ITALIAN CULINARY ART

Installation and operating instructions

ELECTRIC FRYERS FOR PROFESSIONAL USE

F10D-64ETX F2/10D-66ETX
F18D-64ETX F2/8D-64ETX
Model LIBR.ISTR.FDX POT

Code 563022401
Review 1
Edition date 22/04/2020
Language English

LOTUS S.p.A.

Via Calmaor, 46

31020 San Vendemiano

+39 0438 778020

+39 0438 778277

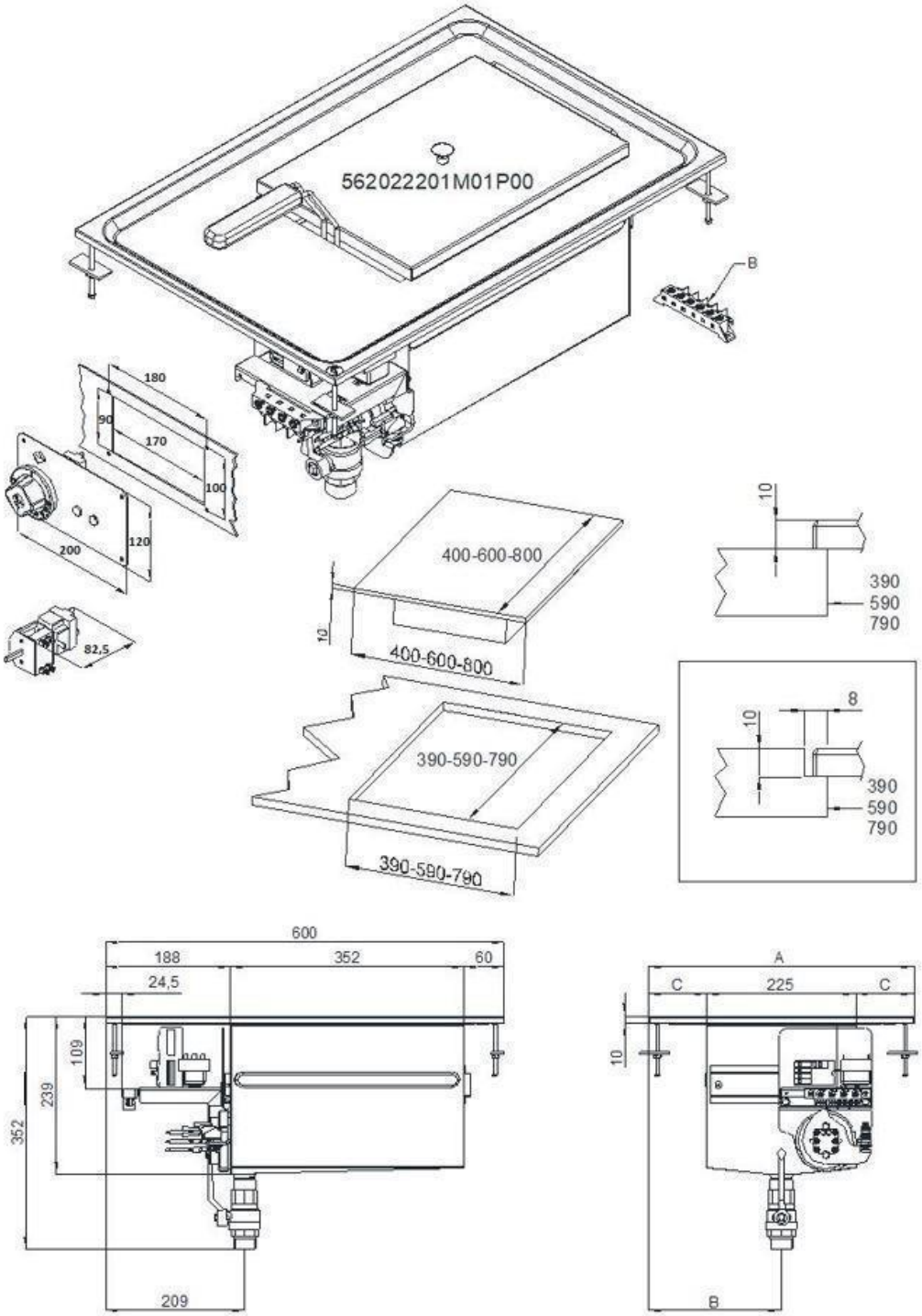
Contents

1	**INTRODUCTION**	**3**
1.1	Installation drawing	3
1.2	Components	7
2	**GENERAL INFORMATION**	**10**
2.1	Declaration of compliance	10
2.2	User information, RAEE Directive on waste electrical and electronic equipment	11
2.3	Technical data table	11
3	**INSTALLATION**	**12**
3.1	Delivery checks	12
3.2	Removing the packaging	12
3.3	Mechanical installation	12
3.4	Electrical/gas connections	12
4	**INSTRUCTIONS FOR USE**	**15**
4.1	General information	15
4.2	Turning the appliance on/off	15
4.3	Safety thermostat	15
4.4	Emptying the tank	16
5	**MAINTENANCE**	**17**
5.1	Routine	17
5.2	Spare parts	18
6	**CLEANING**	**19**
6.1	Routine cleaning	19

1 INTRODUCTION

1.1 Installation drawing

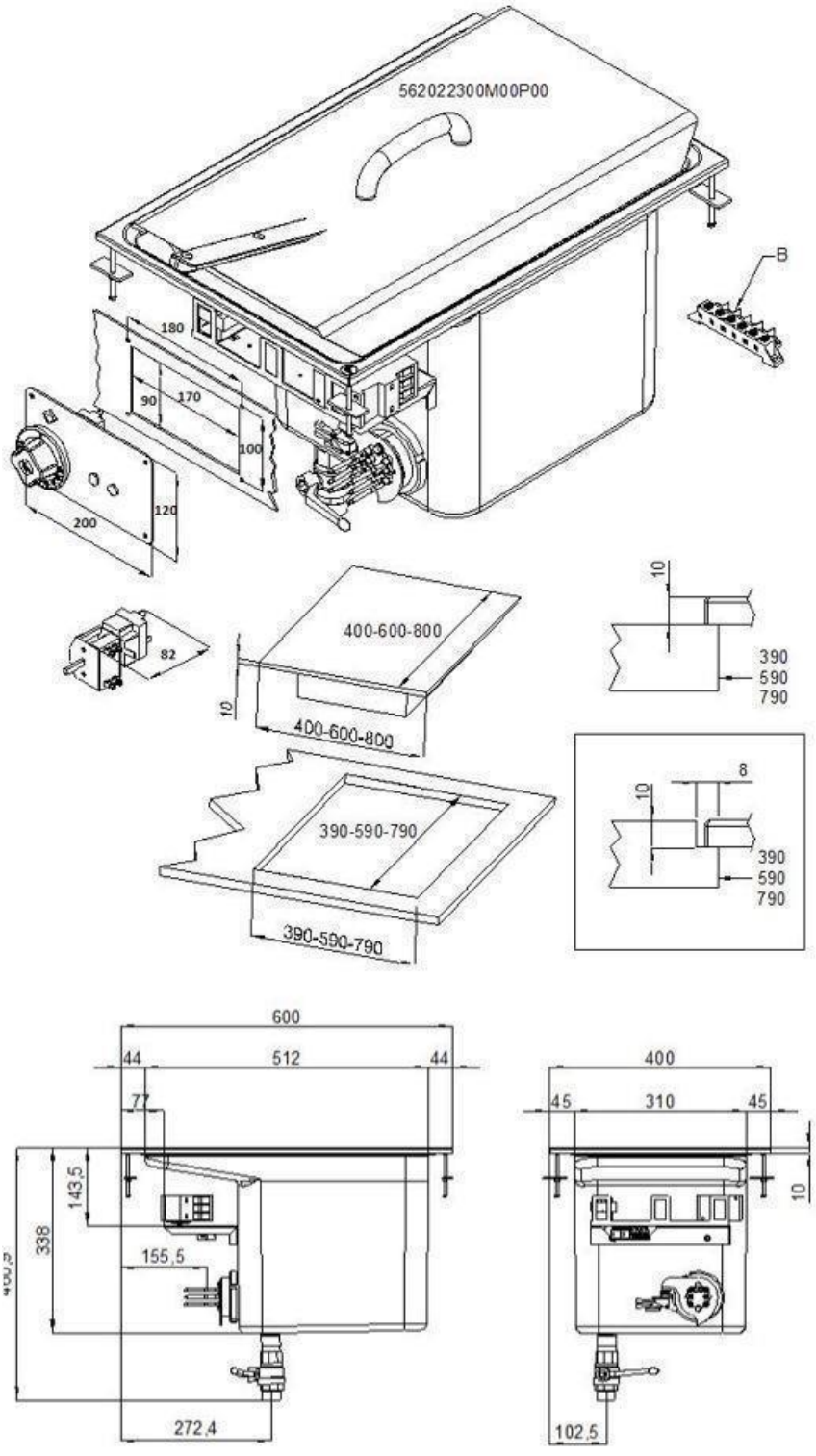
FIG. 1 F10D-64ET , F2/10D-66ET



MODEL	A	B	C
F10D-64ETX	400mm	200mm	87,5mm
F2/10D-66ETX	600mm	150mm	37,5mm

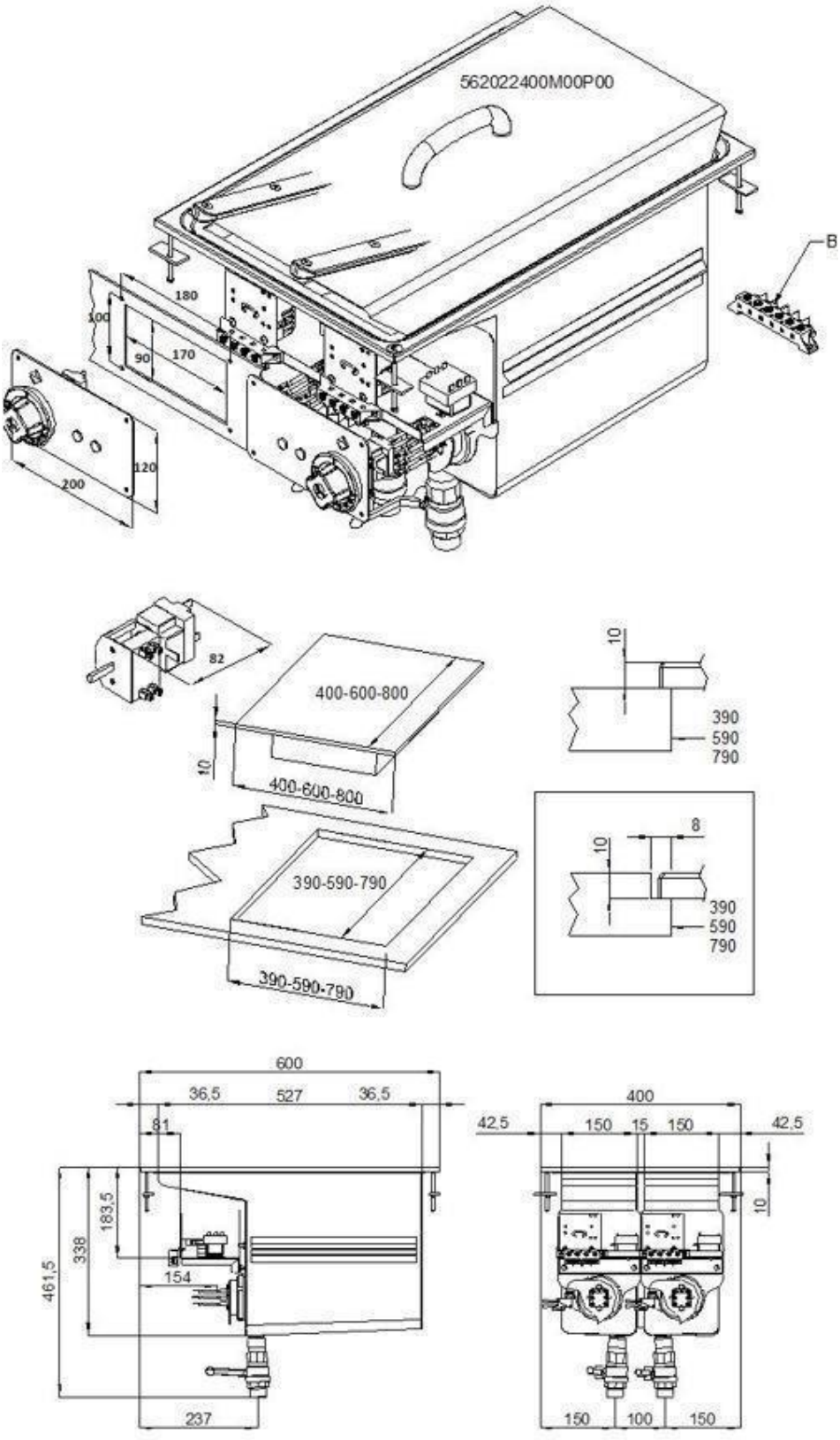
B Electrical connection

FIG. 2 F18D-64ET



B Electrical connection

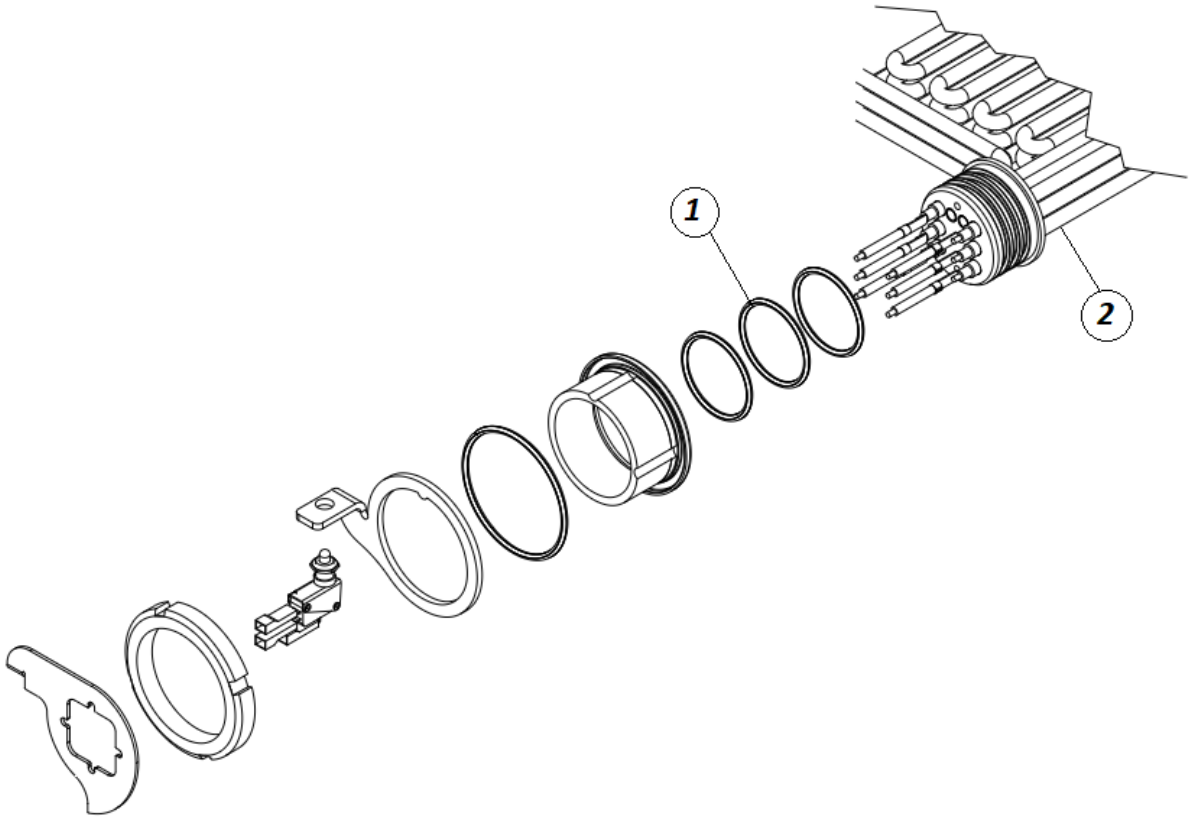
FIG. 3 F2/8D-64ET



B Electrical connection

1.2 Components

FIG. B (ROTARY RESISTANCE)



1 O-rings
2 Rotary heating element

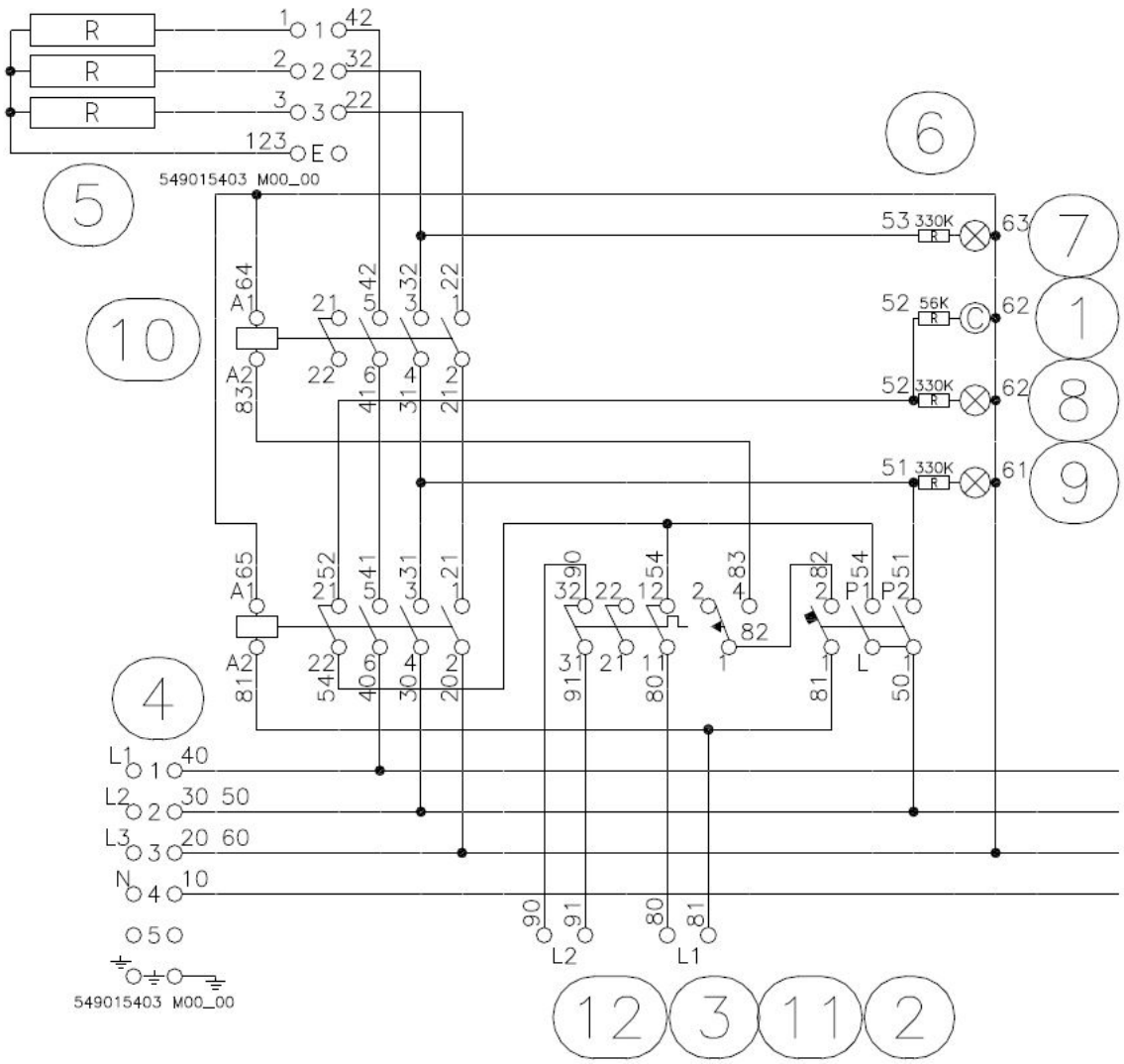
Caution

These fryers are equipped with an acoustic-visual alarm, which is activated when the safety thermostat trips (oil overtemperature). To interrupt the alarm, turn the control knob to zero (but the system remains operational until the problem that caused the intervention is resolved)

Contacts 80 and 81 are provided to enable the fryer to be controlled from a remote location. (note: in order to operate the appliance without remote control, contacts 80 and 81 must be connected together, as shown in the diagram).

Contacts 90 and 91, on the other hand, are normally closed (during normal operation of the appliance) and open in the event of an alarm to control a possible shutdown system.

WIRING DIAGRAM (C)

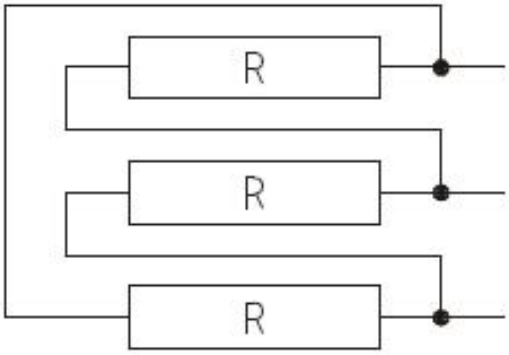


1 Cicada
2 Switch
3 Microswitch
4 Power supply terminal board
5 Heating element
6 Resistance voltage drop
7 White indicator light
8 Red indicator light
9 Green indicator light
10 Contactor
11 Thermostat
12 Safety thermostat

Electrical technical data table

MODEL	WIRING DIAGRAMS
F10D-64ETX	C
F18D-64ETX	C
F2/10D-66ETX	C + C
F2/8D-64ETX	C + C

PREDISPOSITION 440V~3



2 GENERAL INFORMATION

2.1 Declaration of compliance

The manufacturer declares that the appliances comply with the requirements of the regulation GAR 2016/426 for the gas part and directive 2014/30/EU,2014/35/EU for the electrical part. Installation must be performed in compliance with current regulations, especially with regard to ventilation of the premises and the exhaust gas evacuation system.

- Read the warnings in this manual carefully. They provide important information about safe installation, use and maintenance.
- The instruction manual must be kept for the entire duration of the equipment and made available to users for every possible consultation. The manual should be consulted for any information concerning installation, use and maintenance of the appliance.
- After removing the packaging, check the integrity of the equipment.
- All packaging materials (plastic bags, polystyrene, staples, etc.) must be disposed of in compliance with current regulations.
- Before connecting the appliance, make sure that the information on the data plate matches the electricity and gas mains where the appliance is installed. **The manufacturer accepts no liability if the equipment is not connected in accordance with current regulations.**
- Always keep all parts of the equipment clean to avoid the risk of oxidation/rust and/or aggression by chemical agents.
- The equipment must only be used by personnel trained for the purpose.
- **The installation must be implemented by professionally qualified personnel in accordance with the manufacturer's instructions and current reference standards.**
- The electrical safety of this equipment is only ensured when it is correctly connected to an effective ground/earth system as required by current electrical safety standards. The manufacturer cannot be held liable for any damage caused if the system is not connected to ground/earth.
- Before carrying out any cleaning or maintenance tasks on the equipment, unplug it from the electricity mains. In the event of faults or malfunctions, always deactivate the appliance.
- **Repair work of any kind must only be performed by qualified personnel.**
- This appliance must only be used for its expressly intended purpose for cooking or heating food. Any other use is considered improper.
- The appliance is intended for professional use and must be used by trained personnel.
- The installation and possible transformation to another power supply voltage (if envisaged), or transformation for operation with another type of gas, must be implemented exclusively by qualified and authorised professional personnel.
- Before using the appliance, carefully clean all surfaces intended to come into contact with food.
- The manufacturer declines any and all liability for any direct or indirect damage resulting from improper use of the equipment. The manufacturer declines any and all liability for damage caused by incorrect installation, tampering, poor maintenance and unskilled use. Moreover, the manufacturer declines any liability for possible inaccuracies that may be contained in this booklet attributable to errors in transcription or printing and equally reserves the right to make any changes to the product it deems useful and/or necessary without compromising its essential characteristics.
- **The manufacturer cannot be held liable for any damage caused by failure to comply with these basic standards and all other use and maintenance standards contained in this booklet.**

2.2 User information, RAEE Directive on waste electrical and electronic equipment

With regard to the regulatory framework of reference of the European Community, we remind the user of the following:

- Used AAE (Electrical and Electronic Equipment) products must be collected separately
- The user can carry out this collection in the RAEE collection systems and return the equipment to the distributor when purchasing a new one
- Plus being RoHS compatible, (in accordance with Directive 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment) the potential effects on the environment and human health may be due to the misuse of the same equipment or parts of it
- The symbol next to the rating plate indicates the obligation of separate collection
- The penalties provided for in the event of improper disposal of RAEE (Waste Electrical and Electronic Equipment) are those provided for by the national transpositions of European Directives 2012/19/EU

2.3 Technical data table

Electrical technical data table FDX

MODEL	POWER SUPPLY	MAXIMUM POWER (kW)	MAXIMUM INPUT (A)	Silicon POWER SUPPLY CABLE
F10D-64ETX	400V~3 50/60 Hz	7,15	10,36	4 x 1,5 mm²
F10D-64ETX	440V~3 60 Hz	7,15	9,38	4 x 1,5 mm²
F2/10D-66ETX	400V~3 50/60 Hz	14,3	20,72	4 x 2,5 mm²
F2/10D-66ETX	440V~3 60 Hz	14,3	18,76	4 x 2,5 mm²
F2/8D-64ETX	400V~3 50/60 Hz	12	17,39	4 x 2,5 mm²
F2/8D-64ETX	440V~3 50/60 Hz	12	15,75	4 x 2,5 mm²
F18D-64ETX	400V~3 50/60 Hz	15,9	23,04	4 x 2,5 mm²
F18D-64ETX	440V~3 60 Hz	15,9	20,86	4 x 2,5 mm²

3 INSTALLATION

3.1 Delivery checks

On delivery, it is important to check the following:

- External conditions of the packaging
- The general status of the equipment
- The conformity of the model with the information in the technical data plate and the instruction manual
- The conformity of the equipment and components to the order form

3.2 Removing the packaging

While removing the packaging, take care not to damage the appliance. Remove the protective film from the stainless steel and eliminate any traces of glue. Do not smoke. Perform this operation away from sources of heat and wear protective gloves. Do not disperse packaging material in the environment, keep it out of the reach of children and dispose in compliance with current legislation.

3.3 Mechanical installation

Place the appliance on a flat base. Adjust and stabilise the appliance by acting on the support feet. Make sure that the surrounding walls and/or equipment are capable of withstanding the heat emitted by this appliance. Connect the water supply (if necessary).

Caution

Do not install the appliance near equipment/machines used in cold processes. If the appliance has to be installed close to cold process equipment, it is advisable to install non-combustible thermal insulating material and/or neutral elements between them.

3.4 Electrical/gas connections

Before being offered for sale on the market, the appliance was subjected to gas and electrical testing (as required). The appliance is supplied without a power cable. The installation technician must connect the equipment in compliance with current safety regulations on the basis of the power of the appliance.

Caution

Our drop-in units are to be considered as semi-finished products. The completion and securing of the finished product is the responsibility of the installer, in accordance with the applicable regulations Installation, commissioning and maintenance of the appliance must be carried out by qualified personnel. All work necessary for installation must be carried out in accordance with the regulations in force. The manufacturer accepts no liability in the event of malfunctions due to incorrect or improper installation

Note

The ID plate is located in the compartment inside the door for appliances with compartments, or on the left side for appliances with an oven or a top. A second plate with the model and serial number is located inside the dashboard and a third is included with the certificate of conformity. The serial number can also be tracked from the sales document (after 2008). The plate has all the data needed for correct electrical installation. The installation and possible conversion to another power supply voltage (if envisaged) must be implemented exclusively by professionally qualified and authorized personnel. Before using the appliance, carefully clean all surfaces intended to come into contact with food.

Warning

Installation operations, any conversion to other types of gas and start-up must only be performed by qualified personnel, in accordance with current regulations.

Gas systems, electrical connections and premises where the appliances are installed must comply with current regulations in the country of installation; in particular, the appliance must be installed in a room with good ventilation, if possible under a suction hood to ensure complete evacuation of the exhaust gases formed during combustion. The air required for combustion is 2 m3/h per kW of installed power. The appliance can be installed alone or in series with other appliances in our production range. A minimum distance of 10 cm between appliances must be respected to prevent contact with any walls made of flammable material; furthermore, appropriate measures should also be adopted to ensure the thermal insulation of flammable parts, such as the installation of heat shields; take special care to ensure that appliances are installed in an appropriate and safe manner. The support feet can be adjustable in height and any unevenness can therefore be eliminated.

ELECTRICAL CONNECTION

Caution

In accordance with international provisions, when connecting the appliance an automatic device must be installed up-line of it so that the device can be fully disconnected from the mains; this device must have a contact aperture of at least 3 mm.

The connection terminal is located behind the rear wall. Proceed as follows to install the power supply cable:

- Remove the rear panel.
- Pass the new connection cable through the cable gland, connect the leads to the corresponding terminal on the terminal block and fasten them securely.
- Lock the cable with the cable gland and refit the panel. The earth/ground lead must be longer than the others so that if the cable gland breaks it is disconnected after the power cables.

Note

Make sure that the mains voltage complies with the data on the appliance's ID plate and that there is good conductivity to earth/ground. Pay attention when inserting leads to ensure they do not obstruct the normal course of work and routine appliance cleaning operations. Also make sure that the power cable is never pulled taut and is not placed in contact with sources of heat.

Note

The connection cable must have the following characteristics: it must be silicone type (to withstand temperatures of 180 °C), and must have an appropriate cross-section for the power of the appliance (see technical data table).

EQUIPOTENTIAL

The appliance must be connected to an equipotential system. The connecting screw is located on the rear of the appliance and is marked by the yellow symbol above it.

Warning

The manufacturer is not liable for and does not indemnify damages caused by incorrect inadequate installations that do not comply with these instructions.

4 INSTRUCTIONS FOR USE

4.1 General information

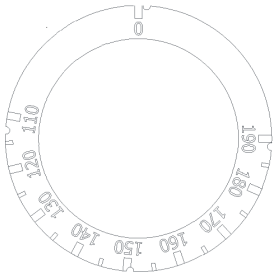
This appliance must only be used for its expressly intended purpose for cooking or heating food. Any other use is considered improper. The appliance is also intended for industrial use and **must only be used by personnel trained for use and aware of the risks that the hot element entails.**

Warning

The appliance operates at high temperatures, so the following is necessary:

- ***Pay attention to the areas surrounding the hot surface during routine normal operation (danger of scalding);***
- ***RISK OF BURNS Do not touch hot surfaces floor with your hands or other parts of the body to avoid burns caused by high temperatures;***
- ***After switching off the appliance, wait for a sufficient time for it to cool before carrying out any cleaning or maintenance operation.***
- ***Fill the tank with oil up to the lower reference mark***

4.2 Turning the appliance on/off



- Turn on the switch located upstream of the appliance. Turn the knob from "0" to the desired position between 110° and 190°C, the white and green indicator lights will turn on
- The green indicator light indicates that the appliance is powered. The white indicator light indicates that the heating element is functioning and when it turns off, this means that the temperature has been reached
- Turn the knob to “0” to switch off the appliance

4.3 Safety thermostat

The appliance is equipped with a safety thermostat which interrupts the gas flow if the temperature of the oil bath exceeds the pre-set maximum value (230 °C). Safety intervention is signalled by the main burner and the pilot burner both switching off. If this happens, operations can be reset by fully pressing the red button on the safety thermostat. If the problem occurs again, call the assistance service so that the causes can be eliminated.

Warning

If using the fryer with products other than oil (lard, for example) that have considerable thermal inertia, it is necessary to set the thermostat to a low value (e.g. 110°C) during the first cycle (not starting cold). The thermostat can be set to the maximum only after the entire mass has melted

4.4 Emptying the tank

The user is required to have a suitable recipient for emptying the oil. This recipient must be made of heat-resistant material and must ensure that, during the emptying stage, the oil does not overflow and does not represent a hazard. We recommend filtering the oil every day at the end of work and changing it when necessary. Turn the oil drain cock into the horizontal position. Take special care if the oil is hot.

Note

Pay close attention to the distance between the appliance and the edges of the basin.

5 MAINTENANCE

5.1 Routine

When using the appliance over time, it is essential to perform regular maintenance to ensure safe operation. We therefore recommend stipulating a service contract.

Caution

Maintenance must only be performed by specialist personnel in compliance with current regulations and our own instructions.

Before carrying out any maintenance and/or cleaning operation:

- Disconnect the appliance from the mains power supply and/or close the gas.
- Wait for a sufficient time for the appliance to cool down.
- Do not wash the appliance with direct or high-pressure jets of water, since any infiltration of water into the electrical components could jeopardise correct operation of the appliance and its safety systems.

Warning

For maintenance/replacement of components, order and use only original spare parts.

Replacing parts must exclusively be performed by authorised and/or qualified personnel. When replacing the electrical components of the machine and the electrical panels, scrupulously follow the technical characteristics for the replacement component indicated on the component itself. The appliance does not require any special maintenance but during the use of the equipment it is advisable to check the following at least once a year (possibly increasing the frequency depending on the degree of use):

- The status of connections especially on the terminal board and the power supply cable, as well as the status of the gas connections;
- The operating condition of the various components (perform a functional test);
- For appliances fitted with rotary resistances, remove the hub, grease it and replace the three o-ring seals to avoid possible leaks.

5.2 Spare parts

It is possible to replace parts such as the valve, the piezoelectric or the ignition control unit (depending on the type of appliance) or the gas pipes easily and quickly.
To replace such parts, proceed as follows:

- **SWITCH and THERMOSTAT:** Remove the knob and open the panel, unscrew the two screws that fasten the switch to the panel, remove all the electrical connections and proceed with replacement. The thermostat and switch are fastened together by a metal bracket

- **ROTARY HEATING ELEMENT**; remove the panel and remove the wires connecting the heating element. Unscrew the two 8 mm screws that fasten the bracket to the heating element and pull out the bracket until it can be removed. At this point, the heating element can be removed from inside the bowl, pushing it towards the draught diverter. Also replace the 3 o-rings (see point 1 in figure B) and apply a bit of grease to facilitate the operation.

Note

It is recommended to replace the three o-rings once a year as they are subject to wear and, with time, can cause leaks

Caution

WHAT TO DO IN THE EVENT OF FAULTS:

Close the gas connection cock and/or switch off the power using the up-line device. Notify customer service.

Warning

MEASURES TO BE TAKEN IF THE APPLIANCE IS NOT TO BE USED FOR A LONG TIME:

Close the gas cock and/or disconnect the power supply. Clean the system as specified above.

6 CLEANING

6.1 Routine cleaning

Caution
The use of flammable fluids to clean the appliance is forbidden

To ensure hygiene and the durability of the appliance, perform external cleaning on a regular basis, taking care not to damage the cables and the electrical connections. Before starting cleaning, disconnect the appliance from the power supply. Parts in steel can be washed with warm water and a neutral detergent: Rinse them thoroughly to eliminate all traces of detergent and then dry with a dry cloth. Do not use abrasive and corrosive detergents. Enamelled parts must be washed with soapy water. For appliances that included an oven, cleaning it is made easier by removing the support grid. Thorough, daily cleaning prevents faults and accumulated deposits of fat and/or food. The steels used in the manufacture of professional equipment are tried and tested materials of the highest quality. Thanks to their characteristics, they are ideal materials for use with food substances.

Consequently, when using stainless steel appliances, the following suggestions must be observed:

- Stainless steel surfaces must always be kept clean, also ensuring contact with the air. The lack of oxygen under layers of scale, starch, egg white or other deposits means that surfaces can be affected by corrosion
- Do not use products containing salt or sulphuric acid to remove scale. Suitable products are available commercially but a diluted solution of acetic acid can also be used
- To clean STAINLESS STEEL appliances, it is advisable to use detergents specifically formulated for this material. For "minor cleaning", a mild washing up liquid solution may also be used
- **Do not wash the appliance with jets of water under pressure**
- Avoid using detergents containing abrasive powders or bleaches of any kind
- Lockable stainless steel appliances, during periods of inactivity, must be left uncovered so that air can freely access internal metal surfaces
- Stainless steel must not remain in contact for long periods with concentrated acids or with aromatised concentrates such as salt solutions, mustard, spice mixtures or the like. At certain temperatures and concentrations, these substances can damage the passive layer. Contact surfaces must therefore be immediately rinsed with clean water and then dried
- It is inadvisable to use stainless steel pots exclusively to cook foods in salt water (pasta, rice, potatoes, etc.). From time to time, these pots must also be used to cook foods containing fats or vegetables. This helps to prevent damage caused by corrosion
- After cooking foods in salt water, rinse the tanks with fresh water since salt water residues from cooking form layers of highly concentrated saline solution that can cause spotting corrosion
- To prevent so-called secondary corrosion, prolonged contact of stainless steel with ferritic steels should be avoided
- Any secondary corrosion spots must be eliminated immediately
- Do not use sharp objects that may scratch stainless steel parts and consequently give rise to deterioration