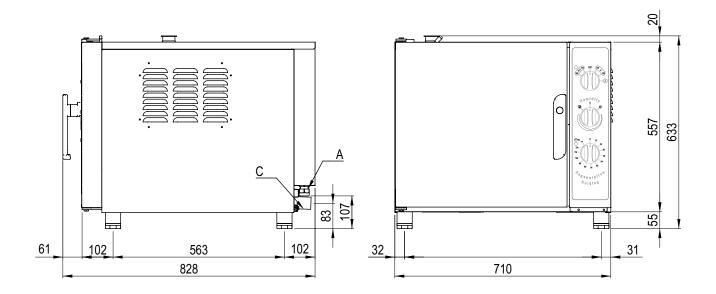


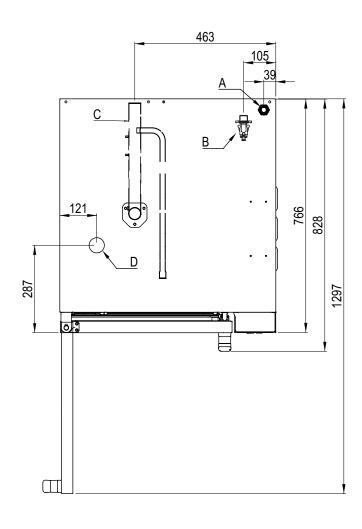
MOD: FRU-511/P

Production code: A1 RRUA-105E JR 12DI 251

REGENERATION OVENS INSTRUCTIONS FOR THE INSTALLATION, USE AND MAINTENANCE

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FOREWORD

The contents of this manual are generic and not all the functions described may be available on your product.

The manufacturer declines all responsibility for possible inaccuracies contained in this pamphlet, due to printing or copy errors. We reserve the right to make on our own products those changes to be considered necessary or useful, without jeopardizing the essential characteristics.

Read the instructions for use very carefully paying particular attention to the rules concerning safety devices. This appliance must only be used for what it has been designed for and built for and that is: all baking of dishes and regenerating pre-cooked and/or frozen food.

WARNING!

Before making any type of connection of this equipment (electrical or hydraulic), carefully read the instructions in this manual. This manual must be carefully kept to be available for future reference by users or service technicians. Installation must be carried out by d qualified personnel only.

1.0 DECLARATION OF CONFORMITY

The Manufacturer declares that the appliances conform to the EEC and UK norms.

They must be installed in accordance with current standards, especially regarding aeration of the premises and the exhaust gas evacuation system.

Note: The Manufacturer declines all and every responsibility for any direct damages caused by: an incorrect use, wrong installation or bad maintenance.

1.1 EUROPEAN DIRECTIVE ROHS 2012/19/UE AND UK THE RESTRICTION OF THE USE OF CERTAIN HAZARDOUS SUBSTANCES IN ELECTRICAL AND ELECTRONIC EQUIPMENT REGULATIONS 2012

This appliance is marked according to the European directive 2012/19/UE on Waste Electrical and Electronic Equipment (WEEE) And Uk The Restriction Of The Use Of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012. By ensuring this product is disposed correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product.



The symbol on the product, or on the documents accompanying the product, indicates that this appliance may not be treated as household waste.

Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment.

Disposal must be carried out in accordance with local environmental regulations for waste disposal.

1.3 TRANSPORT OF THE OVEN AND PACKAGING REMOVAL

Upon receipt of the oven and before installing it, check the packaging is intact and there are not visible damages. Also check that along with the oven you receive also the documentation, consisting of:

- Instructions for installation, use and maintenance
- Chart to check correct installation
- Wiring diagram
- Label ISO 3864-1

Before bringing the oven to the point, where it must be installed, check the following:

The doors are large enough to allow passage of the oven

The floor supports the weight.

According to the model of oven, its dimensions and its weight, use suitable facilities to handle goods during transport and installation, able to guarantee stability in order to avoid overturning, falls or uncontrolled movements of the appliance or its components.

Keep the oven packed until you reach the site where the oven is going to be installed.

The packaging makes the handling of goods easier and protects the oven from accidental push.

During moving and installation of the oven, the installer must comply with accident-prevention regulations in force at the place of installation (use of safety shoes, gloves, etc.) Remove the packaging taking care not to damage the oven. The adhesive film, that protects the surfaces made of stainless steel can be removed also after you have positioned the oven on the corresponding stand or the support surface.



ATTENTION: Packaging materials and adhesive film are potentially dangerous.

For this reason, they must be kept out of the reach of children and properly disposed of in compliance with local directives.

You should separate packaging materials (wood, cardboard, plastic...) and dispose of them separately, in compliance with directives in force at installation site.

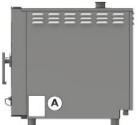
Note: Take the protective film off the stainless steel parts by hand before starting the appliance.

Do not use abrasive substances and/or metal objects. Clear any adhesive residues using a sponge soaked in solvent. If the oven is heated up before removing the adhesive film, the removal of the film and cleaning of residues of glue will be much more difficult.



1.4 INFORMATIVE LABELS

On each oven there are applied some metal labels, that give important info concerning characteristics of the oven, electric and plumbing connections and eventually the drain connection.

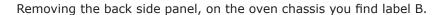






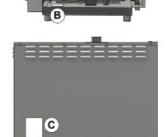
The info contained on this label are:

- Name and address of the manufacturer
- Oven model
- IPX protection grade against water jet.
- · Conformity to EC directives.
- Power input and power supply (single or three phase).
- Serial number of the oven
- Symbol of European Directive 2012/19/UE



On this label the serial number of the oven is repeated.

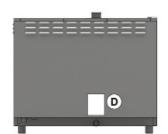
In this way, the customer or the installer can find the serial number of the oven also when the label A is dirty or damaged.



If the oven is equipped with humidification, in the back of the oven, near the connector for water connection there is the label C.

Label C indicates water features necessary for a correct functioning of the oven.

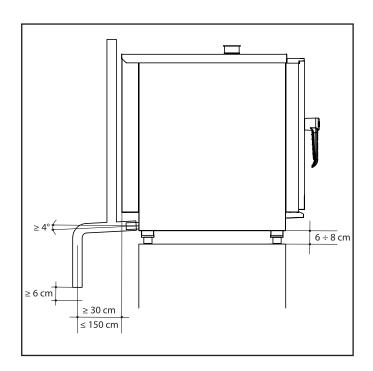
Same features are listed at paragraph 2.4 of this manual.



Close to the drain there is the label D, containing info concerning drain connection.



d 4 ÷ 12 °f (40 ÷ 120 ppm) p 150 ÷ 250 Kpa (1,5 ÷ 2,5 bar) Cl- ≤ 150 mg/lt $Cl2 \le 2,2 \text{ mg/lt}$ pH ≥ 7 CE $50 \div 2000 \,\mu\text{S/cm}$



Label D Label C

WARNING! After installing the equipment and removing the protective film, clean the stainless steel as follows: clean with a soft cloth or a nylon sponge, soaked in warm soapy water or a mild neutral detergent, rinse with warm water and dry with a soft cloth (this procedure is very important as it avoids the later appearance of stains on the surface of the equipment). Never use steel sponges because, in addition to scratching the equipment, they leave tiny particles that can trigger the appearance of stains and even oxidation.

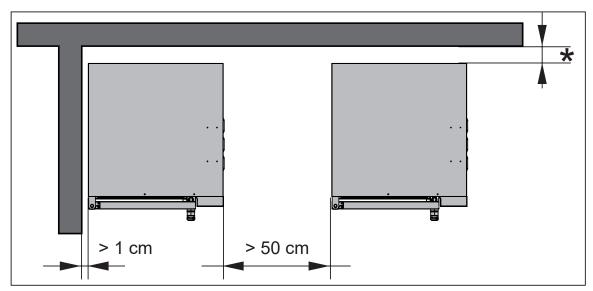
The manufacturer declines any responsibility for oxidation resulting from the deficient removal of the stainless steel protective film and its inefficient cleaning.

1.5 POSITIONING OF THE OVEN

The place where the oven will be installed must comply the following requirements:

- Be protected from atmospheric agents and have an adequate air circulation;
- Comply with regulations concerning safety at work;
- Have a room temperature between 5 °C and 35 °C with a humidification not higher than 70%.
- Place the oven and proceed with levelling using adjustable feet.

*Keep a suitable distance at the back, in order the label of equipotential clamp is easy to see when the oven has been installed.



The same clamp must be easy to access to install equipotential cable after the oven has been installed in compliance with our instructions. Install the appliance in a position that allows access to the right side for installation, maintenance and technical assistance. Maintain the minimum distances between the oven walls, (rear and right side) and either the brick walls or the other appliances.

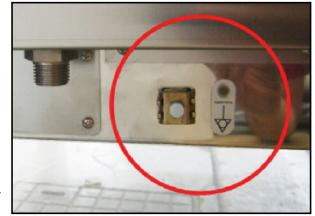
1.6 ELECTRICAL CONNECTION

When the appliance is delivered it is set to work at the voltage given on the rating plate affixed on the right side of the appliance.

The effectiveness of the equipotential system of which the appliance is part of, must conform to current standards.

Connect using the screw you find in the back side of the oven, marked with the word **EQUIPOTENTIAL**.

The Manufacturer declines all and every responsibility if this important accident prevention norm is not complied with. If the feeding cable is damaged, it must be replaced by the technical service or in any case by similar qualified personnel, in order to avoid any risk.





1.7 TECHNICAL DATA FOR ELECTRICAL CONNECTION

Model	Power loading and voltage	no. and motor power	Heating power	Absorbed current	Feed cable section
5 x 1/1 GN Electric	5 kW 380 - 415 V 3N~ 50/60 Hz	1 x 250 W	4.8 kW	8.5 A	5 x 1.5 mm²
5 x 1/1 GN Electric Powered	6 kW 380 - 415 V 3N~ 50/60 Hz	1 x 250 W	5.8 kW	10.0 A	5 x 2.50 mm²
10 x 2/1 GN Electric	12 kW 380 - 415 V 3N~ 50/60 Hz	2 x 250 W	11.6 kW	20.0 A	5 x 4.0 mm ²
15 x 2/1 GN Electric	16 kW 380 - 415 V 3N~ 50/60 Hz	3 x 250 W	14.7 kW	25.0 A	5 x 6.0 mm ²

2.3 WATER FEATURES

The ovens have a water inlet coupling at the back. Always install an on-off valve between the appliance and the water mains, making sure it is easy to operate. We also suggest installing a cartridge filter on the water inlet pipe. Always connect to the cold water.

The solenoid valve (A) supplies the steam generation in Combination cycle.

The water must be suitable to human use with the following characteristics:

Temperature: included between 15 - 20°C

Total hardness: included between 4 and 8 °f (French degrees), it is advisable to install a softener upstream from the appliance that will maintain the hardness level at the mentioned values.

The oven's running with water that has a higher hardness level will not be long before scale forms on the walls of the oven and in this case the technical assistance required to repair such damage is not covered by the guarantee.

Pressure: included between 100 and 200 KPa (1 – 2 bar).

Attention higher water pressure values result in increased water consumption and can compromise the correct functioning of some components.

Maximum chloride concentration (Cl-): less than 150 mg/litre.

Chlorine concentration (Cl2): less than 0.2 mg/litre.

pH: more than 7.

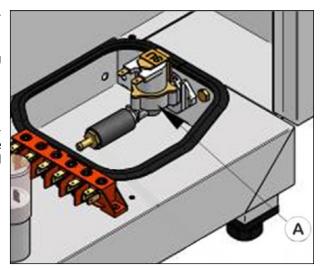
Water conductivity: included between 50 and 2000 $\mu\text{S/cm}$.

Attention: Water treatment systems that bring to different values to the ones above mentioned automatically invalidate the guarantee.

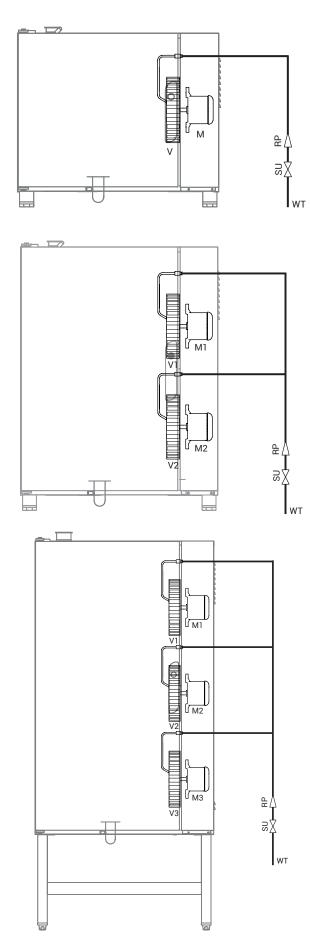
The use of dosing systems designed to prevent the build-up of lime-scale in pipes (i.e. polyphosphate dosing systems) is also prohibited since it may impair the performance of the appliance.



	5 x GN 1/1	10 x GN 1/1	15 x GN 1/1
Humidification water flow rate regulator	Ø 0.4 mm	Ø 0.4 mm	2 x Ø 0.4 mm



2.5 HYDRAULIC DIAGRAM



М	Motor
V	Fan
WT	Water inlet

SU	Solenoid valve for steam production	
RP	Flow reducer	



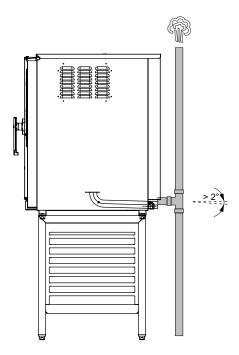
2.6 PLUMBING - WATER DRAINAGE

Drainage for the water is at the back of the oven and must be connected directly to the end of the stainless steel drainpipe.

The drain must have no trap and be made in rigid pipes that can withstand a temperature of 110°C.

Under no circumstances must pipe diameter be reduced. The actual pipe should be at atmospheric pressure with the appropriate funnel type air intake.

If the drainpipe is clogged for any reason steam can escape from the door and bad smells can be created inside in the oven.



3.0 CONTROL AND SAFETY DEVICES

The ovens are equipped with a set of control and safety devices for the electric and hydraulic circuits.

3.0A 2A fuse: it is in the auxiliary circuit to protect against short circuiting of the electrical system and is inside its own support on the contactor's fixing bracket.

3.0D Motor overload protection: a thermal probe disengages the motor when, for various reasons, there is an overload. When the overload protection triggers it stops the motor and also disconnects the heating elements or the gas valve. The probe is reset automatically when motor temperature drops.

3.0Ē Oven safety thermostat: disconnects the heating element or the gas valve when anomalies related to overheating occur. Subsequent re-set will have to be done manually when causes for thermostat operation have been determined.

3.0F Door magneetic switch: it stops the oven working when the door is opened.

3.1 REPLACING SPARE PARTS

The replacement of damaged parts must be done only by qualified personnel. To request the manufacturer parts to be replaced must be provided the oven model and serial number.

These data can be found on the rating plate attached to the oven (see par. 1.4).

Before starting to replace spare parts make sure, for safety reasons, that the electricity main switch is off and that the water on-off valve are closed.

3.2 CHECKING THE FUNCTIONS

After completing the installation of the oven is necessary to perform a leak test to the water network.

The installer must check with suitable measurement instruments that the air noise emissions have a level of sound pressure type weighed A, less than 70 dB (A).



The label ISO 3864-1 here on the side must be stuck on a visible surface, 1,6 mt height from the ground.

On floor models, the label is already stuck in the suitable position.

On table models, the label is supplied along with the documentation and must be stuck after installation on a visible part of the appliance at 1.60 mt from the ground. The installer must verify proper operation of the oven, providing the necessary instructions to the customer and give this instruction manual that the user must follow carefully.

IMPORTANT: The technician or the installer must therefore check as follows:

- The oven must stand (horizontal position) and be fixed on a stand or a shelf, that can guarantee stability.
- Wiring connection must be effected according to the directives and the feed cable section must be no lower than the one indicated in the manual.
- Pressure and hardness of the water must comply the values indicated in this manual;
- If the oven is supplied with drain pipe, this must be connected properly and the materials used should withstand the working temperature.

After you have checked everything, open the water on-off valve, eventually the gas on-off valve and the protection switch, all installed upstream. The installer must check the proper functioning of the oven and give to the operator necessary instructions for a correct use of the oven, and also verify that the operator owns a copy of this manual.



4.1 PROGRAMMING AND OPERATION

///B	(R) Regeneration without humidification Two fixed temperatures selectable: 120°C or 160°C (R) Regeneration with humidification Two fixed temperatures selectable: 120°C or 160°C	(F)— (A)—	
/// R HOLD	(R+H) Regeneration without humidification with maintenance phase Two fixed temperatures selectable: 120°C or 160°C Automatic maintenance after regeneration at fixed temperature 50 °C	B—	Humidle,
/// HOLD	(R+H) Regeneration with humidification with maintenance phase Two fixed temperatures selectable: 120°C or 160°C Automatic maintenance after regeneration at fixed temperature 50 °C	(E)— (C)—	
HOLD	(H) Maintenance of regenerated foods Fixed temperature 50 °C		Holding

4.2 CONTROL PANEL COMPONENTS DESCRIPTION

Α	Cycle selector knob	
В	Humidity regulator	
С	Timer	
E	Pilot light timer ON	
F	Pilot light oven power supply ON	

4.4 STARTING THE OVEN

Ensure that water supply are turned on and that the electricity supply is switched on.

Select the cooking time with the timer (C) that goes up to a maximum of 120 minutes; for longer cooking times, select the (∞) nonstop position.

When the timer is on and the door is closed the cooking cycle starts together with the electric fan, heating and steam generation, if selected.

When the set time is finished a buzzer signals that cooking is finished and all the functions stop. When selecting the cooking time always remember the time needed to pre-heat the oven.

It 'a good practice to observe this caution before introducing the food to be cooked in the oven.

4.6 TURNING THE OVEN OFF

The oven is turned off by turning the cycle selector knob round to position 0.



9.0 MAINTENANCE

It is compulsory to turn the main switch off and close the water on-off valve, both installed upstream from the oven before servicing it.

The oven should be cleaned at the end of each working day, using specific products only.

All stainless steel parts should be:

- 1- cleaned with clear, soapy water;
- 2- rinsed with water;
- 3- dried thoroughly.

It is absolutely forbidden to use scrapers, metal soap pads and other common steel tools as they could besides scratching the surface, deposit iron particles that, oxidizing would cause rust to form.

DO NOT WASH THE APPLIANCE WITH JETS OF WATER

DO NOT USE PRODUCTS TO WASH THE STAINLESS STEEL PARTS, WHICH CONTAIN CHLOR (BLEACH, CHLORINE ACID) EVEN IF WATERED DOWN

All food and residuals and grease must be removed from the coking chamber each time it is used for cooking.

The juices and fat that drip from the food and fall to the bottom, are conveyed to the drain in the centre. To clean the oven, use a degreasing product suitable for stainless steel, a spray-on product for instance, that covers all areas, especially the back of the suction conveyor.

Then proceed as follows:

- 1- Heat the oven to a temperature of 50°C;
- 2- Apply the degreasing product in the recommended quantity;
- 3- Close the door;
- 4- Select the steam cycle;

5-Turn the oven on for 20-30 minutes. After this time open the oven door, protecting your eyes and skin from the fumes, and then wash with water or put the removable parts in the dishwasher.

The fan must be kept clean to avoid grease and fat from depositing on the blades causing motor revolutions to decrease leading to a reduction in the flow of air and dangerous mechanical stress to the motor itself.

When the appliance is not used for long periods of time:

- 1- Turn the main switch off
- 2- Close the water on-off valve (both installed upstream from the oven);
- 3- Leave the door open so air can circulate and prevent bad odors;
- 4- With a cloth spread a thin protective layer of Vaseline oil on all stainless steel surfaces;

9.1 WHAT TO DO IN CASE OF A BREAKDOWN AND/OR EXTENDED PERIOD OF NON USE

If the oven does not work properly, breaks down or if the safety thermostat triggers, switch the oven off, disconnect the electricity and water supply and notify the technical assistance service.

All work of installation, maintenance and repairs should be carried out exclusively by qualified and authorized personnel.