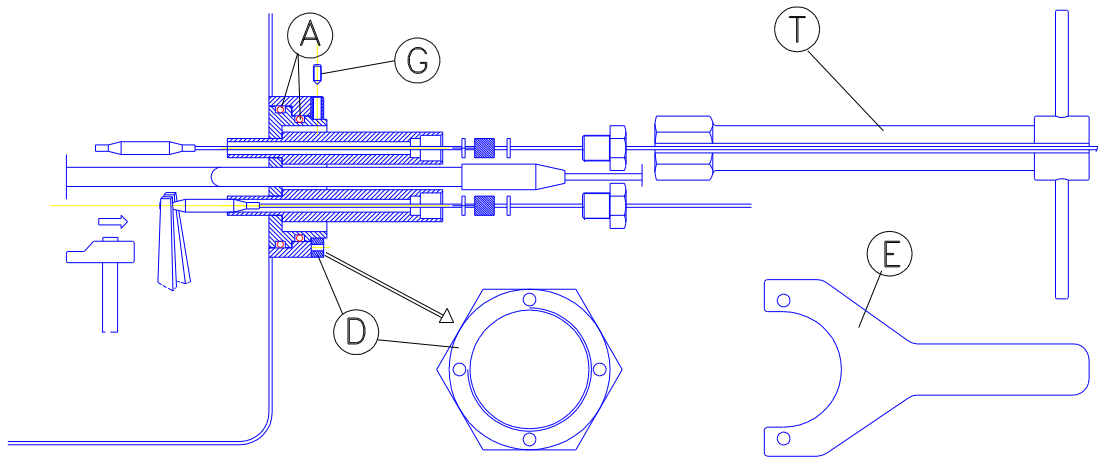


Fig. 3 - Abb.3

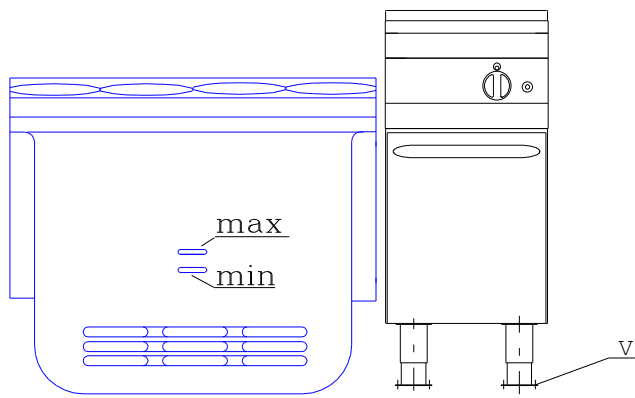


Fig.4 - Abb. 4

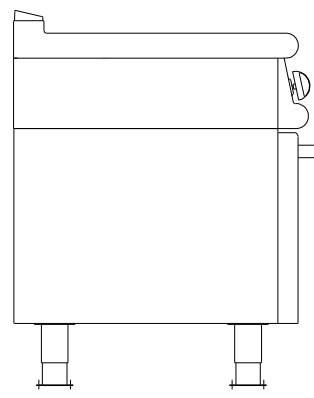
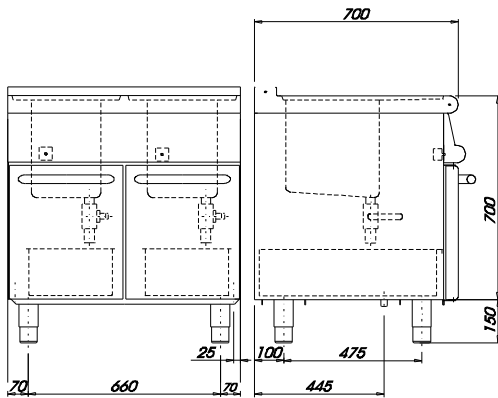
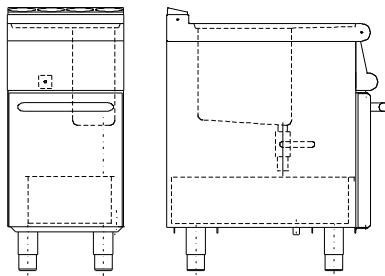
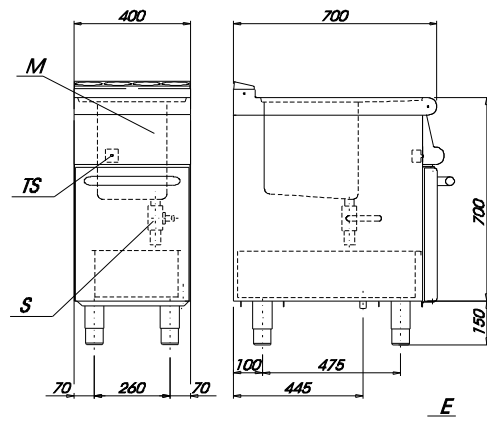
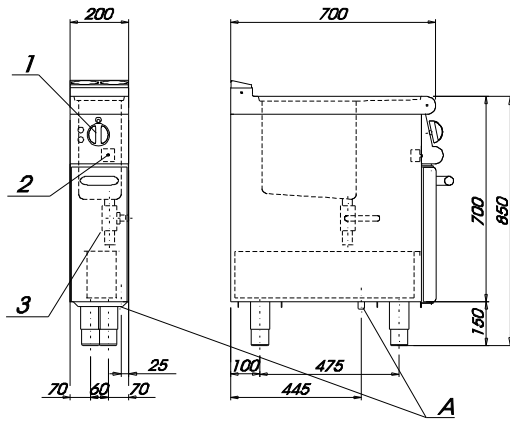
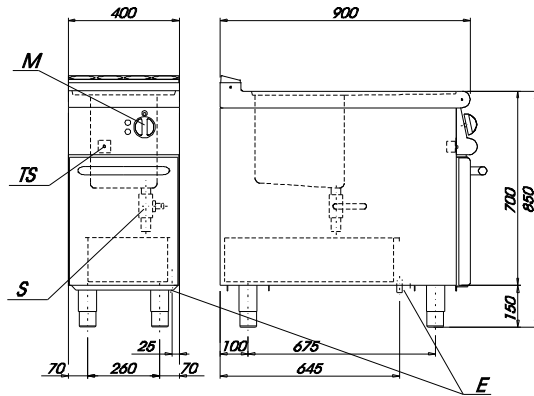


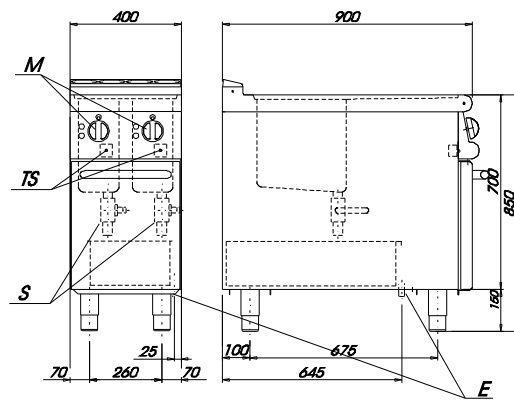
Fig.5 - Abb. 5



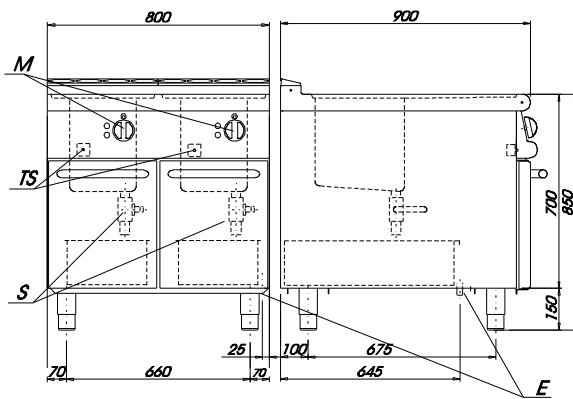
Serie 900



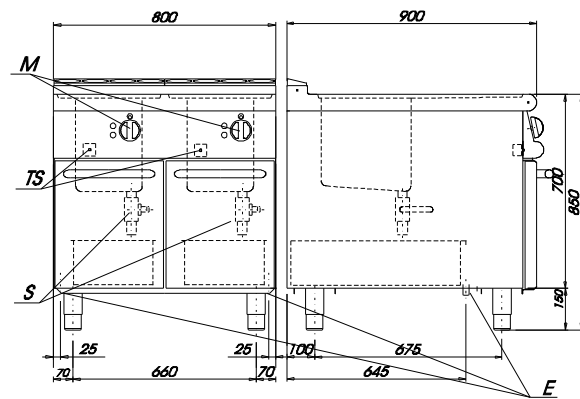
Mod. 8031.44225
Mod. 8031.44325



Mod. 8031.44425



Mod. 8031.44645



Mod. 8031.44745

E = Arrivo linea elettrica - Netzanschlussklemme -El. Power connection block -Branchement électrique

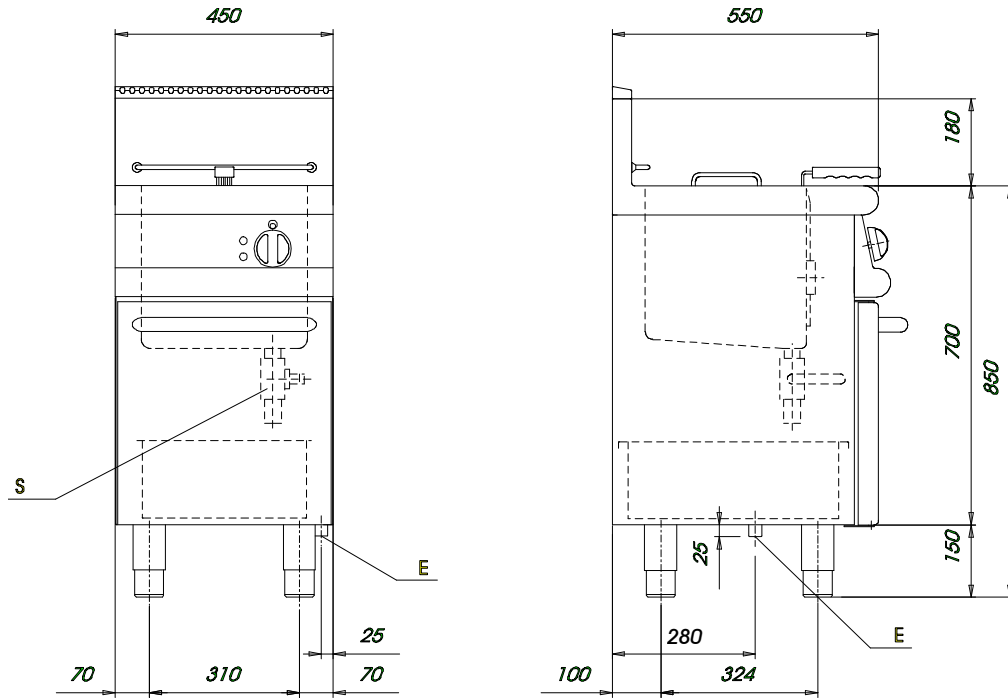
M = Manopola comando - Bedienknebel - Knob - Manette de comande

S = Rubinetto scarico olio - Olablasshahn - Oil drainage cock - Robinet de vidange de l'huile

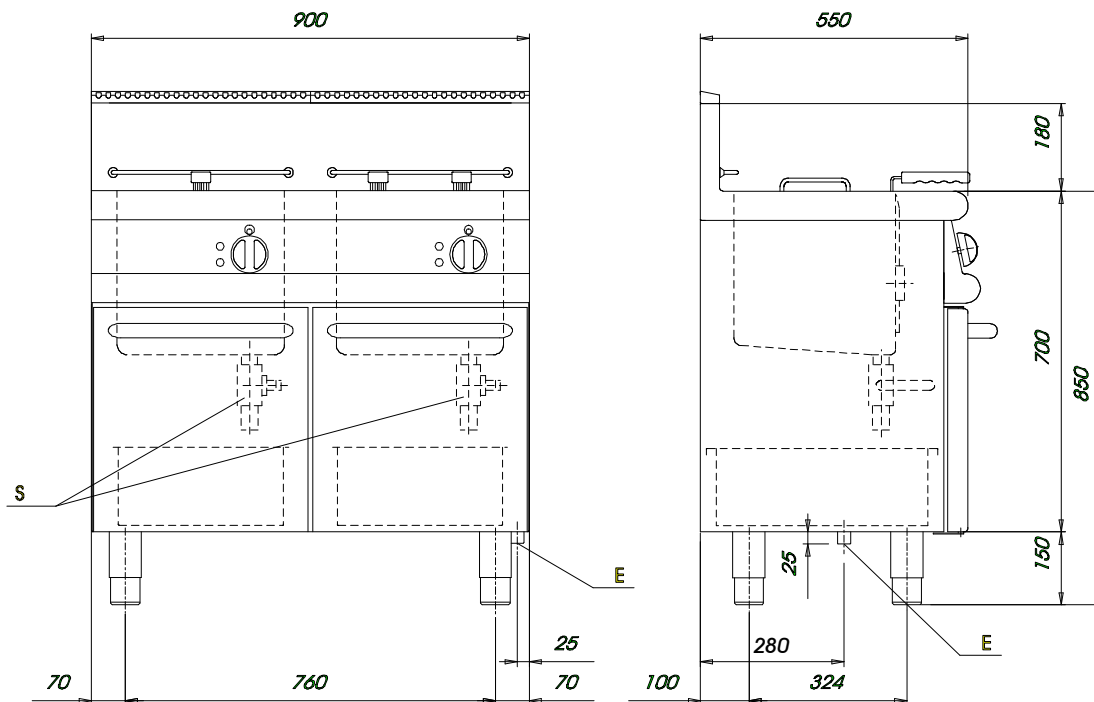
TS = Termostato di sicurezza - Temperaturbegrenzer - Safety thermostat - Thermostat de sécurité

SERIE 110

Mod. 8032.44325

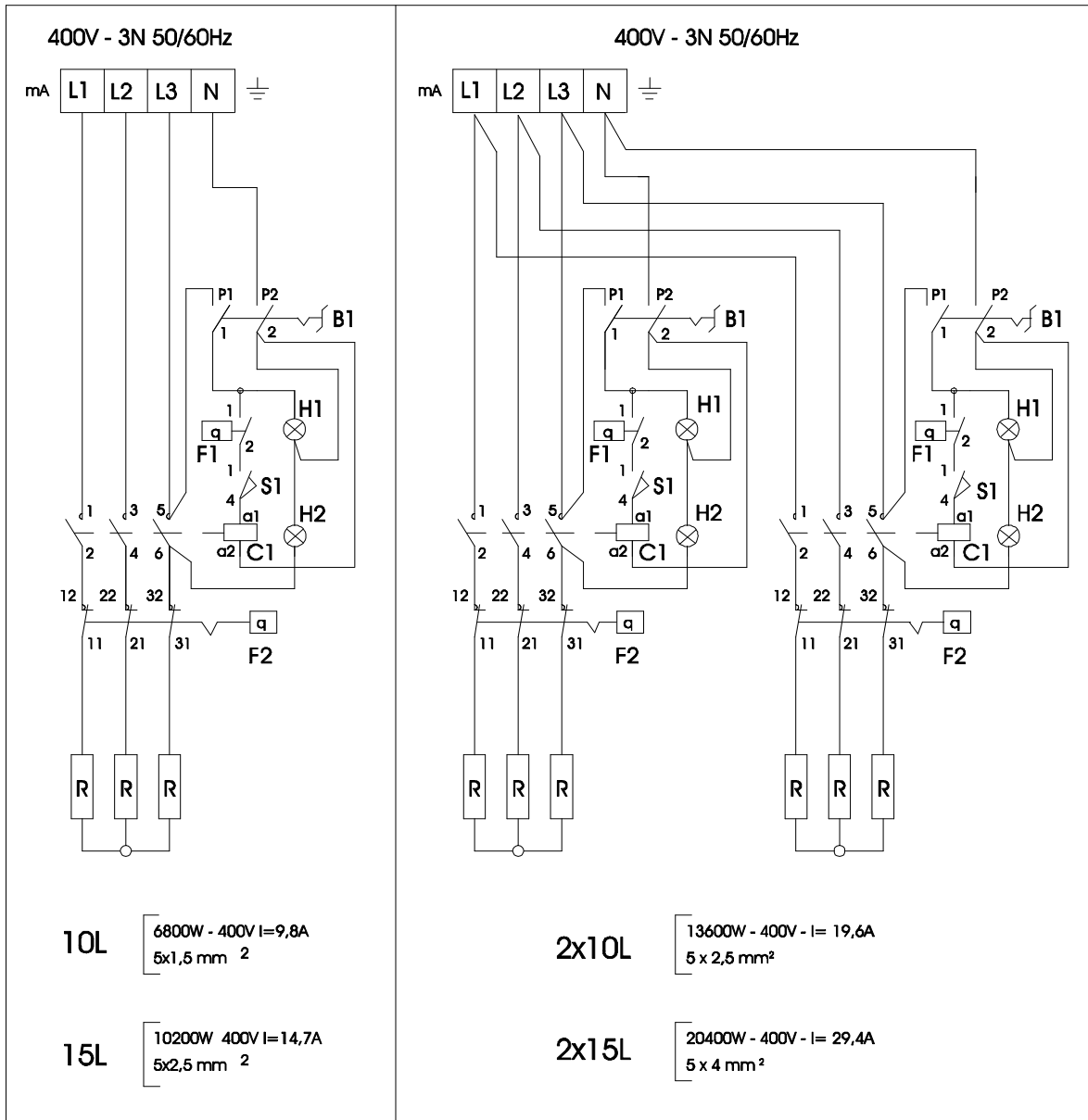


Mod. 8032.44745



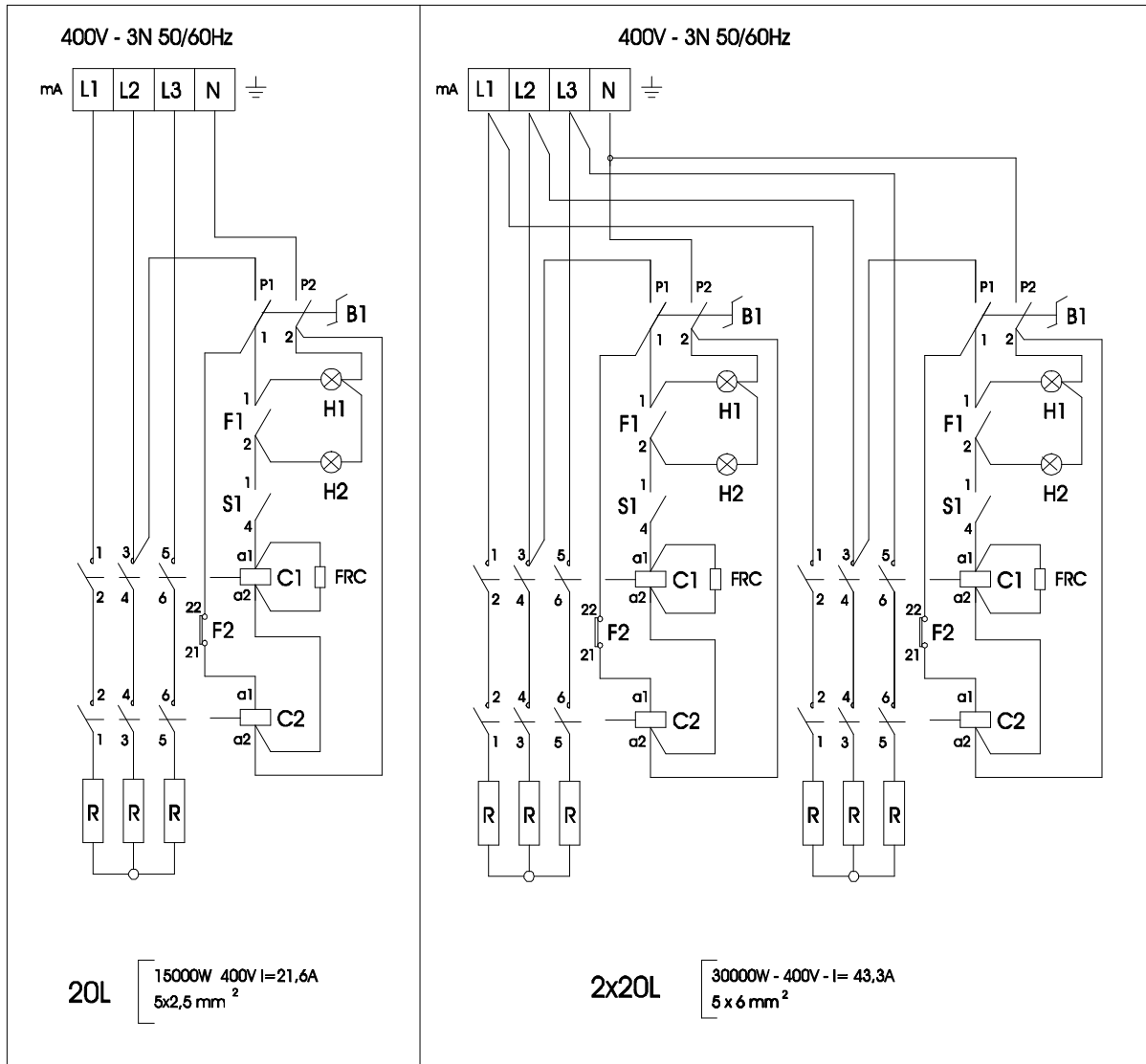
E = Arrivo linea elettrica – Netzanschlussklemme – El. Power connection block – Branchement électrique
S = Rubinetto scarico olio – Olablasshahn – Oil drainage cock – Robinet de vidange de l'huile

SERIE 550-700-900 DA 10-15 L



- mA** MORSETTIERA ALIMENTAZIONE
- B1** INTERRUTTORE GENERALE - HAUPTSCHALTER - MAIN SWITCH - INTERRUPTEUR GENERAL
- C1** CONTATTORE - LUFTSCHUTZ - CONTACTOR - CONTACTEUR
- F1** TERMOSTATO DI LAVORO - TEMPERATURREGLER - RUNNING THERMOSTAT - THERMOSTAT DE TRAVAIL
- F2** TERMOSTATO DI SICUREZZA - TEMPERATURBEGRENZER - SAFETY THERMOSTAT - THERMOSTAT SECUR.
- H1** SEGNALE VERDE - GRUENE KONTROLLAMPE - GREEN PILOT LAMP - LAMPE TEMOIN VERTE
- H2** SEGNALE ARANCIO - ORANGE KONTROLLAMPE - ORANGE PILOT LAMP - LAMPE TEMOIN ORANGE
- S1** MICROINTERRUTTORE - MICROSCHALTER - MICROSWITCH - MICROINTERRUPTEUR

SERIE 550-700-900 DA 20 L



mA	MORSETTIERA ALIMENTAZIONE
B1	INTERRUTTORE GENERALE - HAUPTSCHALTER - MAIN SWITCH - INTERRUPTEUR GENERAL
C1-C2	CONTATORE - LUFTSCHUTZ - CONTACTOR - CONTACTEUR
F1	TERMOSTATO DI LAVORO - TEMPERATURREGLER - RUNNING THERMOSTAT - THERMOSTAT DE TRAVAIL
F2	TERMOSTATO DI SICUREZZA - TEMPERATURBEGRENZER - SAFETY THERMOSTAT - THERMOSTAT SECUR.
H1	SEGNALATORE VERDE - GRUENE KONTROLLAMPE - GREEN PILOT LAMP - LAMPE TEMOIN VERTE
H2	SEGNALATORE ARANCIO - ORANGE KONTROLLAMPE - ORANGE PILOT LAMP - LAMPE TEMOIN ORANGE
S1	MICROINTERRUTTORE - MICROSCHALTER - MICROSWITCH - MICROINTERRUPTEUR
FRC	FILTRO - FILTER - FILTER - FILTRE

