

# SYNTHESIS 12/80 V GAS

Manuale di installazione, uso e manutenzione Manual for installation, use and maintenance Manual de instalación, uso y manutención Notice d'installation, d'utilisation et d'entretien Installations-, Bedienungs- und Instandhaltungshandbuch

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## **TECHNICAL ENCLOSURES**

- A. Technical Specifications
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- C. Wiring diagrams
  D. Exploded views

#### 1. INTRODUCTION

The gas conveyor ovens mod. **SYNTHESIS** gas have been designed mainly for the automatic cooking of pizza and similar products. They are conveyor ovens. Favourable peculiarity of these particular ovens is that it is possible to make excellent baking, without controlling the same. For this reason it is possible for un unqualified staff to use the oven.

**SYNTHESIS** belong to the family of conveyor ovens. Another important innovation is that **SYNTHESIS**, thanks to their ventilation system, enable an excellent and uniform baking. In fact, the flow of hot air surrounds the product, removing the barrier of colder air that normally insulates it. This ensures an uniform distribution of the heat in appropriate dosage, in order to prevent the product from drying out excessively and giving it proper fragrance.

Finally, **SYNTHESIS** gas, are useful for those user located in areas where high electrical powers are not available. These conveyor ovens allow also a reduction of operation cost.

Thank you for the preference given to us. We can confidently assure you about your good choice, as our company has been committed to the production of quality items since decades, without useless restriction in the choice of the best materials.

To get the best use out of your new oven please read the information contained in this manual carefully.

## 2. HOW TO USE THIS MANUAL

The paragraphs marked with this symbol contain indications essential to safety. They must all be read by installers, the end user and any employees that use the machine. Manufacturer does not assume any responsibility for damage or injury incurring as a result of ignoring the safety criteria outlined in these paragraphs.

This symbol applied to various surfaces of the machine, shows that these can reach very high temperatures and should never be touched without taking the necessary precautions.

This symbol, applied to various points on the machine, serves to warn the user of the presence of a non-insulated "high voltage hazard" inside the machine's casing there being enough power to constitute a fire risk or to electrocute a person.

The paragraphs marked with this symbol contain important information to avoid causing damage to the machine. It is in the users own interests to read these paragraphs carefully.

It is recommended that this installation, instruction and service manual be kept in close proximity to the equipment so that it can be easily and quickly consulted. The manual must accompany the equipment if it is resold as it cannot be considered complete and safe without it.

Take note of the manual code and version shown on the back cover. In the event that this copy is lost or destroyed, you can order another using these

This manual is made up of a number of chapters. They should be read in their entirety by both installers and service personnel as well as by the end user to ensure **safety of use** and to get the best results from this product.

Some useful indications for the consultation of each chapter are given below.

**Chapter 3** contains the reference standards of the oven and directions for the proper use of the same.

**Chapter 4** contains all the information needed to install the machine. These are mainly aimed at specialized personnel but should be read by the end user beforehand so as to predispose the environment where the machine will be operated for the installation.

Chapters 5, 6 and 7 are intended for the user who has to learn how to use the machine. These serve as a guide to the essential operations of turning on, using and turning off of the machine under safe conditions.

**Chapter 8** gives all the information necessary for the cleaning of the equipment: all those operations that must be carried out by the user to guarantee that it continues to function under safe, hygienic and sanitary conditions and continues to give the best results.

**Charter 9** gives all information necessary for periodic or extraordinary maintenance, e.g. repairing or replacing parts of the equipment.

These maintenance operations must be carried out by specialized personnel.

Chapter 10 gives directions for dismantling the machine.

The technical annexes contain features related to the specific model of oven and all values which may be necessary for the selection, installation and use. This chapter should be used as a point of reference to check that the way the owner intends to use it is in line with the way the machine has been designed to operate and ensure that and ensure that information concerning the precise value of a given measurement or tolerance of the equipment is available whenever necessary.

This chapter also provides a description of the electrical equipment that comes with the machine, the exploded of equipment and a list of spare parts, to facilitate order and replace any damaged parts.

The Manufacturer reserves the right to update the production series and instruction manuals without the obligation to update the previous production series and previously issued instruction manuals.

## 3. TECHNICAL SPECIFICATIONS

## 3.1. Identifying the product

This manual refers to conveyor oven **SYNTHESIS** gas.

## 3.2. Directives compliance

The oven **SYNTHESIS** carry the **C** obligatory mark, that guaranteeing their conforming to the following European directives:

2014/35/CE low current directive;

2014/30/CE electromagnetic compatibility directive;

2006/42/CE machines directive;

2009/142/CE Gas Directive

1935/2004/CE Regulation objects destined for coming into contact with food products.

## 3.3. Foreseen range of use

The gas conveyor oven mod. Synthesis is designed to cook pizza, or similar products. It is intended for professional use in the catering industry (restaurant, pizza shop, etc..).

The normal operations are the loading and unloading of products on the conveyor, the switching on, adjusting, switching off and cleaning of the appliance.

The use to which the product should be put as stated above and the configurations foreseen for this equipment are the only ones authorized by the Manufacturer. **Do not use these machines in any way other than that indicated in the instructions provided.** 

The use intended is only valid for equipment which is in good structural, mechanical and electrical condition.

## 3.4. Technical Specifications

For technical specifications refer to the following technical annexes at the end of this manual:

- A. Technical Specifications
- **B.** Connections
- C. Wiring diagrams
- D. Exploded views

## 4. INSTALLATION

ATTENTION! These installation instructions are for the exclusive use of personnel qualified for the installation and maintenance of electrical or gas equipment conceived for professional use in the foodservice industry and community catering operations. An installation carried out by unqualified persons could cause damage to the machine, to people, animals or property

ATTENTION! Proceed with the installation according to those norms in force in the country where it is being carried out.

In addition, where it is necessary to carry out modifications or adaptations to the electrical systems of the building in which the machine will be installed, whoever carries out such modifications must certify that the work has been undertaken according to current "best practices".

## 4.1. Checking on delivery

Unless otherwise agreed, the products are carefully packaged in a robust structure in wood and with a sheet of nylon bubble wrap giving protection against knocks and humidity during transport. These are consigned to the freight operator in the best of condition.

We recommend, however, that you to check the packaging on arrival for any signs of damage. If damage has occurred, have it noted on the receipt which must be signed by the driver.

Once the equipment has been unpacked, check that it has not suffered damage. Also check that all the dissembled parts are present.

In the event of damage to the equipment and/or missing parts, bear in mind that the freight operator can only accept claims within 15 days of delivery and that the manufacturer cannot be held responsible for damage incurred to its products during their delivery. We are however, available to assist you in presenting your claim.

In the event of damage do not try to use the equipment and consult with professionally qualified personnel.

## 4.2. Choosing a place for installation

An effective, safe and long lasting functioning of the appliance also depends on the position in which it is installed. For this reason, it is advisable to carefully consider where to install the equipment before it is delivered.

Install the appliance in a dry and easily accessible place both to facilitate its use and to carry out cleaning and maintenance.

The appliance must be installed at least 20cm from the walls of the room or from other equipment so that the ventilation outlets located on the sides of the oven are not obstructed.

Whilst in operation, cooking equipment produces vapor and cooking smells that compromise the integrity of a healthy working environment.

In the case of gas ovens see paragraph 4.8.

A check must be made to ensure that the temperature and relative humidity never exceed the maximum and minimum values indicted in the specifications (see Enclosure A) even when the machine or other machines in the room are functioning.

Exceeding these values especially the temperature or the maximum relative humidity can easily and unexpectedly damage electrical equipment creating hazardous situations.

#### 4.2.1. Location specifications for the installation of gas ovens

It is the installer's responsibility to check that the gas system of the room in which the oven will be installed is working properly and that the ventilation and aeration conduits of this room function as required for the total nominal heat input.

The Manufacturer cannot answer for damage caused by failure to observe the norms in force for the installation of gas equipment.

During the installation, care must be taken to avoid obstructing the cooling vents and the air intakes for combustion air built into the oven.

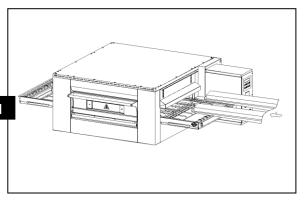
When dealing with gas equipment, the room in which it will be installed must be sufficiently ventilated and aerated. To ensure this, the enclosed area in which it will be housed must have at least two permanent apertures leading directly through its walls leading to the open air.

As an indication, for every kW of power installed, an air renewal rate of 36 m<sup>3</sup>/h is recommended.

To get a clear idea of the specifications required for the housing location, refer to the norms in force in the country where the installation is being carried out, in particular those prescribed for this type of oven.

## 4.3. Moving the unit

To offload and transport the unit, use a pallet truck or a transpallet lifter with a load capacity at least equal to that of the unit. Raise the doors at the entrance and exit of the oven to the position of maximum aperture. Insert the forks into the cooking chamber by way of the tunnel entrance or exit (Fig.1).



To avoid damage, place protective material between the forks and the unit.

⚠ Make sure that the lifting equipment has a lifting capacity superior to that of the weight of the load.

All responsibility for the lifting of loads rests with the person doing the lifting.

⚠ In all circumstances, to avoid unpredictable movement, be aware of the equipment's centre of mass.

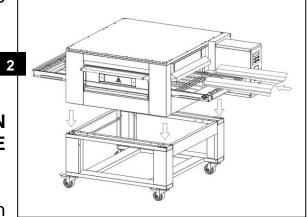
Take care that children do not play with the packaging materials (e.g., plastic sheeting and Styrofoam): suffocation danger!

## 4.4. Positionig the unit on its base

Position the oven by sliding it into the four corners of the basement (Fig.2).

## 4.5. Positioning stacked units

FOR THE UNITS THAT CAN BE STACKED ONE ON TOP OF THE OTHER SEE ENCLOSURE B.



Once the first oven has been positioned on the base (see previous paragraph), overlap consecutively the second and third module fit the chimney exhaust fumes and by matching the exterior side walls of the ovens.

#### 4.6. Electrical connection

Before making any connection, check that the specifications of the electrical supply to which the equipment must be connected, correspond to the specifications of the power supply required by the apparatus itself (see Enclosure A).

The appliances are supplied with an electric connection with ground/earth cable for connecting the appliance to the power grid according to the supply required (see Enclosure A).

In compliance with the safety norms in force. It is obligatory to connect the ground/earth cable (yellow-green) to an earthing system with the same dispersion capacity as the appliance itself. The efficiency of this system must be correctly verified according to the norms in force.

The power cable must terminate with a plug to connect to the electrical switchgear having a corresponding differential magneto thermal switch.

## The equipment is not supplied with a power plug.

The coupling between plug and socket must be such that the earth conductor is connected first and disconnected last and must have the right dimensions for the rated current (see Enclosure A). Plugs and sockets for industrial use of the type CEE17 are suitable or those which satisfy European norm EN 60309.

The thermal circuit breaker must be calibrated to the total rated current and the magnetic circuit breaker calibrated to the rated current (In the case of ovens this is only slightly higher than rated current), while the differential mechanism must be calibrated to the 30 mA current (see Enclosure A).

The electrical socket must be easily accessible and must not require further location after the installation of the equipment. The distance between the equipment and the socket must be sufficient to avoid stretching the power cable.

For the position of the electrical power connections Enclosure B.

The power cable must never be trapped under the feet or wheels of the equipment.

If the power cable is damaged it must be substituted by customer support or by a qualified service engineer so as to avoid any risk.

The Manufacturer does not accept responsibility for damage caused by failure to observe the abovementioned norms.

## 4.7. Connecting the gas

Before making any type of connection, ensure that the type of gas and pressure of the supply for which the equipment has been calibrated, (see plate located on the oven, and Appendix A. of this manual), corresponds to the type and the pressure of the gas that is available. This is indicated on the initial regulation label applied to the identification plate. Should these not correspond, refer to paragraph 8.4 to change the regulation.

Gas appliances have a gas input with a G1/2" conic thread as indicated in the specifications. The connection to the building's gas supply must be made by means of metallic tubing in zinc plated steel or equipment must be connected to the gas mains supply with an easily operated mains copper, exposed to view.

The equipment must be connected to the gas mains supply with an easily operated mains tap.

The connection of the tubing to the equipment must be made with a three piece metal joint to facilitate disassembly.

The strength of the gas tightness on the threaded joint must be ensured with materials specifically declared to be suitable by their manufacturer also for methane and GPL gasses.

For the location of the gas input connections, see Enclosure B.

## 4.8. Exhaust produced by combustion

This oven produces waste gasses classified as type "A1" (see Enclosure A): equipment not intended for connection to a chimney or flue or a device for the evacuation of the combustion residue into the open air from the room in which the equipment is installed. The drawing in of combustion air and the expelling of combustion exhaust takes place in the room where the oven is installed.

To install type "A1" equipment, rooms in which it is housed must be aerated and ventilated. They must specifically respect the conditions concerning the flow of air necessary for combustion and aeration of these spaces and for the disposal of combustion residue.

ATTENTION! Carry out the installation of the oven according to the standard defined by the norms in force for this type of equipment in the country in which it is being installed. For more information refer to these norms.

To find out the nominal heat input of your oven, see Enclosure A When more than one or more cooking units are stacked one on top of another, to calculate the nominal heat input simply sum the power of each single unit.

The area in which the units will be housed must have at least two permanent apertures leading directly through its walls leading into the open air:

- one for the intake of combustion air, ventilating the room
- the other for disposing of combustion gasses, aerating the room.

The two apertures must be in such a position so as not to create a short-circuit in the flow of air: preferably they should be at opposite ends of the room, they must not be obstructed and must be protected with grilles.

The necessary aeration can be achieved naturally or by way of the installation of a forced aeration system depending on the norms in force in the country where the installation is being made for ovens with a type "A1" exhaust.

Be aware of the total nominal heat input of the ovens housed in each room in a situation in which more than one unit is being installed.

The Manufacturer cannot answer for damage caused by ignoring these abovementioned norms as well as the information in this manual.

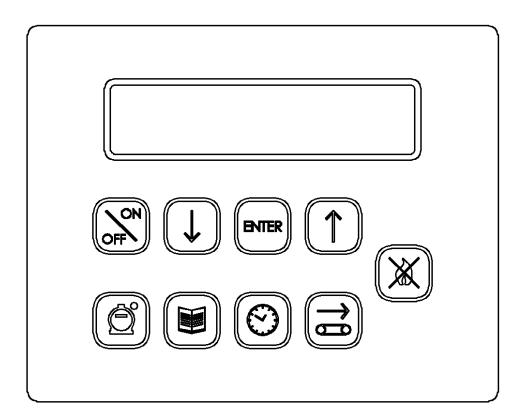
## 4.9. Checking before starting work

After completing installation of the unit a series of checks must be carried out, listed as follows:

- check that the various disassembled parts have been assembled.
- Check the power cable.
- Check that the control panel is working.
- Check the integrity of the jointing for gas supply and exhaust tubes.
- Check that the apertures for ventilating the room are adequate.
- Check the nominal capacity of the oven while it is functioning at the exit point of the solenoid valve.
- If present, check that the ventilation hood is working.

## 5. OPERATION

## 5.1. Control panel





Oven on-off key



Parameter value decrease key



Programme access key



Parameter value increase key



Conveyor start/stop key



Automatic switching on-off key



Reset key



Economy function key



Cooking program setting key.

MRR 1:3

## 5.2. Functional states of the system

#### 5.2.1. Inactive state

In the inactive state (Fig.1-2) the circuit board is supplied with current but all the oven's functions are disabled, apart from those for programming.

The display indicates "OFF", the current time, the day and time the oven will next be automatically switched on (if it set, Fig.2).

In the Fig. 1-2 le letters indicate:

A = current hour

B = current minute

C = day, time, minute the oven will be automatically switched on.

## 5.2.2. State of activity

When the oven is off, the rear illumination on the display is also off.

This turns on when programming is started.

Press the ON key it is entered in a state of activity: it excites the general contactor, the fan turns on and enables the heating of the oven. The backlit

display turns on and shows the writing

thereon in Fig.3, where:

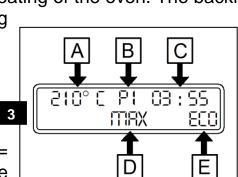
A = Cooking temperature (°C)

B = Program set

C = Cooking time (minutes : seconds)

D = Operating condition of burner (Max = high flame, Min = low flame, --- = flame off).

E = Economy function active if lit.



START: OFF

START:

## 5.3. Settings

### 5.3.1. Setting the current time

The current time can be set by the user both when the oven is **only** off.

Press the key for 3 consecutive seconds to enter the setting mode (Fig.4).

The display indicates (Fig.4), where:

A = current day

B = current month

C = current year

D = current hour

E = current minute.

A cursor indicates the data being modified.

Press the button to decide whether to change the day, month, year, hour or minutes. The value can be adjusted using the keys

and (Fig.5) and confirmed press
the key again, then move to the next data

(Fig.6).

After setting day, month, year, hour and minutes, press the key current day of the week.

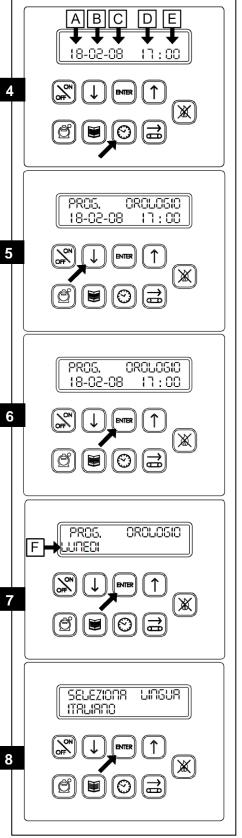
Appears on the display (Fig.7), where: F = current day of the week.

## 5.3.2. Setting the language

The display language can be chosen from a list of available options.

To set the language, enter the clock programming mode (see chap. 5.4.1) and confirm the data until appears on the display (Fig.8).

Adjust and confirm using the same procedure as for setting the clock.



By confirming, you leave the programming mode and return to the previous mode.

## 5.4. Programming

#### 5.4.1. Cooking programs

It is possible to manage up to 6 different cooking programs. Each can be set in the following order:

- 1. Cooking time (minutes : seconds)
- 2. Temperature setting (°C).

These parameters are normally indicated on the display when the oven is on.

With the oven turned on it is possible to modify all the programs that can be set, with the oven turned off it is only possible to modify the last program that has been used.

Turn on the oven and press the select the programme to modify (Fig.9). Press the programming access key enter the programming mode and move from one parameter to the next (Fig.10). A horizontal line flashes below the parameter being programmed. PAR , SISTEMA The program that is being modified is always indicated at the top right of the display 10 To change the value, use the keys to increase and to decrease (Fig.11). By keeping the key pressed, you increase the speed of data change. PAR , SISTEMA If no key is pressed for more than 5 seconds, TEMPER. the displayed value is **memorised** and the oven automatically leaves the programming mode. During the programming of the keys are disabled, the programming mode.

The order of programming is as follows:

- 1. Cooking time
- 2. Temperature

#### 5.4.2. Cooking time adjustment

The desired cooking time is set directly by the user, and is directly connected to the relevant conveyor speed, which is automatically controlled by the electronic circuit board.

When the oven is switched on, the conveyor is still and the cooking time flashes on the display.

Press the conveyor start/stop key to activate the conveyor (Fig.12).

Conveyor can be started or stopped at any time using the key (Fig.12).

When the conveyor is still, the cooking time flashes.

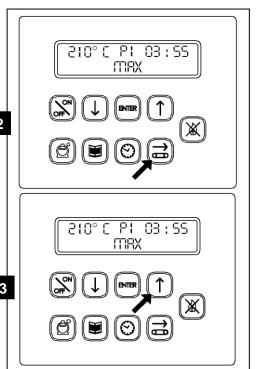
See the paragraph 5.4.1. to set the cooking time.

## 5.4.3. Temperature adjustment

When the oven is on, the real temperature of the cooking chamber is indicated; press the parameter value increase key to display the set temperature (Fig.13).

See the paragraph 5.4.1. to learn how to adjust the set temperature..

The intensity of the flame varies automatically and adjusts according to the operating conditions in the Max, Min or --- positions indicated on the display.

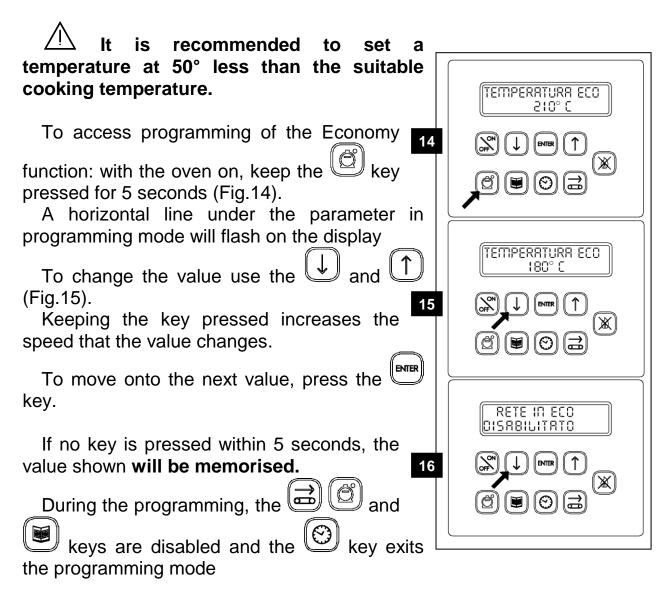


#### 5.4.4. Economy Fuction

The Economy function allows the oven, when left idle, to be kept at a lower temperature than that when it is in use.

This saves energy and consequently money.

Apart from managing the temperature of the oven this can determine whether the wire mesh conveyer moves or not.



The order of programming is as follows:

1. Eco temperature

2. Mesh in Eco mode ( = enabled; = disabled).

To activate the economy function, press the key, the letters "Eco" will appear on the display.

#### 5.4.5. Programming switching on

To enter the setting mode for the programmed switching on, press and immediately release the key enable/disable auto power (Fig. 17) with the oven on or off.

At first the state of the automatic switching on (active or inactive) appears on the display (AUTOSTART : ON or OFF).

To enable or disable the program must act respectively on the ignition keys to increase and to decrease (Fig.18).

Once enabled, pressing the button is displayed on the first day of the week and the figures for the hours and minutes (Fig.19).

To select when to switch the cursor flashing in the figures for hours using the key

and then pressing the buttons to increase and decrease, you set the value (Fig.20).

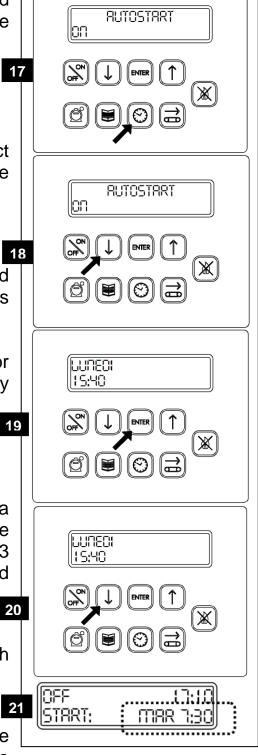
If you want the oven does not turn on a specific day (eg, closing day), during the time setting, select "OFF" lying between the 23 and 00 using the keys to increase and decrease (Fig.20).

Pressing the button again will switch

to minutes and then pressing the button again will return the cursor under the day of the week (Fig.19). To move to the next or previous to press the buttons to respectively increase and decrease.

respectively increase and decrease.

When completed the setting, press again the button and wait about five seconds. Data is automatically stored and you return to the previous function.

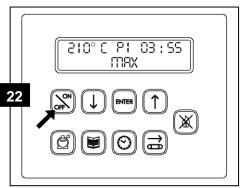


To indicate that the ignition has been enabled, in the idle state the display shows the date and time of the next time (Fig.21). ). If the ignition is turned off, instead of the day and time the message appears "OFF".

## 5.5. Switching off the oven

Press the key to switch off the oven (Fig.22).

The heating stops while the air recycling fan and conveyor continue working (if already on) until the temperature drops below 150°C. Then the main contactor de-energizes leaving only the circuit board powered to feed the clock and programmed switching on functions.



During the switching off phase the rear illumination remains on and the word "OFF" flashes. During this phase the oven can be switched back on and the conveyor can be started or stopped.

To prevent the oven being accidentally switched on, check if the display indicates the desired day and time of switching on, or, if automatic switching on is not desired, that the words "START: OFF" appear.

#### 5.6. Alarms

The functioning of the oven is continuously checked. An alarm procedure is activated if any faults arise.

#### 5.6.1. "OVER 1"

If the temperature measured by probe 1 exceeds 350°C or if the probe breaks, the temperature value on the display is replaced by the flashing words "OVER 1" and the alarm sounds intermittently.

The alarm can be switched off by pressing the key .

The oven continues working and only the probe 2 is used to measure the temperature. The control temperature is automatically decreased by 40°C.

This variation in the temperature value is effected to correct the only value taken in the hottest part of the oven, and to simulate a value near to the real one previously elaborated by making the average between the hottest and coldest points. This allows the oven to be used even when a probe breaks.

#### 5.6.2. "OVER 2"

If the temperature measured by probe 2 exceeds 450°C or if the probe breaks, the temperature value on the display is replaced by the flashing words "OVER 2" and the alarm sounds intermittently.

The alarm can be switched off by pressing the key .

The oven continues working and only probe 1 is used to measure the temperature. The control temperature is automatically raised by 40°C.

This variation in the temperature value is effected to correct the only value taken in the coldest part of the oven and to simulate a value near to the real one previously elaborated by making the average between the hottest and coldest points. This allows the oven to be used even when a probe breaks.

#### 5.6.3. "OVER"

If the temperature measured by the probe 1 exceeds 350°C and, at the same time, probe 2 exceeds 450°C, the temperature value on the display is replaced by the flashing word "OVER" and the alarm sounds intermittently.

You can switch off the alarm by pressing the key .



A Necessary to call in specialists to restore functionality

#### 5.6.4. "BELT"

When the conveyor motor is broken or sends wrong signals to the circuit board, the word "BELT" flashes on the display and the alarm sounds intermittently.

This means that the cooking time does not correspond to the set value and that specialized personnel are required to reset the functions of the oven.

#### 5.6.5. "FAN"

If the pressure regulator fails for 5 consecutive seconds when the fan is on, the temperature value on the display is replaced by the flashing word "FAN", the buzzer sounds intermittently and the oven heating (if on) switches off. The alarm switches off automatically when the pressure regulator contact is re-established or the oven is switched off (after the switching off phase). The correct functioning of the pressure regulator should then be checked.

While the alarm sounds, fan and conveyor (if on) remain activated.

The buzzer can be silenced by pressing the key .

#### 5.6.6. "PRESS"

If there is no pressure regulator (before switching on the fan), the word OFF is replaced by the flashing word "PRESS", the alarm sounds intermittently and the switching on procedure terminates.

To reset the functioning of the oven, check that the pressure regulator is working properly. To do this, check that the pipes are connected without any constriction. If necessary, adjust the calibration with the screw located

at the centre of the pressure regulator. The buzzer can be silenced by pressing the key .

#### 5.6.7. "FLAME"

If the gas control centre cannot detect a flame while the burner is on or being switched on, an alarm is given on the display through the flashing word "FIAMMA" ("FLAME"), accompanied by the intermittent sound of the buzzer .The oven stops working.

Press the key to try and light the burner again. In case of failure, the alarm sounds again.

The buzzer can be silenced by pressing the key.

If, after having pressed the reset button the oven fails to turn on, check the gas connection (for inst. if the valve on the feeding pipe is open) and that the flame detector is in contact with the flame while lighting.

At the first ignition this alarm may often occur due to the presence of air in the feeding pipe. Try lighting repeatedly until the air has left the pipe completely.

#### 5.6.8. "BATTERY"

When the buffer battery installed on the main electronic board is exhausted, an alarm is activated on the display together with the flashing writing "BATTERY" and the acoustic signal plays in intermittent way. To replace the battery see paragraph 8.3.

#### 6. USE

During cooking or at the end of cooking some of the oven's surfaces reach dangerous temperatures. The symbol warns of this danger. Never touch these surfaces and only use the proper handle.

## 6.1. Preparation for use and before turning

If the unit has just been installed or if it has not been used for several days before using it to work you need to clean it completely food as described in Chapter cleaning, to eliminate manufacturing waste,

accumulations of dust or other substances that may contaminate food.

## 6.1.1. Ignition Control Panel

Press the (Fig.1), part of the fan. After 20 seconds the message appears on the display "FLAMES" and activates the audible signal.

## 6.1.2. Settings and start cooking

Select the desired cooking program by

pressing the button (Fig.2). For programming, see section 5.4.1.

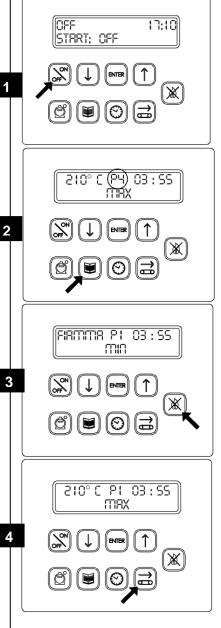
Open the gas cock and press the reset-button

(Fig.3) to light the burner.

If at the end of the 40/50 seconds the writing "FLAME" appears on the display, check that the gas pipe is connected properly and that the gas cock is open. Anyway, it may happen that a failure occurs during the first starting trial, due to the presence of air in the gas pipes.

Wait 5 minutes and press again on reset button (Fig.3) to activate the burner.

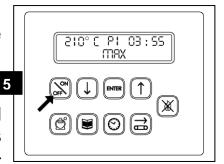
After setting the cooking time and temperature required to proceed to the activation of the belt movement using the button (Fig.4).



#### 6.1.3. How to turn off the oven

At the end of each working day press the button (Fig.5).

The heating is turned off while the blower and the recirculation of the belt, if activated, will continue to operate until the temperature has dropped to below 150°C, after which depending only the



energizes the contactor generally leaving only the supplied tab to enable the clock and power-programmed functions.

During the shutdown the backlight stays on and the word "OFF" blinks. At this stage you can still turn on the oven and start or stop the movement of the belt. To avoid unwanted ignition, check that the display indicates the exact date and time desired power or, if you do not want to use the automatic ignition, which appears the word "START: OFF"

When the oven is not used for a long period (for example until the day after) you must position the switches ON/OFF in OFF position and close the gas cock.

For longer periods of inactivity (for instance holidays closure) it is advisable to turn off the main switch on the electric panel, but only when the chamber fans have stopped.

#### 7. SAFETY WARNINGS

## 7.1. Prohibited actions and obligations towards the prevention of accidents

A Read the warnings listed in this chapter carefully. They give important indications concerning safety.

It is forbidden to install accessories that do not conform with safety standards.

Have the appliance inspected regularly by a qualified technician to guarantee your safety.

## 7.1.1. Warnings for installers

Check that the preparation for housing the appliance conforms to the local National and European regulations.

- Follow all the indications in this manual
- Do not make any overhead electrical connections using provisional or non-insulated cabling.
- Check that this electrical equipment is efficiently earthed.
- Always use personal safety devices and other means of protection foreseen by the law.

## 7.1.2. Warnings for users

The environmental conditions of the place where the appliance is to be installed must have the following characteristics:

- the area must be dry;
- be distant from sources of heat or water;
- have adequate ventilation and illumination conforming to the norms of hygiene and safety foreseen by the laws in force;
- The floor must be level and compact to facilitate thorough cleaning;
- there must not be any obstacles of any kind in the immediate vicinity that could compromise the normal ventilation of the area;

Apart from this the user must:

- make sure that children do not come close to the equipment whilst it is functioning;
- observe the rules laid out in this manual;
- not use the machine inappropriately but stick scrupulously to the use for which it was designed;
- not remove o interfere with the equipment's safety mechanisms;
- keep the safety systems in good working order;

- carry out all working procedures with the utmost safety and calm;
- respect the instructions and warnings highlighted by the signs on the equipment. These signs are to prevent accidents and must always be perfectly legible. Whenever they are damaged or illegible it is obligatory to replace them by requesting the original part from the manufacturer;
- disconnect the electricity supply after the appliance has been used,
- before carrying out cleaning or maintenance.

ATTENTION! Whilst the machine is working it is forbidden to remove the safety protection seeing that its parts are moving. These could cause injury to hands.

 $\triangle$  In the case of fire do not use liquid extinguishing agents but only those in powder form

#### 7.1.3. Warnings for the maintenance operator

⚠ Disconnect the electricity supply before working on electrical or electronic parts or connections.

- Always use personal safety devices and other means of protection.
- Before beginning any maintenance operations make sure that the equipment has cooled down if it has just been used.
- Should one of the safety devices not work or not be set correctly the appliance must be considered out of order.

## 8. CLEANING

Cleaning should be carried out with the equipment turned off and at room temperature having taken the precaution of disconnecting the electricity supply.

Weekly maintenance can be carried out by the equipment's operator given that they observe the safety procedures set out in this manual. A simple but regular and careful clearing guarantees efficient performance and the normal functioning of this equipment.

Always use person protection gear and always use tools that are appropriate for maintenance.

Do not direct jets of water onto the equipment for clearing as these can penetrate through to and damage the electrical system with the consequent risk of electrocution and the equipment starting up unexpectedly.

On not use abrasive tools (abrasive sponges, etc.) because these will cause the stainless steel and glass parts to become opaque and will, quite quickly, remove the protective layer of aluminum coated sheet steel, at which point it will start to rust.

O Do not use detergents containing chlorine.

After the maintenance operation or repair has been carried out, reinstall all physical protection and reactivate all safety devices before putting the machine back into service.

## 8.1. Cleaning removable parts

To avoid that at some points accumulate dirt or detergent residue that may contaminate processed products, help with tools not sharp or small brushes.

It is advisable to wash the various removable parts before food residues on them dry and go hard.

Cleaning of the drawers of entry and exit should be performed every 4 hours of operation.

## 8.2. Cleaning of external parts

The crystals are particularly sensitive to sudden changes in temperature that can cause them to break into tiny fragments. Do not handle the crystals and not bring them into contact with the water until they are at room temperature.

Use a soft wet sponge with a light not abrasive detergent to clean external stainless steel or painted surfaces.

## 8.3. Cleaning the baking chambers

To access the internal components of the baking chamber, proceed as follows:

- 1. Disconnect the power supply to the oven by turning off the mains. Use the switch on the mains fuse box.
- 2. Remove the drawers at the entrance and exit of the wire mesh conveyor belt.
- 3. Remove the casing covering the conveyor belt transmission joint freeing it from its attachment with an upward movement.
- 4. Rotate the wire mesh conveyor until the drive shaft pivot corresponds with the transmission joint notch.
- 5. Slide the joint towards the control panel freeing it from the conveyor belt drive shaft.
- 6. Raise the shutters at the entrance and exit to the point of maximum aperture.
- 7. Lift the wire mesh conveyor belt from both ends and remove it in the direction of the controls.
- 8. Open the side hatch and unbolt the nuts using a number 8 spanner. Making sure to wear a pair of heavy duty gloves to avoid getting scratched from sharp metal corners and take out the diffusers.
- 9. To clean the removable parts, follow the instructions contained in paragraph 8.1. To clean inside the baking chamber, remove food deposits with a dustpan and brush or with a vacuum cleaner before cleaning the metal surfaces with a sponge wetted with water and a non abrasive or corrosive detergent, then wash these surfaces with a sponge soaked in clean water.
- 10. After cleaning the equipment reassemble all the components by following the instructions above in reverse order.

It is recommended to clean the oven after it has been in operation for more than 200 hours.

#### 9. MAINTENANCE

MARNING! These use and maintenance instructions are intended only for staff qualified for the installation and maintenance of electrical and gas equipment. Maintenance by other persons may cause damage to the equipment, persons, animals or things.

⚠ In the majority of cases it is necessary to remove the fixed guards in order to carry out repairs and checks. This also renders the voltage cables accessible.

Before carrying out any maintenance operations check that the equipment's feed cable plug is disconnected from the switchboard. Put the plug in a place where the maintenance operator can easily ascertain that it has been disconnected during all of the work done with the guards removed.

#### 9.1. Error indicator

The electronic thermo-regulator can detect various malfunctions, for details see 5.6.

## 9.2. Safety thermostat

If the chamber temperature exceeds 500°C., the safety thermostat is activated and closes the gas valve. The safety thermostat is reset manually and is at the external side of the oven electric board or on the left side of the control panel under the conveyor.

To correct the error, disconnect the plug from the electric panel, close the gas valve and wait until the chamber cools down.

Remove the right side panel of the electric board and press the red push-button on the thermostat. Reset will take place only when the chamber temperature has gone below the temperature of 500°C.

Since the safety thermostat is activated only in case of serious damages (for instance if the gas valve ON/OFF is blocked open), before starting the oven again check carefully the good working of the same and perform the required reparations.

## 9.3. Replace battery

The alarm message "BATTERY" has to be referred to the buffer battery of the electronic base board, which is over and must be replaced.

The message on the display is given together with an alarm, which intermittently sounds.

Switch off the alarm sound by pressing the key

For replacing the battery it is necessary to remove the fixed guards on the electric panel.

Before carrying out any maintenance operations check that the

main cable plug is disconnected from the power.

The battery is located in the middle of the electronic base board, see fig. 8.1; for replacing the battery, please follow carefully the steps listed below:

- switch off the oven and disconnect it from the main power;
- remove the guards of the electronic panel;
- replace the old battery with a new one;
- connect the oven to the power and switch it on;
- set the current time (see paragraph 5.4.1);
- switch off the oven again and disconnect it from the main power;
- connect the oven to the power and switch it on again.

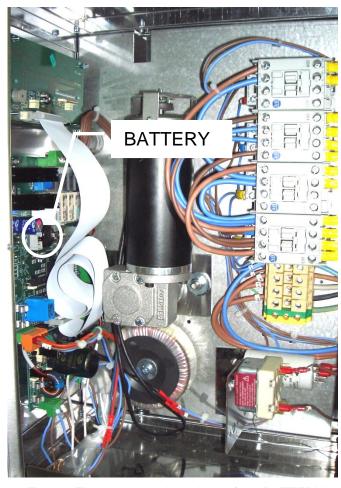


Fig. 8.1 Electronic panel, position of the BATTERY.

Now everything is ok, your battery won't give any other alarm; and you can start working.

In case the "BATTERY" alarm still remains after replacing the battery, please don't forget to set the clock of the base board (see

## paragraph 5.3.1). Then disconnect the oven from the main power and connect it again.

This operation permits to reset the base board and delete any other alarms in memory.

## 9.4. Adjustment to different gas type

Warning! The maintenance instruction contained here are for the use of qualified maintenance and service personnel only. Three steps have to be performed to have the gas conveyor oven adjusted to work with a gas type different from the one shown on the initial data label:

- 1. replacement of burner injectors.
- 2. Adjustment of minimum power.
- 3. Removal of the old data label and application of the new one.

Carefully perform all a.m. steps, as only in this way the baking oven can be considered safe.

#### 9.4.1. Replacement of burner injector

- 1. Disconnect the plug from the electric panel and close the gas cock.
- 2. Open the safety enclosure of the burner compartment.
- 3. Take down the burner after having disconnected the gas pipe and the electric wiring.
- 4. Remove the ignition and flame detection electrodes
- 5. Unscrew the burner pipes using a screwdriver.
- 6. Unscrew the injectors using a number 12 spanner, and replace them with the new ones.
- 7. Repeat the above operations in reverse, checking carefully the tightening of nozzles and of gas feeding pipes.

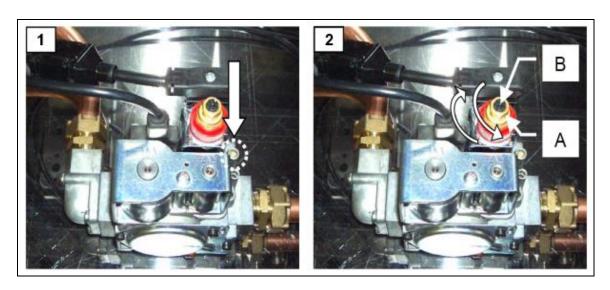


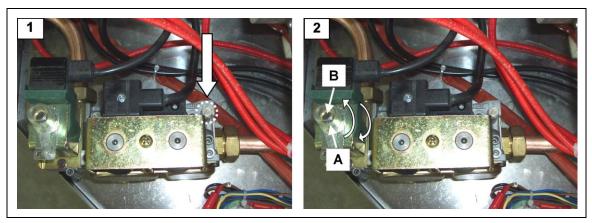




#### 9.4.2. Adjustment of minimum power

- 1. Remove the safety enclosure of the burner compartment.
- 2. Remove the sealing screws placed before and after the gas valve and connect two vertical tube manometer (Fig.1).
- 3. Turn on the oven and set temperature of 200 ° C. When the burner is lit, the flame intensity is highest, verify that the pressure indicated by pressure gauge is connected to supply provided for the adjustments made, otherwise proceed with the regulation through the hexagon A (wrench of 10, Fig.2).
- 4. Wait until the oven ports on the phase of the minimum and adjust the pressure of the minimum through the screw B (Philips screwdriver, Fig.2).





## 9.4.3. Application of new label

- 1. Remove the old label on the back of the conveyor oven and clean the area by means of a cloth dampened with petrol.
- 2. Apply the new label, showing the kind of gas pressure for which the oven has been changed (the adapting kit, with new label, instructions and nozzles, is supplied according to the gas type and pressure).

#### 10. DECOMISSIONING AND DEMOLITION

Before proceeding with the decommissioning disconnect the electrical supplies to the equipment and any other connections there may be and then move the modules using suitable means such as: forklift trucks, hoists, and so on.

The machines are made up of the following materials: stainless steel, coated steel, glass, ceramic material, rock wool and electrical parts.

For the purposes of demolition therefore the materials have to be separated in observance with the norms in force in the place where the machine is being dismantled.



Separate collection. This product must not be disposed of with normal household waste. Local RAEE regulations may provide for separate collection of this kind of product.

# SYNTHESIS 12/80 V GAS

Allegati tecnici
Technical enclosures

Anexos técnicos

Fichiers techniques joints

TECHNISCHE ANLAGEN

#### A. Caratteristiche tecniche Synthesis 12/80 V gas

A. Technical specifications Synthesis 12/80 V gas

A. Especificaciones técnicas Synthesis 12/80 V gas

ITALIANO	ENGLISH	ESPAÑOL	
Peso	Weight	Peso	345 kg
Dimensioni esterne	Overall dimensions	Dimensiones externas	1675x2180x595 mm
Larghezza rete	Conveyor width	Amplitud red	800 mm
Lunghezza rete	Conveyor length	Longitud red	2100 mm
Lunghezza camera	Chamber length	Longitud cámara	1200 mm
Capacità produttiva	Output per hour	Capacidad productiva	49-56 (150-170 pizzas/h ø 30 cm) Kg/h
Alimentazione elettrica	Electrical power	Alimentación eléctrica	<b>Monofase</b> Single-Phase Monofásica
Tensione	Voltage	Tensión	230 VAC
Frequenza	Frequency	Frecuencia	50 o 60 Hz
Corrente a 230V 50Hz	Current at 230V 50Hz	Corriente a 230V 50Hz	2 A
Potenza elettrica tot.	Total electrical power	Potencia eléctrica total	450 W
Collegamento elettrico	Electrical connection	Conexión eléctrica	Cavo bipolare senza spina - Bi-polar cable, without plague - Cable bipolar sin enchufe
Lunghezza cavo	Cable length	Longitud cable	2 m
Sezione conduttori	Wire section	Sección conductores	1.5 mm <sup>2</sup>
Tipo di bruciatore	Burner type	Tipo de quemador	<b>Aspirato</b> Aspirate Aspirado
Categoria	Type	Categoría	II <sub>2H3+</sub>

**Diametro ugello in funzione del gas e della pressione** – Injectors diameter according to gas and pressure - Diámetro inyector en función del gas y de la presión

G20 - 20 mbar	G20 - 20 mbar	G20 - 20 mbar	2,15 mm
G25 - 25 mbar	G25 - 25 mbar	G25 - 25 mbar	2,15 mm
G25 - 20 mbar	G25 - 20 mbar	G25 - 20 mbar	2,15 mm
G30 - 2830 mbar	G30 - 2830 mbar	G30 - 2830 mbar	1,20 mm
G30 - 50 mbar	G30 - 50 mbar	G30 - 50 mbar	
G31 - 3037 mbar	G31 - 3037 mbar	G31 - 3037 mbar	1,20 mm
G31 - 50 mbar	G31 - 50 mbar	G31 - 50 mbar	

#### Pressione minima all'ugello in funzione del gas e della pressione di alimentazione

Minimum pressure and injector according to gas and pressure

Presión mínima al inyector en función del gas y de la presión de alimentación

G20 - 20 mbar	G20 - 20 mbar	G20 - 20 mbar	3,2 mbar
G25 - 25 mbar	G25 - 25 mbar	G25 - 25 mbar	4,8 mbar
G25 - 20 mbar	G25 - 20 mbar	G25 - 20 mbar	4,8 mbar
G30 - 2830 mbar	G30 - 2830 mbar	G30 - 2830 mbar	9,0 mbar
G30 - 50 mbar	G30 - 50 mbar	G30 - 50 mbar	
G31 - 3037 mbar	G31 - 3037 mbar	G31 - 3037 mbar	9,0 mbar
G31 - 50 mbar	G31 - 50 mbar	G31 - 50 mbar	

#### Pressione massima all'ugello in funzione del gas e della pressione di alimentazione

Maximum pressure and injector according to gas and pressure

Presión máxima al inyector en función del gas y de la presión de alimentación

G20 - 20 mbar	G20 - 20 mbar	G20 - 20 mbar	10 mbar
G25 - 25 mbar	G25 - 25 mbar	G25 - 25 mbar	15 mbar
G25 - 20 mbar	G25 - 20 mbar	G25 - 20 mbar	15 mbar
G30 - 2830 mbar	G30 - 2830 mbar	G30 - 2830 mbar	30 mbar
G30 - 50 mbar	G30 - 50 mbar	G30 - 50 mbar	30 mbar
G31 - 3037 mbar	G31 - 3037 mbar	G31 - 3037 mbar	30 mbar

004 50 1	004 50 1	004 50 1	50 h - "
G31 - 50 mbar	G31 - 50 mbar	G31 - 50 mbar	50 mbar
Collegamento gas	Gas connection	Conexión gas	ISO 7 - (filettatura gas conica) (taper pipe thread) (rosca gas cónica)
Tubo	Ø Pipe	Tubo	1/2"
		sumption - Consumo	
Potenza massima	Nominal thermal	Potencia máxima	20 144
bruciatore	capacity	quemador	30 kW
Portata G20	Consumption G20	Portada G20	3,18 m <sup>3</sup> /h
Portata G25	Consumption G25	Portada G25	3,69 m <sup>3</sup> /h
Portata G30	Consumption G30	Portada G30	2,35 Kg/h
Portata G31	Consumption G31	Portada G31	2,33 Kg/h
Potenza minima	Reduced thermal	Potencia mínima	17 kW
bruciatore	capacity	quemador	
Portata G20	Consumption G20	Portada G20	1,80 m <sup>3</sup> /h
Portata G25	Consumption G25	Portada G25	2,09 m <sup>3</sup> /h
Portata G30	Consumption G30	Portada G30	1,33 Kg/h
Portata G31	Consumption G31	Portada G31	1,32 Kg/h
		nnection - Descarga humo	
Tipo	Туре	Tipo	A1
Ricambio d'aria	Air exchange	Recambio de aire	65 m <sup>3</sup> /h
Controllo fiamma	Flame control	Control llama	Controllo elettronico senza fiamma pilota Electronic without pilot Control electrónico sin llama piloto
Tempo di sicurezza	Safety time	Tiempo de seguridad	<5 s
Accensione fiamma	Flame ignition	Encendido llama	A scintilla - Hot surface
	r iamo igrillion	Ziredirarae marria	- A chispa
Controllo cottura	Baking control	Control cocción	Elettronico computerizzato Electronic computerized Electrónico computerizado
Unità di misura	Temperature	Unidad de medida	°C
temperatura	measuring unit	temperatura	
Massima temp. impostabile	Maximum possible temperature	Máxima temperatura configurable	320 °C
Controllo intensità fiamma	Flame power control	Control intensidad llama	Automatico o manuale Automatic or manual Automático o manual
Segnalazione errori	Errors indicator	Señalaciones errores	Mediante display e segnalazione acustica By means of display and acoustic alarm Mediante display y
	isiani ambiantali. Essi	conment Candisians and	señalación acústica
Cond		ronment - Condiciones amb	señalación acústica pientales
	i <b>zioni ambientali</b> - Envii Temperature	ronment - Condiciones amb Temperatura	señalación acústica pientales 0 – 40 °C
Cond			señalación acústica pientales

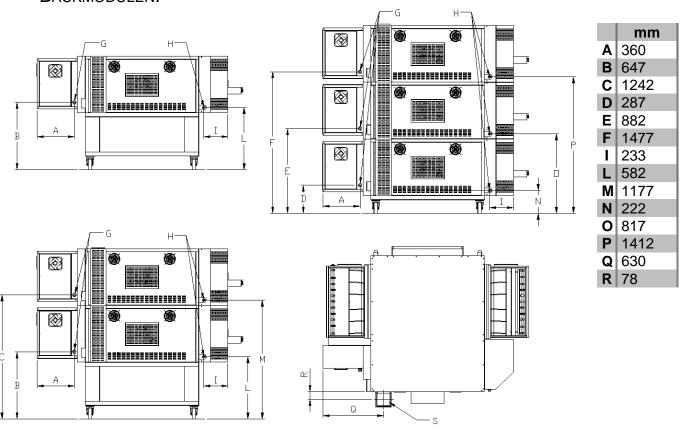
# A. Spécifications techniques Synthesis 12/80 V gas A. TECHNISCHE SPEZIFIKATIONEN SYNTHESIS 12/80 V GAS

FRANÇAIS	DEUTSCH	
Poids	GEWICHT	345 kg
Dimensions ext.	AUßENABMESSUNGEN	1675x2180x595 mm
Largeur ruban transp.	NETZBANDBREITE	800 mm
Longueur ruban transp.	NETZBANDLÄNGE	2100 mm
Longueur chambre	BACKKAMMERLÄNGE	1200 mm
Capacité productive	STUNDENLEISTUNG	49-56 (150-170 pizzas/h
Alimentation électr.	STROMVERSORGUNG	ø 30 cm) Kg/h <b>Monophase</b>
		EINPHASIG
Tension	SPANNUNG	230 VAC
Fréquence	FREQUENZ	50 o 60 Hz
Courant à 230 V 50 Hz	STROM ZU 230V 50HZ	2 A
Puissance électrique totale	ELEKTRISCHE LEISTUNG INSGESAMT	450 W
Connexion électrique	ELEKTRISCHER ANSCHLUSS	Câble bipolaire sans fiche - ZWEIPOLIGES STECKERLOSES KABEL
Longueur du câble	Kabellänge	2 m
Section conducteurs	LEITERQUERSCHNITT	1,5 mm <sup>2</sup>
Type de brûleur	BRENNERTYP	Aspiré
		ATMOSPHÄRISCH
Catégorie	KATEGORIE	<sub>2H3+</sub>
Diamètre de la	buse en fonction du gaz et de la pro	ession
Durchmesser	DER DÜSE LAUT DEM GASTYP UND DEM [	DRUCK
G20 - 20 mbar	G20 - 20 mbar	2,15 mm
G25 - 25 mbar	G25 - 25 mbar	2,15 mm
G25 - 20 mbar	G25 - 20 mbar	2,15 mm
G30 - 2830 mbar	G30 - 2830 mbar	1,20 mm
G30 - 50 mbar G31 - 3037 mbar G31 - 50 mbar	G30 - 50 mbar G31 - 3037 mbar G31 - 50 mbar	1,20 mm
	se en fonction du gaz et de la press	ion d'alimentation
	ÜSE LAUT DEM GASTYP UND DEM VERSC	
G20 - 20 mbar	G20 - 20 mbar	3,2 mbar
G25 - 25 mbar	G25 - 25 mbar	4,8 mbar
G25 - 20 mbar	G25 - 20 mbar	4,8 mbar
G30 - 2830 mbar	G30 - 2830 mbar	9,0 mbar
G30 - 50 mbar G31 - 3037 mbar	G30 - 50 mbar G31 - 3037 mbar	9,0 mbar
G31 - 50 mbar	G31 - 50 mbar	0,0111001
	se en fonction du gaz et de la press	ion d'alimentation
	DÜSE LAUT DEM GASTYP UND DEM VERSC	
G20 - 20 mbar	G20 - 20 mbar	10 mbar
G25 - 25 mbar	G25 - 25 mbar	15 mbar
G25 - 20 mbar	G25 - 20 mbar	15 mbar
G30 - 2830 mbar	G30 - 2830 mbar	30 mbar
G30 - 50 mbar	G30 - 50 mbar	30 mbar
G31 - 3037 mbar	G30 - 30 mbar G31 - 3037 mbar	30 mbar
G31 - 50 mbar	G31 - 5057 Ilibal	50 mbar
GS1 - 30 IIIDAI	OST - SU IIIDAI	ISO 7 –
Connexion gaz	Gasanschluss	(filettatura gas conica) (KONISCHES GASGEWINDE)
Tube	Rohr	1/2"
TUNG	ROIN	1/2

	Consommation - VERBRAUCH	00 1147				
Puissance maximale brûleur	MAXIMALE BRENNERLEISTUNG	30 kW				
Portata G20	CONSUMPTION G20	3,18 m <sup>3</sup> /h				
Portata G25	CONSUMPTION G25	3,69 m <sup>3</sup> /h				
Portata G30	CONSUMPTION G30	2,35 Kg/h				
Portata G31	CONSUMPTION G31	2,33 Kg/h				
Puissance minimale brûleur	MINIMALE BRENNERLEISTUNG	17 kW				
Portata G20	CONSUMPTION G20	1,80 m <sup>3</sup> /h				
Portata G25	CONSUMPTION G25	2,09 m <sup>3</sup> /h				
Portata G30	CONSUMPTION G30	1,33 Kg/h				
Portata G31	CONSUMPTION G31	1,32 Kg/h				
Éva	cuation fumées - RAUCHAUSLASS					
Туре	ТҮР	A1				
Aération	LUFTWECHSEL	65 m <sup>3</sup> /h				
Contrôle flamme	FLAMMENKONTROLLE	Contrôle électronique sans flamme pilote ELEKTRONISCHE KONTROLLE OHNE PILOTFLAMME				
Temps de sécurité	SICHERHEITSZEIT	<5 s				
Allumage flamme	FLAMMENZÜNDUNG	<b>À étincelle</b> - Mittels Funken				
Contrôle cuisson	BACKKONTROLLE	Électronique informatisé ELEKTRONISCH COMPUTERISIERT				
Unité de mesure température	TEMPERATUR-MAßEINHEIT	°C				
Température max. programmable	MAXIMAL EINSTELLBARE TEMPERATUR	320 °C				
Contrôle intensité de la flamme	KONTROLLE DER FLAMMENINTENSITÄT	Automatique ou manuel AUTOMATISCH ODER MANUELL				
Signalisation d'erreur	FEHLERMELDUNG	Grâce au display et signal acoustique MITTELS DISPLAY UND SIGNALTON				
	Conditions ambiantes - UMGEBUNGSBEDINGUNGEN					
T						
Température	s ambiantes - UMGEBUNGSBEDINGUNG TEMPERATUR	0 – 40 °C				
Humidité maximale						

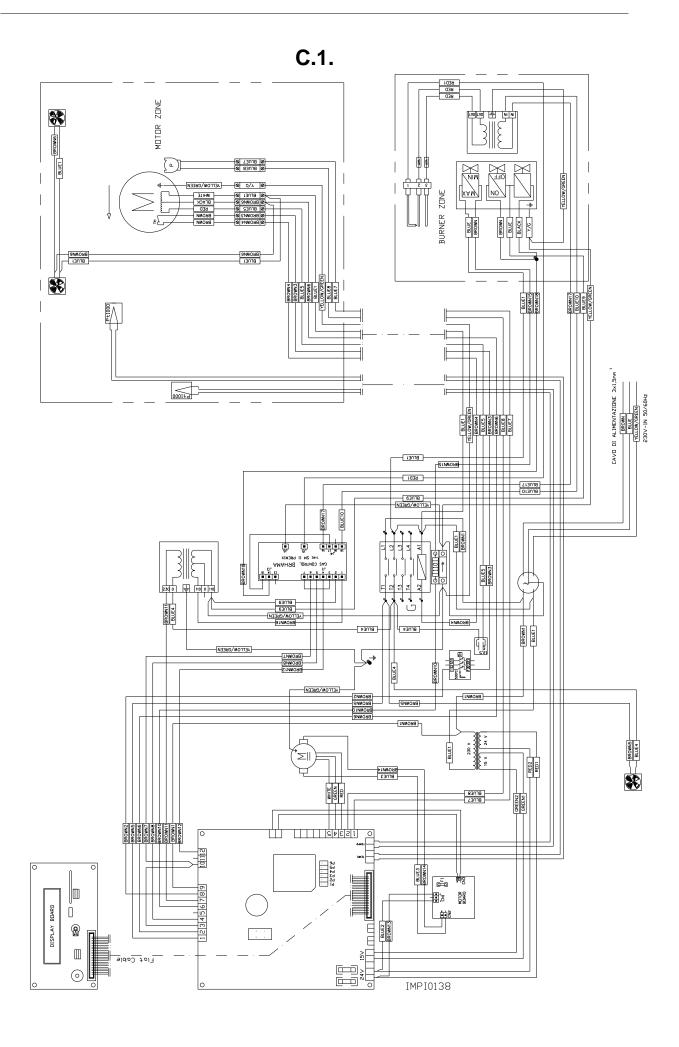
# B. Allacciamenti alimentazione elettrica, alimentazione gas e scarico fumi per un modulo di cottura e per la sovrapposizione di massimo tre moduli di cottura

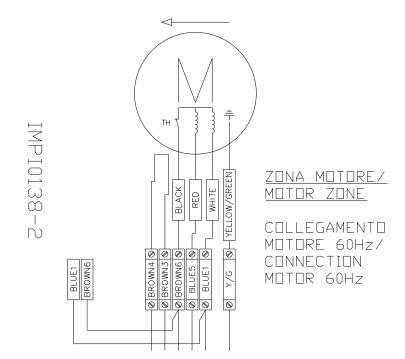
- B. Connections for electrical and gas supply, exhaust for a single cooking unit and a maximum of three cooking units stacked one on top of another
- B. Conexiones alimentación eléctrica, alimentación gas y descarga humos para un módulo de cocción y para la sobreposición máxima de tres módulos de cocción
- B. Branchements alimentation électrique, alimentation à gaz et évacuation des fumées pour un module de cuisson et pour la superposition de trois modules de cuisson maximum
- B. Stromanschluß, Gasanschluß und Rauchgasabzuganschluß für ein Backmodul und das Übereinanderlegen für von höchstens drei Backmodulen.



G	Ingresso alimentazione elettrica	Entry point for power supply	Ingreso alimentación eléctrica	Entrée alimentation électrique	EINGABE STROMSPEISUNG
н	Ingresso alimentazione gas	Entry point for gas	Ingreso alimentación gas	Entrée alimentation gaz	EINGABE GASSPEISUNG
S	Scarico fumi combustione	Combustion fumes exhaust	Descarga humos combustión	Évacuation des fumées de combustion	RAUCHGASABZUG

- C.1. Schema elettrico Synthesis 12/80 V gas (230 Vac. ~ 1+N 50-60Hz)
- C.2. Collegamento del motore in 60Hz
- C.1. Wiring diagram Synthesis 12/80 V gas (230 Vac. ~ 1+N 50-60Hz)
- C.2. Connection of motor in 60Hz
- C.1. Squema eléctrico Synthesis 12/80 V gas (230 Vac. ~ 1+N 50-60Hz)
- C.2. Conexión del motor en 60 Hz
- C.1. Schéma électrique Synthesis 12/80 V gas (230 Vac. ~ 1+N 50-60Hz)
- C.2. Connexion du moteur à 60 Hz
- C.1. SCHALTPLAN SYNTHESIS 12/80 V GAS (230 Vac. ~ 1+N 50-60Hz)
- C.2. ANSCHLUSS DER MOTOR IN 60 HZ





#### D. DISEGNI ESPLOSI ED ELENCO PARTI DI RICAMBIO

Per interventi complessi e nel caso di rotture vi preghiamo di contattarci. Comunque, allo scopo di semplificare la ricerca dei guasti e l'eventuale sostituzione delle parti danneggiate, diamo di seguito una lista delle parti di ricambio, i disegni esplosi e figure con i riferimenti a ciascuna delle parti elencate.

#### D. EXPLODED VIEWS AND LIST OF SPARE PARTS

For complicated maintenance works and in case of breakages we kindly ask you to contact us.

However, in order to simplify troubleshooting and possible replacement of damaged parts, we give below a list of spare parts, exploded drawings and figures with references to each party listed.

#### D. DIBUJOS TÉCNICOS Y LISTA DE REPUESTOS

Para interventos más complicados y en caso de rupturas, les rogamos contactarnos. En todo caso, con el fin de simplificar la búsqueda de las averías y la eventual sustitución de piezas dañadas, damos a continuación una lista de repuestos, los dibujos técnicos y figuras referentes a cada una de las piezas elencadas.

#### D. Dessins d'ensemble et liste des pièces de rechange

Nous vous prions de nous contacter en cas d'interventions plus complexes ou de ruptures. Toutefois, afin de simplifier la recherche des avaries et l'éventuelle substitution de pièces endommagées, vous trouverez ci-dessous une liste des pièces de rechange, les dessins d'ensemble et les figures avec les références de toutes les pièces indiquées.

#### D. EXPLOSIONSZEICHNUNGEN UND ERSATZTEILLISTE

BITTE SETZEN SIE SICH BEI UMFANGREICHEREN EINGRIFFEN BZW. BEI BRÜCHEN MIT UNS IN VERBINDUNG. UM DIE STÖRUNGSSUCHE UND DAS AUSWECHSELN VON EVENTUELL BESCHÄDIGTEN TEILEN ZU ERLEICHTERN, FÜHREN WIR NACHSTEHEND EINE ERSATZTEILLISTE UND DIE EXPLOSIONSZEICHNUNGEN MIT DEN BEZÜGEN DER AUFGEFÜHRTEN TEILE AUF.

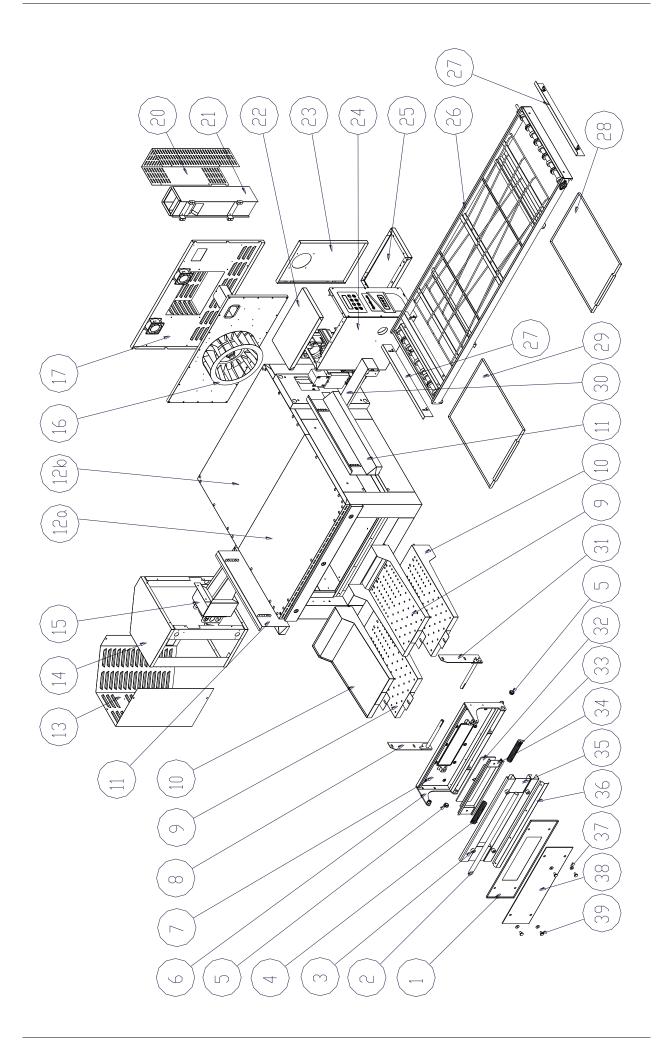
### Tabella codici di riferimento componenti di carpenteria List of spare component parts Tabla códigos de referencia componentes de carpintería

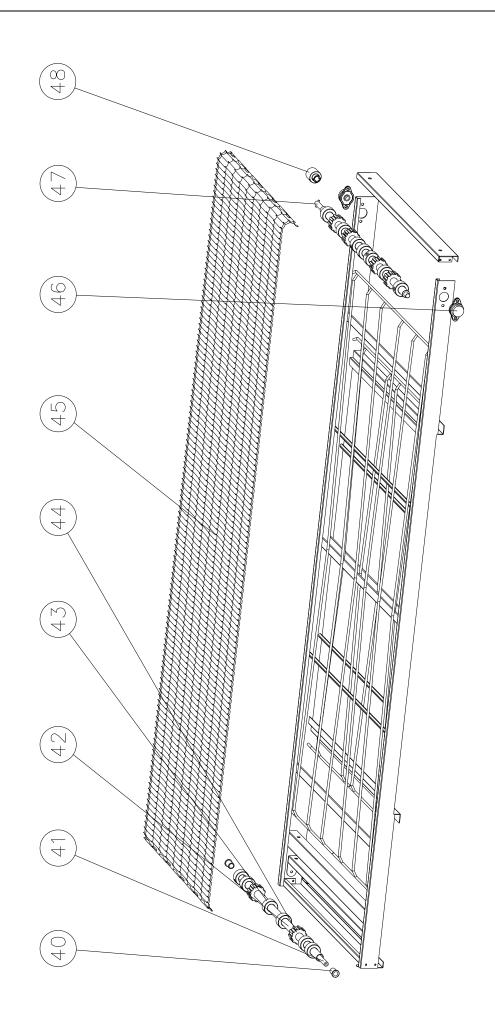
		jos de referencia compone		
	DESCRIZIONE	DESCRIPTION	DENOMINACIÓN	
1	Telaio vetro esterno	Door external glass frame	Telar vidrio externo	CARP1909
	porta	-	puerta	
2	Maniglia porta	Door handle	Manilla puerta	MANI0057
3	Giunto supporto vetro	Coupling for external glass	Junta soporte vidrio	CARP1870
	esterno	support	externo	
4	Molla sx	Left door spring	Resorte sx	SPRI0009
5	Boccola porta	Door bush	Buje puerta	BOCC0006
6	Telaio portina	Door frame	Telar puerta	PORT0224
7	Porta interna	Internal door	Puerta interior	PORT0062
8	Staffa porta sx	Left staff	Abrazadera puerta sx	SUPP0394
9	Diffusore superiore dx /	Upper diffuser dx / Lower sx	Difusor superior dx /	CARP1757
	inferiore sx	opper amager ax, zerrer ex	inferior sx	<b>6</b> , 1161
10	Diffusore inferiore dx /	Lower diffuser dx / Upper sx	Difusor inferior dx /	CARP1758
	superiore sx		superior sx	
11	Paratoia	Cofferdam	Compuerta	CARP1766
12a		Oven top	Cielo horno	FIAN0442
12b		Oven top	Cielo horno	FIAN0443
13	Pannello carter	Panel burner housing	Tapa cárter quemador	PANN0349
	bruciatore	ŭ		
14		Carter burner	Cárter quemador	CART0251
15	Camera combustione	Combustion chamber	Cámara combustión	CARP1756
16	Ventola primaria	Fan primary	Ventilador primario	VENT0028
17	Pannello posteriore	Rear Panel	Panel posterior	PANN0347
20	Protezione camino	Fire protection	Protección chimenea	CARP1765
21	Camino	Fireplace	Chimenea	TUBO0181
22	Cielo carter comandi	Sky carter commands	Cielo cárter comandos	CART0131
23	Pannello chiusura	Command Panel carter	Panell cierre cárter	CART0134
- 1	carter comandi		comandos	
24	Fascia carter comandi	Carter commands	Banda cárter comandos	CART0130
25	Base carter comandi	Base carter commands	Base cárter comandos	CART0132
26	Bancale rete	Pallet Conveyor	Bancada red	CARP1770
27	Fermo registrabile	Stop Recording	Afianzador registrable	CARP1775
28	Teglia telaio rete uscita	Baking tin frame conveyor exit	Bandeja telar red salida	CARP1774
29	Teglia telaio rete	Baking tin frame conveyor input	Bandeja telar red ingreso	CARP1774
20	ingresso	Coveriginat	Duata asián irrata mad	CADD4770
30	Protezione giunto rete	Coverjoint	Protección junta red	CARP1773
31	Staffa porta dx	Right staff	Abrazadera puerta dx	SUPP0393
32	-	Glass door	Cristal puerta Resorte dx	CRIS0025
33	Molla dx	Right door spring Door holder		SPRI0010
34	Ferma vetro porta	External door	Tope vidrio puerta Puerta externa	CARP0110
35 36	Porta esterna	Door spring cover		PORT0402 PORT0065
37	Copri molla porta Rondella gomma vetro	Rubber washer for external	Protección resorte puerta	POK 10003
31	esterno		Arandela goma vidrio externo	ROND0023
38		glass Door external glass		CRIS0077
39	Vetro esterno porta	Door external glass	Vidrio externo puerta	CKISUUI I
39	Vite supporto vetro esterno	Screw for external glass	Tornillo soporte vidrio externo	CARP1871
40	Boccola albero folle	support Bush		BOCC0013
40	Perno albero folle	Idle shaft	Buje árbol vacío Árbol vacío interior	MECC0634
41				
42	Tubo tendi rete	Tube tend Conveyor	Árbol vacío exterior	MECC0635

43	Distanziale rete	Spacer Conveyor	Distanciador red	MECC0520
44 Ruota rete		Rotate Conveyor	Rueda red	MECC0519
45	Rete	Conveyor	Red	RETE0018
46	Cuscinetto rete	Conveyor bearing	Cojinete red	CUSC0022
47	Albero traino rete	Conveyor driving shaft	Árbol arrastre red	MECC0682
48	Giunto traino rete	Conveyor Joint hub	Junta arrastre red	MECC0114

## Table codes de référence composants de charpenterie METALLBESTANDTEILE - KODENTABELLE

	_	DECCUPEDING	
_	DÉSIGNATION	BESCHREIBUNG	04554000
1	Structure vitre externe porte	AUßENGLASRAHMEN TÜR	CARP1909
2	Poignée porte	TÜRGRIFF	MANI0057
3	Joint support vitre externe	VERBINDUNGSSTÜCK AUßENGLASSCHEIBE	CARP1870
4	Ressort gauche	LINKE FEDER	SPRI0009
5	Raccord porte	TÜRBÜCHSE	BOCC0006
6	Structure porte	TÜRRAHMEN	PORT0224
7	Porte interne	TÜRINNENSEITE	PORT0062
8	Etrier porte gauche	LINKER TÜRHALTER	SUPP0394
9	Diffuseur sup. droit / inf. gauche	VERTEILER OBEN RECHTS / UNTEN LINKS	CARP1757
10	Diffuseur inf. droit / sup. gauche	VERTEILER UNTEN RECHTS / OBEN LINKS	CARP1758
11	Vanne	PLATTE	CARP1766
12a	Voûte four	OFENDECKE	FIAN0442
12b		OFENDECKE	FIAN0443
13	Fermeture carter brûleur	DECKE BRENNERSCHUTZVORRICHTUNG	PANN0349
14	Carter brûleur	Brennerschutzvorrichtung	CART0251
15	Chambre de combustion	Brennkammer	CARP1756
16	Ventilateur primaire	HAUPTVENTILATOR	VENT0028
17	Panneau postérieur	HINTERE PLATTE	PANN0347
20	Protection cheminée	SCHORNSTEINSCHUTZVORRICHTUNG	CARP1765
21	Cheminée	SCHORNSTEIN	TUBO0181
22	Voûte carter des commandes	DECKEL ABDECKUNG	CART0131
22	Voute carter des commandes	SCHALTUNGSVORRICHTUNG	CARTOTST
23	Panneau fermeture carter	ABDECKUNGSPLATTE	CART0134
25	commandes	SCHALTUNGSVORRICHTUNG	OAKTO134
24	Partie carter des commandes	ABDECKUNGSPLATTE	CART0130
	Tartio dartor dos communados	SCHALTUNGSVORRICHTUNG	O/ (( ( ) 0 ) 0 0
25	Base carter des commandes	GRUNDPLATTE ABDECKUNG	CART0132
26	Compart without transportation	SCHALTUNGSVORRICHTUNG	CARP1770
26	Support ruban transporteur	NETZBANDRAHMEN EINSTELLBARER HALTER	
27	Butée réglable		CARP1775 CARP1774
28 29	Plat structure ruban transp. sortie	BACKBLECH NETZBANDRAHMEN - AUSLAUF BACKBLECH NETZBANDRAHMEN - EINLAUF	CARP1774
30	Plat structure ruban transp. Entrée	SCHUTZABDECKUNG NETZBANDKUPPLUNG	
	Protection joint réseau Etrier porte droite	RECHTER TÜRHALTER	CARP1773 SUPP0393
31 32		TÜRGLAS	CRIS0025
33	Verre porte Ressort droit	RECHTE FEDER	SPRI0010
34	Parclose porte	GLASHALTER TÜR	CARP0110
35	Porte externe	AUßentür	PORT0402
36		TÜRFEDERABDECKUNG	PORT0402
	Couvre ressort porte Rondelle en caoutchouc vitre	I ONFEDERABDECKUNG	F OK 10005
37	externe	GUMMIUNTERLEGSCHEIBE AUßENGLAS	ROND0023
38	Vitre externe porte	AUßENGLAS TÜR	CRIS0077
39	Vis support vitre externe	STÜTZSCHRAUBE AUßENGLAS	CARP1871
40	fourreau pignon fou	BUCHSE LEERLAUFWELLE	BOCC0013
41	Pignon fou interne	INNERE LEERLAUFWELLE	MECC0634
41	Pignon fou externe	ÄUßERE LEERLAUFWELLE	MECC0634
42	Entretoise ruban transporteur	DISTANZSTÜCK NETZBAND	MECC0535
44	Roue ruban transporteur	NETZBANDRAD	MECC0520
44	-	NETZBANDRAD NETZBAND	RETE0018
45	Ruban transporteur	LAGER NETZBAND	CUSC0022
40	Coussinet ruban transporteur	LAGER INETZBAND	00300022
47	Arbre tendeur du ruban	Antriebswelle	MECC0682
	transporteur Joint de traction ruban		
48		NETZBANDANTRIEBSKUPPLUNG	MECC0114
	transporteur		



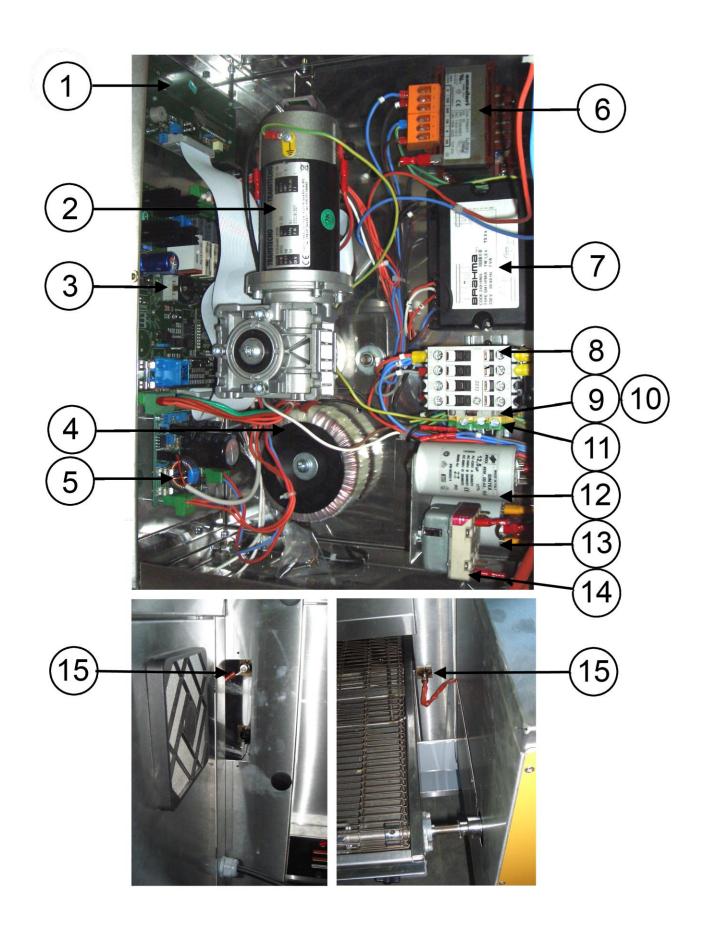


#### Tabella codici di riferimento componenti elettrici List of electrical components parts Tabla códigos de referencia componentes eléctricos

	DESCRIZIONE	DESCRIPTION	DENOMINACIÓN	
1	Scheda display	Display Card	Cédula display	ELET0673
2	Motore rete (Transtecno) Motore rete (Automec)	Conveyor motor (Transtecno) Conveyor motor (Automec)	Motor red (Transtecno) Motor red (Automec)	MOTO0052 MOTO0004
3	Scheda base	Base board	Cédula base	ELET0676
4	Trasformatore toroidale per scheda base	Toroidal Transformer for Display Card	Trasformador toroidal para cédula base	ELET0156
5	Scheda elettronica rete	Electronic board Conveyor	Cédula electrónica red	ELET0213
6	Trasformatore di isolamento	Transformer	Trasformador de aislamiento	ELET0003
7	Centralina accensione gas	Flame control	Centralina encendido gas	ELET0134
8	Teleruttore 20A	Contactor 20A	Telerruptor 20A	ELET0480
9	Morsetto portafusibile 4 mm <sup>2</sup>	Fuse terminal 4 mm <sup>2</sup>	Borne portafusible 4 mm <sup>2</sup>	ELET0440
10	Fusibile	Fuse	Fusible	ELET0204
11	Morsetto di terra 10 mm <sup>2</sup>	Earth terminal 10 mm <sup>2</sup>	Borne de tierra 10 mm <sup>2</sup>	ELET0462
12	Condensatore motore vent.	Condenser fan motor	Condensa motor vent.	ELET0350
13	Soppressore disturbi	Noise suppressor	Supresor disturbios	ELET0142
14	Termostato di sicurezza	Safety Thermostat	Termostato de seguridad	TERM0005
15	Sonda PT1000	Thermocouple PT1000	Sonda PT1000	TERM0049
16	Ventola raffreddamento	Fan cooling	Ventilador enfriamiento	VENT0012
17	Griglia protezione ventola raff.	Grid Security fan cooling	Reja protección vent.enfriam	VENT0013
18	Ventola raffreddamento	Fan cooling	Ventilador enfriamiento	VENT0012
19	Motore ventilazione (50Hz) Motore ventilazione (60Hz)	Fan motor (50 Hz) Fan motor (60 Hz)	Motor ventilación (50Hz) Motor ventilación (60Hz)	MOTO0030 MOTO0076
20	Pressostato + Supporto	Thrust meter + Holder	Presostato + Soporte	ELET0641 + SUPP0414
	Pressostato (Honeywell)	Thrust meter	Presostato (Honeywell)	ELET0130
21	Pulsantiera	Push button	Botonera	ELET0656
22	Pannello serigrafato	Serigraph Panel	Panel serigrafiado	PANN0468
23	Filtro ventola raffreddamento	Filter fan cooling	Filtro ventil. enfriamiento	FLTR0003

### Tableau des codes de référence composants électriques Tabelle Bezugsartikelnummern elektrischen Komponente

	DÉSIGNATION	BESCHREIBUNG	
1	Carte display	DISPLAYKARTE	ELET0673
2	Moteur ruban transporteur (Transtecno Moteur ruban transporteur (Automec)	NETZBANDMOTOR (TRANSTECNO) NETZBANDMOTOR (AUTOMEC)	MOTO0052 MOTO0004
3	Carte base	GRUNDELEKTRONIKKARTE	ELET0676
4	Transformateur toroïdal pour carte base	RINGKERNTRANSFORMATOR FÜR BASISKARTE	ELET0156
5	Carte électronique ruban tranp	ELEKTRONIKKARTE NETZBAND	ELET0213
6	Transformateur d'isolement	ISOLIERUNGSTRANFORMATOR	ELET0003
7	Centrale allumage gaz	STEUERUNG GASZÜNDUNG	ELET0134
8	Télérupteur 20A	FERNSCHALTER 20A	ELET0480
9	Borne porte fusible 4 mm <sup>2</sup>	KLEMME SICHERUNGSHALTER 4 MM <sup>2</sup>	ELET0440
10	Fusible	SICHERUNG	ELET0204
11	Borne de terre 10 mm²	ERDEKLEMME 10 MM <sup>2</sup>	ELET0462
12	Condensateur moteur vent.	KONDENSATOR VENTILATORMOTOR	ELET0350
13	Filtre antiparasite	STÖRUNGSDÄMPER	ELET0142
14	Thermostat de sécurité	SICHERHEITSTHERMOSTAT	TERM0005
15	Sonde PT1000	SONDE PT1000	TERM0049
16	Hélice de refroidissement	KÜHLVENTILATOR	VENT0012
17	Grille protection hélice de refroidissement	SCHUTZGITTER KÜHLVENTILATOR	VENT0013
18	Hélice de refroidissement	KÜHLVENTILATOR	VENT0012
19	Moteur ventilation (50 Hz)	VENTILATORMOTOR (50 Hz)	MOTO0030
	Moteur ventilation (60 Hz)	VENTILATORMOTOR (60 Hz)	MOTO0076
20	Pressostat + Support	DRUCKSCHALTER + STÄNDER	ELET0641 + SUPP0414
	Pressostat (Honeywell)	DRUCKSCHALTER (HONEYWELL)	ELET0130
21	Tableau	DRUCKTASTENTAFEL	ELET0656
22	Panneau sérigraphé	SIEBBEDRUCKTE TAFEL	PANN0468
23	Filtre hélice de refroidissement	FILTER KÜHLVENTILATOR	FLTR0003





# Tabella codici di riferimento gruppo bruciatore List of group burners components parts Tabla códigos de referencia componentes gupo quemador

	DESCRIZIONE	DESCRIPTION	DENOMINACIÓN	
1	Trasformatore per centralina gas	Transformer for gas unit	Trasformador para centralina gas	ELET0135
2	Cavo elettrodo rilevazione fiamma (1)	Wire for ignition electrode (1)	Cable electrodo relevación llama (1)	CAVI0059
3	Elettrodo rilevazione fiamma (1)	Ignition electrode (1)	Electrodo relevación llama (1)	ELET0410
4	Supporto bruciatore	Nozzle pipe support	Soporte quemador	BGAS0054
5	Elettrodo accensione fiamma (3)	Flame electrode (3)	Electrodo encendido llama(3)	ELET0412
6	Elettrodo accensione iamma (2)		Electrodo encendido llama (2)	ELET0411
7	Cavo elettrodo accensione fiamma	Wire for flame electrode	Cable electrodo encendido llama	CAVI0057
8	Torcia completa METANO - GPL	Complete nozzle pipe METHANE - GPL	Antorcha completa METANO - GPL	CARP0357
9	Connettore bobina modulante per elettrovalvola (50Hz)	Modulating coil connector for solenoid valve (50 Hz)	Conectador para bobina moduladora de electroválvula (50 Hz)	ELET0075
10	Connettore bobina per elettrovalvola (50Hz)	Coil connector for solenoid valve (50Hz)	Conectador para bobina de electroválvula (50Hz)	ELET0076
11	Elettrovalvola (50Hz)	Gas valve (50 Hz)	Electroválvula (50 Hz)	GASI0007
12	Elettrovalvola (60Hz)	Gas valve (60 Hz)	Electroválvula (60 Hz)	GASI0002
13	Connettore bobina per elettrovalvola (60Hz)	Coil connector for solenoid valve (60Hz)	Conectador para bobina de electroválvula (60Hz)	ELET0075
14	Connettore bobina modulante per elettrovalvola (60Hz)	Modulating coil connector for solenoid valve (60Hz)	Conectador para bobina moduladora de electroválvula (60 Hz)	ELET0076

### Tableau des codes de référence composants groupe brûleur Brenner - Kodentabelle

	DÉSIGNATION	BESCHREIBUNG	
1	Transformateur pour centrale gaz	TRANSFORMATOR GASSTEUERVORRICHTUNG	ELET0135
2	Câble électrode détection flamme (1)	KABEL ELEKTRODE FLAMMENDETEKTION (1)	CAVI0059
3	Électrode détection de la flamme (1)	ELEKTRODE FLAMMENZÜNDUNG (1)	ELET0410
4	Support brûleur	BRENNERHALTER	BGAS0054
5	Électrode allumage de la flamme (3)	ELEKTRODE FLAMMENZÜNDUNG (3)	ELET0412
6	Électrode allumage de la flamme (2)	ELEKTRODE FLAMMENZÜNDUNG (2)	ELET0411
7	Câble électrode allumage flamme	KABEL ELEKTRODE FLAMMENZÜNDUNG	CAVI0057
8	Torche complète MÉTHANE - GPL	KOMPLETTE FACKEL METHANGAS- LPG	CARP0357
9	Connecteur bobine de modulation pour électrovanne (50 Hz)	VERBINDER FÜR MODULATIONSSPULE DES GASVENTILS (50 HZ)	ELET0075
10	Connecteur bobine pour électrovanne (50 Hz)	VERBINDER FÜR GASVENTILSSPULE (50 Hz)	ELET0076
11	Électrovalve (50 Hz)	ELEKTROVENTIL (50 Hz)	GASI0007
12	Électrovalve (60 Hz)	ELEKTROVENTIL (60 Hz)	GASI0002
13	Connecteur bobine pour électrovanne (60 Hz)	VERBINDER FÜR GASVENTILSSPULE (60 Hz)	ELET0075
14	Connecteur bobine de modulation pour électrovanne (60 Hz)	VERBINDER FÜR MODULATIONSSPULE DES GASVENTILS (60 Hz)	ELET0076

