

metos

PIZZA OVEN

MILLENNIUM

Installation and Operation Manual



ENGLISH

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Chapter 1

1.1 - GENERAL WARNINGS

- Before starting the oven, user shall carefully read this handbook and be aware of both technical specifications and control elements.
- **User should be trained in the use of the oven.**
- Before installing the oven, make sure the area the latter shall be placed in is compatible with oven overall dimensions and weight.
- In case of installation or removal of oven parts, only means of lifting & handling being suitable for both weight and geometric characteristics of the part to be lifted/handled shall be utilized.
- Only authorized as well as trained personnel may start, adjust and/or repair the oven.
Concerning operations to be carried out on the oven, please refer to this handbook.
- Mechanical and electric parts being inside the oven are protected by panels which are totally closed by means of screws.
- Before carrying out cleaning and/or maintenance operations as well as removing any protection, **make sure the cutout switch is on "OFF" (O)**, in order to disconnect power supply to the oven during user's operation.
- Buyer's power supply system shall be equipped with an automatic release system on the upper side of the oven cutout switch and also with an earthing system complying with all accident prevention protection requirements.
- 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.
- The oven shall not be left unguarded.
- 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 carried out near or under the oven, make sure:
 - there are no elements which can be started and/or there are no unstable parts on or near the oven.
- To carry out operations on the oven, do not use your hands, but only appropriate tools.
- Do not use your hands or other tools to stop any moving parts.
- Do not use household matches, lighters or free flames near the oven.
- **TAKE HIGHEST CARE TO THE WARNING PLATES BEING ON THE OVEN, WHEN YOU ARE GOING TO CARRY OUT OPERATIONS ON OR NEAR IT.**
- 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.
- **It is strictly forbidden to carry out repairs when the oven is functioning.**
- In case of malfunctioning of the oven or damaged oven components, please contact the person in charge of maintenance, without carrying out arbitrary repairs.
- **It is strictly forbidden to make an improper use of the oven.**
The oven shall always be used as provided for by good, scrupulous technique rules, according to 89/392 EEC direction as well as workers' health & safety standards as per legislation being in force in the oven utilization Countries or, in the event the latter do not exist, according to 89/391 EEC direction.
- **The manufacturer declines all responsibility for any injury or damage to persons or things arising from inobservance of the safety regulations and the instructions contained in this manual.**

- THESE SAFETY REGULATIONS INTEGRATE OR COMPLEMENT THE LOCAL SAFETY REGULATIONS.
- NEVER carry out hasty or makeshift repairs which could jeopardize the oven functioning and user's safety, as well.
- IN CASE OF DOUBT ALWAYS ASK FOR THE PRESENCE OF SKILLED PERSONNEL.
- MANUFACTURER DISCLAIMS ALL RESPONSIBILITY IN CASE OF ELECTRIC, ELECTRONIC, MECHANICAL TAMPERING OF THE OVEN BY USER OR CARELESSNESS OF USER BY USING IT.


ATTENTION

This symbol is used in the safety messages of the booklet for any danger situation that, if disregarded, may cause small or moderate injuries or damages. The message can also be used as to dangers which can damage the oven.

1.2 - REFERENCE NORMATIVE

- The oven and its safety devices have been built according to the rules being indicated in the declaration of conformity.


IMPORTANT

This symbol is utilized in order to avoid operations which could result a shorter oven life or for important messages to user.

1.3 - DESCRIPTION OF THE SYMBOLS

Several accidents are due to an insufficient knowledge and a lack of fulfilment of safety rules to be considered during functioning and maintenance of the oven.

To avoid accidents, all warning notes and instructions contained in this handbook as well as the ones being reported on the oven plates, shall be read, understood and observed.

To identify the safety messages included in this booklet, following symbols have been used:


DANGER

This symbol is used in the safety messages contained in the booklet in case of potential danger situations or possibility to cause serious injuries or dead.



For clearness purposes, some pictures in this handbook show the oven without protection structures. DO NOT USE THE OVEN WITHOUT PROTECTION STRUCTURES.

1.4 - OVEN COMPOSITION

Manufacturer's ovens are the result of a several year-experience.

- Single-chamber, two-chamber or three-chamber ovens with digital or manual functioning.
- Over the oven, an extractor hood controlled by a special board can be installed.
- The oven/s are supported by a bearing base.

1.5 - PREARRANGEMENTS AT PURCHASER'S CHARGE

a) Prearrangement of the installation place.

- The supporting surface the oven shall be placed on shall have the features as reported in "Installation" chapter.

b) Electric prearrangement.

- The power system should comply with the local regulations and provided with an efficient earthing.
- An omnipolar sectioning device shall be positioned on the power supply line at the upper side of the oven.
- **The electric power supply cables shall be dimensioned by considering the highest power rate needed by the oven, so that a total voltage drop is lower than 2 %, under full load conditions.**

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

- a) In case of fire, disconnect the oven by disconnecting the cutout switch.
- b) Put out the fire by means of suitable fire extinguishers.



When the oven is under tension, do not try to extinguish the fire by using water.

1.7 - EXPLOSION RISK

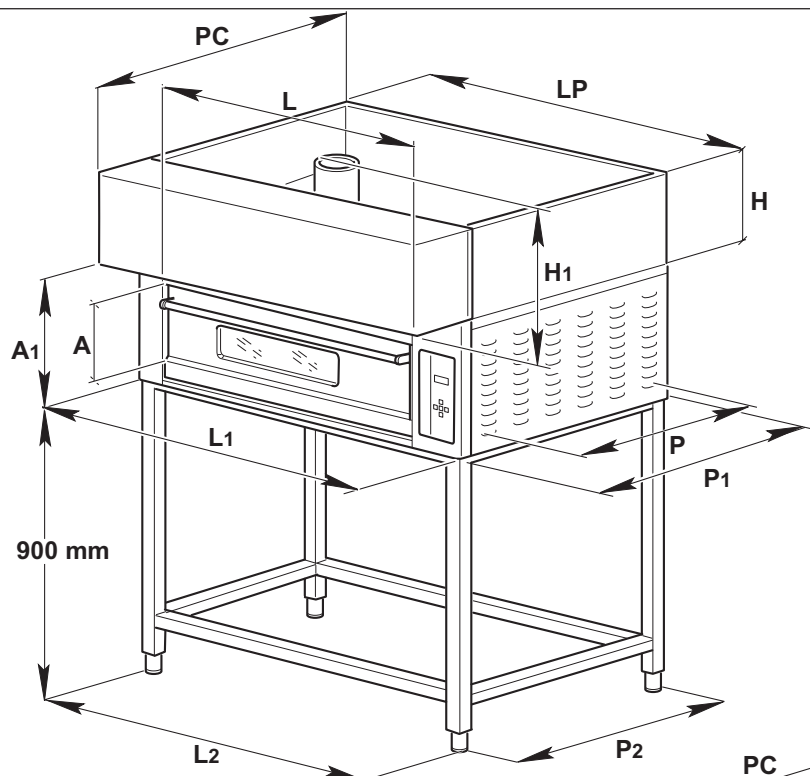
- The oven is not suitable for being utilized in hazardous environment.

1.8 - ACOUSTIC PRESSURE LEVEL

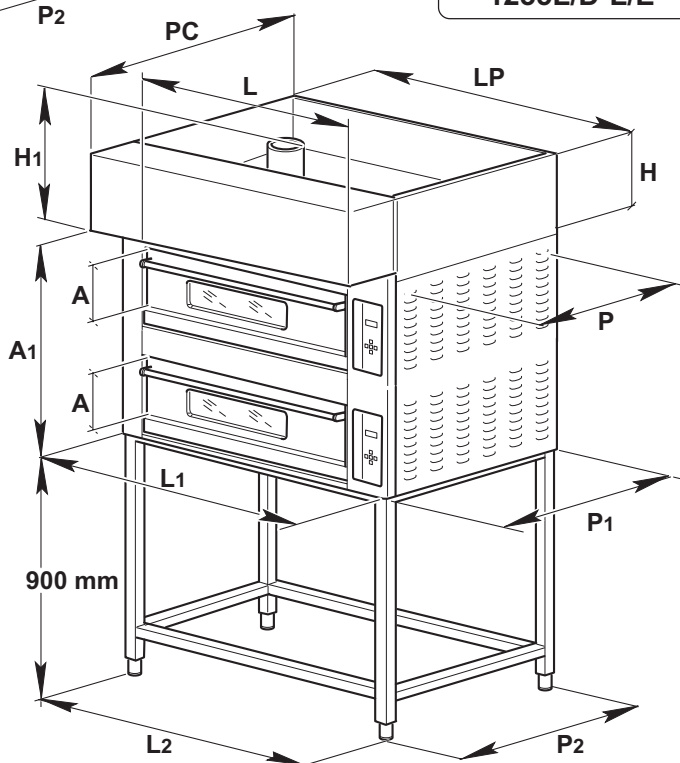
With MILLENNIUM ovens, an A acoustic continuous equivalent weighted pressure level(dB) under the maximum allowed 70dB level is kept.

Chapter 2

OVERALL DIMENSIONS



835/D-E
1235S/D-S/E
1235L/D-L/E



H= neutral hood
H1= motor-driven hodd height

sizes in cm

Mod.	Inside size			Outside size							Support	
	L	P	A	L1	P1	A1	H	PC	LP	H1	P2	L2
435/D-E	73	73	15	105	95	40	17	90	105	43,7	90	105
635S/D-S/E	73	108	15	105	130	40	17	125	105	43,7	125	105
635L/D-L/E	113	73	15	145	95	40	17	90	145	43,7	90	145
935/D-E	113	108	15	145	130	40	17	125	145	43,7	125	145
835/D-E	73	73	15	105	95	73	17	90	105	43,7	90	105
1235S/D-S/E	73	108	15	105	130	73	17	125	105	43,7	125	105
1235L/D-L/E	113	73	15	145	95	73	17	90	145	43,7	90	145

2.1 - TECHNICAL FEATURES

Model	435/D 435/E	635S/D 635S/E	635L/D 635L/E	935/D 935/E	835/D 835/E	1235S/D 1235/E	1235L/D 1235L/E
Electric connection	230V-3 400V-3	230V-3 400V-3	230V-3 400V-3	230V-3 400V-3	230V-3 400V-3	230V-3 400V-3	230V-3 400V-3
Power - kW/max	6	9,9	10,5	13,2	12	19,8	21
Cable section	4x2,5 5x2,5	4x2,5 5x2,5	4x2,5 5x2,5	4x2,5 5x2,5	4x2,5 5x2,5	4x2,5 5x2,5	4x2,5 5x2,5
MAX TEMPERATURE	400°C	400°C	400°C	400°C	400°C	400°C	400°C
Relative humidity	10 ÷ 80 %						

Model	Ceiling resistance			Bedplate resistance			Max Power	Code
		N°	W.CAD		N°	W.CAD	Kw	
435/D 435/E	1 Chamber 2 Chambers 3 Chambers	1 2 3	2900 2900 2900	1 Chamber 2 Chambers 3 Chambers	1 2 3	2900 2900 2900	6 12 18	EE281
635S/D 635S/E	1 Chamber 2 Chambers 3 Chambers	3 6 9	1650 1650 1650	1 Chamber 2 Chambers 3 Chambers	3 6 9	1650 1650 1650	9,9 19,8 29,7	EE292
635L/D 635L/E	1 Chamber 2 Chambers 3 Chambers	6 12 18	875 875 875	1 Chamber 2 Chambers 3 Chambers	6 12 18	875 875 875	10,5 21 31,5	EE294
935/D 935/E	1 Chamber 2 Chambers 3 Chambers	6 12 18	1100 1100 1100	1 Chamber 2 Chambers 3 Chambers	6 12 18	1100 1100 1100	13,2 26,4 39,6	EE287
835/D 835/E	2 Chambers	4	2900	2 Chambers	4	2900	12	EE281
1235S/D 1235S/E	2 Chambers	6	1650	2 Chambers	6	1650	19,8	EE292
1235L/D 1235L/E	2 Chambers	6	875	2 Chambers	6	875	21	EE294

2.2 - TRANSPORT

2.2.a - Shipment (Fig. 1)

The oven is positioned on a wooden pallet being fixed by means of screws and put into a box equipped with strapping.

The shipment of the oven shall be carried out by choosing between the following solutions:

- a) Land transport (lorry)
- b) Air transport
- c) Sea transport
- d) Railway transport

The way of transport will be agreed in course of contract between supplier and purchaser.



IMPORTANT

The packing containing the oven shall be transported protecting it from weather and it is strictly forbidden to position other cases or materials on it.

2.2.b - Lifting of the packing (Fig. 2)

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.

2.2.c - Storage



IMPORTANT

The case containing the oven shall be stored protecting it from weather and it is strictly forbidden to position other cases or materials on it.

FIG. 1

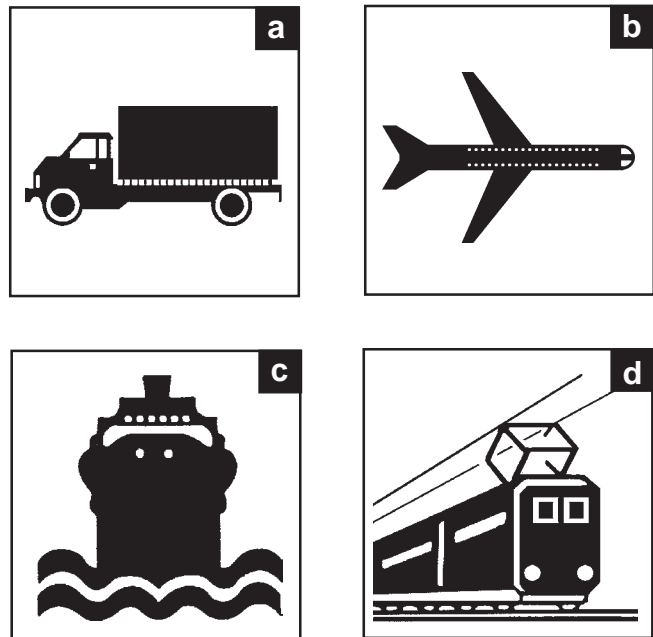
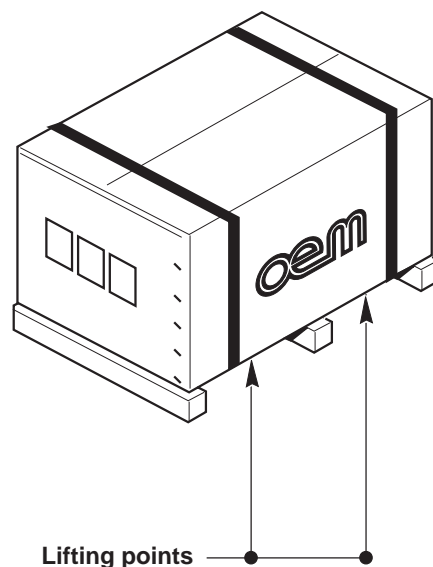


FIG. 2



2.3 - 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 as specify at point 2.4 (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:

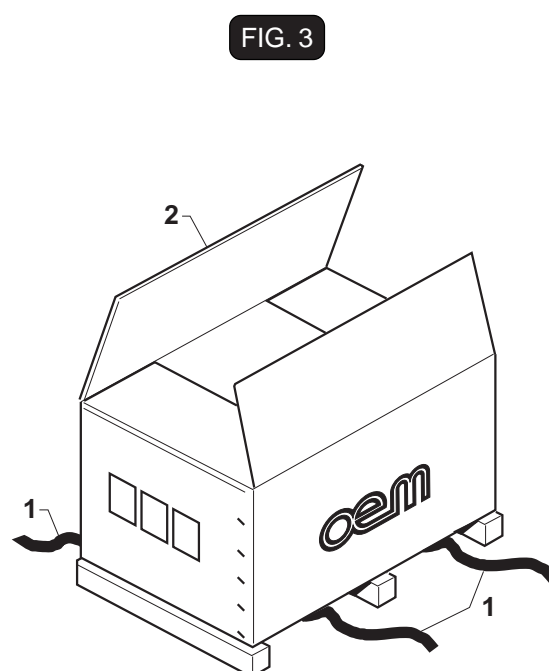
- a- Inform immediately the transport company and your agent, both by phone and by registered letter with return receipt;
- b- Manufacturer shall also be informed.



IMPORTANT

The oven consists of three distinct parts: support, cover or hood.

Each part is packed, separately; on installation, the components are assembled.



2.4 - UNPACKING (Fig. 3)

To remove the oven from its packing, 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

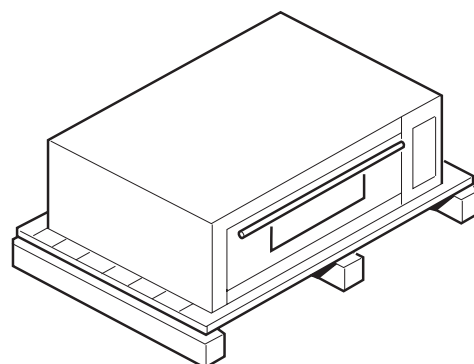


The packing elements (plastic bags, carton, nails, etc...) shall be kept away from the reach of the children, since they are potential danger sources, so, they shall be gathered and sent to special centres to correctly be recycled.



IMPORTANT

a message concerning possible damages, troubles or a non-compliance in comparison with the description in our packing list shall timely occur, anyway it shall latest occur within 8 days from the receipt of the oven. Otherwise, the goods will be considered as accepted.



2.5 - IDENTIFICATION OF THE COMPONENTS
(Fig. 4)

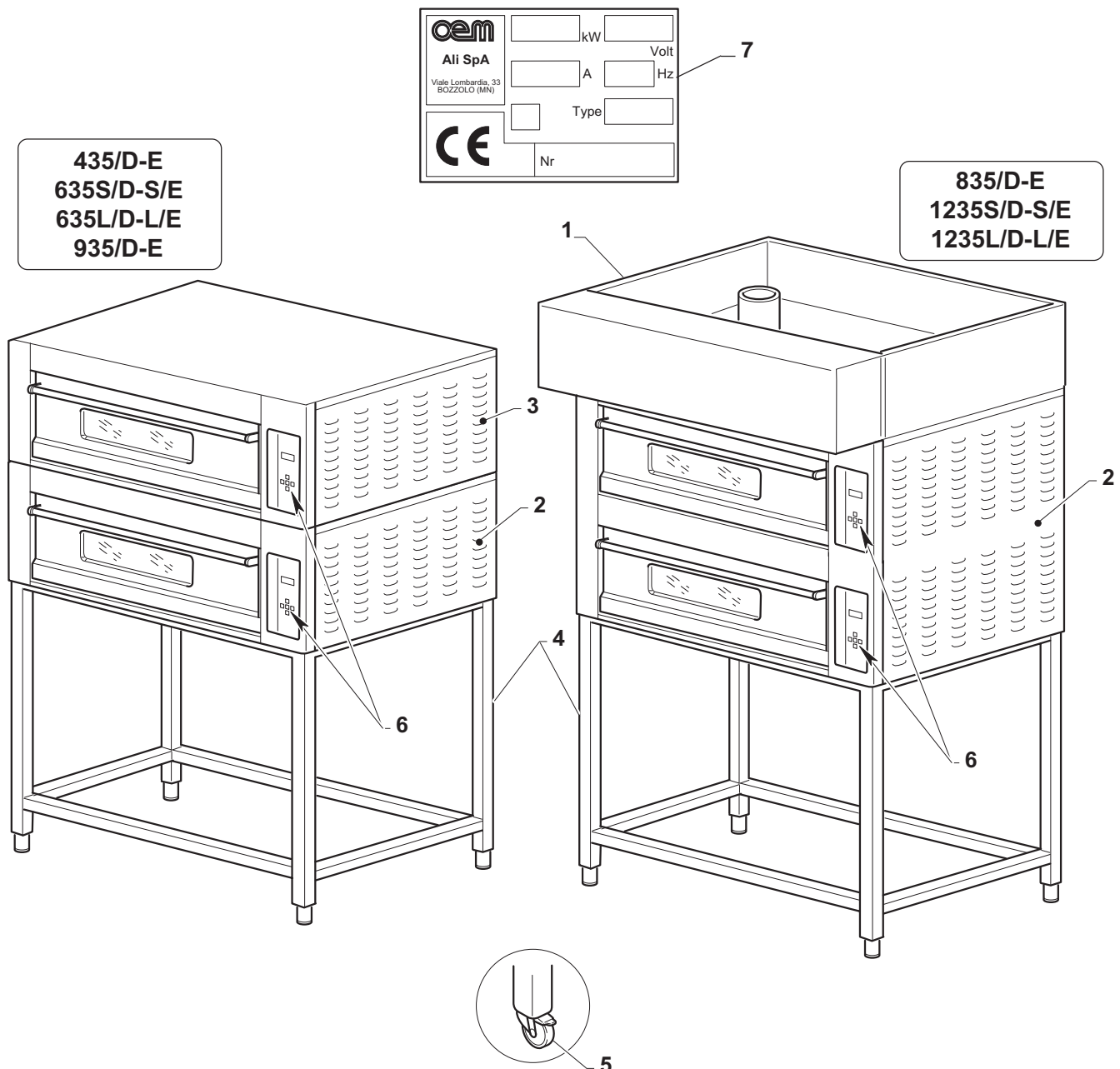
1. Hood (Optional)
2. Oven 1
3. Oven 2 (by request)
4. Support
5. Wheels (Optional)
6. Control board
7. Data plate

2.6 - OVEN IDENTIFICATION (Fig 4)

Both serial number and oven identification data are engraved on a plate (7) being fixed on the base of the oven.


IMPORTANT

Should you need technical service or spare parts, please, always indicate the oven serial number.

FIG. 4


Chapter 3



DANGER

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

3.1 - OVEN LIFTING (Fig 1)

The oven lifting shall be carried out by using a crane or a tackle as follows:

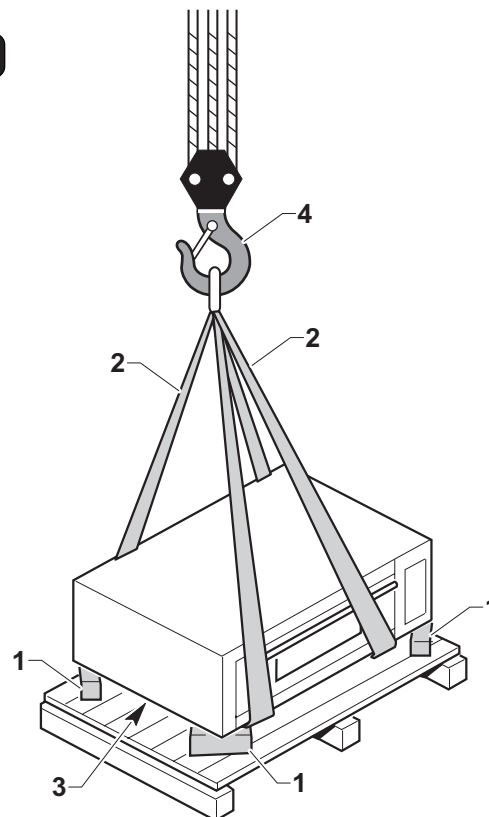
- The oven shall slightly alternatively be lifted from its four sides using a lever and making sure the panels are not damaged, then the oven shall be positioned on shims (1).
- insert two belts (2) being properly dimensioned according to the weight of the oven, under the base (3) of the latter and connect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



ATTENTION

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

FIG. 1



3.2 - ASSEMBLING OF THE COMPONENTS



IMPORTANT

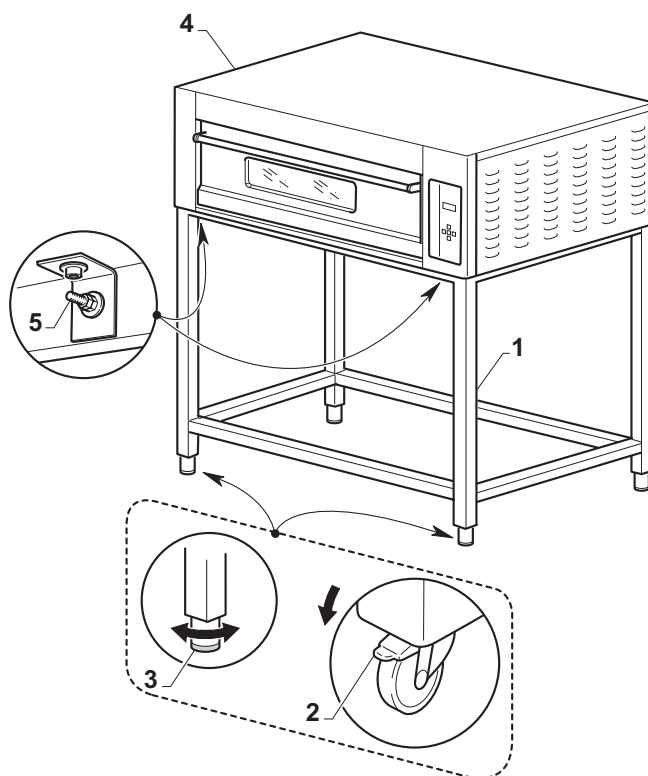
Regarding the assembling of the support, the hood and the relevant components, please follow the instructions in the relevant handbooks.

- Position the support (1) near the final oven installation area by positioning its possible braking wheels (optional) onto the front side. Brake the front wheels by the lever (2) or level the oven by operating its adjustable feet (3) depending on the kind of support.

Single-chamber oven assembling (Fig 2)

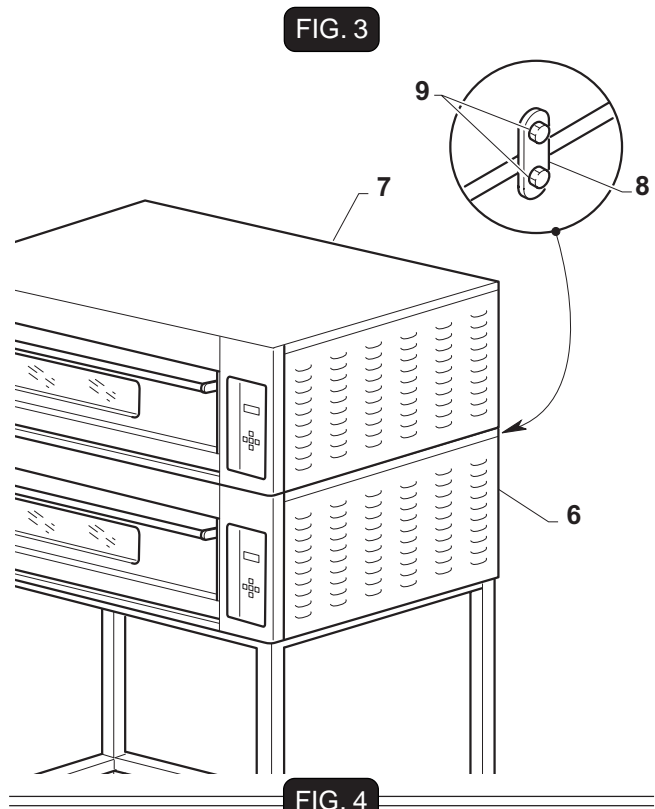
- The oven (4) shall be lifted as indicated in "lifting" paragraph and positioned on the base.
- Fix the oven (4) to the support (1) by the screws (5) and the washers supplied with the support set.

FIG. 2

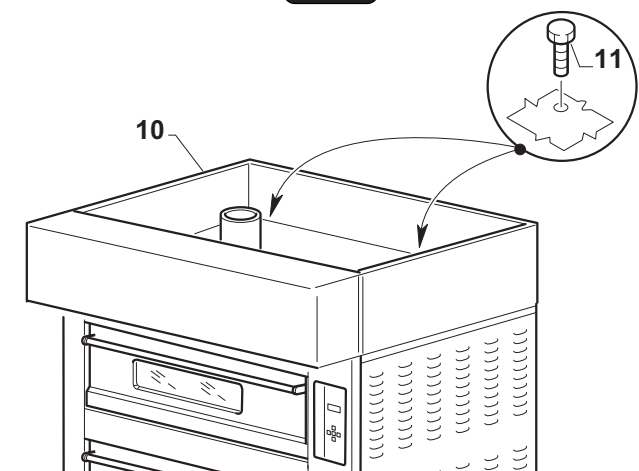


Two-, three-chamber oven assembling (Fig 3)
(For 430-435 models, only)

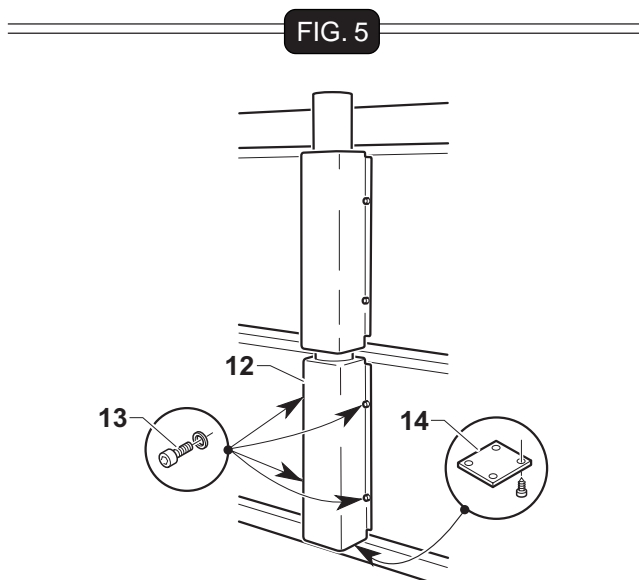
- To assemble the two-chamber oven, position the second oven (7) the first oven (6) and fix it by the small bracket (8) and the screws (9).
- Concerning three-chamber ovens, the third oven shall be put onto the second one and fixed as above.


Hood assembling (Fig 5)

- The hood (10) shall be positioned on the last oven and fixed by the four existing screws (11).


Chimney assembling (Fig 5)

- Unpack the chimney (12) and place it on the back of the oven (see figure) by the screws (13) 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 (14) under the chimney of the lowest oven.



3.3 - ELECTRICAL CONNECTION (Fig. 6)

FIG. 6



- 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.
- Electric power supply cables shall be dimensioned depending on the highest power rate being needed by the oven and in such a way that the total voltage drop is lower than 2 %, under full load conditions.
- 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.



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

3.3.a - Electric oven connection

- To reach the electric oven part, remove the lateral right-hand 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.



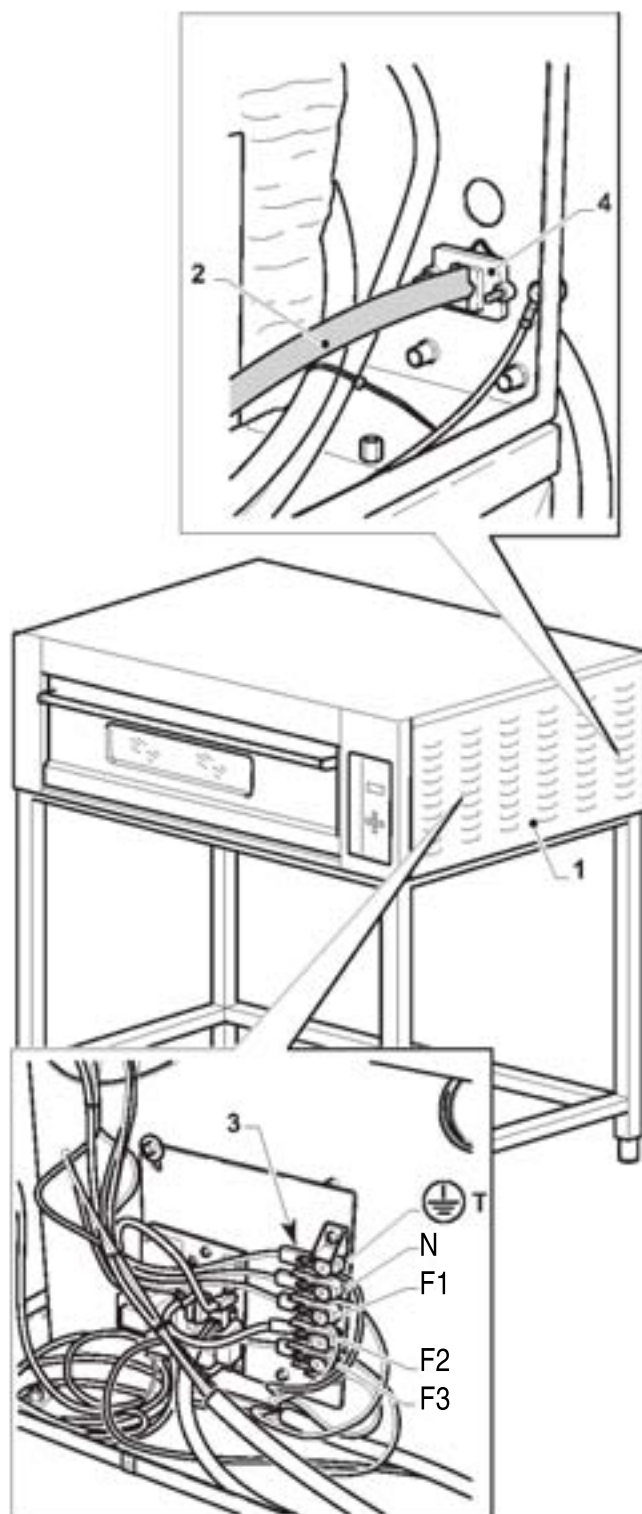
The disconnecting switch placed in the upper part of the oven shall be easily to be reached.

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



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.

Concerning 835/D-E, 1235S/D-E, 1235L/D-E two-chamber models, there is only one electric connection cable for both chambers.



3.3.b - Electric hood connection

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

3.3.c - Unipotential connection (Fig 7)

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.

3.4 - OVEN POSITIONING (Fig 8)



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 8, because they indicate the minimum distances required to allow the oven correctly to function.
- Fix the oven position by braking the rear wheels.

3.4.a - Chimney connection (Fig 9)

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

3.5 - 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.

FIG. 7

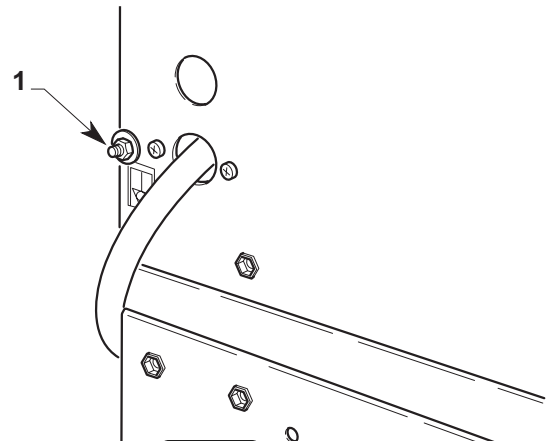


FIG. 8

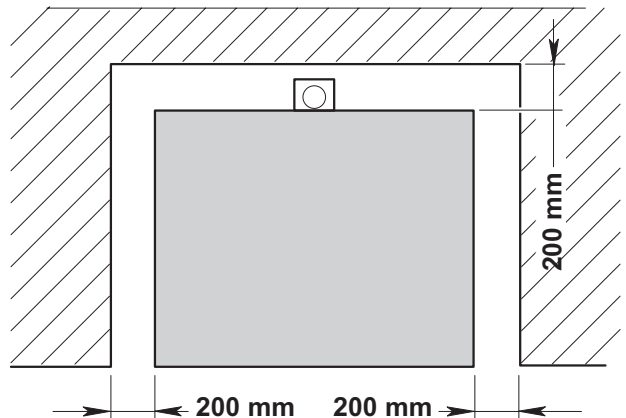
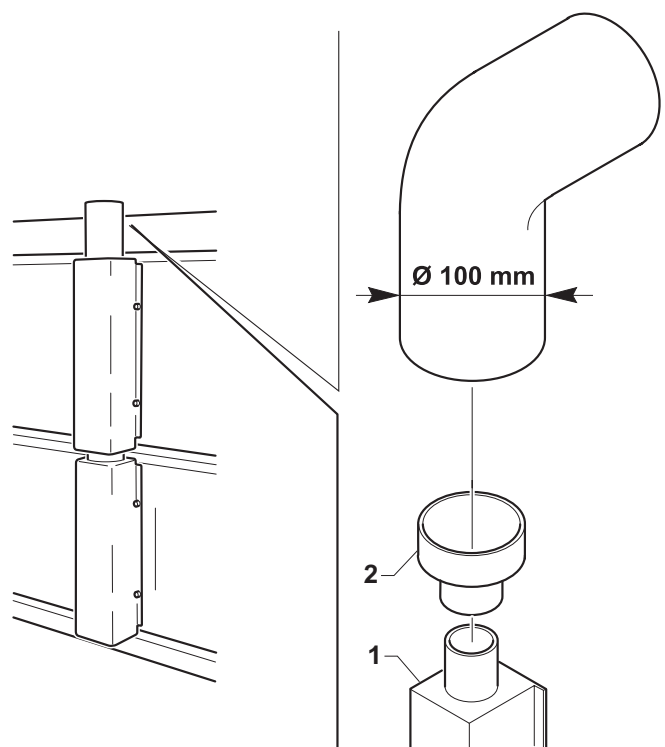


FIG. 9



Chapter 4

4.1 - TYPE OF USE AND CONTRAINDICATIONS



IMPORTANT

MILLENNIUM MM/MB 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 (Fig. 1)

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

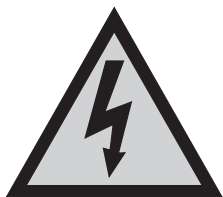


DANGER



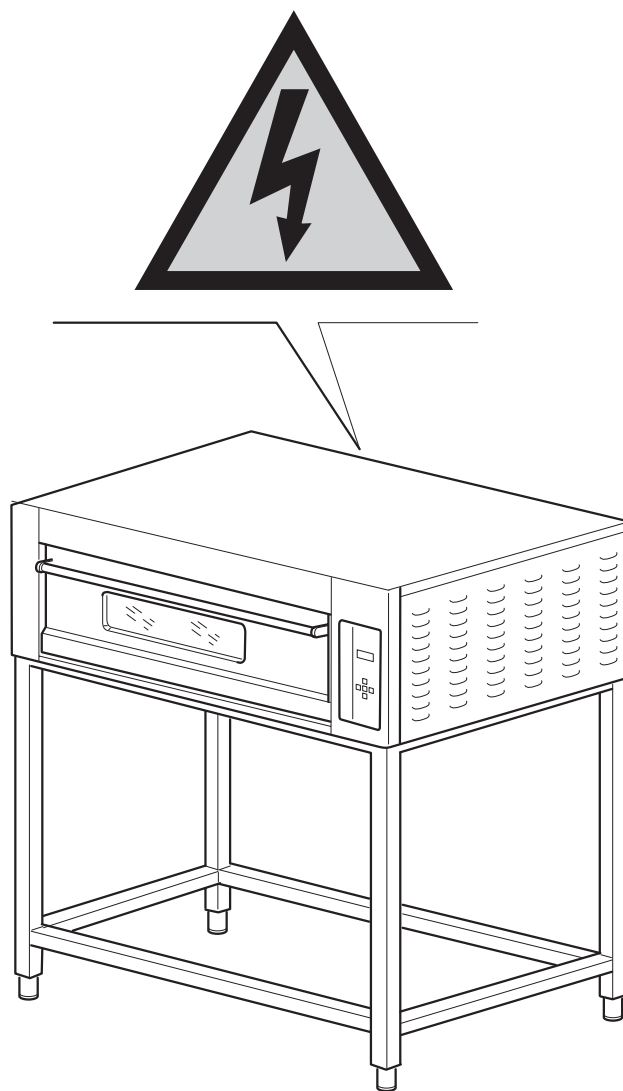
On the oven, there are plates reporting safety instructions which shall absolutely be followed by any oven user. Manufacturer disclaims all responsibility in case of accidents to persons or objects arising from a non-fulfilment of such instructions.

Danger: machine under voltage



- Do not work with the machine under voltage.

FIG. 1



4.3 - SAFETY DEVICES (Fig 2)

The equipment is equipped with following safety systems:

- 1) All dangerous areas are closed by screwed cases.
- 2) Each oven is equipped under the right-hand panel with a safety thermostat (1) to allow the oven to be disconnected in case of overtemperature inside the baking chamber.

4.4 - USER'S AREAS (Fig 3)

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.

4.5 - RESIDUAL DANGER AREAS (Fig. 3)

Remaining danger areas: areas which cannot be protected due to the particular concerned kind of production; as to the oven, they can be read as follows:

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

FIG. 2

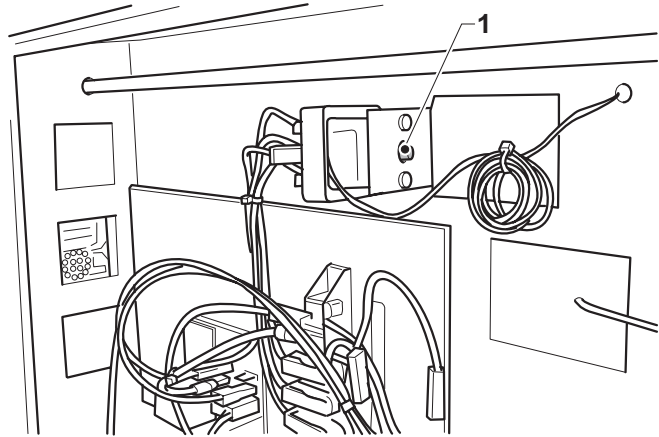
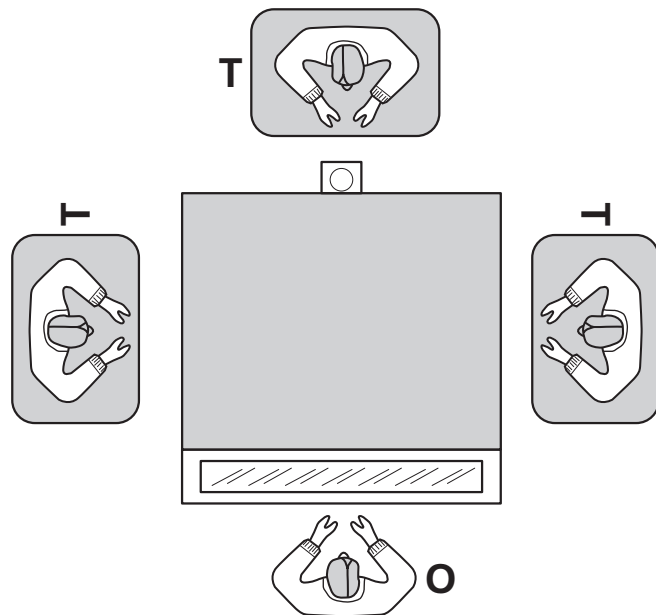


FIG. 3



Capitolo 5

5.1 - CONTROL BOARD AND PILOT LIGHTS ON DIGITALLY CONTROLLED OVENS (Fig 1)

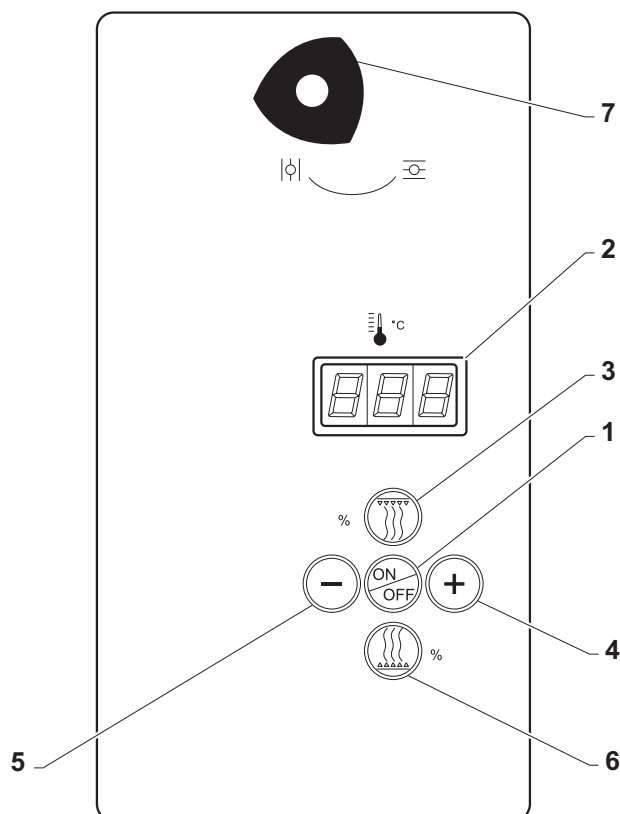


FIG. 1

On the oven, there are the following control elements:

1. Line key ON/OFF



Pressing it, the display (2) lights up, the lamp inside the chamber lights up and the control elements are energized.

2. Display

The set and real temperature as well as the ceiling and bedplate resistance functioning percentage are displayed.

3. Ceiling resistance capacity

Pressing it, the connection percentage value of the upper resistances is displayed; to increase it press

 (4), to reduce it press  (5).

4. Increment key



To increase the values to be set.

5. Decrement key



To reduce the values to be set.

6. Bedplate resistance capacity





Pressing it, the connection percentage value of the lower resistances is displayed; to increase it press

 (4), to reduce it press  (5).

7. Handwheel opening/closing

By turning towards , the chimney damper opens; by turning towards , the chimney damper closes.

Temperature setting

On the display (2) the real oven temperature is displayed, to modify the set temperature press  or , on the display the set temperature is displayed, then press the key  within 5 seconds to raise or  reduce the temperature. After approximately 10 seconds from the temperature setting, a temperature self-entering occurs and the real oven temperature is displayed.

5.2 - MANUAL OVEN CONTROL BOARD (Fig 2)

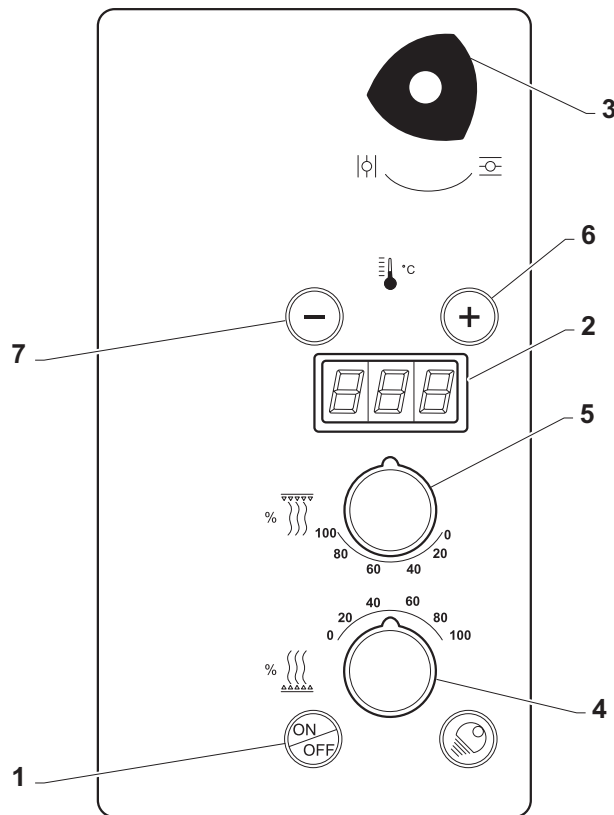


FIG. 2

On the oven, there are the following control elements:



1. Line key ON/OFF

Pressing it, the display (2) lights up and the control elements are energized.

2. Display

The set & real temperatures are displayed.

3. Handwheel opening/closing

By turning towards , the chimney damper opens; by turning towards , the chimney damper closes.

4. Adjustment hand grip for bedplate resistance capacity

By rotating the hand grip (4) clockwise, the bedplate resistance percentage capacity is increased, counterclockwise it is reduced.

5. Adjustment hand grip for ceiling resistance capacity

By rotating the hand grip (5) clockwise, the ceiling resistance percentage capacity is increased, counterclockwise it is reduced.

6. Increment key

To increase the temperature value.

7. Decrement key

To reduce the temperature value.

5.3 - OVEN PREPARATION

Pizza can be baked either directly on the refractory oven surface or in the baking-tin.

Here below you can find some instructions to adjust the different parameters.

5.3.a General rules to bake on refractory surfaces

- Heat up the oven at least one hour and fifteen minutes before starting the work and set following parameters:
Working temperature $290^{\circ}\text{C} \div 350^{\circ}\text{C}$
Ceiling resistances 75 %
Bedplate resistances 5 %
- To bake the first pizzas set the temperature at 320°C .
- If a sensible work increase is foreseen, adjust the bedplate resistances at 40 %.

**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.

5.3.b General rules to bake in baking-tin

- Heat up the oven at least one hour and fifteen minutes before starting the work and set following parameters:
Working temperature $300^{\circ}\text{C} \div 350^{\circ}\text{C}$
Ceiling resistances 40 %
Bedplate resistances 60 %

**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 $50^{\circ} - 60^{\circ}\text{C}$ higher than the set one and pizzas will burn.

5.3.c - Oven starting (2) (Fig: 3)














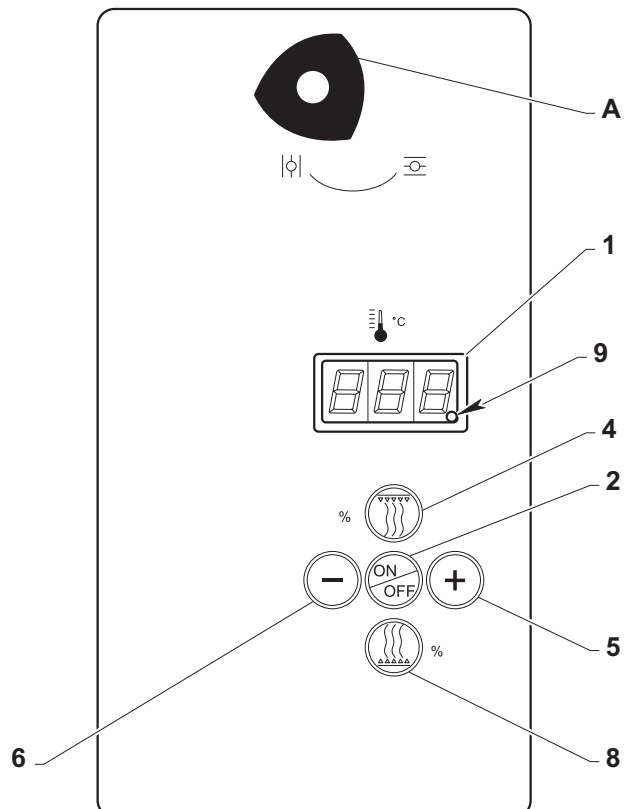
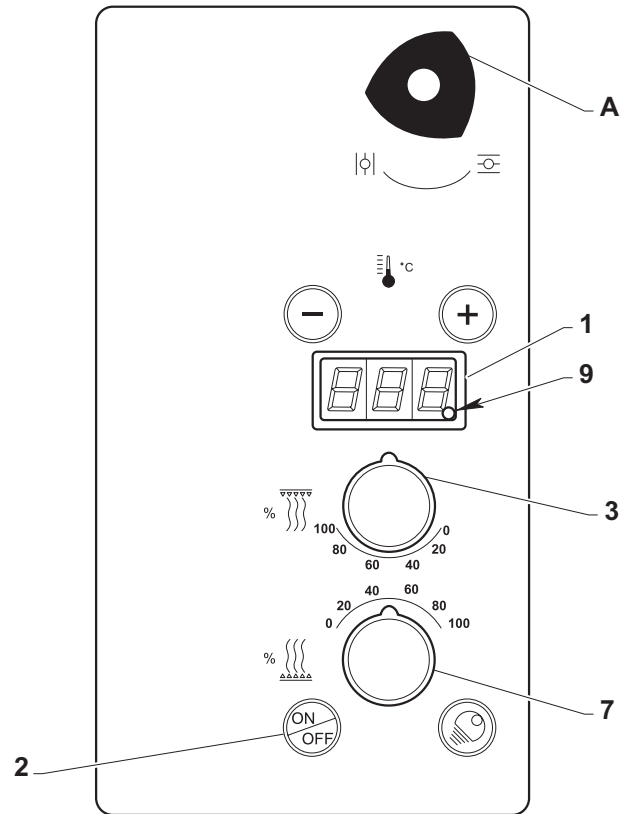
- Close the chimney by positioning the handwheel (A) on  to close the damper.
- Press the key , the display (1) lights up.
- On the display (1) the real oven temperature is displayed.
- Set the baking temperature by pressing the key  or , the temperature value will be displayed on the display (1). Operate the key  or  to raise or reduce the temperature.
- Adjust the ceiling resistance functioning percentage by operating the hand grip (3) or the key  (4) as well as the key  (5) or  (6) (in case of ovens with digital control elements) and additionally the bedplate resistance functioning by operating the hand grip (7) or the key  (8) as well as the key  (5) or  (6) (in case of ovens with digital control elements).
- Wait until the oven reaches the set pizza baking temperature which will be indicated by a lighting up of the led (9).
- Open the chimney by positioning the handwheel (A) on  to open the damper.

FIG. 3



5.4 - PIZZA BAKING

FIG. 4

- When the set temperature is reached, open the chimney damper by positioning the handwheel on ϕ , open the access door and insert the pizza to be baked.



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

- Start the extractor hood by pressing the relevant switch.
- While baking, it is possible to modify parameters on both ovens with manual control elements and ovens with digital control elements, by operating the relevant push-buttons or hand grips as explained in the preceding paragraphs.
- Once the pizza is baked, open the oven access door and remove the baked pizza.

5.5 - ALARM CONDITIONS DURING OVEN FUNCTIONING

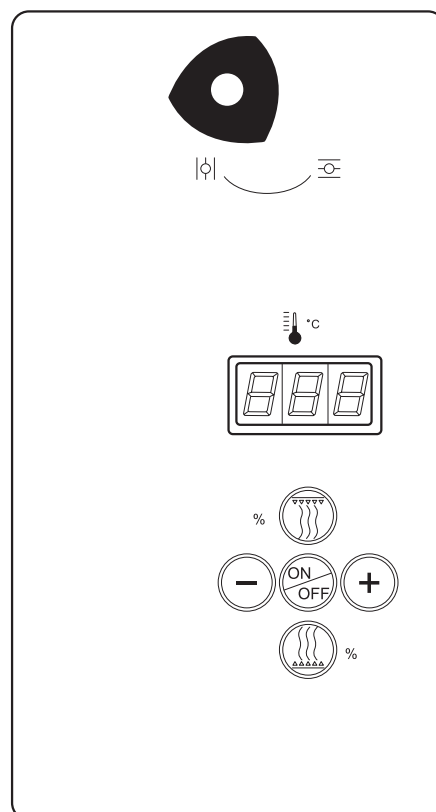
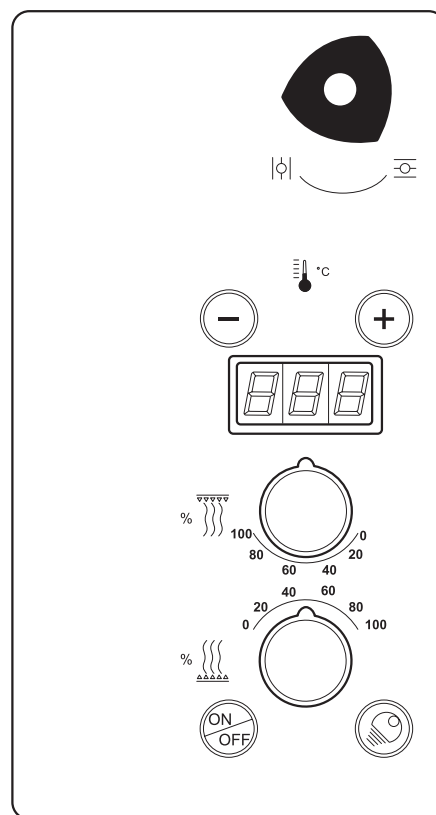
During the oven functioning, alarms due to breakage could occur; such alarms are displayed.

5.5.a - Alarm for damaged or disconnected temperature feeler

When this alarm intervenes, following visual display appears:

AL1 - AL2

- An automatic cutoff of the power supply to electric resistances occurs.
- 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.

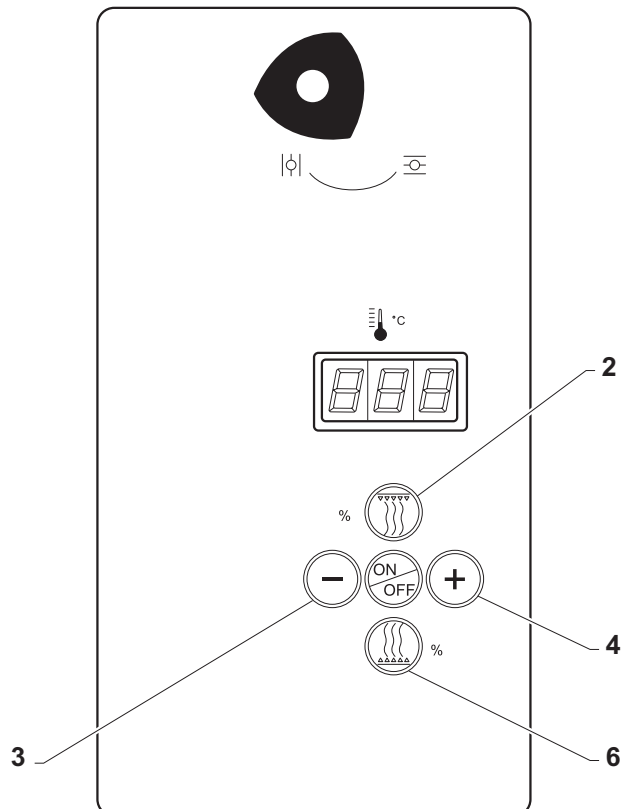
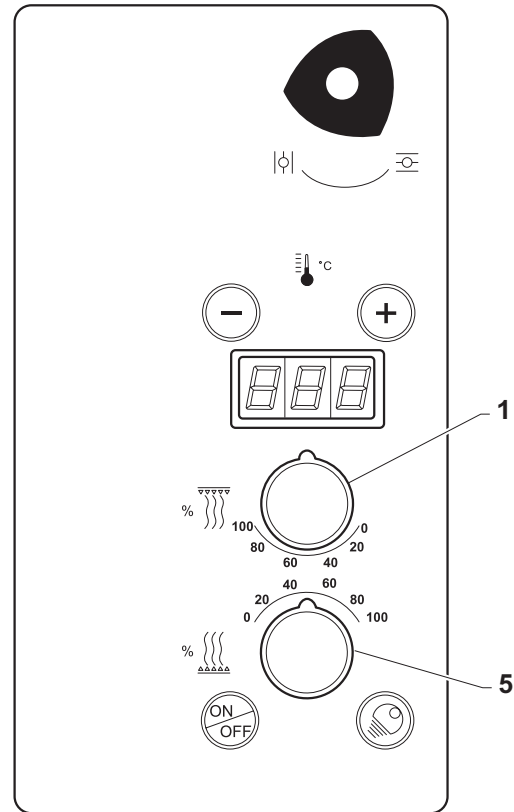


5.6 - SELF-CLEANING CYCLE (Fig 5)

- At the end of each working day, a self-cleaning cycle shall be carried out before cutting off the oven.
- Press the key or and operate the key to reach a 400°C temperature.
- Adjust ceiling capacity at 100% by operating the hand grip (1) or the key (2) as well as the key (3) or (4) (in case of ovens with digital control elements).
- Adjust the bedplate capacity at 100 % by operating the hand grip (5) or the key (6) as well as the key (3) or (4) (in case of ovens with digital control elements).
- Leave the oven on for approximately twenty minutes, then disconnect it to allow it to get cold.

5.7 - CUTTING OFF

- At the end of each working day, cut off the oven by pressing the push-button .
- In the event the extractor hood is functioning, let it function for the time needed to carry out a self-cleaning cycle.
- On restarting, the oven starts according to the data being which were present before cutting it off.

FIG. 5


5.8 - MALFUNCTIONING, CAUSE AND CURE

- The oven does not start:

- Verify the electric connection.
- Make sure the cutout switch is on.
- 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
- Adjust the oven temperature
- Check the hood extraction

- Oven malfunctioning:

- The set temperature is not reached:
Resistances are damaged
Make sure the electric oven connection has properly been carried out
Contact manufacturer's technical service.



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

5.9 - SAFETY THERMOSTAT RECHARGE (Fig 6)



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:

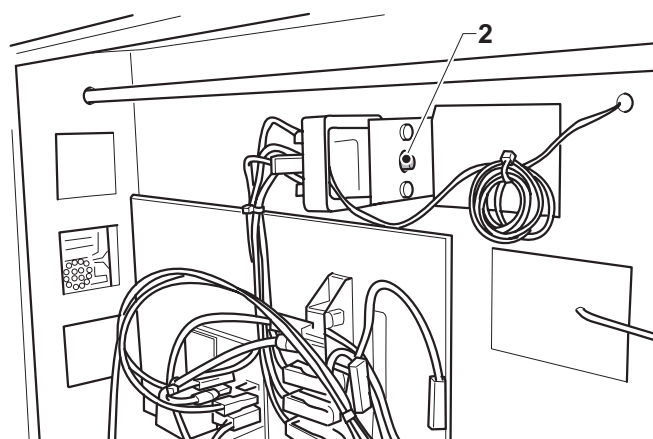
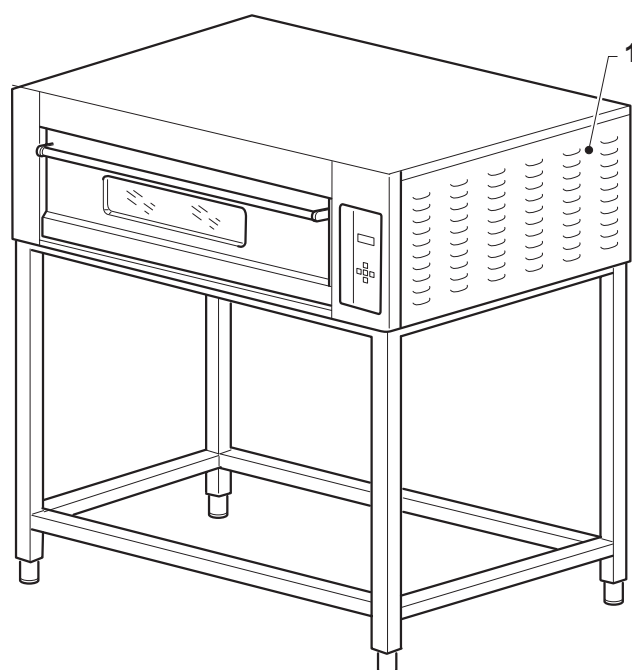


Disconnect the knife switch placed in the upper machine side, eliminate the cause of the thermostat intervention.

Remove the right-hand panel (1).

Press the red push-button (2) on the safety thermostat, then reassemble all by proceeding in the opposite way.

FIG. 6



Chapter 6

6.1 - ROUTINE AND PLANNED MAINTENANCE

6.1.a- In general



All maintenance operations shall be carried out when the oven is off and cool and the cutout switch is disconnected, on "0" OFF position.

Maintenance operations have been subdivided into three categories:

- **ROUTINE MAINTENANCE:**

Group all daily and weekly operations to be carried out on the oven.

- **PLANNED MAINTENANCE:**

List all operations to be carried out at regular intervals in order to ensure a good oven functioning.

- **MAINTENANCE IN CASE OF NEED:**

Some operations to be carried out in case of need, for instance the replacement of broken or worn components.

6.1.b - Ordinary maintenance

6.1.b.a - Outer cleaning (to be carried out every day)



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.

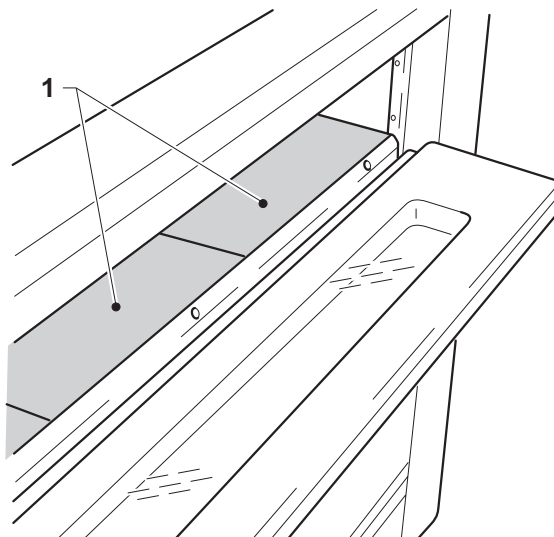
Do not utilize water jets to clean the oven sides.

- 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.

6.1.b.b - Fireproof surface cleaning (to be carried out every day) (Fig 1)

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

FIG. 1



6.1.c - Planned maintenance

6.1.c.a - Every 600 hours a careful chamber cleaning (Fig 2)

- 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 fireproof surface by utilizing the special brush.



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.

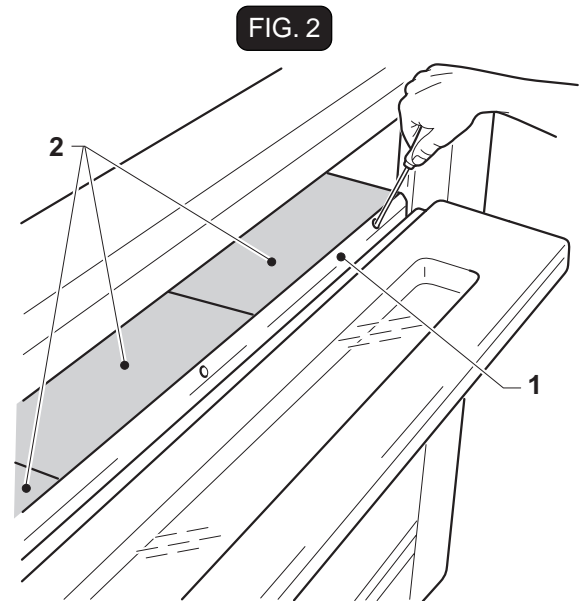


FIG. 3

6.1.c.b - Every 2 years

- Contact manufacturer's technical service to carry out a comprehensive checking of the oven.

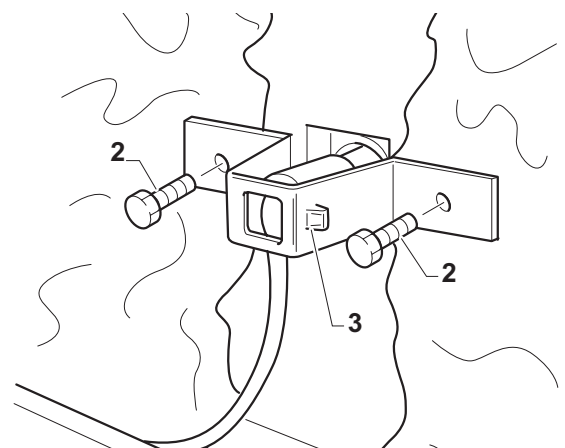
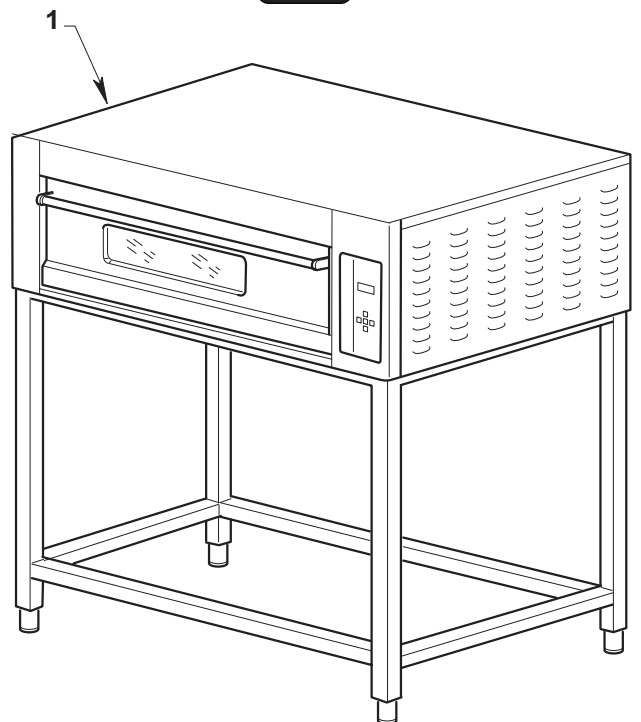
6.1.d - Maintenance in case of need

6.1.d.a - Lamp holder replacement (Fig 3)



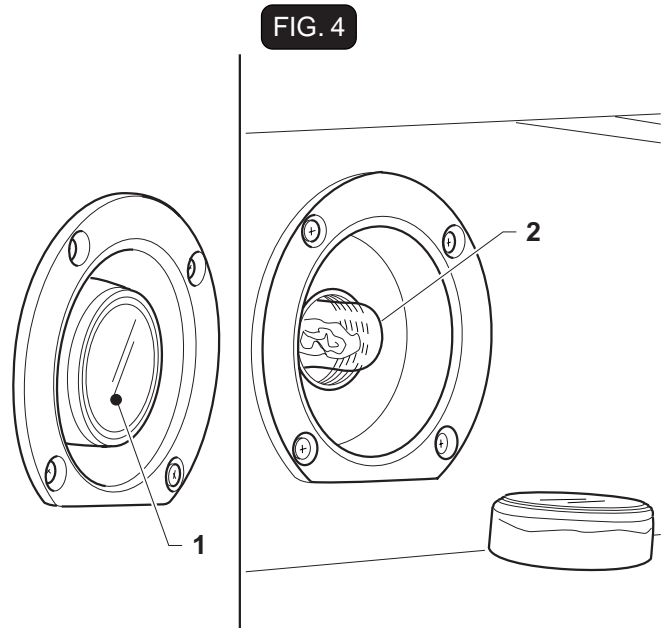
This operation shall be carried out by a skilled technician.

- Remove the left-hand panel (1).
- Unscrew both screws (2) and remove the square.
- Remove the lamp and release the lamp holder by operating the spring (3).
- Replace the lamp holder and reassemble all by proceeding in the opposite way.



6.1.d.b - Lamp replacement (Fig 4)

- Unscrew the glass (1) protecting the lamp (2).
- Unscrew the burnt out lamp (2) and replace it, then reassemble all by proceeding in the opposite way.



6.1.d.c - Ceiling or bedplate resistance replacement (Fig 5)



This operation shall be carried out by skilled technicians.

To access the resistance, the oven covering mineral wool shall be moved, therefore, it is necessary to use suitable individual protection means.

- The user shall place himself at the rear side of the oven and remove the rear panel (1) with chimney, loosening the relevant screws.
- Remove the oven covering mineral wool (2), loosen the resistance fixing screws (3) (two per resistance).
- Electrically disconnect the resistance, then open the oven door.

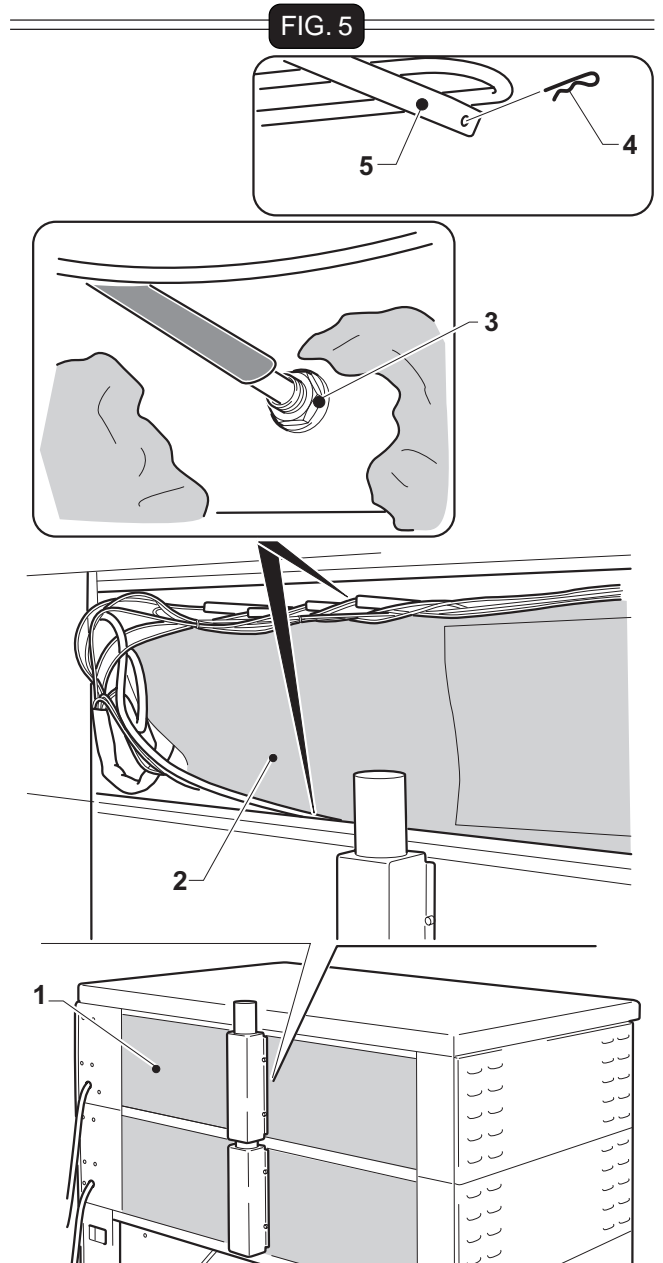
Bedplate resistance:

After opening the oven door, take off the refractory surface and the resistance to be replaced, as well.

Ceiling resistance:

after opening the oven door, remove the split pins (4), take off the resistance support bar (5) then, take off the resistance to be replaced.

- Replace the resistance and mount again proceeding in the reverse order taking care of a proper power supply cable connection.



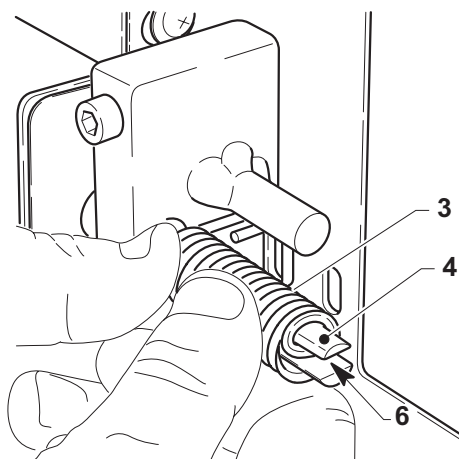
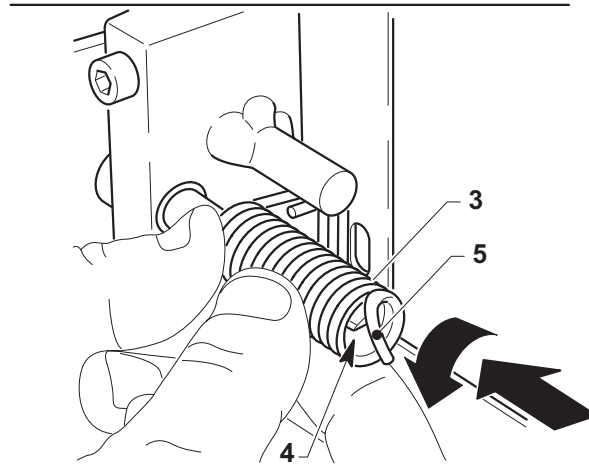
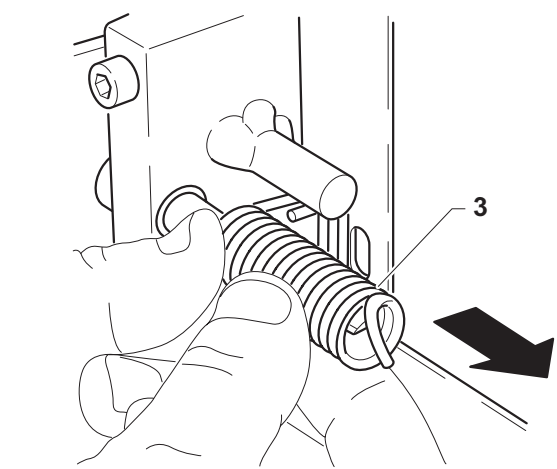
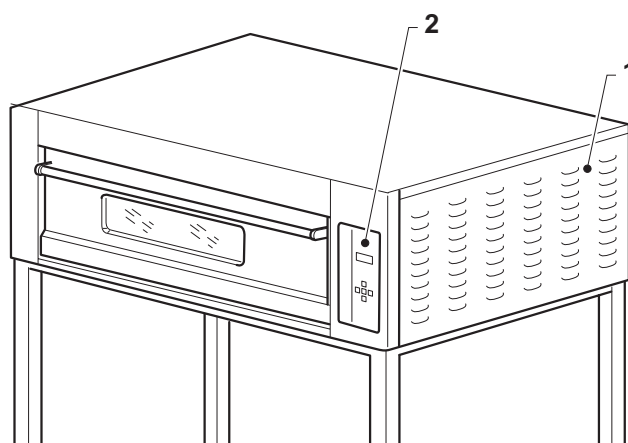
6.1.d.d - Door spring replacement (Fig 6)

**DANGER**

This operation shall be carried out by skilled technicians.

- Remove the right-hand panel (1) by unscrewing the relevant screws.
- Remove the control board (2) by unscrewing the relevant screws.
- Release the spring (3) and replace it.
- Insert the spring (3) in the pin (4), turn the spring rewinding it up, then fasten the spring catch (5) in the milling (6) of the pin (4).
- Reassemble the panel (1) and (2).

FIG. 6



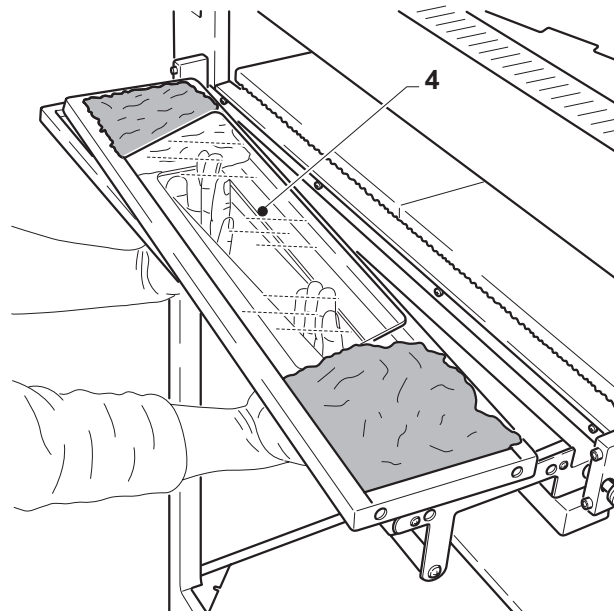
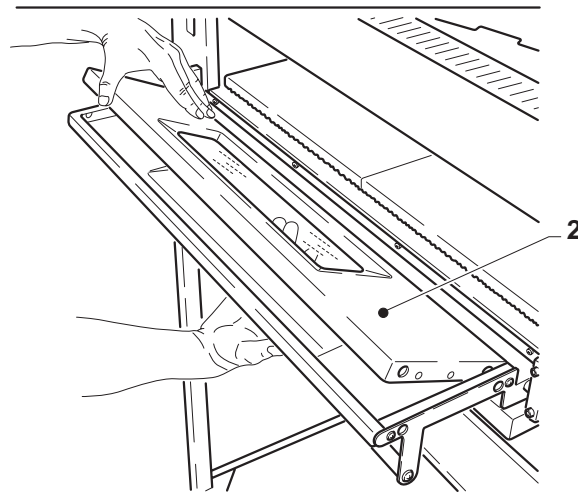
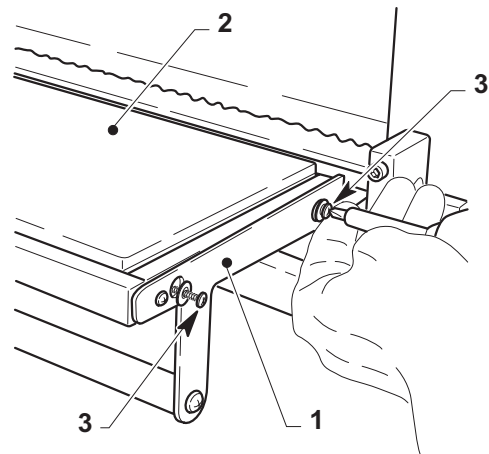
6.1.d.e - Door pane replacement (Fig 7)



This operation shall be carried out by skilled technicians.

- Open the door (1) and remove the inner panel (2) loosening the relevant screws (3).
- Replace the pane (4) and mount all again proceeding in the reverse.

FIG. 7



Chapter 7

7.1 - OVEN DISASSEMBLY

In case the oven shall be disassembled to reinstall it later, proceed in a reverse order compared to the description being reported in "Installation" chapter.



Before disassembling the machine or demounting some machine components, disconnect the power supply.

The machine assembling shall only be carried out by skilled and authorized personnel.



In case you need to disassemble the oven or demount some components of the latter in a way being different than the manner which is reported in this handbook, you shall contact manufacturer or the latter's Agent, whose address can be found under the contact names on the third page of this handbook.

7.2 - OVEN SCRAPPING



To protect the environment, please proceed in compliance with the local laws in force.

When the machine can no longer be used or repaired, please proceed with recycle and disposal.

Electrical equipment cannot be disposed of as ordinary urban waste: it must be disposed of according to the special EU directive for the recycling of electric and electronic equipment.

The electrical equipment is marked with a pictogram of a garbage can inside a barred circle. This symbol means that the equipment was sold on the market after August 13, 2005, and must be disposed of accordingly.

Due to the substances and materials it contains, inappropriate or illegal disposal of this equipment, or improper use of the same, can be harmful to humans and the environment. Improper disposal of electric equipment that fails to respect the laws in force will be subject to administrative fines and penal sanctions.



Consult the next paragraph when disposing of harmful materials (lubricants, solvents, coating products, etc.).

7.3 - DISPOSING OF HARMFUL SUBSTANCES

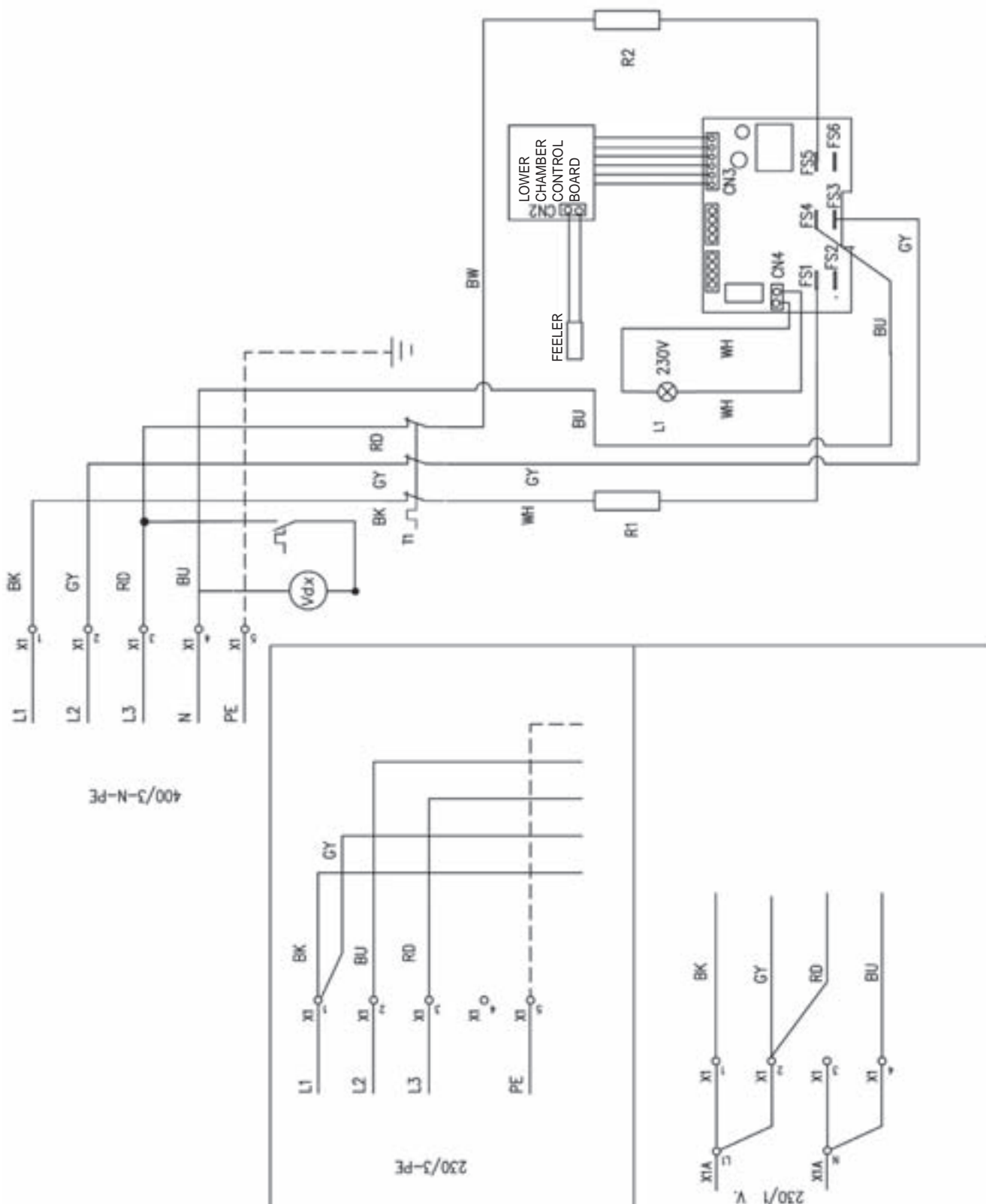
Consult the provisions established by the Standards in force in each individual country before disposing of such substances.



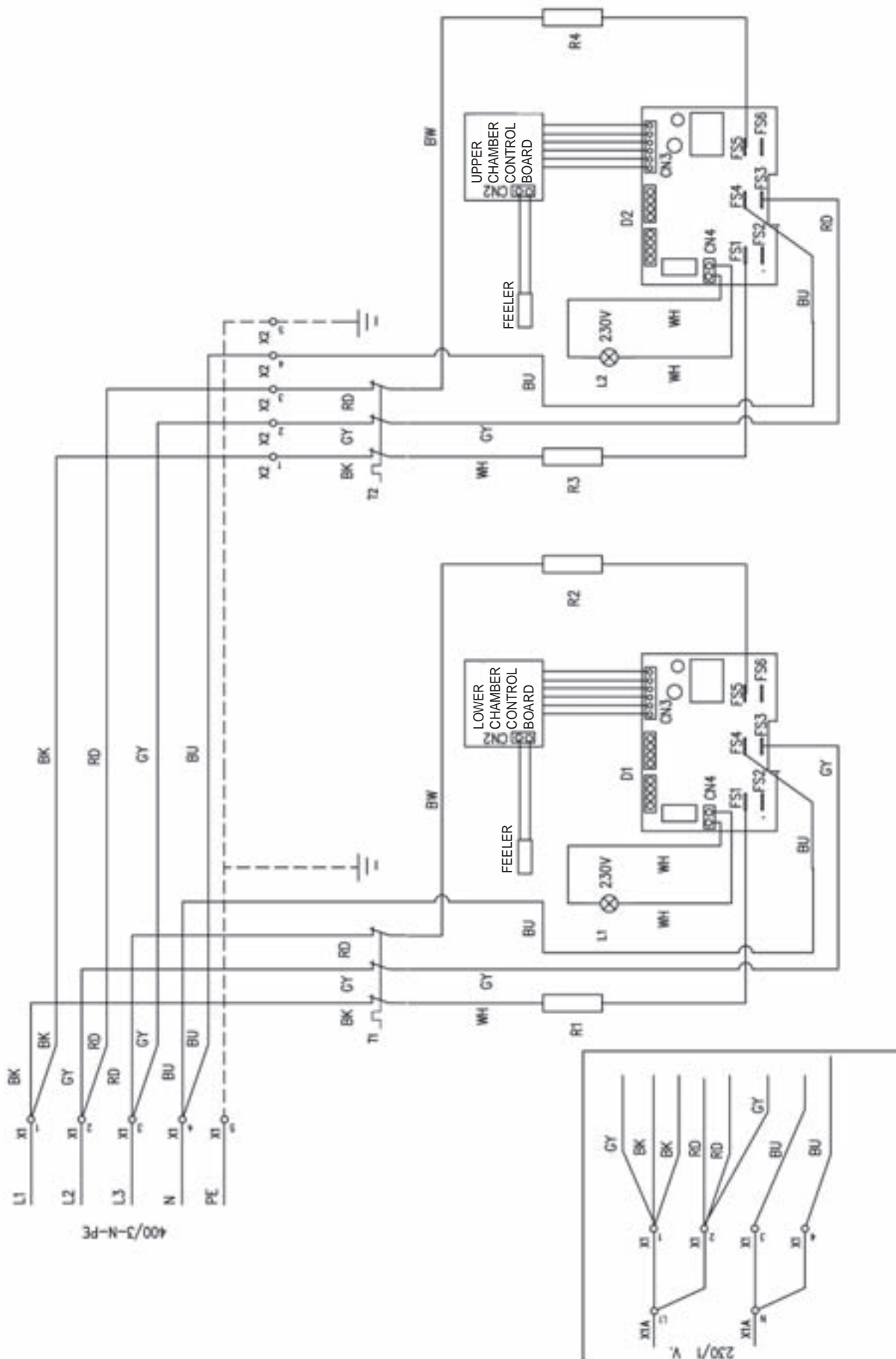
Manufacturer disclaims all responsibility in case of irregularities made by Customer before, during and after scrapping and disposal of oven components and also in case of mistakes by the latter while interpreting and following the concerned Rules being in force.

WIRING DIAGRAM MM/D-E 435

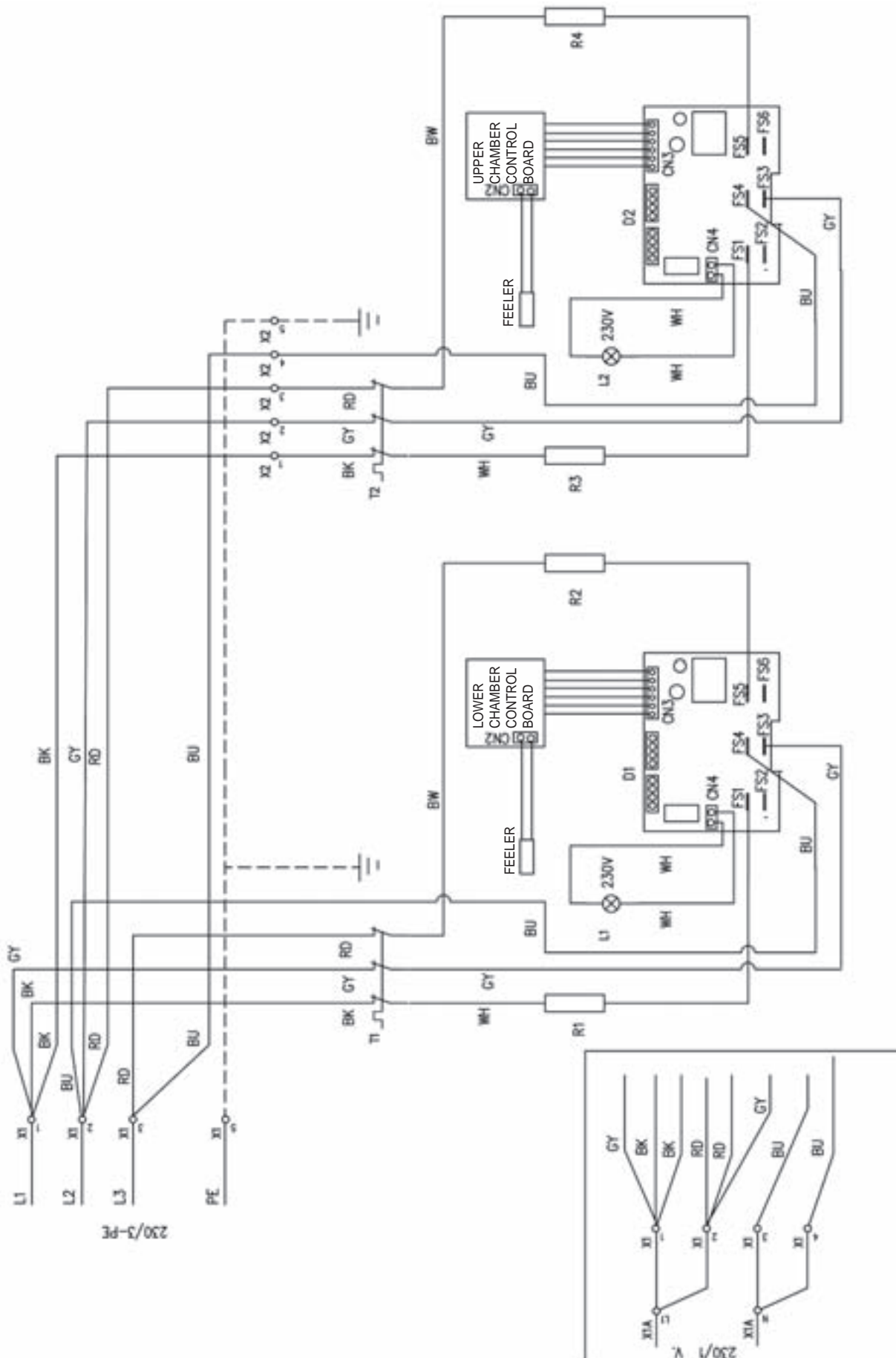
V400-230 Trifase / V230 Single-phase

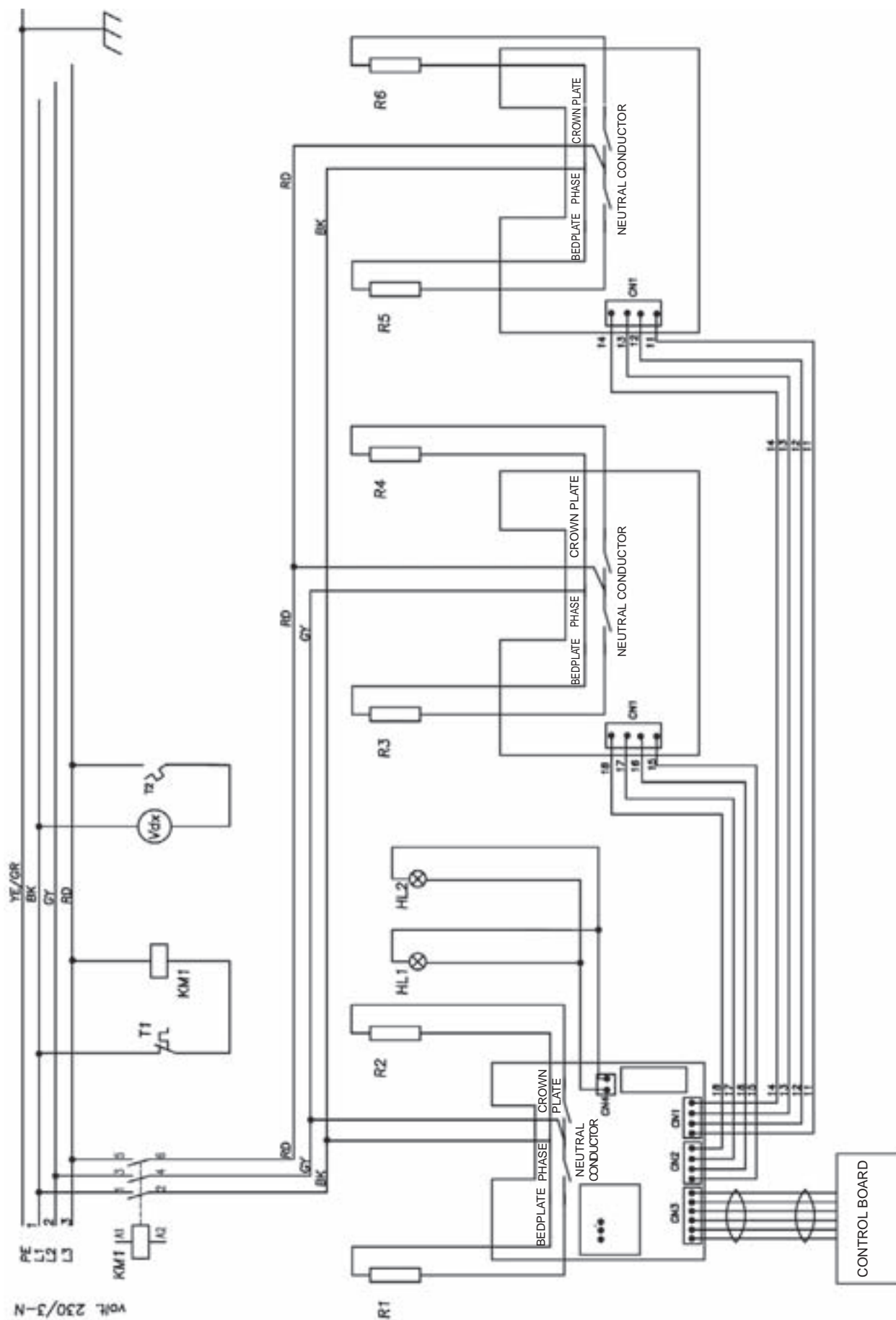


WIRING DIAGRAM MB/D-E 835 - V400

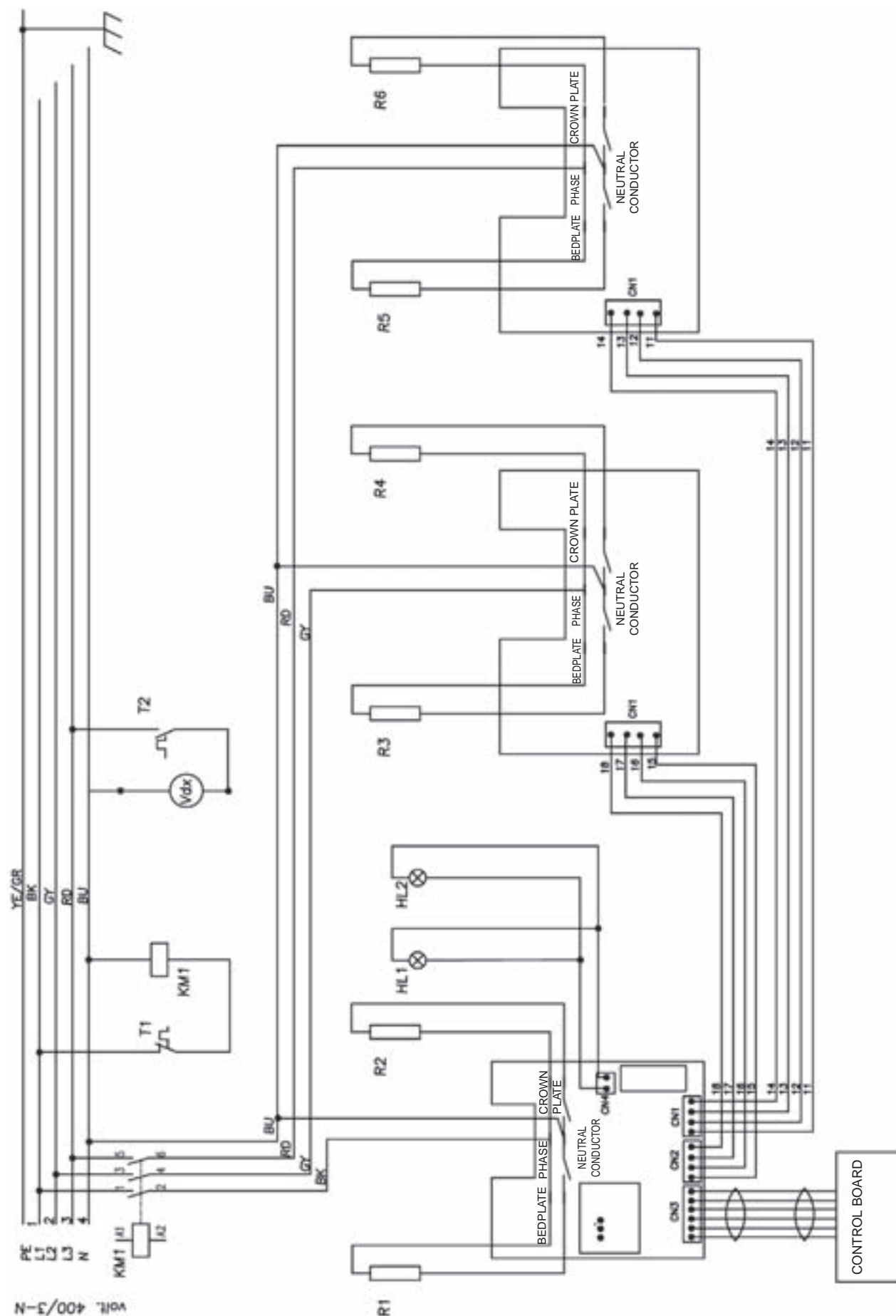


WIRING DIAGRAM MB/D-E 835 - 230V Three-phase





WIRING DIAGRAM MM/MB/E-D 635S/L - 935 - 1235S/L - 400V



OVEN CAPTION MM435 E/D

D1= Oven card
T1= Safety thermostat
L1= Lower lamp
R1= Oven ceiling resistance
R2= Oven bedplate resistance
Vdx= Right-hand fan

OVEN CAPTION MB 835 E/D

D1= Lower oven card
T1= Lower safety thermostat
L1= Lower lamp
R1= Lower oven ceiling resistance
R2= Lower oven bedplate resistance

D2= Upper oven card
T2= Upper safety thermostat
L2= Upper lamp
R3= Upper oven ceiling resistance
R4= Upper oven bedplate resistance
Vdx= Right-hand fan

OVEN CAPTION MM.E.D.-635S-635L-935 + MB.E.D.-1235S-1235L

KM1= System remote switch
T1= Safety thermostat
R1-R2-R3-R4-R5-R6= Crown plate & bedplate resistances
HL1-HL2= Crown plate & bedplate lights
TR1-TR2= 0-230/0-12 transformer for oven lights
Vdx= Right-hand fan

