

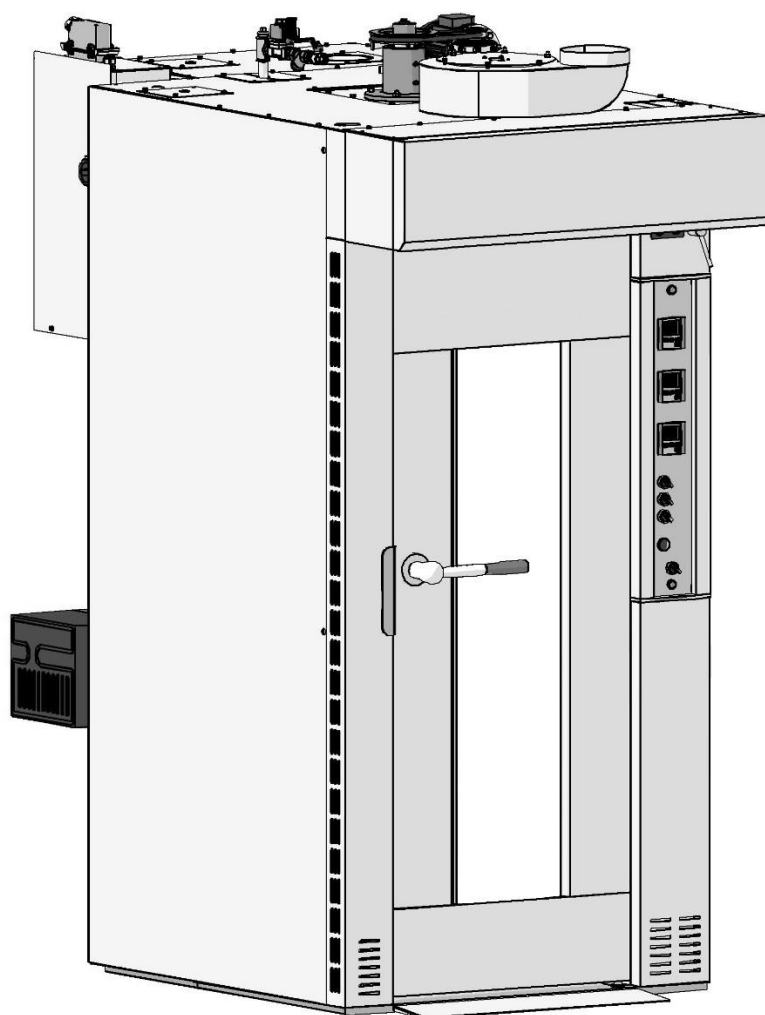
09/2018

Mod: FRM/4G-L

Production code: ROTOR WIND 4G-L



Diamond
catering equipment



ROTOR WIND 3GL-4GL-5GL

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Manual for installation, use and maintenance



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TECHNICAL ANNEXES

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

1. PRESENTATION

This manual refers to the following Rotor Wind cooking unit models:

- 3E	- 4EL	- 5EL
- ---	- 4EF	- 5EF
- 3GL	- 4GL	- 5GL
- 3GF	- 4GF	- 5GF

The manufacturer would like to thank you for the preference expressed in your purchasing this product. We can confidently assure you that it is a good choice. Our company has been committed to the manufacture of quality products for many years. We do not believe in making compromises and use the best possible materials.

1.1. Use of Symbols



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



This symbol applied to various points on the oven, serves to warn the user of danger: **“CAUTION, HOT SURFACES!”**.



Risk of burns: While handling hot racks and trays, use protective gloves. Also open and close oven door with protective gloves. The glass door is provided with a well visible sign making this procedure mandatory.



This symbol, applied to various points on the oven, serves to warn the user of the presence of a non-insulated “high voltage hazard” inside the oven’s casing, where there is enough power to constitute a fire risk or to electrocute a person.

We recommend:

 This manual consists of several chapters. They must be read in their entirety by both installers and service personnel as well as by the end user, to make sure that the equipment is **used safely** and to get the best results from the product.

 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 code and the manual version number shown on the back cover. In the event that this copy is lost or destroyed, you can order another copy using the above details.

The technical annexes contain features related to the specific oven model 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 its intended use is in line with the way the machine has been designed to operate 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, an exploded view of equipment and a list of spare parts, to facilitate ordering and replacing any damaged parts.

 The Manufacturer reserves the right to update production and instruction manuals without having to update the previous production and instruction manuals, if not under exceptional circumstances.

2. TECHNICAL SPECIFICATIONS

2.1. Identifying the product

This manual refers to the following Rotor Wind cooking units, models:

- 3E	- 4EL	- 5EL
- ---	- 4EF	- 5EF
- 3GL	- 4GL	- 5GL
- 3GF	- 4GF	- 5GF

2.2. Conformity to European Directives

The Rotor Wind cooking units, bear the following obligatory marking:

CE Guaranteeing their conformity to the following European directives

2014/30/CE electromagnetic compatibility directive;

2014/35/CE low current directive;

2006/42/CE machines directive;

(UE) 2016/426 (GAR) Gas Regulation;

1935/2004/CE Regulation for Equipment intended to come into Contact with Foodstuffs.

2.3. Intended use

The rotative convection oven has been designed to be used in the bakery and pasta industry and workshops to bake compounds made with flour of wheat and/or other cereals, water and other additives for human nutrition.



Compounds used for baking should not cause or release explosive and/or flammable mixtures.

No other use of the oven is allowed unless for its original application. Any other use must be approved in writing by the manufacturer. The manufacturer waives any and all liabilities for damages caused by improper and unskilled use, such as:

- Use of the oven for baking non-food products
- Improper use of the machine by untrained staff
- Unauthorized modifications or interventions
- Use of non original spare parts or not fitting the model
- Failure to respect instructions (also in part).
- Lack of maintenance

Normal use operations are opening and closing the doors, loading and unloading the products on the tray trolley, inserting and extracting the tray trolley in the cooking chamber and turning on, adjusting, shutting down and cleaning the equipment.

2.4. Technical specifications

To locate information plate see Annex B.

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

3. INSTALLATION

 **ATTENTION!** These installation instructions are for the exclusive use of personnel qualified in the installation and maintenance of electrical and gas equipment. Installation by unqualified persons could cause damage to the oven, to people, animals or property.

In addition, where modifications or adaptations need to be made to the electrical systems in the building where the machine will be installed, whoever carries out such modifications must certify that the work has been undertaken according to current regulations in the country where it is installed.

 **The machine as supplied must not be stacked on other ovens or goods unless a special support and/or shelter has been installed in order to avoid any deformation.**

Temperature in the storage area should range from -5°C and +60°C.

Humidity caused by weather conditions should in no case generate condensation.

The machine and its parts should never been exposed to the bad weather conditions.

3.1. Checking upon delivery

Unless otherwise agreed, the products are carefully bubble wrapped in a robust wooden structure to protect against knocks and humidity during transport, and are delivered to the carrier in the best condition.

We recommend, however, that you check the packaging on arrival for any signs of damage. If there is damage, 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 disassembled parts are present.

The components that cannot be pre/installed are stocked in the cooking chamber. The table below lists the above mentioned components:

- Vapour extractor
- Flue cover
- Rack inlet chute
- Instruction manual
- Pair of gloves for putting the product into the oven

- Suction hood
- Water inlet unit
- For GAS ovens:
 - Gas ramp;
 - Burner instruction manual (burner supplier).

In the event of damage to the equipment and/or missing parts, bear in mind that the carrier 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.**

3.2. Choosing a place for installation

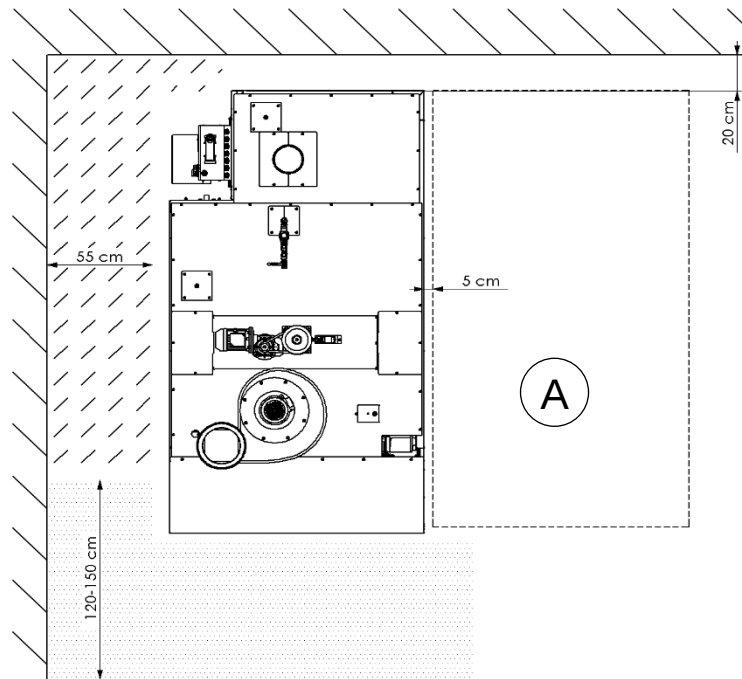
The appliance's effective, safe and long lasting operation also depends on the position in which it is installed. For this reason, it is advisable to carefully consider where to install the equipment before it is delivered. The instructions given by the manufacturer for a correct installation do not include the qualification of the oven installation area and/or nearby areas. This is the reason why it is recommended to consult a professional technician in order to comply with the local laws and/or regulations in force. Installation areas must be provided with openings large enough to allow the passage of the bulkiest parts of the machine (see the technical specs and data).

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

Once defined the oven positioning, the base (floor) must be smooth, flat, heat resistant and leveled to the surrounding area. It must also be suitable to support the weight of the machine.

It is important to preserve a free surface area of at least 55cms. all around the oven to allow burner interventions and installation of the panelling.

Other machines, if any (A).



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

For the vapours discharge see paragraph 3.7.

For the exhaust produced by combustion (only for combustion ovens) see 3.8.

 A check must be made to ensure that the temperature and relative humidity never exceed the maximum and minimum values indicated in the specifications (see Annex A) even when the oven itself or other ovens in the room are functioning.

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

 **The manufacturer cannot answer for damage caused by ignoring these abovementioned norms regarding the equipment's proper installation.**

3.2.1. 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.

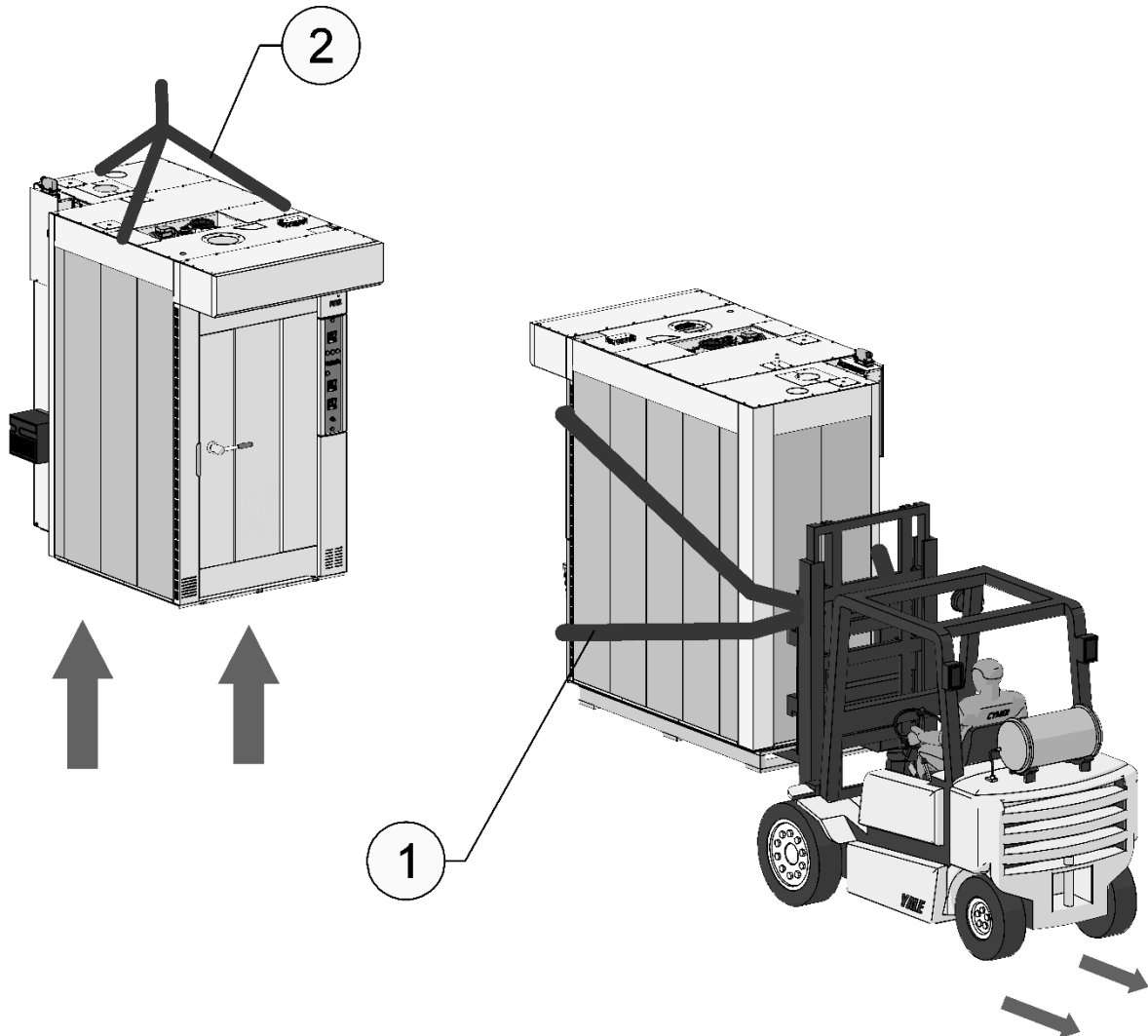
Premises must be permanently ventilated in order to maintain the appropriate inlet of combustive and ventilation air in compliance with the safety regulations applied to thermal systems.



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.

3.3. Moving the unit

Handling, loading and unloading from the truck should be carried out with a fork-lift (Pos.1) or with rope/chain elevator that can bear the machine weight (Pos.2).



When handling the machine with the fork lift, make sure it is secured to the fork lift with strong ropes fixed in the appropriate clamps.

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

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

3.4. 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 Annex 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.**

Client is responsible and take care of installation, oven power, differential magneto-thermal switch, which needs to be:

- installed at a reasonable distance from the oven;
- visible and easily accessible.

The machine is provided with an electronic equipment and controls in compliance with the European Directive on Low Voltage and Electromagnetic Compatibility. The power electronic, the presence of autotransformers and/or transformers can generate ineffective earthing current but always within the limits set by the Electromagnetic Compatibility Directive. The magneto-thermal and/or differential protection of the machine must be sized and tested on the basis of the TT or TN distribution system and relevant impedance resistant fault-loop in the installation point as set out by IEC 60364-6-61. We recommend that you install a device with minimum intervention threshold of 300 mA for TT distribution systems and 500 mA – 1 A for TN distribution systems. The line and cable sizing must be carried out in compliance with the technical specifications of the machine and written in the CE plate.

Connections should be made directly on the main disconnecter of the machine.

 **The electrical connection must be carried out by qualified personnel.**

We remind that the client is fully responsible for the electrical supply up to the machine terminal board; connection instructions are given in the wiring diagram. The protection level of the electrical panel should not be altered by holes drilled by the client who must always install cable glands or fittings for sheaths.

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

For the position of the electrical power connections, see Annex B.

3.5. Connecting the gas (only for gas oven)



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.

The dimension of the fuel feeding pipe is carried out as specified in the instructions manual of the burner and in compliance with the current regulations. The diameter described in the technical data sheet is purely a reference value and it should be modified according to external elements such as:

- installed power
- distance from the gas meter
- gas system pressure



Before carrying out any connection, make sure that the burner is suitable with the feeding fuel.



Make sure that burner in use complies with the regulations in force in the Country where it is installed.



Risks for gas leakage should be prevented by installing a gas leak detector connected to a shut-off valve that, whenever needed, can stop gas flow.

Burner

The oven has been designed to house burners with the following specifications:

Type: BLOWN AIR SINGLE STAGE

Nozzle: MAX LENGTH 120 MM

Electric power: 220V SINGLE-STAGE

Burners which do not comply with at least one of the above requirements are not suitable. For more detailed technical specifications, refer to the technical data given by the manufacturer. Installation, calibration, testing and guarantee documentation are taken care by the closest service centre recommended by the burner manufacturer.

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

3.6. Humidifier feeding

The machine should be connected only to the main water supply and maintain the same pressure. This connection is needed to produce steam under room pressure by means of the humidifier located in the baking chamber.

The feeding pipe diameter and the max/min pipeline pressure values are shown in the technical data sheet of the oven (see annex A).

Should the pipeline pressure be higher, the shutter positioned on the oven can be used. In case pressure is lower, a water pump unit should be installed for loading water.



It is recommended that you install a water softener on the feeding line in order to prevent the formation of lime deposits.

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

3.7. Emissions from cooking appliances

Vapour expelled from the baking chamber is released in the atmosphere through the vapour duct which must be installed on the top pressing part of the exhauster.



The vapours discharge duct must not be connected to the fume stack, and must have its own exit which can be near but should not communicate with the combustion fume stack.

We recommend that you build a duct as linear as possible, with very few elbows and long linear sections. At the bottom of each rising element of the vapour exhauster, a collecting chamber must be included with a condensation draining pipe. Special openings must be arranged in order to facilitate inspections and cleaning.

The use of stainless steel ducts is recommended and preferential.

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

To locate **exhaust** see Annex B

3.8. Exhaust produced by combustion (only for gas oven)



This oven produces waste gasses classified as type “B23” (see Enclosure A):

Type B23: equipment intended for connection to flue/chimney or exhaust device for the evacuation of combustion products outside the room where it is installed.

The combustion air is taken from the environment where the equipment is located.

 **To install type “B23” 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.**

Combustion products are released in the atmosphere through a special fume stack. The fume stack should be installed onto the oven protruding section. The stack and fume duct must be made of thermo-resistant material.

The use of stainless steel ducts is recommended and preferential. Ideal draught is obtained making sure that the stack top is one meter higher than the surrounding roof ridges, parapets and any other obstacle or structure within a distance of 10 meters.

Ensure that pipes are as linear as possible, with very few elbows and long linear sections.

 **When the burner is on, the smoke stack must guarantee a slight depression in the combustion chamber.**

At the bottom of the stack, special openings must be arranged in order to facilitate the sample collection and inspections. A discharge chamber must always be included for each raising element of the stack for the collection of solid combustion materials. The smoke duct and the stack must be built in compliance with the technical specifications set out by the current regulations.

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 “B23” exhaust.

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

To locate exhaust produced by combustion see Annex B.

3.9. Humidifier drain

Water in excess is discharged through a pipe located in the left rear side of the oven. It is recommended that discharge pipes is slightly pointing downwards and does not exceed 2-3mts length.

Unpleasant smells can be avoided by including a syphon in the sewage connection.

Diameter and precise position of the drain pipe are included in the technical data sheet (Annex B).

3.10. 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 motor rotation (7.5)
- Check Water Feeding Circuit (7.4.3)
- Check baking timer (7.6)
- Check thermostatisation (7.7)
- Check Safety thermostat (7.8)
- Check door safety (7.9)
- Rack removal (7.10)
- Check Air flow regulation (7.11)

IMPORTANT – TURNING ON FOR THE FIRST TIME

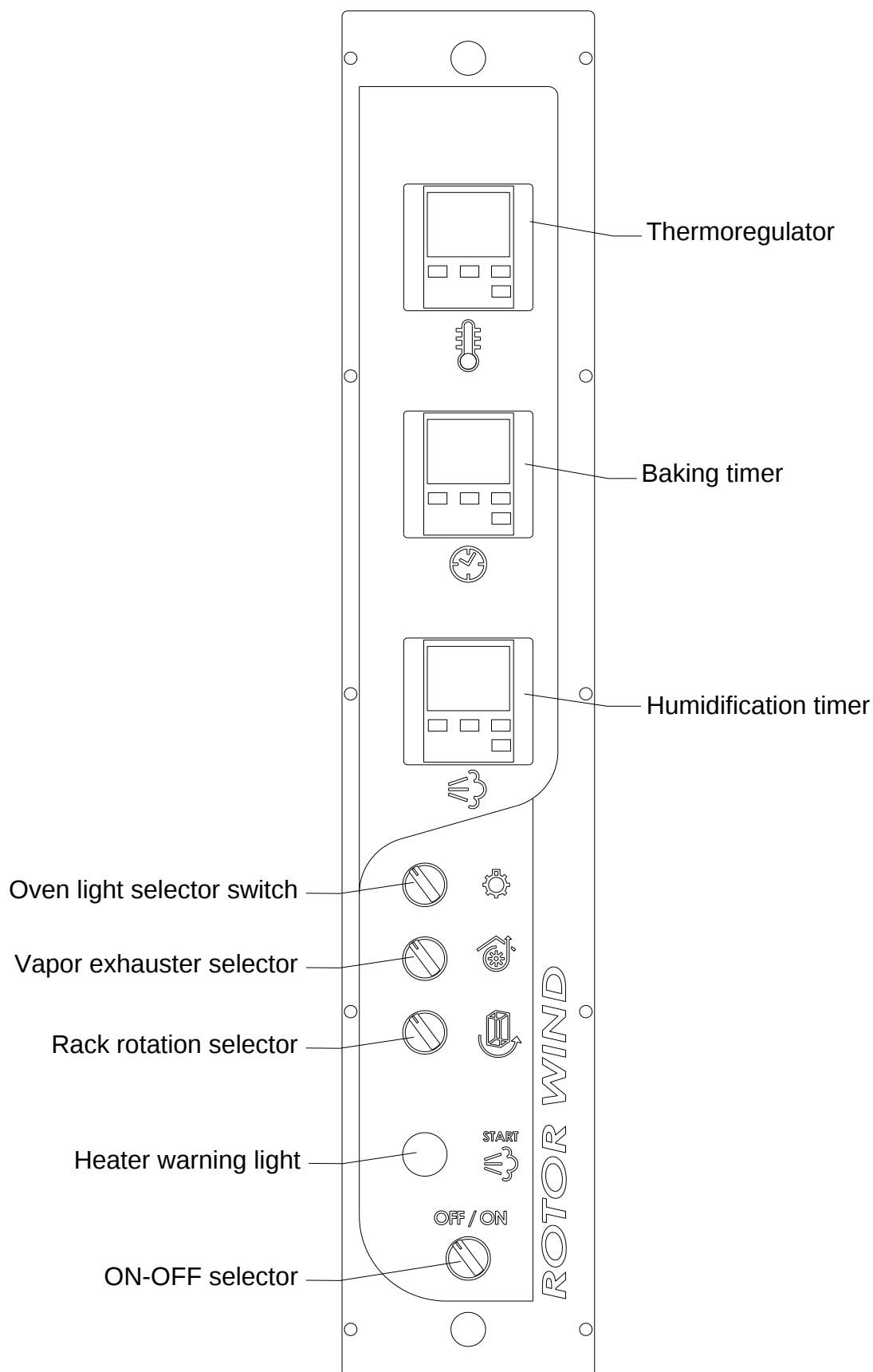
The components of a factory new oven need to be subjected to an initial preheating. The first time the oven is turned on this is an **INDISPENSIBLE** procedure to avoid possible damage to the above mentioned parts.

Gradually heat oven up, with passages of 60°C and hold times of 15 minutes, until temperature reaches 240°C and maintain it for 30 minutes.

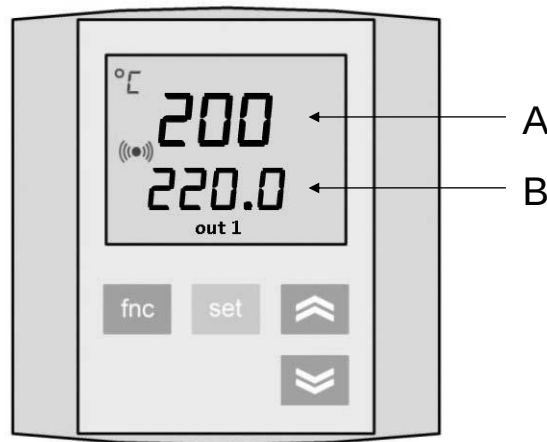
This operation help eliminate all unpleasant odours and fumes generated by insulation drying and grease deposits left on the sheets.

4. FUNCTION (ELECTROMECHANICAL)

4.1. Control Panel



4.1.1. Thermoregulator setting



A= Displays the temperature value in the baking room, names of parameters and alarms.

B= Displays the setpoint and parameters values

out1= When the exit is on (running heating unit)

°C= This shows the °C or °F temperature scales displayed

(((•)))= It starts in case of alarm

 =exit function from setpoint and parameters setting

 = function setting of setpoint and parameters

 = scrolling function: scrolling of menu items and set-points to increase parameter values

 = scrolling function: scrolling of menu items and set-points to decrease parameter values

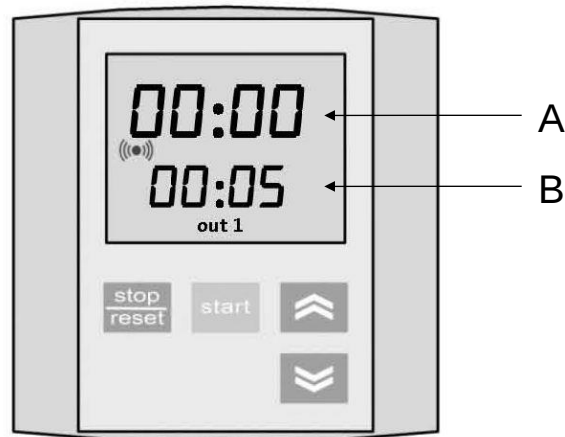
Press and release the  key.

The A display shows "Set 1" while the "B" display shows the actual setpoint value.

With the keys  and  you can modify the setpoint value on the "B" display.

Pressing the  key or after 15 seconds, the new value will be stored bringing the instrument to the original value.

4.1.2. Cooking / humidification timer setting



A= Displays counting progress, the parameters names and the alarms

B= Displays the setpoint and parameters values

out1= When the exit is on (running heating unit)

 = Turns on when the baking cycle is over

 = stops and restarts counting, exit function from programming parameters.

 = starts counting, gives access to the setting functions of the parameters.

 = scrolling function: scrolling of menu items and setpoints to increase parameter values.

 = scrolling function: scrolling of menu items and setpoints to decrease parameter values

The A display shows "set" while the "B" display shows the current setpoint
With the keys  and  you can modify the setpoint value on the "B" display.

Press and release the  key to start counting.

Once the counting is over, reset original conditions by pressing the  key.

4.1.3. Oven light selector switch

By rotating the selector clockwise, the light is turned on inside the oven. Turning it counterclockwise turns it off.

4.1.4. Vapor exhaust selector

By rotating the selector clockwise, the aspiration of the vapours is turned on. Rotating it counterclockwise turns it off.

N.B. The vapour extraction system is equipped with a motorized extraction female screw that operates at the opening of the door.

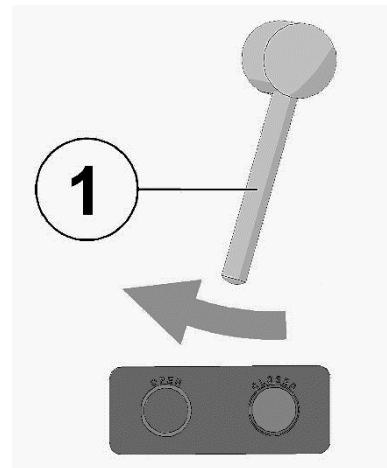
The female screw directly sucks the vapour exiting the door avoiding annoying accumulation under the hood of the oven.

4.1.5. Vapour exhaust valve control

During cooking the water contained in the dough evaporates, and the vapour generated accumulates inside the chamber of the oven.

If it required to discharge this excess vapour just act on a valve placed inside the box for vapour collection.

The opening of this dumper (Pos.1) allows the vapour to flow from inside the oven directly into the collection box.



4.1.6. Rack rotation selector

By rotating the selector clockwise, the rack rotation is turned on. Rotating it counterclockwise turns it off.

4.1.7. Heater warning light

This light indicates whether the heater is turned on and off. In the case of electric ovens (resistances) it is green, in the case of gas ovens (burner) it is red.

4.1.8. ON-OFF selector

By rotating the selector clockwise, the general ignition of the oven is powered on. Rotating it counterclockwise turns it off.

4.2. Alarms

4.2.1. Temperature probe fault alarm

If the temperature sensor is faulty, short circuited or open, the system activates the alarm signal.

“E1” appears on the thermoregulator display.

To enable all the system functions again, it is necessary to switch off the system and then switch it on again with the general "off/on" selector after having identified the fault and reset the probe.

4.2.2. Maximum detectable temperature exceeded alarm

If the maximum temperature detectable by the thermoregulator is exceeded, the system activates the alarm signal.

“HA1” appears on the display.

To enable all the system functions again, it is necessary to switch off the system and then switch it on again with the general "off/on" selector after having identified the cause of this anomaly.

5. USE (ELECTROMECHANICAL)

5.1. Preparation for use

If the appliance has just been installed or if it has not been used for some time, it should be cleaned thoroughly following the instructions in chapter 6 before preparing food products. This is to eliminate residue from the manufacturing process and the accumulation of dust and other substances that could contaminate food.

IMPORTANT – TURNING ON FOR THE FIRST TIME

The components of a factory new oven need to be subjected to an initial preheating. The first time the oven is turned on this is an **INDISPENSIBLE** procedure to avoid possible damage to the above mentioned parts. Gradually heat oven up, with passages of 60°C and hold times of 15 minutes, until temperature reaches 240°C and maintain it for 30 minutes. This operation help eliminate all unpleasant odours and fumes generated by insulation drying and grease deposits left on the sheets.

5.2. Startup

- Activate the supply of the oven (power, fuel, water).
- Power the oven turning on "ON" the main switch 
- Set the desidered temperature on the thermoregulator  (see paragraph 4.1.1). For the thermalstation tightly close the door
- Start the rack rotation selector.  .

Wait approx. 30 minutes to allow the oven and the humidifier to reach the desired temperature.

5.3. Placing the rack

- Open the manual gate to exhaust vapors (4.1.5).
- Perform the settings of the humidification timer  (vedi paragrafo 4.1.2).
- Fully open the door Ensure that the vapor exhauster runs.
- Push the rack straight to its place.
- Close back the door and lock it. The heating is enabled (activated fan and heater).

- Make sure the rotation of the rack is activated.
- Press the steam command to start humidification by pressing the button



of the humidification timer



(see paragraph 4.1.2).

- Perform the settings of the cooking timer  and activate the cooking time using the button  (see paragraph 4.1.2).

5.4. Removing the rack

A sound signal warns that the set baking time is over.

Ensure that the dough is ready to be taken out of the oven and, if not, set the timer again to complete the baking cycle.

Start taking the racks out of the oven following this sequence:

- Open the manual gate for vapor discharge (4.1.5)
- Unlock and leave the door slightly open for a few instants: this will allow residual heat to be.
- Make the racks rotate to its exit position exhausted.
- Fully open the door and, wearing heat-resistant gloves, take out the racks
- Close and lock well the door handle.
- Prepare the oven – if needed – for a new baking cycle

5.5. General guidelines for best results

It is not possible to give precise indications of temperature and cooking time for general foodstuffs, given their enormous variety and the correspondingly varied conditions that they require.

Cooking time in particular can vary according to the type of dough, its homogeneity and volume.

Make sure you carefully monitor the first baking cycles and check the results achieved: using the same types of dough under the same conditions, you will obtain standard results.

The heat needed to process your dough depends on its preparation, ingredients and liquids.

Setting the same processing temperatures you can bake different product at the same time.

Disregarding their position, you can use all shelves, and also bake small batches with top results.

Should bread not take on vapor, resulting matt and rough at the end of your baking cycle, check if during the vaporizing cycle the product gets wet. Should this be the case, you need to modify the dough. Keep in mind that you can achieve good results only if your batch is not too wet when ready to be moved inside the oven. For this reason, it is important that the rack

loaded with the dough from the proofing chamber, is left to rest 1-2 minutes in the air before going into the oven.

Make sure that the oven door opens only for loading and unloading operations.

Keeping the oven access door open for too long, makes the baking chamber temperatures drop, i.e. uneconomically increases the consumption of fuel or energy.

As a consequence of the loading and unloading operations, temperature displayed on the thermoregulator drops of about 30°C. The thermal difference is re-balanced within a maximum span of time of 8/10 minutes.

5.6. Turning off the equipment

At the end of each working day, Zero the timer , disable in sequence the following actuators:

- rack rotation 
- vapor exhauster 
- after 20 / 25 minutes position on "OFF" the main switch .
- Power off the machine (electrical Energy; fuel; water).

On occasion of holidays, extraordinary maintenance, where the machine needs to be stopped, follow the instructions here below:

- Turn off power, fuel and water.
- Leave the oven door slightly open to allow a minimum air ventilation and avoid non-hygienic conditions.
- When doing it, also consider the installation of a mouse trap next to the door opening (which should never exceed 5 mm).
- Make sure room to be well ventilated.

 Every 2-3 days, start the machine engine for approx. 30' to make motors run. This is very important to guarantee their duration and proper functioning.

5.7. Cleaning

 At the end of each working day (if not more often) it is necessary to carefully clean the oven and all the parts that have come in contact with cooked products. This is to avoid food substances deteriorating and polluting both the working area and products that are subsequently cooked. To see how to carry out cleaning, see chapter 6.

6. CLEANING

⚠ At the end of each working day (or more frequently if possible) it is necessary to carefully clean all the parts of the oven which come into contact with the food being cooked to avoid that any food substances go off and contaminate either the working environment or later products to be cooked.

⚠ Before cleaning is carried out, the oven should be turned off and at room temperature with the oven disconnected from the mains electricity supply by means of the mains switch on the switchgear.

6.1. Cleaning the exposed parts

⚠ The tempered glass parts are particularly sensitive to sudden variations in temperature that can cause them to crack into tiny fragments. **Do not handle glass parts and do not bring them into contact with water until they have cooled down to room temperature.**

To clean the external surfaces made from either stainless steel or painted sheet metal as well as the control panel, use a soft moistened sponge and if needs be a weak non abrasive detergent.

Painted and chrome-plated parts must be cleaned with a cloth moistened with water and non-corrosive liquid detergent.

⚠ It is not recommended to use abrasive tools (abrasive sponges or similar) because over time they take the shine off the stainless steel parts and high impact glass.

⚠ 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.

6.2. Cleaning the oven's cooking chamber

To clean the aluminized sheet steel cooking chamber, use a soft moistened sponge and if needs be a weak non abrasive detergent.

If there is a consistent amount of fat deposited on the surfaces remove it first using a spatula.

 Do not use abrasive or corrosive detergents because these will cause the stainless steel to become opaque.

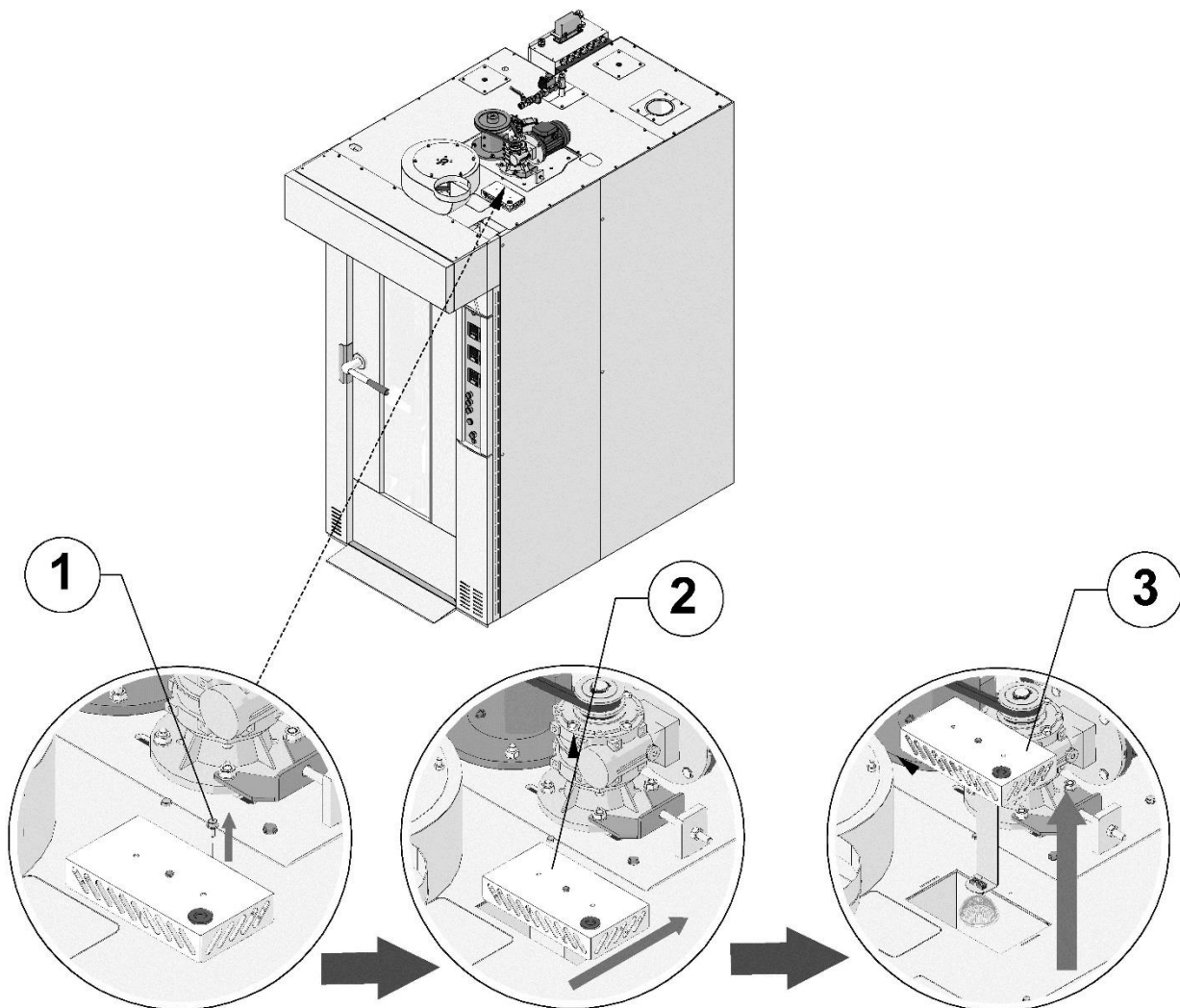
 Do not direct jets of water onto the equipment for clearing as these can penetrate through to and damage the electrical system with the consequent risk of electrocution and the equipment starting up unexpectedly.

7. MAINTENANCE

⚠ ATTENTION: these maintenance instructions are to be used exclusively by personnel qualified to install and maintain electrical and gas appliances. Maintenance work carried out by non qualified personnel could cause damage to the oven, to persons, animals or property.

⚠ To carry out repairs and routine checks it will be necessary, in most cases, to remove the safety panels. This gives access to parts conducting electricity. **Before removing any protective housing ensure that the plug supplying current to the cooking unit is disconnected from the electrical system. Put the plug to one side in a place where the service engineer can easily ensure that it has been unplugged during the entire duration of any work carried out with any safety covers removed.**

7.1. Changing the halogen lamp

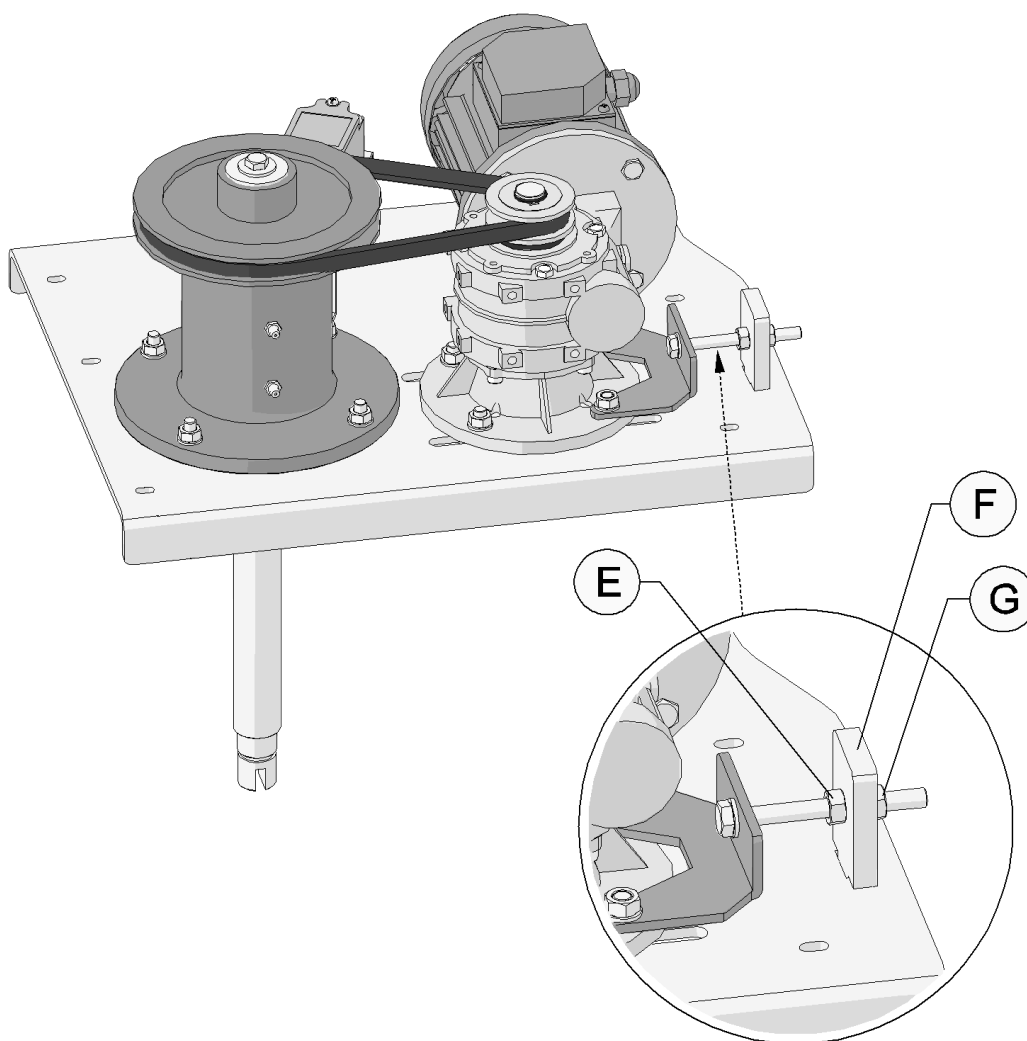


**Power off the oven**

To reach the lamp:

- Remove the fixing screw (Pos.1) of the protection (Pos.2)
- Release the protection making (see arrow)
- Lift the protection and remove the lamp unit (Pos.3).
- Replace the lamp with a similar one.
- Re-assemble all the parts previously removed.

7.2. Replacement of the transmission belt



- Loosen the screws securing the gear-motor.
- Loosen nut "E" on the block "F".
- Rotate anti-clockwise the tensioner "G" in order to reduce the distance between the pulleys.
- Replace the worn out belt.
- Rotate clockwise the tensioner "G" in order to increase the distance between the pulleys.

- Tighten nut "E" on block "F".
- Tighten the screws fixing the motor-gear.

 **Do not over-tension belts as to avoid abnormal gearing stress.**

 **Have the belts tension inspected by the oven service technician.**

7.3. Weekly maintenance

The user is responsible for weekly maintenance always in compliance of the safety regulations contained in this instructions manual.

Power off the oven

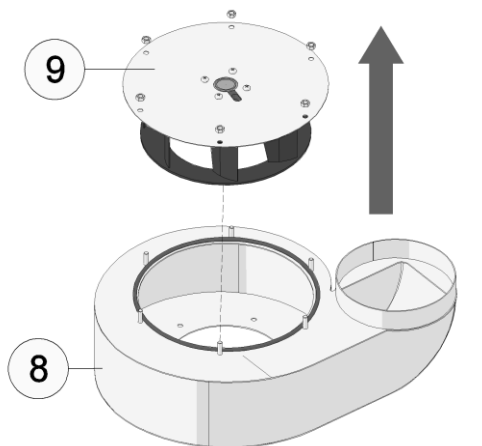
By means of a stiff-bristled vacuum cleaner, remove all powders from motors, transmission gears and control panel. In the most critical points, also use a stiff-bristled brush. For all the other oven parts, use a vacuum cleaner.

7.4. Six-months maintenance

Every six months the following intervention and controls should be effected by the installer technician:

- Inspection of all oven functions efficiency
- Inspection of all safety devices efficiency
- Cleaning the impeller and scroll of steam extractor (7.4.1)
- Check rack motion unit (7.4.2)
- Check the hydraulic system (7.4.3)
- Clean the door gaskets (7.4.4)
- Make the burner inspected by a qualified technician:
 - General cleaning of the burner and inspection of its adjustments.
 - Check the combustion.
 - Check the depression in the combustion chamber.

7.4.1.Cleaning the impeller and scroll of steam extractor



Power off the oven

The housing remains connected to the oven (Pos.8).

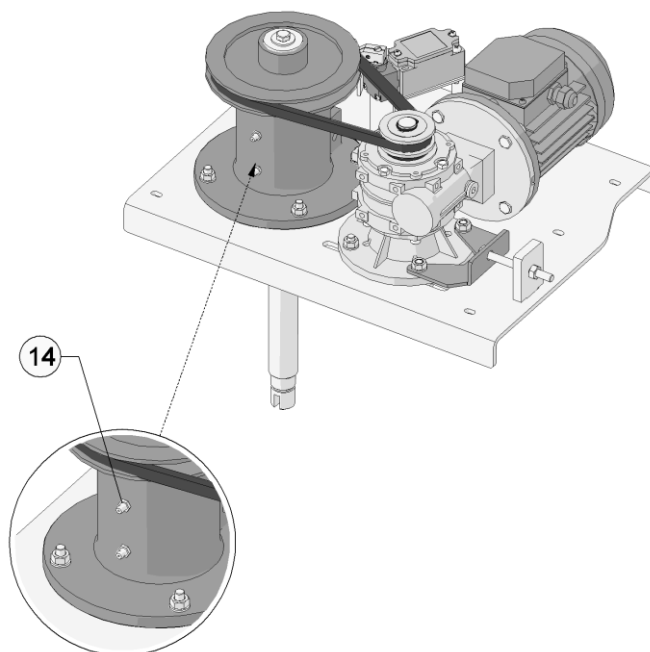
- Remove the fixing screws without removing the sheath covering the power connection cable of the motor, and act following the arrow direction.
- Remove the fan flange unit on the motor (Pos.9).
- Place the motor on the oven hood and clean the fan flaps with a vacuum cleaner. In the most critical points use a stiff-bristled brush.



Clean the snail-shell with common detergents used to clean stainless steel pans.

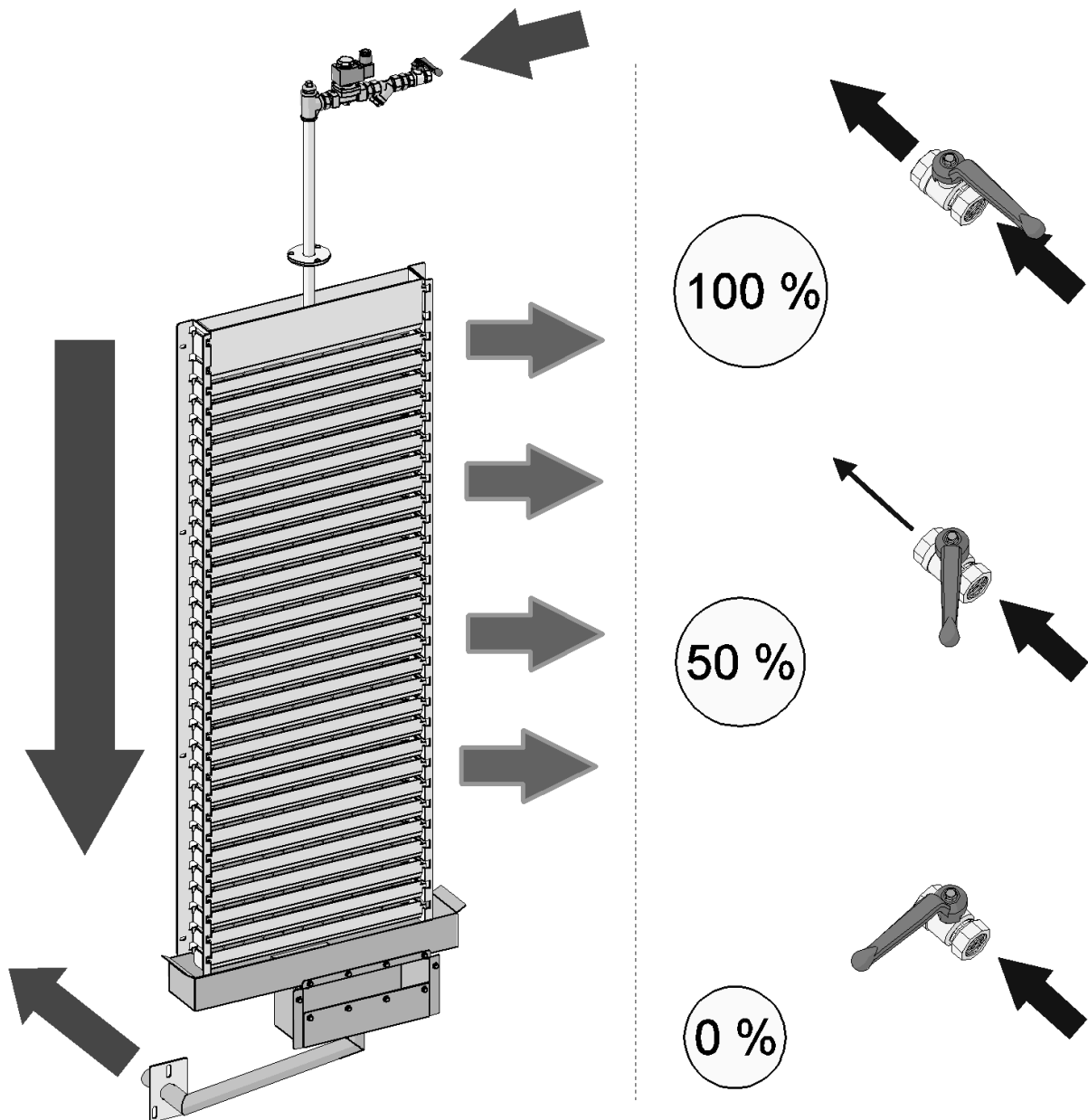
- Once cleaning operations have been completed, proceed with the above operations, but in reverse order.

7.4.2.Check rack motion unit



- Check the tensioning belts of the handling unit
 - Lubricate the handling unit by means of the two lubricators (Pos.14)
- Handling reducers do not need maintenance.

7.4.3. Check the hydraulic system



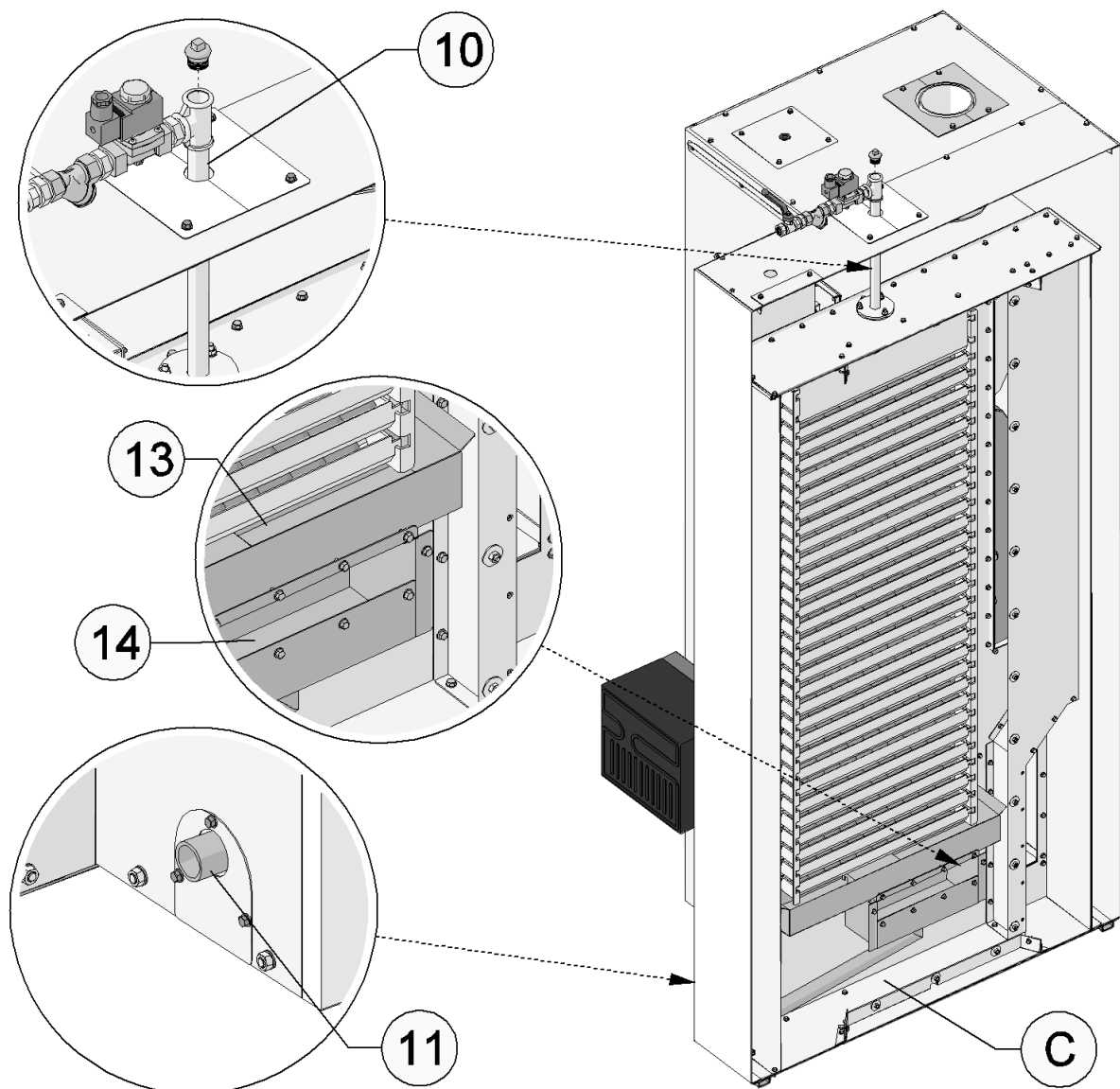
⚠ Check the water circuit with cold humidifier. Adjust the opening of the manual shutter at 100%.

Set a humidification time of about 10 seconds and operate the count. The solenoid valve placed on the inlet unit opens and allow the passage of the water into the circuit.

The water must flow all along the length of the humidifier wetting evenly the balls contained into the drawers.

After several seconds the water must drain into the lower collection box. Then, through the drain tube, it must be removed from the oven.

Once passed the time previously the water flow automatically stops.

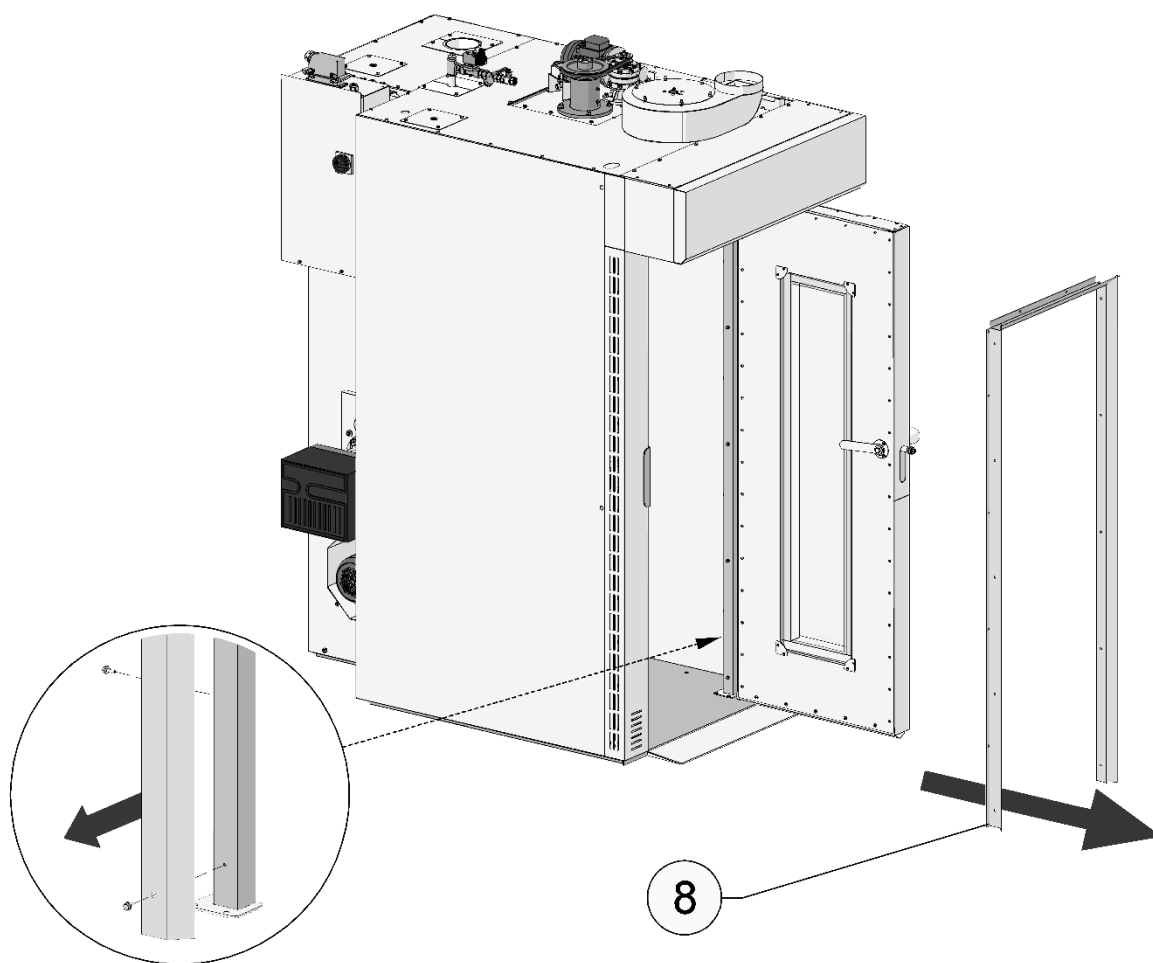
Humidifier cleaning:

Cleaning the humidification system substantially means eliminating lime deposits inside the following components:

- (Pos.10) Cleaning the water loading tube.
- (Pos.11) Cleaning the water unloading tube.
- (Pos.12) Cleaning the drawers of the humidifier.
- (Pos.13-14) Cleaning the water collection boxes.
- (Pos.C) Cleaning the base under the vapour maker.

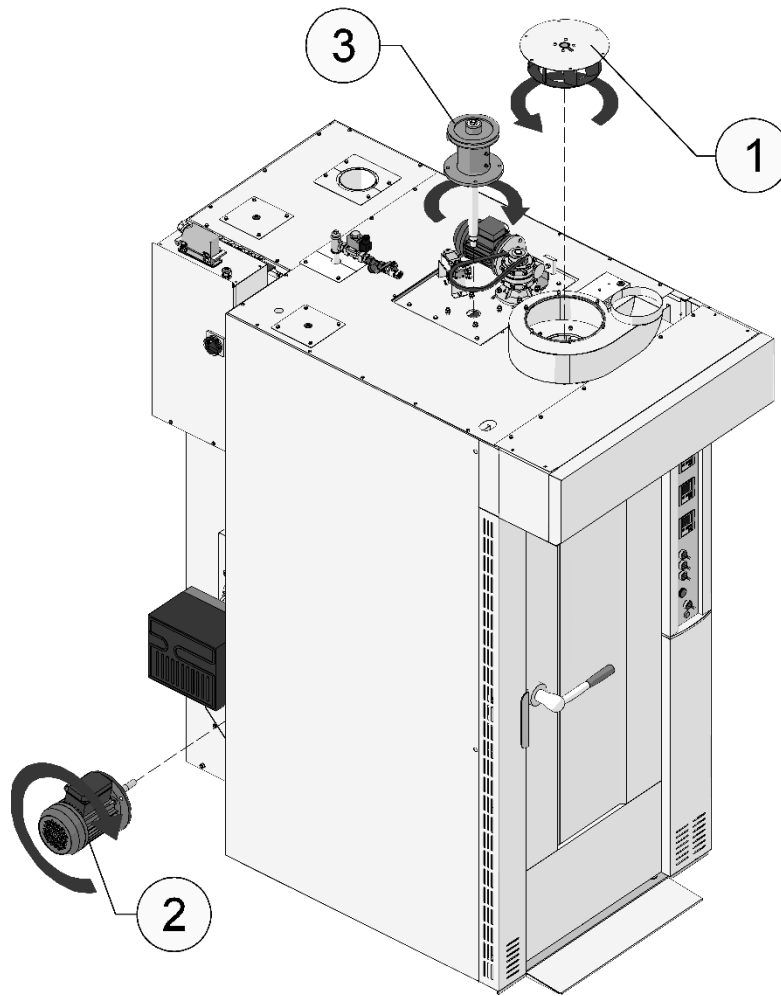
At the end of cleaning operations make a functional check, when cool, of the hydraulic circuit. (7.4.3).

7.4.4.Clean the door gaskets



Dismantle the gaskets (Pos.8) secured with the self threading screws to the door and its edge.
Clean them and remove the deposits (if any) door and its edge with normal dishwasher detergent. Re-assemble.

7.5. Motor rotation checks



Zero the thermoregulator.

Close the door and actuate the various utilities.

Steam exhauster (Pos.1).

Ventilator (Pos.2).

Rack rotation (Pos.3).

Check the correct direction of rotation as in the figure.

If the rotation goes in the opposite direction, power off the machine immediately and correct the motor sense of rotation.

7.6. Check baking timer

Check the end-of-cycle buzzer setting a baking time of 5 minutes.

Start counting the baking time.

After 5 minutes the buzzer will be enabled.

Silence it by means of the relevant control.

7.7. Check thermostatisation

Thermostatisation is the capacity of the oven to modulate the heating system (burner or resistances) ignition according to the baking temperature you have set.

Close and lock the door and close the manual damper of the steam box.

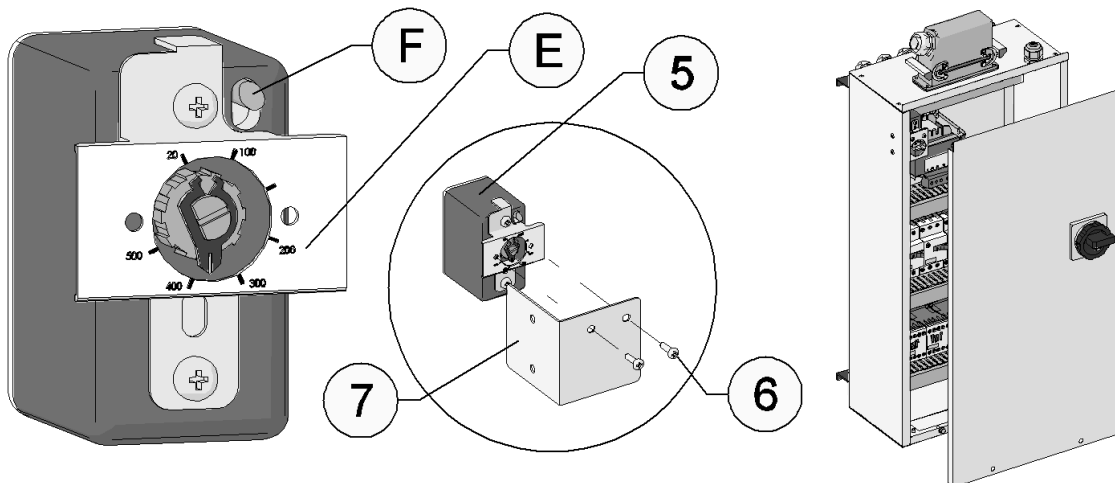
Set 60°C temperature on the thermoregulator

The heating system starts working and stops after a few minutes, as soon as the expected temperature has been reached.

Now set 120°C temperature.

If the heating system restarts, the thermostatisation is efficiently working.

7.8. Check Safety thermostat



Remove the thermostat (Pos. 5) by opening the two fixing screws (Pos.6)

To prevent tampering, the thermostat is purposely installed to be adjusted only if removed from its support (Pos. 7).

Adjust the safety thermostat at 200°C (Pos. E), close and lock the door

Set 250°C temperature on the thermoregulator

The heating system starts. The thermoregulator records the rise in temperature. Wait some minutes to check if the heating system stops before the thermoregulator has reached set temperature. In this case, the safety thermostat is considered efficient. Wait until temperature drops down the threshold of the value set on the safety thermostat

⚠ Power off the machine and reset the safety thermostat by pressing the green button (Pos. F).

After inspecting the safety thermostat, take care of the correct calibration.

7.9. Check door safety

Start up the empty oven (without dough to be processed) like a normal production cycle:

Cautiously unlock the door!

This must stop immediately the operation of the heating system and fan air recycling.

It should also inhibit the operation of the solenoid valve water inlet to the humidifier and start the steam ventilator.

Open the door.

At the opening of the door the cart turning is immediately stopped.

Close and lock the door.

Closing and locking the door allow for resetting the operations stopped with opening.

If the checks described are found then the safety functions of the door are to be considered efficient

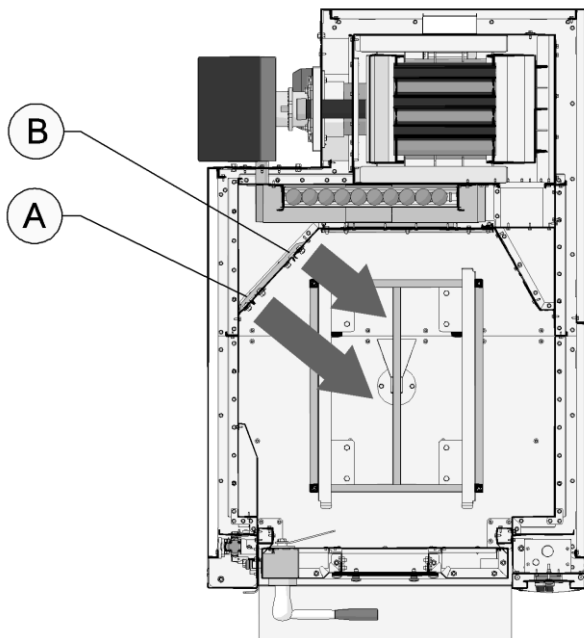
7.10. Rack removal

The stopping of the cart is made automatically provided the door is unlocked but not open. At door unlocking the cart keeps on rotating unto its extraction position. By opening the door the cart stops instantly.

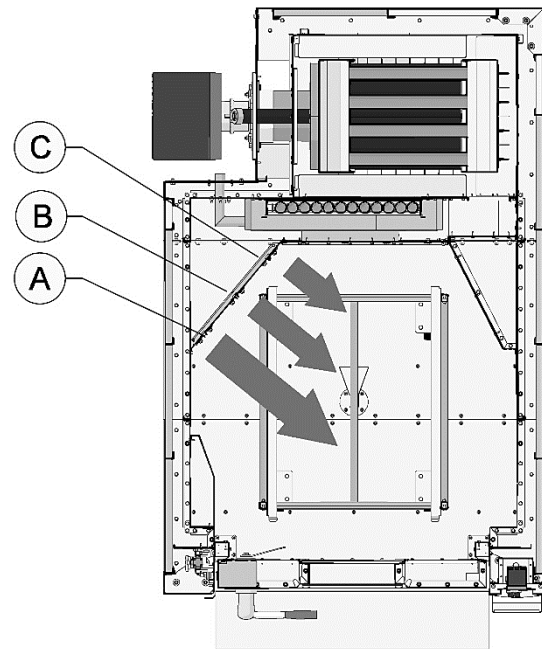
7.11. Air flow regulation 3GL-4GL-5GL

The air flow adjustment is of crucial importance in order to obtain an even cooking all along the high of the rack.

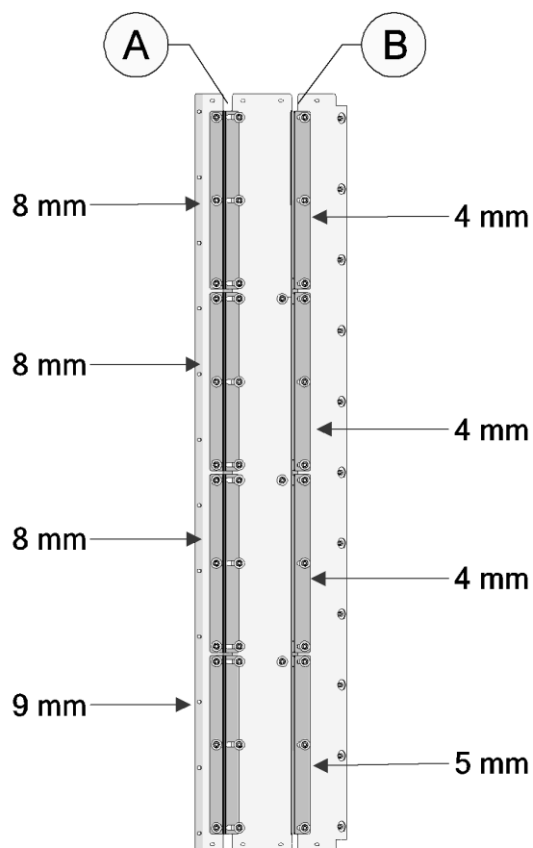
Check that all dampers have flow vents heading inside the baking chamber and are positioned in the middle of the slot.



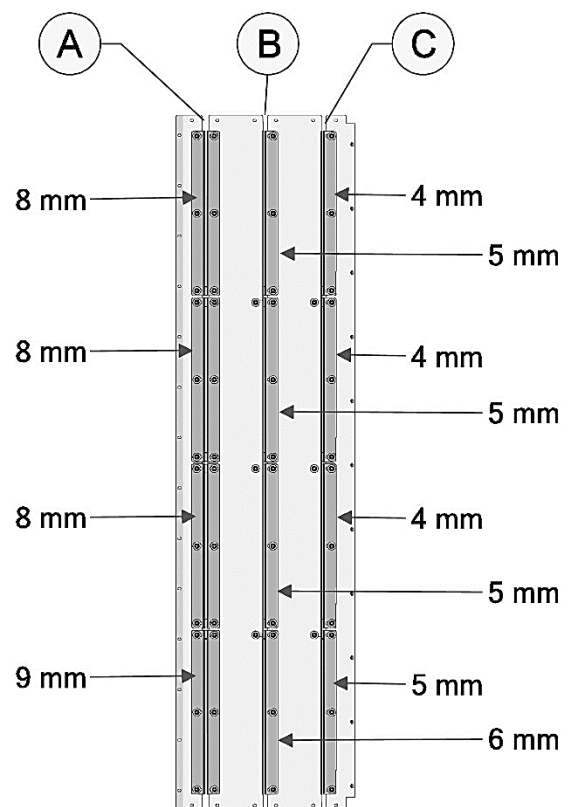
3GL-4GL



5GL



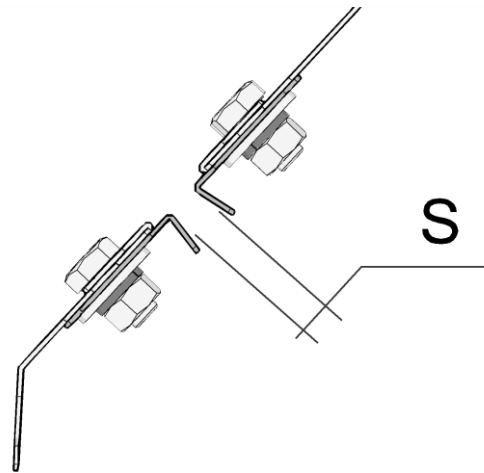
3GL-4GL



5GL

Slot A adjusts the dough baking in the central part of the trays; the others slots regulate baking in the lateral section.

Shutters are bent and kept under-square, therefore the standard regulation shown in the figure must be taken in the narrowest part (section "S").



This page shows the “recommended” adjustment of dampers.

These value are to be considered merely indicative, as different processing methods may require adjustment other than those shown.

⚠ Max opening of air slots must not exceed 10mms.

Regulation procedures:

⚠ All the operations described below must be performed when oven is cold.

- Regulate shutters in compliance with the values of the Drawing.
- Use the proper selector switch to start air circulation fans.
- Enter the baking chamber and close the door.

From there check that the air flow from the shutters is directed to the center of the rack rotation.

If not, move the slots of the A unit, to the right or to the left (as needed) in order to centre the air flow on the middle rack.

⚠ When moving them, never modify their opening which must remain the standard one.

Examples of regulations:

Once the standard regulation has been done, if products after baking appear:

White in the centre of all or some trays

Intervention:

Move slots to the right or to the left trying to direct air flow to the middle of the rack. If the baking result is not good on all trays, move all slots Pos.A; while, if trays not well baked are only few, move only relevant slots.

Overbaked in the centre of all or some trays

Intervention:

Move slots to the right or to the left in order to direct the air flow to the middle of the rack. If overbaking affects all trays move all slots Pos.A; While, if overbaked trays are only few, move only relevant slots.

This operation must be carried out on both gates maintaining the opening unchanged.

White on the sides of all trays

Intervention:

Increase the opening of the gates Pos. B

The air flow regulation must be carried out mainly on gates Pos. A

When moving slots never exceed 1 mm for each regulation cycle.

7.12. Wiring diagram

See Annex C.

8. DECOMISSIONING AND DEMOLITION

Before proceeding with the decommissioning disconnect the electrical supply 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 from the following materials: stainless steel, aluminized steel, glass, ceramic material, rock wool and electrical parts.

For the purposes of demolition therefore the materials have to be separated in compliance 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.

ROTOR WIND 3GL-4GL-5GL

Allegati tecnici
Technical enclosures
Anexos técnicos

A. Caratteristiche tecniche Rotor Wind

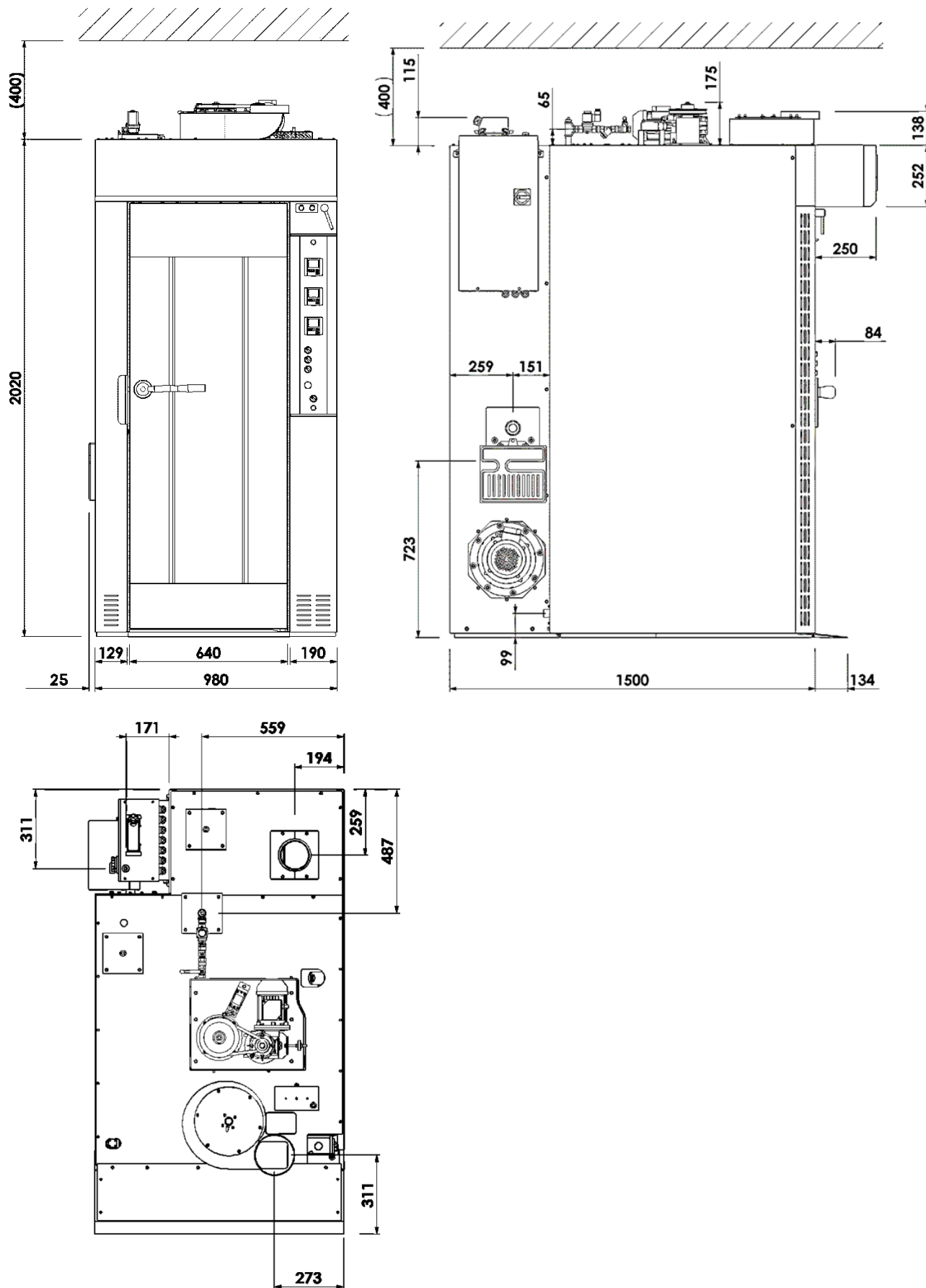
A. Technical specifications Rotor Wind

A. Especificaciones técnicas Rotor Wind

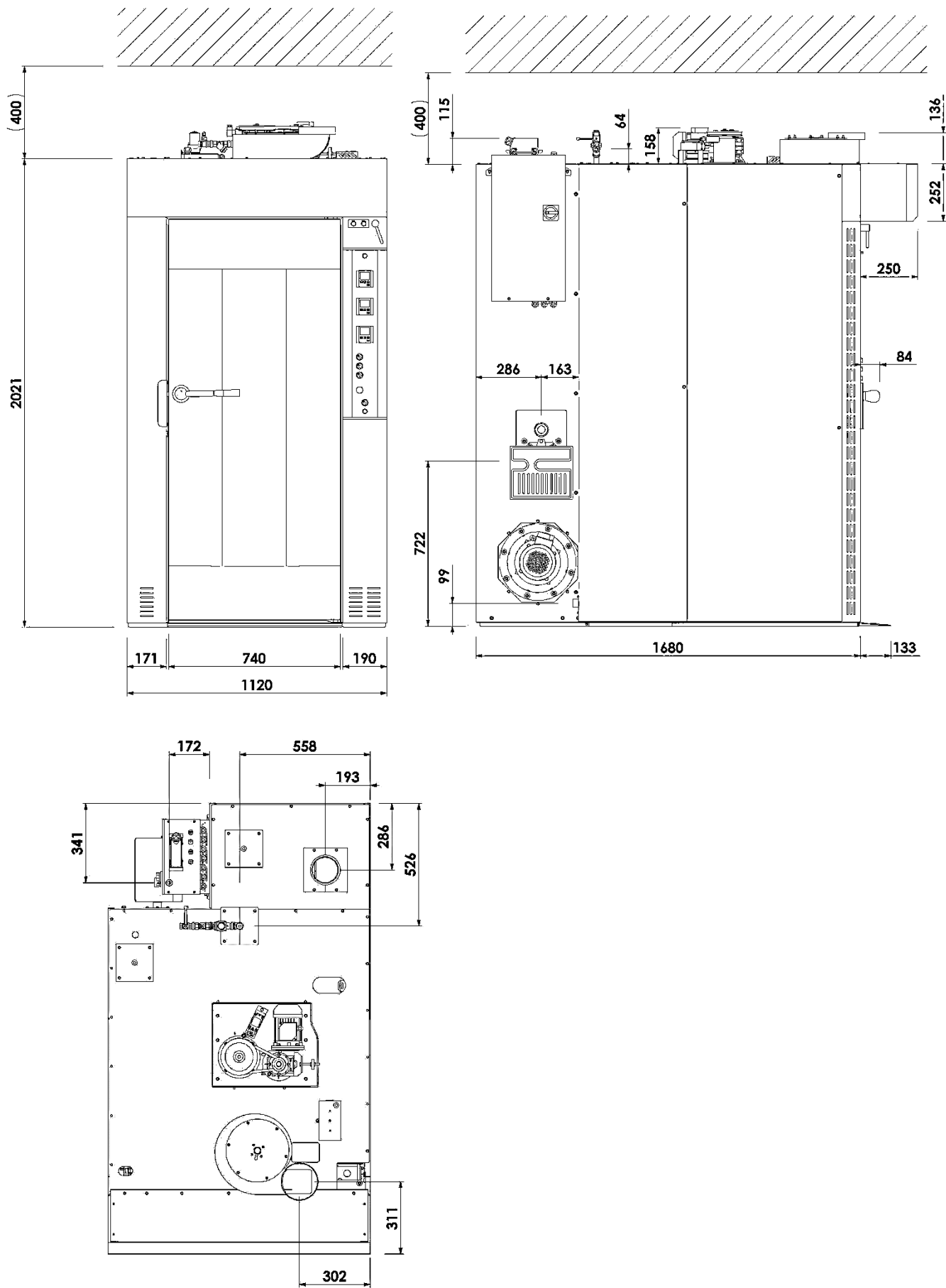
ITALIANO	ENGLISH	ESPAÑOL	3GL	4GL	5GL	Unità di misura Unit of measurement Unidad de medida
Peso	Weight	Peso	650	800	1100	Kg
Dimensioni esterne	Overall dimensions	Dimensiones externas	980x1500x2020	1120x1680x2021	1330x2049x2326	mm
Larghezza massima carrello	Rack max wisth	Anchura máxima carro	450	550	700	mm
Diagonale massima carrello	Rack max diagonal	Diagonal máxima carro	740	890	1020	mm
Carico massimo carrello	Rack max load	Carga máxima carro	70	70	100	Kg
Numero teglie	Number of baking pans	Número bandejas	15 (60x40 cm)	15 - 18 (50x70 cm)	18 (60x80 cm)	n°
Superficie di cottura	Backing surface	Superficie de cocción	3.6 (n°15)	5,2 (n° 15)	8,6 (n° 18)	m²
Capacità produttiva	Hourly production	Capacidad productiva	50	70	120	Kg/h
Alimentazione elettrica	Electrical power	Alimentación eléctrica	Triphase or triphase + neutral Trifasica o trifasica + neutro Trifase o trifase + neutro			-----
Potenza elettrica totale	Total electrical power	Potencia eléctrica total	1	1	2	kW
Tensione	Voltage	Tensión	230 o 400			Vac
Frequenza	Frequency	Frecuencia	50 o 60			Hz
Corrente a 400V 50Hz	Current at 400V 50Hz	Corriente a 400V 50Hz	2	2	3	A
Corrente a 230V 50Hz	Current at 230V 50Hz	Corriente a 230V 50Hz	3	3	5	A
Grado di protezione	Level of protection	Grado de protección	IP54			-----
Caratteristiche bruciatore - Constructive characteristics – Características quemador						
Tipo di bruciatore	Burner type	Tipo de quemador	Monostadio ad aria soffiata Single-stage blown air Monoetápico a aire soplado			-----
Lunghezza massima boccaglio	Nozzle max length	Lungituid máxima tubo	120	120	120	mm
Tensione di alimentazione (monofase)	Tension supply	Tensión de alimentación (monofásica)	230	230	230	Vac
Taratura ugello (con pompa tarata a 12 bar)	Nozzle calibration	Calibración inyector (con pompa calibrada a 12 bar)	0.75 a 60°	0.85 a 60°	1.25 a 60°	gph
Pressione in entrata del gas	Incoming gas pressure	Presión entrada gas	30 ÷ 360	30 ÷ 360	30 ÷ 360	mbar
Raccordo alimentazione gas	Burner supply gas connection	Empalme alimentación gas	1/2"	1/2"	1/2"	inch
Raccordo alimentazione gasolio	Burner supply gasoil connection	Empalme alimenttación gasóleo	3/8"	3/8"	1/2"	inch
Potenza termica	Termical powwer	Potencia térmica	33.7 (29.000 kcal)	40.6 (35.000 kcal)	64 (55.000 kcal)	kW
Caratteristiche camera di combustione - Combustion chamber characteristics - Características cámara de combustión						
Volume focolare	Furnace volume	Volumen quemador	19	19	59	dm³
Pressione nel focolare (depressione rilevata con bruciatore acceso)	Furnace pressure	Presión del focolare (depresión obtenida con quemador encendido)	-1 ÷ -4	-1 ÷ -4	-1 ÷ -4	mbar
Consumo - Consumption - Consumo						
Consumo medio giornaliero (per forno a gasolio)	Overage daily consumption (for GASOIL fired oven)	Consumo medio diario (Para horno a gasóleo)	1.4 ÷ 2.2	1.7 ÷ 2.7	2.6 ÷ 4.3	Kg/h

Consumo medio giornaliero (per forno a gas)	Overage daily consumption (for GAS fired oven)	Consumo medio diario (para horno a gas)	1.7 ÷ 2.7	2.0 ÷ 3.2	3.2 ÷ 5.1	m³/h
Scarico fumi - Flue connection - Descarga humos						
Tipo	Type	Tipo	B23			-----
Diametro camino scarico fumi	Diameter steam exhaust pipe	Diámetro chimenea descarga humos	120	120	150	mm
Caratteristiche ventilatore - Ventilator Charatteristic - Características ventilador						
Portata aria ventilatore	Air flow	Capacidad aire ventilador	14÷32	16÷35	28÷44	m³/min
Potenza motore ventilazione	Power air motor	Potencia motor ventilación	0.75 (0.55)	0.75 (0.55)	1.5 (1.1)	hp (kW)
Caratteristiche aspiratore vapori - Steam suction fun characteristics – Características aspirador vapores						
Portata aria aspiratore	Air flow	Capacidad aire aspirador	8÷20	8÷20	20÷32	m³/min
Potenza motore aspirazione	Power air motor	Potencia motor aspiración	0.15	0.15	0.15	kW
Diametro camino uscita vapori	Diameter steam exhaust pipe	Diámetro chimenea salida vapores	150	150	200	mm
Caratteristiche umidificatore - Steam generator characteristics – Características humidificador						
Intervallo di umidificazione (con il forno ad una temperature di 250 °C)	Humidification interval (for oven at 250°C)	Intervalo de humidificación (con iel horno a una temperatura di 250°C	20	20	20	min.
Pressione acqua in ingresso	Incoming water pressure	Presión agua en entrada	1.5	1.5	1.5	bar
Diametro tubo carico acqua	Diameter water arrival pipe	Diámetro tubo carga agua	1/2"	1/2"	1/2"	inch
Diametro tubo scarico acqua	Diameter water discharge pipe	Diámetro tubo descarga agua	1"	1"	1"	inch
Lampadina illuminazione camera - Chamber illumination lamp - Lámpara iluminación cámara						
Tipo	Type	Tipo	Alogena Halogen Halógena			-----
Potenza	Power	Potencia	50 - (24V)			W
Controllo cottura - Baking control - Control cocción						
Controllo temperatura	Temperature control	Control temperatura	Termoregolatore elettronico Electronic termoregulator Termoregulator electrónico			-----
Massima temperatura impostabile	Maximum possible temperature	Máxima temperatura configurable	300	300	300	°C
Gradiente salita temperatura (con forno vuoto)	Temperature rise gradient (on empty oven)	Gradiente subida temperatura (con horno vacío)	12	12	12	°C/min
Gradiente salita temperatura (con forno a pieno carico)	Temperature rise gradient (on fully loaded oven)	Gradiente subida temperatura (con horno completamente cargado)	6	6	6	°C/min
Temperatura termostato di sicurezza	Safety thermostat temperature	Temperatura termostato de seguridad	350	350	350	°C
Condizione dell’ambiente - Environmental conditions - Condición del ambiente						
Temperatura	Temperature	Temperatura	0 - 40			°C
Umidità massima	Maximum humidity	Humedad máxima	95% senza condensa 95% without condensation 95% sin condensación			-----
Livello di rumore	Noise level	Nivel acústico	< 70			decibel

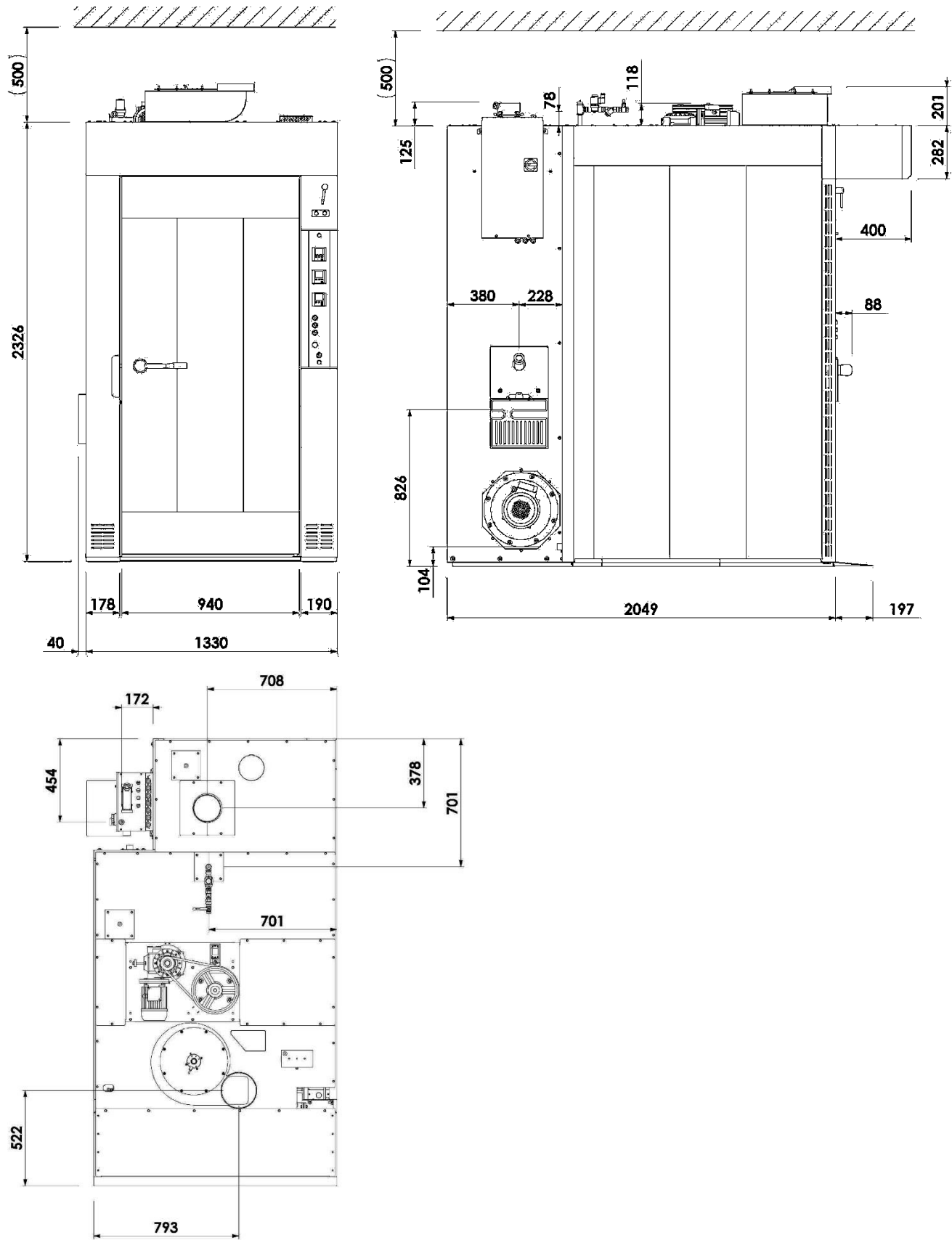
Rotor Wind 3GL



Rotor Wind 4GL



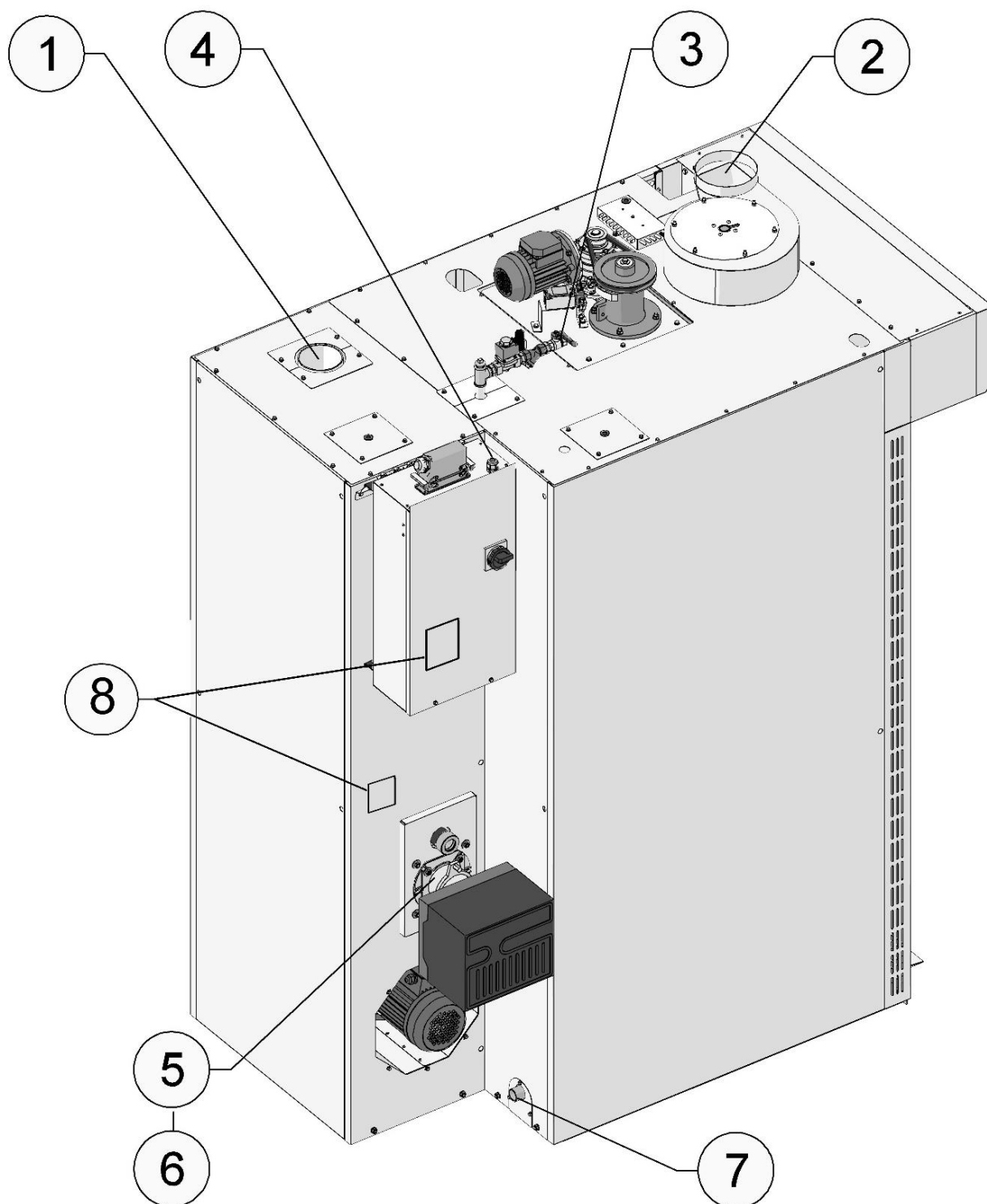
Rotor Wind 5GL



B. Allacciamenti alimentazione elettrica, alimentazione bruciatore gas/gasolio, alimentazione acqua umidificatore, scarico vapori, scarico fumi, scarico eccedenza acqua e posizione della targa dati.

B. Electricity supply connections, burner supply gas/gasoil, steam generator water arrival, water vapour tube, smoke exhaust pipe, water discharge and position of information plate.

B. Conexiones alimentación eléctrica, alimentación quemador gas/gasóleo, alimentación agua humidificador, descarga vapores, descarga humos, descarga exceso de agua y posición de la chapa homologación datos.



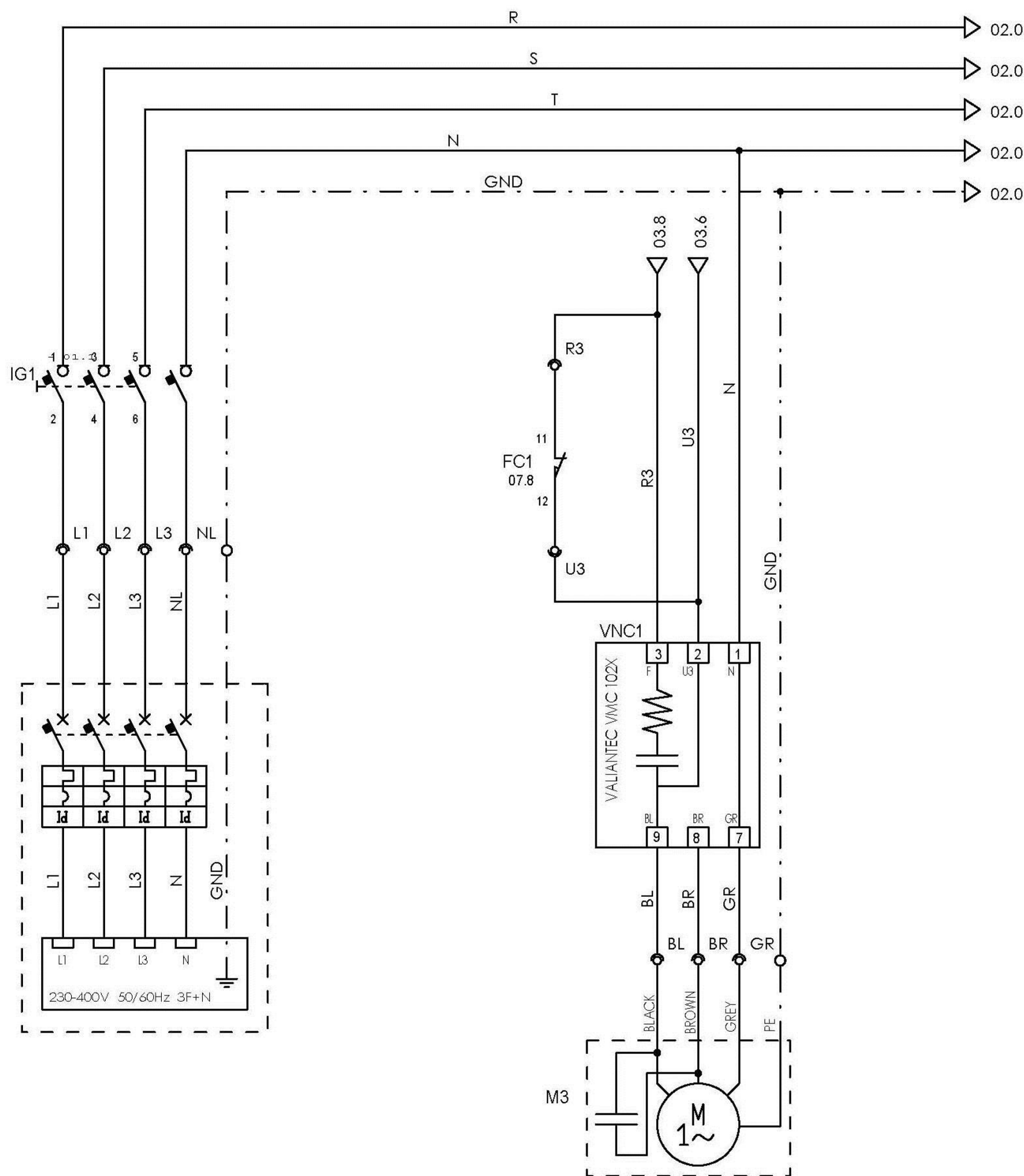
Rotor Wind 3GL-4GL

1	Tubazione scarico fumi Ø 120mm	Smoke exhaust pipe Ø 120mm	<i>Tubería descarga humos Ø 120mm</i>
2	Tubazione scarico vapori Ø 150mm	Steam exhaust pipe Ø 150mm	<i>Tubería descarga vapores Ø 150mm</i>
3	Alimentazione acqua umidificatore Ø 1/2"	Steam generator water arrival Ø 1/2"	<i>Alimentación agua humidificador Ø 1/2"</i>
4	Ingresso alimentazione elettrica	Electrical power input	<i>Ingreso alimentación eléctrica</i>
5	Alimentazione bruciatore gas Ø 1/2"	Burner supply gas Ø 1/2"	<i>Alimentación quemador gas Ø 1/2"</i>
6	Alimentazione bruciatore gasolio Ø 3/8"	Burner supply gasoil Ø 3/8"	<i>Alimentación quemador gasóleo Ø 3/8"</i>
7	Scarico eccedenza acqua Ø 1"	Water discharge Ø 1"	<i>Descarga exceso de agua Ø 1"</i>
8	Targa dati	Information plate	<i>Chapa homologación datos técnicos</i>

Rotor Wind 5GL

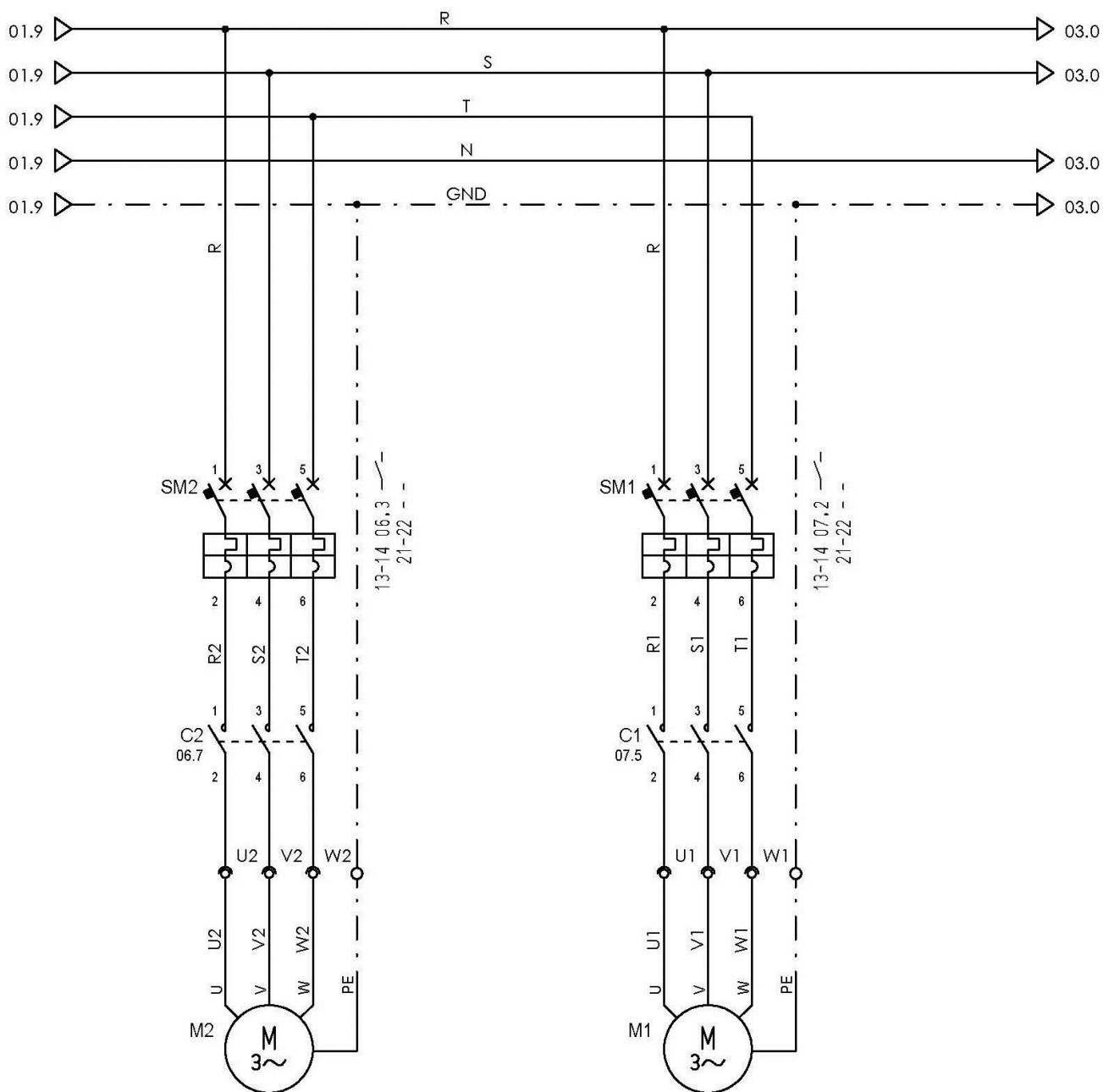
1	Tubazione scarico fumi Ø 150mm	Smoke exhaust pipe Ø 150mm	<i>Tubería descarga humos Ø 150mm</i>
2	Tubazione scarico vapori Ø 200mm	Steam exhaust pipe Ø 200mm	<i>Tubería descarga vapores Ø 200mm</i>
3	Alimentazione acqua umidificatore Ø 1/2"	Steam generator water arrival Ø 1/2"	<i>Alimentación agua humidificador Ø 1/2"</i>
4	Ingresso alimentazione elettrica	Electrical power input	<i>Ingreso alimentación eléctrica</i>
5	Alimentazione bruciatore gas Ø 1/2"	Burner supply gas Ø 1/2"	<i>Alimentación quemador gas Ø 1/2"</i>
6	Alimentazione bruciatore gasolio Ø 1/2"	Burner supply gasoil Ø 1/2"	<i>Alimentación quemador gasóleo Ø 1/2"</i>
7	Scarico eccedenza acqua Ø 1"	Water discharge Ø 1"	<i>Descarga exceso de agua Ø 1"</i>
8	Targa dati	Information plate	<i>Chapa homologación datos técnicos</i>

C. Schema elettrico - Wiring diagram-*Esquema eléctrico*



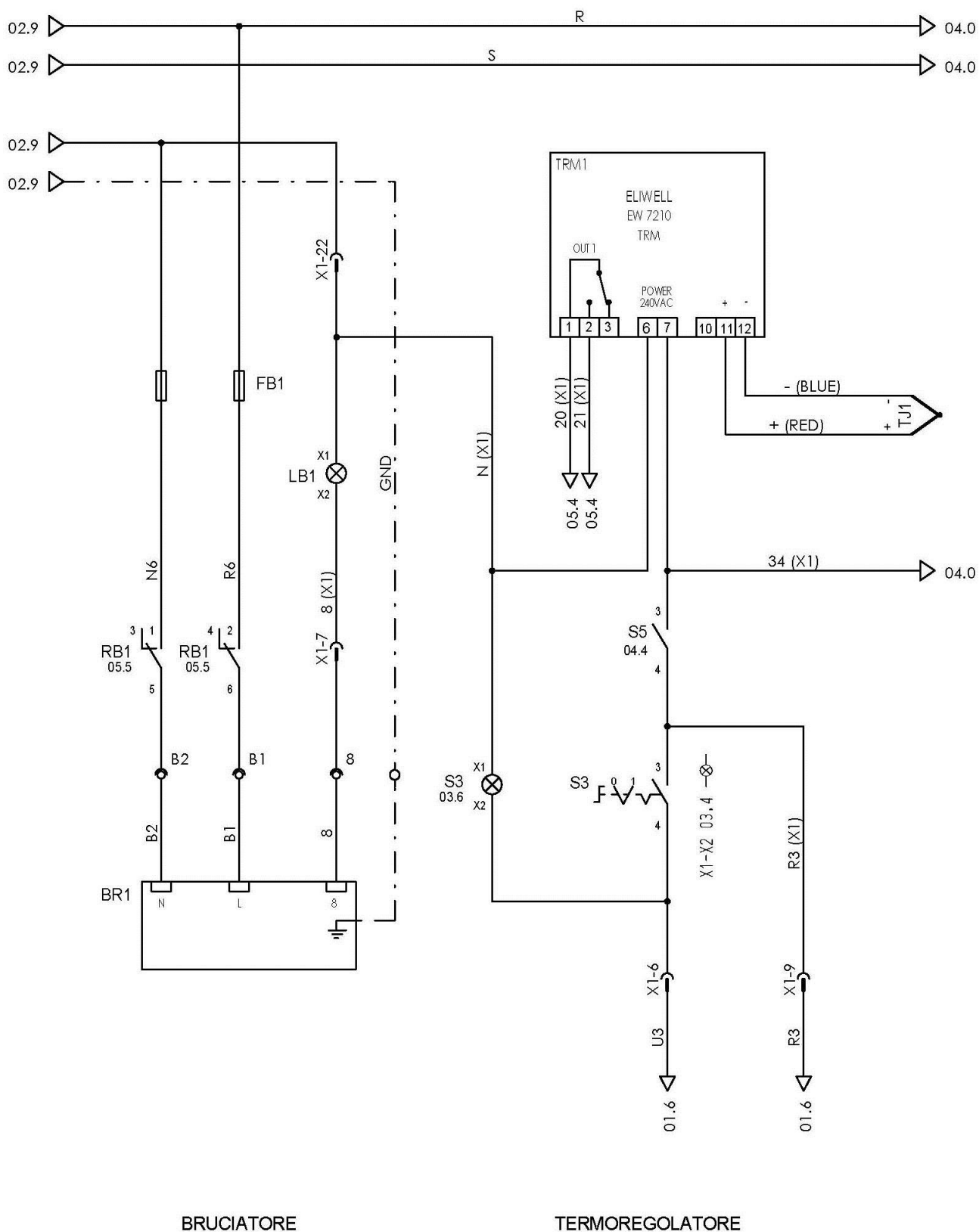
LINEA DI ALIMENTAZIONE

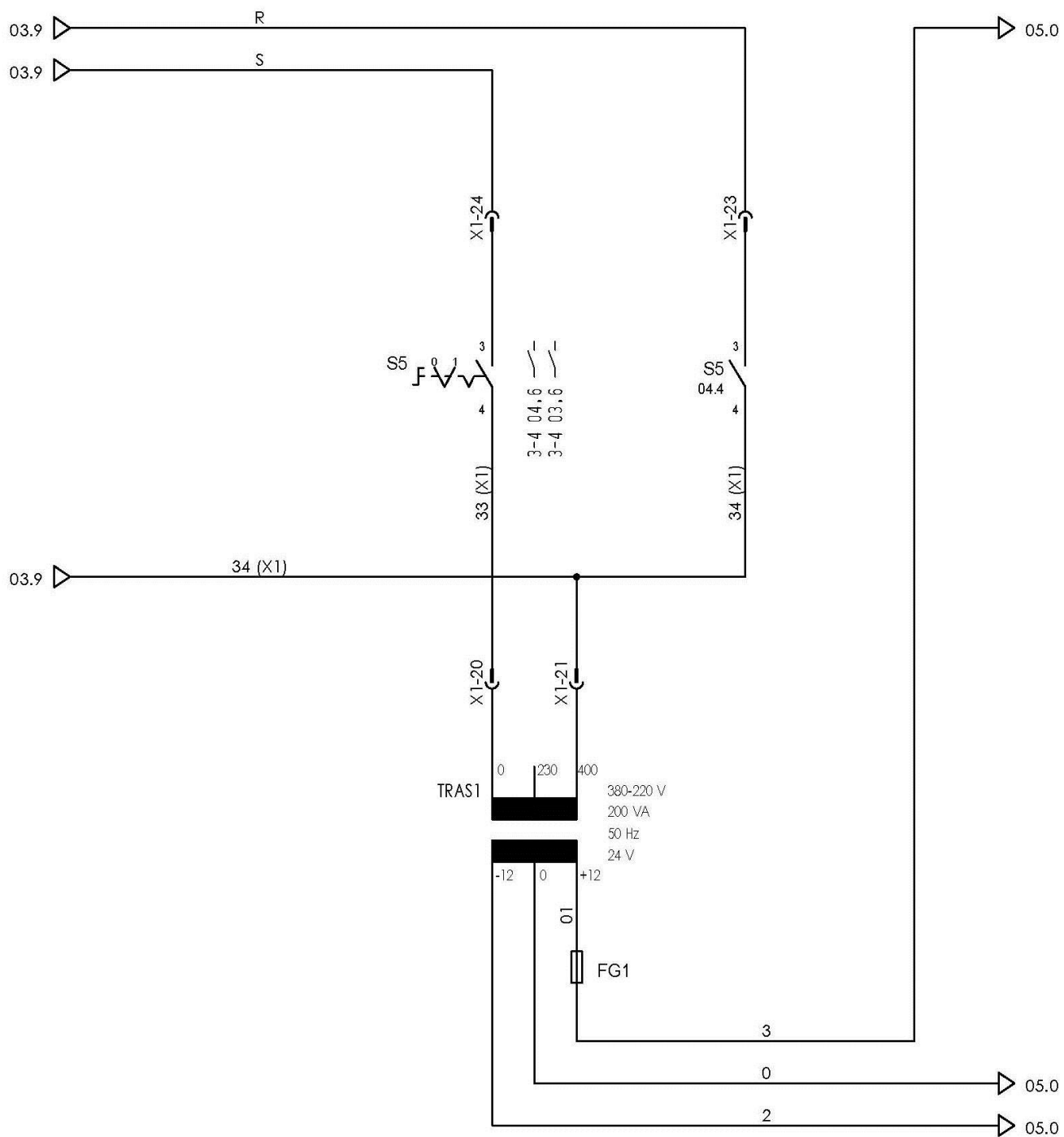
ASPIRATORE VAPORE



VENTILATORE

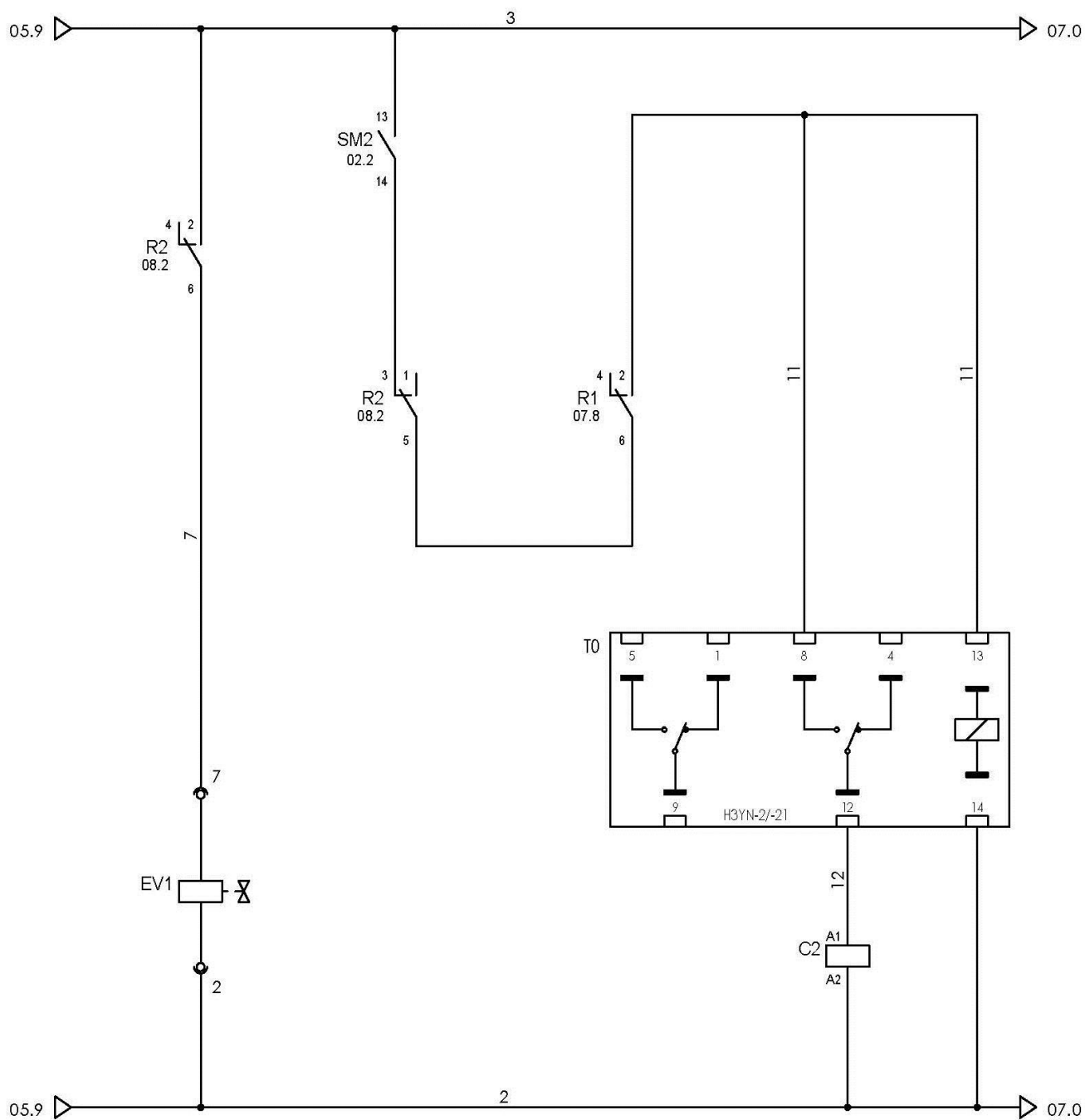
CARRELLO





TRASFORMATORE

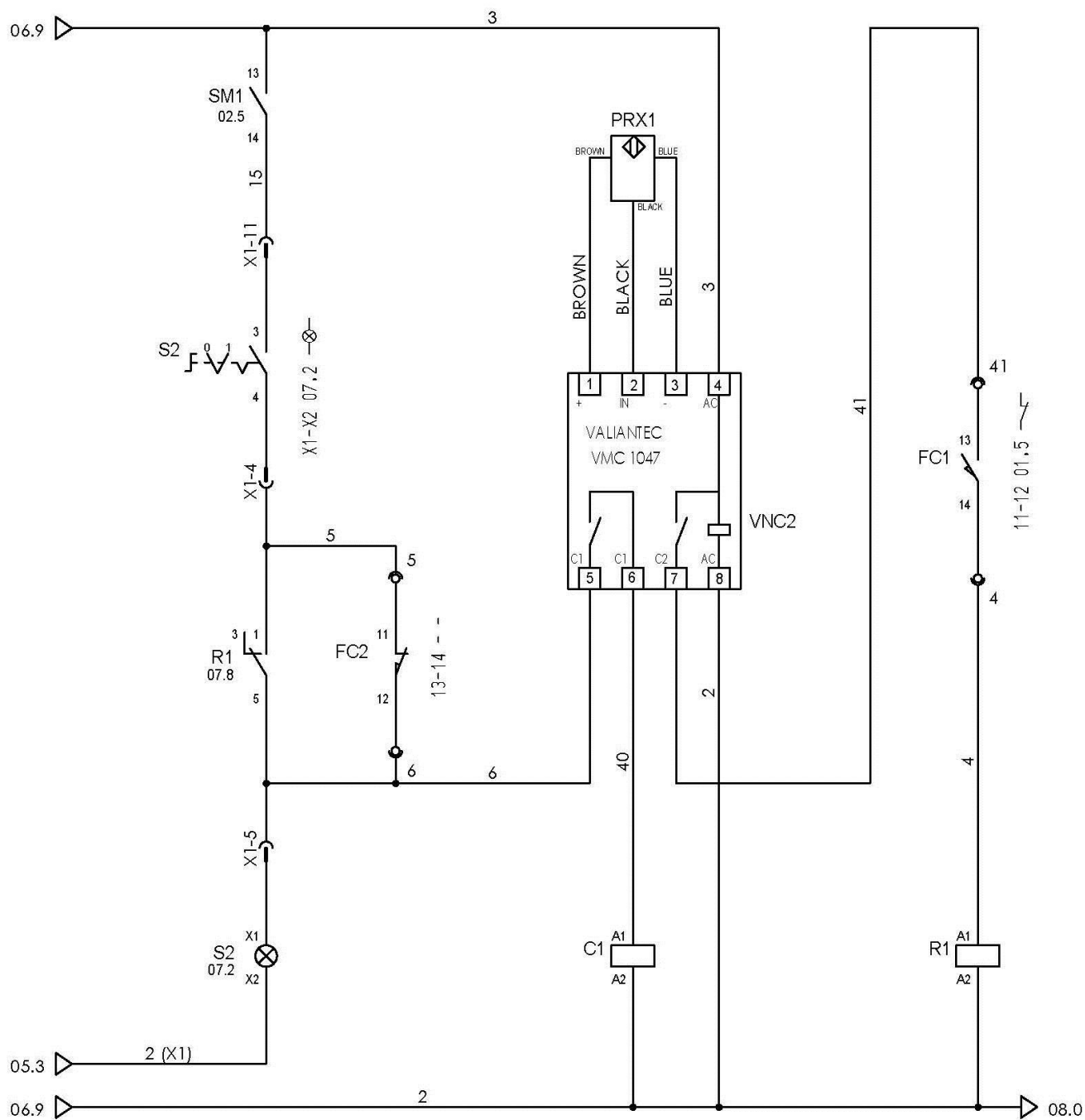
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RT-5101-GM	R-0							03 ◀ 04 ▶ 05	



1	↗	2	02.2
3	↗	4	02.2
5	↗	6	02.2
13	↗	14	05.5

ELETTOVALVOLA

VENTILATORE



ROTAZIONE CARRELLO

RELE' PORTA

0	1	2	3	4	5	6	7	8	9
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RT-5101-GM

R-0

06 ◀ 07 ▶ 08

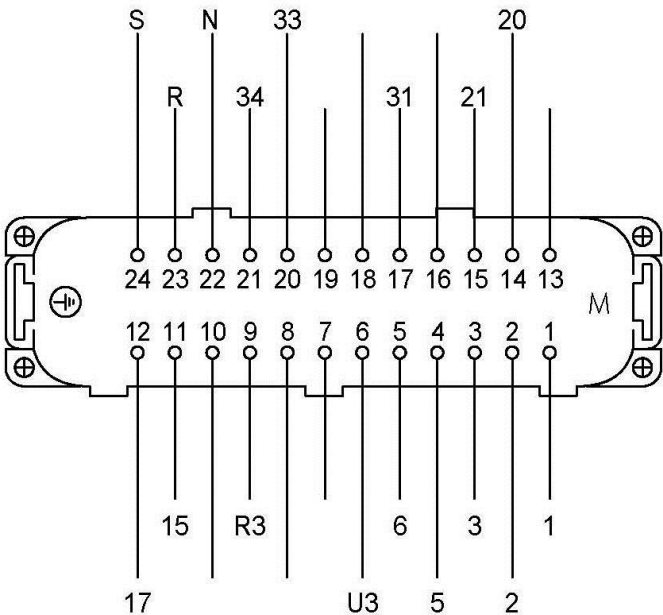
CONNETTORE
X1

FILO	MORSETTO	POSIZIONE
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N° PIN : 24
PRODUCER : IUME

LISTA LOCALIZZAZIONI	
BM	BORDO MACCHINA
CP	CASSETTA POTENZA
QC	QUADRO COMANDI

		COLONNA	FOGLIO
1	1	1	05
2	2	2	05
3	3	1	05
5	4	2	07
6	5	2	07
U3	6	6	03
8	7	3	03
	8	RISERVA	
R3	9	8	03
	10	RISERVA	
15	11	2	07
17	12	6	08
	13	RISERVA	
20	14	5	05
21	15	5	05
	16	RISERVA	
31	17	2	08
	18	RISERVA	
	19	RISERVA	
33	20	4	04
34	21	5	04
N	22	3	03
R	23	6	04
S	24	4	04



RIEPILOGO UTENZE

Y1

L1	L2	L3	NL	
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LINEA DI ALIMENTAZIONE

B2	B1	8	
----	----	---	---

BRUCIATORE

U1	V1	W1	
----	----	----	---

ROTAZIONE CARRELLO

U2	V2	W2	
----	----	----	---

MOTORE VENTILATORE

GR	BR	BL	
----	----	----	---

MOTORE ASPIRATORE VAPORE

1	0
---	---

LUCE FORNO

41	4	R3	U3
----	---	----	----

FINECORSA PORTA

5	6
---	---

FINECORSA CARRELLO

7	2
---	---

ELETTROVALVOLA

0	1	2	3	4	5	6	7	8	9
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09 ◀ 10 ▶ 11

LISTA MATERIALE

CODICE	DESCRIZIONE	CODICE RICAMBIO	LOCAZIONE	FOGLIO					
BR1	BRUCIATORE	---	BM	03					
C1	TELERUTTORE CARRELLO	PRR 88	CP	07					
C2	TELERUTTORE VENTILATORE	PRR 88	CP	06					
EV1	ELETTROVALVOLA	PRR 22	BM	06					
FB1	FUSIBILI BRUCIATORE	PRR 27 - PRR 49	CP	03					
FC1	FINECORSIA PORTA	PRR 25	BM	07					
FC2	FINECORSIA CARRELLO	PRR 25	BM	07					
FG1	FUSIBILE GENERALE	PRR 27 - PRR 52/3	CP	04					
IG1	INTERRUTTORE GENERALE	PRR 31	CP	01					
LB1	LAMPADA SPIA BLOCCO BRUCIATORE	PRR 74	QC	03					
LF1	LUCE FORNO	PRR 34/1	BM	05					
M1	ROTAZIONE CARRELLO	PRR 40	BM	02					
M2	MOTORE VENTILATORE	PRR 38	BM	02					
M3	MOTORE ASPIRATORE VAPORE	PRR 3/6	BM	01					
PRX1	SENSORE DI PROSSIMITA'	PRR 44/7	BM	07					
R1	RELE' PORTA	PRR 61	CP	07					
R2	RELE' VAPORE	PRR 61	CP	08					
RB1	RELE' BRUCIATORE	PRR 61	CP	05					
S1	SELETTORE LUCI FORNO	PRR 69	QC	05					
0	1	2	3	4	5	6	7	8	9

RT-5101-GM

R-0

10 **11** 12

0	1	2	3	4	5	6	7	8	9
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11 ◀ 12 ▶

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

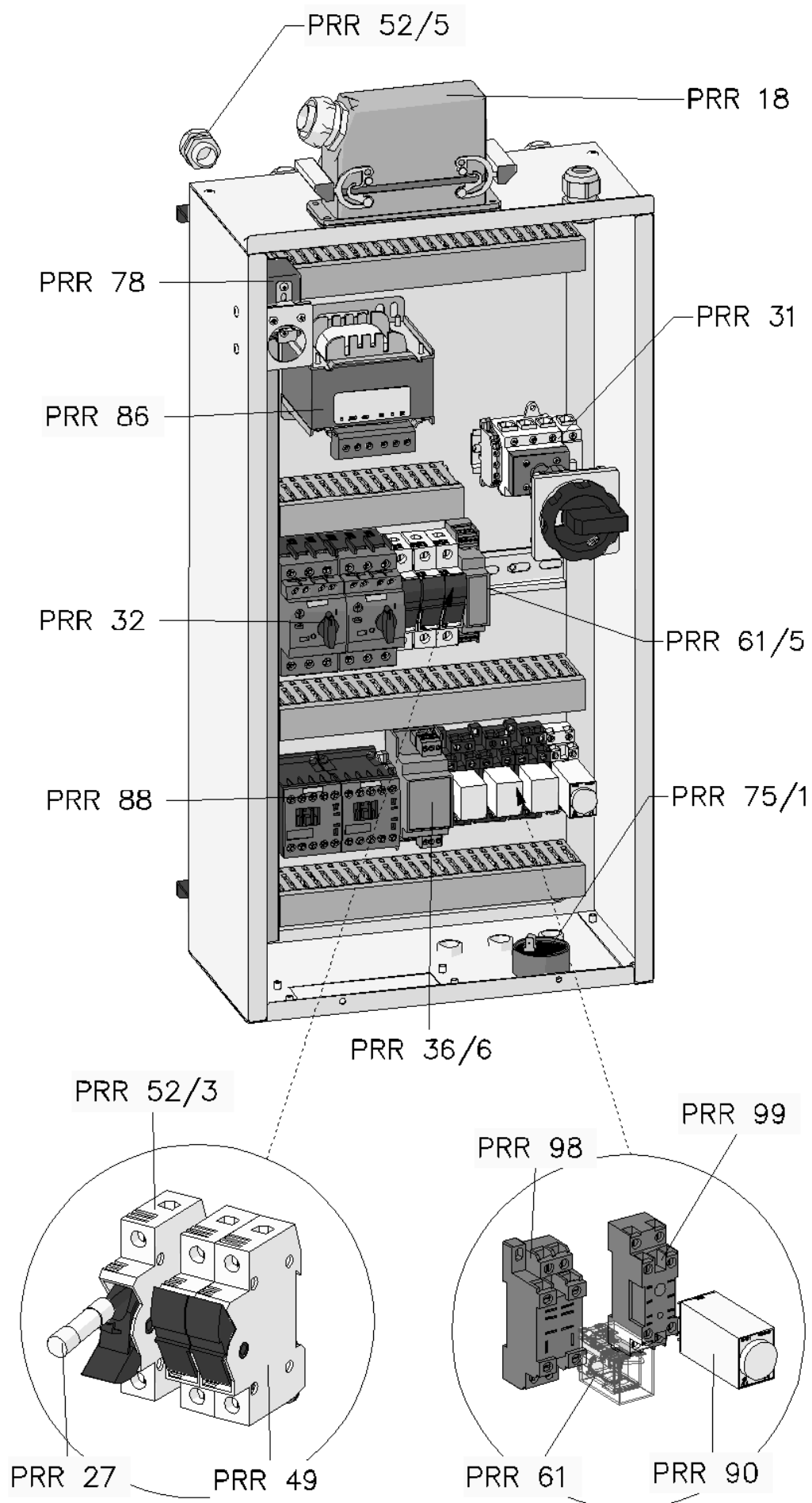
For complicated maintenance works and in case of breakages we kindly ask you to contact us.

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

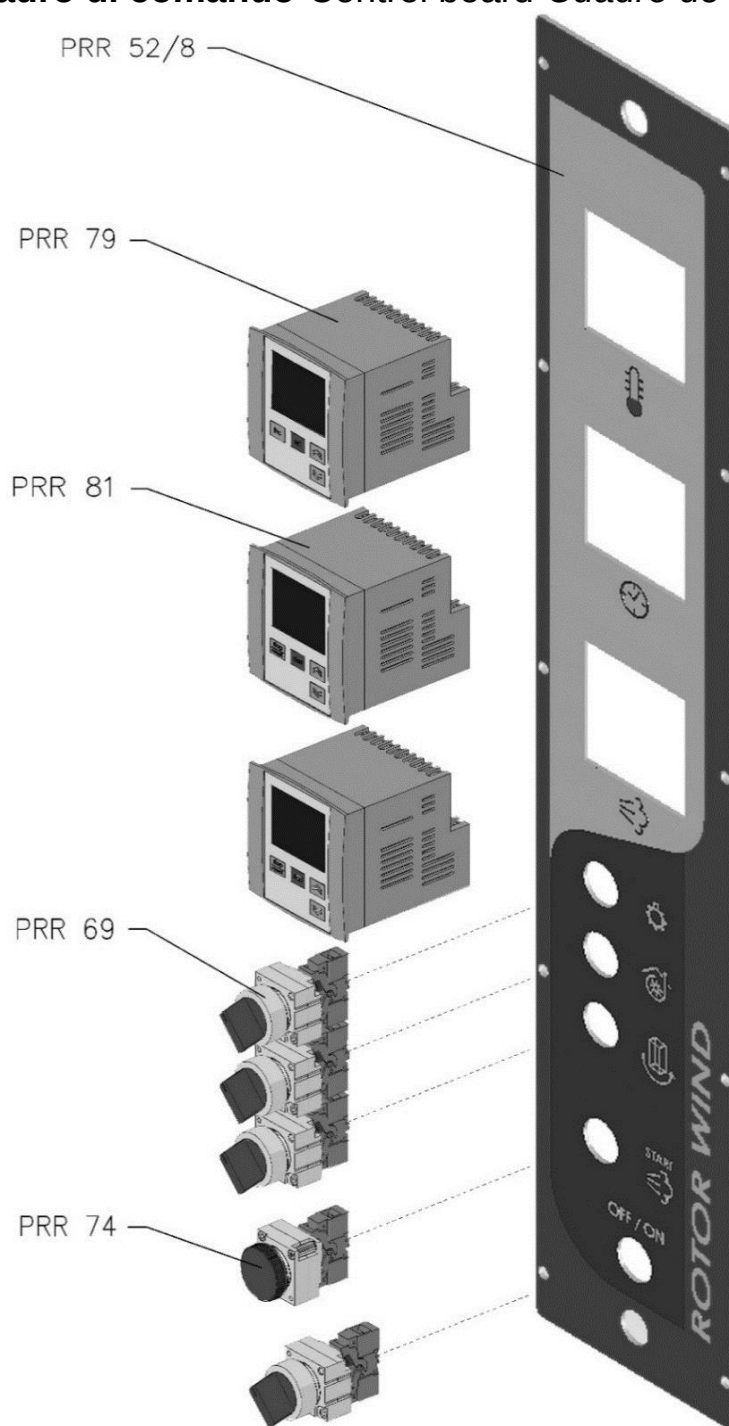
Para interventos más complicados y en caso de rupturas, les rogamos contactarnos. En todo caso, con el fin de simplificar la búsqueda de las averías y la eventual sustitución de piezas dañadas, damos a continuación una lista de repuestos, los dibujos técnicos y figuras referentes a cada una de las piezas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

Quadro di potenza-Power board-Cuadro de potencia



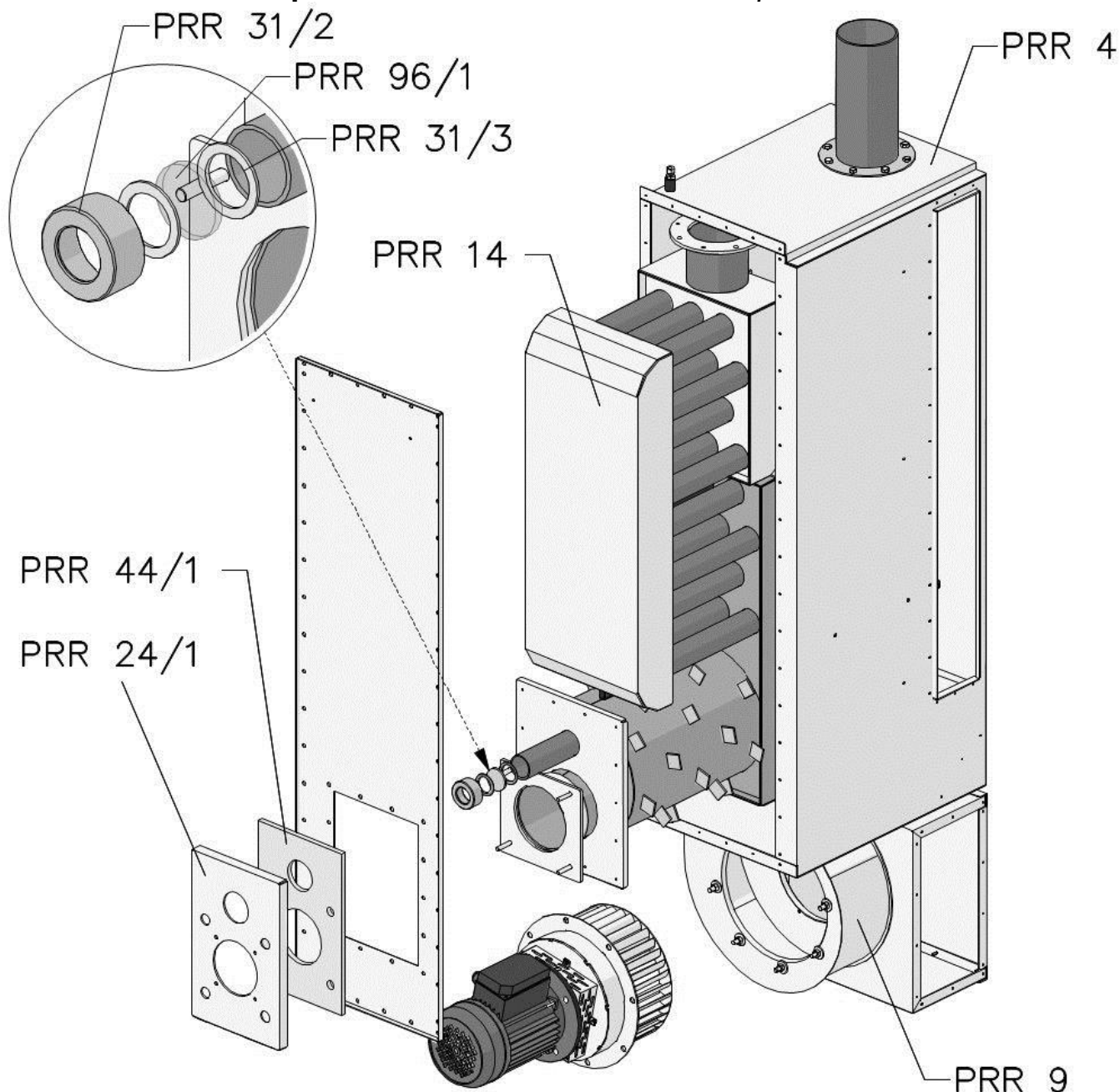
IT-UK-ES	Tabella codici di riferimento quadro di potenza		
	List of power board parts		
	Tabla códigos de referencia cuadro de potencia		
	Descrizione	Description	Descripción
3GL-4GL-5GL			
	CONNETTORE QUADRO ELETTRICO COMPLETO	ELECTRIC BOARD CONNECTOR COMPLETED	CONECTADOR CUADRO ELÉCTRICO COMPLETO
	FUSIBILE NORMALE	STANDARD FUSE	FUSIBLE NORMAL
	INTERRUTTORE GENERALE PER FORNI ROTATIVI GAS/GASOLIO	MAINS SWITCH FOR GAS/FUEL ROTARY OVENS	INTERRUPTOR GENERAL PARA HORNOS ROTATORIOS GAS/GASÓLEO
	PORTAFUSIBILE NORMALE (BIPOLARE)	STANDARD FUSE HOLDERR (BIPOLAR)	PORTAFUSIBLE NORMAL (BIPOLAR)
	PORTAFUSIBILE NORMALE (UNIPOLARE)	STANDARD FUSE HOLDER (SINGLE-POLAR)	PORTAFUSIBLE NORMAL (UNIPOLAR)
	PRESSAGUAINA DIRITTO	STRAIGHT SHEATH THROUGH	PRENSA-CABLE DIRITTO
	RELÈ	RELAY	RELÈ
	SUONERIA ELETTRONICA BITONALE	TWO-SOUND ELECTRONIC BEEPER	ALARMA ELECTRÓNICA A 2 TONOS
	TERMOSTATO DI MASSIMA	MAX TEMP. THERMOSTAT	TERMOSTATO TEMPERATURA MÁXIMA
	TRASFORMATORE 200VA	200VA TRANSFORMER	TRANSFORMADOR 200VA
	TELERUTTORE NORMALE	NORMAL REMOTE-CONTROL SWITCH	TELERRUPTOR NORMAL
	TEMPORIZZATORE OMRON H3Y	OMRON H3Y TIMER	TEMPORIZADOR OMRON H3Y
	ZOCCOLO PER RELÈ	BASE FOR RELAY	BASE PARA RELÈ
	ZOCCOLO PER OMRON H3Y	BASE FOR OMRON H3Y	BASE PARA OMRON H3Y
	INTERRUTTORE AUTOMATICO	AUTOMATIC SWITCH	INTERRUPTOR AUTOMÁTICO
	INTERFACCIA PER ASPIRATORE MONOFASE	INTERFACE FOR STEAM SUCTION FAN - SINGLE PHASE	INTERFACE PARA ASPIRADOR MONOFÁSICO
	RELE' PER PROXIMITY	RELAY FOR PROXIMITY	RELE' PARA PROXIMITY

Quadro di comando-Control board-Cuadro de comando



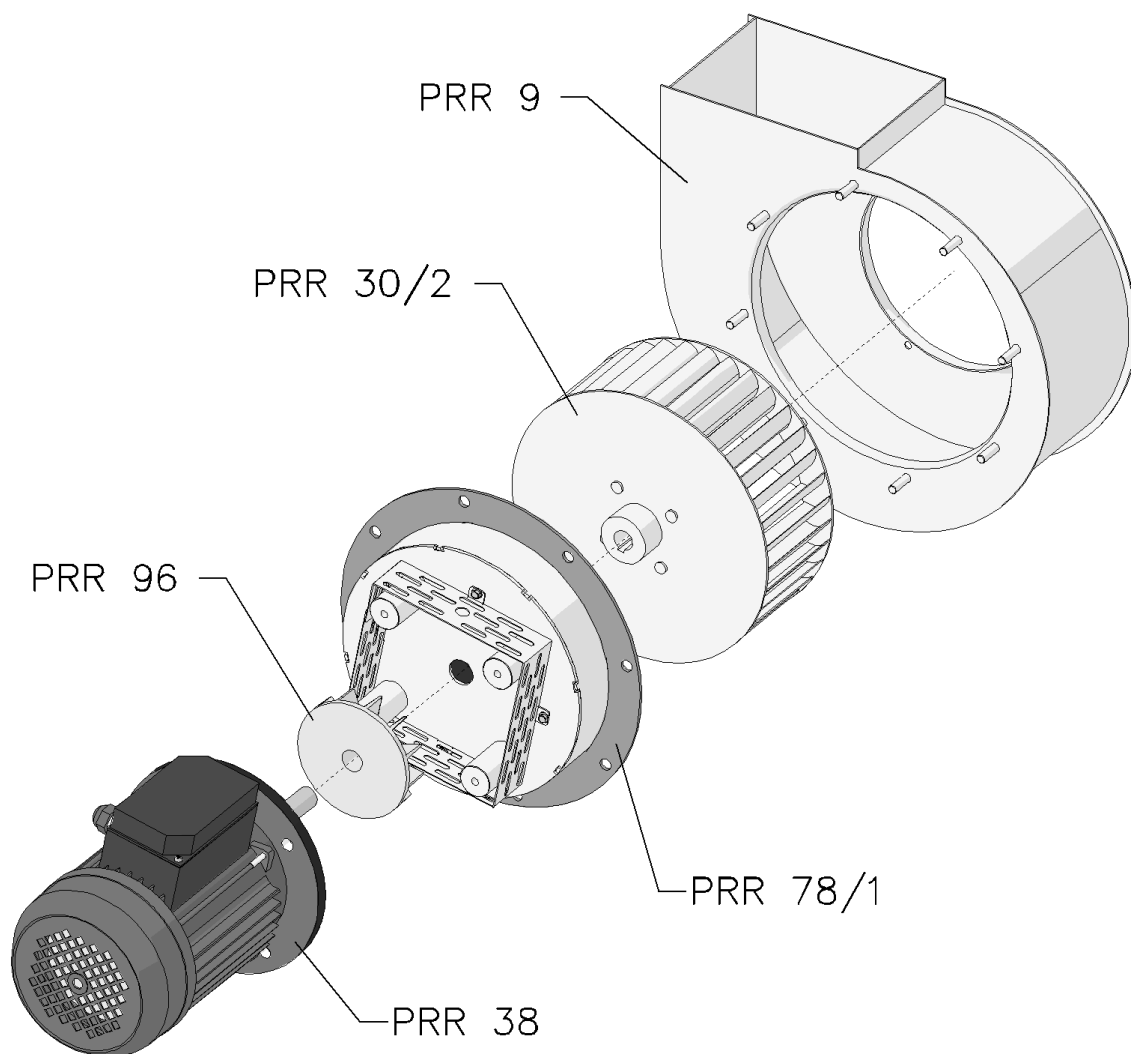
IT-UK-ES	Tabella codici di riferimento quadro di comando		
	List of control board parts		
	Tabla códigos de referencia cuadro de comando		
Descrizione	Description	Descripción	3GL-4GL-5GL
PANNELLO PORTASTRUMENTI Elettromeccanico	ELECTROMECHANICAL TOOL HOLDER	PANEL PORTAINSTRUMENTOS ELECTROMECÁNICO	PRR 52/8
TERMOREGOLATORE ELETTRONICO ELIWELL	ELIWELL ELECTRONIC THERMAL ADJUSTER	TERMORREGULADOR ELECTRÓNICO ELIWELL	PRR 79
TEMPORIZZATORE ELETTRONICO ELIWELL	ELIWELL ELECTRONIC TIMER	TEMPORIZADOR ELECTRÓNICO ELIWELL	PRR 81
SELETTORE	SWITCH	SELETTORE	PRR 69
SPIA LUMINOSA ROSSA	RED WANING LIGHT	ESPIA LUMINOSA ROJA	PRR 74
SONDA PER TERMOREGOLATORE	PROBE FOR THERMAL ADJUSTER	SONDA PARA TERMORREGULADOR	PRR 72

Sezione posteriore-Rear section-Sección posterior



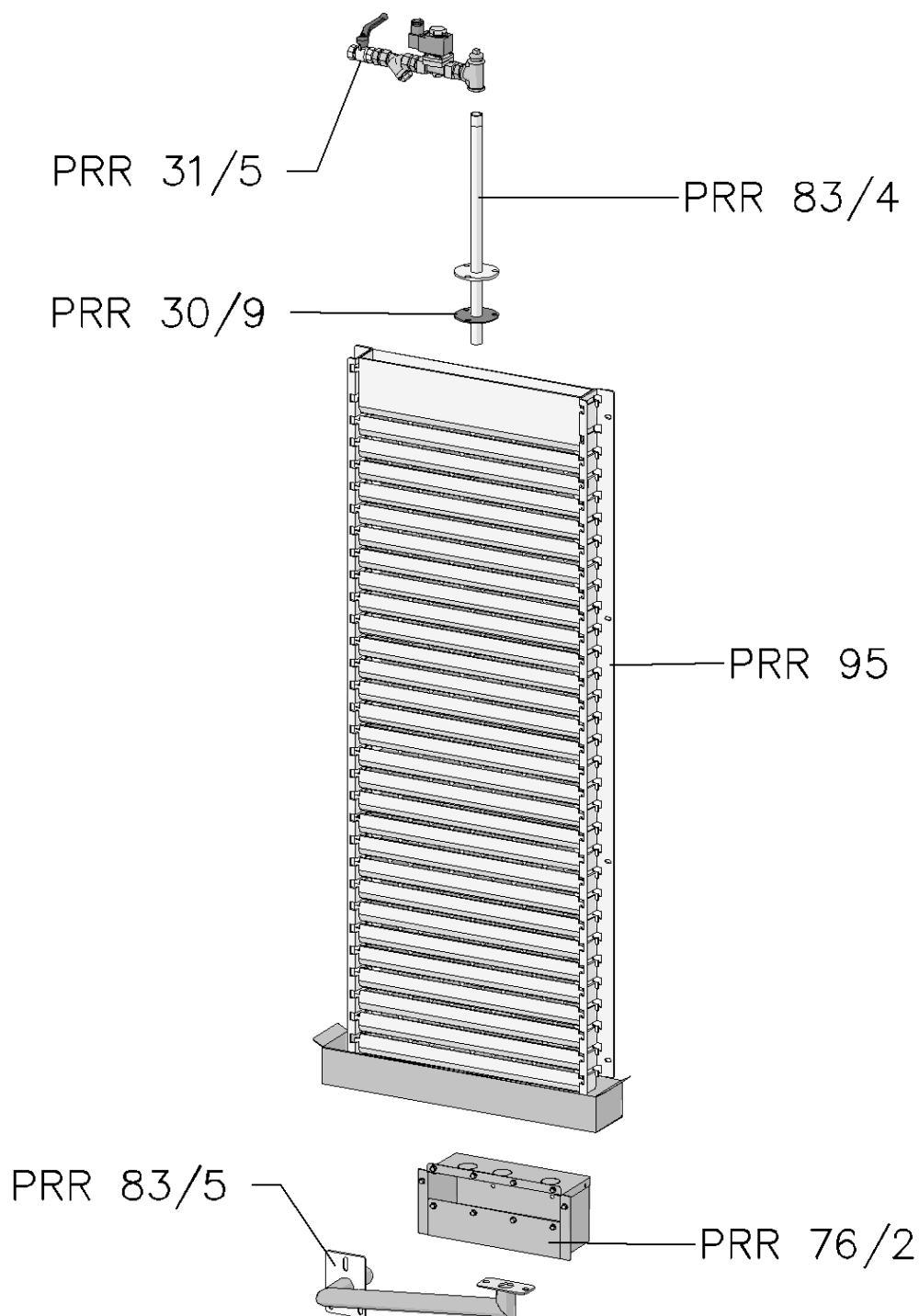
IT-UK-ES	Tabella codici di riferimento sezione posteriore		
	List of rear section parts		
	Tabla códigos de referencia sección posterior		
Descrizione	Description	Descripción	3GL-4GL-5GL
BLOCCO CAMERA DI COMBUSTIONE	COMBUSTION CHAMBER BLOCK	BLOQUEO CÁMARA DE COMBUSTIÓN	PRR 4
CHIOCCIOLA PER VENTILATORE	VENTILATOR HOUSING	ESPIRAL PARA VENTILADOR	PRR 9
CAMERA DI COMBUSTIONE	COMBUSTION CHAMBER	CÁMARA DE COMBUSTIÓN	PRR 14
FLANGIA CONTENIMENTO ISOLANTE BRUCIATORE	FLANGE FOR BURNER INSULATING CONTAINMENT	BRIDA SUJECIÓN AISLANTE QUEMADOR	PRR 24/1
PIASTRA ISOLANTE PER BRUCIATORE-SPESSORE 10MM	INSULATING BURNER PLATE TH. 10 mm	CHAPA AISLANTE PARA QUEMADOR-ESPEJOR 10MM	PRR 44/1
GHIERA PER SPIONCINO DI ISPEZIONE	RING NUT FOR INSPECTION SPY HOLE COMBUSTION CHAMBER	ABRAZADERA PARA ESPÍA DE INSPECCIÓN	PRR 31/2
VETRO DI ISPEZIONE CAMERA DI COMBUSTIONE	SPY HOLE GLASS FOR COMBUSTION CHAMBER	VIDRIO DE INSPECCIÓN CÁMARA DE COMBUSTIÓN	PRR 96/1
GUARNIZIONE PER VETRO DI ISPEZIONE	GASKET FOR INSPECTION GLASS	GUARNICIÓN PARA VIDRIO DE INSPECCIÓN	PRR 31/3

Ventilatore-Ventilator-Ventilador



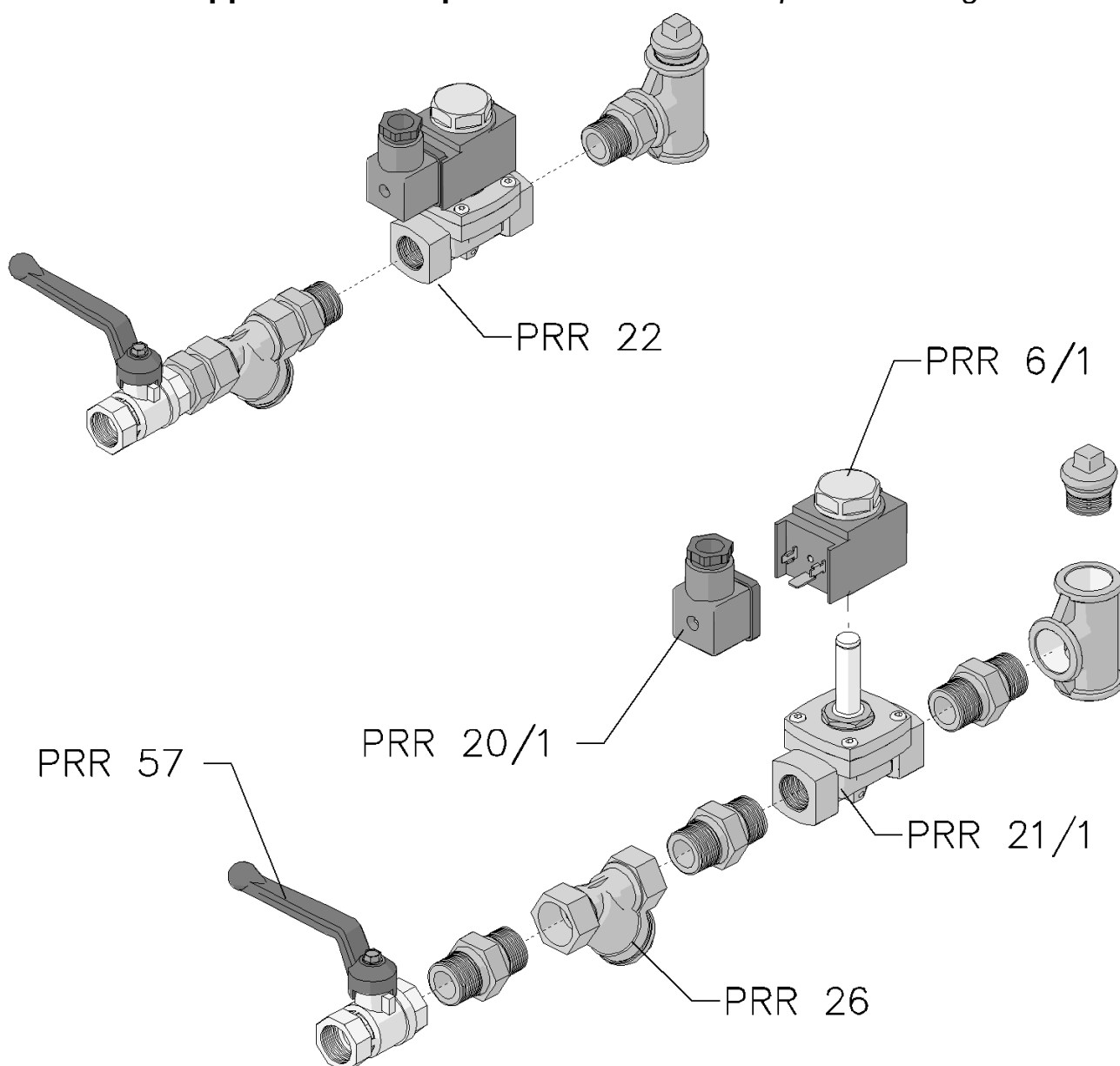
IT-UK-ES	Tabella codici di riferimento ventilatore		
	List of ventilator parts		
	Tabla códigos de referencia ventilador		
Descrizione	Description	Descripción	3GL-4GL-5GL
CHIOCCIOLA PER VENTILATORE	VENTILATOR HOUSING	ESPIRAL PARA VENTILADOR	PRR 9
GIRANTE PER VENTILATORE	IMPELLER FOR VENTILATOR	RODANTE PARA VENTILADOR	PRR 30/2
TORTA PER VENTILATORE	MOUNTING PLATE FOR BLOWER - ROTATIVE OVEN	TORSIÓN PARA VENTILADOR	PRR 78/1
VENTOLINA DI RAFFREDDAMENTO	COOLING FAN	VENTILADOR DE ENFRIAMIENTO	PRR 96
MOTORE VENTILATORE	VENTILATOR MOTOR FOR ROTATIVE OVENS	MOTOR VENTILADOR	PRR 38

Umidificatore-Humidifier-Humidificador



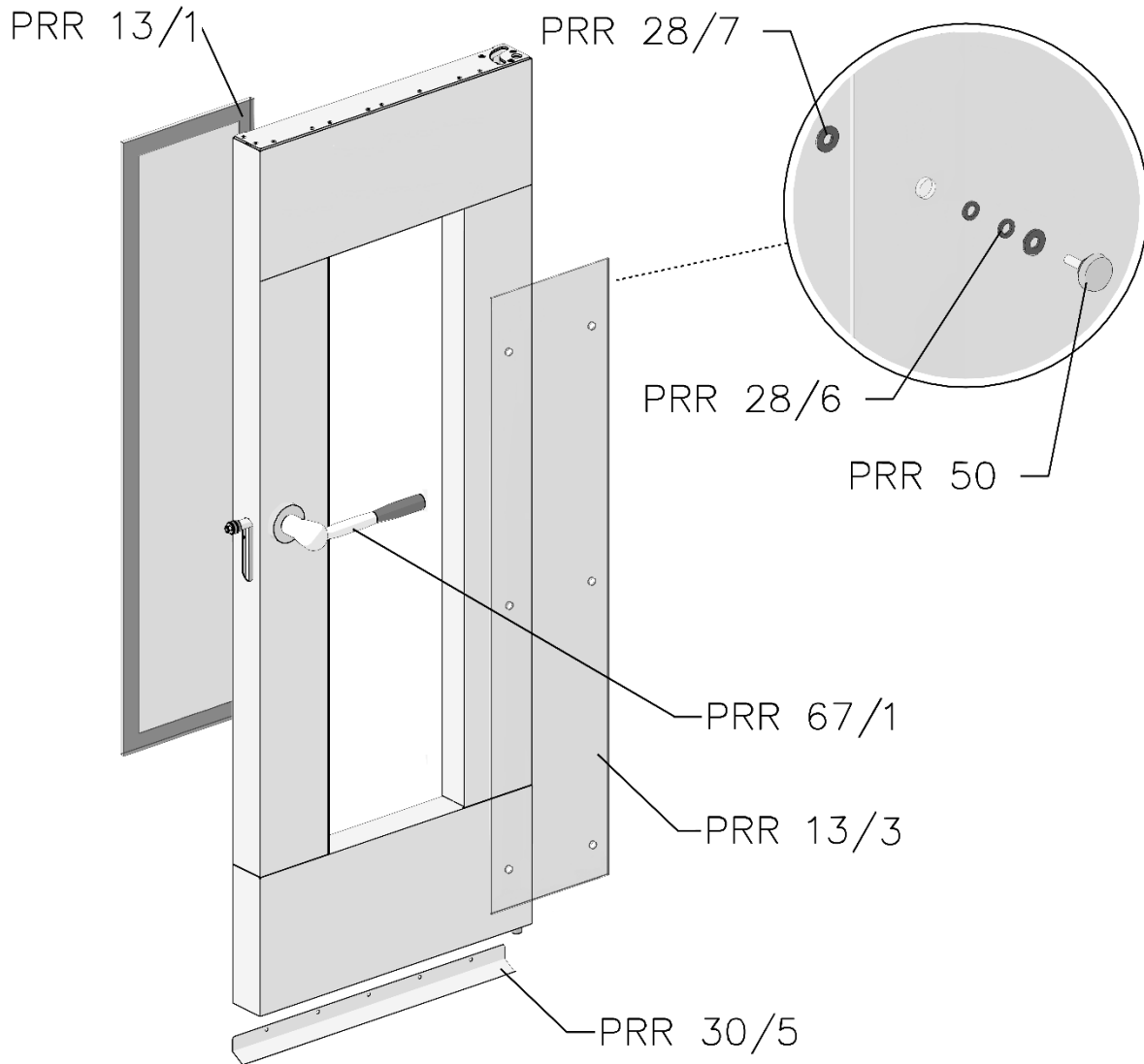
IT-UK-ES	Tabella codici di riferimento umidificatore		
	List of humidifier component parts		
	Tabla códigos de referencia humidificador		
Descrizione	Description	Descripción	3GL-4GL-5GL
GRUPPO ENTRATA ACQUA	WATER INLET COMPLETE UNIT	GRUPO ENTRADA AGUA	PRR 31/5
TUBO ENTRATA ACQUA	WATER INLET PIPE	TUBO ENTRADA AGUA	PRR 83/4
GUARNIZIONE ENTRATA ACQUA	WATER INLET GASKET	GUARNICIÓN ENTRADA AGUA	PRR 30/9
UMIDIFICATORE	STEAM GENERATOR	HUMIDIFICADOR	PRR 95
VASCHETTA RACCOLTA ACQUA IN ECCESSO	CONDENSATE DRAINAGE BOX	CAJA RECOGEDORA AGUA EN EXCESO	PRR 76/2
TUBO SCARICO ACQUA	WATER DRAINAGE PIPE FOR STEAM GENERATOR	TUBO DESCARGA AGUA	PRR 83/5

Gruppo entrata acqua-Water inlet unit-Grupo entrada agua



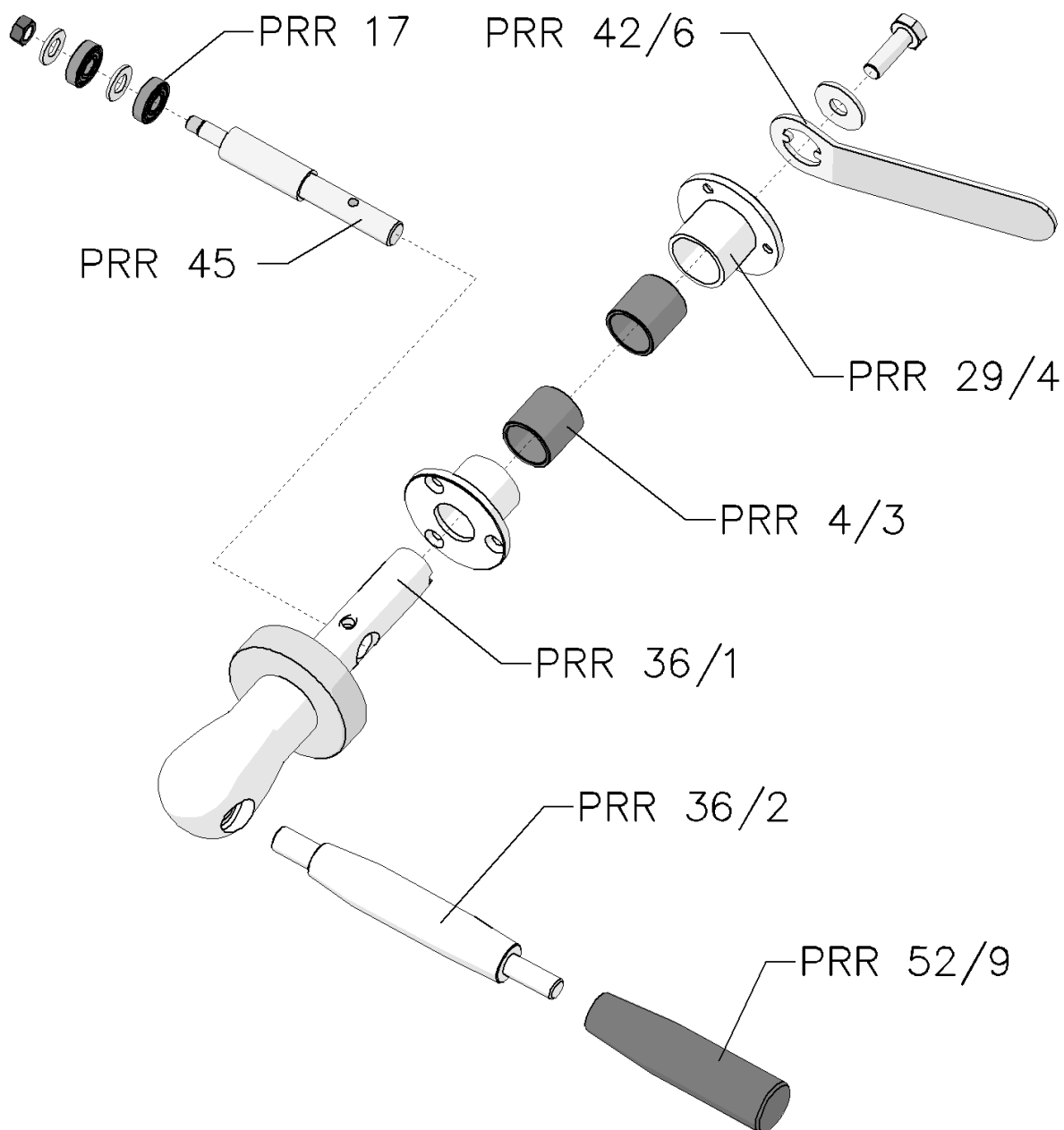
IT-UK-ES	Tabella codici di riferimento gruppo entrata acqua		
	List of water inlet unit parts		
	Tabla códigos de referencia grupo entrada agua		
Descrizione	Description	Descripción	3GL-4GL-5GL
BOBINA PER ELETTROVALVOLA	SOLENOID VALVE COIL	BOBINA PARA ELECTROVÁLVULA	PRR 6/1
CONNETTORE PER ELETTROVALVOLA	CONNECTOR FOR WATER VALVE	CONECTOR PARA ELECTROVÁLVULA	PRR 20/1
SERRANDA ENTRATA ACQUA	WATER INLET SHUTTER	CIERRE ENTRADA AGUA	PRR 57
FILTRO ELETTROVALVOLA ACQUA	WATER SOLENOID VALVE FILTER	FILTRO ELECTROVÁLVULA AGUA	PRR 26
ELETTROVALVOLA ACQUA (SOLO VALVOLA)	WATER SOLENOID VALVE (ONLY VALVE)	ELECTROVÁLVULA AGUA (SÓLO VÁLVULA)	PRR 21/1
ELETTROVALVOLA ACQUA COMPLETA	WATER SOLENOID VALVE - COMPLETE	ELECTROVÁLVULA AGUA COMPLETA	PRR 22

Porta-Door-Puerta



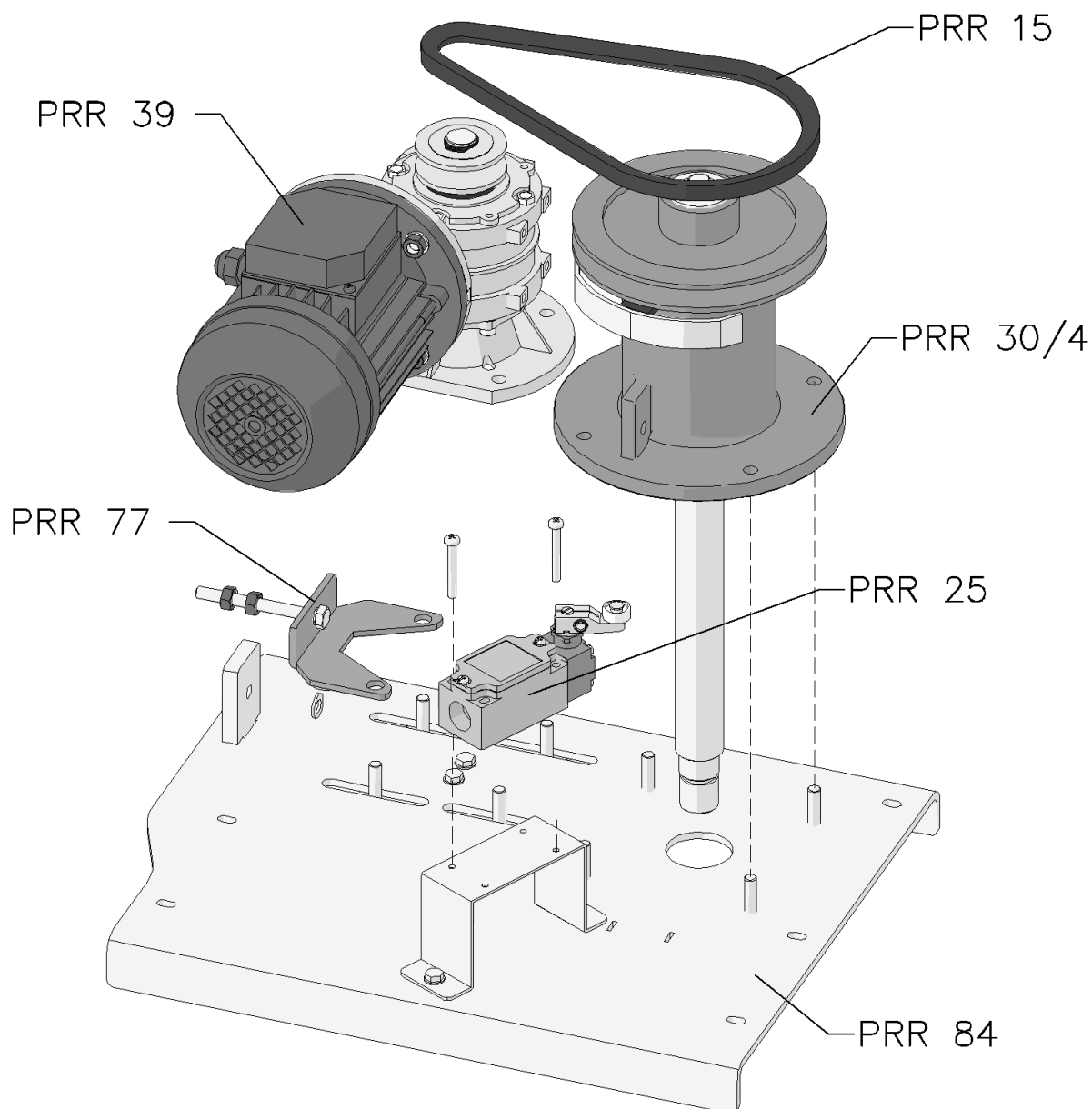
IT-UK-ES	Tabella codici di riferimento porta List of door component parts Tabla códigos de referencia puerta		
	Descrizione	Description	Descripción
			3GF-4GF-5GF
	SERRATURA PORTA COMPLETA	DOOR LOCK	CERRADURA PUERTA COMPLETA PRR 67/1
	VETRO PORTA INTERNO PER PORTA CON VETRO LUNGO	DOOR GLASS - INTERNAL - FOR DOOR WITH LONG WINDOW	VIDRIO PUERTA INTERNO PARA PUERTA CON VIDRIO LARGO PRR 13/1
	VETRO PORTA ESTERNO PER PORTA CON VETRO LUNGO	DOOR GLASS - EXTERNAL - FOR DOOR WITH LONG WINDOW	VIDRIO PUERTA EXTERNA PARA PUERTA CON VIDRIO LARGO PRR 13/3
	GUARNIZIONE INFERIORE INOX PER PORTA DI COTTURA	DOOR GASKET "BOTTOM" - STAINLESS STEEL	GUARNICIÓN INFERIOR INOX PARA PUERTA DE COCCIÓN PRR 30/5
	VITE CON POMELLO INOX	SCREW WITH INOX KNOB	TORNILLO CON POMO INOX PRR 50
	GUARNIZIONE TONDA PICCOLA FISSAGGIO VETRO	GLASS FIXING LITTLE ROUND GASKET	GUARNICIÓN REDONDA PEQUEÑA FIJACIÓN VIDRIO PRR 28/6
	GUARNIZIONE TONDA GRANDE FISSAGGIO VETRO	GLASS FIXING LARGE ROUND GASKET	GUARNICIÓN REDONDA GRANDE FIJACIÓN VIDRIO PRR 28/7

Serratura-Lock for door-Cerradura



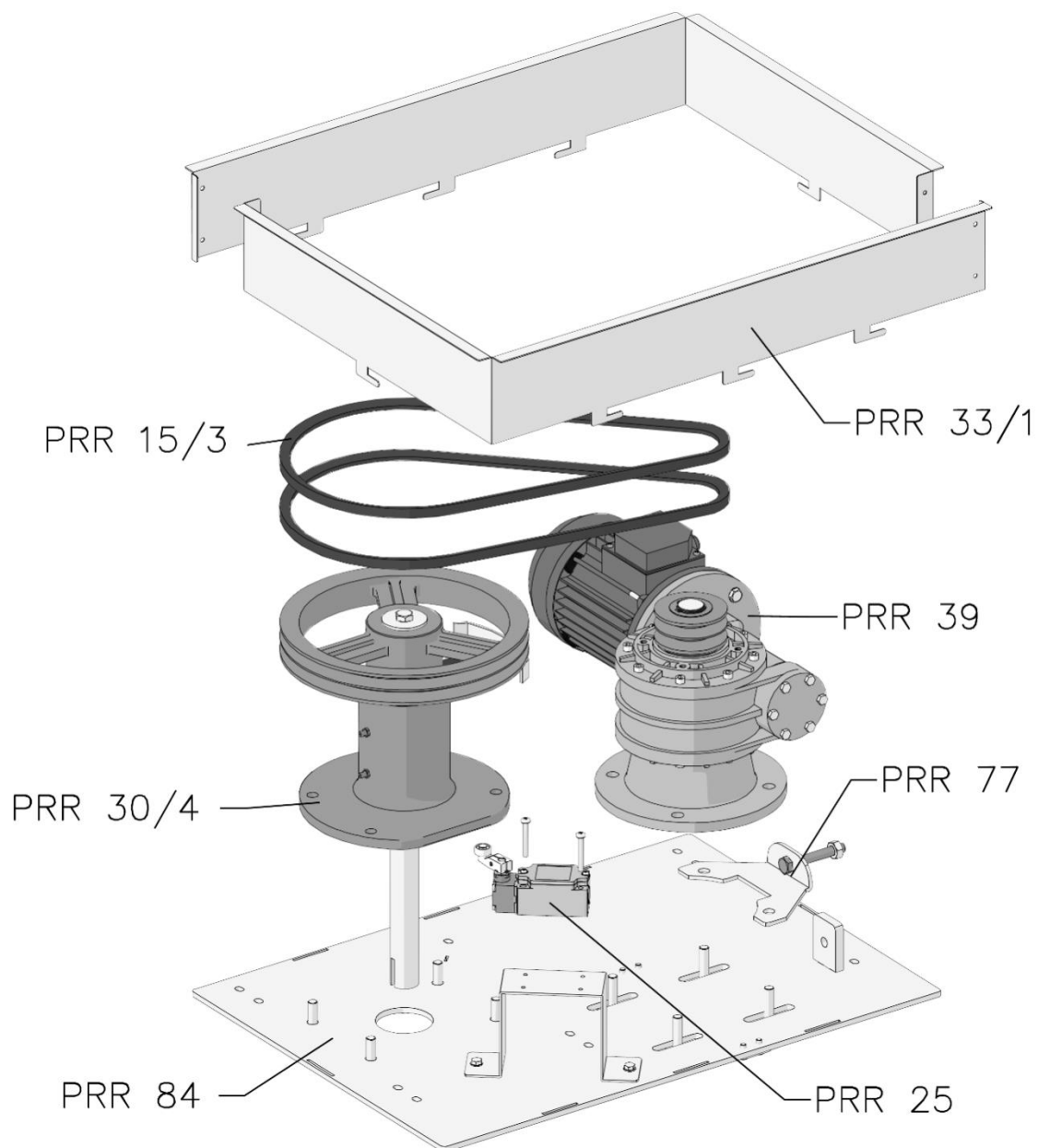
IT-UK-ES	Tabella codici di riferimento serratura		
	List of lock for door parts		
	Tabla códigos de referencia cerradura		
Descrizione	Description	Descripción	3GL-4GL-5GL
CUSCINETTO PER SERRATURA PORTA	BEARING FOR DOOR LOCK	COJINETE CERRADURA PUERTA	PRR 17
PERNO PER MANIGLIA PORTA	PIN FOR DOOR HANDLE	PERNO PARA MANIJA PUERTA	PRR 45
MANIGLIA PORTA: IMPUGNATURA IN BACHELITE NERA	DOOR HANDLE, BLACK BAKELITE HILT	MANIJA PUERTA: EMPUÑADURA EN BAQUELITA NEGRA	PRR 52/9
MANIGLIA PORTA: IMPUGNATURA IN FERRO CROMATO	DOOR HANDLE- HILT IN CHROMIUM-IRON	MANIJA PUERTA: EMPUÑADURA EN FIERRO CROMADO	PRR 36/2
MANIGLIA PORTA: CORPO CENTRALE CON PERNO PASSANTE	DOOR HANDLE- CENTRAL PART WITH PIVOT	MANIJA PUERTA: CUERPO CENTRAL CON PERNO PASADOR	PRR 36/1
BRONZINA MANIGLIA PORTA	BUSHING FOR DOOR HANDLE	CHUMACERA MANIJA PUERTA	PRR 4/3
GHIERE SUPPORTO MANIGLIA	RING NUT FOR DOOR HANDLE SUPPORT	ZUNCHO SOPORTE MANIJA	PRR 29/4
MANIGLIA INTERNA PORTA	INTERNAL DOOR HANDLE	MANIJA INTERNA PUERTA	PRR 42/6

Gruppo rotazione carrello-Rack motion-Grupo rotación carro (3GL-4GL)



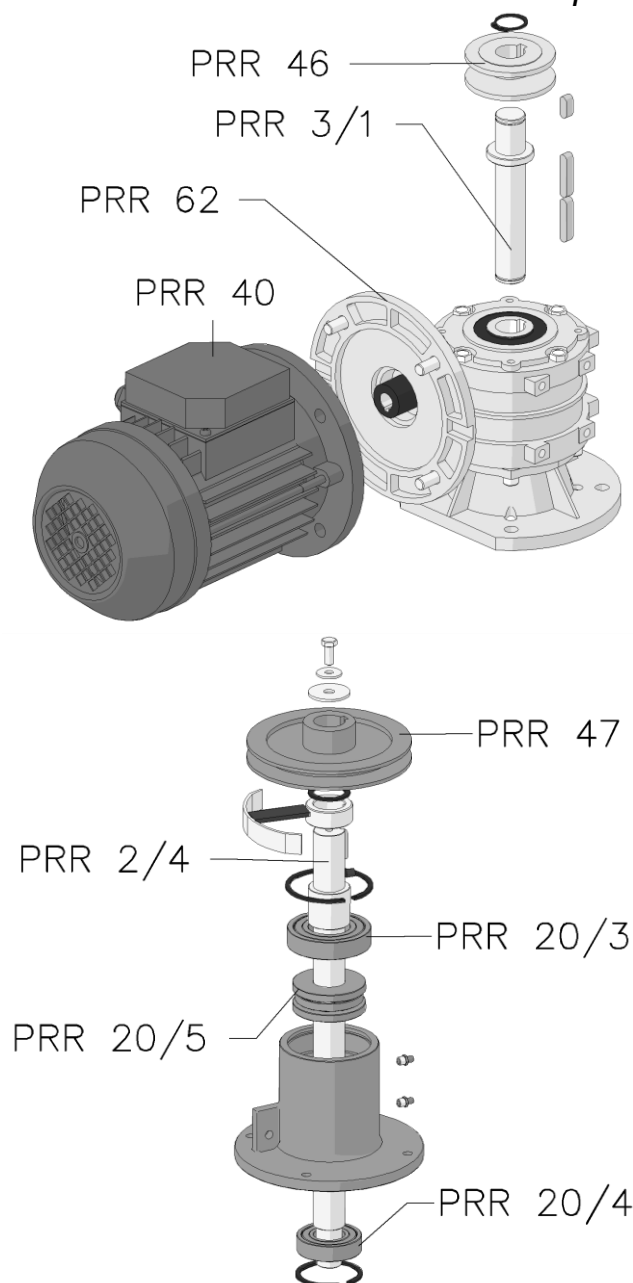
IT-UK-ES	Tabella codici di riferimento gruppo rotazione carrello		
	List of rack motion parts		
	Tabla códigos de referencia grupo rotación carro		
Descrizione	Description	Descripción	3GL-4GL
CINGHIA A25	ROTATION BELT A25	CORREA A25	PRR 15
FINECORSA	LIMIT SWITCH	TOPE	PRR 25
GRUPPO ROTAZIONE COMPLETO DI PULEGGIA PER AGGANCIO	ROTATION UNIT WITH PULLEY FOR TOP HOOK	GRUPO ROTACIÓN COMPLETO CON POLEA PARA ENGANCHE	PRR 30/4
STAFFA TENDICINGHIA	BRACKET FOR BELT STRETCHER	REFUERZO TENSOR DE POLEA	PRR 77
MOTORIDUTTORE PER CARRELLO COMPLETO DI ALBERO E PULEGGIA	RACK GEAR MOTOR COMPLETE WITH SHAFT AND PULLEY	MOTORREDUCTOR CARRO COMPLETO CON ÁRBOL Y POLEA	PRR 39
TRAVERSA ROTAZIONE SENZA MOTORIDUTTORE E GRUPPO ROTAZIONE	ROTATION CROSS PIECE (WITHOUT GEAR BOX MOTOR AND ROTATION UNIT)	TRAVESAÑO ROTACIÓN SIN MOTORREDUCTOR Y GRUPO ROTACIÓN	PRR 84

Gruppo rotazione carrello-Rack motion-Grupo rotación carro (5GL)



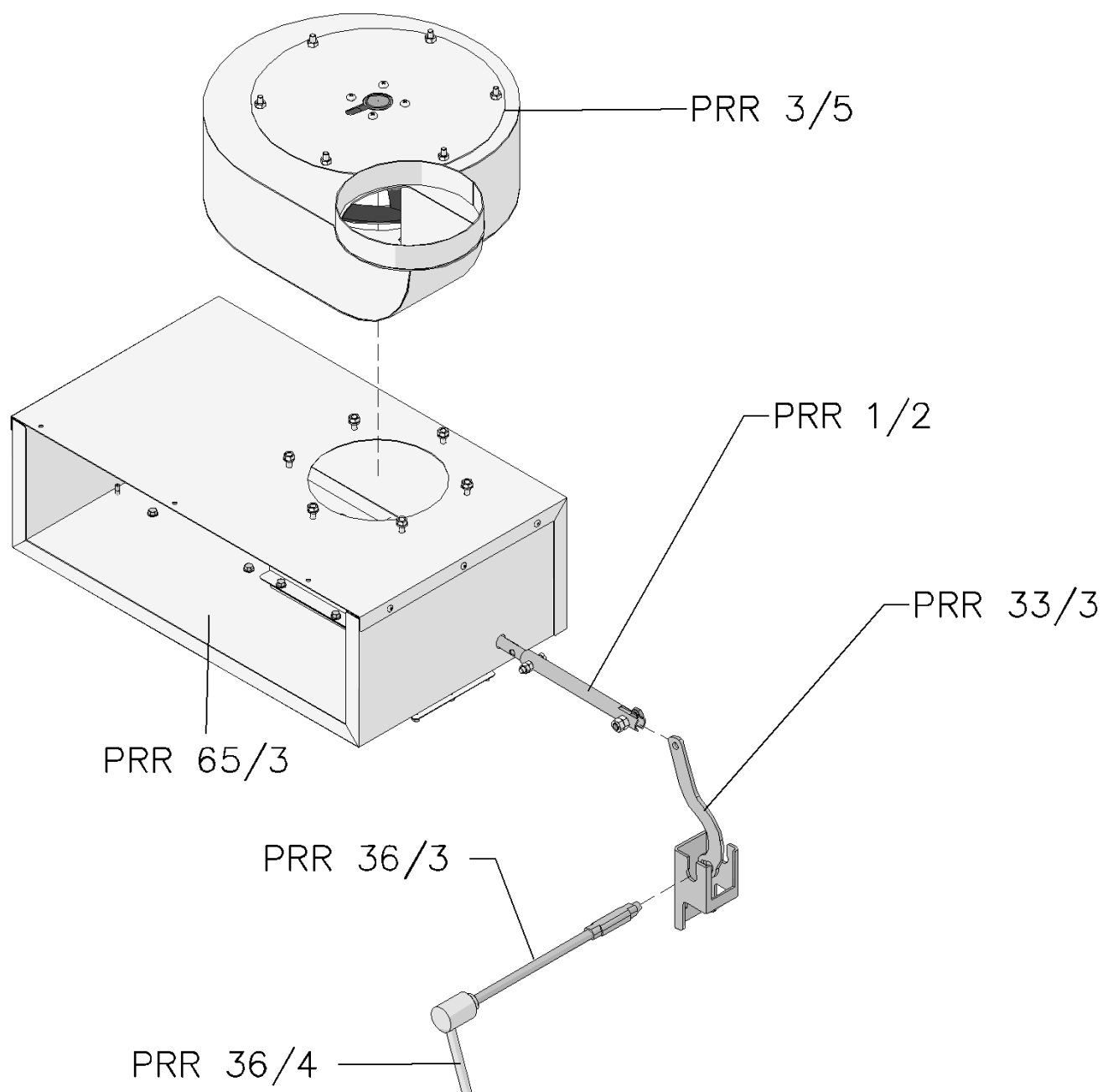
IT-UK-ES	Tabella codici di riferimento gruppo rotazione carrello		
	List of rack motion parts		
	Tabla códigos de referencia grupo rotación carro		
Descrizione	Description	Descripción	5GL
LAMIERA CONTENIMENTO ISOLANTE TRAVERSA CON AGGANCIO	INSULATING CONTAINING METAL SHEET FOR CROSS PIECE WITH COUPLING ENDS	CHAPA AISLANTE TRAVESAÑO CON ENGANCHE	PRR 33/1
CINGHIA A43	ROTATION BELT A43	CORREA A43	PRR 15/3
FINECORS	LIMIT SWITCH	TOPE	PRR 25
GRUPPO ROTAZIONE COMPLETO DI PULEGGIA PER AGGANCIO	ROTATION UNIT WITH PULLEY FOR TOP HOOK	GRUPO ROTACIÓN COMPLETO CON POLEA PARA ENGANCHE	PRR 30/4
STAFFA TENDICINGHIA	BRACKET FOR BELT STRETCHER	REFUERZO TENSOR DE POLEA	PRR 77
MOTORIDUTTORE PER CARRELLO COMPLETO DI ALBERO E PULEGGIA	RACK GEAR MOTOR COMPLETE WITH SHAFT AND PULLEY	MOTORREDUCTOR PARA CARRO COMPLETO CON ÁRBOL Y POLEA	PRR 39
TRAVERSA ROTAZIONE SENZA MOTORIDUTTORE E GRUPPO ROTAZIONE	ROTATION CROSS PIECE (WITHOUT GEAR BOX MOTOR AND ROTATION UNIT)	TRAAVESANO ROTACIÓN SIN MOTORREDUCTOR Y GRUPO ROTACIÓN	PRR 84

Gruppo rotazione carrello- Rack motion-Grupo rotación carro



IT-UK-ES	Tabella codici di riferimento gruppo rotazione carrello		
	List of rack motion parts		
	Tabla códigos de referencia grupo rotación carro		
Descrizione	Description	Descripción	3GL-4GL-5GL
PULEGGIA MOTRICE ROTAZIONE	DRIVING PULLEY FOR RACK ROTATION	POLEA MOTRIZ ROTACIÓN	PRR 46
MOTORE PER RIDUTTORE CARRELLO	RACK GEAR MOTOR	MOTOR PARA REDUCTOR CARRO	PRR 40
ALBERO PER RIDUTTORE ROTAZIONE CARRELLO	SHAFT FOR RACK GEAR REDUCER	ÁRBOL PARA REDUCTOR ROTACIÓN CARRO	PRR 3/1
RIDUTTORE CARRELLO	RACK GEAR REDUCER	REDUCTOR CARRO	PRR 62
PULEGGIA CONDOTTA ROTAZIONE	DRIVEN PULLEY FOR RACK ROTATION	POLEA CONDUCTO ROTACIÓN	PRR 47
ALBERO ROTAZIONE PER FORNO CON AGGANCIO	ROTATION SHAFT FOR OVEN WITH TOP HOOK	ÁRBOL PARA HORNO CON ENGANCHE	PRR 2/4
CUSCINETTO SUPERIORE GRUPPO ROTAZIONE	BEARING "UPPER" FOR ROTATION UNIT	COJINETE SUPERIOR GRUPO ROTACIÓN	PRR 20/3
CUSCINETTO REGGISPINTA GRUPPO ROTAZIONE	THRUST BEARING FOR ROTATION UNIT	COJINETE DE TOPE PARA GRUPO ROTACIÓN	PRR 20/5
CUSCINETTO INFERIORE GRUPPO ROTAZIONE	BEARING "LOWER" FOR ROTATION UNIT	COJINETE INFERIOR GRUPO ROTACIÓN	PRR20/4

Gruppo aspiratore vapore-Steam suction fan-Grupo aspirador vapor



IT-UK-ES	Tabella codici di riferimento gruppo aspiratore vapore		
	List of steam suction fan component parts		
	Tabla códigos de referencia grupo aspirador vapor		
Descrizione	Description	Descripción	3GL-4GL-5GL
ASPIRATORE VAPORE	STEAM SUCTION FAN - COMPLETE	ASPIRADOR VAPOR	PRR 3/5
SCATOLA SCARICO VAPORE	STEAM EXHAUST BOX FOR ROTATIVE OVENS	CAJA DESCARGA VAPOR	PRR 65/3
ASTA APERTURA SERRANDA VAPORE	OPENING ROD FOR STEAM EXHAUST SHUTTER	ASTA APERTURA CIERRE VAPOR	PRR 1/2
LEVA APERTURA SERRANDA VAPORE	OPENING LEVER WITH STEAM SHUTTER	LEVA APERTURA CIERRE VAPORE	PRR 33/3
MANIGLIA SERRANDA VAPORE (COMPLETA DI PERNO E MANIGLIA)	STEAM SHUTTER HANDLE - WITH COMPLETE HANDLE AND PIVOT	MANIJA CIERRE VAPOR (COMPLETA CON PERNO Y MANIJA)	PRR 36/3
MANIGLIA SERRANDA VAPORE (SOLO IMPUGNATURA)	STEAM SHUTTER HANDLE - ONLY HILT	MANIJA CIERRE VAPOR (SÓLO IEMPUÑADURA)	PRR 36/4