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# **INSTALLATION AND USE BOOKLET**

**MANUAL DE INSTALACION Y USO  
MANUEL D'INSTALLATION ET EMPLOI  
INSTALLATIONSHANDBUCH**

**02**  
Ed. 0505

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## **REGENERATING AND HOLDING EQUIPMENT ON WHEELS / SISTEMAS DE**

**REGENERATING AND HOLDING EQUIPMENT ON WHEELS / SISTEMAS DE  
REGENERACION Y MANTENIMIENTO CON RUEDAS / ÉQUIPMENTS DE REMISE  
ET MANTIEN EN TEMPÉRATURE SUR ROUES / REGENERIERUNGS- UND  
WARMHALTESYSTEME AUF RÄDEN**

**RM 061 - 101 - 112 - 153 - 156 - 161 - 162 - 262 M/E**

**RC 061 - 101 - 112 - 153 - 156 - 161 - 162 M/E**

**SISTEMI DI RIMESSA IN TEMPERATURA, MANTENIMENTO E SERVIZIO**

REGENERATION HOT HOLDING SERVICE SYSTEMS  
SISTEMAS DE PUESTA EN TEMPERATURA, MANTENIMIENTO Y SERVICIO  
SYSTEMES DE REMISE EN TEMPERATURE, CONSERVATION ET SERVICE  
SYSTEME FÜR DIE REGENERIERUNG, DAS WARMHALTEN UND DEN SERVICE






# GENERAL RECOMMENDATIONS AND TECHNICAL DATA

**02 GB**  
Ed. 0505

## GENERAL RECOMMENDATIONS FOR THE INSTALLER

- Installation, start-up and maintenance of the appliance should be carried out by qualified engineers, licensed fitters or personnel authorised by the manufacturer.
- Carefully read the recommendations in this instruction booklet, as they provide important advice for safe installation, operation and maintenance.
- Keep this booklet to hand in a safe place for future reference.
- This appliance should be used only for the purpose for which it has been expressly designed, i.e. for regenerating food and/or keeping it warm any other use should be considered incorrect and therefore dangerous.
- After having unpacked the appliance, check that it is in perfect condition. If in doubt, do not use the appliance and contact authorised personnel.
- Do not leave any packing material within reach of children, as it is a potential source of danger.
- Before connecting the appliance, make sure that the data on the rating plate (at the rear towards the bottom) correspond to the mains supply data (electricity and water).
- Special labels show where to position the inlets and outlets.
- In case of failure or malfunctioning, turn off the appliance immediately.

Example of rating plate			
		TYPE: RM 153	
		NR. 0512001	
AC		230 V	50 Hz
	0,04 kW	TOT. 3,2 kW	
IPX 4			

## TECHNICAL DATA

Model	Rated voltage [Vac]	Total input [kW]	Amps. [A]	Connecting wire min. section (type H07 RN-F) [mm <sup>2</sup> ]	
RM 061	230	1,2	5,2	3 x 1,5	
RM 101		2,6	11,3		
RM 112		3,2	13,9		13,9
RM 153					
RM 156					
RM 161					
RM 162		3N - 400	6,5		9,4
RM 262					
RC 061	3N - 400	3,2	4,6	5 x 1,5	
RC 101		6,5	9,4		
RC 112		9,5	13,7		
RC 153		9,6	13,9		
RC 156		6,5	9,4		13,9
RC 161					
RC 162					

## SPECIAL INSTRUCTIONS

- Current regulations require the installation of a multiple pole switch between the appliance and the electrical power supply; the switch must have a contact gap of at least 3 mm on each pole.
- **The manufacturer cannot be held liable and declines all guarantee obligations regarding any claims for damages ensuing from bad installation or failure to observe current regulations.**

## LAWS, TECHNICAL REGULATIONS AND STANDARDS

Throughout installation it is vital to observe the following requirements:

- any health and hygiene standards applicable to kitchens and eating places
- local and/or territorial building regulations and fire prevention standards
- current accident prevention guidelines
- the regulations of the electrical power supply company or agency
- any other local regulations

## ***INSTRUCTIONS FOR POSITIONING***

- If the walls next to the appliance are of inflammable material, they should be suitably clad.
- Fire prevention regulations must be scrupulously observed.
- The electric wiring must never be under strain. Do not obstruct the suction inlets or heat dispersion outlets; scrupulously follow the installation diagrams.
- Remove the protective film.

## ***INSTRUCTIONS FOR ELECTRICAL CONNECTION AND UNIPOTENTIAL SYSTEM***

The electrical safety of this appliance is guaranteed only if it is connected correctly to an **efficient earthing system**, in accordance with current safety regulations. The manufacturer shall not be responsible for any damage caused by failure to earth the installation properly.

The appliance must also be included in a **unipotential system**. Make the connection through the terminal situated on the rear of the appliance, and marked by the relevant symbol, according to current safety regulations.

## ***SAFETY AND CONTROL SYSTEMS***

<b>Room safety thermostat</b>	Intervenes in the event of a malfunction of the main temperature regulating thermostat to ensure that the machine room temperature does not exceed the authorised limits
<b>Power circuit protection</b>	A remote control switch protects the power circuit
<b>Auxiliary circuit switch</b>	Fuses positioned next to the terminal board protect the electric circuit

## **START-UP: RECOMMENDATIONS**

When the appliance has been connected, before operating it for the first time, a general check should be carried out as follows:

- **remove** all packing material and protective film
- **make** sure that the vents are not obstructed
- **ensure** that current safety regulations have been observed
- **make sure** that the fan turns freely
- **check** that water flows freely from the drain
- **demonstrate** to the user the different systems available with the appliance, what routine maintenance is required and the correct use of the appliance
- we recommend **advising** the customer to sign a maintenance contract

## **GENERAL RECOMMENDATIONS FOR THE USER**

**WARNING!** **Read the instructions in the following chapter very carefully. It contains important advice concerning the safe use and maintenance of your appliance. Failure to observe these fundamental rules may compromise your own safety and that of the appliance. The manufacturer declines all responsibility if the original functions of the appliance are altered through mishandling, the installation instructions are not followed, modifications take place or other devices are added.**

- Before leaving the factory this appliance has been tested and set by qualified, specialised personnel to perform at its best.
- Any repair work or re-setting required thereafter must be carried out extremely carefully by qualified persons. For this reason it is therefore recommended that, whenever necessary, the dealer from whom the appliance was bought should always be contacted specifying the problem, the model and the serial number of the appliance.
- The appliance should be operated only by personnel trained in its use.
- The appliance must be under supervision when in operation: remember that some parts will be hot.
- Ask the fitter for all instructions necessary for starting up the appliance correctly, including an explanation of the controls and their functions.
- Before using the appliance for the first time and at the end of every working day, it should be thoroughly cleaned inside (see paragraph "Cleaning and maintenance").
- Use non-corrosive products (alkaline) for daily cleaning. Do not use abrasive cleaners.
- Avoid any operation which leads to cooking salt being deposited on the steel surfaces of the appliance; should this happen, clean thoroughly and immediately.
- Always switch off the appliance when not in operation and turn off mains supplies (electricity and water).

**WARNING!** In the event of malfunctioning:

- **switch off the appliance immediately**
- **and cut out and/or turn off all mains supplies (water and electricity)**
- **only call the service centre or an authorised dealer and ask for original spare parts**

## **CLEANING AND MAINTENANCE**

- **Disconnect the appliance from the mains power supply** before carrying out any cleaning operations.
- Before using your new appliance clean out the cavity carefully. Do not use acids or corrosive cleaners, wire wool or brushes to clean either the appliance cavity or the external sides (use warm water with a suitable detergent).
- **Do not wash the appliance with jets of water under pressure.**

Thorough daily cleaning helps your appliance regenerate and/or keep warm with perfect, trouble-free results. A clean appliance gives problem-free performance:

- the flavour and smell of the food are unaltered
- the appliance works smoothly and does not smoke
- less energy is consumed
- costly, inconvenient maintenance operations are avoided

Mod. RM 061 - 101 - 112 - 153 - 156 - 161 - 162 - 262 M

WITH ELECTRO-MECHANICAL  
CONTROL

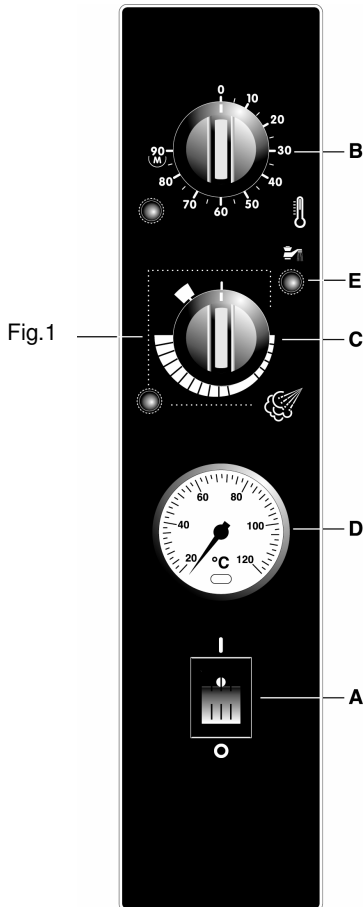


Fig.1

## DESCRIPTION OF CONTROLS

- A. **ON/OFF switch.**
- B. **Temperature regulation knob**, with warning light to show that temperature has been reached. It is advisable to set a temperature of 90°C (M)
- C. **Humidity regulation knob**, with warning light indicating operation. It is advisable to regulate on the "medium humidity" area (Fig. 1)
- D. **Thermometer** which displays the actual oven temperature
- E. **No water indicator light.** Whenever the water tank empties, the indicator light comes on and a buzzer warns the operator. It is advisable to fill the tank immediately to prevent the product from drying.

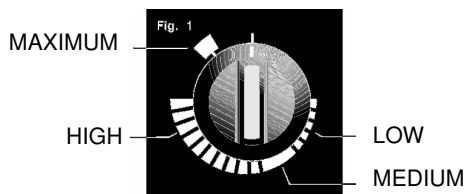
## OPERATING METHODS

### Keeping warm

- Press the ON/OFF switch A, pre-heat by turning knob B to 90°C (M) until the relative indicator light goes out.
- The appliance is now ready to carry out a holding of keeping warm cycle.
- Select the keeping-warm temperature using knob B and the degree of humidity using knob C.
- The thermometer D will display the actual oven temperature during the cycle.

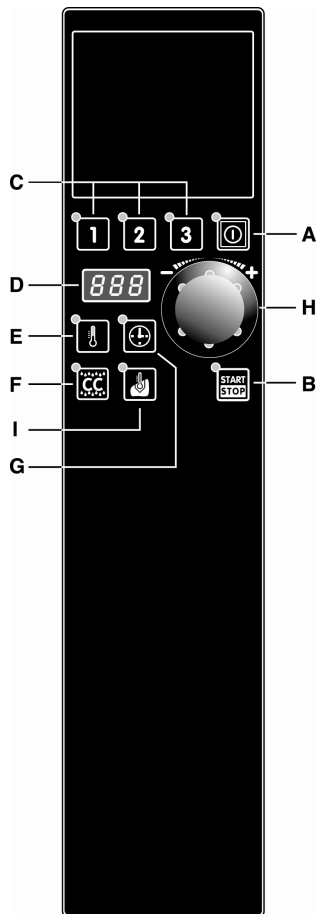
## RECOMMENDATIONS DURING OPERATION (vers. M-E)

- **The appliance should always be pre-heated before introducing the product.**
- **Open the door during operation as little as possible.**



Mod. RM 061 - 101 - 112 - 153 - 156 - 161 - 162 - 262 E

WITH ELECTRONICAL  
CONTROL



## DESCRIPTION OF CONTROLS

- A. ON/OFF switch
- B. START/STOP key
- C. Keeping warm mode programming keys
- D. Display
- E. Temperature selection key
- F. Humidity selection key
- G. Time selection key
- H. Increase/decrease knob
- I. Core probe on/off key (On request)

## OPERATING METHODS

### Preheating

- Switch on the appliance by pressing key **A**.
- To pre-heat, press key **E** and regulate the temperature to 90°C using knob **H** for keeping warm; using key **G** and knob **H** set infinite time (INF).
- Then press key **B**, START.

### Keeping warm

- Select one of the pre-set programming keys **C** and press: the relative indicator light comes on; then press key **B** to start. The actual oven temperature normally appears on the display. To see pre-set temperature, humidity and time values, just press the relative keys **E**, **F**, **G**.
- After 5 seconds the actual oven temperature appears again on the display (On request would be possible to personalize the control panel and the display: the temperature of the core probe, elapsed time starting from initial cooking cycle, remaining time to end the cooking cycle)

### Pre-set program changes (Buttons "C")

Program changes for **1** **2** **3** must be performed when the equipment is off.

Simultaneously press: **1** and **START STOP**.

As soon as **CAL** appears, release the buttons and **P-O**, will appear on the display. Turning the **H** knob moves to the next parameter **P-1** and so on. By pressing the

button **0** the value assigned to the parameter is displayed.

Turn the **H** knob to increase or decrease the value assigned to the parameter. The appropriate parameters to modify are set on the side.

To save new values press **START STOP**

Par.	Set Point:	Prg
P17	Program temperature	1 70
P42	Program time	1 inf
P43	Program humidity	1 40
P18	Program temperature	2 80
P44	Program time	2 60
P45	Program humidity	2 60
P19	Program temperature	3 90
P46	Program time	3 60
P47	Program humidity	3 0

**Using a program that is not pre-set** After preheating, a keeping warm program other than the pre-set ones may be carried out:

- select the temperature value required using key **E** and knob **H**
- set the percentage humidity value using key **F** and knob **H**
- lastly, in the same way set the time value using key **G** and knob **H**
- now press key **B** to start

**Buzzer** A buzzer will warn the operator at the end of every cycle with set time

**Water tank** In models fitted with this optional, whenever the water tank empties, the writing **H<sub>2</sub>O** appears on the display and a buzzer warns the operator.  
It is advisable to fill the tank immediately to prevent the product from drying.



### Core probe (optional)

The models with these functions inbuilt allows the operator either to complete a holding or regeneration cycle, controlled both from the set temperature probe into food. Once the set temperature to the food has been reached and sensed by the probe, the cycle terminates.

In cases that the requirement is to hold the food once the regeneration cycle has been terminated than the setting prior to the regeneration cycle should be: set the temperature to the core probe and time infinite "INF"; start the appliance with key **B** (START/STOP)



### Clima chef (optional)

This mode has a double function, it can be used: when standard model, this mode controls only the amount of humidity injected in the chamber and does not control automatically the exit of humidity from vent; in this model the vent is manually controlled.

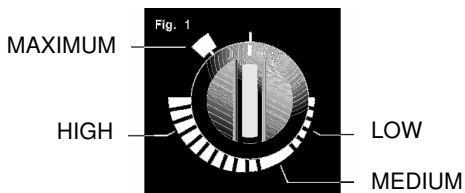
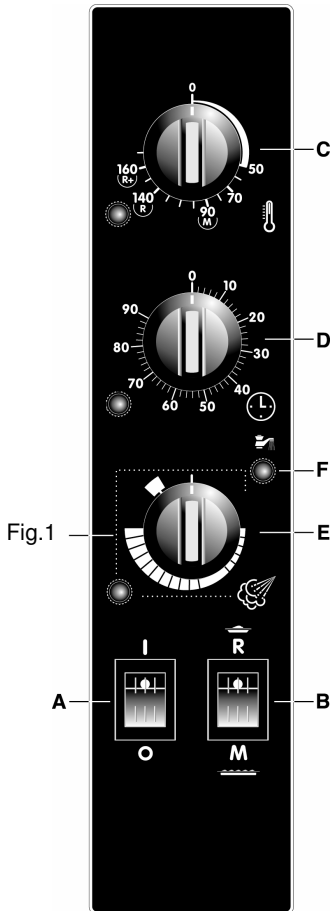
When the model is required with autoclima (optional) than this mode controls both, the injection and venting out of humidity.

### **AUTODIAGNOSTIC AND FAULTS (available only with RM and RC models with electronic controls)**

ERRORS	CAUSE
<b>ER1</b>	Malfunction of temperature probe of the cooking chamber. Contact the Technical Service of Assistance
<b>ER2</b>	Malfunction of temperature probe (on request) controlling the automatic humidity of the cooking chamber
<b>ER3</b>	Temperature core probe malfunctioning (on request)
<b>H<sub>2</sub>O</b>	Water reservoir empty. This will follow with an acoustic sound, if cycle chosen needs humidity
<b>od</b>	Open door

Mod. RC 061 - 101 - 112 - 153 - 156 - 161 - 162 M

WITH ELECTRO-MECHANICAL  
CONTROL



## DESCRIPTION OF CONTROLS

- A. **ON/OFF switch.**
- B. **Mode selection switch** for regenerating **R** on plate or keeping warm **M** on plate or container.
- C. **Temperature regulation knob**, with warning light to show that temperature has been reached.
  - 90M** : Keeping warm on plate or container; recommended temperature: 90°C.
  - 140R** : Regenerating on plate for normal products; recommended temperature: 140°C.
  - 160R+** : Regenerating on plate for fried products; recommended temperature: 160°C.
- D. **Regenerating time regulation knob**, with warning light indicating operation. By selecting "keeping warm" **M** the "time" function is cut out.
- E. **Humidity regulation knob**, with warning light indicating operation. It is advisable to regulate on the "medium humidity" area (Fig. 1).
- F. **No-water indicator light.** Whenever the water tank empties, the indicator light comes on and a buzzer warns the operator. It is advisable to fill the tank immediately to prevent the product from drying.

## OPERATING METHODS

### Keeping warm

- Put switch **B** to the position **M** (keeping warm).
- Press the ON/OFF switch **A**; pre-heat by turning knob **C** to 90°C (M) until the relative indicator light goes out.
- Upon completion of preheating, introduce the product and if necessary select the degree of humidity required using knob **E**.
- Note that in the keeping warm mode, the timer is cut out.

### Regenerating

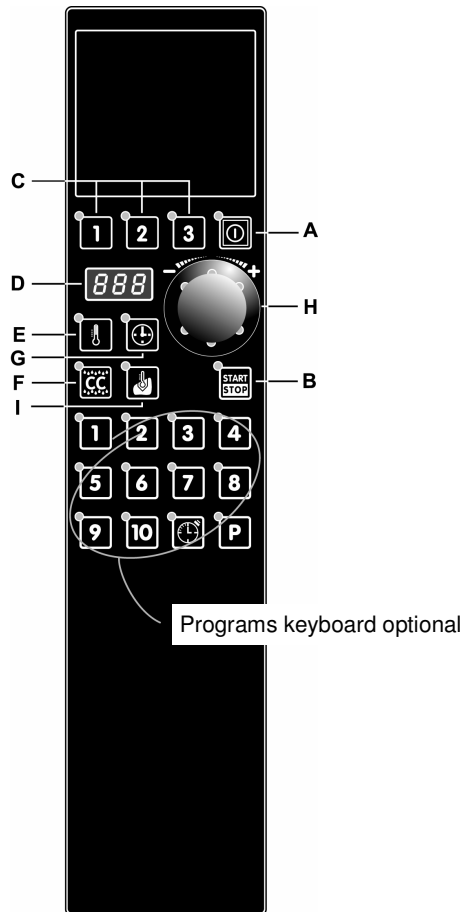
- Put switch **B** to the position **R** (regenerating).
- Press the ON/OFF switch **A**; pre-heat by turning knob **C** to 140°C (R) and knob **D** (recommended time 10/15').
- Upon completion of preheating, introduce the product, select the time with knob **D** and the degree of humidity with knob **E**. (A buzzer will warn the operator at the end of every cycle with set time)

## RECOMMENDATIONS DURING OPERATION (vers. M-E)

- **The appliance should always be pre-heated before introducing the product.**
- **Open the door during operation as little as possible.**

Mod. RC 061 - 101 - 112 - 153 - 156 - 161 - 162 E

WITH ELECTRONICAL CONTROL  
(PROGRAMS KEYBOARD OPTIONAL)



## DESCRIPTION OF CONTROLS

- A. ON/OFF switch
- B. START/STOP key
- C. Keeping warm or regenerating mode programming keys
- D. Display
- E. Temperature selection key
- F. Humidity selection key
- G. Time selection key
- H. Increase/decrease knob
- I. Core probe on/off key (On request)

## OPERATING METHODS

### Preheating

- Switch on the appliance by pressing key **A**.
- To pre-heat, press key **E** and regulate the temperature to 90°C using knob **H** for keeping warm or 140°C for regenerating; using key **G** and knob **H** set infinite time (INF).
- Then press key **B**, START.

### Keeping warm or regenerating

- Select one of the pre-set programming keys **C** and press: the relative indicator light comes on; then press key **B** to start. The actual oven temperature normally appears on the display. To see pre-set temperature, humidity and time values, just press the relative keys **E, F, G**.
- After 5 seconds the actual oven temperature appears again on the display (On request would be possible to personalize the control panel and the display: the temperature of the core probe, elapsed time starting from initial cooking cycle, remaining time to end the cooking cycle)


- 1** Keeping warm on plate or container
- 2** Soft regenerating on plate
- 3** Hard regenerating on plate

### Pre-set program changes (Buttons "C")


Program changes for **1 2 3** must be performed when the equipment is off.

Simultaneously press: **1** and **START/STOP**.

As soon as **CAL** appears, release the buttons and **P-O**, will appear on the display. Turning the **H** knob moves to the next parameter **P-1** and so on. By pressing the

button  the value assigned to the parameter is displayed.

Turn the **H** knob to increase or decrease the value assigned to the parameter. The appropriate parameters to modify are set on the side.

To save new values press 

Par.	Set Point:		Prg
P17	Program temperature	1	90
P42	Program time	1	inf
P43	Program humidity	1	40
P18	Program temperature	2	140
P44	Program time	2	60
P45	Program humidity	2	60
P19	Program temperature	3	160
P46	Program time	3	60
P47	Program humidity	3	0

### Using a program that is not pre-set

After preheating, a regenerating or keeping warm program other than the pre-set ones may be carried out:

- select the temperature value required using key **E** and knob **H**
- set the percentage humidity value using key **F** and knob **H**
- lastly, in the same way set the time value using key **G** and knob **H**
- now press key **B** to start

**Buzzer** A buzzer will warn the operator at the end of every cycle with set time.

**Water tank** In models fitted with this optional, whenever the water tank empties, the writing **H<sub>2</sub>O** appears on the display and a buzzer warns the operator. It is advisable to fill the tank immediately to prevent the product from drying.

## Programming (optional)



### Regeneration in sequence on single shelves with different regenerating times

**Operation:** After having set a regenerating programme, the multiple buzzer may be activated, allowing the operator to use a specific regenerating time for each shelf.

**Example:** introduce the product to be regenerated onto shelf 1 (at the top), press button 1, set the required time. Then introduce another product onto shelf 2, press button 2 and set another time, and so on. When the time set on 1 has elapsed, a buzzer and the subsequent blinking light indicate the fact. Take out the product and press button 1 to turn off, and so on.



### Sequence of stored programmes in relation to time of service

**Programming:** With the appliance not in operation, upon pressing key **P**: the display panel will indicate the word "PAS" and the relative indicator light starts blinking. You have 20" to enter the password; if this time has elapsed, press **P** again. Key in the password by pressing keys **1/2/3/4/8**; the indicator light of key **P** stops blinking and remains on. Now press key **1** and enter the required time, temperature and humidity values for the product to be regenerated. Then press key **1** again. Storage of data is complete when all the indicator lights and the display go out, except for indicator light P, which remains on.

Repeat the procedure with other keys and other data to be stored. At the end, press key **A**; the indicator light of key P goes out and the appliance is ready to carry out the regenerating programme stages.

**Operation:** Identify the program according to the products by pressing the relative keys: e.g. **1/3/7** indicator lights are lit, then introduce the product with the longest time and press the start key **B**. The indicator light related to the first product blinks; a buzzer and a blinking light indicate the moment of introduction in sequence of the subsequent products. Different products may be regenerated in this way, all programmed to be ready at the time of service.

The regenerating stage may be followed with a heated holding stage by manually setting the time (INF) or by introducing this stage into the programming.



### Core probe (optional)

The models with these functions inbuilt allows the operator either to complete a holding or regeneration cycle, controlled both from the set temperature probe into food. Once the set temperature to the food has been reached and sensed by the probe, the cycle terminates.

In cases that the requirement is to hold the food once the regeneration cycle has been terminated than the setting prior to the regeneration cycle should be: set the temperature to the core probe and time infinite "INF"; start the appliance with key **B** (START/STOP)



### Klima chef (optional)

This mode has a double function, it can be used: when standard model, this mode controls only the amount of humidity injected in the chamber and does not control automatically the exit of humidity from vent; in this model the vent is manually controlled. When the model is required with autoclima (optional) than this mode controls both, the injection and venting out of humidity.

## AUTODIAGNOSTIC AND FAULTS (available only with RM and RC models with electronic controls)

ERRORS	CAUSE
ER1	Malfunction of temperature probe of the cooking chamber. Contact the Technical Service of Assistance
ER2	Malfunction of temperature probe (on request) controlling the automatic humidity of the cooking chamber
ER3	Temperature core probe malfunctioning (on request)
H <sub>2</sub> O	Water reservoir empty. This will follow with an acoustic sound, if cycle chosen needs humidity
od	Open door

