

metos

PIZZA OVEN

Zenith

Installation and Operation Manual



rev 2.0

Contents

1 GENERAL	5
1.2 Symbols used in the manual	5
1.3 Symbols used on the appliance	5
1.4 Checking the relationship of the appliance and the manual	5
2 Safety	6
2.1. General safety rules	6
1.4 - MACHINE COMPOSITION	7
1.5 - PREARRANGEMENTS AT PURCHASER'S CHARGE	7
1.6 - EMERGENCY OPERATIONS IN CASE OF FIRE	7
1.7 - EXPLOSION RISK	7
1.8 - ACOUSTIC PRESSURE LEVEL	7
2. FUNCTIONAL DESCRIPTION	8
4.2 - SAFETY PLATES	8
2.3 - SAFETY DEVICES	9
2.4 - USER'S AREAS	9
2.5 - RESIDUAL DANGER AREAS	9
2.6 - LOADING THE OVEN	10
3. OPERATING INSTRUCTIONS	11
3.1 - CONTROL BOARD AND PILOT LIGHTS ON DIGITALLY CONTROLLED OVENS	11
3.2 - FUNCTION SETTING	12
3.3 - FUNCTIONING	13
3.4 - OVEN PREPARATION	16
3.5 - MANUAL OVEN CONTROL BOARD	17
3.6 - OVEN PREPARATION	18
3.7 - PIZZA BAKING	19
3.8 - ALARM CONDITIONS DURING OVEN FUNCTIONING	20
3.9 - SELF-CLEANING CYCLE	21
3.10 - SWITCH-OFF	22
3.11 - MALFUNCTIONING, CAUSE AND CURE	23
3.12 - SAFETY THERMOSTAT RECHARGE	23
3.12 CLEANING	24
3.12.1 - Outer cleaning	24
3.12.2 - Refractory surface cleaning	24
3.12.3 - Every 600 hours a careful chamber cleaning	24
4. INSTALLATION	25
4.1 TRANSPORTING AND HANDLING THE PRODUCT	25
4.1.1 Lifting of the packing	25
4.2 - RECEPTION OF THE MACHINE	26
4.3 - UNPACKING	26

4.4 - IDENTIFICATION OF THE COMPONENTS.....	27
4.5 - IDENTIFICATION OF THE MACHINE	27
4.6 - LIFTING OF THE MACHINE	28
4.7 - ASSEMBLING OF THE COMPONENTS	28
4.8 - ELECTRICAL CONNECTION.....	31
4.8.1 - Electric oven connection	31
4.8.2 - Electric hood connection	32
4.8.3 - Heated room electric connection	32
4.8.4 - Unipotential connection.....	32
4.9 - OVEN POSITIONING	32
5.9.1 - Chimney connection	32
4.10 - FIRST STARTING.....	32
TECHNICAL SPECIFICATIONS.....	33

1 GENERAL

Carefully read the instructions in this manual as they contain important information regarding proper, efficient and safe installation, use and maintenance of the appliance.

Keep this manual in a safe place for eventual use by other operators of the appliance.

The installation of this appliance must be carried out in accordance with the manufacturer's instructions and following local regulations. The connection of the appliance to the electric and water supply must be carried out by qualified persons only.

Persons using this appliance should be specifically trained in its operation. Switch off the appliance in the case of failure or malfunction. The periodical function checks requested in the manual must be carried out according to the instructions. Have the appliance serviced by a technically qualified person authorized by the manufacturer and using original spare parts.

Not complying with the above may put the safety of the appliance in danger.

1.2 Symbols used in the manual



This symbol informs about a situation where a safety risk might be at hand. Given instructions are mandatory in order to prevent injury.



This symbol informs about the right way to perform in order to prevent bad results, appliance damage or hazardous situations.



This symbol informs about recommendations and hints that help to get the best performance out of the appliance.

1.3 Symbols used on the appliance



This symbol on a part informs about electrical terminals behind the part. The removal of the part must be carried out by qualified persons only.



This symbol is applied near zones where high temperature may occur.

1.4 Checking the relationship of the appliance and the manual

The rating plate of the appliance indicates the serial number of the appliance. If the manuals are missing, it is possible to order new ones from the manufacturer or the local representative. When ordering new manuals it is essential to quote the serial number shown on the rating plate.

2 Safety

2.1. General safety rules

Before installing the machine make sure that the used area is compatible with the dimensions and the weight of the machine.

For the installation or removal of any machine part, the used lifting and handling devices should be suitable to the weight and geometrical characteristics of the part to be lifted or handled.

Mechanical parts and electrical components inside the machine are protected by totally enclosed panels fastened with screws.

Before cleaning and/or maintaining the machine and before removing any type of protection, **make sure that the general switch is on "OFF" position (O)**, in order to turn off the power while the operator is working.

The power supply system of the purchaser should be provided with an automatic release device above the machine main switch and with a suitable earthing system complying with the accident prevention regulations.

In case of repairs to be done on the main switch or in the main switch area, turn off the power of the electrical line.

Any inspection and maintenance works requiring the removal of the safety protections are made under the responsibility of the user.

Therefore it is recommended that the above mentioned works are done by authorized and skilled personnel only.

Make sure that all safety devices (barriers, protections, carter, micro-switches, etc.) have not been tampered and are perfectly working. On the contrary, they should be repaired.

Do not remove the safety devices.

In order to avoid personal risks, only suitable tools should be used, in accordance with the local safety regulations.

Do not tamper the electric and pneumatic plant or any other mechanism for any reason.

Do not leave the machine unattended while it is working.

Wear safety clothing only, approved by the law in force.

In case of works to be done in a position that cannot be reached from the ground, use safe ladders or lifting devices only, in conformity with the local safety regulations.

In case of repairs to be done near or under the machine, make sure that:

- there are no machine members that can start working and/ or instable parts placed on the machine or near the machine.

Do not use your hands instead of suitable tools to work on the machine.

Do not use your hands or other tools to stop any moving parts.

Do not use matches, lighters or flames near the machine.

YOUR BEST ATTENTION SHOULD BE PAID TO THE WARNING PLATES LOCATED ON THE MACHINE BEFORE DOING ANY WORK ON THE MACHINE OR NEAR THE MACHINE.

The user is obliged to keep all the warning plates in legible conditions and, if required, to change their position in order to make them fully visible to the operator.

Moreover the user is obliged to replace any warning plate that, for any reason, has been damaged or is not clearly legible. New warning plates can be obtained through our Technical Service Centre.

Stop the machine before doing any repair work.

In case of malfunction of the machine or damages to its components, get in touch with the maintenance engineer and do not try to repair the machine.

It is absolutely prohibited to use the machine for other purposes different from those expressly indicated and documented.

The machine should be used always when and how provided by the good technique, in compliance with the EEC machine directive 89/392 and in compliance with the regulations concerning health and safety of the workers, as indicated by the local regulations or according to the EEC directive 89/391.

The manufacturer declines all responsibility for any injury or damage to persons or things arising from in observance of the safety regulations and the instructions contained in this manual.



For clarity reasons, some illustrations of this booklet show the machine without safety guards. **DO NOT USE THE MACHINE WITHOUT SAFETY GUARDS.**

DO NOT make hurried or inaccurate repairs that may compromise the good running of the machine and the safety of the operator.

IN CASE OF DOUBT ALWAYS ASK FOR THE PRESENCE OF SKILLED PERSONNEL.

FOR ANY ELECTRIC/ELECTRONIC OR MECHANIC TAMPERING OF THE MACHINE BY THE USER OR IN CASE OF A NEGLIGENT USE OF THE MACHINE, THE MANUFACTURER IS RELIEVED FROM ANY RESPONSIBILITY AND THE USER WILL BE THE ONLY ONE RESPONSIBLE AGAINST THE COMPETENT AUTHORITIES FOR THE ACCIDENT PREVENTION.

1.4 - MACHINE COMPOSITION

Manufacturer's machines are the results of a considerable experience.

- Ovens with single chamber or two chambers, with digital or manual functioning.
- A hood can be placed over the oven; in case of manually functioning ovens, the hood shall be controlled by a special board, in case of digitally controlled oven, the hood shall directly be controlled by the oven keyboard.
- The oven/s is/are placed on a bearing base equipped with wheels.

1.5 - PREARRANGEMENTS AT PURCHASER'S CHARGE

a) Prearrangement of the installation place.

- The purchaser shall prearrange a supporting surface for the machine as indicated in the chapter "Installation".

b) Electric prearrangement.

- The power system should comply with the local regulations and provided with an efficient earthing.
- Place an omnipolar sectioning device on the power feed line, above the machine.
- The size of the electric power cables should comply with the maximum current required by the machine, so that the total voltage drop at full charge will be less than 2%.

c) Flue prearrangement

- It is necessary to prearrange a vapour flue, whose features shall be in compliance with the rules being in force in the Country the oven shall be installed in.

b) Neutral wire

- The machine is equipped with neutral wire, therefore, a special terminal being identified according to the relevant directions has been prearranged.

1.6 - EMERGENCY OPERATIONS IN CASE OF FIRE

- In case of fire turn off the power by disconnecting the main power switch.
- Put out the fire by means of suitable fire extinguishers.



Do not attempt to put out the fire by using water.

1.7 - EXPLOSION RISK

- The machine is not suitable to be used in a place with explosion risk.

1.8 - ACOUSTIC PRESSURE LEVEL

With ZENITH ovens, an A acoustic continuous equivalent weighted pressure level(dB) under the maximum allowed 70dB level is kept.

2. FUNCTIONAL DESCRIPTION

2.1 - TYPE OF USE AND CONTRA-INDICATIONS

ZENITH ovens are professional machines suitable for baking pizza and similar products. The various models shall only be used to process as above; in case of any other use, manufacturer disclaims all responsibility for accidents to persons or objects and customer will be debarred from a possible guarantee right.

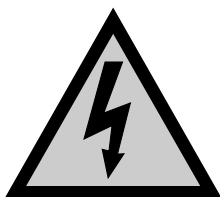
4.2 - SAFETY PLATES

The warning plates with explanatory symbols are to be found in all those areas that may be dangerous for operators or engineers.



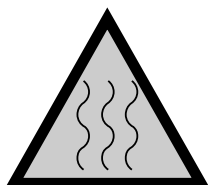
Anyone preparing to work on the machine should protect the warning plates with the safety instructions. The non compliance with the instructions mentioned on the safety plates will release the manufacturer from all responsibilities for damages or injuries to persons or properties that may arise.

Danger: machine under voltage

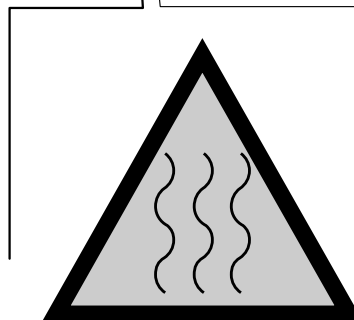
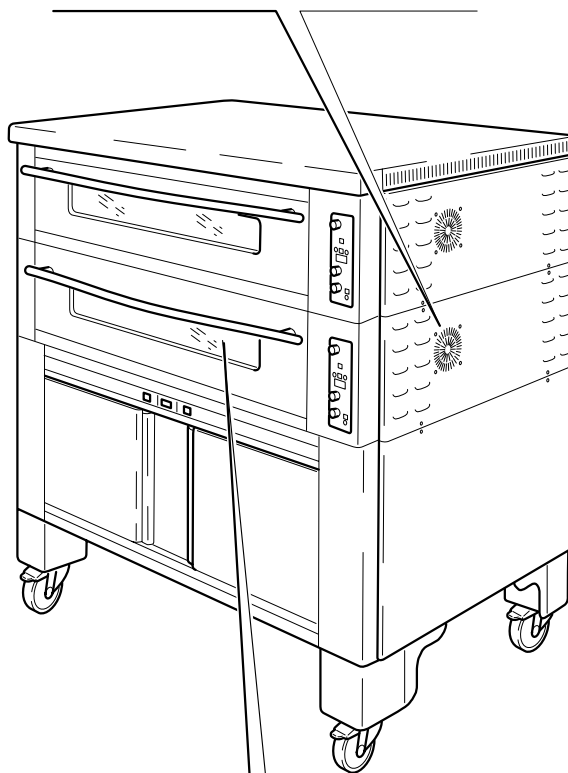
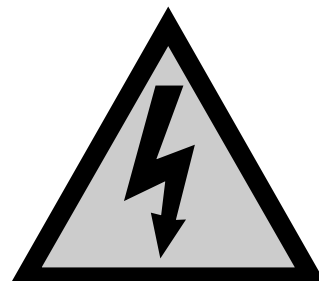


- Do not work with the machine under voltage.

Risk of burns



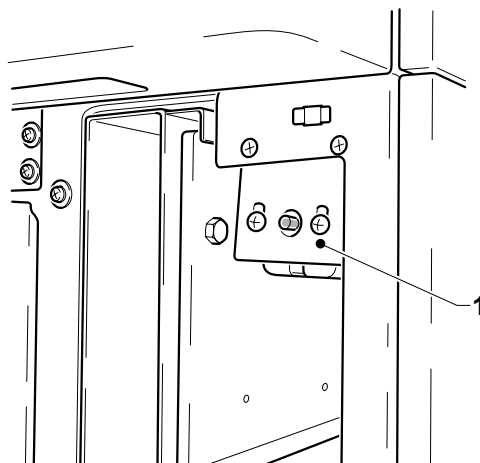
- Risk of burns: do not touch by hand.



2.3 - SAFETY DEVICES

The equipment is equipped with following safety systems:

- 1) All dangerous areas are closed by screwed cases.
- 2) Each oven is equipped with a safety thermostat (1), which disconnects the oven in case of overtemperature inside the baking chamber, in case of digitally controlled ovens, the card is equipped with a special component, which stops the oven functioning in the event the temperature inside the control board exceeds 85°C.



2.4 - USER'S AREAS

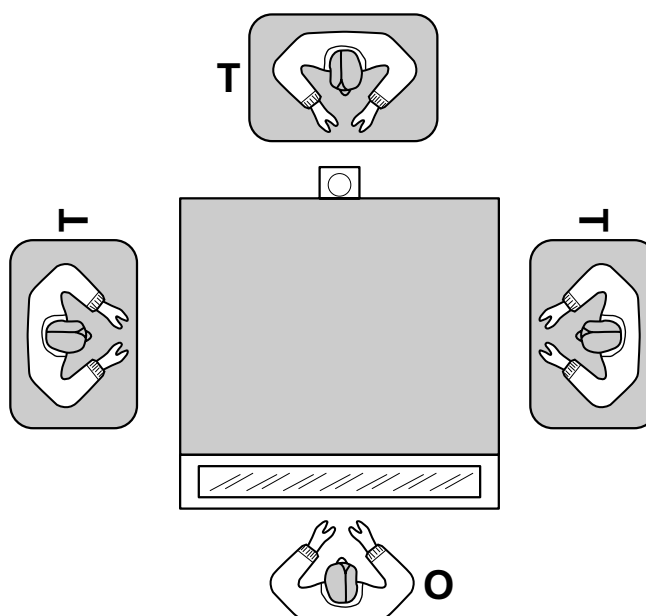
During the oven functioning, user is in front of it, in order to be able to easily insert and remove the pizza through the door (1) (see Fig. 3 "O" position).

To carry out maintenance operations, technician's position may be on the rear or lateral side of the oven - "T" position.

2.5 - RESIDUAL DANGER AREAS

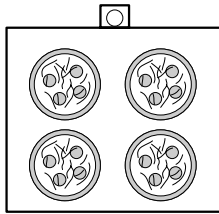
The residual danger areas are those areas that cannot be protected because of the particular type of production, as far as the machine concerns. They are the following:

- Door area and baking chamber inner area: risk of burns.

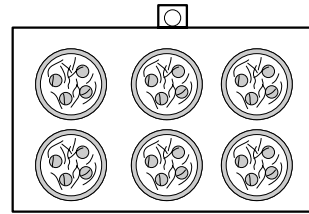


2.6 - LOADING THE OVEN

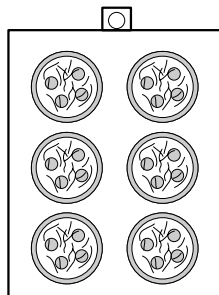
Mod 435 can contain 4 Ø 35 cm pizzas positioned as follows:



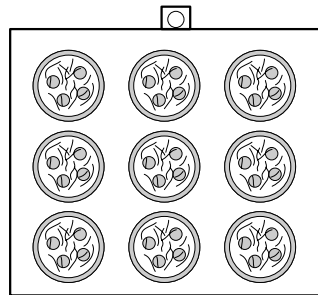
Mod 635 XL can contain 6 Ø 35 cm pizzas positioned as follows:



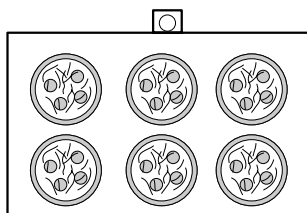
Mod 635 S can contain 6 Ø 35 cm pizzas positioned as follows:



Mod 935 can contain 9 Ø 35 cm pizzas positioned as follows:



Mod 635 L can contain 6 Ø 35 cm pizzas positioned as follows:



3. OPERATING INSTRUCTIONS

3.1 - CONTROL BOARD AND PILOT LIGHTS ON DIGITALLY CONTROLLED OVENS

The machine has following control elements:

1. Line key

When it is pressed, the green led (1A) lights up and the control elements are energized.

3. Increment key

To raise values to be set.

4. Decrement key

To decrease values to be set.

5. Temperature key °C

When it is pressed on display, the set baking temperature (15) blinks, to raise it, press , to decrease, press .

6. Ceiling power

When it is pressed on display, value (16) blinks, it is the insertion percentage value of upper resistances; to raise it, press , to decrease, press .

7. Bedplate power

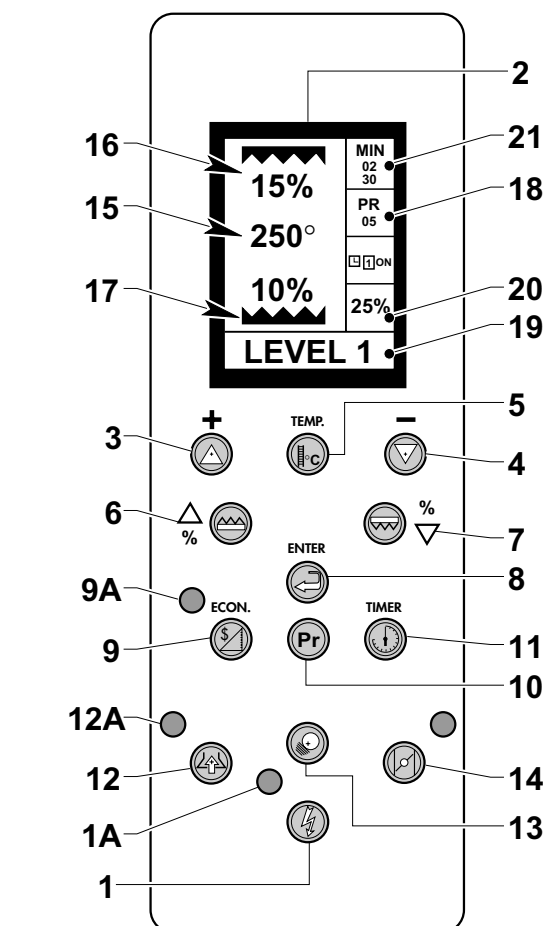
When it is pressed on display, value (17) blinks, it is the insertion percentage value of lower resistances; to raise it, press , to decrease, press .

8. "ENTER" key

On programming stage, this key enters the stored data and moves on further data.

9. "ECONOMY" key

When it is pressed, the relevant led (9A) lights up and ECONOMY function is enabled. To disable this function, press (9) again, led (9A) goes out.



10. "Programmes" Pr key

When it is pressed, stored programmes are displayed, to move on other programmes, indifferently press or .

During functioning on display, the stored programme number (18) is displayed.

11. "Timer" key

When it is pressed with a selected programme, it starts the pizza baking timer [the minute counter (21) blinks], once the set time is over, a sound signal intervenes in the selected programme, for a few seconds.

[The time set in the selected programme (21) is displayed]

12. Hood key

When it is pressed, the relevant led (12A) lights up. The hood functioning as well as the relevant adjustment are also enabled when key (1) is disabled - led (1A) gone out - . Suction level (19) is displayed.

13. Lamp key

When it is pressed, the lamp inside the oven lights up. To allow the lamp to go out, press the key again.

14. Chimney key

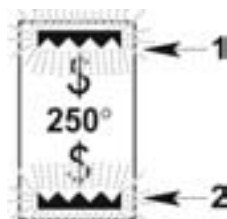
When it is pressed, the relevant opening % (20) is displayed, to raise or decrease the chimney opening, press  or .

3.2 - FUNCTION SETTING

Press the key  to enable the function keys. ECONOMY function setting.

By this function, the heating resistances alternatively intervene using 50 % of the power. Normally, this function is utilized when the oven is hot to keep the set temperature.

- Press the key , the relevant led lights up, following visual display appears:

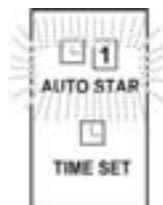


- The upper part (1) and the lower part (2) are displayed with alternating blinking. In the middle, the real oven temperature is displayed.
- To disable this function, press , again, the relevant led goes out.

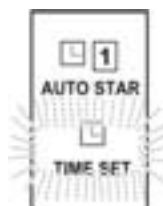
TIMER setting

To set the timer, proceed as follows:

- At the same time press  and  to get following visual display:



- Press the key  to select "TIME SET"



- Press , to get time modification, press  or  to change the time.



IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

Hood suction speed setting.

To set the suction speed, operate as follows:

- At the same time press  and  following visual display appears:



- To increase  or press  reduce the hood speed. In the visual display, the value set on the scale is the blackened one.

IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

Chimney setting

To set the chimney opening, operate as follows:

- Pressing , following visual display appears:



- To increase or reduce the chimney opening, operate  or . In the visual display, the value set on the scale is the blackened one.

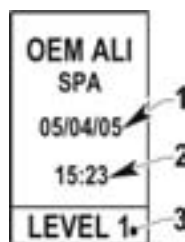


IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

Change of date, hour, day of week

- Make sure the push-buttons have no tension, the  key is disabled and the relevant lamp is went out.
- Following visual display appears:



- Pressing , following visual display appears:



- Press  or  to change the data item (HOUR), then press  to move on the next visual display. Minutes, day, month and year can in sequence be modified.
- To set the day (very important for a weekly oven starting programme) access the hour modification phase as above and press  to allow following visual display to appear:



- To modify the data item, press  or  setting the concerned day of the week according to the under reported lay-out:

- 1 = Monday
- 2 = Tuesday
- 3 = Wednesday
- 4 = Thursday
- 5 = Friday
- 6 = Saturday
- 7 = Sunday



IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

3.3 - FUNCTIONING

- With disabled key  the date (1) and the time (2) are displayed, in case of hood (3), the value of the latter is also displayed.

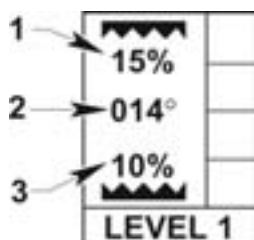


IMPORTANT

This kind of oven can either be utilized in "MANUAL" or "PROGRAMMED" mode.

3.3.a - Manual mode functioning

- Press , following visual display appears.



Part (1) of display indicates the ceiling resistance use percentage, part (2) indicates the real oven temperature, part (3) indicates the bedplate resistance use percentage.

The values are manually changed as follows:

Ceiling resistance % setting.

- Press  , part (1) blinks on display, press  or  to increase or decrease the utilization percentage.

Bedplate resistance % setting.

- Press  , part (3) blinks on display, press  or  to increase or decrease the utilization percentage.

Baking temperature setting.

- Press , part (2) blinks on display, press  or  to increase or decrease the temperature.



IMPORTANT

When the set temperature is reached, a light on the display blinks reporting the temperature value (2).



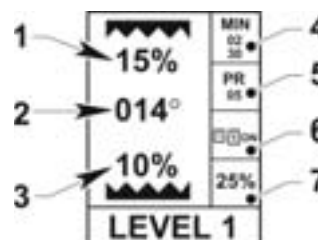
IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

To set the baking timer, the ECONOMY function, the hood suction as well as the chimney, see "FUNCTION SETTING" paragraph.

3.3.b - Programmed use

- Press , following visual display appears:



On the display you can read the following:

Part 1

Indicates the ceiling resistance use percentage set in the selected programme.

Part 2

Indicates the real oven temperature.



IMPORTANT

When the set temperature is reached, a light on the display blinks reporting the temperature value (2).

Part 3

Indicates the ceiling resistance use percentage set in the selected programme.

Part 4

Indicates the baking time set in the selected programme.

Part 5

Indicates the number of the selected programme.

Part 6

Indicates an automatic starting of the oven by a weekly programming.

Part 7

Indicates the chimney opening percentage set in the selected programme.

Programme choice

To choose a baking programme press the , key to display stored programmes; to run among

programmes operate  or , once the wished programme is chosen, enter your choice pressing

, an output from the programme choice phase immediately occurs and the initial visual display appears again, where you can see the new selected programme setting.



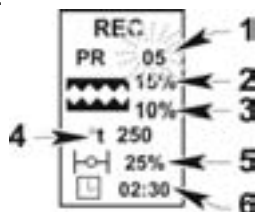
IMPORTANT

The software can store 30 baking programmes.

Programme change and recording

To modify or record a new programme, proceed as follows:

- At the same time press and , to get following visual display.



You get following visual display:

Part 1

Indicates the stored programme number, blinking.

Part 2

Indicates the ceiling resistance use percentage.

Part 3

Indicates the bedplate resistance use percentage.

Part 4

Indicates the set baking temperature.

Part 5

Indicates the chimney opening percentage.

Part 6

Indicates the set baking time.

- Choose the programme to be modified by or then press to access the programme modification phase.
- Set the wished value by or then press to enter the set data item and move on the next one.



IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

Weekly programming

It is possible to programme oven starting day and time.

- At the same time, press and to get following visual display:



- Press to select "AUTO START", following visual display appears:



- Area (1) lights up blinking, you can enable/disable the oven starting weekly programme. The weekly programming can be enabled/disabled by or .

ON = programming on

OFF = programming off.

Press to move on the starting time setting with relevant programme, following visual display appears:



- On the visual display, the numbers 1÷7 indicate the days in a week, PRO X indicates the chosen baking programme, XX:XX indicates the oven starting time; to change the data item, press or , press to enter the data item and to move on the next data item.



IMPORTANT

If you want that on a certain day of the week the oven does not start, you shall now insert following value on field --:--.



IMPORTANT

After 5 seconds, an output from the data setting phase automatically occurs.

3.4 - OVEN PREPARATION

Pizza can be baked as follows: either directly on the refractory surface or in the baking tin.

Here below, you can find some information related to different parameter adjustments, anyway you can refer to the table reported in 5.7 paragraph to find more details.



IMPORTANT

The information reported in the table shall be followed until the user's experience allows the user to personally set time and temperatures.

3.4.a General rules to bake on refractory surfaces

- Start the oven at least one hour and fifteen minutes before working and set following parameters:

Working temperature 290°C

Ceiling resistances 75%

Bedplate resistances 5%

Chimney closed "0".

- To bake the first pizzas, set the temperature at 320°C and open the chimney for the half of its capacity.

- If a sensible work increase is foreseen, the bedplate resistances shall be 40% adjusted and the chimney shall be opened at its maximum capacity ("MAX").



ATTENTION

- Do not salt the refractory surface, do not make the surface cool using a wet cloth (the cloth shall be moistened with cold water), only use pizza dough; in this way, a refractory surface wear does not occur and pizza can correctly be baked, as well.

3.4.b General rules to bake in baking-tin

- Start the oven at least one hour and fifteen minutes before working and set following parameters:

Working temperature 300°C

Ceiling resistances 20%

Bedplate resistances 70%

Chimney closed "0".

- To bake the first pizzas, open the chimney for the half of its capacity.



IMPORTANT

When you are going to start the oven, do not adjust ceiling and bedplate resistances at their maximum capacity (100%), since the oven temperature would in such a case be 50° - 60° C higher than the set one and pizzas will burn.

3.4.c - Oven starting

- In case the oven has been set with a weekly starting programming, at the set time it starts with the value of the various parameters belonging to the programme selected in the weekly programming phase. If the weekly programming has not been set,

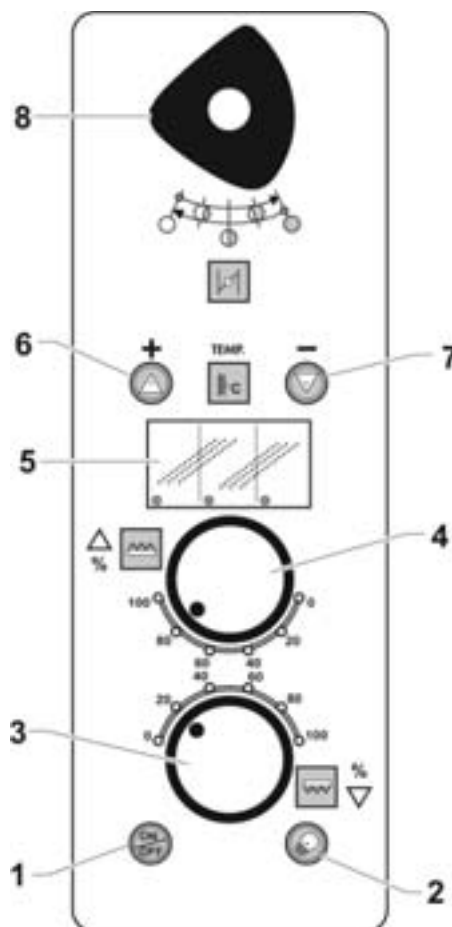
press , the relevant lamp (1) lights up and the control elements are in this way energized.

- If you intend to utilize the oven in manual mode, manually set the parameter values as indicated in "Use in manual mode" paragraph, in the event many baking programmes have been recorded, choose the wished programme as indicated in "Use in programmed mode" paragraph.

- Wait, until the oven reaches the temperature set for baking the pizza.

3.5 - MANUAL OVEN CONTROL BOARD

On the machine you can find following elements:



1. Line key

If you press it, the thermoregulator (5) display lights up and the control elements are energized.

2. Lamp key

If you press it, the lamp inside the oven lights up. Pressing the key again, the lamp goes out.

3. Bedplate power adjustment

Turning the knob (3) clockwise, the bedplate resistance percentage power is increased, to reduce it, turn the knob counterclockwise.

4. Ceiling power adjustment

Turning the knob (4) clockwise, the ceiling resistance percentage power is increased, to reduce it, turn the knob counterclockwise.

5. Thermo regulator display

When the oven is off, the three leds on the display light up in alternating way, this means that the cutout switch placed in the machine upper side is on ON. Pressing (1), the oven starts and the real oven temperature is displayed, pressing or the set temperature is displayed, to change it press (6) and (7) .

6. Increment key

To increase the values to be set.

7. Decrement key

To reduce the values to be set.

8. Chimney opening adjustment knob .

Turning the knob (9) towards "C" the chimney closes, turning the knob towards "O" the chimney opens; inbetween positions allows 1/4, 1/2, 3/4 adjustments to occur.

3.6 - OVEN PREPARATION

Pizza can be baked as follows: either directly on the refractory surface or in the baking tin.

Here below, you can find some information related to different parameter adjustments, anyway you can refer to the table reported in 5.7.a paragraph to find more details.



IMPORTANT

The information reported in the table shall be followed until the user's experience allows the user to personally set time and temperatures.

5.6.a General rules to bake on refractory surfaces

- Start the oven at least one hour and fifteen minutes before working and set following parameters:
Working temperature 290°C
Ceiling resistances 75%
Bedplate resistances 5%
Chimney closed "0".
- To bake the first pizzas, set the temperature at 320°C and open the chimney for the half of its capacity.
- If a sensible work increase is foreseen, the bedplate resistances shall be 40% adjusted and the chimney shall be opened at its maximum capacity ("MAX").



ATTENTION

- Do not salt the refractory surface, do not make the surface cool using a wet cloth (the cloth shall be moistened with cold water), only use pizza dough; in this way, a refractory surface wear does not occur and pizza can correctly be baked, as well.

5.6.b General rules to bake in baking-tin

- Start the oven at least one hour and fifteen minutes before working and set following parameters:
Working temperature 300°C
Ceiling resistances 20%
Bedplate resistances 70%
Chimney closed "0".
- To bake the first pizzas, open the chimney for the half of its capacity.

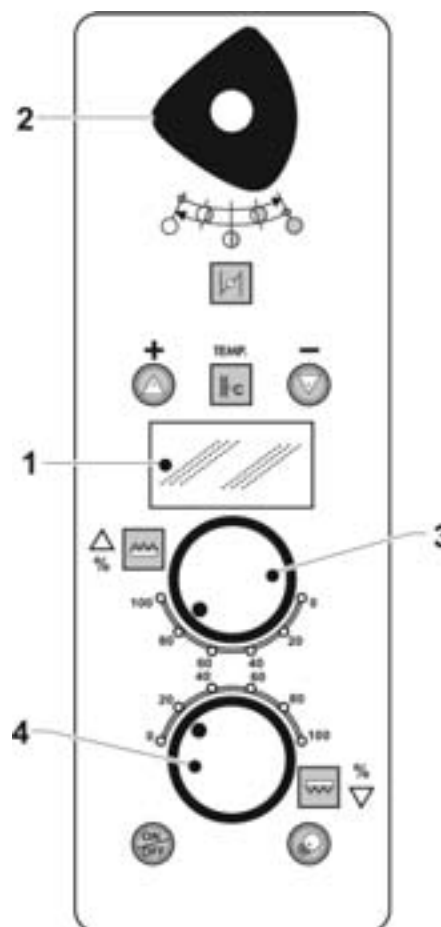


IMPORTANT

When you are going to start the oven, do not adjust ceiling and bedplate resistances at their maximum capacity (100%), since the oven temperature would in such a case be 50° - 60° C higher than the set one and pizzas will burn.

5.6.c - Oven starting

- Press , the thermoregulator display (1) lights up.
- Set the temperature pressing  or , in this way, the temperature value will be displayed (1). Press  or  to increase or decrease the temperature.
- Adjust the chimney opening by operating the knob (2), the ceiling resistance functioning percentage by the knob (3) as well as the bedplate resistance functioning percentage by the knob (4).
- Wait until the oven reaches the set temperature to bake pizza.



3.7 - PIZZA BAKING

- Once the set temperature is reached, open the access door and insert the pizza to be baked.



ATTENTION

Inside the oven, temperature is very high, therefore suitable individual protection means shall be used to insert and remove the pizza; RISK OF BURNS.

- If you have an oven with digital control, press  to start the timer; when time is up, a sound signal is heard for a few seconds.
- Start the hood by pressing  in case of digitally controlled ovens or the relevant switch in case of manually controlled ovens.
- To check the pizza baking, switch on the inner lamp by pressing .



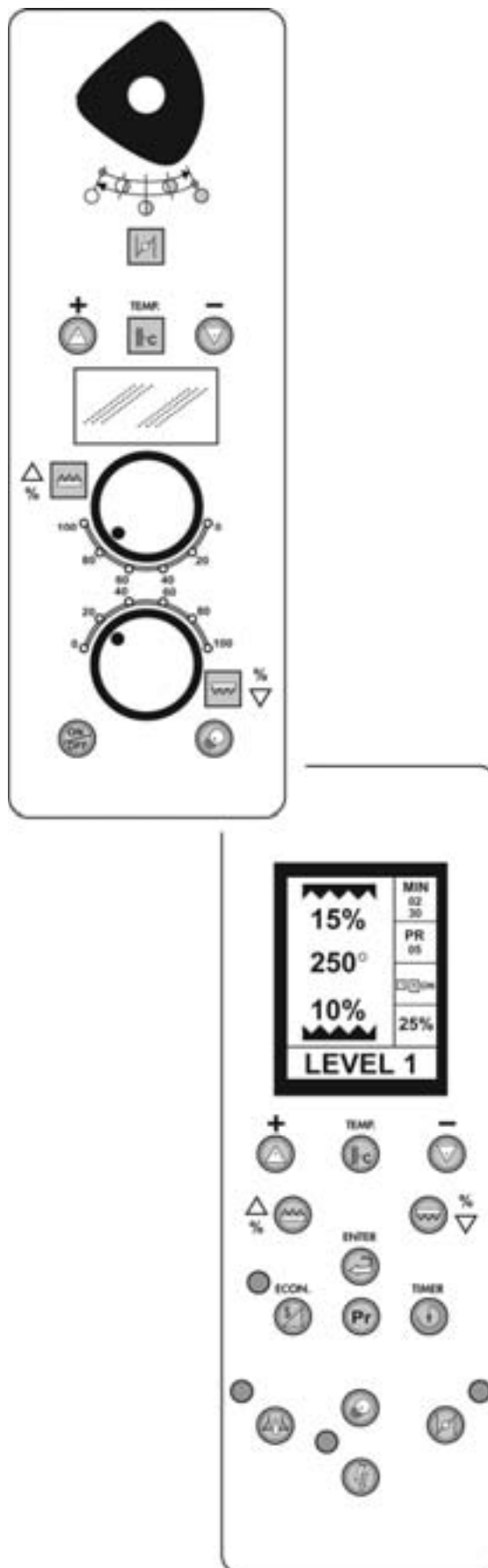
IMPORTANT

The inner lamp should not only be switched up when baking shall be checked. In this way, the lamp will have a long life.

- While baking, it is possible to modify parameters on both the manually and digitally controlled ovens by operating the relevant push-buttons or knobs as explained in the preceding paragraphs.

In the event some baking programme parameters have been changed (digital oven), if the oven is turned off, the changed parameters will NOT be stored.

- Once the pizza is baked, open the oven access door and remove the baked pizza.



5.7.a Suggestions for a right baking

A right chimney adjustment is important to correctly bake the pizza.

- If the chimney is totally closed while baking, vapour comes out from the door, moreover the ceiling resistance action will remarkably be less effective due to the vapour, so, the pizza will tend to burn in its lower side and not in its upper side.

- If the chimney is directly connected with an aspirator, too much heat will be extracted from the oven and this will result a too dry pizza also being burnt in its lower side.



IMPORTANT

At least at the beginning, we suggest to consult the table in this paragraph to set correct values. The parameters can change according to the different doughs.

	Processign phases	Chamber Temp. °C	Ceiling power	Bedplate power	Chimney
Round pizza Ø33	Starting	320	70 - 75%	5-10%	Closed
	Not too much work	320	70 - 75%	5-10%	Opened 50%
	Medium quantity of work	320	70 - 75%	5-10-20%	Opened 50%
	A lot of work	320	70 - 75%	10-15-30-40%	Opened 100%
Round pizza Ø45	Starting	290	70 - 75%	5-10%	Closed
	Not too much work	290	70 - 75%	5-10%	Opened 50%
	Medium quantity of work	290	70 - 75%	5-10-20%	Opened 50%
	A lot of work	290	70 - 75%	10-15-30-40%	Opened 100%
Pizza in baking-tin	Starting	260 + 230	40 - 50 %	40 - 50%	Closed
	Prebaking phase 6 min	330	40 - 50 %	40 - 50%	Opened 100%
	Prebaking phase 6 min	260 + 300	40 - 50 %	40 - 50%	Opened 100%

3.8 - ALARM CONDITIONS DURING OVEN FUNCTIONING

(in case of digitally controlled ovens, only)

While functioning, alarm conditions due to break-ages or overtemperatures could occur; such alarm conditions are displayed.

3.8.a - Alarm conditions in case of damaged temperature feeler

When this alarm intervenes, following visual display appears:



- The buzzer sounds and power supply to resistances is automatically cut off.
- Switch off the oven, wait until it is cool, then try to start it again; in case the alarm conditions still occur, contact manufacturer's technical service.

3.8.b - Oven overtemperature

When this alarm intervenes, following visual display appears:



- These alarm conditions occur when the temperature inside the oven exceeds 440°C.
- The buzzer sounds and power supply to resistances is automatically cut off.
- Switch off the oven, wait until it is cool, then try to start it again; in case the alarm conditions still occur, contact manufacturer's technical service.

3.8.c - Overtemperature in control board

When this alarm intervenes, following visual display appears



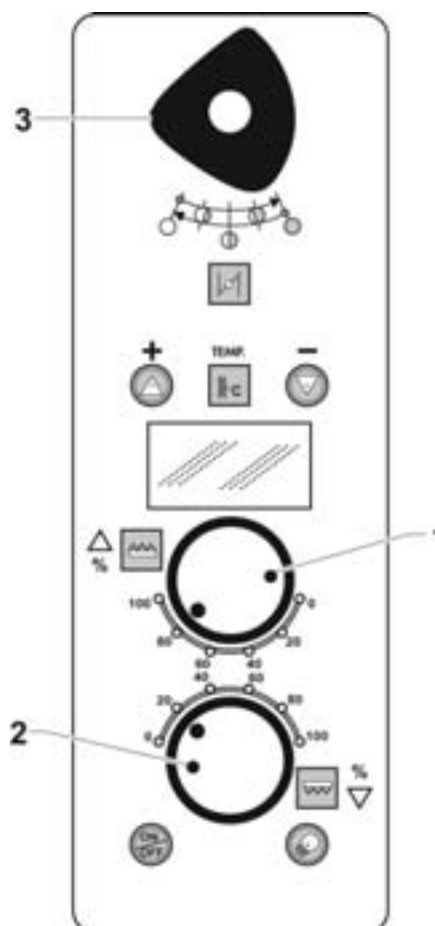
- These alarm conditions occur when the temperature inside the oven exceeds 85°C.
- The buzzer sounds and power supply to resistances is automatically cut off.
- Make sure there is at least a 10 cms-space from the right-hand oven side to the wall, in order to assure a proper wiring system cooling.
- Switch off the oven, wait until it is cool, then try to start it again; in case the alarm conditions still occur, contact manufacturer's technical service.

3.9 - SELF-CLEANING CYCLE

• At the end of each working day, a self-cleaning cycle shall be carried out before switching off the oven.

3.9.a - Self-cleaning cycle for manually controlled ovens

- Press or and operate the push-button to reach a 360°C temperature.
- Adjust the ceiling power by operating the knob (1) at 20%.
- Adjust the bedplate power by operating the knob (2) at 100%.
- Totally open the chimney by turning the knob (3) on "C".
- Leave the oven on for approximately one hour, then switch it off and allow it to cool down.



3.9.b - Self-cleaning cycle for digitally controlled ovens

- Press  to display the stored programmes, run over among the programmes pressing or until "PUL" programme is selected, then enter your choice by .

Following visual display appears:



- A self-cleaning cycle starts, which allows the oven to reach a 400°C temperature, once the temperature is reached, the temperature value blinks on the display; the 400°C temperature is kept for 15 minutes, then the oven automatically goes on off (in case lights are on, they will also go out).



IMPORTANT

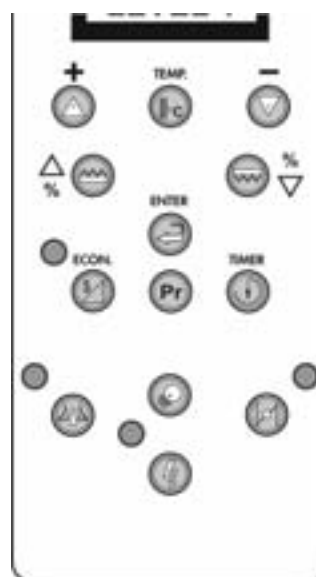
If for any reason the oven is disconnected before carrying out a complete self-cleaning cycle, the programme will automatically start a new selfcleaning cycle.

3.10 - SWITCH-OFF

- At the end of each working day switch off the oven by  or  according to the concerned model.

- If the hood functioning still continues, even after having switched off the oven, let it function to allow the oven to cool down.

- On restarting, the oven starts: in case of digitally controlled ovens, it starts with the programme, which was operative on switch-off, in case of manually controlled ovens, the oven starts with the data, which were set on switch-off.



3.11 -MALFUCTIONING,CAUSE AND CURE

- The oven does not start:

- Verify the electric connection.
- Make sure the cutout switch is on.
- Make sure no safety thermostat intervention occurred.
- Contact manufacturer's technical service.

- Pizza is not baked, uniformly:

- The baking surface is dirt: clean the baking surface
- The baking surface is damaged: replace the surface

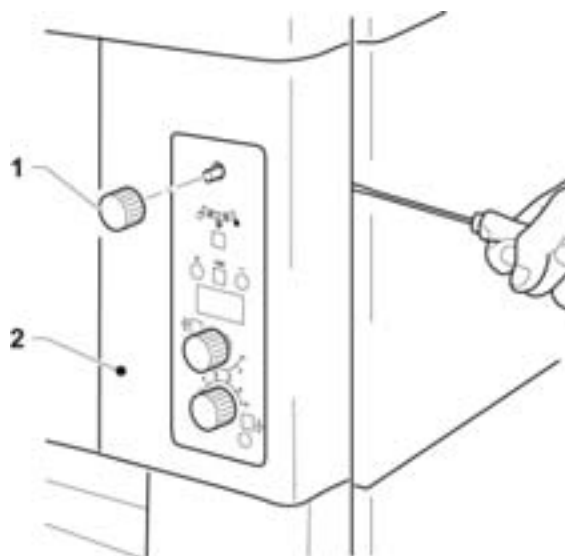
- Oven malfunctioning:

- The set temperature is not reached:
Resistances are burnt
Thermostat is out of order
Contact manufacturer's technical service.



DANGER

For all other troubles, do not hesitate to contact manufacturer's technical service



3.12 -SAFETY THERMOSTAT RE-CHARGE



DANGER

This operation shall be carried out by manufacturer's technical service after eliminating the trouble. The safety thermostat recharge shall manually be carried out as follows:



DANGER

Disconnect the knife switch placed in the upper machine side, eliminate the cause of the thermostat intervention.

Only in manually controlled ovens, unscrew the upper knob (1).

Insert a screwdriver and levering up release the control board (2).

Press the red push-button (3) of the safety thermostat, then mount all again in the reverse order.



3.12 CLEANING

3.12.1 - Outer cleaning



ATTENTION

At the end of each working cycle, carefully clean the oven.

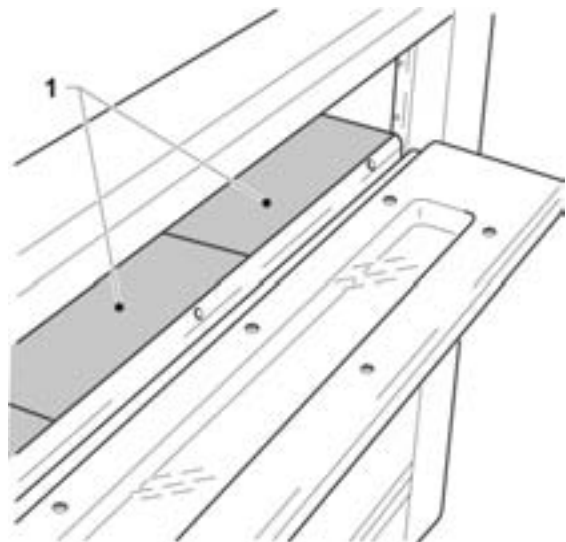
To clean the oven, **NEITHER** metallic objects such as steel wool, brushes, scrapers **NOR** corrosive products shall be used.

Do not utilize water jets to clean the oven sides.

- To clean the outer side of the oven, you shall use a wet cloth as well as a detergent suitable for the surface to be treated.

3.12.2 - Refractory surface cleaning

- Make sure the oven is totally cool, open the door and clean the refractory surface (1) by the special scrubber.



3.12.3 - Every 600 hours a careful chamber cleaning

- Make sure the oven is totally cool, then open the door, remove the protection (1) unscrewing the relevant screws and gently take off the refractory surface (2) from the door. Remove all possible residues by a vacuum cleaner.

- Clean the refractory surface by the special scrubber and a wet cloth.



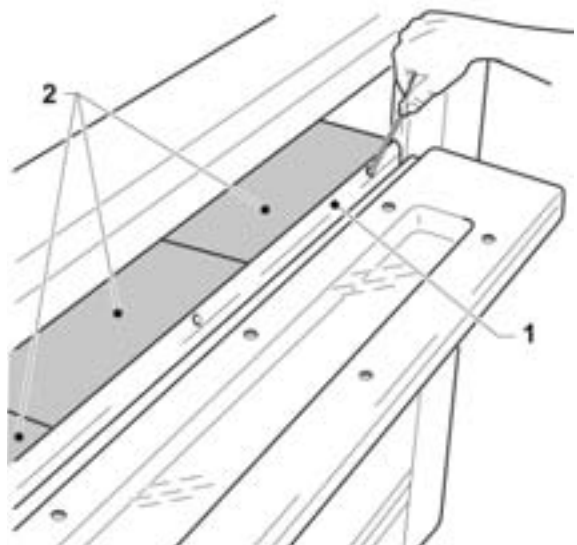
ATTENTION

Carefully handle the refractory surface.

DO NOT wash with water,

DO NOT wash in a dishwasher,

DO NOT utilize detergents to clean the refractory surfaces, only use a wet cloth.



4. INSTALLATION

4.1 TRANSPORTING AND HANDLING THE PRODUCT

The machine is positioned on a wooden pallet, fastened with screws, inside a strapped carton.



IMPORTANT

The packing containing the machine should be kept away from the weather. Do not put other boxes or materials on it.

4.1.1 Lifting of the packing

The box should be handled with the most care. To lift and to position the box use suitable lifting systems, according to the weight of the machine.

The box should be lifted by using a crane or a hoist with appropriate belts or by means of a lift track, by inserting the forks in the appropriate joints.



DANGER

Any handling and lifting operation should be done by skilled personnel, authorized to use appropriate equipments.

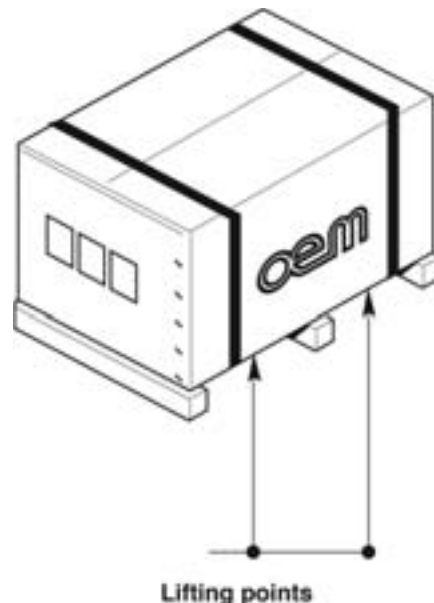
The manufacturer declines all responsibility for any damage to persons or things caused by inobservance of the current safety regulations regarding lifting and moving of materials inside or outside the factory.

4.1.2 - Storage



IMPORTANT

The box containing the machine should be stored away from weather. Do not put other boxes or materials on it.



4.2 - RECEPTION OF THE MACHINE

Upon reception of the machine make sure that the packing is complete and not damaged. Should the packing be complete, remove it following the instructions (aside from different manufacturer's instructions).

Check if the instruction booklet is inside the packing as well as the components specified in the transport documentation.

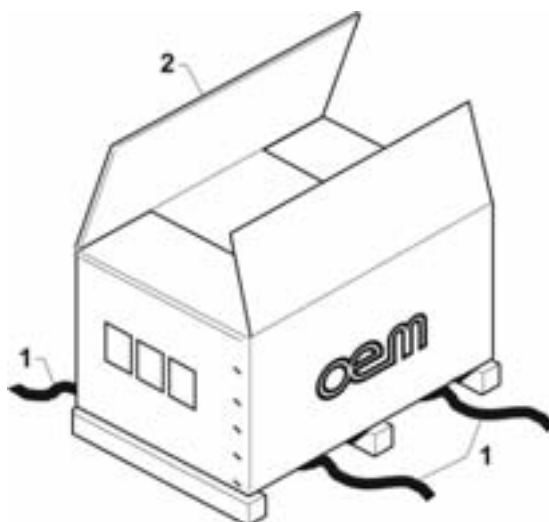
In case any damage or defect is found:

- a- Inform immediately the transport company and your agent, both by phone and by registered letter with return receipt;
- b- Manufacturer shall also be informed.



IMPORTANT

The oven consists of three distinct parts: support, cover or hood. Each part is packed separately; on installation, the components are assembled.



4.3 - UNPACKING

To remove the packing from the machine proceed as follows:

- Cut the straps (1) that tie up the carton.
- Open the carton (2), by removing the metallic clips.
- Remove the cardboard packaging (2).
- Check if everything is complete.
- Open the oven door (3), remove the refractory material fastening carton and the loose components, as well.
- Check if the delivery is complying with the PACKING LIST.



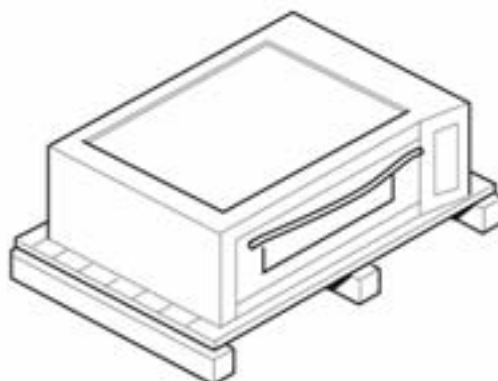
DANGER

The packing elements (plastic bags, carton, nails, etc...) shall be kept away from the reach of the children, since they are potential danger sources, so, they shall be gathered and sent to special centres to correctly be recycled.



IMPORTANT

Any damage or defect or non conformity with the packing list should be immediately reported and, in any case, it should be notified within 8 days from the date of reception of the machine. On the contrary the goods are to be considered as accepted.



4.4 - IDENTIFICATION OF THE COMPONENTS

1. Cover
2. Hood
3. Oven 1
4. Oven 2 (by request)
5. Support
6. Support with room (room by request)
7. Wheels
8. Control board
9. Data plate

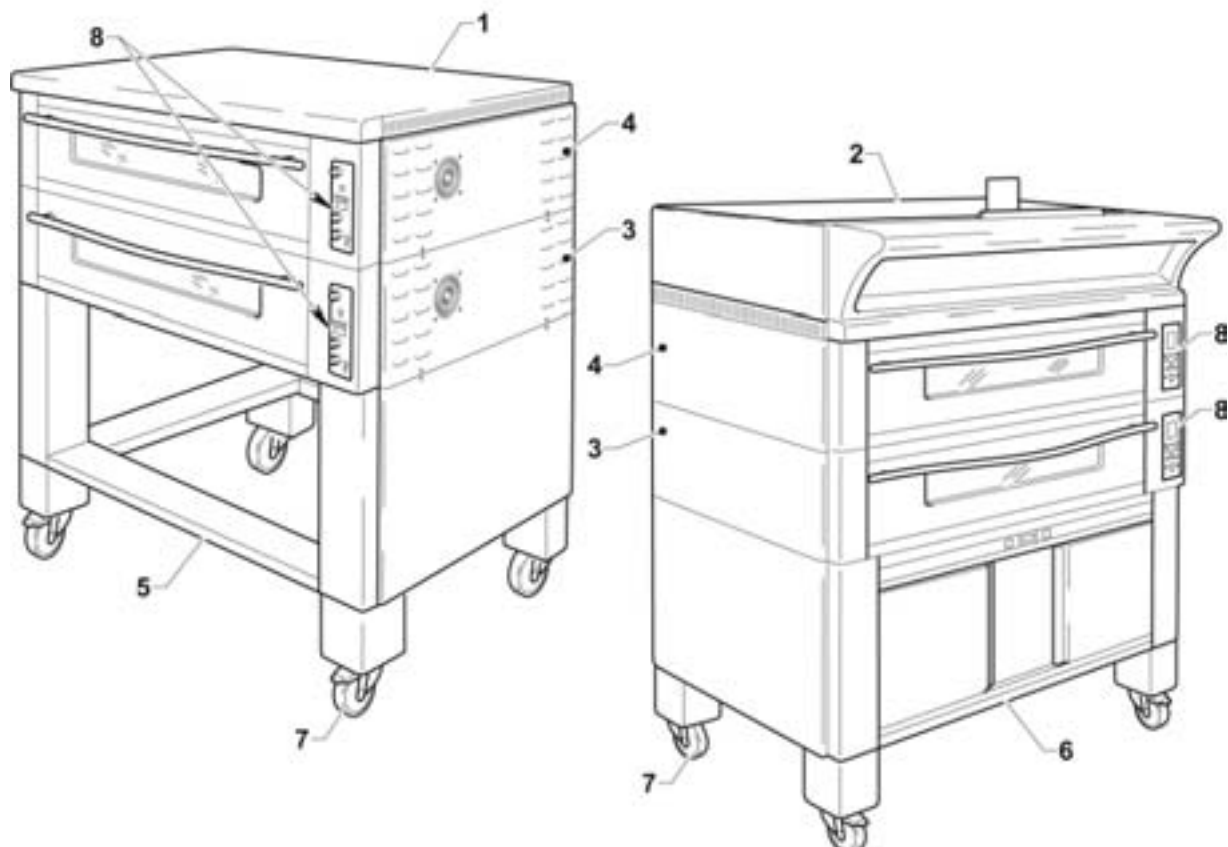
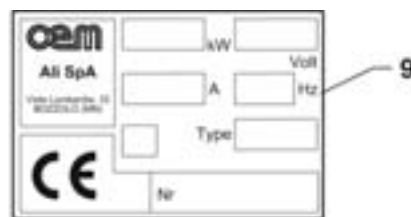
4.5 - IDENTIFICATION OF THE MACHINE

The serial number and identification data of the machine are punched on a plate (9) fastened to the machine base.



IMPORTANT

The machine serial number should be always mentioned in your request of technical assistance or in your spare part orders.





All operations described in this chapter shall be carried out by skilled and authorized technicians, only.

4.6 - LIFTING OF THE MACHINE

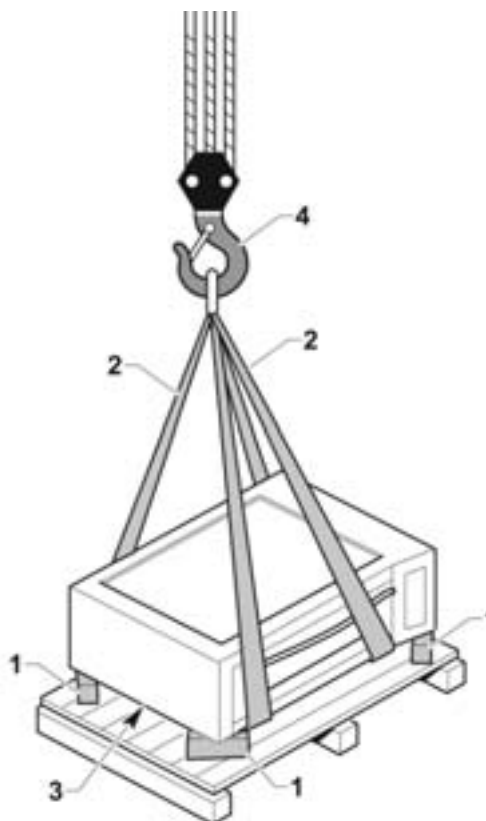
The machine should be lifted by means of a crane or hoist, as follows:

- The oven shall slightly alternatively be lifted from its four sides using a lever and making sure the panels are not damaged, then the oven shall be positioned on shims (1).
- Insert two belts, (2) suitably dimensioned to the weight of the machine, under the base (3) of the machine and connect them to the hook (4) of a crane or hoist.



ATTENTION

To hoist the machine do not use steel belts as they may damage the outside body.



4.7 - ASSEMBLING OF THE COMPONENTS



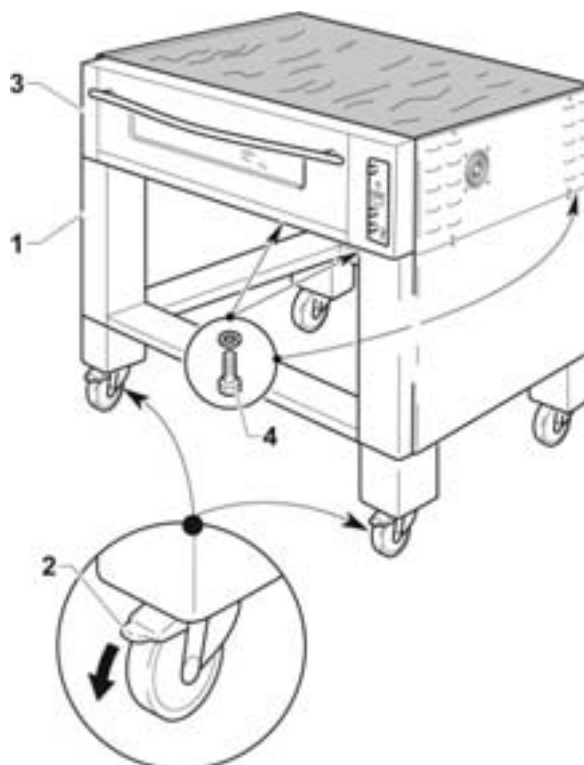
IMPORTANT

To assemble support, cover hood as well as their components see instructions in the relevant handbooks.

- The trailer-mounted support (1) shall be positioned near the precise oven installation area placing the braking wheels on the front. The front wheels shall be braked by the lever (2).

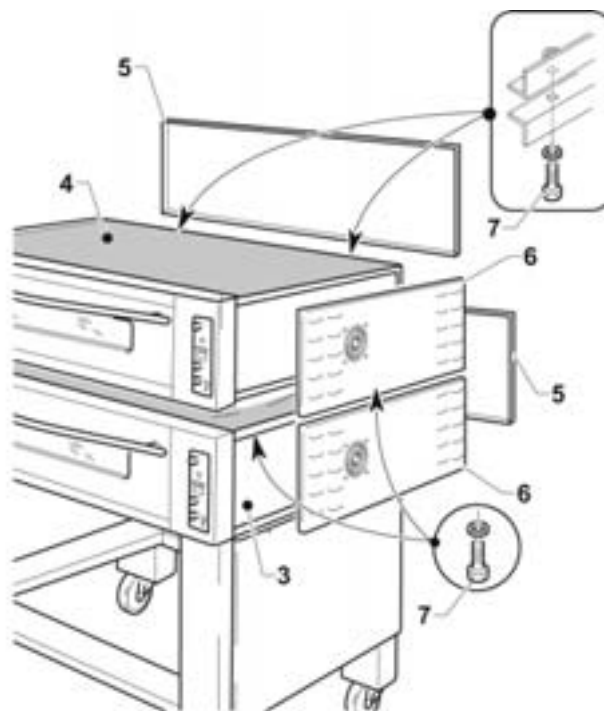
Single-chamber oven assembling

- The oven (3) shall be lifted as indicated in "lifting" paragraph and positioned on the base.
- Fix the oven (3) to the support (1) by the screws (4) and the washers supplied with the support set.



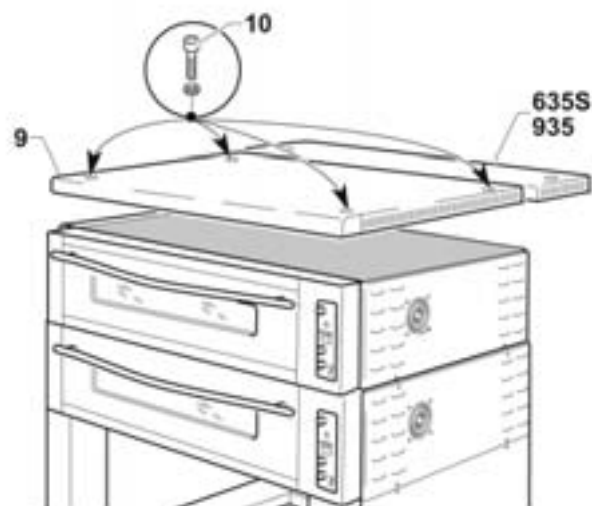
Two- and three-chamber oven assembling

- In case of two-chamber ovens, the first oven (3) shall be positioned on the second one (4), remove the rear panels (5) or the lateral right-hand panels (6) and fix both ovens by the screws (7) and the washers supplied with.
- In case of three-chamber ovens, the third oven (8) shall be positioned on the second one (4) and fixed as mentioned in the previous item.
- If the ovens have been fixed on the back, the panels, which have previously been removed, shall be mounted again.



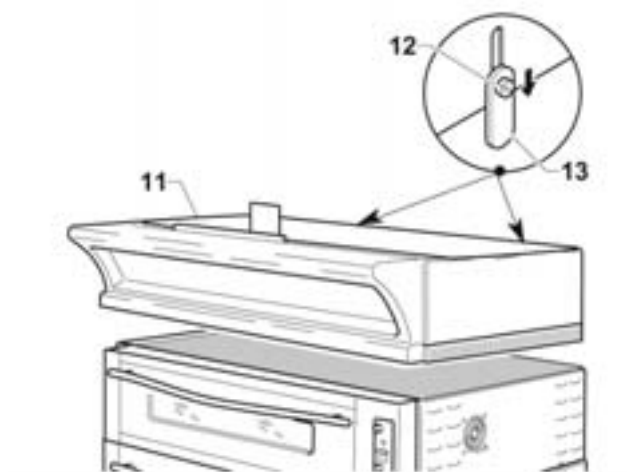
Cover assembling

- The cover (9) shall be positioned on the oven (regarding 635S and 935 models, cover consists of two pieces).
- Fix the cover (9) by the screws (10) and relevant washers supplied with.



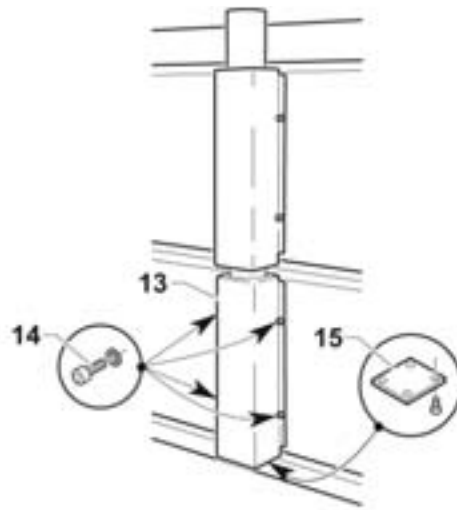
Hood assembling

- Place the hood (11) over the last oven, loosen the screws (12), lower the plaque (13), then tighten the screws (12) again.



Chimney assembling

- Unpack the chimney (13) and place it on the back of the oven (see figure) by the screws (14) and relevant washers supplied with.
- In case of two- or three-chamber ovens, start assembling the chimney from the lowest oven, then insert the other chimneys one on the other (see figure) placing them on the relevant ovens.
- By the screws supplied with place the cap (15) under the chimney of the lowest oven.



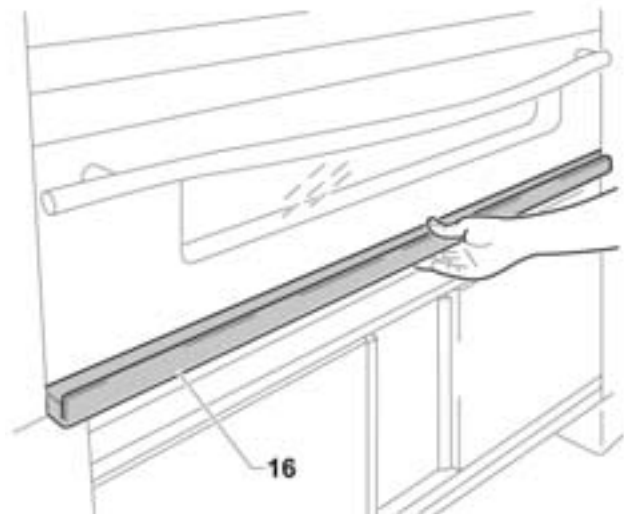
Crumb gathering device assembling

- Place the crumb gathering device (16) under the door of each oven; the position of such device is fixed by two magnets.



IMPORTANT

After mounting the various components, remove the transparent protection film being on all oven steel



4.8 - ELECTRICAL CONNECTION



DANGER

- The power feed line should be provided with a suitable omnipolar DISCONNECTING SWITCH (automatic thermomagnetic switch or differential) placed before the control unit main switch, with a minimum contact opening of 3 mm.
- The earthing system should comply with the local electric regulations in force.
- The electric power cables should comply with the maximum current required by the machine, so that the total voltage drop at full charge will be less than 2%.
- The specifications of the electric power line should correspond to the specifications of the identification plate and to those mentioned in the technical specifications table that can be consulted in the first part of this booklet.



DANGER

Before connecting the machine with the electric line, make sure that the DISCONNECTING SWITCH is disconnected (line not energized).

4.8.1 - Electric oven connection

- To reach the electric oven part, remove the lateral righthand panel (1).
- Connect a suitably dimensioned electric cable (2) with the terminal (3) according to the oven absorption, the three phases shall be connected with F1-F2-F3 terminals, the neutral wire with N terminal, the earth with T terminal.
- Insert the electric cable (2) in the special fairlead (4) and connect it with the disconnecting switch placed in the upper part of the oven.



IMPORTANT

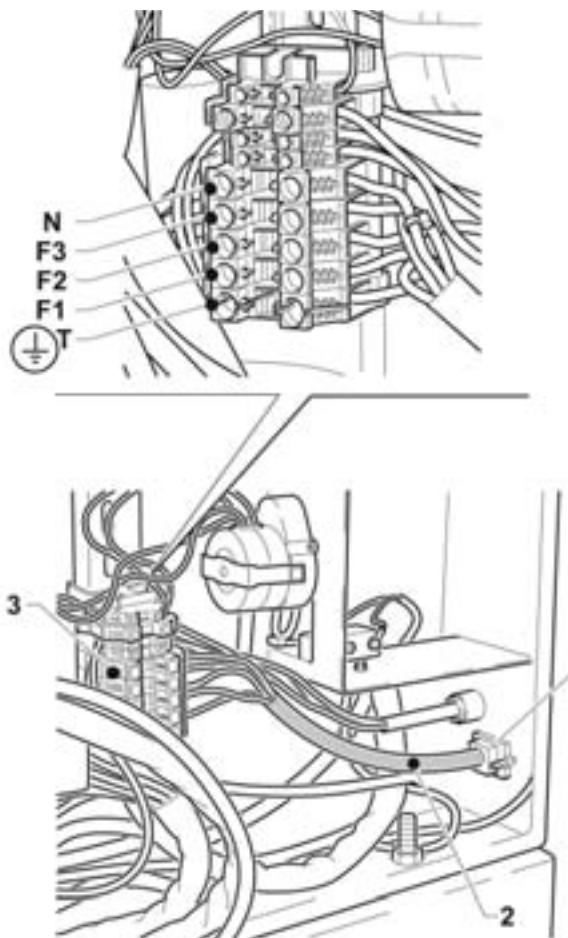
The disconnecting switch placed in the upper part of the oven shall be easily to be reached.

- Re-install the lateral right-hand panel (1).



DANGER

In case of two- and three-chamber ovens, each oven shall be connected with a special knife switch, it is not possible to connect more than one oven to one knife switch.



4.8.2 - Electric hood connection

Concerning electric hood connection, follow the instructions supplied with the hood.

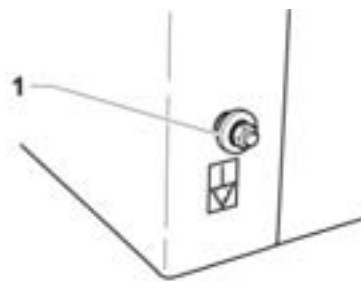
4.8.3 - Heated room electric connection

Concerning heated room electric connection, follow the instructions supplied with the heated room.

4.8.4 - Unipotential connection

The equipment shall be inserted in a unipotential system, whose effectiveness shall be verified according to the rules being in force.

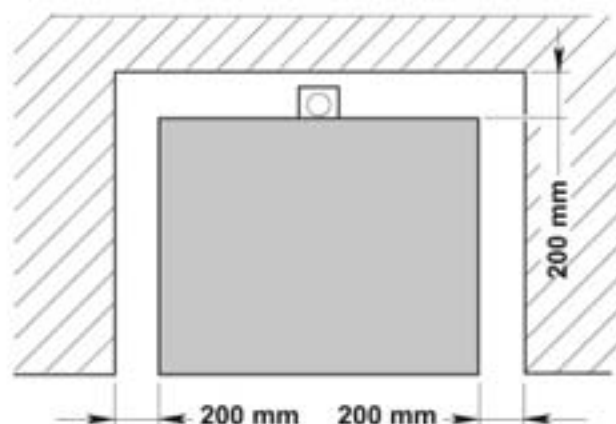
A cascade connection shall be carried out among the various oven components by using the screw (1) placed on the rear oven side.



4.9 - OVEN POSITIONING



The oven shall not be installed closed to inflammable walls such as furniture, partition walls, matchboarded coatings etc... A safety range of at least 20 cms from lateral and rear oven sides should be kept. No inflammable flooring shall be utilized to install the oven on it.



- The oven shall be positioned on the final area following the indications reported in figure 10, because they indicate the minimum distances required to allow the oven correctly to function.

- Fix the oven position by braking the rear wheels.

5.9.1 - Chimney connection

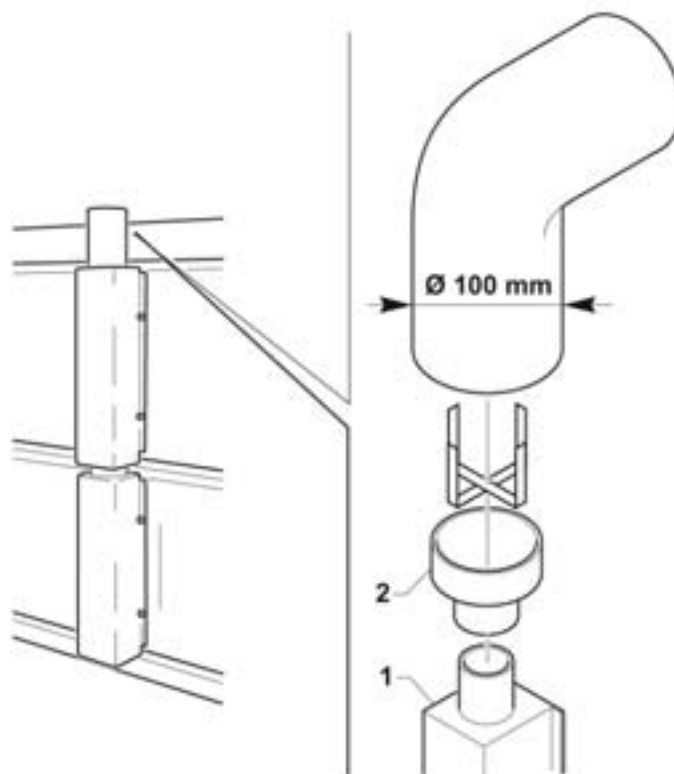
- Place the fitting (2) on the chimney (1).
- Connect the Ø 100 mm fitting (2) with a natural draught conduit or a hood.

4.10 - FIRST STARTING



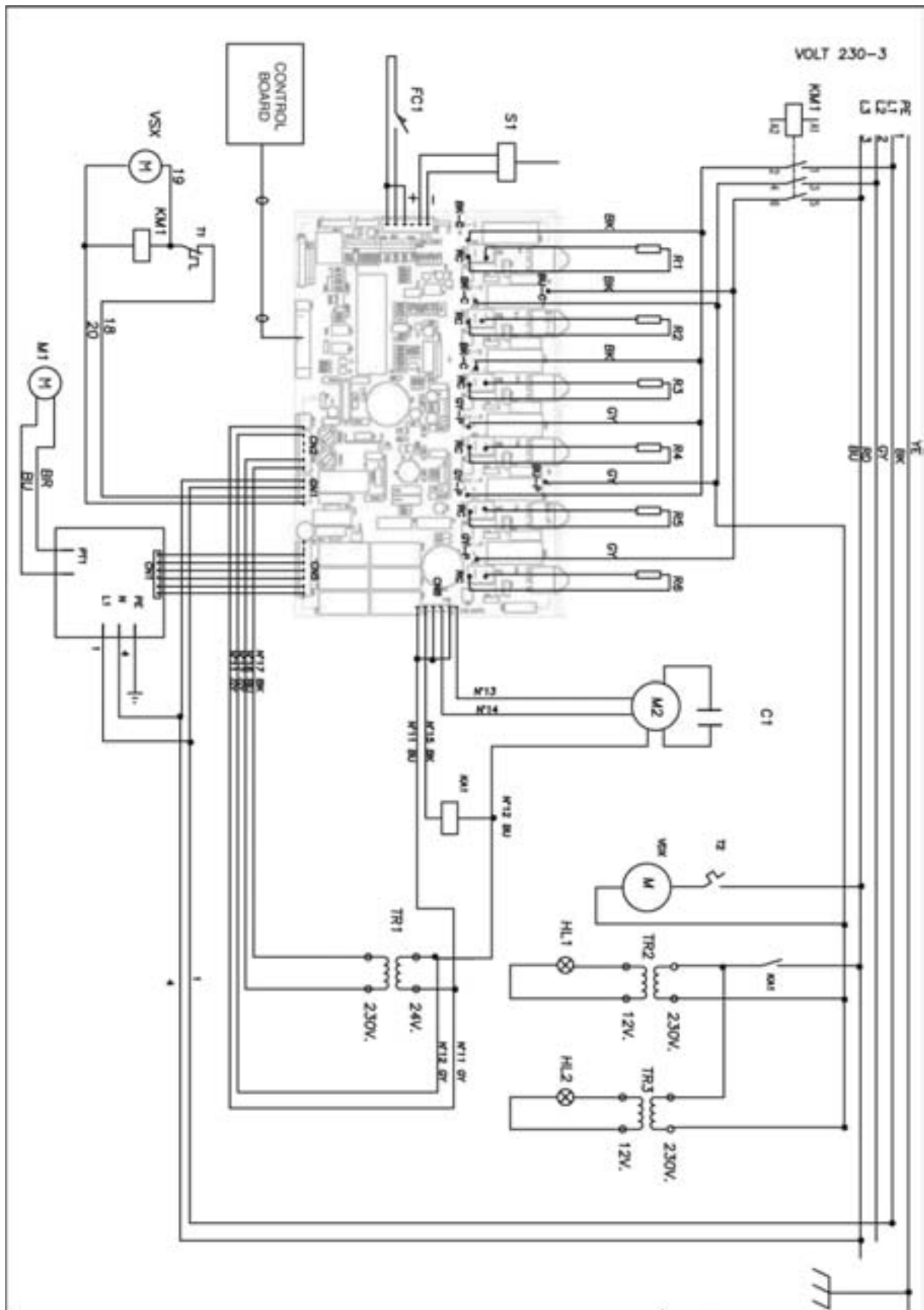
Once the oven is installed and before starting it, carefully clean its inner part as well as refractory surface as explained in "Maintenance" chapter, also make sure neither foreign nor inflammable bodies are inside the oven.

- Start the oven as prescribed in "Functioning" paragraph, making sure the set temperature is correctly reached and the different options (according to the concerned model) properly function.

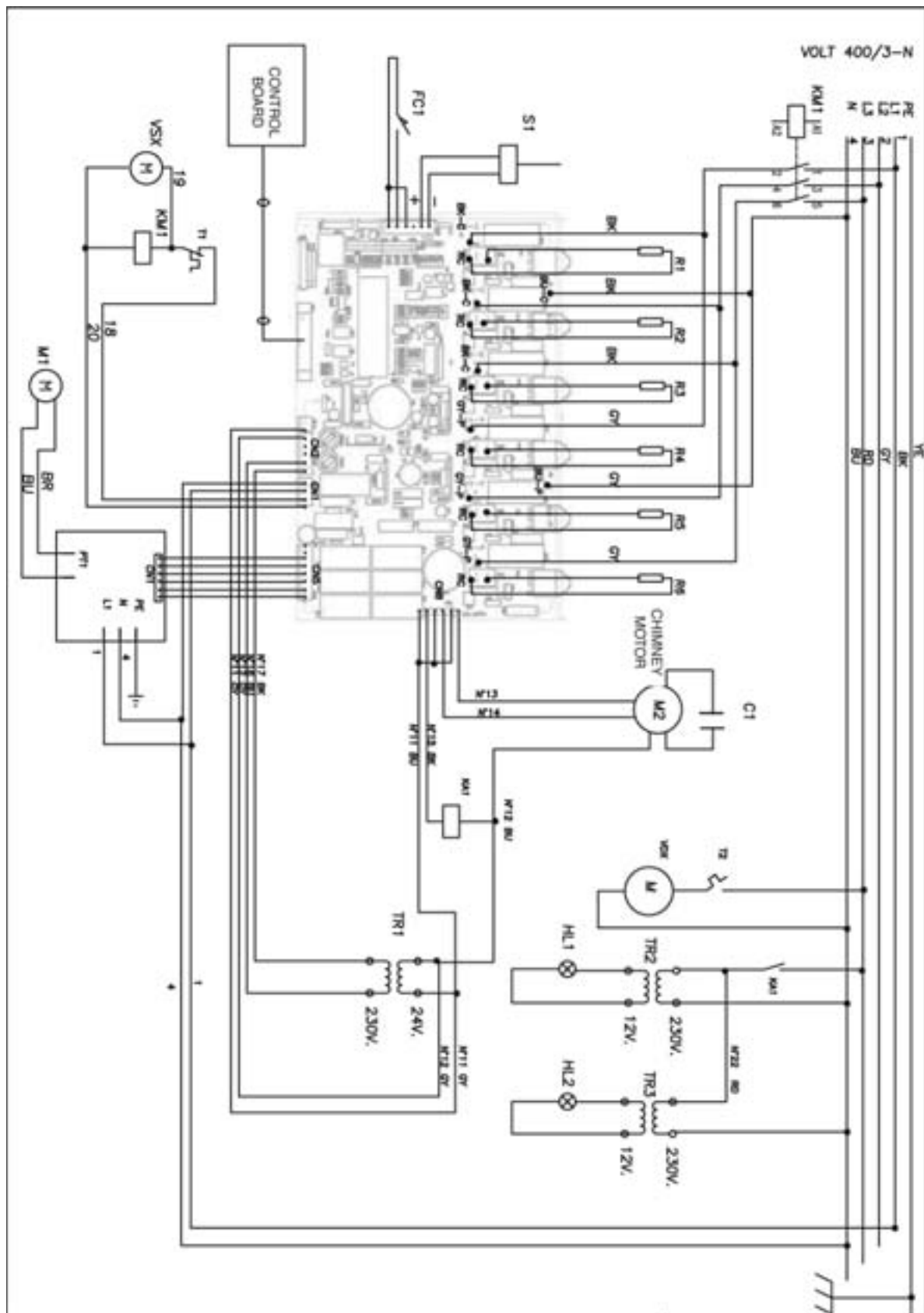


TECHNICAL SPECIFICATIONS

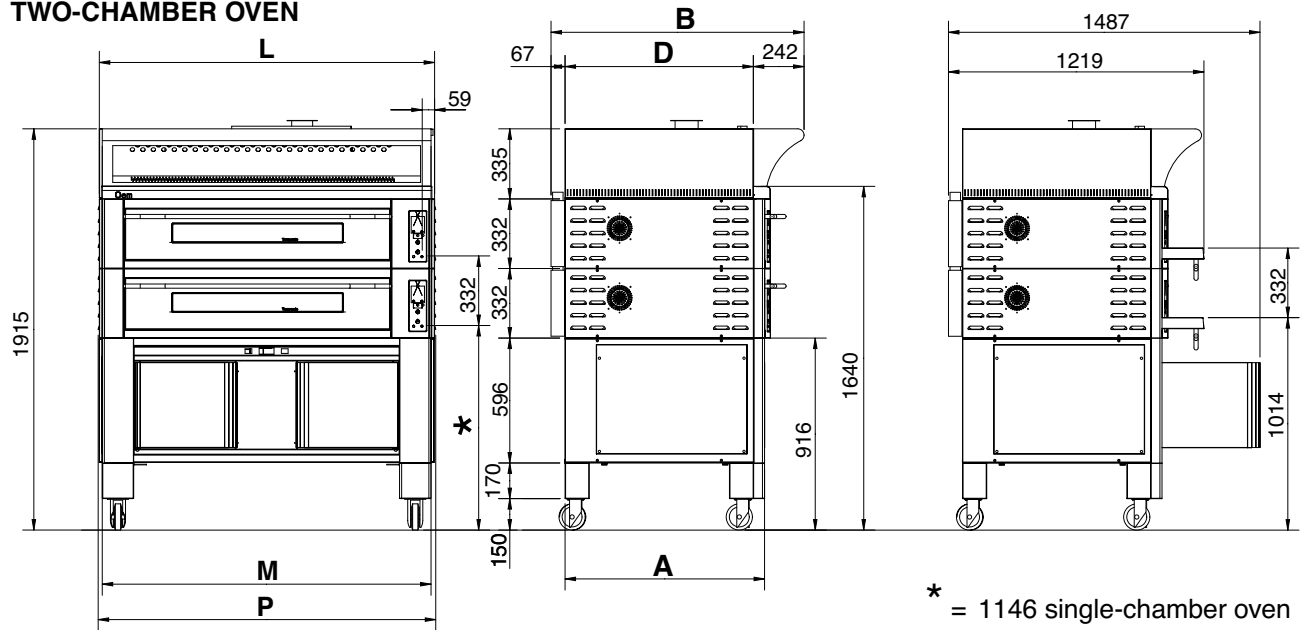
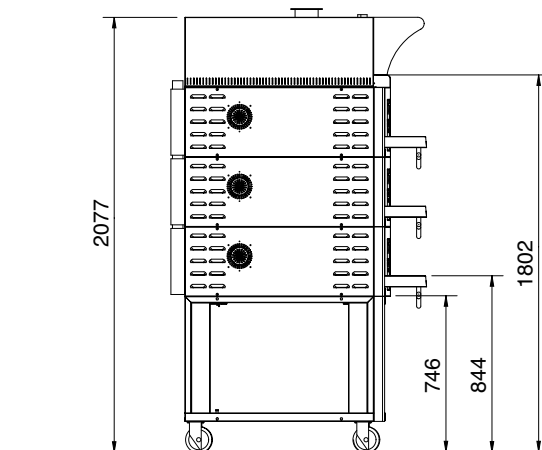
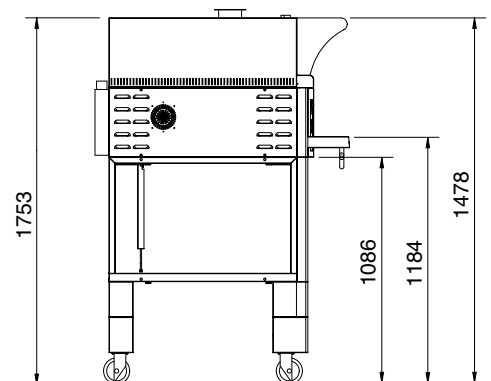
Wiring diagrams
Installation drawing
Technical specification



Wiring diagram, electronic oven 230V



Wiring diagram, electronic oven 400V

TWO-CHAMBER OVEN**THREE-CHAMBER OVEN****SINGLE-CHAMBER OVEN**

Mod.	A	B	L	D	M	P
435 - 435E	952	1206	1079	898,5	1049	1090
635 XL - 635XL/E	952	1206	1600	898,5	1596	1610
935 - 935/E	1302	1556	1479	1248,5	1449	1490
635 L - 635L/E	952	1206	1479	898,5	1449	1490
635 S - 635S/E	1302	1556	1079	1248,5	1049	1090

sizes in mm

Mod.	Inside size			Outside exterieures		
	Width	Depth	Height	Width	Depth	Height
435 - 435E	730	730	140	1080	1030	390
635 XL - 635XL/E	1250	730	140	1600	1030	390
935 - 935/E	1130	1080	140	1480	1380	390
635 L - 635L/E	1130	730	140	1480	1030	390
635 S - 635S/E	730	1080	140	1080	1380	390

Installation drawing

Technical features

Model	435 435/E	635S 635S/E	35L 635L/E	635XL 635XL/E	935 935/E
Electric connection	230V 3 ~ 400V 3 ~ 50Hz	230V 3 ~ 400V 3 ~ 50Hz	230V 3 ~ 400V 3 ~ 50Hz	230V 3 ~ 400V 3 ~ 50Hz	230V 3 ~ 400V 3 ~ 50Hz
Power	6,6 kW	9,9 kW	10,5 kW	12,0 kW	13,2 kW
Cable section	4 x 2,5 mm ² 230 V 5 x 2,5 mm ² 400 V	4 x 2,5 mm ² 230 V 5 x 2,5 mm ² 400 V	4 x 2,5 mm ² 230 V 5 x 2,5 mm ² 400 V	4 x 2,5 mm ² 230 V 5 x 2,5 mm ² 400 V	4 x 2,5 mm ² 230 V 5 x 2,5 mm ² 400 V
Net weight	137 kg	184 kg	180 kg	195kg	225 kg
Relative humidity	10 ÷ 80 %				

Model	Ceiling resistance			Bedplate resistance			Max. Power Kw	AMP. PER PHASE		Code
		N°	W.CAD		N°	W.EACH		V200	V400	
435	1 Chamber	3	1100	1 Chamber	3	1100	6,6 1	6,5	9,5	EE266
435/E	2 Chambers	6	1100	2 Chambers	6	1100	13,2	33	19	
	3 Chambers	9	1100	3 Chambers	9	1100	19,8	49,5	28,5	
635-S	1 Chamber	3	1650	1 Chamber	3	1650	9,9	24,9	14,2	EE265
635-S/E	2 Chambers	6	1650	2 Chambers	6	1650	19,8	49,8	28,4	
	3 Chambers	9	1650	3 Chambers	9	1650	29,7	74,7	42,6	
635	1 Chamber	6	875	1 Chamber	6	875	10,5	26,3	15	EE267
635-L/E	2 Chambers	12	875	2 Chambers	12	875	21	52,6	30	
	3 Chambers	18	875	3 Chambers	18	875	31,5	78,9	45	
635XL	1 Chamber	6	1000	1 Chamber	6	1000	12	30	17,3	EE279
635XL/E	2 Chambers	12	1000	2 Chambers	12	1000	24	60	34,6	
	3 Chambers	18	1000	3 Chambers	18	1000	36	90	51,9	
935	1 Chamber	6	1100	1 Chamber	6	1100	13,2	19	33,1	EE264
935/E	2 Chambers	12	1100	2 Chambers	12	1100	26,4	38	66,2	
	3 Chambers	18	1100	3 Chambers	18	1100	39,6	57	99,3	

DICHIARAZIONE CE DI CONFORMITA'

DECLARATION OF CONFORMITY - DECLARATION CE DE CONFORMITE
CE-KONFORMITÄTSERKLÄRUNG - DECLARACIÓN CE DE CONFORMIDAD
DECLARAÇÃO CE DE CONFORMIDADE



OEM - ALI SpA
Viale Lombardia, 33
46012 BOZZOLO (MN) Italia
Tel. 0376- 910511 - Fax 0376 - 920754

Dichiara che il modello - *It is hereby declared that model*
Déclare que le modèle - *erklärt, daß die Maschine Modell*
Declara que el modelo - *Declara que o modelo*

ZENITH

435 / 635-XL / 935 / 635-L / 635-S

anno di costruzione - *Year of manufacture* - An de production - *Baujahr*
año de fabricación - *ano de fabricação*

I è conforme alle disposizioni legislative che traspongono le direttive e successivi emendamenti:
GB complies with the law provisions that transpose the directives and relevant amendments:
F est conforme aux dispositions législatives qui transposent les directives et amendements successifs:
D den gesetzlichen Richtlinienbestimmungen und nachfolgenden Änderungen:
E es conforme a las disposiciones legislativas que transponen las directivas y sucesivas enmiendas:
P encontra-se em conformidade com as disposições legislativas relativas as diretivas:

98/37 - 73/23 - 89/336 - DPR 24/7/1996 n° 459

I e inoltre dichiara che sono state applicate le seguenti norme armonizzate
GB it is also hereby declared that the following harmonized provisions have been applied
F et en plus elle déclare que les normes suivantes ont été appliquées
D sowie folgenden harmonisierten Normen:
E y declara además que han sido aplicadas las siguientes normas armonizadas
P e declara além disso que foram aplicadas as seguintes normas harmonizadas

**EN 60335-1-2-36; EN 61000-4-2; EN 61000-4-5; EN 50141;
EN 61000-4-11
EN 55014; EN 55104; EN 60555-2-3; EN 60555-3**

Firma del legale rappresentante - *Signature of the legal representative*
Signature du représentant légal - *Unterschrift des Rechtsvertreters*
Firma del representante legal - *Assinatura do representante legal*

(Giandomenico Walter)