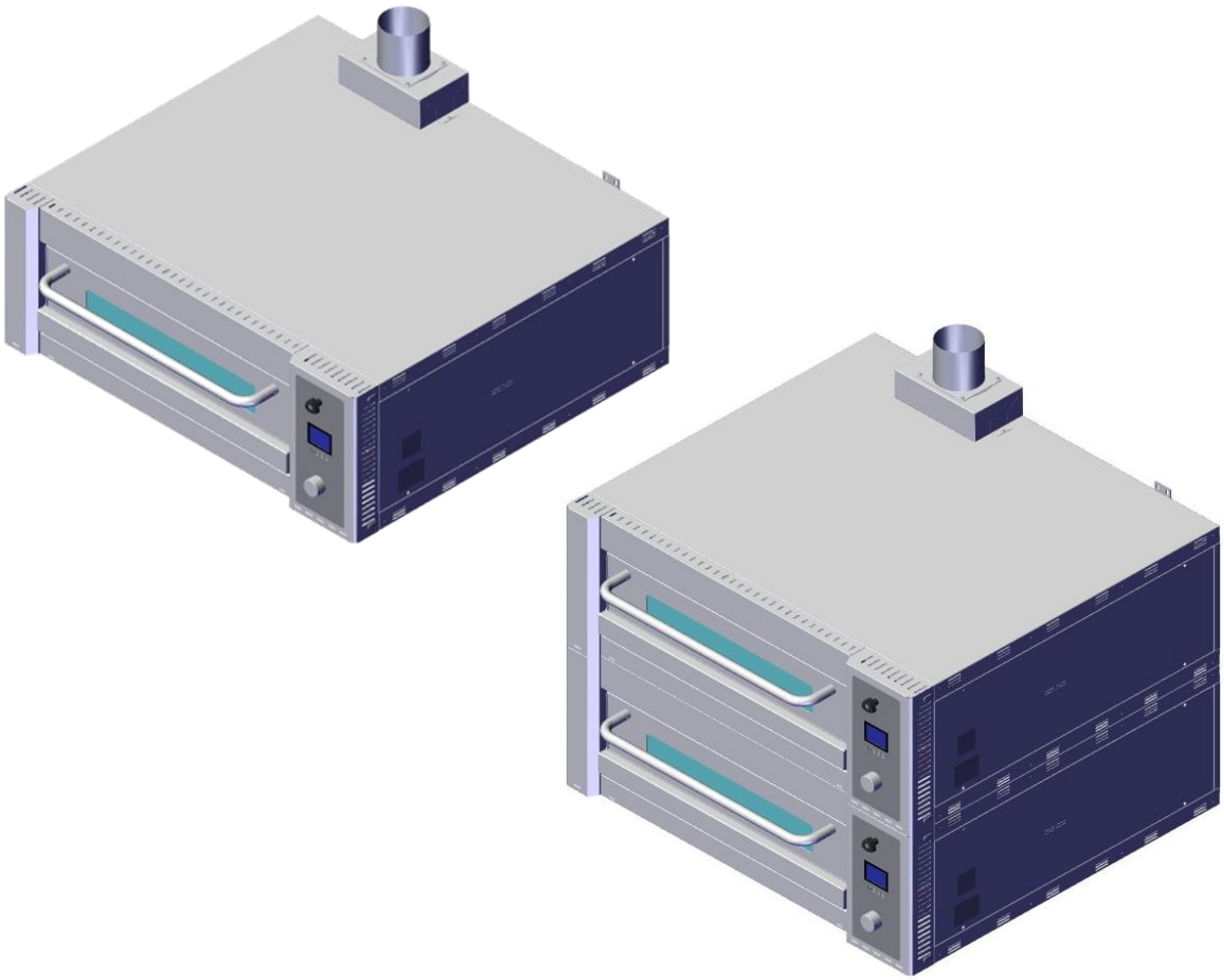
TRANSLATION OF THE ORIGINAL

USE AND WARNING INSTRUCTIONS



PIZZA OVEN

mod. VALIDO EVO

Cod: OM40.00073

OEM ALI GROUP S.r.l a socio unico
Viale Lombardia, 33 Bozzolo (MN) - Italia
Tel. +39 0376 910511 – Fax +39 0376 920754
info@oemali.com – www.oemali.com

PREFACE

All rights reserved. No part of this publication can be reproduced, distributed, translated into other languages or transmitted by any electronic or mechanical means, including photocopy, recording or any other storage and retrieval system, for other purposes other than the only personal use of the buyer, without express written permission of the Manufacturer.
The Manufacturer is in no way responsible for the consequences of any mishandled operations carried out by the user.

EDITOR'S NOTE

This documentation is specifically intended for technicians; therefore, some information that is easily deductible from reading texts and examining drawings may not have been further specified.
The Publisher is not, in any way, responsible for the information and data in this manual: all the information contained therein has been provided, checked and approved during verification by the Manufacturer.
The Publisher is in no way responsible for the consequences of any mishandled operations carried out by the user.

GENERAL

All operational and maintenance instructions and recommendations described in this guide must be complied with. For best results, the Manufacturer recommends to perform regularly all the cleaning and maintenance operations to keep the plant in the best condition.
It's very important to train the personnel responsible for the machine, both in terms of its use, as well as for the maintenance and control of compliance with operating procedures and all the safety standards in this manual.

Edition: 06/2020
Version: 1.0

COPYRIGHT

© 2020 OEM ALI GROUP S.r.l. a socio unico

Summary

1 IDENTIFICATION 8
1.1 Manufacturer identification 8
1.2 Identification 8
1.3 Identification plate 8
1.4 Declaration of Conformity CE (Fac-simile) 9
1.5 Reference Directives 10
2 PRELIMINARY INFORMATION 12
2.1 Recipients 12
2.2 Supply and Storage 12
2.3 Updates 12
2.4 Language 12
2.5 Operators 13
2.6 Symbols used in manual 14
2.7 Glossary 14
2.8 Individual protection devices 15
2.9 User safety areas 17
2.10 Warranty 18
3 SAFETIES 20
3.1 General Warnings 20
3.2 Safety devices 20
3.3 Noise 22
3.4 Vibrations 22
3.5 Electromagnetic compatibility 22
3.6 Remaining risk 23
3.7 Applied safety pictograms 24
4 DESCRIPTION 26
4.1 Correct use 26
4.2 Reasonably predictable wrong use 26
4.3 Obligations and prohibition 27
4.3.1 User obligations 27
4.3.2 Staff obligation (operators/maintainers/technicians) 27
4.3.3 Staff prohibition (operators/maintainers/technicians) 27
4.4 Technical data 28

4.5 Layout measures 29
4.6 Main components 31
4.7 General description 31
5 TRANSPORT AND INSTALLATION 33
5.1 Introduction 33
5.2 Packaging 33
5.2.1 Packaging removal 34
5.2.2 Packaging disposal 34
5.3 Transportation and handling 34
5.3.1 Group and Weight Division Table 35
5.3.2 Transport operation 35
5.4 Installation 38
5.4.1 Predisposition charged to the customer 38
5.4.2 Allowed environmental conditions 38
5.4.3 Oven positioning 40
5.4.4 Double-deck oven assembly 41
5.4.5 Draught cap assembly 42
5.4.6 Smoke output box assembly 43
5.5 Connections 44
5.5.1 Electrical connection 44
5.5.2 Electrical connection of the oven 46
5.5.3 Electrical connection of the draught cap 47
5.5.4 First ignition 47
6 CONTROLS AND USE 49
6.1 Operator positioning 49
6.2 Command button 50
6.2.1 Electro-mechanical oven control panel 51
6.2.2 Digital oven control panel 52
6.3 Digital command operator panel 53
6.3.1 Start screen 53
6.3.2 Home screen 54
6.3.3 “MENÙ” screen 55
6.4 How to use it 60
6.4.1 Preliminary checks 60

6.4.2 Digitally command oven start-up procedure 61
6.4.3 Electromechanical oven start-up procedure 62
6.4.4 Electromechanical oven baking timer setting 63
6.4.5 Electromechanical oven self-ignition programming 63
6.4.6 Power-off procedure 64
6.5 General baking rules 65
6.5.1 Baking on a refractory surface (electromechanical/digital ovens) 65
6.5.2 General rules to bake in baking trays (electromechanical/digital ovens) 65
6.6 Pizza baking 66
6.6.1 Pizza baking in mechanical ovens 66
6.6.2 Pizza baking in electromechanical and digital ovens 66
7 MAINTENANCE 69
7.1 Safety warnings 70
7.2 Ordinary Maintenance 71
7.2.1 Controls and inspection 71
7.2.2 Cleaning 72
7.3 Extraordinary Maintennance 75
7.3.1 Bulb replacement 76
7.3.2 Bulb holder replacement 77
7.3.3 Door spring replacement 78
7.3.4 Door glass replacement 79
7.3.5 Safety thermostat rearmament 80
8 PUTTING THE EQUIPMENT OUT OF ORDER AND DISPOSING OF IT 82
8.1 Putting the equipment out of order and storing it 82
8.2 Disposal 83
9 TROUBLESHOOTING 86
9.1 Alarms during operation (electromechanical /digital ovens) 86
9.1.1 Temperature probe alarm, damaged or disconnected 86
9.2 Malfunctions, causes and remedies 86
9.2.1 “ALARM” list 87
10 . ATTACHMENTS 90

PAGINA LASCIATA INTENZIONALMENTE BIANCA

Chapter 1
IDENTIFICATION

1 IDENTIFICATION

1.1 Manufacturer identification

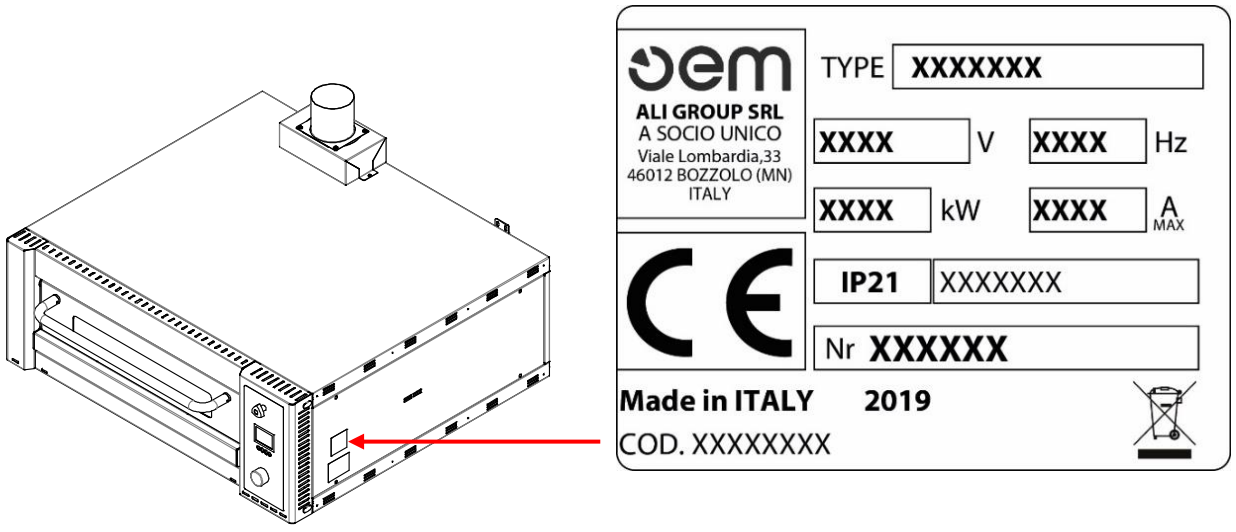
Manufacturer	OEM ALI GROUP S.r.l. a socio unico
Address	Viale Lombardia, 33 Bozzolo (MN) - Italia Tel. +39 0376 910511 – Fax +39 0376 920754 info@oemali.com - www.oemali.com

1.2 Identification

Tipologia	PIZZA OVEN
Model	VALIDO EVO
Year of construction	2020

1.3 Identification plate

The machine has an identification plate located on the side panel.
On the plate there are the details of the machine to be mentioned in case of need to the OEM ALI GROUP S.r.l a socio unico.



PROHIBITION!
It is absolutely forbidden to remove the CE identification plate and/or replace it with other plates. If, for accidental reasons, the license plate is damaged or removed, the customer must inform the Manufacturer.

1.4 Declaration of Conformity CE (Fac-simile)

YOUR PIZZA HUB	DICHIARAZIONE DI CONFORMITÀ CE	Direttiva 2006/42/CE Direttiva 2014/53/UE Direttiva 2011/65/UE
	Macchina, modello e tipo: CAPPA ASPIRAZIONE	Pagina 1 di 1

CE

DICHIARAZIONE DI CONFORMITÀ CE

Ragione sociale del fabbricante o nel caso del suo manadatario:	OEM ALI GROUP S.r.l. a socio unico
Indirizzo:	Viale Lombardia, 33 46012 – Bozzolo (MN) – Italy Tel. +39 0376 910511 - Fax +39 0376 920754 e-mail: info@oemali.com sito web: www.oemali.com
Descrizione e identificazione della macchina	FORNO PER PIZZA mod. VALIDO EVO
Anno	2020
Persona autorizzata a costituire il fascicolo tecnico	Giacomo Bonfiglioli Viale Lombardia, 33 46012 – Bozzolo (MN) – Italy

IL PRODOTTO È CONFORME AI REQUISITI ESSENZIALI DELLE DIRETTIVE EUROPEE:

- MACCHINE (MD): 2006/42/CE
- COMPATIBILITA' ELETTROMAGNETICA (EMC): 2014/30/UE
- BASSA TENSIONE: 2014/35 UE
- RoHS II: 2011/65/UE ed s.m.i. del Parlamento Europeo
- Direttiva sui rifiuti di apparecchiature elettriche ed elettroniche (RAEE): 2012/19 CE :

Sono state inoltre applicate le seguenti norme:
EN 55014-1:2006
EN 55014-2:1997 + A1:2001 + A2:2008
EN 61000-3-2:2006
EN 61000-3-3:1995 + A1:2001 + A1:2001 + A2/IS:2005
EN 61000-3-11:2000
EN 61000-3-12:2005
EN 62233:2008
EN 60335-2-36:2000 + A1:2004 + A2:2008 (EN 60335-1:2002+A1:2004+A11:2004+A12:2006+A2:2006)

Luogo e data emissione: Bozzolo (MN), __/__/____

Nome: **Bonfiglioli Giacomo**
Funzione: **Legale rappresentante**

Firma:

_____

1.5 Reference Directives

The machine supplied by OEM ALI GROUP S.R.L A SOCIO UNICO does not belong to one of the categories of machines listed in the list covered in Annex IV of the Directive; therefore, for the purpose of the declaration of conformity of the machine to the present directive, OEM ALI GROUP S.R.L A SOCIO UNICO applies the procedure of compliance assessing with internal control on the manufacture of the machine, see attached VIII.

In order to certify the machine's compliance with the provisions of the Directive, OEM ALI GROUP S.R.L A SOCIO UNICO before to entry in the market , carried out the risk assessment in order to verify compliance with the essential safety and health requirements provided by the Directive as well as the tests and checks provided by the relevant reference rules. The technical construction file was produced in accordance with Annex VII of the 2006/42/CE Directive and it is available to be verified by supervisory bodies on a reasoned application, as required by the relevant legislation.

OEM ALI GROUP S.R.L A SOCIO UNICO provides the introduction on the market of the machine by equipping it and accompanying it with:

CE Marking	
CE Declaration of Conformity	
Instruction and Warning Manual	(Documentation drawn up in paragraph 1.7.4 of the Machines Directive 2006/42/CE)

Please note that the oven was designed according to the following Guidelines:

2006/42/CE	Machines Directive
2014/30/UE	Electromagnetic Compatibility Directive

And the following harmonized standards have been applied:

UNI EN ISO 12100:2010	Machine safety - General design principles - Risk assessment and risk reduction
UNI EN ISO 13857:2008	Machine Safety - Safety distances to prevent the achievement of dangerous areas with upper and lower limbs.
UNI EN 349:2008	Machine Safety - Minimal spaces to avoid crushing body parts.
UNI EN ISO 13849-1:2016	Machine safety - Parts of safety-related control systems - Part 1: General design principles
UNI EN 1005-4 :2009	Machine safety - Human physical performance - Part 4: assessment of postures and work movements in relation to the oven.
CEI EN 62061:2005	Machine safety – Functional safety of programmable electrical, electronic and electronic control and control systems related to safety
CEI EN 60204-1:2006	Machine safety - Machine equipment - general rules
CEI EN 61496-1:2005	Machine safety - Electrosensitive protective equipment - Part 1: General requirements and tests
UNI EN ISO 13850:2008	Machine safety - Emergency stop - Design principles
UNI EN 14120:2015	Machine safety - Shelters - General requirements for the design and construction of fixed and mobile shelters

Chapter 2
PRELIMINARY INFORMATION

2 PRELIMINARY INFORMATION

2.1 Recipients

The manual is intended for operators in charge of using and managing the machine in all its stages of technical life. It contains themes that refer to the correct use of the machine, in order to maintain the functional and qualitative characteristics of the machine over time.
All information and warnings are for a proper use in complete safety.
The manual, like the CE Declaration of Conformity, is an integral part of the machine and must always accompany it in every move or resale.
It is the user's job to keep this documentation intact, to allow it to be consulted, throughout the life of the machine.

2.2 Supply and Storage

The manual is provided in paper and electronic format. All additional documentation will be provided in the annex to this manual. This manual can be downloaded in pdf format by linking to the site: *www.oemali.com*.

Keep this manual in conjunction with the machine, so that it can be easily consulted by the operator.

The manual is an integral part of the safety, so:

1. must be kept intact (in all its parts). If it is lost or ruined, you should immediately request a copy.
2. must follow the machine until demolition (even in the case of movements, sale, rental, rent, etc....);
3. The attached manuals are part of this documentation and apply to them the same recommendations/prescription as this manual.

The Manufacturer declines all responsibility for the wrong use of the machine and/or for damages caused as a result of operations not covered in the technical documentation.

2.3 Updates

If the machine needs functional modifications or replacements, the Manufacturer is responsible for reviewing or updating the manual. The Manufacturer is responsible for delivering the manual update.
The user is also responsible for ensuring that, if this document is modified by the Manufacturer, the updated versions of the manual are actually present at the points of use.

2.4 Language

The original manual was written in Italian.
Any translations in additional languages must be done from the original instructions.
The Constructor is responsible for the information contained in the original instructions; translations in different languages cannot be fully verified, so if an inconsistency is detected you must follow the text in the original language or contact our Technical Documentation Office.

2.5 Operators

In order to establish with certainty what are the skills and qualifications of the operators involved in the various tasks (starting, cleaning, routine maintenance), see the following table:

Qualification	DEFINITION
Operator	Part of the User's staff trained and machine-enabled for production purposes for the activities for which it was built and supplied. He will be able to perform all the necessary operations for the proper functioning of the machine and for the safety of himself or any collaborators. he must have a proven experience of using these types of machines and be trained, informed and educated about them. In case of doubt, he should report any anomaly to his superior. Note: he isn't authorized to perform any maintenance activity.
Mechanical Maintainer	Qualified technician able to perform preventive/corrective maintenance on all mechanical parts of the machine subject to maintenance or repair. Qualified technician able to have access to all parts of the machine for visual analysis, equipment health control, adjustments and calibrations. Qualified technician capable of: 1. using the machine as the operator; 2. intervening on mechanical organs for adjustments, maintenance and repairs; 3. reading technical drawings and spare part-list. In extraordinary cases, he is trained to work the machine with reduced safeties. If necessary, it can give instructions to the operator for a good use of the machine for production purposes. Note: he is not enabled to intervene on electrical systems under tension.
Electric Maintainer	Qualified technician able to carry out preventive/corrective maintenance on all electrical parts of the machine subject to maintenance or repair. Qualified technician able to have access to all parts of the machine for visual analysis, equipment health control, adjustments and calibrations. Qualified technician capable of: 1. using the machine as the operator; 1. intervening on adjustments and electrical systems for maintenance, repair and replacement of worn parts; 1. reading electrical diagrams and check the correct functional cycle. If necessary, it can give the operator instructions for a good use of the machine for production purposes. He can operate in the presence of voltage inside the electrical panels, derivation boxes, control equipment etc. only if he is the appropriate person (PEI). (Reference regulatory EN50110-1).
Manufacturer's Technician	Technician qualified by the Manufacturer and/or by his distributor for complex operations, because he knows the production cycle of construction of the machine. This person intervenes in accordance with the user's requests. Skills are mechanical.

The qualifications shown in the table on this page are obligatory within a category of people defined as "trained person".

TYPE	DEFINITION
Trained Person	The one who has been informed, instructed and trained at work and any dangers arising from misuse. He also knows the importance of safety devices, safety standards and safe working conditions.

2.6 Symbols used in manual

SYIMBOL	DEFINITION
	Symbol used to identify warnings that are important for the safety of the operator and/or machine.
	Symbol used to identify information of particular importance in the manual. The information also relates to the safety of personnel involved in the use of the machine.

2.7 Glossary

In manuals you can find a technical terminology or with an unusual meaning.

The following explains the used terms and abbreviations:

TERM	DEFINITION
Lifting accessories	Components or equipment not connected to the machines that allow, located between the machine and the load or on the load itself, the grasp of the load. The harnesses and their components are also considered lifting accessories.
ATEX	It derives from the words ATmosphères and EXplosibles and it is the conventional name that groups two directives of the European Union (EU): • 2014/34/EU for the regulation of the equipment used in explosion risk areas; • 99/92/CE for the safety and health of the workers in explosive atmospheres or in explosion risk environments.
Failure	A general failure that prevents the normal operation of a machine, a plant, etc.
Chains, ropes or straps	Elements designed and built for lifting purposes as an integral part of lifting machines or lifting accessories.
Damage	Any adverse consequences resulting from the occurrence of a dangerous event.
D.P.I.	The term Individual Protection Device (acronym DPI) refers to products that have the function of safeguarding the worker (operator, maintainer, technician, etc.) that you wear or take them with you, from health and safety risks.
Breakdown	Element totally deprived of normal ability to execute a required function.
Support	Equipped or intended to be equipped with an activation system, composed of parts or components, at least one of which moves, connected to each other solidly for a well-established application.
Malfunction	Faulty or inappropriate operation of a machine or one of its elements performing a particular function.

TERM	DEFINITION
Protection measure	Expected measure to achieve risk reduction, implemented: • By the designer (inherently safe design, additional protections and protection measures, information for use) and/or • By the user (organization: safe working procedures, surveillance, work permits; provision and use of additional means of protection; use of personal protective equipment; training).
Danger	Potential source of damage that, if not avoided, implicates a risk to the safety and health of the people exposed.
Exposed person	Any person who is entirely or in part in a dangerous area.
Prevention	The set of necessary provisions or measures, also according to the particularity of the work, experience and technique, to avoid risks or reduce the chances of happening.
Protection	Defense against what could harm. An element that is between those who can suffer the damage and what can cause it for hazards that cannot be reasonably eliminated or for risks that cannot be sufficiently reduced during design. We distinguish: • active protection that the operators themselves must activate (emergency stops for example) and/or wear (DPI); • passive protection that intervenes even without human command.
Barrier	Physical barrier, designed as part of the machine, to provide protection.
Fixed Barrier	Protection held in place (i.e. closed) or permanently (welded) or by means of fastening systems (screws, bolts, etc.) that make it impossible to remove/open without the help of tools (keys, screwdrivers or hex key). Easy-to-remove fasteners are not allowed (e.g. plastic knob).
Mobile Barrier	Barrier mechanically connected to the machine structure (e.g. with hinges or guides) that can be opened without the use of tools.
Risk	Combination of the probabilities of damage and the severity of that damage.
Residual risk	Risk that remains after taking protection and prevention measures.
Transpallet	A mechanical vehicle used to handle loads in warehouses, industrial interiors or external yard. The vehicle moves on rubberized or non-rubber wheels, either by electric or manual traction and it is equipped with a pneumatic lift system that allows to detach the load from the ground and to move it.
Expected use	Use of a machine in accordance with the information provided in the instructions for use.
Reasonably predictable misuse	Use of a machine in a way not foreseen by the designer, but that can result from an easily predictable human behavior.

2.8 Individual protection devices

When you work near the machine, both for assembly operations, and for maintenance and/or regulation operations, you must strictly comply with the general anti-injury rules, for this it will be important to use the individual protection devices (D.P.I.) required for each operation.

Here is the full list of individual protection devices (D.P.I.) that can be requested for different procedures:

SYMBOL	DESCRIPTION

	Obligation to use protective or insulation gloves. It indicates a requirement for staff to use protective or insulation gloves.
	Obligation to use protective glasses. Indicates a prescription for staff to use protective glasses.
	Obligation to use safety shoes. It indicates a prescription for staff to use safety shoes to protect their feet.
	Obligation to use noise protection devices. It indicates a prescription for staff to use headphones or earplugs to protect their hearing.
	Obligation to wear protective clothing. It indicates a requirement for staff to wear specific protective clothing.
	Obligation to read the manual of instructions. It indicates a requirement for staff to consult (and understand) the support instructions and warning before working with it.

The clothing of those who operate or maintain the machine must comply with the essential safety requirements defined by the EU 2016/425 and the laws in the country where the machine is installed.

2.9 User safety areas

The areas around the machine are divided as follows:

TERM	DESCRIPTION
Command areas	These are the areas where the user and other operators can perform control and command operations of the cyclical functions of the machine both automatically and semi-automatically, acting on the appropriate control panels or for the execution of the manual operations.
Maintenance Zones/ Adjustment	These are the areas where mechanical maintainers can perform maintenance or regulation. These areas are considered dangerous and not accessible during the normal operation of the oven. Operators should be fully aware of safety warnings and individual devices to wear.
Dangerous areas	All spaces inside and/or around the machine where a person may be exposed to danger.

The dangers and risks that exist in these areas are protected, as far as possible, by protections (carters, hatches).



BAN!
When the machine is ON, it is ABSOLUTELY BANNED to operate in dangerous areas as some risks may not have been totally cancelled.

2.10 Warranty

The full warranty clauses are listed in the sales agreement.

The terms of the trade agreement (if different) take precedence over what is in this section.

The warranty is subject to the following general conditions:

- opening of the packaging and installation must be carried out in the presence of the technicians authorized by the Manufacturer;
- The first start and positive testing of the installed machine must be done in the presence and under the guidance of the Manufacturer's technicians; the intervention sheet related to the installation/testing of the oven must be completed.
- The machine must be used within the limits declared in the contract and reported in the technical documentation.
- Maintenance must be carried out in the time and manner provided by the manual, using original spare parts OEM ALI GROUP S.R.L A SOCIO UNICO and entrusting the interventions to qualified personnel.

The warranty expires if:

- failure to respect safety standards;
- removal or tampering of the control and security devices (protections);
- changes to the safety conditions established by the Manufacturer in the machine management software;
- misuse of the machine;
- use of the machine by uneducated and/or unauthorised personnel or non-compliance with the competences of the various operators, as indicated in the manual;
- modifications or repairs made by the user without the Builder's written permission;
- partial or total non-compliance of instructions;
- power defects (electric, compressed air, etc.);
- lack of maintenance;
- use of non-original parts;
- exceptional events such as flooding, fires (if not caused by machines).



Additional details may be present in the trade agreement.
The terms of the trade agreement (if different) take precedence over what is in this section.

Chapter 3

SAFETIES

3 SAFETIES

3.1 General Warnings

The user (entrepreneur or employer) must:

- carefully read this manual and gain a deep understanding of the technical specifications and controls before putting into operation the machine;
- train the operator on the use of the machine;
- check that the installation area of the device is compatible with the size and weight of the machine;
- Use lifting equipment appropriate to the weight and characteristics of the piece to be lifted/moved;
- Prevent the use of the machine to unauthorized personnel;
- Prevent the removal of panels that protect mechanical and electrical parts during the operation of the machine;
- ensure that the buyer's power system is equipped with an automatic release system upstream of the general machine switch and a suitable grounding system that meets accident prevention rules;
- remove tension from the line where the general switch is fastened in case of interventions;
- Maintenance protection removal operations must be carried out ONLY by specialized and authorized personnel;
- Ensure that safety devices (barriers, protections, carters, micro-switches, etc.) have not been tampered with and that they are fully functional. If not, arrange them;
- Avoid removing security devices;
- use only suitable equipment that complies with safety regulations;
- Avoid tampering with the electrical system, tire or other mechanisms;
- Do not leave the device unattended;
- Wear clothing that complies with safety regulations;
- Use ladders or lifting equipment that comply with safety standards in case of interventions on positions not directly reachable from the ground;
- ensure that there are no organs that can come into operation and/or details placed on the machine in case of maintenance;
- use appropriate DPI and tools;
- Do not remove warning tags;
- Prevent maintenance when the machine is ON;
- ONLY to authorized personnel can perform maintenance operations;
- Prevent children from playing or performing cleaning and/or maintenance on the machine;
- use the machine ONLY as described in the paragraph "CORRECT USE";
- avoid making hasty or successful repairs that could compromise the smooth running of the machine and the safety of the operator.



DANGER!
In the case of movements, it is forbidden to tilt or overturn the ovens.



ATTENTION!
Before cleaning and/or maintaining, make sure that the general switch on "0" - "OFF" to remove the power supply.



ATTENTION!
The removal of the plug must be such that an operator can verify from anywhere that the plug is disconnected.

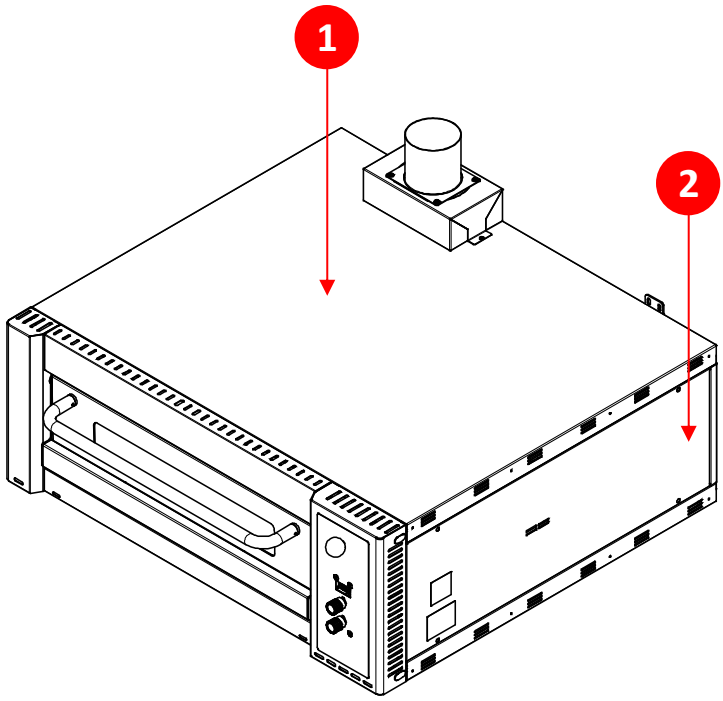


IMPORTANT!
Misuse of the machine excludes any responsibility of the Manufacturer.

3.2 Safety devices

The machine has safety devices described in the following table. For the location of these devices, refer to the drawing below the table.

POS.	TERM	DESCRIPTION
1	Fixed protections	Fixed protections consist of fixed perimeter barriers, which are responsible for preventing access into the machine and its units through areas other than the main openings. The machine has fixed protections, placed in areas with exclusive access during maintenance and requiring specific tools for their removal.
2	Safety thermostat	Located inside the baking space, turn off the oven in case of over-temperature (510°C) detected.



3.3 Noise

Noise measurements were made in accordance with UNI EN 11200 and UNI EN ISO 3746 standards.
During operating cycles, the staff noise exposure is less than 80 dB.

The actual noise level of the machine installed during operation at the site in a production process is different from that detected because the noise is affected by certain factors such as:

- type and site features;
- other adjacent machines in operation.

It is the user's responsibility to apply the preventive and protective measures that follow, in accordance with the legislation of the country of installation and use of the machine.

3.4 Vibrations

The vibrations produced by the machine are not dangerous to the health of the operators.



ATTENTION!
Excessive vibration can only be caused by a mechanical failure that must be immediately reported and eliminated, not to affect the safety of the machine and operators.

3.5 Electromagnetic compatibility

The machine contains electronic components subject to Electromagnetic Compatibility regulations, conditioned by piped and irradiated emissions.
Emissions values are part of the regulatory requirements thanks to the use of components that comply with the Electromagnetic Compatibility Directive, suitable links and the installation of filters where necessary.
The machine is therefore compliant with the Electromagnetic Compatibility Directive (EMC).



ATTENTION!
Maintaining electrical equipment activities that are performed non-compliantly or mis-replaced components can compromise the efficiency of the used solutions.

3.6 Remaining risk

The machine was designed to ensure the essential safety requirements for the operator.
Safety, as far as possible, has been integrated into the design and construction of the machine; however, there are still risks from which operators need to be protected especially during:

- transport and installation;
- normal operation;
- adjustment and set-up,
- maintenance and cleaning;
- dismantling.

Below, for each residual risk is provided a description, the area or part of the machine subject to the risk and the procedural information on how to avoid it:

RISK	DESCRIPTION AND PROCEDURAL INFORMATIONI
Electrical danger	Contact of people with elements under tension. Cleaning/maintenance always with the machine off Only the PES/PAV electric maintainer with the suitability for work under voltage under CEI 11-27, can perform extraordinary maintenance with suitable DPI.
Thermical danger	Contact of people with elements that can cause burns, caused by contact with objects or materials with an extreme temperature.
Dangers generated by materials and substances processed, used, produced or discharged from the machine	Danger of fire or explosion (due to materials, powders, liquids, substances and gases, used or produced).
Dangers generated by materials and substances processed, used, produced or discharged from the machine	Biological (mold) and microbiological dangers (viruses or bacteria).



ATTENTION!
Do not carry out maintenance and cleaning tasks **if you have not** de-energized the energies.

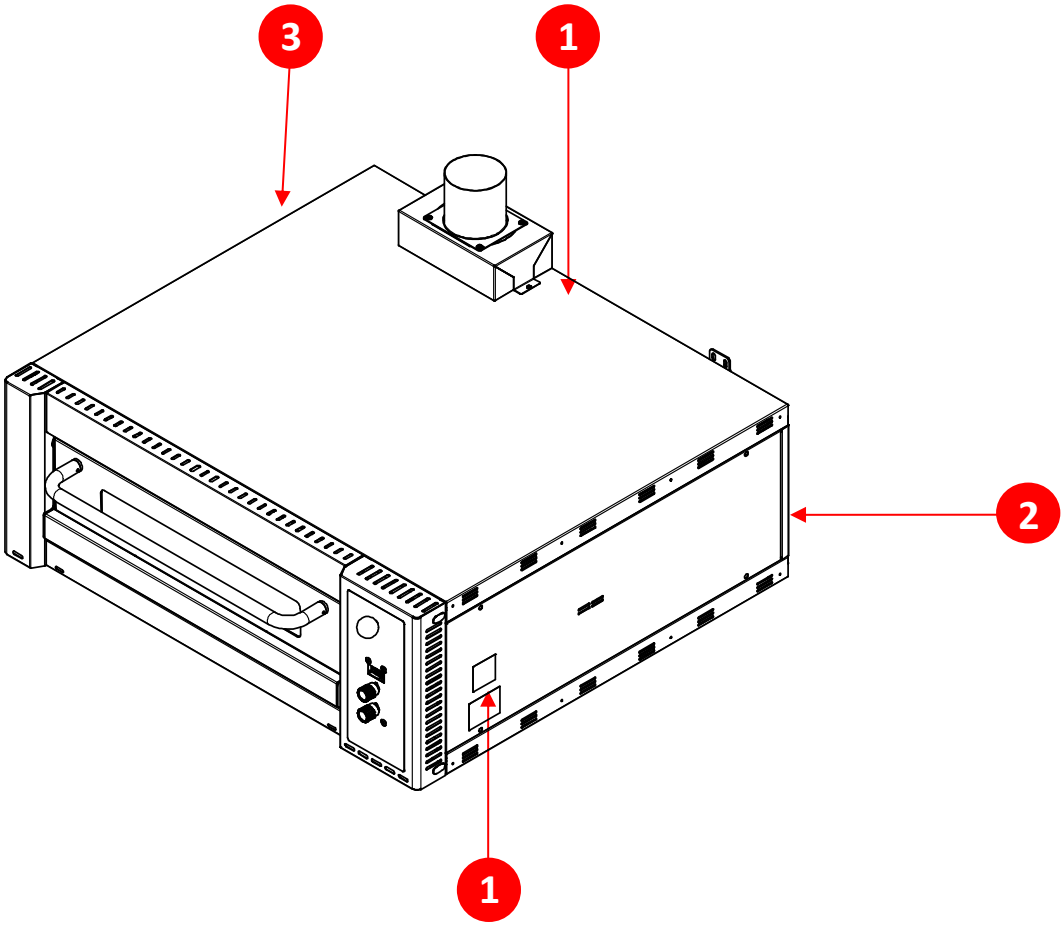
It will be user care to:

- analyse the risks that may occur during a handling and installation phase inside your location (The analyses carried out on the handling of the machine were made only in consideration of the its characteristics);
- delimit the path of forklift and/or laser vehicles driven with signs on the floor;
- raise awareness and educate the operations staff on workstations and who conducts the machine.
- apply visual safety signs in the work environment after assessing risks inside transit or control areas.

3.7 Applied safety pictograms

On the machine are applied stickers and safety tags, as shown in the following table. For positioning, refer to the image.

POS.	PICTOGRAM	DESCRIPTION
1		Electrical danger!
2		High temperatures danger!
3		It indicates the terminals that, when connected together, bring the various parts of an equipment or system to the same potential, not necessarily the ground potential (ground) (IEC 60417-5021).



Chapter 4
DESCRIPTION

4 DESCRIPTION

4.1 Correct use

The machine in question is intended to be used for:

OPERATION	ALLOWED	NOT ALLOWED	PROCESSING ENVIRONMENTS
Cottura di:	pizze focacce bruschette	Any other use other than the one allowed.	Restaurant

The machine was created to:

- meet the specific requirements mentioned in the sales agreement;
- be used following instructions and limits of use in this manual.

The machine is designed and built to work safely if:

- it is used within the limits declared on the contract and this manual;
- the procedures of the user manual are followed;
- routine maintenance is carried out in the specified time and manner;
- extraordinary maintenance is carried out in a timely manner in case of need;
- security devices are not removed and/or bypassed.

4.2 Reasonably predictable wrong use

Reasonably predictable wrong use, is listed below:

- to use the machine as a foothold for unsuitable components;
- to use the machine to obtain production values over the prescribed limits;
- to use the machine differently than provided in section "Correct use".

Any other use of the machine than expected must be authorized in writing by the Manufacturer. In the absence of such written authorization, the use is to be considered "improper use"; therefore, the Manufacturer disclaims any liability in relation to any damage caused to property or persons and considers any kind of guarantee on the oven to be expired.



IMPORTANT!
Misuse of the machine excludes any responsibility of the Manufacturer.

4.3 Obligations and prohibition

4.3.1 User obligations

The user (entrepreneur or employer) must:

- consider the abilities and conditions of the operators in relation to their health and safety;
- provide the appropriate means of individual protection conform to each procedure;
- Provide standard lifting means and procedures;
- Require individual workers to comply with company rules and regulations on safety and the use of collective and individual protections;
- educate staff on accident procedures;
- educate staff about residual risks;
- educate staff on operator safety devices;
- educate staff on the general safety rules provided by European directives and the legislation of the country where oven is targeted.

Only personnel who have seen this manual and properly trained can operate on the machine.

4.3.2 Staff obligation (operators/maintainers/technicians)

The Staff has to:

- Perform maintenance always with the machine off.
- Perform interventions on all components of the electrical system always with the general switch off.
- When you start the machine, make sure that there is no foreign object inside.
- appropriately use the protective equipment provided by the employer.
- Report safety device deficiencies to your employer, manager, or supervisor immediately.

4.3.3 Staff prohibition (operators/maintainers/technicians)

In particular, the staff mustn't:

- use the machine improperly, that is, for uses other than those indicated in the paragraph "Correct Use";
- remove or modify security or signaling devices without permission;
- carry out operations on their own initiative or that may compromise the safety of their own or other workers;
- change the operation of the machine;
- modify electrical connections to exclude internal security;
- use the oven if not installed according to the applicable regulations;
- use the oven outside of the allowed environmental conditions (see "chapter 5").



ATTENTION!

OEM ALI GROUP S.R.L A SOCIO UNICO does not respond for damages caused by things or people when:

- the machine has been used in one of the spaces that are not allowed;
- described obligations and prohibitions have not been met.

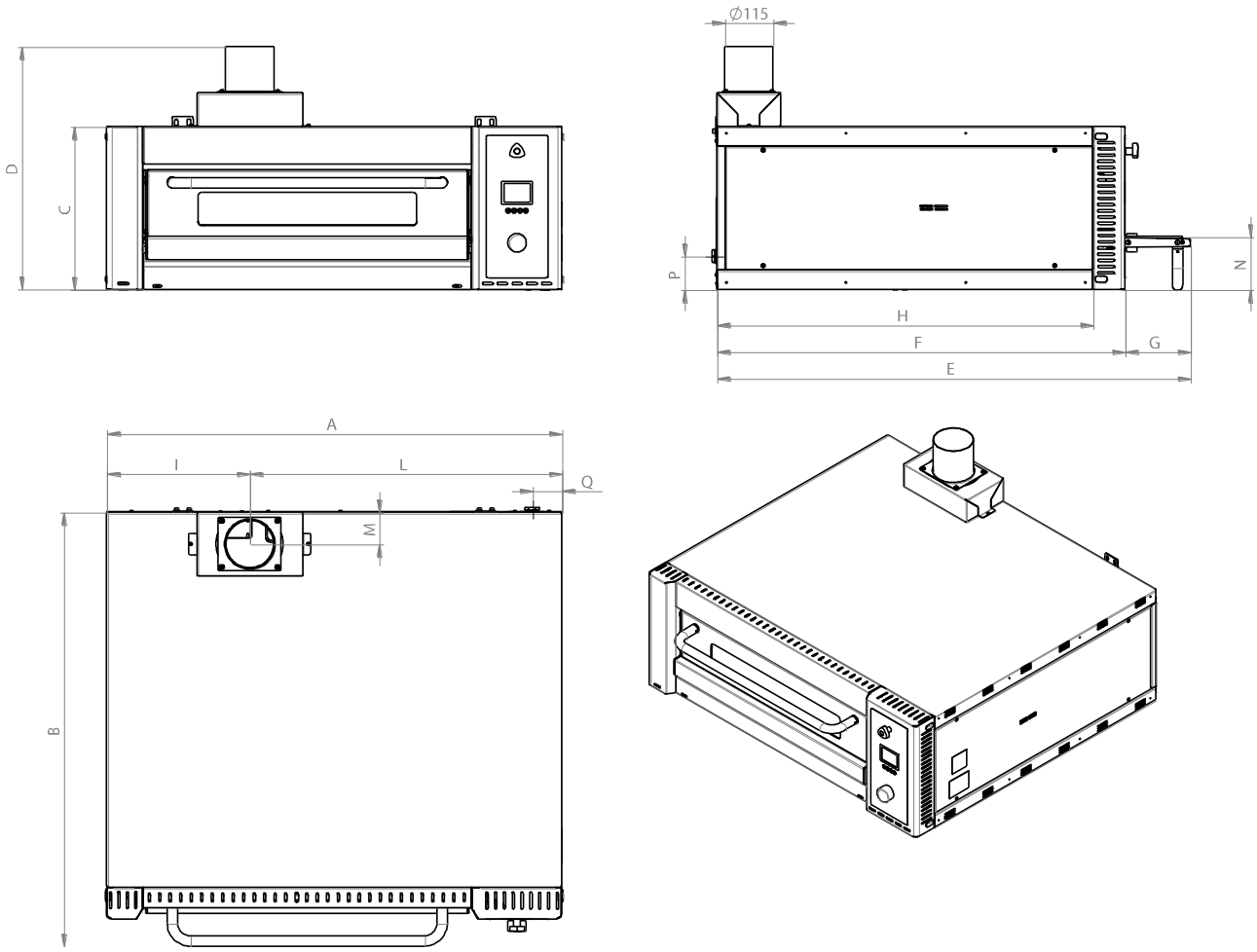
4.4 Technical data

Models	435A-B EM-DG	835A-B EM-DG	635SA-B EM-DG	1235SA-B EM-DG	635LA-B EM-DG	1235LA-B EM-DG	935A-B EM-DG
Max temperature	400°	400°	400°	400°	400°	400°	400°
No. pizza /hour Ø 30	32	64	48	96	48	96	72
No. pizza /hour Ø 45	5	10	10	20	10	20	20
No. tray/hour (60x40)	3	6	6	12	6	12	12
Baking chamber size	759x738x135	759x738x135 N°2	759x1088x135	759x1088x135 N°2	1136x738x115	1136x738x115 N°2	1136x1088x135 N°2
Weight (kg)	155	310	208	416	210	420	265

Models	435A-B EM-DG	835A-B EM-DG	635SA-B EM-DG	1235SA-B EM-DG	635LA-B EM-DG	1235LA-B EM-DG	935A-B EM-DG
Voltage	V400-3NT	V400-3NT	V400-3NT	V400-3NT	V400-3NT	V400-3NT	V400-3NT
Frequency	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Absorption	11,7 A	23,4 A	16,5 A	33 A	20,9 A	41,8 A	24,4 A
Average consumption	3,9 kW	7,8 kW	5,5 kW	11 kW	5,7 kW	11,4 kW	7,8 kW
Power	7,1 kW	14,2 kW	10,2 kW	20,4 kW	12,8 kW	25,6 kW	14,9 kW

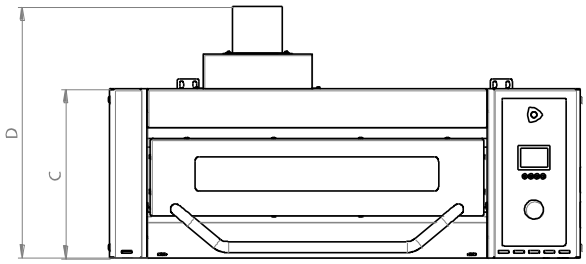
4.5 Layout measures

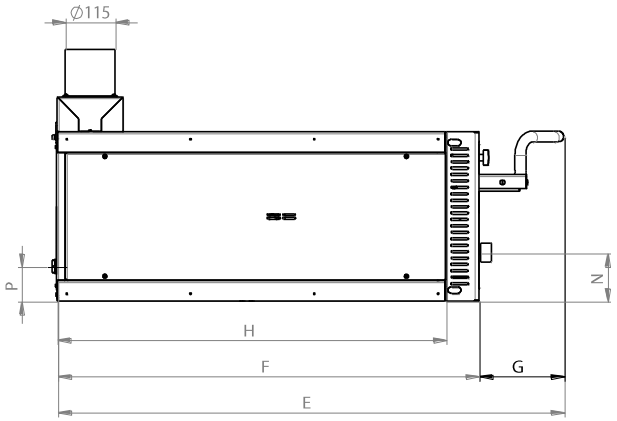
VALIDO EVO OVEN (low door)

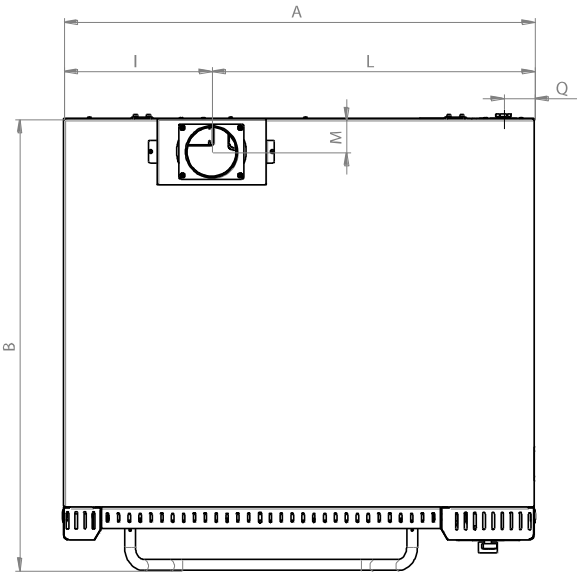


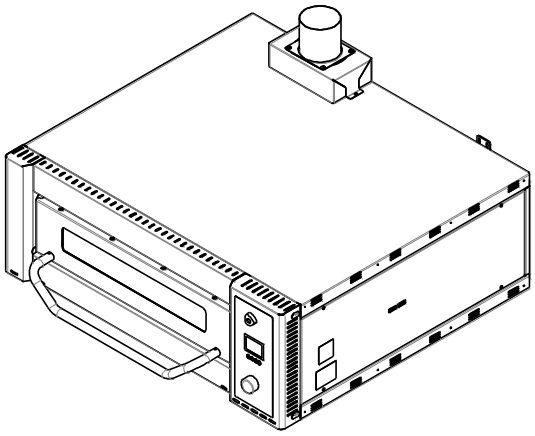
MOD	A	B	C	D	E	F	G	H	I	L	M	N	P	Q
435	1083	1038	390	580	1129	973	156	896	341	742	77	132	80	70
435/2	1083	1038	780	970	1129	973	156	896	341	742	77	132/ 522	80/ 470	70
635L	1460	1038	390	580	1129	973	156	896	529	931	77	132	80	70
635L/2	1460	1038	780	970	1129	973	156	896	529	931	77	132/ 522	80/ 470	70
635S	1083	1387	390	580	1478	1322	156	3102	341	742	77	132	80	70
635S/2	1083	1387	780	970	1478	1322	156	3102	341	742	77	132/ 522	80/ 470	70
935	1460	1387	390	580	1478	1322	156	3102	529	931	77	132	80	70

VALIDO EVO OVEN (high door)







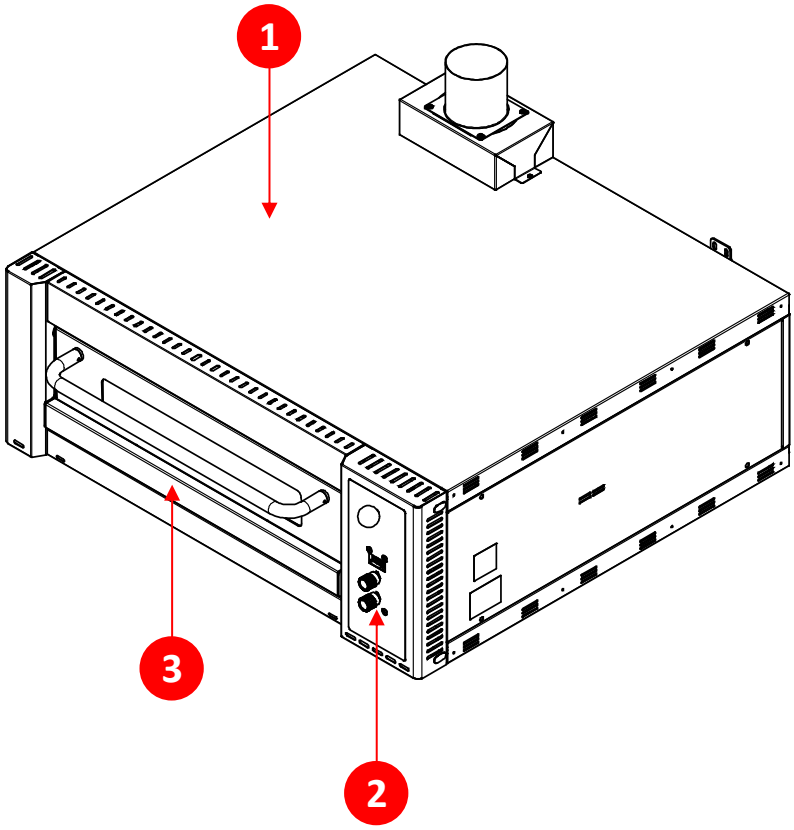


MOD	A	B	C	D	E	F	G	H	I	L	M	N	P	Q
435	1083	1042	390	580	1169	973	196	896	341	742	77	132	80	70
435/2	1083	1042	780	970	1169	973	196	896	341	742	77	132/522	80/470	70
635L	1460	1042	390	580	1169	973	196	896	529	931	77	132	80	70
635L/2	1460	1042	780	970	1169	973	196	896	529	931	77	132/522	80/470	70
635S	1083	1390	390	580	1518	1322	196	3102	341	742	77	132	80	70
635S/2	1083	1390	780	970	1518	1322	196	3102	341	742	77	132/522	80/470	70
935	1460	1390	390	580	1518	1322	196	3102	529	931	77	132	80	70

4.6 Main components

The oven is made of the following key parts:

POS.	DESCRIPTION
1	Baking chamber
2	Command Panel
3	Door



4.7 General description

The machine is a professional oven used for baking pizza, focaccia, bruschetta continuously.

The baking can be done using special pans, baking trays, or circular supports in aluminum or stainless-steel metal mesh or directly on the mesh tape of the oven.

The oven is designed to be placed on the top of a special counter.

Chapter 5
TRANSPORT AND INSTALLATION

5 TRANSPORT AND INSTALLATION

5.1 Introduction



IMPORTANT!

Lifting and handling operations must be carried out exclusively by specialized and trained personnel who can carry out these activities.

During installation, OEM ALI GROUP S.R.L A SOCIO UNICO technicians must be supported by operators prepared for future maintenance and use of the machine.

The machine is designed so that in the packaging, transport and assembly phases it is necessary to use a forklift or a crane / hoist.

5.2 Packaging

The machine is shipped by OEM ALI GROUP S.R.L A SOCIO UNICO from the factory to the customer.

Depending on the distance of the transport, the customer's specific requests and the residence time of the load in the packaging, the machine is shipped in the following ways:

- normal protective packaging for short and medium distances;
- special protective packaging for long distances.

The shipment must be carried out with covered or sheeted means depending on the type of load.

When receiving the machine, the customer must check that there is no damage caused by the transporter or personnel in charge of specific operations.

- If there are damages, leave the packaging in question in the found state and immediately request the damage assessment by the relevant shipping company, then communicate with a certificate of failure the damage detected to the competent transport insurance and to the point of sale.

.

- **If the oven is in wooden box, on pallets or on wooden brackets with possible heat-retractable cellophane protection, initially remove the packaging or any cover. To completely free the machine, remove the screws and metal strapping. Then lift the machine with a lifter trolley as described in the appropriate table and remove the pallet used for transport.**

5.2.1 Packaging removal

To remove the packaging, follow these steps as described:

STEP	ACTION
1	Place the machine in the place intended for it.
2	Unpack the parts delivered on pallets, as follows: • Remove the strapping; • remove the carton; • remove cellophane; • remove any fixing systems to the wooden floor.



IMPORTANT!
Follow the table in paragraph "Group and Weight Division Table" to see which and how many separate parts the machine will be transported.

For the machine handling, refer to section "Transport".

5.2.2 Packaging disposal

The packaging is an integral part of the supply and is not collected, so the disposal is in charge to the buyer.
Any disposal or destruction must take place in accordance with the regulations in the user's country, considering the nature of the materials:

- wooden for boxes;
- Plastic film for the protection of the oven and adhesive tapes for fixing them;
- bags of absorbent substance for dampness.
- Etc.

5.3 Transportation and handling

The OEM ALI GROUP S.R.L A UNICO SOCIO, considering the ways of transport, uses appropriate packaging and fixtures to ensure integrity and storage during transport.

When receiving the machine, verify that no party has been damaged during transport and/or handling.
If damage is found, it is mandatory to report them immediately to the Manufacturer.

The handling activities described in this section must be carried out by qualified personnel for such operations: specially trained personnel to carry out loading, unloading and handling operations by means of lifting.



ATTENTION!
The OEM ALI GROUP S.R.L A SOCIO UNICO is not accountable for the damages, to property or to people, caused by accidents caused by non-compliance with the instructions in this manual.

5.3.1 Group and Weight Division Table

Follow the table below to see which and how many separate parts the oven will be transported to.

GROUP	WEIGHT	DIMENSION
Oven 435B	155/175 kg (net)	L = 1280 mm P = 1110 mm H = 560 mm
Oven 435A	310/325 kg (net)	L = 1310 mm P = 1160 mm H = 900 mm
Oven 635SB	193/224 kg (net)	L = 1450 mm P = 1670 mm H = 500 mm
Oven 635SA	386/421 kg (net)	L = 1650 mm P = 1150 mm H = 900 mm
Oven 635LB	199/230 kg (net)	L = 1650 mm P = 1130 mm H = 510 mm
Oven 635LA	398/433 kg (net)	L = 1650 mm P = 1130 mm H = 900 mm
Oven 935B Oven 935A	250/281 kg (net)	L = 1670 mm P = 1460 mm H = 500 mm

5.3.2 Transport operation



ATTENTION!
OEM ALI GROUP S.R.L A SOCIO UNICO takes no responsibility for any damage to the machine resulting from non-compliance with the instructions provided.



IMPORTANT!
Lifting personnel must be authorised and trained in the use of lifting equipment and must comply with the requirements for individual protection.

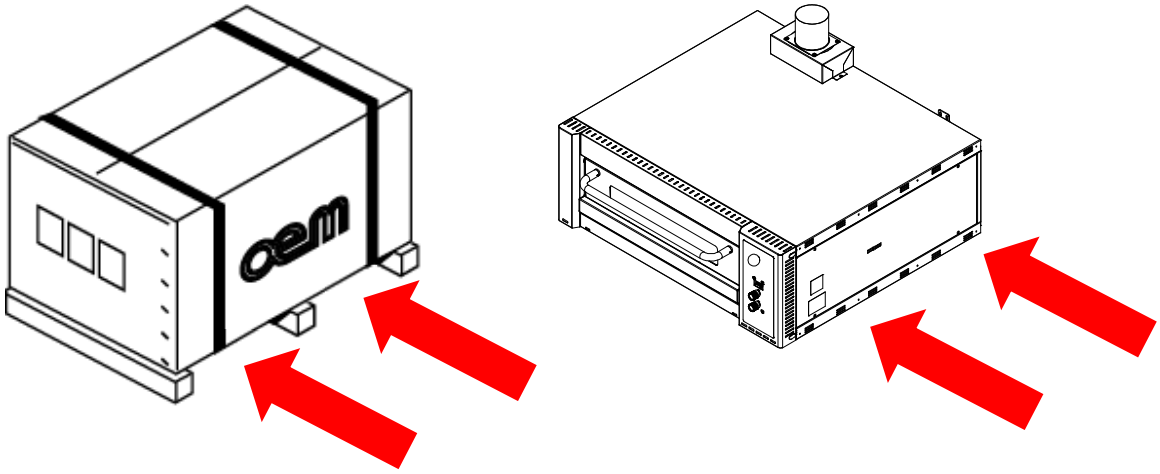
TRANSPORT BY FORKLIFT	
Operator qualification	Conductor of lifting means
Necessary DPI	
Lifting means	Forklift
Tools to use	Nothing

ATTENZION!
Use only suitable and approved lifting means, compatible for the size and weight of the machine.

ATTENTION!
Make sure no one is under and within the range of the lifting mean.

To successfully transport by forklift, follow these steps:

STEP	ACTION
1	Place the fork of the forklift under the worktop of the machine.
2	Ensure that the fork comes out from the back of the load (at least 5 cm), for a sufficient length to eliminate any risk of overturning the transported part.
3	Lift the forks until the contact with the load Note: If necessary, attach the load to the fork with clamps or similar devices.
4	Slowly lift the load by a few tens of centimeters and check its stability by making sure that the load center of gravity is positioned in the center of the lift fork.
5	Tilt the forks backwards (towards the driver's seat) to ensure greater load stability during transport.
6	Adjust transport speed based on pavement and load type, avoiding abrupt manoeuvres.



TRANSPORT WITH GRU / HOIST	
Operator qualification	Conductor of lifting means
Required DPI	
Lifting mean	Crane / hoist
Tools to use	Straps



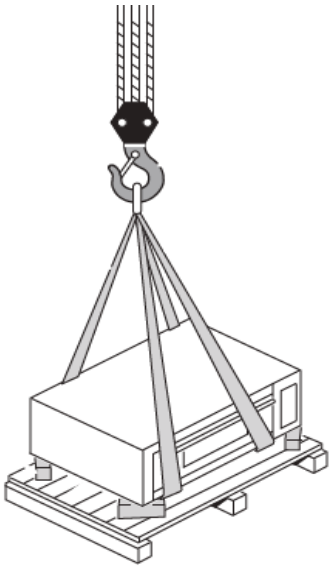
ATTENTION!
Use only suitable and approved lifting means, compatible for the size and weight of the machine; do not use steel ropes to avoid damaging the body of the machine.



ATTENTION!
Make sure no one is under and within range of the lifting mean.

For a successfully transport by crane/hoist, follow the following steps:

STEP	ACTION
1	Lift, slightly and alternately, the four corners of the machine and place below the spacers. Note: If necessary, use a forklift (see previous page).
2	Pass two straps under the machine's plinth.
3	Connect the straps to the hook of the lifting system (crane/hoist).
4	Lift slowly the load of some centimeters and check its stability, checking that it remains in a horizontal position.
5	Lift slowly, making sure the load does not fluctuate or unbalance.



5.4 Installation

5.4.1 Predisposition charged to the customer

Except for any different contractual agreements, it is normally charged to the customer the predisposition:

- Locals (including masonry works, such as foundations or funnels if required, lighting);
- power systems up to the power points of the machine, in accordance with the rules in the country of installation and/or required by the Manufacturer. All technical specifications required by the manufacturer are contained in the sales agreement. The Manufacturer disclaims any liability if the customer fails to guarantee the technical characteristics of the electrical system required in the sales contract.
- The power supply for the oven, including the grounding conductor, according to the characteristics and tolerances required and specified in this manual.
- tools and supplies needed for assembly and installation;
- appropriate lifting and handling equipment.



ATTENTION!
The electrical power cables are paid by the customer and must be sized according to the maximum current absorbed.
Use a flexible cable under an oil-resistant sheath that should not be lighter than polychromelene or synthetic elastomer cables under equivalent sheath (designation 60245 IEC 57).

5.4.2 Allowed environmental conditions

The environment where the machine is installed and used is internal, protected from weather such as: rain, hail, snow, fog, suspended dust, combustible powders, protected from aggressive agents such as corrosive vapors or excessive heat sources and should not be classified as ATEX.
The use of the machine under conditions other than those listed is not allowed.
In particular, the installation and usage environment must not present:

- Exposure to corrosive fumes;
- Exposure to excessive humidity (over 85%) and rapid changes of relative humidity (over 0.005 p.u./h);
- Exposure to excessive dust;
- Exposure to abrasive dust;
- Exposure to oily vapours;
- Exposure to explosive mixtures of dust or gas;
- Exposure to brackish air;
- Exposure to vibrations, shocks or abnormal shocks;
- Exposure to bad weather out of the permitted limits or dripping;
- Exposure to unusual transport or storage conditions;
- Exposure to high or rapid thermal variations (over 5K/h);
- Presence of nuclear radiation.

The machine is designed and built to operate, safely, under the following environmental conditions:

Room temperature	15 – 35 °C
Maximum relative humidity	90 %
Place of installation	Locale di ristorazione
Lighting	**Neon or LED light**
Support surface	Any floor that can support its weight



ATTENTION!
Environmental conditions other than those specified can cause serious damages to the machine. The positioning of the machine in environments that do not correspond to what is indicated causes the expiry of the warranty.



IMPORTANT!
The work surface must be sufficiently illuminated.
If there are shadows or differences in height, it will be up to the user to set up appropriate lighting devices.

If these requirements are not met, the Manufacturer disclaims any responsibility.

5.4.3 Oven positioning

IMPORTANT!

Place the oven in a way to prevent food from being adversely affected by air currents, dust, leak-derived liquids or condensation, or aerosols.

DANGER!

The oven DOESN'T HAVE TO BE INSTALLED next to flammable walls such as furniture, walls, partitions, wooden coatings, etc..

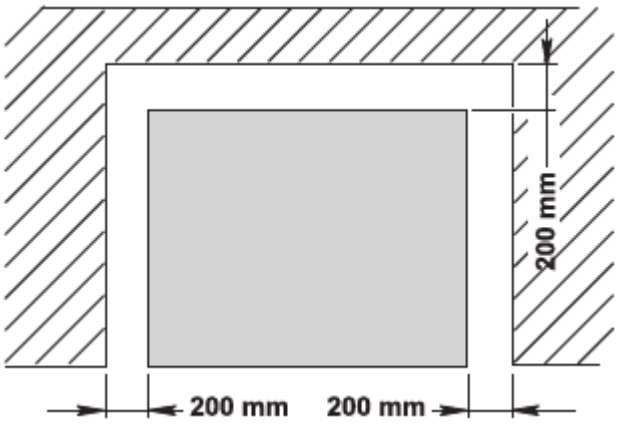
The floor on which the oven is installed must not be of flammable material. In no case is permitted to store flammable objects close to the device. Fire safety conditions must be guaranteed.

IMPORTANT!

The manufacturer denies any responsibility for fires to people or things arising from non-compliance with these provisions.

For the positioning of the oven:

- **Place the oven on the defined area in accordance with the indications shown in the figure as they indicate the minimum distances necessary for the oven to function properly.**
- **place the oven in places not subject to turbulence or drafts as they would change the good operation of the baking space and therefore the finished product; This significantly increases electricity consumption.**
- **lock the position of the oven with the braking wheels (optional) placed on the control side.**



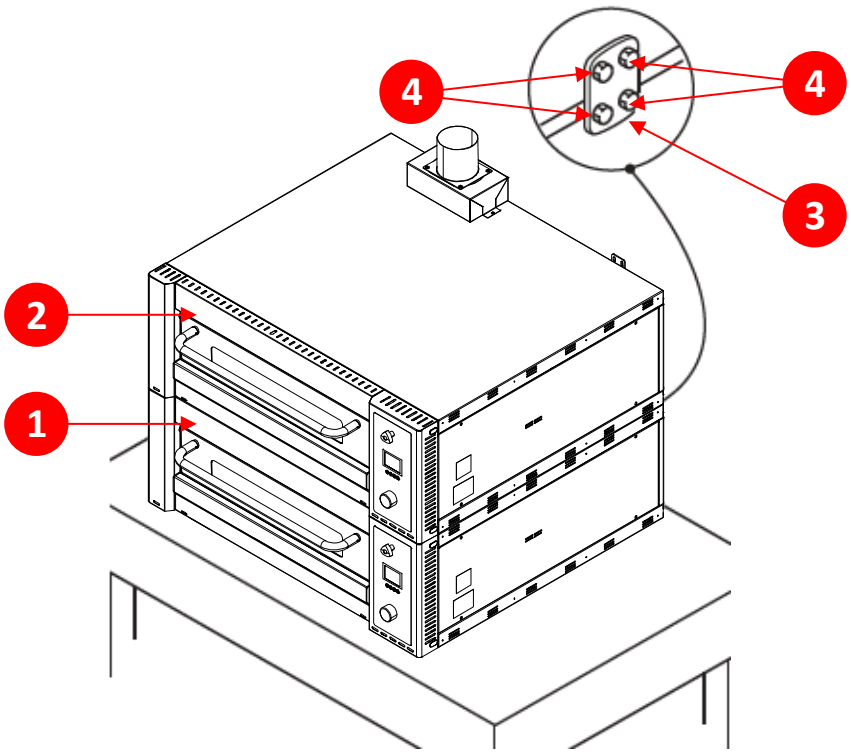
5.4.4 Double-deck oven assembly

Required DPI	
Lifting mean	Forklift / Crane / Hoist
Tools to use	-

To assemble the double-deck oven, follow the steps below:

STEP	ACTION
1	Lift the oven as indicated in the paragraph "Transport" and place it on top of the counter.
2	Place the second oven (pos.1) on top of the first oven (pos.2) and secure it by means of the relay (pos.3) and screws (pos.4). Note: For three-chamber ovens place the third oven on the second and fix it as indicated in the previous point.

DANGER!
In case of movement, it is forbidden to tilt or overturn the ovens.

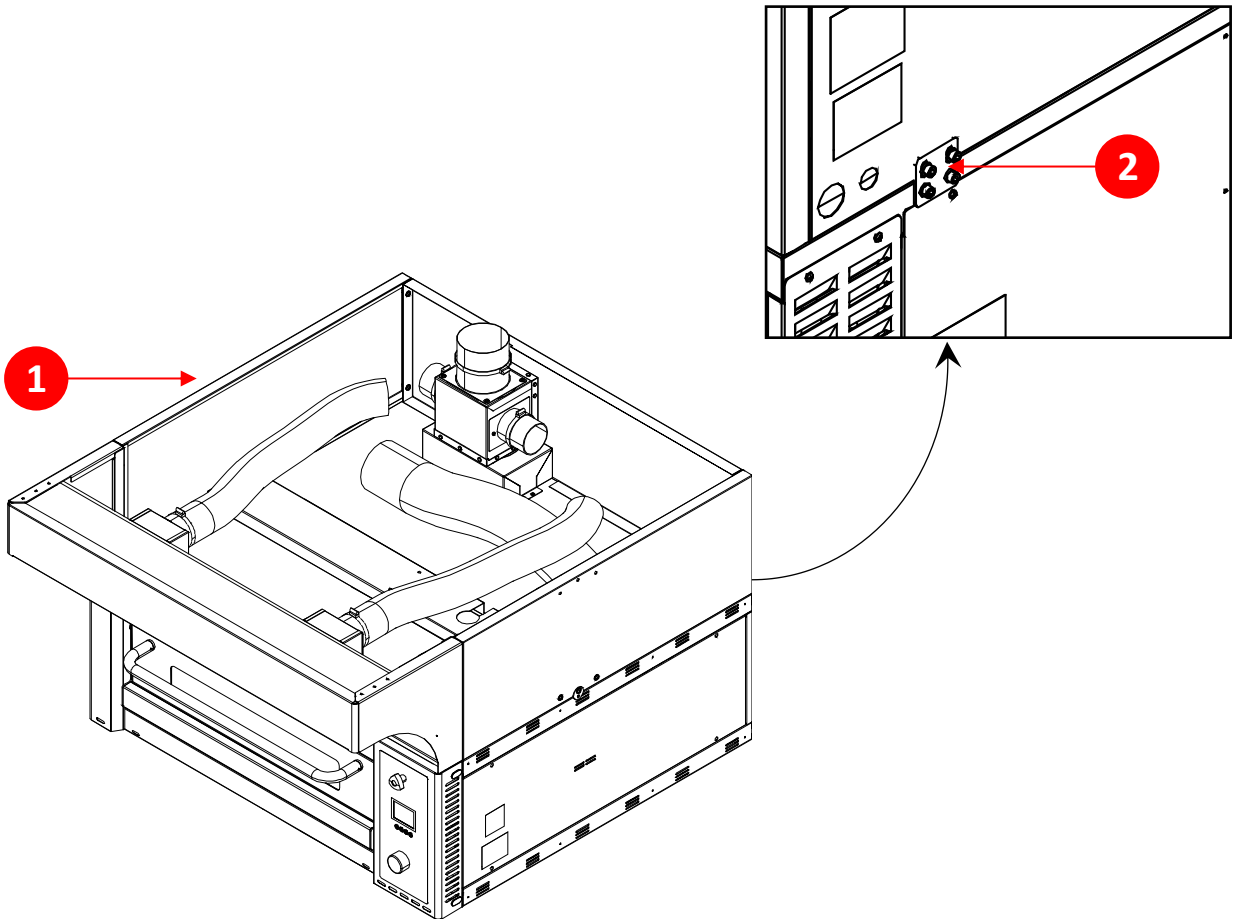


5.4.5 Draught cap assembly

Required DPI	
Lifting mean	Forklift / Crane / Hoist
Tools to use	-

to mount the hood follow these steps:

STEP	ACTION
1	Place the hood (pos.1) on the last oven and secure it by screwing the four screws (pos.2).



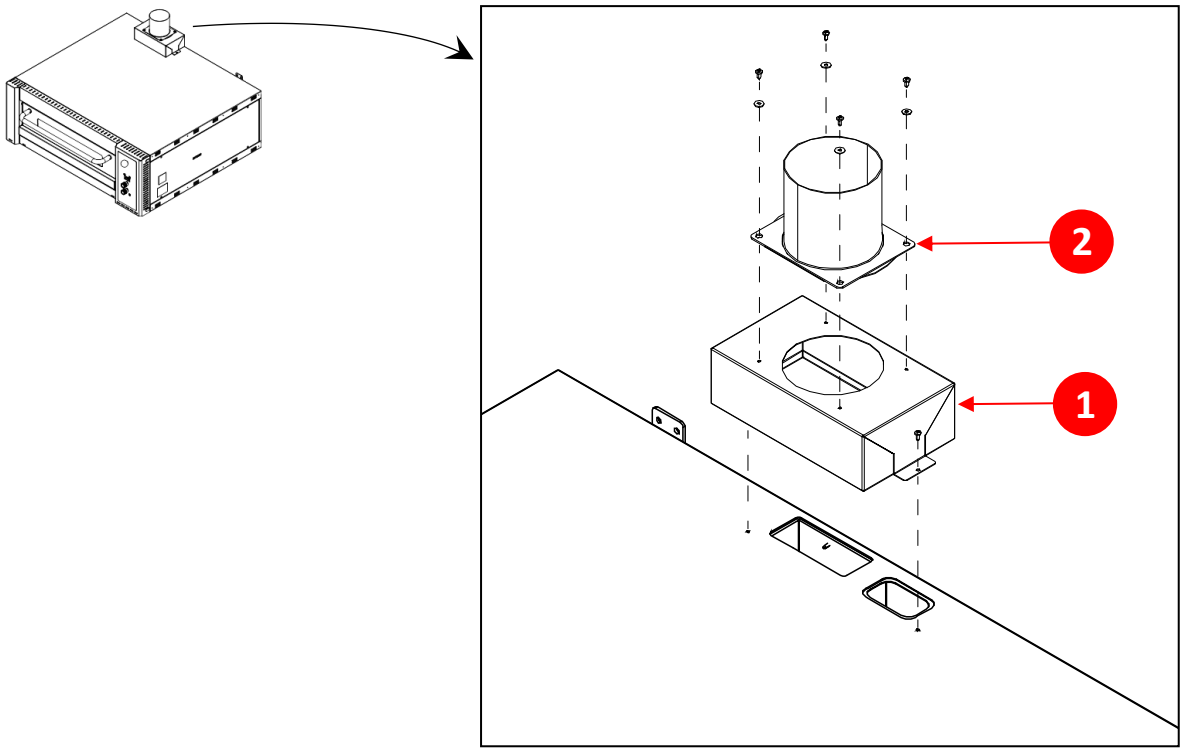
5.4.6 Smoke output box assembly

Required DPI	
Lifting mean	Tools to use
Tools to use	-

To link the fume drain, follow these steps:

STEP	ACTION
1	Place the Chimney (pos.1) on the oven and fix it using its screws (pos.2).
2	Mount the flange and fitting for the fume outlet pipe (pos.3), using the relevant screws (pos.4).
3	Connect with fume outlet pipe ø100 mm to a natural pull pipe, or to a suction hood.

IMPORTANT!
For 2-deck or 3-deck ovens start mounting the chimney on the oven at the bottom and then insert the other chimneys on top of each other (see figure) by mounting them on the relevant ovens.



5.5 Connections

For the starting of the oven, the necessary connections to local networks must be ensured:

- electrical connection (including grounding connection),

compliant with the rules in the country of installation.

It is the user's responsibility to ensure the required connection features.



ATTENTION!
The required connection must be made by qualified and authorised personnel.

5.5.1 Electrical connection



ATTENTION!
The electrical power cables are charged to the customer and must be sized according to the maximum current absorbed.
Use a flexible cable under an oil-resistant sheath that should not be lighter than polychromelene or synthetic elastomer cables under equivalent sheath (designation 60245 IEC 57).



ATTENTION!
Before performing any electrical connection, it is important to check that the oven is turned off. Then place the general switch on "0" - "OFF".



ATTENTION!
Ensure that the customer power line has been pre-dissected.

The connection between the oven and the grounding system is up to the buyer.



ATTENTION!
The operation must be performed exclusively by specialized and authorized personnel (electric maintainer).

Before proceeding with the electrical connection, make sure that:

- the maintainer is aware of the regulations in the country of installation;
- the frequency and power voltage values of the machine match the values of the power supply;
- the section of the used electrical cables is adequate for absorption;
- the power line is adequate to withstand the maximum absorptions of the oven;
- the grounding of the circuit complies with EN 60204-1 standards;
- materials used in the grounding system have adequate solidity or adequate mechanical protection.



ATTENTION!
Do not operate with hands and damp objects.
In the event of a fire, do not use water on electrical components.



IMPORTANT!
The electrical connection is provided with a cable, which must be connected to the power grid by specialized personnel (electrician)..



ATTENTION!
For the double-deck ovens each oven must be connected to a special line sectioner, it is not possible to connect multiple ovens to a single line sectioner.



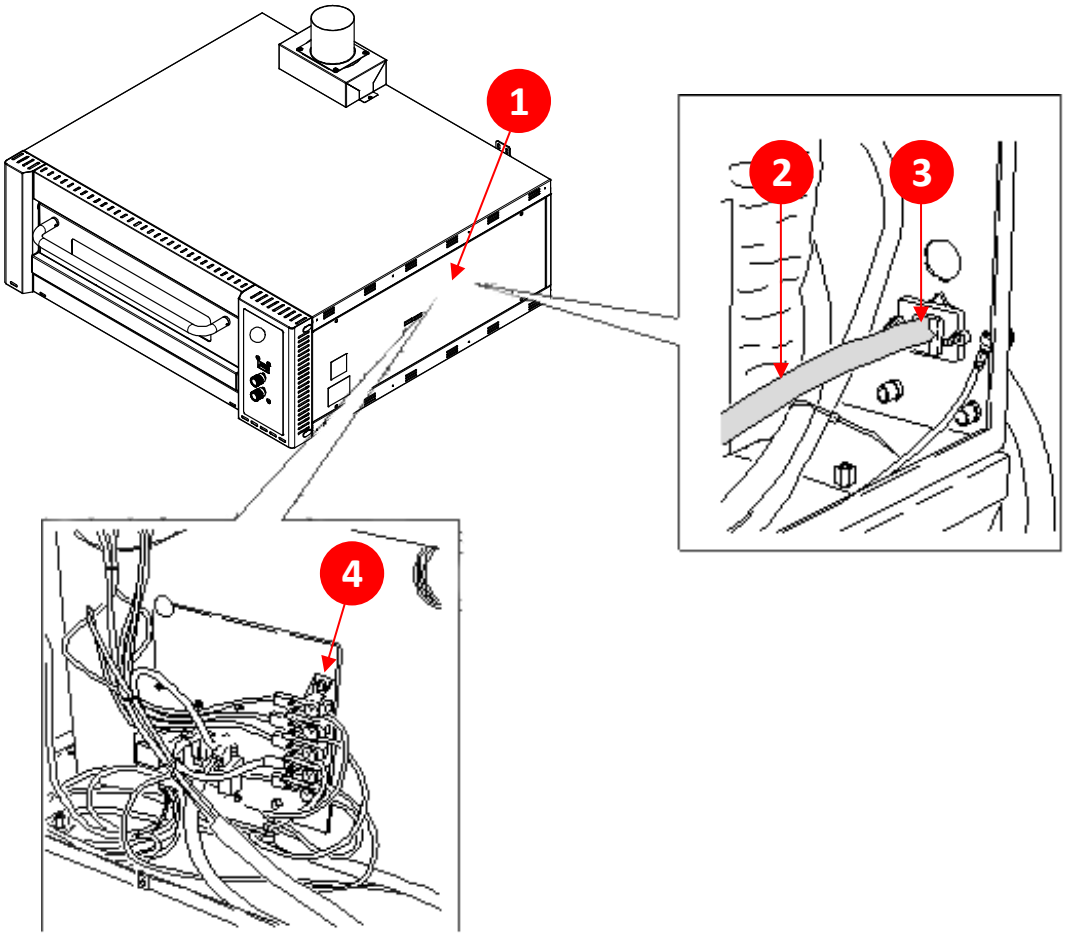
IMPORTANT!
The line sectioner positioned upstream of the oven must be in an easily accessible and visible area.

5.5.2 Electrical connection of the oven

Operator qualification	Electric maintainer
DPI needed	
Lifting medium	-
Tools to use	Hand tools

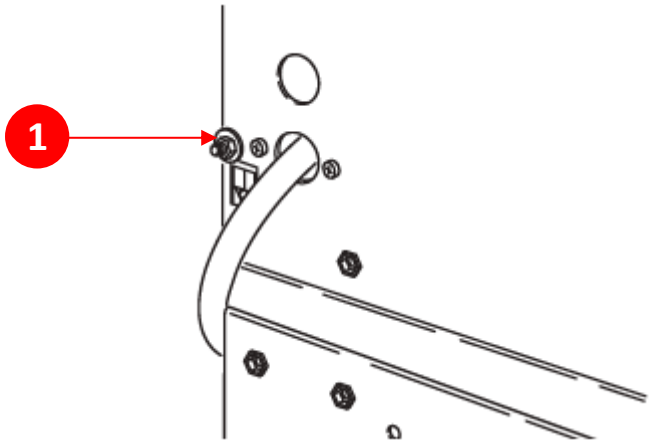
To electrically connect the oven, follow these steps:

STEP	ACTION
1	Remove the right-side panel (pos.1) to access the electrical part of the oven.
2	Connect an electrical cable (pos.2) suitably sized in function to the absorption of the furnace to the clamp (pos.4) by connecting the three phases to the L1-L2-L3 clamps, the neutral to clamp N and the earth to the T clamp.
3	Insert the electrical cable (pos.2) into the appropriate cable pass (pos.3) and connect it to the line disconnector located upstream of the oven.
4	Reassemble the right side panel (pos.1).



5.5.3 Electrical connection of the draught cap

The apparatus must be inserted into an equivalent system whose effectiveness must be checked in accordance with the rules in force. The connection must be made in cascade between the various components of the oven using the screw (pos.1) positioned in the back of the same.



IMPORTANT!
For the electrical connection of the hood follow the instructions attached to the hood itself.

5.5.4 First ignition

DANGER!
Clean the inside of the oven thoroughly as indicated in the chapter "Maintenance" checking that there are no foreign or flammable bodies inside at the end of the installation and before ignition.

When turning on the oven, check that:

- the oven reaches the set temperature and that the various options are working.

Chapter 6
CONTROLS AND USE

6 CONTROLS AND USE

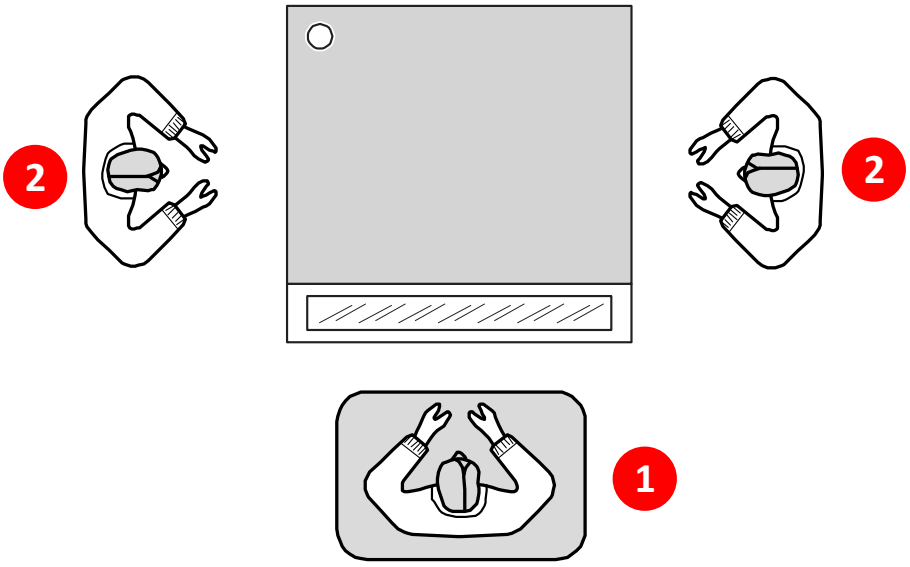
The oven does not require the continuous presence of an operator during operations.

ATTENTION!
Using the oven for a different purpose than those indicated by the manufacturer may cause serious harm to people and/or things and/or animals.
OEM ALI GROUP S.R.L A SOCIO UNICO is not responding for damages caused by improper use of the oven.

IMPORTANT!
The control panel is not part of the area in contact with the food and therefore the appropriate precautions must be taken to AVOID the operator cross-contact with the food and controls.

6.1 Operator positioning

The operator, while the oven is operating is positioned in front of the same so to insert the products and posterior to easily remove the products (Pos. "1").
The technician is allowed, for maintenance operations, to position himself on the side of the oven (Pos. "2").

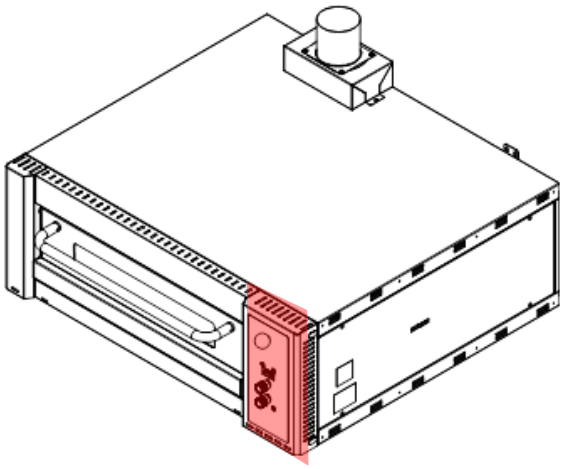


IMPORTANT!
THE FLOOR NEAR THE OVEN COULD BE SLIPPERY, EQUIP YOURSELF WITH ADEQUATE ANTI-SLIP SHOES..

6.2 Command button

the buttons are described below.

The control devices are located on the side of the product input area.

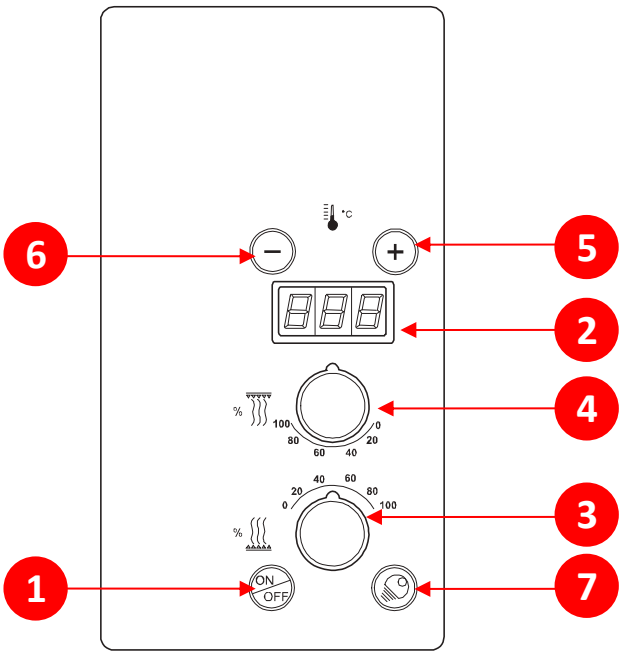


ATTENTION!
The control panel is not part of the area in contact with food and appropriate precautions must therefore be taken to prevent the operator from making cross-contact with food and controls.

6.2.1 Electro-mechanical oven control panel

the buttons are described below.

POS.	BUTTON	DESCRIPTION
1	Line button ON/OFF	ON: oven on, activation of controls and lamp lighting inside the chamber and display (pos.2). OFF: oven off and controls off.
2	Display	Display of the set temperature and the real temperature.
3	Adjustment knob of the floor heating element power	Turning the knob clockwise the power as % of the floor heating elements increases, vice versa it decreases.
4	Adjustment knob of the ceiling heating element power	Turning the knob clockwise the power as % of the ceiling heating elements increases, vice versa it decreases.
5	Increment button	Press the button once to see the set temperature. If the button is pressed again within 5 sec, the temperature will be increased. The new temperature is stored after 10 sec.
6	Decrement button	Press the button once, to see the set temperature. If the button is pressed again within 5 sec, the temperature is lowered. The new temperature is stored after 10 sec.
7	Light bulb button	Pressed the bulb lights up inside the oven; press it again to turn it off.

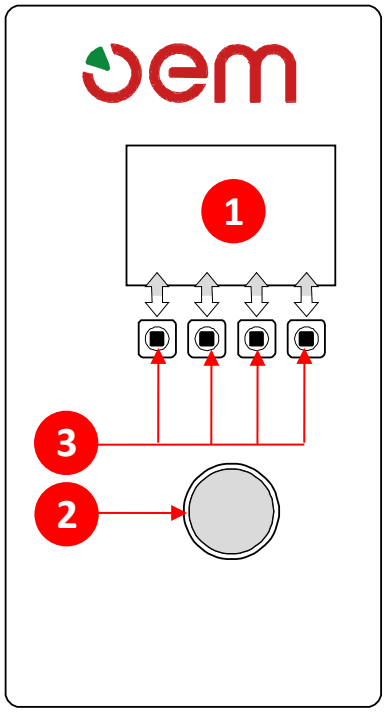


6.2.2 Digital oven control panel

The control devices are located on the side of the product input area.

the buttons are described below.

POS.	BUTTON	DESCRIPTION
1	Display	It displays all the information related to the operation of the oven, alarms, settable values, etc...
2	Encoder knob push button	It allows you to scroll, select and modify the different operating parameters on the control panel.
3	Command panel buttons	They allow you to select the different functions by means of a control panel.



6.3 Digital command operator panel

The machine is controlled through an operator panel located on the side of the product input area, through which it is possible to manage the functions of use of the oven.

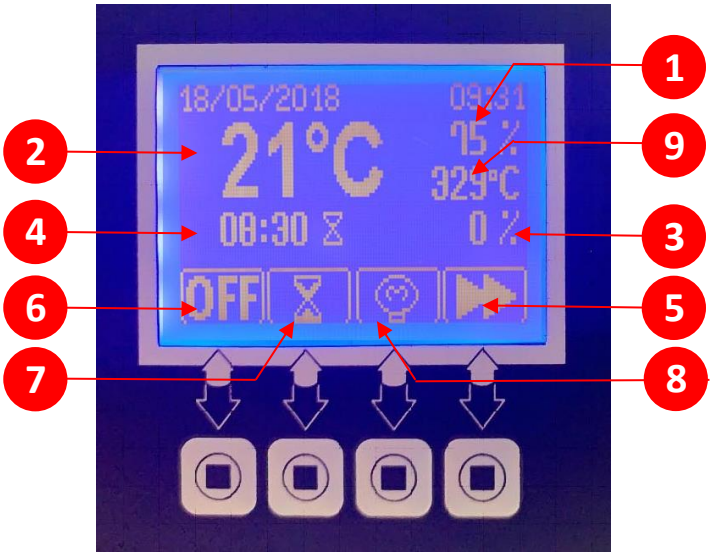
6.3.1 Start screen

This screen is presented to the operator when the machine is switched on.



POS.	FUNCTION	DESCRIPTION
1	Date	Indicates the current date.
2	Time	Indicates the current time.
3	Version	Indicates the version of the software currently in use.
4	Start	It allows you to start the machine, pressing the relative button below it, accessing the "Home Screen".
5	Scheduled ignition	if you set the scheduled power-on feature, the day of the week and the time of the switching on appears.

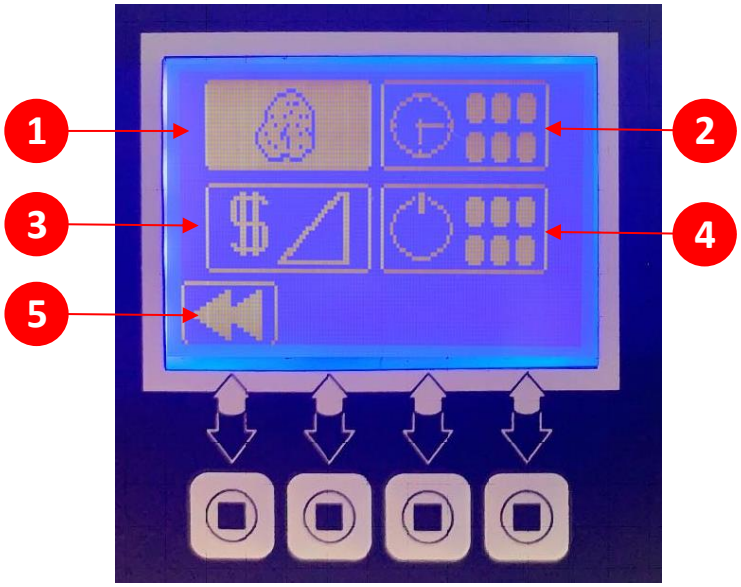
6.3.2 Home screen



IMPORTANT!
To move from one menu to another, you must use the wheel selector (A).

POS.	FUNCTION	DESCRIPTION
1	Upper heating element	Allows you to set the percentage of operation of the upper heating element of the oven, rotating the wheel selector (A).
2	Temperature	The instantaneous temperature in the room is displayed.
3	Lower heating element	Allows you to set the percentage of operation of the lower heating element of the oven, rotating the wheel selector (A)..
4	Baking time	Allows you to set the baking time inside the room.
5	Menù	Allows you to access the “Menù screen”.
6	Power Off	It allows you to turn off the machine and return to the "Start Screen".
7	Baking start button	Pressing the corresponding button starts the set baking time; the time displayed in the field (pos.4) will count backwards until the end of baking. Pressing the corresponding button stops baking
8	Bulb button	Turns on or off the lamp placed inside the baking space.
9	Setting temperature	Displays the set cooking temperature (Set Point) with wheel selector.

6.3.3 "MENÙ" screen



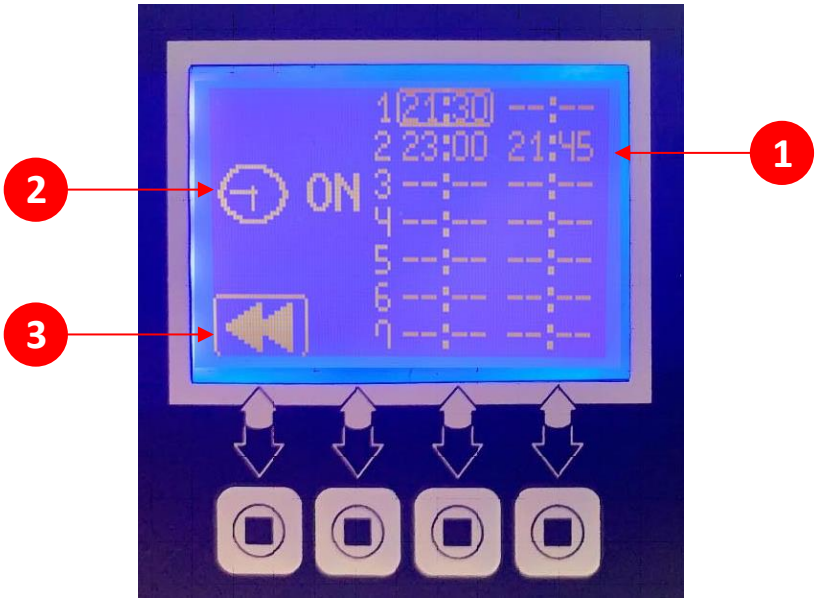
POS.	FUNCTION	DESCRIPTION
1	Self cleaning	Allows you to access the "Self-cleaning cycle" screen.
2	Date and time	Allows you to access the "Date and Time" setting screen.
3	Economy cycle	Allows you to activate the "Eco" screen.
4	Programming	Allows you to access the "Self-ignition" screen.
5	Home	Allows you to return to the "Home Screen".

6.3.3.1 "DATE AND TIME" screen



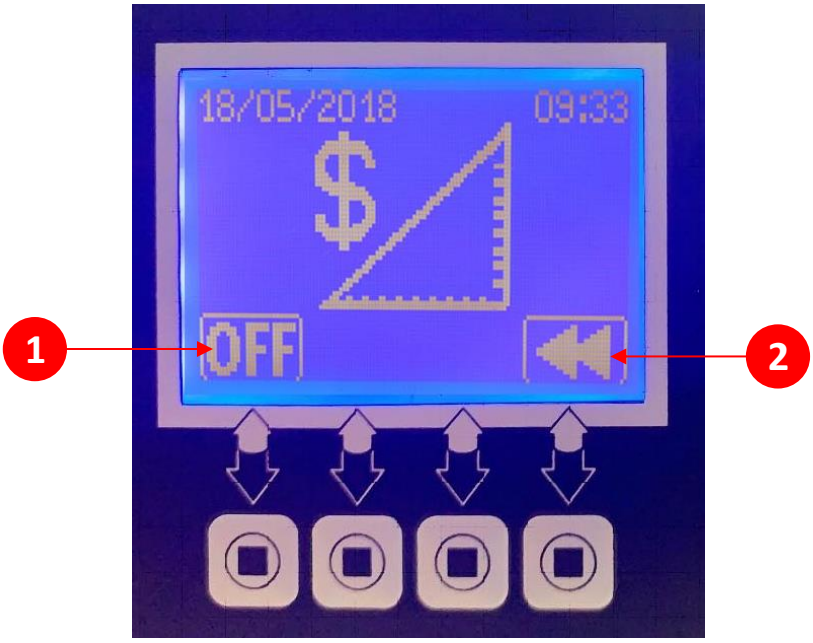
POS.	FUNCTION	DESCRIPTION
1	Date	Allows you to set the date. Rotate the wheel selector to vary the value indicated.
2	Time	Allows you to set the time. Rotate the wheel selector to vary the value indicated.
3	Home	Allows you to return to the "Home Screen".

6.3.3.2 "self-ignition" screen



POS.	FUNCTION	DESCRIPTION
1	Self-ignition times	Allows you to set automatic on and off times for up to 7 days with wheel selector.
2	Self-ignition on/off	Allows you to enable/disable the self-ignition function.
3	Home	Allows you to return to the "Home Screen".

6.3.3.3 "ECO" screen



IMPORTANT!
Use the "economy" function when the oven is in baking temperature, but you should not bake pizzas. The baking temperature is maintained with a lower consumption of electricity, making the floor and ceiling heating elements work alternately.

POS.	FUNCTION	DESCRIPTION
1	Turn off oven	Allows you to turn on/off the "ECO" mode, which will turn off the light inside the oven and alter the heating elements.
2	Home	Allows you to return to the "Home Screen".

6.3.3.4 "SELF-CLEANING" screen



POS.	FUNCTION	DESCRIPTION
1	Cleaning timer	it starts the heating of the oven with the maximum power of the floor and ceiling heating elements and the time count "20" minutes begins when the oven temperature reaches 400°C
2	Oven temperature	Indicates the temperature of the oven reached during self-cleaning.
3	Turn off oven	Allows you to turn the self-cleaning function on/off.
4	Home	Allows you to return to the "Home Screen".

6.4 How to use it

6.4.1 Preliminary checks

Before proceeding with the start up of the oven, you must perform the following checks:

- Check that the oven is positioned on a top able to support its weight.
- Check that the space around the oven is free of obstructions.
- Check that the oven has been connected to the power grid.
- Check that the electrical power supply phases are correct.
- Check that the oven is not in a "Maintenance" state.



ATTENTION!
Take the product at the exit with adequate means of individual protection given the high burn risk.



ATTENTION!
Always use the appropriate levers to raise/lower the moving flips, as they can reach high surface temperatures.

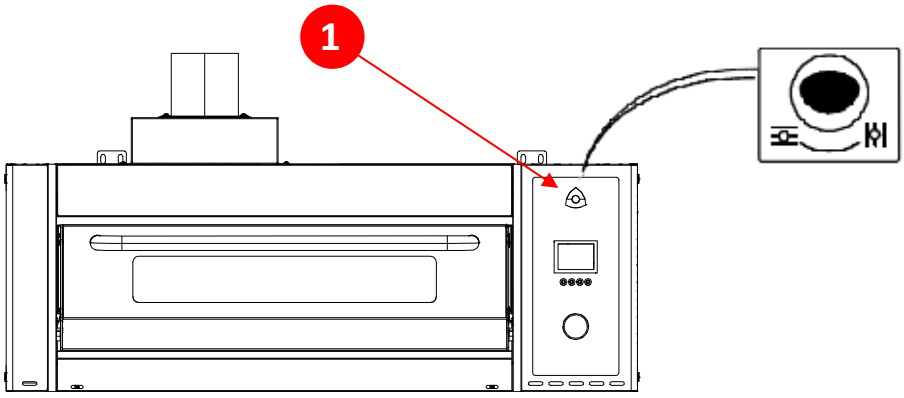
6.4.2 Digitally command oven start-up procedure

The operation of the oven for all compositions is always autonomous and therefore, for 2-deck and 3 deck versions two or three types of different baking times are possible.
If the oven has been set with the weekly power-on schedule, at the appointed time it lights up with the value of the various parameters set in the program.

IMPORTANT!
If you have not set the weekly schedule, the oven lights up with the last program set.

to start the machine do as described:

STEP	ACTION
1	Close the chimney by pushing the knob (pos. 1) until it stops.
2	Place the general on/off switch upstream of the machine on "ON".
3	Press the power on/off button. (see paragraph "Operator Panel").
4	Set the baking parameters and wait for the oven to reach the set temperature.
5	When the desired temperature is reached, open the chimney by pulling the knob (pos.1).
6	Proceed with the baking of the product.



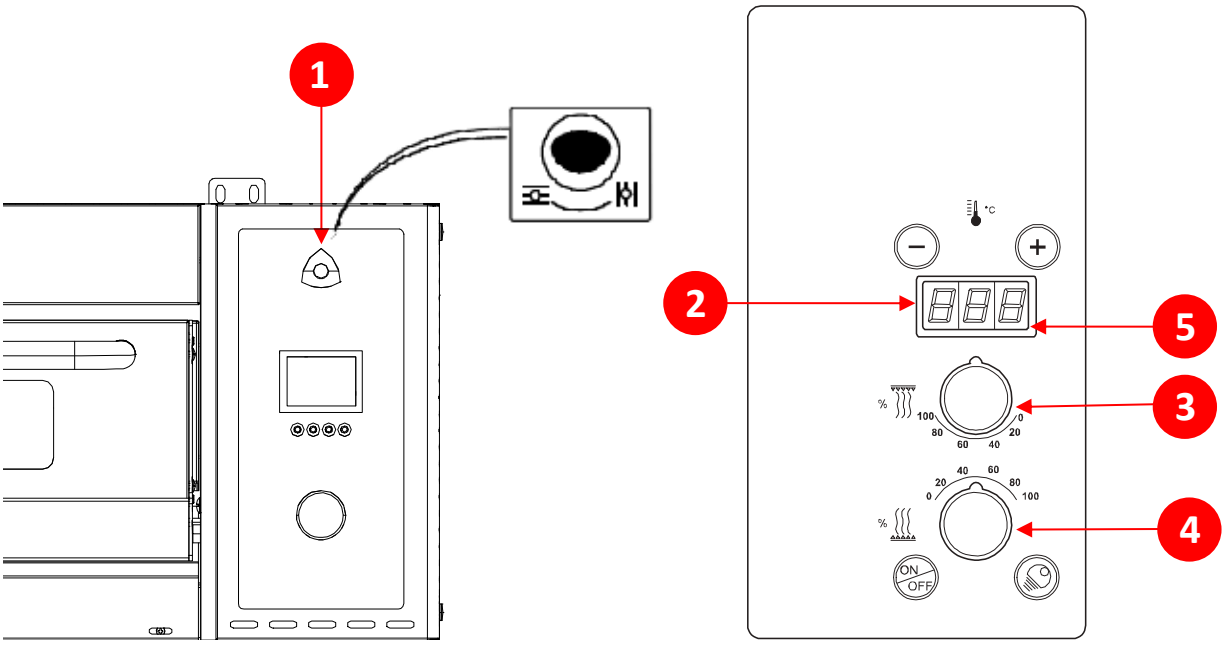
IMPORTANT!
During the baking it is possible to change the parameters by acting on their buttons as explained in the previous paragraphs (See paragraph "Operator Panel").

IMPORTANT!
Do some baking tests to find the correct parameters.

6.4.3 Electromechanical oven start-up procedure

For the ignition of the electromechanical oven, do the following:

STEP	ACTION
1	Close the chimney by pushing the knob (pos. 1) until it stops.
2	Press the "ON/OFF" button, the display lights up (pos.2).
3	The actual temperature of the oven is displayed on the display.
4	Set the cooking temperature by pressing the "+" or "-" buttons, and the temperature value will be displayed on the display.
5	Adjust the percentage of operation of the ceiling heating elements through the knob (pos.3) and the percentage of operation of the floor heating elements through the knob (pos.4).
6	Wait for the oven to reach the temperature set for baking the pizza indicated by the LED (pos.5).
7	When the desired temperature is reached, open the chimney by pulling the knob (pos.1).



6.4.4 Electromechanical oven baking timer setting

To set a baking timer, proceed as follows:

STEP	ACTION
1	Press the "+" and "-" buttons at the same time for about 20 seconds until you see the baking time.
2	Within 3/4 seconds vary the time, always pressing "+" and "-".
3	After 3/4 seconds of inactivity you return to the temperature display. NOTE: The settable time ranges from 30" to 9' and 55".

6.4.5 Electromechanical oven self-ignition programming

The oven is equipped with a predisposition to automatic self-ignition. You must install an external timer upstream of the general switch and activate the function from the control panel.

To turn this function on or off proceed as follows:

STEP	ACTION
1	When the oven is off, hold down the "ON/OFF" button, then always holding it down, give tension to the oven via the general switch upstream.
2	You access page A-x where: • x=0 Self-ignition OFF • x=1 Self-ignition ON Using the "+" or "-" buttons, set the desired mode. NOTE: If no changes are made for three seconds, the card confirms the data on the display and turns off.

6.4.6 Power-off procedure

To power off the machine, proceed as described:

STEP	ACTION
1	Press the power on/off button (see paragraph "Operator Panel") to stop the machine.
2	Place the general on/off switch, upstream of the machine, on “OFF”. When the oven restarts, it starts with the data set at the time of power off.



IMPORTANT!
At the end of the working day turn off the oven.



IMPORTANT!
If the self-ignition mode is set, do not remove the tension in the oven via the general switch positioned upstream.

6.5 General baking rules

It is good practice to consider the following provisions, for optimal operation and ideal pizza baking.

6.5.1 Baking on a refractory surface (electromechanical/digital ovens)

Turn on the oven at least 1h and 15' before starting work by setting the following parameters:

- Working temperature 290°C ÷350°C;
- Ceiling heating elements 75%;
- Floor heating elements 5%.



IMPORTANT!
To bake the first pizzas set the temperature to 320°C.



IMPORTANT!
If a significant increase in work is expected, regulate the floor heating elements to 40%.



ATTENTION!
These precautions avoid the deterioration of the refractory surface and therefore allow a correct baking of the pizza.

- Do not throw salt on the refractory stone;
- do not cool the surface using a rag moistened with cold water;
- use only pizza dough.

6.5.2 General rules to bake in baking trays (electromechanical/digital ovens)

Turn on the oven at least 1h and 15' before starting work by setting the following parameters:

- Temperatura di lavoro 300°C ÷350°C;
- Ceiling heating elements 40%;
- Floor heating elements 60%.



IMPORTANT!
When you turn on the oven, do not adjust the heating elements to the maximum (100%) as the temperature of the oven will be 50° - 60 ° C higher than the set and you risk burning the pizzas.

6.6 Pizza baking



ATTENTION!
The inside of the oven has a high temperature, so during the operation of insertion and extraction of the pizza use adequate means of personal protection; DANGER OF BURN.

6.6.1 Pizza baking in mechanical ovens

- When the set temperature is reached, open the access door and introduce the pizza to be baked.
- Start the draught cap by pressing its switch.

1. During baking it is possible to change the temperature by acting on the respective knobs (as described in the previous paragraphs).

- When baked, open the oven access door and extract the pizza.

6.6.2 Pizza baking in electromechanical and digital ovens

- When the set temperature is reached, open the chimney shutter by acting on the knob, open the access door and introduce the pizza to be baked.
- Start the draught cap by pressing its switch.
- During baking it is possible to change the parameters both for the manual control and the digital control oven by acting on the relevant buttons or knobs as explained in the previous paragraphs.
- When baked, open the oven access door and extract the pizza.

PAGINA LASCIATA INTENZIONALMENTE BIANCA

Chapter 7
MAINTENANCE

7 MAINTENANCE



ATTENTION!
Maintenance operations must be performed when the equipment is turned off (main switch placed on "0"- "OFF").



ATTENTION!
Maintenance operations must be performed by qualified and authorized staff.



IMPORTANT!
When removing the plug, the operator must be able to check that the plug is indeed disconnected from any spot he has access to.

Maintenance of the equipment includes all operations (inspection, verification, check, adjustment and replacement) that it is necessary to perform following its normal use.

For good maintenance:

- Only use original spare parts, as well as suitable tools in a good state.
- Follow the maintenance frequency guidelines provided by the user manual for planned maintenance (preventive and periodic). The time lapse (calculated either in time or in work cycles) between one intervention and the following one must be regarded as the longest possible; therefore, it cannot be exceeded, but it can be shortened.
- Good preventive maintenance requires constant attention as well as a continuous monitoring of the equipment. Promptly check the cause of any anomaly such as excessive noise, overheating, etc... and solve it.
- A prompt removal of what is provoking an anomaly or malfunction avoids further damage to the equipments and guarantees the operators' safety.

The staff in charge of the equipment's maintenance must be well trained and must have deep knowledge of accident prevention regulations; unauthorized staff must remain outside the working area during operations.

Also the equipment cleaning operations must be performed only during maintenance, when the equipment is still and de-energized.



IMPORTANT!
Do not perform any operation if you are unsure about anything. Contact the manufacturer first to get the needed explanations.



ATTENTION!
All kinds of repair and maintenance which are not included in this user manual can only be performed provided they have been previously authorized by OEM ALI GROUP S.R.L A SOCIO UNICO.
OEM ALI GROUP S.R.L A SOCIO UNICO shall not be held responsible for any damage to people or objects, if resulting from operations either different from those described or performed differently from what stated.

From an operational point of view, maintenance operations of this equipment can be divided in two main categories:

Ordinary Maintenance	All operations that the service people must perform preventively in order to guarantee the proper functioning of the equipment over time; ordinary maintenance includes inspections, check, adjustment, cleaning and lubrication.

Extraordinary Maintenance	All operations that the service people must perform when needed by the equipment. Extraordinary maintenance includes operations of revision, repair, recovery of the nominal functioning conditions or replacement of a unit if damaged, faulty or worn out.

7.1 Safety warnings



ATTENTION!
Before starting any maintenance operation, disconnect the equipment from the power supply.



ATTENTION!
When removing the plug, the operator must be able to check that the plug is indeed disconnected from any spot he has access to.



ATTENTION!
When the equipment is under maintenance, in order to prevent it from being accidentally switched on, disconnect power supply and add the following notice:
"ATTENTION! EQUIPMENT UNDER MAINTENANCE"

The accident prevention regulations contained in this paragraph must always be strictly followed, during maintenance of the equipment, so as to avoid injuries to the staff and damages to the equipments.

- Maintenance must only be performed when the equipment is switched off and de-energized.
- Put specific warnings such as: EQUIPMENT UNDER MAINTENANCE – DO NOT SUPPLY POWER next to the equipment itself.
- Only perform maintenance operations (Mechanical, Electrical, Fluidic) you have been previously authorized to perform.
- You must be able to use the most suitable and adequate tools to identify the failure and you must be aware of which the most suitable tools are to perform maintenance operations.

7.2 Ordinary Maintenance

When the equipment is delivered to the user, it is already adjusted so as to work properly; however, in order to guarantee its good functioning over time, you must perform controls as well as preventive and recurring maintenance operations.

Ordinary maintenance includes inspections, checks and operations that prevent failures by monitoring:

- the mechanical status of the equipment:
- the (electric) power sources;
- the equipment cleanness.

The following charts list a series of controls and interventions to be performed according to a suggested timing. The recurrence of the ordinary maintenance operations listed is meant for normal functioning conditions, that is, within the provided conditions of use.

7.2.1 Controls and inspection

7.2.1.1 Ordinary Maintenance Charts

OPERATION	FREQUENCY				
	Daily	Weekly	Mensile	Biannual	Every 2 years
Visual control of machine conditions			X		
Bolt tightening control			X		
Oven review*					X

7.2.2 Cleaning

ATTENTION!
Cleaning must be performed only by qualified and authorized staff.

ATTENTION!
Respect the regulations in force in the country where the equipment is installed as far as washing water treatment is concerned.

IMPORTANT!
When removing the plug, the operator must be able to check that the plug is indeed disconnected from any spot he has access to.

7.2.2.1 Cleaning charts

OPERATION	FREQUENCY				
	Daily	Weekly	Monthly	Half-yearly	Yearly
External cleaning	X				
Self-cleaning cycle	X				
Refractory surface cleaning	X				
Chamber cleaning			X		

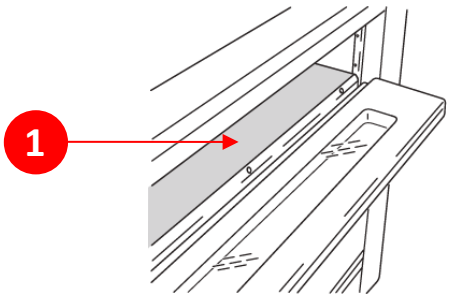
7.2.2.2 External cleaning

For the external cleaning use a cloth moistened with water and detergent suitable for the surface to be treated.

ATTENTION!
For the oven cleaning DO NOT use metal tools such as straws, brushes, scrapers, and/or corrosive products. DO NOT use water jets.

7.2.2.3 Cleaning refractory stone

Check that the oven is completely cold, open the door and clean the refractory stone (pos.1) with the appropriate Brush.



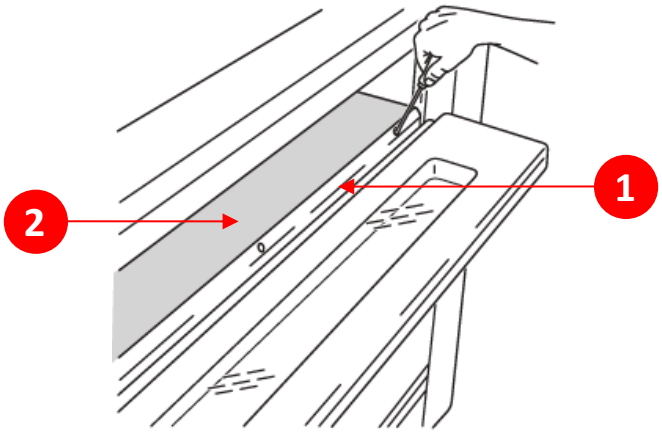
7.2.2.4 Chamber cleaning

Operator qualification	Operator

DPI needed	
Tools to use	Hand tools

To clean the chamber, proceed as described:

STEP	ACTION
1	Make sure the oven is completely cold, then open the door, remove the protection (pos.1) by unscrewed the relevant screws.
2	Gently remove the refractory top (pos.2) from the oven.
3	Using a vacuum cleaner, remove all residues.
4	Clean the refractory top using the suitable brush.
5	Replace the refractory top and reassemble the previously disassembled protection.



ATTENTION!
Carefully handle the refractory stone. Do not wash with water, DO NOT wash in the dishwasher, DO NOT use detergents for cleaning refractory tops, use only a cloth soaked in water

7.2.2.5 Electromechanical/digital oven self-cleaning cycle.

Operator qualification	Operator
DPI needed	
Tools to use	Hand tools

to perform the self-cleaning cycle, do as described:

STEP	ACTION
1	Press the "+" or "-" button then act on the "+" button to increase the temperature to 400°C.
2	Adjust the power of the ceiling and floor to 100%, via the knob (for electromechanical ovens) or the "+" and "-" buttons (for ovens with digital controls).
3	Leave the oven ON for about twenty minutes, then turn it off leaving it to cool.

7.3 Extraordinary Maintennance



ATTENTION!
Extraordinary maintenance, as well as repair of the equipment, are to be performed only by qualified, trained and authorized technicians, either working for the Manufacturer or for an authorized service center.
These operations require deep, specialized knowledge of the equipment, of the necessary interventions to perform, of the relevant risks and of the correct procedures to work in complete safety.

In case of exceptional events requiring extraordinary maintenance, the regular service people working for the user must proceed as follows:

- check the status of the damaged and/or dephased units;
- perform the operations listed in this paragraph;
- if the operations to perform are not listed in this manual, send the Manufacturer a report of the events that occurred, the results of the inspection and other useful information.

The Manufacturer or the authorized Service Center will assess the situation and will agree with the service people upon the kind of intervention to perform, choosing the best solution among the following two:

- the Manufacturer sends an authorized, trained and qualified technician to perform the necessary operations;
- the Manufacturer authorizes the user's service people to perform the operations, and sends them further instructions, if needed.



ATTENTION!
The needed spare parts must be ordered to OEM ALI GROUP S.R.L A SOCIO UNICO. In case the customer does not use spare parts either original or authorized in writing by the Manufacturer, the latter shall not be held responsible about the equipment's functioning and the workers' safety. The authorization and/or the instructions must always be transmitted in writing. Without a written authorization, it is forbidden to proceed and the Manufacturer refuses all responsibility.



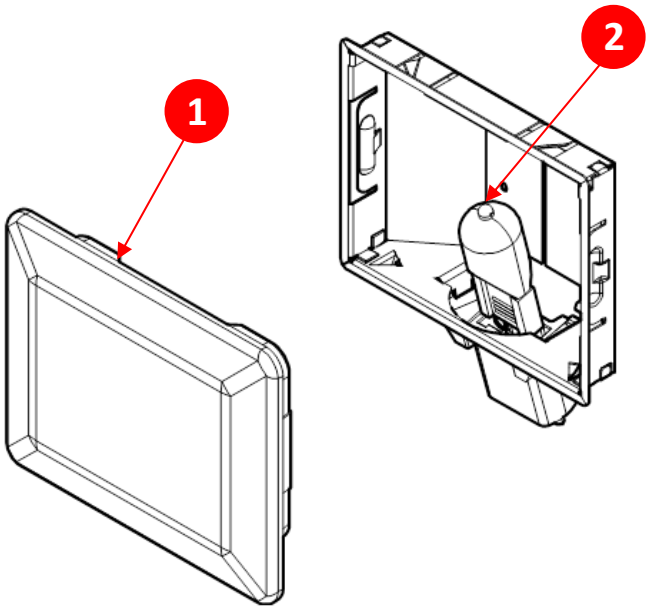
ATTENTION!
In case it is necessary to perform operations of extraordinary maintenance, contact the Manufacturer.

7.3.1 Bulb replacement

Operator qualification	Electric maintainer
DPI needed	
Tools to use	Hand tools

to replace the bulb, do as described:

STEP	ACTION
1	Open the oven and use a screwdriver, lever and detach the lamp cover glass (pos.1).
2	Replace the light bulb (pos.2).
3	Reassemble by checking the correct position of the gasket (if present) and screw the lamp cover glass (pos.1), without applying too much tightening torque.



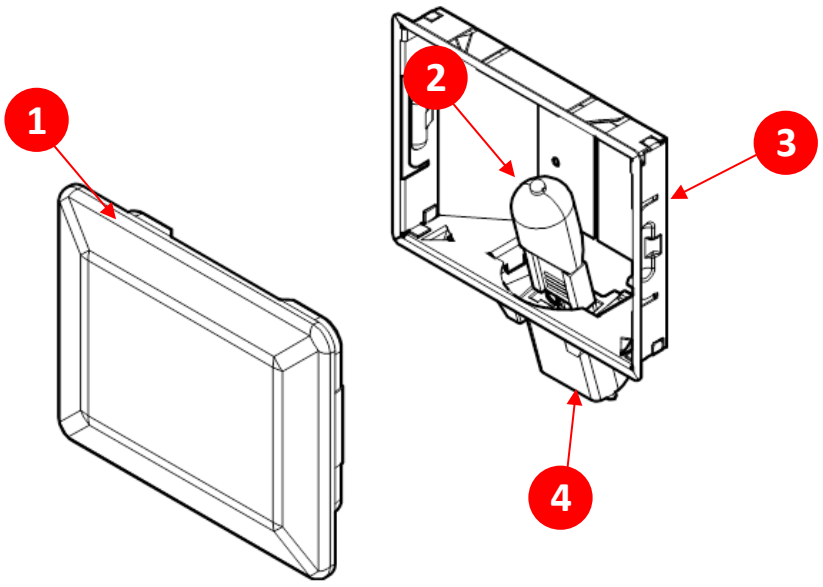
ATTENTION!
The bulb is halogenic; DO NOT touch with your fingers.

7.3.2 Bulb holder replacement

Operator qualification	Electric maintainer
DPI needed	
Tools to use	Hand tools

To replace the bulb holder, do as described:

STEP	ACTION
1	Open the oven and use a screwdriver, lever and detach the lamp cover glass (pos.1).
2	Remove the bulb (pos.2).
3	Using a screwdriver, leverage and pull out the bulb holder (pos.3).
4	Disconnect the electrical connections (pos.4) on the bulb holder.
5	Connect the new bulb holder and insert it into the seat inside the oven chamber.
6	Connect the bulb and reassemble the glass.



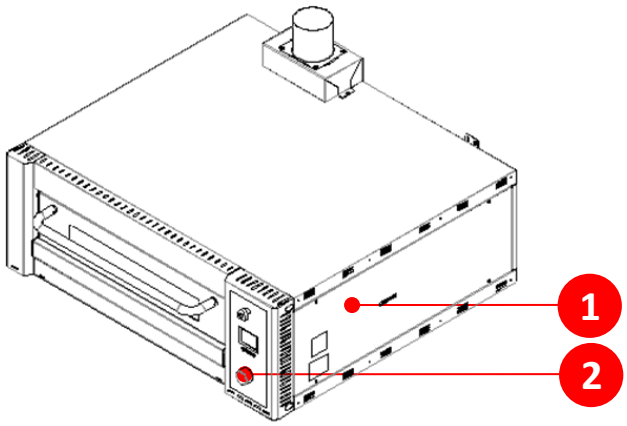
ATTENTION!
The bulb is halogenic; DO NOT touch with your fingers.

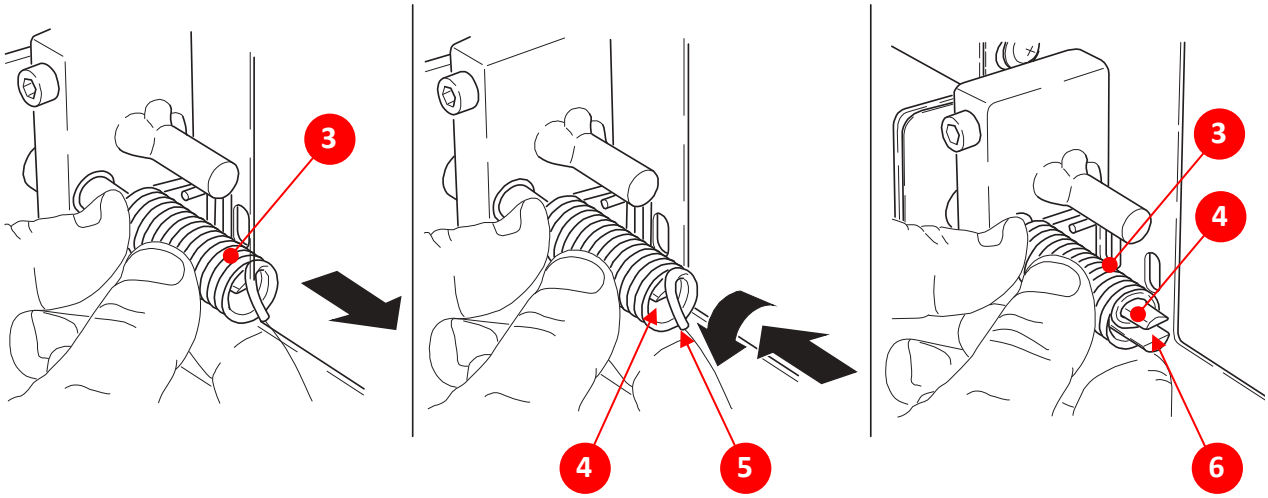
7.3.3 Door spring replacement

Operator qualification	Mechanical maintainer
DPI needed	
Tools to use	Hand tools

To replace the spring, do as described:

STEP	ACTION
1	Remove the right side panel (pos.1) by unscrewed the relevant screws.
2	Remove the control panel (pos.2) by unscrewed its screws.
3	Remove the spring (pos.3) and replace it.
4	Thread the spring (pos.3) on the pin (pos.4), turn it preloading it and hook the spring retainer (5) into the milling (pos.6) of the pin (pos.4).
5	Reassemble the panels (pos.1) and (pos.2).



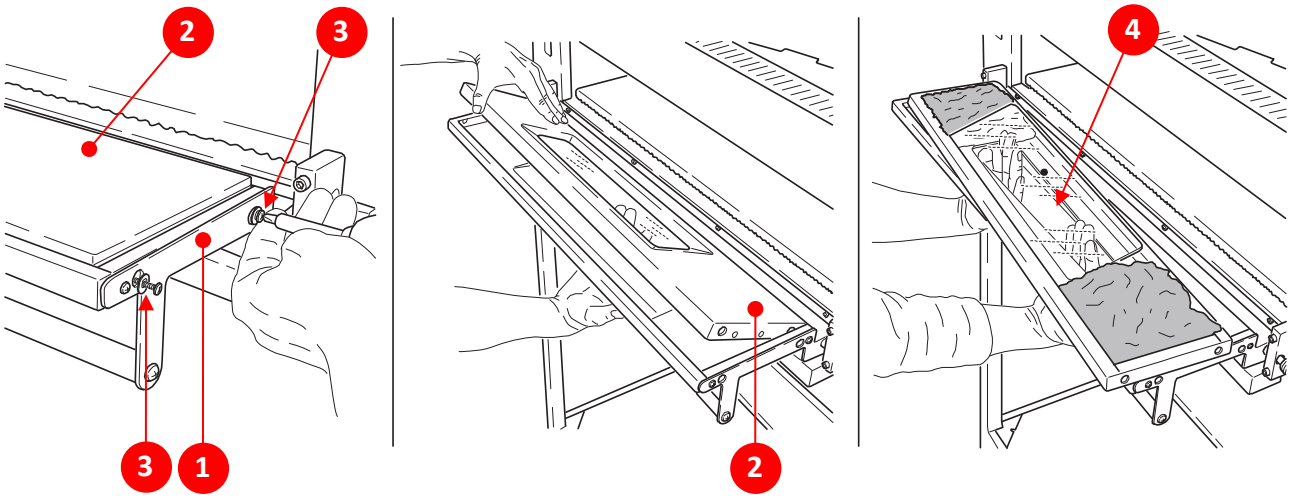


7.3.4 Door glass replacement

Operator qualification	Mechanical maintainer
DPI needed	
Tools to use	Hand tools

to replace the glass, do as described:

STEP	ACTION
1	Open the door (pos.1) and remove the inner panel (pos.2) by unscrewed the screws (pos.3).
2	Remove the glass (pos.4) and replace it by remounting everything by proceeding in the opposite direction



7.3.5 Safety thermostat rearmament

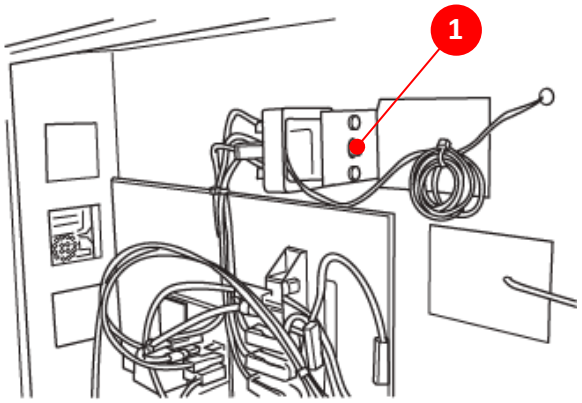
Operator qualification	Electric maintainer
DPI needed	
Tools to use	Hand tools

ATTENTION!
this must be done by the technical support service after the abnormal recovery operation.

ATTENTION!
Turn off the line disconnector located upstream of the unit, eliminate the causes that caused the thermostat to be inserted

to rearmament your thermostat, do as described:

STEP	ACTION
1	Disassemble the right side panel.
2	press the red button (pos.1) of the safety thermostat and then reassemble the side panel.



Chapter 8
PUTTING THE EQUIPMENT OUT OF ORDER AND DISPOSING OF IT

8 PUTTING THE EQUIPMENT OUT OF ORDER AND DISPOSING OF IT



ATTENTION!
Only qualified staff can take care of dismantling and putting out of order the equipment. In particular, only the person in charge of the dismantling phase and of end-of-life disposal is allowed to:

- perform operations of mechanical and electrical disconnection of the units according to the dismatling instructions and the project schemes;
- take the units to the disposal center in order to divide the different materials.

The equipment is basically made up by the following materials:

- ferritic steel (AISI 430);
- steel (DD11);
- aluminates (DX51D + AS);
- plastic material in polyethylene;
- elastomers, PTFE, graphite;
- electric cables and their sheaths;
- etc...



ATTENTION!
The equipment does not contain dangerous components or substances which need particular removal procedures.

8.1 Putting the equipment out of order and storing it

If the equipment will not be used for a long time, it is necessary to secure and store it. Proceed as follows:

STEP	ACTION
1	Disconnect power supply from the equipment.
2	Cover the equipment and store it in a place which must be under cover and not too damp.

8.2 Disposal

When you intend to dispose of the equipment, you must make sure to secure it. Proceed as follows:

STEP	ACTION
1	Disconnect power supply from the equipment.
2	Proceed with dismatling, separating the components making up the equipment in groups ready for differentiated disposal.



ATTENTION!

To disassemble commercial parts or subcontracting material making up the equipment supplied by OEM ALI GROUP S.R.L A SOCIO UNICO, please refer to the relevant user manual supplied.



According to the "WEEE" Directive 2012/19/EU, if the component/equipment purchased is marked with this symbol of a crossed-out rubbish bin with wheels, it means that, at the end of its useful life, the product must be collected separately from the other waste.



ATTENTION!

Always respect the disposal regulations in force in the country where the equipment is installed.

PAGINA LASCIATA INTENZIONALMENTE BIANCA

Chapter 9
TROUBLESHOOTING

9 TROUBLESHOOTING

9.1 Alarms during operation (electromechanical /digital ovens)

During operation, alarms due to breakage can be inserted; these alarms are displayed on the display.

9.1.1 Temperature probe alarm, damaged or disconnected

When you insert this alarm on the display, the following message appears on the display:

AL1 - AL2

- Power to heating elements automatically stops;
- Turn off the oven and call the technical support.

9.2 Malfunctions, causes and remedies

PROBLEM	SOLUTION
The oven does not turn on	Check that there is an electrical connection. Check that the general switch is inserted Call technical support.
Pizzas are not cooked uniformly	Dirty baking top: clean the top. Ruined top: replace the top. Adjust the oven temperature.
Failure to reach temperature	Heating elements not working. Verification of electrical connection of the oven. Call technical support.

ATTENTION!
For any other problems, please contact the Technical Assistance Service

9.2.1 "ALARM" list

In case of malfunction, the following alarms are displayed on the display:

SYMBOL	MEANING
	Safety thermostat: when this alarm is displayed on the display, the "TS" alarm appears, indicating that the temperature in the chamber has exceeded 512°C; the heating of the oven is turned off. Rearm the safety thermostat as indicated in the relevant paragraph.
	Chamber overtemperature: when this alarm is displayed on the display the alarm "TC1" appears and indicates that the temperature in the chamber has exceeded 480°C; the heating of the oven is turned off. Turn off the oven and wait for the chamber to cool down. please try again and if the alarm recurs call technical support.
	Chamber temperature probe interrupted or disconnected: when this alarm is displayed on the display the alarm "TC1" appears and indicates that the room temperature probe is interrupted or disconnected; the oven is turned off. Call technical support to control and/or replace the probe.
	Short-circuit chamber temperature probe: When this alarm is displayed on the display, the alarm "TC1"appears and indicates that the room temperature probe is short-circuited; the oven is turned off. Call technical support to replace the probe.

PAGINA LASCIATA INTENZIONALMENTE BIANCA

Capitolo 10
ATTACHMENTS

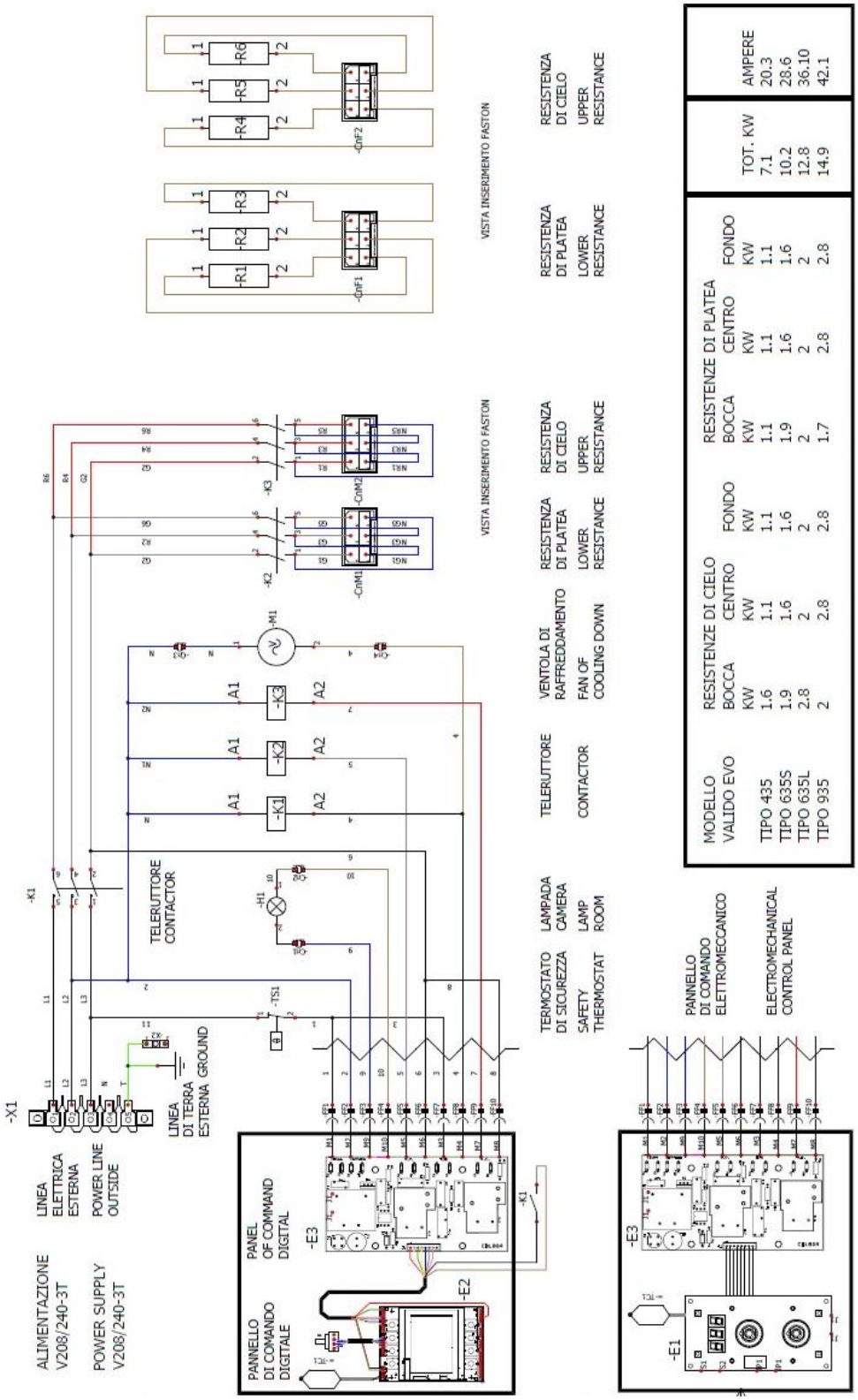
10. ATTACHMENTS

ATTACHMENTS LIST	
1	ELECTRICAL DIAGRAMS
2	ALARM LIST
3	HEATING ELEMENT TABLE

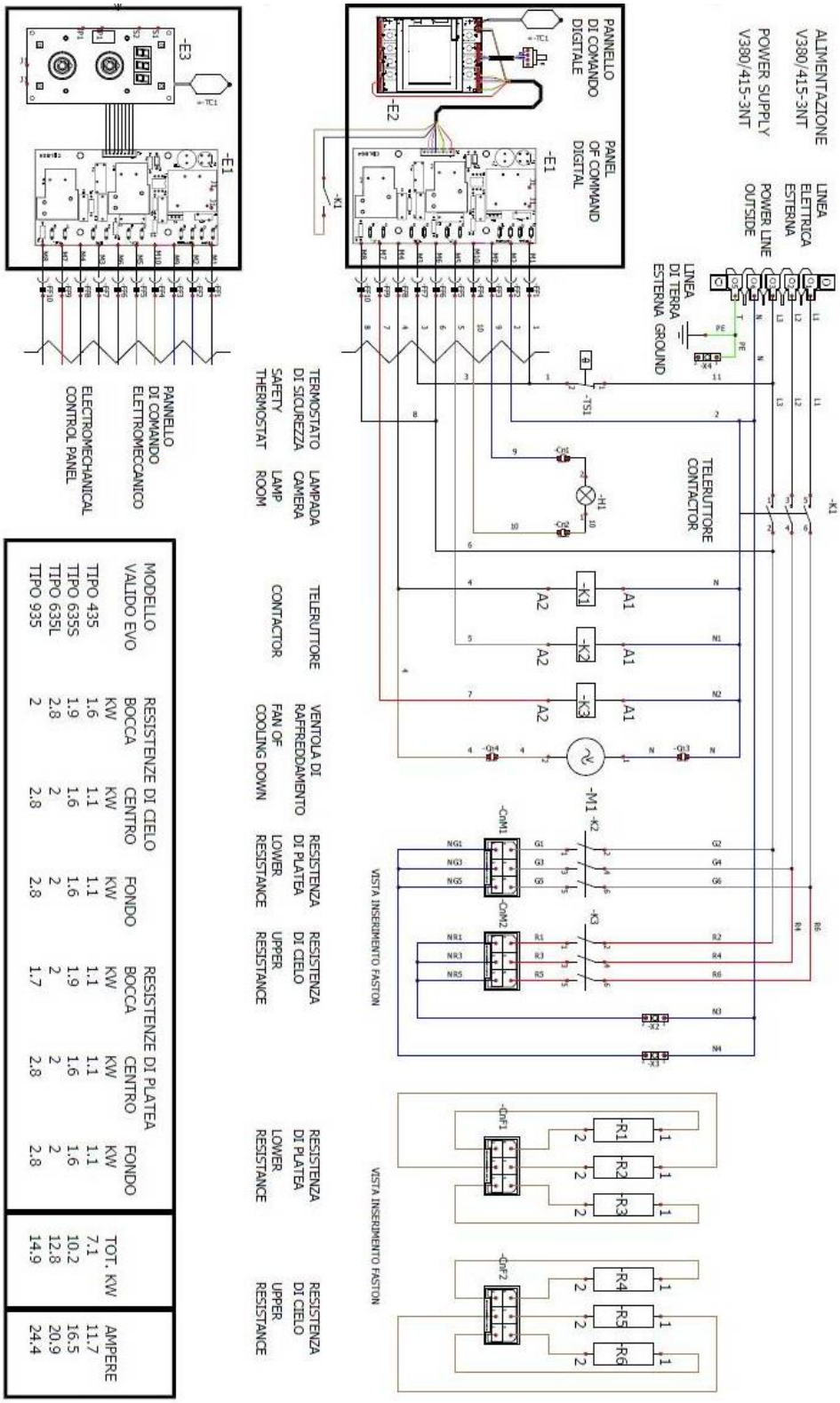
Electric diagram legend

ABBREVIATION	DESCRIPTION
CV1	POWER CABLE
E1	DISPLAY CARD
E2	ELECTRONIC CARD
H1	BAKING CHAMBER BULB
K1	CONTACTOR
K2	STATIC RELE'
K3	STATIC RELE'
K4	STATIC RELE'
K5	STATIC RELE'
K6	STATIC RELE'
K7	STATIC RELE'
M1	FAN
M2	FAN
M3	MOTOR
R1	CEILING HEATING ELEMENT
R2	CEILING HEATING ELEMENT
R3	CEILING HEATING ELEMENT
R4	FLOOR HEATING ELEMENT
R5	FLOOR HEATING ELEMENT
R6	FLOOR HEATING ELEMENT
S1	EMERGENCY BUTTON
T1	TRANSFORMER
TC1	TEMPERATURE PROBE
TE1	THERMOSTAT
TS1	SAFETY THERMOSTAT
X1	CLAMP
X2	CLAMP
X3	CLAMP
X4	CLAMP
X5	CLAMP
X6	CLAMP
X7	CLAMP
X8	CLAMP
X9	CLAMP
X10	CLAMP
X11	CLAMP
X12	CLAMP
X13	CLAMP
X14	CLAMP
X15	CLAMP
X16	CLAMP
X17	CLAMP
X18	CLAMP
X19	CLAMP
X20	CLAMP
X21	CLAMP
X22	CLAMP

Electrical diagram OM23.00581 (230V 3T)



Electrical diagram OM23.00580 (400V 3T)



MODELLO VALIDO EVO	RESISTENZE DI CIELO BOCCA KW	CENTRO KW	FONDO KW	RESISTENZE DI PLATEA BOCCA KW	CENTRO KW	FONDO KW	TOT. KW	AMPERE
TIPO 435	1.6	1.1	1.1	1.1	1.1	1.1	7.1	11.7
TIPO 635S	1.9	1.6	1.6	1.9	1.6	1.6	10.2	16.5
TIPO 635L	2.8	2	2	2	2	2	12.8	20.9
TIPO 935	2	2.8	2.8	1.7	2.8	2.8	14.9	24.4

Heating element table

VALIDO EVO HEATING ELEMENT TABLE						
Dimensions	Position		OEM Code	Heating element Kw	Connection	Total Kw
OVEN SHELL 435 DG MOD 400T 1	Ceiling	Mouth heating element	OMEE41100	1,6	RC1	7,1
		Center heating element	OM20.00003	1,1	RC2	
		bottom heating element	OM20.00004	1,1	RC3	
	floor	Mouth heating element	OM20.00002	1,1	RP1	
		Center heating element	OM20.00003	1,1	RP2	
		bottom heating element	OM20.00004	1,1	RP3	
OVEN SHELL 635S DG MOD 400T 1	Ceiling	Mouth heating element	OMEE37300	1,9	RC1	10,2
		Center heating element	OM20.00008	1,6	RC2	
		bottom heating element	OM20.00009	1,6	RC3	
	floor	Mouth heating element	OMEE37300	1,9	RP1	
		Center heating element	OM20.00008	1,6	RP2	
		bottom heating element	OM20.00009	1,6	RP3	
OVEN SHELL 635L DG MOD 400T 1	Ceiling	Mouth heating element	OMEE38500	2,8	RC1	12,8
		Center heating element	OM20.00006	2	RC2	
		bottom heating element	OM20.00007	2	RC3	
	floor	Mouth heating element	OM20.00005	2	RP1	
		Center heating element	OM20.00006	2	RP2	
		bottom heating element	OM20.00007	2	RP3	
OVEN SHELL 935 DG MOD 400T 1	Ceiling	Mouth heating element	OM20.00146	2	RC1	14,9
		Center heating element	OM20.00010	2,8	RC2	
		bottom heating element	OM20.00011	2,8	RC3	
	floor	Mouth heating element	OM20.00147	1,7	RP1	
		Center heating element	OM20.00010	2,8	RP2	
		bottom heating element	OM20.00011	2,8	RP3	

YOUR PIZZA HUB