

Electrical Cold-Zone Fryer

E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR

Pro 1000 Series



- ✓ **V00722: MODULE 1000 E1FR80** **Cold-zone fryer**
- ✓ **V00949: MODULE 1000 E1FR80TRG** **Cold-zone fryer**
- ✓ **V00723: MODULE 1000 E1FR80TRD** **Cold-zone fryer**
- ✓ **V00843: MODULE 1000 E2FR80TR** **Cold-zone fryer**

Installation Manual



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1. INSTALLATION

1.1. General instructions

The installation must be done in a sufficiently ventilated room with mechanical extraction, according to professional standards and in accordance with the relevant rules and standards in the country of installation and with the instructions contained in this manual.

The user must be supplied with the manual once the machine has been installed.

1.2. Handling – Positioning of the machine

The machine **must** remain on its wooden base during handling, until it has been put in its final position. Remove packaging and make sure that the machine is in good condition.

In the event of damage, please indicate the reservations on the delivery note, to be confirmed by registered post with acknowledgement of receipt to the carrier within a maximum of 48 hours.

1.3. Positioning of the machine

Special attention must be given to the fire safety regulations applicable at the relevant site (see E.R.P. regulations).

The machine **must** be installed underneath an extractor fan.

If this machine must be installed close to a wall, a partition, a piece of furniture or decorative borders, it is recommended that these should be made of non-flammable materials.

If this is not the case, they must be coated with an appropriate material, a good, non-flammable thermal insulator.

In case of any doubts about the materials, we recommend that you install the machine, leaving a space of 10 cm.

Remove all plastic protective covers of the packaging.

Position the machine in its work space.

Warning!



- **Fixed installation:**

Put the feet or adjusting screws on (these come in an additional ventilated box)
Adjust level of machine by adjusting height of feet in order to obtain a height of the horizontal work surface.

- **Mobile installation:**

Put the wheels on (these come in a separate box)
The wheels with brakes **must** be locked when the machine is in connecting position and at all times while the machine is in cooking mode.

Do not install this machine right next to machines with an open burner or insert a neutral part between the machines. (fire hazard due to splashing oil).



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Technical operations and repairs

Any operation or repair on a machine must be carried out by a qualified installation engineer.

Once the installation of the machine has been completed, its users must be trained in the appropriate use (see user manual).

Warranty: Details of the warranty are contained in the sales contract. This warranty does not cover any damage as a result of wrong or inappropriate installation, use or poor maintenance.

- **Identification number plate**

Every machine has a number plate. Please copy the data from this plate into the part of this manual for this purpose (see last page). This will make it easier for you to communicate with your client to ensure better service.



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✓ ELECTRICAL PART

Warnings and Important notes

The machine must be earthed.
There is a danger in putting the machine into operation without earthing.
We assume no liability in the event of accidents as a result of an incorrect or inexistent earthing.



- **Fixed and mobile installation:**

Make sure that the fixed user installation has an all-pole circuit-breaker with an opening distance of the contacts of 3.5mm and that it is in accordance with the standard EN 60335-1.

- **Mobile installation:**

The machine must be connected by a cable with a connecting plug which is appropriate for the power; this plug must be accessible at all times.



- **IMPORTANT NOTE:**

Use approved cable (according to Standard 245 IEC 57 or 245 IEC 66), or any other type of cable with the same characteristics.

4. Checks to be carried out before making the electrical connections

All the control checks and operations and listed below must be carried out while the machine is out of operation and when it is cold.

- **Check following points:**

Please check the following before live-putting:

- that the voltage of the circuit is compatible with the voltage and the power of the machine (see Section 5)
- the cable is properly fixed,
- the connections of the machine are properly tightened,
- that the section of the cable is compatible with the power of the machine.

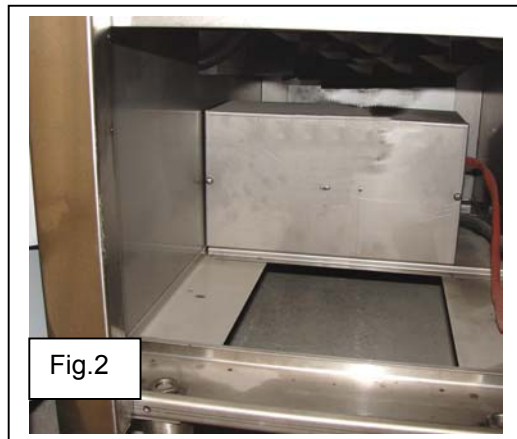
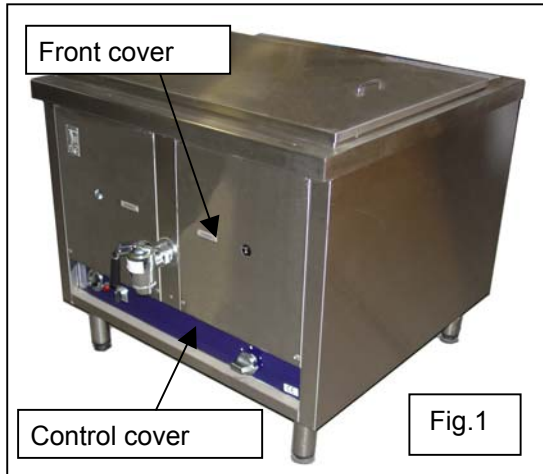


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4.1. Electrical connection

- **Electrical ignition**



- **ELECTRICAL IGNITION:**

-The machine comes with a high-temperature flexible cable.
 The electrical cable can be accessed behind the control cover, under the machine.
 Connect the machine to the electrical circuit.
Before reassembling, check and ensure appropriate electrical insulation of the machine (condition of cable).

Position front cover (fixing with 4 screws, fig.1) and the control cover (fixing with 4 screws) Thus, you can access the flexible high-temperature cable (fig.2 et 3)

4.2. Checks to be carried out once the electrical connections have been made

- Following the connection, please check:
 - proper earthing, (see warnings)
 - Insulation of the electrical installation,
 - correct operation of the machine (functioning of thermostat etc.):

Putting into operation: (please see section 'Putting into Operation' of the User Manual)

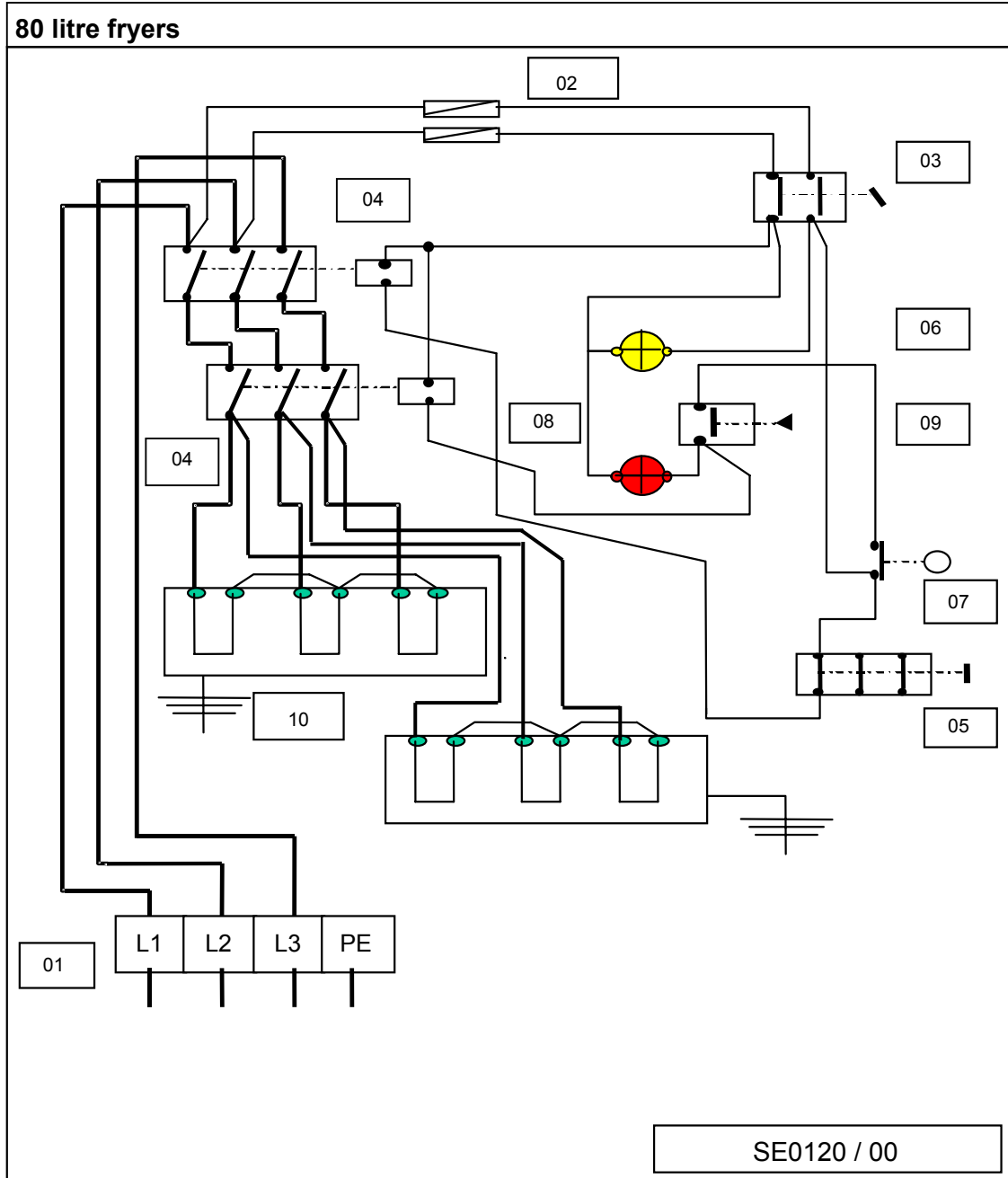
5. Table of adjustments to the different network voltages and available options.

<i>T</i> transformation voltage	⇨				
<i>The different electr. configurations</i>	⇩	1~230V+T	3~230V+T	3~400V+T	3~400V+N+T
E1FR80 : V00722, V00949, V00723, V00843		C	C	A	C
Electr. diagram				SE0120/00	



Electrical Cold-Zone Fryer

E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR




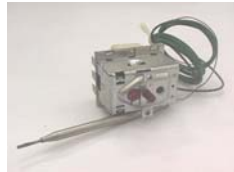




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E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR

NOMENCLATURE: E1FR80TR FRYER (Diagram No. SE0120 / 00)

Number	Reference no.	Designation	Qty
01	02468A	Viking terminals, 10 mm ²	3
01	03575A	Viking terminals, 10 mm ² green/yellow	1
02	02726A	Fuse-holder 5 mm x 20 mm	2
02	03413A	Fuse 5 mm x 20 mm, 5 A	2
03	02104A	Change-over switch with handle (without protector)	1
04	03579A	Contacteur (400 V)	2
05	05996A	Safety thermostat	1
06	05075A	Yellow indicator	1
06/08	02142A	Light bulb (400 V)	2
07	05091A	Limit sensor	1
08	02131A	Red indicator	1
09	01996A	Thermostat	1
10	07038A	Resistance (25 kW 400 V)	2

7. LIST OF EMERGENCY PARTS

Designation	Code	Photograph	Designation	Code	Photograph
Heating bodies 25 kW 400 V	05598A		mechanical timer	02167A	
tri-polar temperature limiter	05996A		Fuse 5 mm x 20 mm 5A	03413A	
400 V light bulb	02142A		Regulating thermostat	01996A	
Coil contacteur (400 V)	03579A				



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User Manual



Electrical Cold-Zone Fryer

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INTRODUCTION:

Product Identity see technical data sheet

- A) Our machines are destined for commercial use and must be used by operated by qualified personnel.
 - B) Our machines are destined for industrial use and must be operated by qualified personnel.
 - C) The machines must be installed in a room with adequate ventilation, underneath an extractor fan, in accordance with the relevant standards and regulations in the country of installation.
 - D) The machine may be positioned next to others or placed against non-flammable partitions. However, under no circumstances must it be placed at less than 10 cm from any flammable object.
 - E) Any changes with respect to the materials in place or any new installation **must** be carried out by a qualified technician.
1. **WARRANTY:** *The warranty is indicated in the sales contract. For any warranty operation, please contact an approved reseller. This warranty does not cover any damage as a result of inadequate or wrong installation or use, or poor maintenance..*

3.1. SAFETY

Fire hazard:

The safety thermostat helps to prevent the oil from reaching an excessive temperature.
The generously dimensioned overflow area helps to avoid the spillage of oil outside the tub.

IMPORTANT NOTE:
When in operation, the fryer **must** be under supervision.

Recommendations
Change the oil from time to time; used oil has a lower ignition point.
Wait until the fryer has switched off and the oil has cooled down before you do the oil change.

Recommendations

- Avoid heating up for a prolonged time while empty,
- Never salt your food over the oil bath.



NEVER MELT A SOLID BLOCK OF FAT ON THE RESISTANCES
(melt beforehand)



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E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR

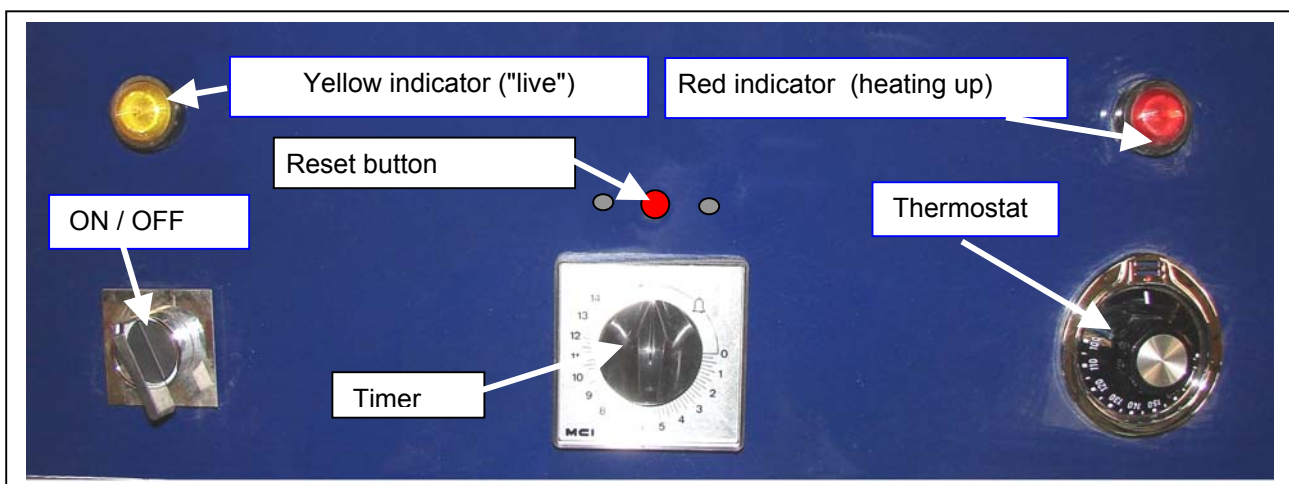
1. FIRST LAUNCH:

- When the machine is live:
- Before filling the tub with oil, clean it out in order to remove any dirt which may be in it (respect basic hygiene rules).
- Fill the tub with water, using a non-aggressive detergent (water level above the index on the side of the tub).
- Position switch on "ON", the yellow indicator will come on. (sign that it is live).
- Select a temperature of 100 °C by operating the thermostat button; then the red indicator will come on. The machine is heating up.
- Switch the fryer off.
- Drain it.
- Make sure the tub is well dried before filling in the oil.
- Before heating up the oil, make sure that the oil level in the tub of the fryer is correct (between the high and low ends of the index on the side of the tub).

Above minimum level, there is a danger that the oil bath might get overheated.

Above maximum level, there is a risk of overflow through swelling when letting down the basket.

☞ Key to serigraphic marking:



3.1. PUTTING INTO OPERATION

.1. Filling

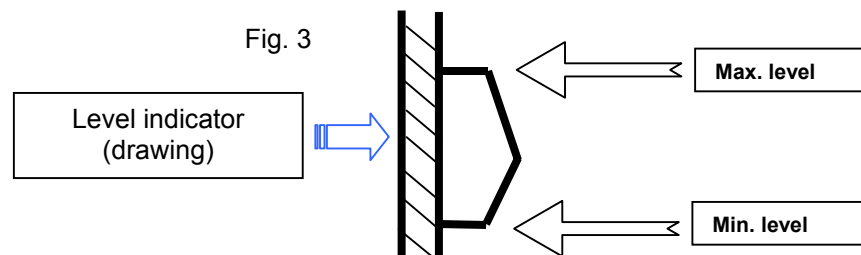
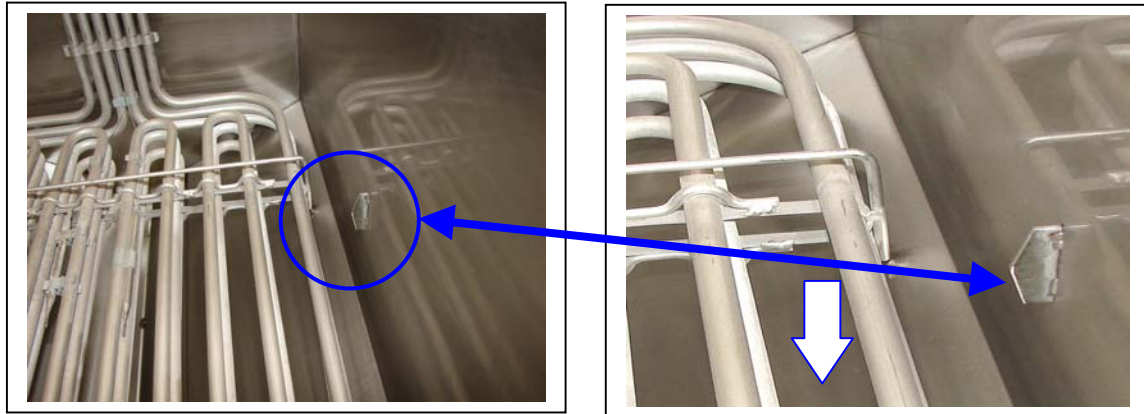
It is important that you should always use an oil or fat for fryers made for high temperatures.

Fill the tub up to the level marking (figure 3).

The oil level must be between the minimum and maximum level of the indicator.

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E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR



Please note:


If it has been decided to use oil in solid condition (a block of fat) for the first filling of the tub, it is recommended that you first melt those blocks outside the fryer.

Then, when the oil is in place, the melting of solid fats is programmed automatically each time the fryer is launched (up to 58°C).

- Position change-over switch on "ON", then the yellow indicator will come on (sign that it is live).
- Select the temperature you want by operating the thermostat button; then the red indicator will come on. The machine is heating up.

When the temperature displayed has been reached, this red indicator will go off. Then the basket of the fryer can be let down.

3. PUTTING THE MACHINE OUT OF OPERATION

Put the control hand-wheel of the valves on  position (=Stop).

At the end of the day, the gas valve must be closed and the machine must be disconnected from the power-supply circuit.

3.1. MAINTENANCE

Wait until the temperature of the parts close to the burners have come down to a bearable temperature.

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E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR

3.2. Cleaning of stainless steel parts:

- a) Switch machine off. After each use, it is highly recommended to disconnect all machines from electrical power supply before cleaning.
- b) Wash with a sponge, using soap water (or any other *neutral* detergent).

Do not use water with bleach and any other acid product, even very diluted.

For the tops, use a scourer if necessary, making sure that you always rub **in polishing direction**.

Wipe down with an oily rag after each cleaning.

Decanting:

After each use, it is recommended to decant the tub of the water it contains by slightly opening the drain valve, until the oil runs off; make sure you have put the collection sump underneath.

Daily maintenance:

Remove immediately any spillages due to oil splashes; use a cloth. The frame can be cleaned with soap water, then rinse and wipe down.

Switch off fryer; then, when the oil has cooled down to lukewarm (about 60°C), drain the entire oil into a sump with a filter, take off the stainless-steel retention grid for large residues.

When the oil has thus been filtered, it can be put back into the tub. Refill the oil level as appropriate, if necessary.

Cleaning the tub:

Empty the tub completely of its oil.

Fill the tub with water, using a little bit of soap; the level should be a little bit above the max. level indicated on the tub.

Bring the water to the boil and let it boil for a few minutes.

Stop the resistance and drain. When the walls have cooled down to a bearable temperature, clean by rubbing with a non-abrasive sponge soaked with a detergent.

Rinse tub generously and dry.

This machine must not be exposed to major water splashes or be cleaned with high-pressure water jets. Make sure that the machine is disconnected.

Table (for guidance):

Designation	Weight of part en Kg
<u>Retention grid</u>	70Kg

*Please note : *Please handle its parts with care for your own safety .*

For better service, it is recommended to have the machine serviced by a qualified service engineer at regular intervals, according to the intensity of use.

Warning: Some parts of the machine are covered by the manufacturer. In the event of a failure or defect, please call a qualified service engineer.



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E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR

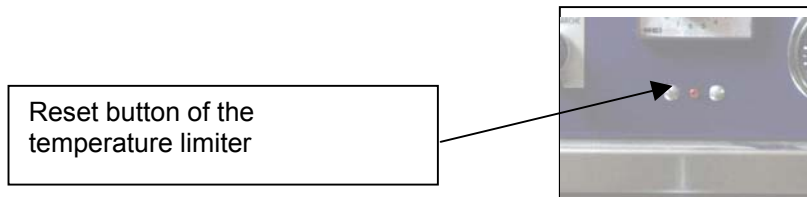
4. Table of potential faults

4.1. Resetting the limiter thermostat

The fryers are fitted with a limiter thermostat which protects them from overheating due to:

- a defective regulating thermostat,
- a defective power contactor,
- an insufficient level of the tub.

The reset is done by operating the red push-button of the safety thermostat which can be accessed on the front.



Any trigger of the safety thermostat must be analysed before reset.

Notify your installer to exchange the defective control organs, so that the machine is ready for the next use.








The ignition transformers may only be replaced by a qualified electrician.

Neither the manufacturer nor the installation engineer shall assume any liability if the operator fails to call for maintenance in the event of these faults.

Electrical Cold-Zone Fryer

E1FR80/E1FR80TRG/E1FR80TRD/E2FR80TR

PLEASE COPY the data from the IDENTIFICATION NUMBER PLATE of your machine here.

		CHARVET S.A.			
		38850 CHARAVINES			
Réf.	<input type="text"/>				
Code:	<input type="text"/>	Type:	<input type="text"/>		
N°FC:	<input type="text"/>	Rep.	<input type="text"/>		
Cat.	<input type="text"/>				
Gaz	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
P (mbar)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ΣQ_n (kW)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ΣV_n (m³/h)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
ΣM_n (kg/h)	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>	<input type="text"/>
U	<input type="text"/>	V	<input type="text"/>	Ip	<input type="text"/>
f	<input type="text"/>	Hz	P	<input type="text"/>	kW
<input type="text"/>	<input type="text"/>				
	<input type="text"/>				
	MADE IN FRANCE				

This information will make it easier for you to communicate with your installation engineer for maintenance and for the delivery of spare parts.

