

# AIRCUISEUR

WITH GENERATOR (ELECTRIC)

AC 50N W102141

AC 240N W102533

AC 150N W102281

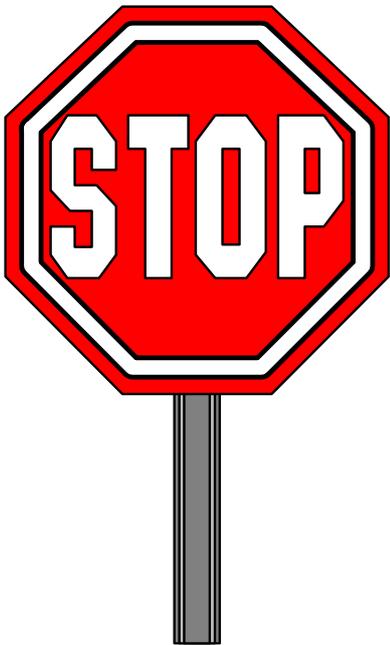
AC 350N W102433

AC 220N W102331



You just have acquired **CAPIC** equipment and for that, we would like to thank you for your trust. To quickly familiarise yourself with this new tool, we advise you to read thoughtfully the present manual. And please note that we remain at your entire disposal for any further request.

# CHECKING THE DIRECTION OF ROTATION OF THE TURBINE



## INSTALLATION INSTRUCTIONS

For this:

Put down the drawing-in filter(s) situated at the bottom of the oven.

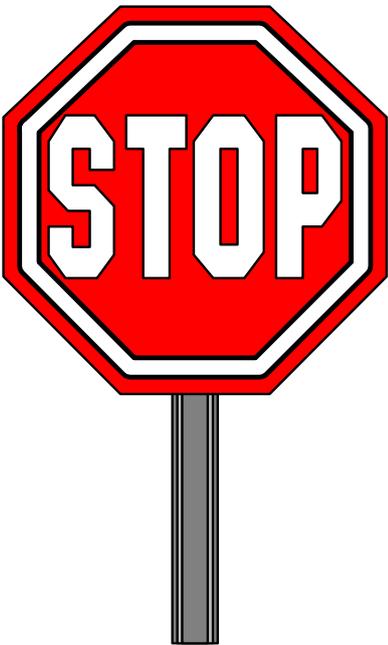
The direction of rotation of the turbine(s) is shown by two arrows engraved on the vault:

- Clockwise direction for AC50N oven
- Anticlockwise direction for AC150N, 220N, 240N, 350N.

In case of inverse rotation, switch around 2 phases on the power supply.

# EQUIPMENT WITH INTEGRATED STEAM GENERATOR

## ESSENTIAL MAINTENANCE ADVISE



You have just acquired independent steam production equipment either with integrated generator or with injection.

During the steam generation, the transition from liquid water to steam can cause physico-chemical phenomena that might lead to hard inlays which would adhere to the internal elements (immersion heater, sensor, side-walls, turbines) and could clog the external elements (piping, solenoid valves)

The damages of these deposits are in proportion of **the hardness range of water** of your network; higher the degree is more damages will occur. Please check the public water service of you area to know its value TH.

To prevent any malfunctioning or breakdowns, you must systematically carry out a descaling and supply your equipment with a scale preventive or a scale destroyer of your choice (magnetic or electronic).

**Any carelessness at this level will rule out the guarantee.**

**The frequency of the descaling is depending on the degree of hardness range of water. It is a NECESSARY maintenance task. (Please read the user manual).**



The use of hydrochloric acid as descaling product is banned, but phosphoric acid is advised.

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## 1 - RECOMMENDATIONS

**The equipment must be installed in accordance with the regulations and norms in force by a qualified installer and in a well-ventilated area. It applies for any adaptation to another strain than the one planned.**

**THE DEVICE IS DEDICATED TO A PROFESSIONAL USE AND MUST BE USED BY QUALIFIED STAFF.**

- As the oven is working at high temperatures, any contact with the door, the windowpane or any side-walls could cause severe burns
- Handle the tubs, trays and trolley handles with gloves to avoid burns.
- Be careful when opening the doors as you could stand in the area of the steam exhaust.
- Avoid letting the door open as the steam could head for the panel control.
- At the end of the service, put the power off.
- Never clean the panel control with water under pressure jet.
- Be sure that the oven is off before cleaning the cooking enclosure.
- Drain the boiler everyday and do regularly descalings.

## 2 - GENERALITIES:

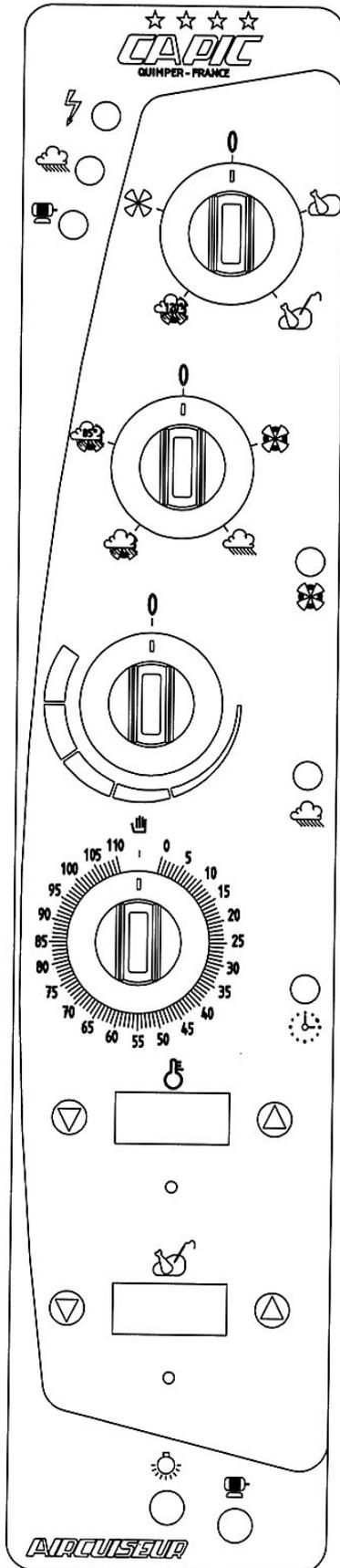
The CAPIC « aircuseur » can do:

- Dry cooking with high temperature up to 270°C (Viennese pastries, braising...).
- Steam cooking up to 100°C. (Vegetables, vacuum cooking...).
- Multi cooking – combination of both – up to 180°C. (Rotisserie, pastry, shellfish...).
- Cooking with low temperatures to 85°C with preset water content: this allows the long cooking period.

Each function can be run manually, by a time switch or by a heart sensor (optional).

The aircuseur can also insure the heating-up to 120°C with preset water content: this allows warming up without drying out the cooked dishes and the plates by limiting the condensation on it.

### 3 - PANEL CONTROL:



#### Lights Indicators:

- Orange, powering.
- Red, steam defect.
- Red, motor defect ventilation.

#### KNOB 1:

- Stop.
- Cooking in manual mode.
- Cooking with heart sensor.
- Rethermalization to 120°C.
- Quick cool down.

#### KNOB 2:

- Dry air function.
- Steam ambiance.
- Mixed.
- Low temperature 85°C.

#### KNOB 3:

- Water content settings for the steam and mixed functions.

#### KNOB 4:

- Time switch: setting of the cooking times from 1 to 110 minutes.

#### Orange lights:

- Dry air function, steam and time switch.

#### Ambiance thermostat:

- Setting of advice temperature from 0 to 270°C.
- Green heating diode.

#### Heart sensor thermostat:

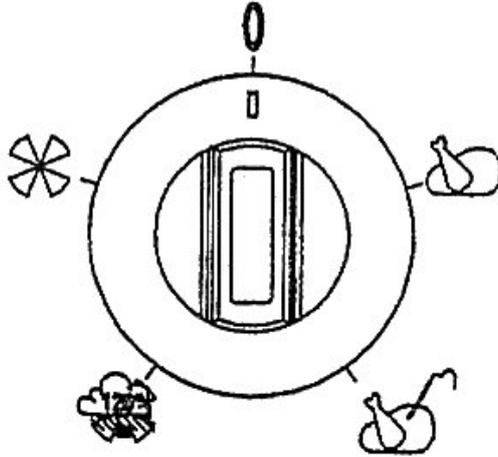
- Setting of the heart temperature of the product from 0 to 100°C.
- Green heating diode.

#### Push Knob:

- Lighting.
- Motor reset.

## 4 - GENERAL OPERATIONS:

KNOB 1: COOKING MODE.



**Position 0:** device off.

**Manual:** the ventilation starts with closed door, the ambiance thermostat shows the last instruction: there is no heating.



**Heart sensor:** the ventilation starts with closed door; the ambiance thermostat shows the last advice and also the heart sensor thermostat: there is no heating.



**Heating-up 120°C:** heating up to 120°C with preset water content.

- Starts ventilating and heating when doors are closed and without any other setting (KNOB 2 and 3 of **0**).
- The ambiance thermostat is ineffective.
- Needs a preheating of 20 min.
- Can be run by a time switch.

**This function does not ensure in any case a steam or mixed cooking.**

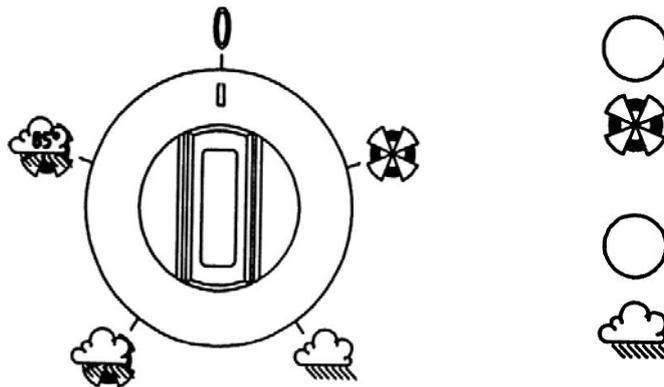


**Ventilation:** quick cool down of the cooking cavity with open door.

Stop in position **0**.

# USER MANUAL

## KNOB 2: CHOICE OF THE COOKING TYPE.



- **Dry:** starting of the heating:
  - Knob 1 in manual
  - To set the advised temperature (see ambience thermostat).

The light indicator 'DRY' switches on and off during the setting.



- **Steam:** starting of the steam heating:
  - Knob 1 in manual
  - Steam request with the knob 3 (see setting).
  - Setting an advice lower than 100°C.
  - Close the mist flapper (on the left).

After the automatic water filling of the boiler, the steam light switches on and off when the wanted temperature is reached.



- **Mix:** starting of the dry air heating and steam:
  - Knob 1 in manual.
  - Steam request with the knob 3
  - The advice can be set beyond 100°C.
  - Close the mist flapper.

Over this value, the steam is only regulated by the measure (KNOB 3).  
The 2 lights switch on.



- **BT 85°C:** starting of a mixed heating to 85°C with preset water content; needs the preheating of 20 min.
  - KNOB 1 in manual.
  - KNOB 3 of **0**.
  - Ambience thermostat ineffective.

To all these functions we can assign a working with heart sensor by putting the knob 1 on heart sensor (see thermostat with heart sensor).

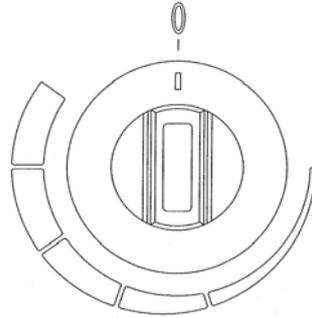
We can also run these functions with a time switch for the cooking period (see knob 4).

# USER MANUAL

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## KNOB 3: STEAM MEASURE.

To adjust the water content from 0 to 100% for the steam and mixed functions knob 2.  
Linked to the orange light indicator Steam.



## KNOB 4: TIME SWITCH.

Set the cooking time from 1 to 110 min.

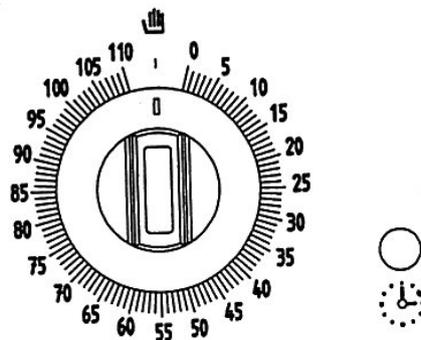
Program the cooking time (all the positions of the knob 2).

The light indicator switches on.

At the end of the cooking the alarm rings and the heating stops but the ventilation goes on for a better sharing out.

Stop the alarm by putting the time switch on  .

**WARNING:** the heating restarts in manual mode. Thus you have to put the knob 2 on **0** position.  
Stop the ventilation by positioning the KNOB 1 on **0**.



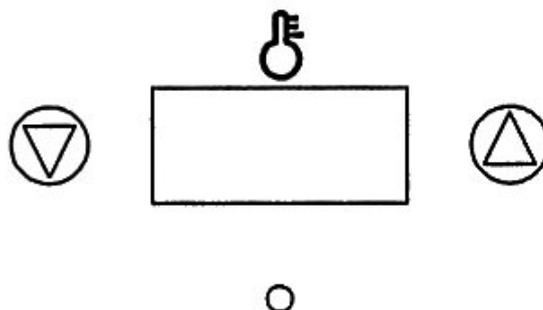
AMBIANCE THERMOSTAT: setting the advised temperature from 0 to 270°C.

Without any action on the up/down knobs, the screen indicates the last instructed temperature (wanted temperature for the cooking).

To modify it, prolonged push on the up or down knob.

To visualise the real temperature, push on the up or down knob.

The green diode switches on during the heating and switches off when the advice is reached.



# USER MANUAL

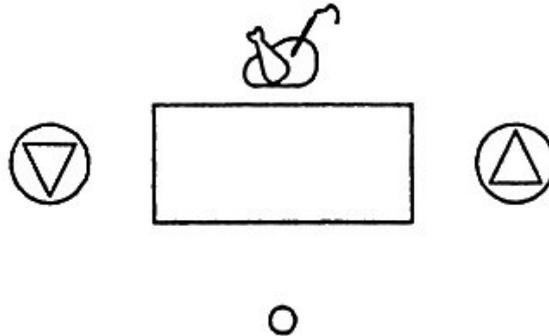
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THERMOSTAT « HEART SENSOR »: setting of the heart temperature of the product from 0 to 100°C.

Same settings than the previous one.

The knob 1 must be positioned on heart sensor cooking: when the temperature is reached, the alarm rings and the heating stops but the ventilation goes on.

Stop the alarm and the ventilation by positioning the knob 1 on **0**.



LIGHTING: 

By maintaining an impulse on the push knob situated on the thermostat, the light in the cavity of the oven will be on.

MANUAL DRAIN OF THE BOILER: 

Periodically drain the boiler, preferably after every service by pulling on the lever situated in lower part of the control panel.

At the end of the drain, put it back in deep-set position.

## 5 - VISUALIZATION OF THE DEFECTS:

Steam defect: 

When the red light (on the top left) is on, it means the boiler is overheated due to a use without water and safety setting of the manual reset thermostat. Wait 15 to 20 min for the boiler to cool down and action the red knob for the reset of the thermostat situated on the left, under the chassis.

If, after a few minutes of working, the defect reappears, it is necessary to make the equipment checked by the installer.

Ventilation defect: 

In case of motor overcharge, the red light indicator switches on, all the functions stop. To rearm, push on the push knob situated near to the lighting.

If the defect reappears, it is necessary to make the equipment checked by the installer

*Overheating defect for an internal temperature > 300°C.*

Not shown function. The oven is equipped with a temperature limiter that sets off all the functions in case of main thermostat fault. For a re-starting of the device, open the control panel, reset the limiter thermostat situated in upper part.

## 6 - USING ADVISES:

- Select a cooking temperature lower than about 30°C of the usual used temperature for a static oven

- In dry heating function, it is essential to pre-heat to a temperature upper than 30 to 40°C of the cooking temperature to offset the loading time.

- Take care during the filling of the plates or grids to let enough spaces between the products for a good air circulation.

- Put quickly the products in the oven and avoid opening the doors during the cooking to reduce the temperature falls.

- For the cooking of pastries and drought pastes, open widely the mist evacuation flapper (pull tab on the right).

- For the tarts, quiches, pizzas, pre-cook the batter before cooking the fillings.

- Cleaning the filters, the cooking cavity and proceeding of a periodical technical maintenance will guarantee the reliability of the product in the future.

- In steam function:

- Wait that the oven is at temperature before putting the product in the oven.  
(Important emergence of steam on the window and thermostat regulation)

- Favour the use of perforated vats.

- Close the steams evacuation flapper (pull tab on the top of the door on the left).

- Drain the steam producer every day and do regularly deliming.

## **IMPORTANT:**

For the cooking of the frozen products or in case of important loading, it is preferable to use the function "MIXED" (steam + simultaneous dry), to a temperature between 105 to 120°C, energy-measuring set to 100%. The cooking, benefiting of the additional calorific power of the vault and also of a maximum steam rate would be homogeneous and quicker.

## **MIX FUNCTION SETTING:**

- KNOB 1:  or  (manual cooking mode or by heart sensor)

- KNOB 2:  (mixed cooking)

- KNOB 3: water content rate setting (100% for the vegetables)

- KNOB 4: Time switch

- Ambiance thermostat: setting from 102°C to 120°C

## 7 – COOKING CONTROL PANEL:

### VEGETABLES

| PRODUCTS                                 | COOKING SUGGESTION |  |   | TIME                      | QUANTITY                    |
|--|--------------------|--|---|---------------------------|-----------------------------|
|  | Steam              | Mixed  | Hot Air   |                           |                             |
| Asparagus                                | 100°<br>15'        |  |   | 15'                       | 2 kg<br>Full vat            |
| Eggplants                                | 100°<br>10'        |  |   | 10'                       | 2 kg<br>Perforated vat      |
| Beetroots cut in 1cm dices.              | 100°<br>30'        |  |   | 30'                       | 4 kg<br>Perforated vat      |
| Fresh broccolis in fleurons              | 100°<br>10'        | or  120°<br>20' |   | 10' steam or<br>20' mixed | 3 kg<br>Perforated vat      |
| Carrots in pieces                        | 100°<br>15'        | or  130°<br>25' |   | 15' steam or<br>25' mixed | 5 kg<br>Perforated vat      |
| Braised celerys                          | 100°<br>25'        |  |   | 25'                       | 5 kg<br>Perforated vat      |
| Brussels sprouts fresh                   | 100°<br>15'        | or  150°<br>15' |   | 15'                       | 3 à 4 kg<br>Perforated vat  |
| Fresh cauliflowers                       | 100°<br>15'        | or  120°<br>25' |   | 15' steam or<br>25' mixed | 3 to 4 kg<br>Perforated vat |
| Fresh courgettes cut in slices           |                    |  150°<br>8'     |   | 8'                        | 4 kg<br>Perforated vat      |
| Frozen spinach                           | 100°<br>6'         |  |   | 6'                        | 2 kg<br>Perforated vat      |
| Frozen French beans                      | 100°<br>25'        |  |   | 25'                       | 2 kg<br>Perforated vat      |
| Frozen peas                              | 100°<br>15'        | or  115°<br>7'  |   | 15' steam or<br>7' mixed  | 3 kg<br>Perforated vat      |
| Fresh green capsicums                    |                    |  200°<br>4'   |   | 4'                        | 4 kg<br>Perforated vat      |
| Steamed potatoes                         | 100°<br>25'        |  |   | 25'                       | 6 kg<br>Perforated vat      |
| Potatoes 'Boulangère',<br>thickness 5 mm |                    |  130°<br>30'  | et  275°<br>15' | 45'                       | 4 kg<br>Full vat            |
| Frozen ratatouille                       |                    |  200°<br>15'  |   | 15'                       | 4 kg<br>Full vat            |

### FISH and SHELLFISH

|  |             |  |  |                           |                       |
|--|-------------|--|--|---------------------------|-----------------------|
| Haddock, fresh cod fillet                    | 100°<br>14' | or  250°<br>15' |  | 14' steam or<br>15' mixed | 10 pieces<br>Full vat |
| Creamed shell                                |             |  250°<br>2'     | et  250°<br>6' | 8'                        | 10 pieces<br>Plate    |
| Fillet of 'Julienne' 120 to 150 gr           |             |  150°<br>8'     | et  200°<br>5' | 13'                       | 12 pieces<br>Full vat |
| Fillet of whiting and of John-Dory<br>100 gr |             |  200°<br>15'    |  | 15'                       | 12 pieces<br>Full vat |
| Lobster and Scampi                           | 100°<br>10' |  |  | 10'                       | 2 kg<br>Full vat      |
| Mussels                                      | 100°<br>10' | or  200°<br>2'  |  | 10' steam or<br>2' mixed  | 2 kg<br>Full vat      |
| Salmon, fresh 'darne de turbot'              | 100°<br>17' | or  120°<br>20' |  | 17' steam or<br>20' mixed | 10 pieces<br>Full vat |
| Salmon, frozen 'darne de turbot'             | 100°<br>18' |  |  | 18'                       | 10 pieces<br>Full vat |
| Soles  | 100°<br>14' | or  250°<br>12' |  | 14' steam or<br>12' mixed | 20 pieces<br>Full vat |
| Trout 180 gr                                 | 100°<br>17' | or  120°<br>20' |  | 17' steam or<br>20' mixed | 2 kg<br>Full vat      |

## MEAT

| PRODUCTS                                 | COOKING SUGGESTION |   |         | TIME | QUANTITY  |
|--|--------------------|---|---------|------|-----------|
|  | Steam              | Mixed   | Hot air |      |           |
| Meatballs ~150 gr                        |                    |  220°<br>15'     |         | 15'  | 12 pieces |
| Rack of veal                             | 100°<br>20'        | et  160°<br>50'  |         | 70'  | 5 kg      |
| Pork chop env. 130 gr<br>thickness 2 cm  |                    |  250°<br>15'     |         | 15'  | 12 pieces |
| Turkey env. 3 à 4 kg                     |                    |  180°<br>120'    |         | 120' | 1 unit    |
| Thin slices of pork ~ 150 gr             |                    |  220°<br>8'      |         | 8'   | 8 pieces  |
| Steak fillet ~. 180 gr 3 cm<br>thickness |                    |  250°<br>7'      |         | 7'   | 12 pieces |
| Knuckle of ham                           | 100°<br>80'        | et  240°<br>50'  |         | 130' | 6 pieces  |
| Osso-bucco                               | 100°<br>30'        | et  180°<br>50'  |         | 80'  | 5 pieces  |
| Liver paté or pork's head                | 100°<br>10'        | et  120°<br>30'  |         | 40'  | 6 kg      |
| Full chicken ~ 1 kg                      |                    |  200°<br>40'     |         | 40'  | 5 pieces  |
| Road of beef                             | 100°<br>15'        | et  170°<br>15'  |         | 30'  | 4 kg      |
| Roast                                    | 100°<br>90'        | et  180°<br>60'  |         | 150' | 4 kg      |
| Stuffed rolled meat                      | 100°<br>10'        | et  190°<br>80' |         | 90'  | 5 kg      |
| Fresh sausage                            | 100°<br>6'         | et  250°<br>6' |         | 12'  | 24 pieces |

## SPECIALITIES

|                       |  |   |  |     |           |
|-----------------------|--|---|--|-----|-----------|
| Fresh pizza           |  |  250°<br>15' |  | 15' | 2 pieces  |
| Frozen pizza          |  |  200°<br>10' |  | 10' | 2 pieces  |
| Stuffed capsicums     |  |  240°<br>55' |  | 55' | 14 pieces |
| Foil parcel potatoes  |  |  180°<br>50' |  | 50' | 24 pieces |
| Onion soup            |  |  250°<br>5'  |  | 5'  | 5 pieces  |
| Cheese toast au grain |  |  250°<br>5'  |  | 5'  | 10 pieces |
| Tomatoes au gratin    |  |  250°<br>5'  |  | 5'  | 5 pieces  |

## VARIOUS

|                            |             |  |  |     |           |
|----------------------------|-------------|--|--|-----|-----------|
| Hard-boiled eggs           | 100°<br>15' |  |  | 15' | 50 pieces |
| Pasta, spaghetti, macaroni | 100°<br>15' |  |  | 15' | 2 kg      |
| Rice                       | 100°<br>20' |  |  | 20' | 2 kg      |

## PASTRIES

|                           |  |  |  |     |  |
|---------------------------|--|--|--|-----|--|
| Baguettes                 |  |  |  225°<br>15' | 15' |  |
| Apple or apricot turnover |  |  |  200°<br>20' | 20' |  |
| Croissant                 |  |  |  225°<br>15' | 15' |  |
| Apple pie Ø 21 cm         |  |  |  175°<br>55' | 55' |  |

## 8 - MAINTENANCE:

**Before any maintenance operation, put the power off**

### **8.1 - BODY REPAIR WORK:**

The body repair work in stainless steel owes its qualities to the surface finish. It must be cleaned regularly to keep its original state.

The main rule is to always scrub in the polishing sense and to avoid, in any case, the use of wool and iron brush.

The regular cleaning will be done with soapy water (not chlorinated) using a sponge, follow-up of a rinsing with clear water and a drying.

As for the tank, avoid any use of chlorinated products.

When cleaning the floors, in particular before putting into service the equipments ban the use of hydrochloric acid or similar product of which the splashes are likely to impair the covering panels.

### **8.2 - CLEANING OF THE COOKING CAVITY:**

The cleaning is to be made after each service to avoid any oxidation favoured by the stagnation of the food residues.

A cleaning with washing products followed by an abundant rinsing with clear water and then drying is usually enough to eliminate the marks.

#### **8.2.1 – Medium marks :**

With the help of a sponge and a damp duster, clean with hot water the food marks before they become hard.

If the marks are persistent, use water and soap or detergents without chlorine. If necessary, you can use a wood spatula.

You can use most of the soaps and domestic washing powders for dishwashers, provided that it does not contain chlorine.

After cleaning, do an abundant rinsing with clear water and then do a complete drying of the oven by dry heating.

#### **Comments:**

It is better to pre-heat the oven to 50-60°C before beginning the cleaning.

In the case of non-use of sponge, the detergent can be directly sprayed on the walls. You have to let the product act during the recommended time by the manufacturer (usually 10 minutes). Put the oven in steam mode during 20 min and then rinse copiously with clear water and dry completely in dry heating mode.

## 8.2.2 – Hard marks :

Apply a cleaning product that can get rid of pollution (AD80 and Dincox10) or a product containing phosphoric acid. Let act a few minutes. Rinse copiously with clear water and dry completely the cooking cavity by putting the oven in dry heat mode. It is better to strictly follow the instructions given by the manufacturer (proportions, time of application...).

### **Important notes:**

- The use of chlorinated products (chlorine, hydrochloric acid...) is banned.
- Never use steel wool that can definitively tamper the stainless steel.
- Avoid any contact of cleaning product with the door seal. Rinse it thoroughly if necessary.

### **Periodic cleaning:**

- The outer covering,
- The inner walls: dismantle the inner walls and the air strainer and proceed the cleaning by using one the process described above.

Particularly watch the scaling level of the walls, of the support, the air strainer, the heating elements and the turbine. In case of appearance of scaled deposits, immediately contact your installer for a water network exam.

### **Cleaning of the door & window seals:**

It has to be exclusively cleaned with hot soapy water.

The use of metal pickling or washing products is banned.

### **DURING THE CLEANING OPERATIONS:**

**Avoid the use of water jet or foam gun on the sensible parts of the cooking devices, particularly the control & power panels, the cooking units and its environment.**

## **8.3 - BOILER WATER REMOVAL:**

To reduce the fur deposits, it is necessary to drain off the steam producer everyday.

For all models, this drainage is made manually by using the pull-tab situated at the bottom of control panel. Pull to open the drainage sluice gate. Wait 5 min then push to close back the gate. If the gate is not closed, the filling cannot happen.

For all models, the filling is automatic from the moment the function Steam is activated.

## **8.4 - DESCALING OF THE BOILER:**

The descaling is an essential maintenance operation for the smooth functioning of the steam generator and the equipment. It must be done regularly and systematically.

Its frequency varies according to the hardness of the water defined by the hardness measurement (TH) and by the length of use of the steam function:

- If TH < 8°F proceed at least a monthly descaling.
- If TH > 8°F use a magnetic or electromagnetic scale remover and maintain a monthly descaling.

# USER MANUAL

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Any carelessness in the regular maintenance will lead the steam production to malfunction and will be harmful to the following components: control valves, piping, level tasters, immersion heaters.

Please note that the failure to comply with the maintenance operations during the guarantee period would annul the guarantee.

## OPERATIVE MODE:

### - Descaling solution:

It is composed of a hydrochloric acid solution diluted in volume at 33%. You can obtain this product in specialized shops or prepare it yourself.

Note: hydrochloric acid is banned as this substance can provoke important risks of corrosion or spots on stainless steel material

- Quantity to insert: Please refer to below tab

| <b>EQUIPMENT</b>   | <b>GENERATOR VOLUME<br/>(litres)</b> | <b>QTY SOLUTION<br/>(litres)</b> |
|--------------------|--------------------------------------|----------------------------------|
| AC 50N             | 5                                    | 1                                |
| AC 150N            | 10                                   | 2                                |
| AC 220N - ACN 240N | 15                                   | 3                                |
| AC 350N            | 23                                   | 4                                |

## DESCALING PROCEDURE:

Depending on the safety regulations of your company, the descaling should preferably be done at the end of the day.

- A - Drain the boiler: push the pull tab in position 'drain' for 5 min then push it back to close the boiler.
- B - Insert the descaling solution advised above by the neck located on the top of the oven
- C - Complete the filling of the generator with water until the oven's interior is overflowed (cleaning of the piping).
- D - Leave the oven. The effectiveness of the descaling depends on the duration (all night if the descaling is made at the end of the day)
- E - Drain the boiler (as explained in A)
- F - Restart the oven as well as the steam function for 2 min.
- G - Carry out a 2<sup>nd</sup> rinsing following the explanations given in E & F.

# SUMMARY

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## 1 - RECEIPT:

### **1.1 - Unpacking:**

Unpack the machine as soon as delivered and check that no damages occurred during the transport. In case of any damages, you must describe them in details on the delivery note and then confirm them within 48 hours by registered letter with acknowledgement of receipt to the carrier.

### **1.2 - Control of the descriptive plate:**

The descriptive plate is situated on the lower facade of the oven:

|  |  |                      |                                   |
|--|--|----------------------|-----------------------------------|
| <br>B.P. 613<br>Cedex 9<br>29551<br>QUIMPER<br>FRANCE | ref. commerciale                       | N°                   | N ° de série                      |
|  | $\Sigma Q_n =$ <input type="text"/> kW |                      | TYPE A                            |
|  | PAYS                                   | <input type="text"/> | CAT.                              |
|  |  |                      | A503055                           |
| U=   | <input type="text"/> TENSION           | IP                   | <input type="text"/>              |
|  |  | P=                   | <input type="text"/> PUISSANCE kW |
|   | <input type="text"/>                   | f=                   | <input type="text"/> 50 Hz        |

When delivered, check the compliance of the information with the order specifications.

### **1.3 - Handling:**

Use a forklift truck or similar to move the equipment.

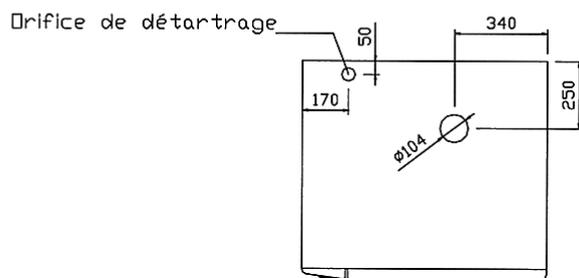
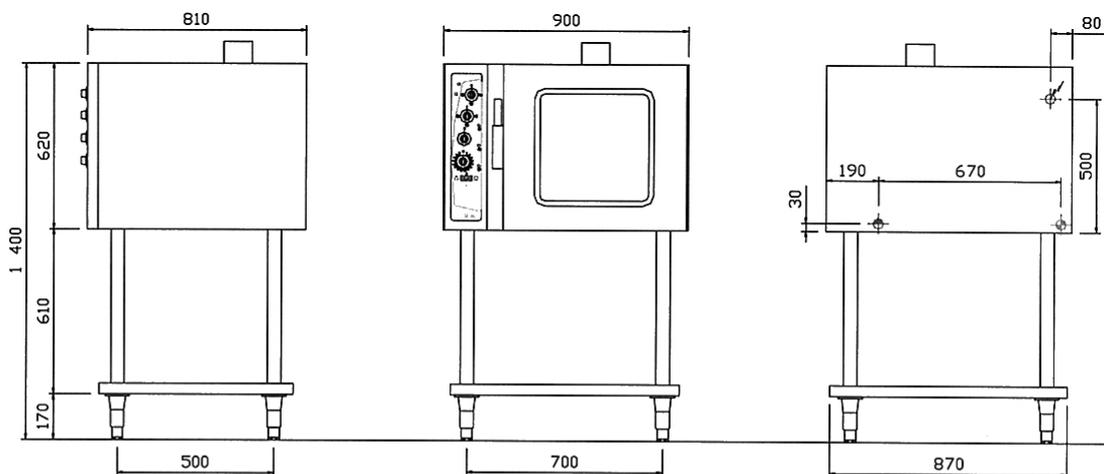
NEVER GRAB THE HANDLES, PULL TABS OR CASING ELEMENTS.

# FITTER GUIDE

## 2 – GENERAL CHARACTERISTICS AND DRAWINGS:

|                 | AC50N        | AC150N                                | AC220N                       | AC240N               | AC350N               |
|-----------------|--------------|---------------------------------------|------------------------------|----------------------|----------------------|
| Lids            | 20-80        | 100-250                               | 150-300                      | 200-350              | 300-500              |
| Levels          | 5 or 6 GN1/1 | 8 or 10 GN1/1                         | 10 GN 2/1                    | 16 or 20 GN1/1       | 16 or 20 GN2/1       |
| Space of        | 75/60 mm     | 75/60 mm                              | 75 mm                        | 75/60 mm             | 75/60 mm             |
| Thermostat      | 0 – 270°C    | 0 – 270°C                             | 0 - 270°C                    | 0 - 270°C            | 0 - 270°C            |
| Time switch     | 1 - 110 min  | 1 – 110 min                           | 1 - 110 min                  | 1 - 110 min          | 1 - 110 min          |
| Lighting        | YES          | YES                                   | YES                          | YES                  | YES                  |
| Loading         | Racks        | Mobile framework 580x380x710 or Racks | Mobile framework 580x700x860 | Trolley 805x540x1620 | Trolley 805x790x1620 |
| Base            | 870x720x750  | 870x720x750                           | 870x900x750                  | Feet H=210           | Feet H=210           |
| 230 V Tri +T    | YES          | YES                                   | YES                          | YES                  | NO                   |
| 400 V Tri +N +T | YES          | YES                                   | YES                          | YES                  | YES                  |
| Commutative     | NO           | NO                                    | NO                           | NO                   | NO                   |
| Turbine(s)      | 1            | 1                                     | 1                            | 2                    | 2                    |
| Power           | 14 kW        | 25,7 kW                               | 38,3 kW                      | 46,8 kW              | 72 kW                |
| Weight          | 135 kg       | 250 Kg                                | 400 Kg                       | 440 Kg               | 500 Kg               |

### AC 50 N:



#### RESERVATIONS :



**ELECTRICITE**

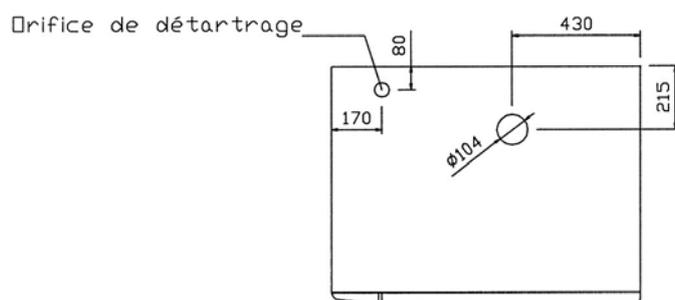
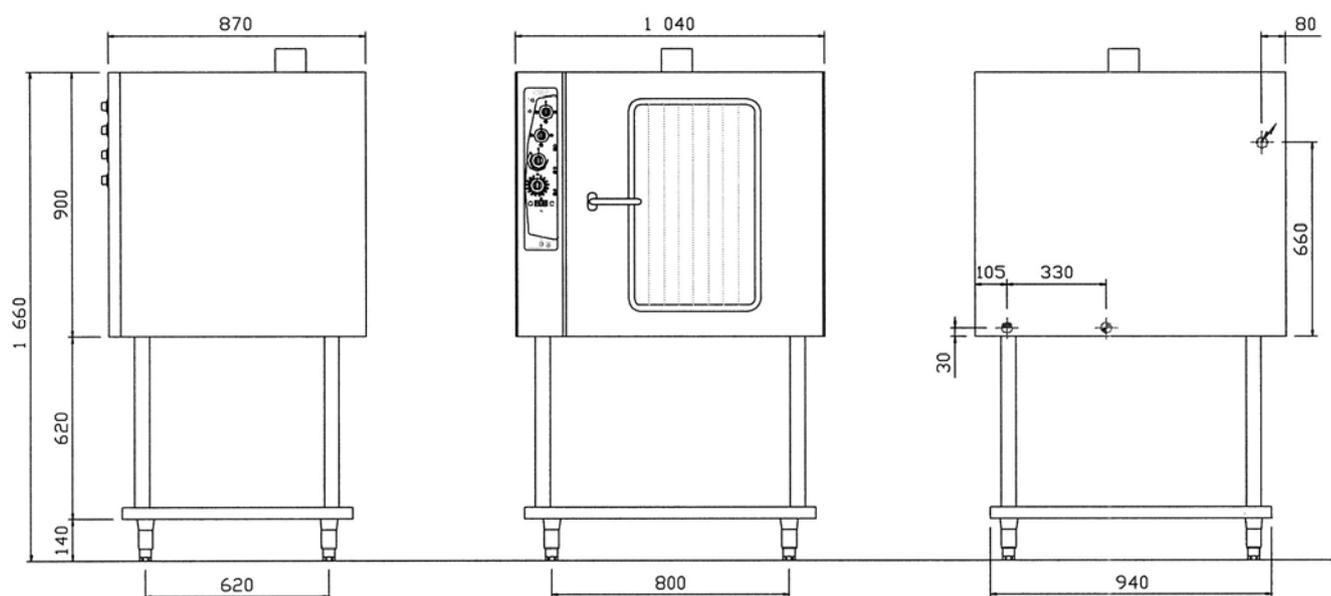


**EAU : EAU ADOUCIE (°TH<8) 3/4M PREVOIR LIMITEUR DE PRESSION REGLE A 1.5 BAR MAX.**



**EAU USEE : VIDANGE 3/4M**

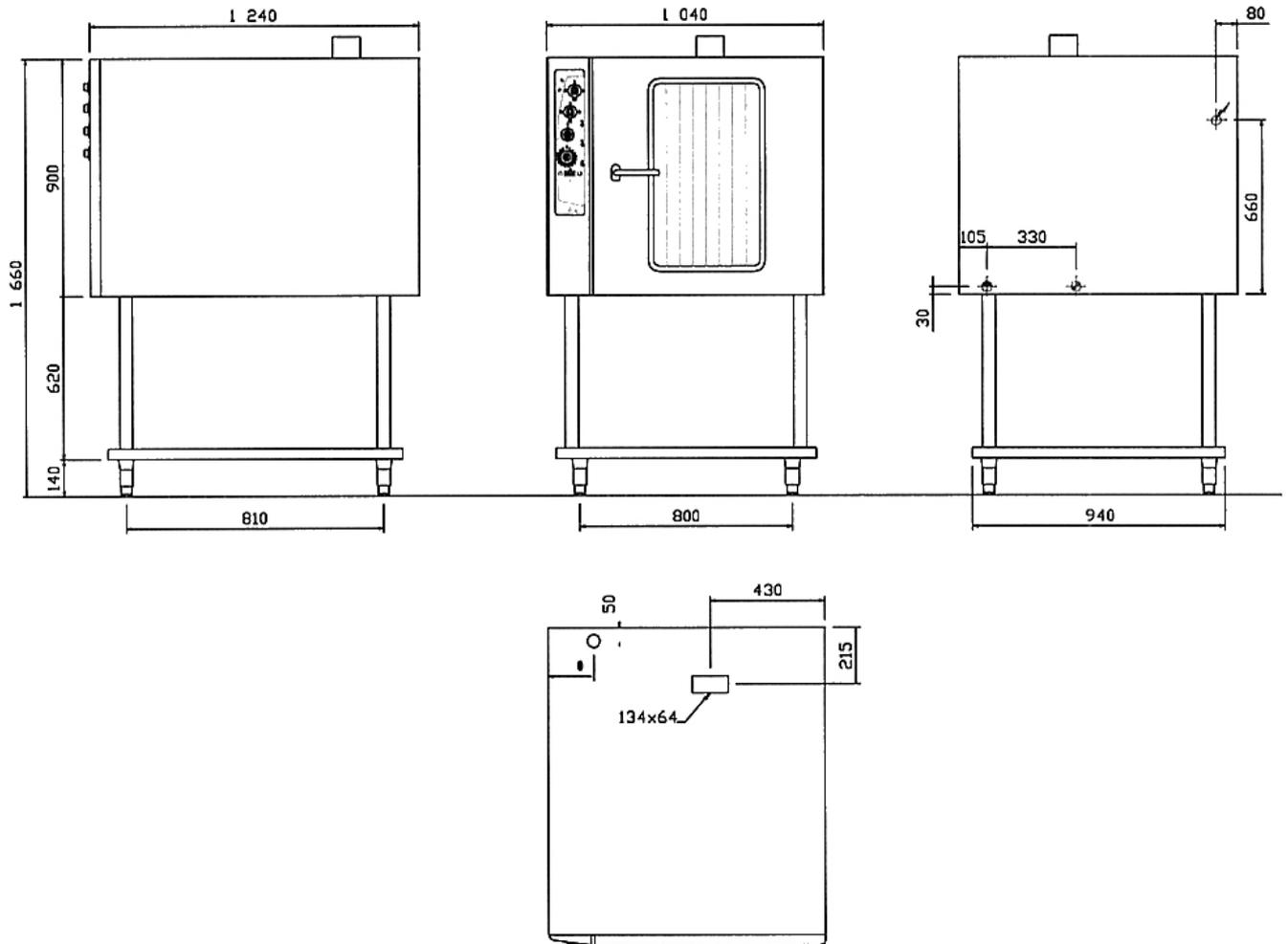
**AC 150 N:**



**RESERVATIONS :**

-  **ELECTRICITE**
-  **EAU : EAU ADOUCIE (°TH<8) 3/4M PREVOIR LIMITEUR DE PRESSION REGLE A 1.5 BAR MAX.**
-  **EAU USEE : 3/4M**

**AC 220 N:**



**RESERVATIONS :**



**ELECTRICITE**

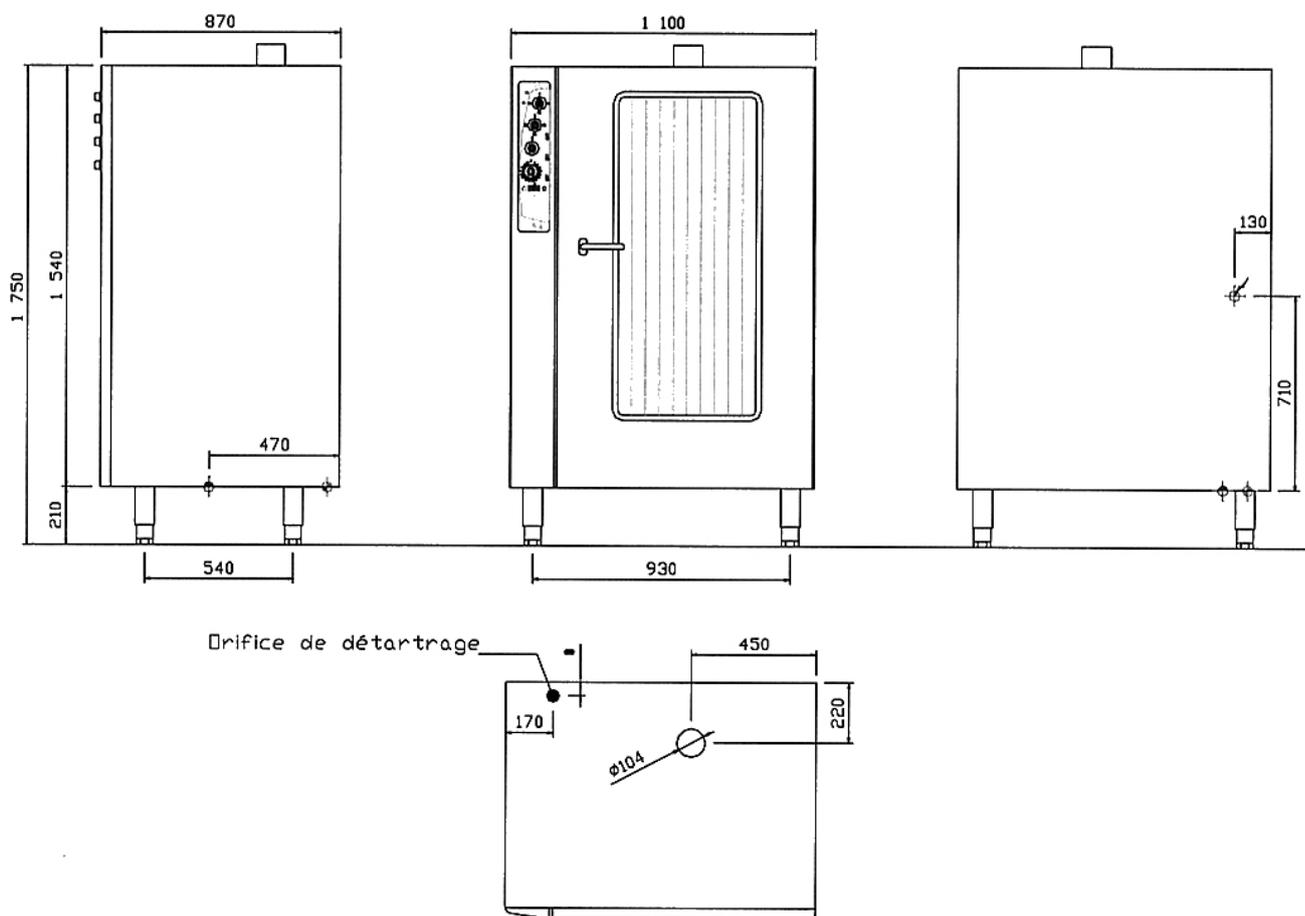


**EAU : EAU ADOUCIE (°TH<8) 3/4M PREVOIR LIMITEUR DE PRESSION REGLE A 1.5 BAR MAX.**



**EAU USEE : 3/4M**

## AC 240 N:



### RESERVATIONS :



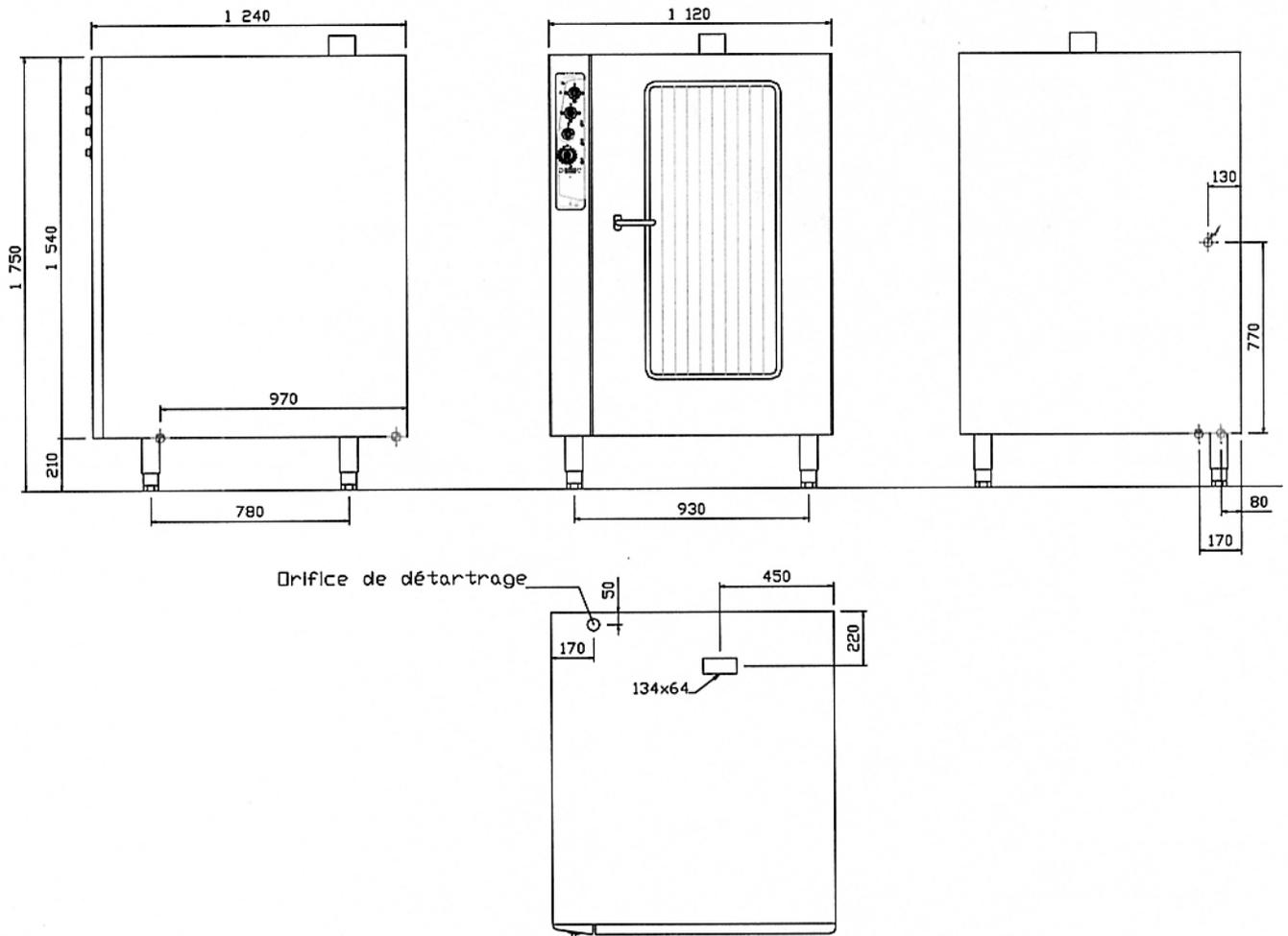
**ELECTRICITE**

**EAU : EAU ADOUCIE ( $^{\circ}\text{TH} < 8$ ) 3/4M PREVOIR LIMITEUR DE PRESSION REGLE A 1.5 BAR MAX.**

**EAU USEE : 3/4M**

**NOTE:** Keep a height of 210mm between the floor and the bottom of the oven in order to put the cart correctly inside the oven.

**AC 350 N:**



**RESERVATIONS :**



**ELECTRICITE**



**EAU : EAU ADOUCIE (°TH<8) 3/4M PREVOIR LIMITEUR DE PRESSION REGLE A 1.5 BAR MAX.**



**EAU USEE : 3/4M**

**NOTE:** Keep a height of 210mm between the floor and the bottom of the oven in order to put the cart correctly inside the oven.

### 3 – INSTALLATION:

**The equipment must be installed in accordance with the regulations and norms in force by a qualified installer and in a well-ventilated area.**

#### 3.1 – GENERAL INSTRUCTIONS

The equipment must be stable and placed on a perfectly horizontal area.

The service area of the device must be free and well lighted to facilitate the access to the control panel and to the working area.

In any case, a minimum space of 60 mm between the wall and the back of the oven is necessary to ensure the cooling of the ventilation motor.

Also you have to plan sufficient clearing of the upper door opening at 90°.

Never place the oven control panel near a source of heat as high-heat rings, French hot tops.

Check the direction of rotation of the turbine by putting down the aspiration filter. The direction is shown by the arrow engraved on the turbine:

- Clockwise direction for AC50N oven
  - Anticlockwise direction for AC150N, 220N, 240N, 350N.
- (For 240 and 350, both turbines rotate in the same direction).

In case of reverse rotation, switch around 2 phases on the power supply.

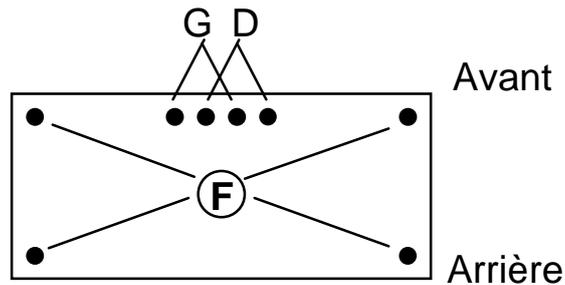
# FITTER GUIDE

## **ASSEMBLY OF THE OVEN ON THE BASE**

(AC50N, AC150N and AC220N)

- Put the oven on the upper tablet of the base and fix it with the help of 4 'H' head screws.
- Fix on (G) or (D) the condensation recovery system's trough rack depending on whether the control panel is on the right or left.

Underside stand view

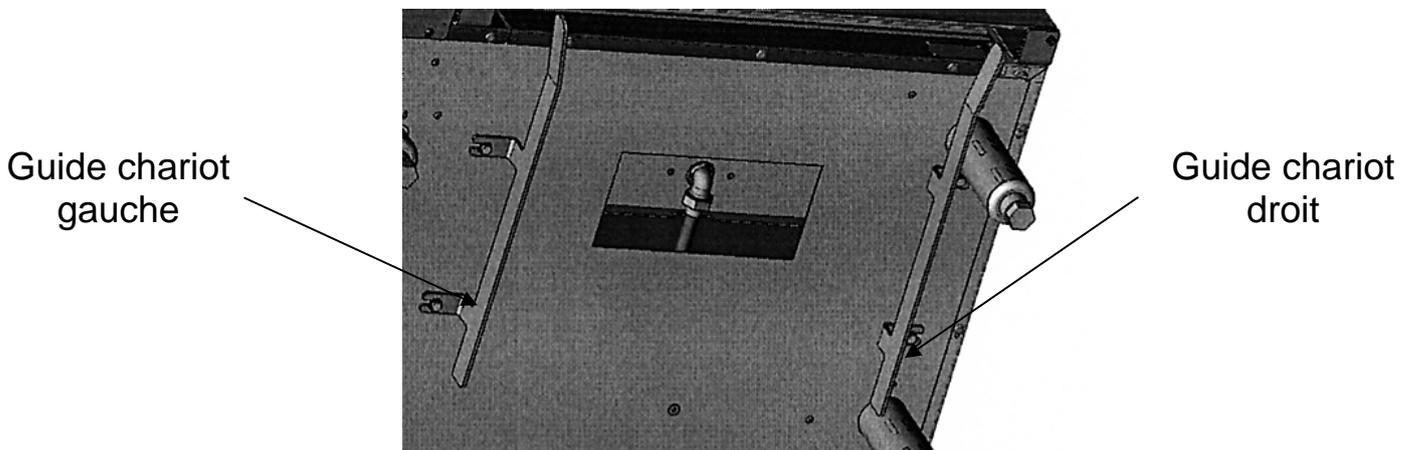


Attach the equipment on the wall or to any another fixed part through the 2 fastening points To be found on the back of the upper tablet of the base.

## **ASSEMBLY CART GUIDE :**

(R240N and R350N).

- Place the cart guides in front of the oven and attach it with the 4 screws M8 and the 4 washers (pls. refer to below diagram)



Note: there is a left and a right cart guide.

Option to fix the ovens AC240N & AC350N on the wall by angle iron (fixations are under the stand in the back)

# FITTER GUIDE

## 3.2 – ELECTRIC CONNECTION:

The operating voltage, the demand and the current on line are shown on the descriptive plate laid on the lower fraction of the façade.

It's very important to plan the correct dimensions of the inlet current line. The following tabs inform on the current on line and the section mini of the alimentation cable of the 5 conductors (3 PH+N+T) for all models.

|   | MODELS | POWER kW | CURRENT A | CABLE TYPE                      |
|---|--------|----------|-----------|---------------------------------|
| <b>DEVICE SUPPLIED WITH 400 V x 3+N</b> | AC50N  | 14       | 20,2      | H 07 RNF 5 x 4 mm <sup>2</sup>  |
|   | AC150N | 25,7     | 37,1      | H 07 RNF 5 x 10 mm <sup>2</sup> |
|   | AC220N | 38,3     | 55,3      | H 07 RNF 5 x 16 mm <sup>2</sup> |
|   | AC240N | 46,8     | 67,5      | H 07 RNF 5 x 25 mm <sup>2</sup> |
|   | AC350N | 72       | 104       | H 07 RNF 5 x 35 mm <sup>2</sup> |
| <b>DEVICE SUPPLIED WITH 230 V x 3</b>   | AC50N  | 14       | 35        | H 07 RNF 4 x 10 mm <sup>2</sup> |
|   | AC150N | 25,7     | 64,25     | H 07 RNF 4 x 16 mm <sup>2</sup> |
|   | AC220N | 38,3     | 95,75     | H 07 RNF 4 x 35 mm <sup>2</sup> |
|   | AC240N | 46,8     | 117       | H 07 RNF 4 x 35 mm <sup>2</sup> |
|   | -      | -        | -         | -                               |

**NOTE:** The device considered for the fix position system with direct connection on the line without connector (socket) must compulsory go with single pole break system in upstream (divider, switch, etc...) having at least 3 mm opening distance between the contacts. Moreover, the upstream electric system of the connecting points must comply with the norm NFC 15.100.

To link the device to the network:

- Take apart the trap door of the rear panel.
- Insert the feeding cable trough the gland and link it to the marked terminals.
- Do not forget the earth connection.
- After the linking, reassemble.

## 3.3 – WATERS CONNECTION :

The connection is to be made

- at the back of the device on the control valve 3/4M for the AC50N, AC150N and AC220N models;
- under the base for the models AC240N and AC350N.

The feeding pressure should be between 1 bar & 2 bars. The TH of water hardness cannot exceed < 10°F.

## FITTER GUIDE

### 3.4 – VAPOURS EVACUATION:

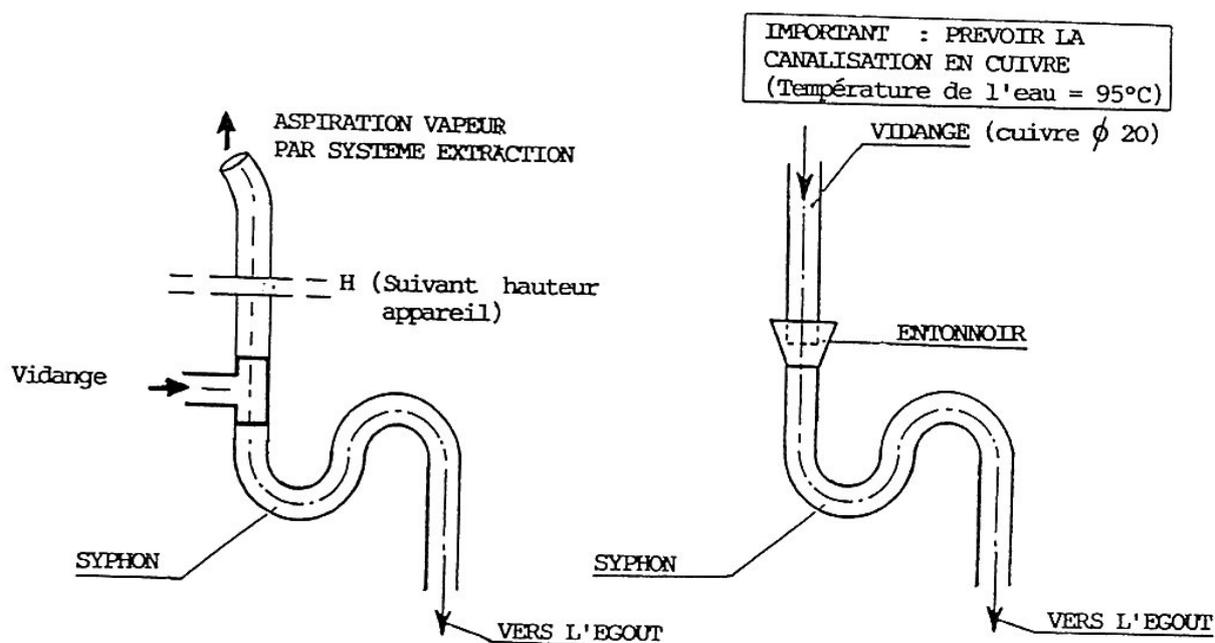
A vapour evacuation system is essential depending on the setting up.

- To plan:
- Either installs the device under a hood.
  - Either installs a direct vapours evacuation system to the exterior taking care to place a salvaging box (this one should be fitted to the chimney)

### 3.5 – CONDENSATION EVACUATION:

- Condensation evacuation should be done by the rear of the device.
- Connect by a brass-piping diameter 20 (see drawing).
- Use one of the 2 recommended assemblies.

#### Drain connection drawing:



## 4 - MAINTENANCE:

**Before any maintenance operation, put the power off**

### 4.1 – STEAM GENERATOR:

#### a) Generalities:

Mainly is made of:

- Of a rectangular body in stainless steel,
- Of a heat body made of unit power 4.5kW immersion heater.
- A feed-channel controlled by control valve,
- A detection level electrode,
- A steam start,
- An orifice to insert the draw off solution,
- A manual draws off,
- Of a thermal protection thermostat.

#### b) Steam production system:

The boiler is built of a water tank, immersion heaters and of a water level detection electrode.

When starting the steam function, the control valve commands the filling of the boiler. When the level is reached, the control valve closes up and the water starts heating.

As soon as the level becomes insufficient, the control valve orders the water make up. The detection of the level is electronic and run the control valve and the heating system; at each make up the heating system is automatically stopped.

#### c) Descaling:

The descaling is an essential maintenance operation to ensure the smooth functioning of your steam generator and of the full equipment. It must be done regularly.

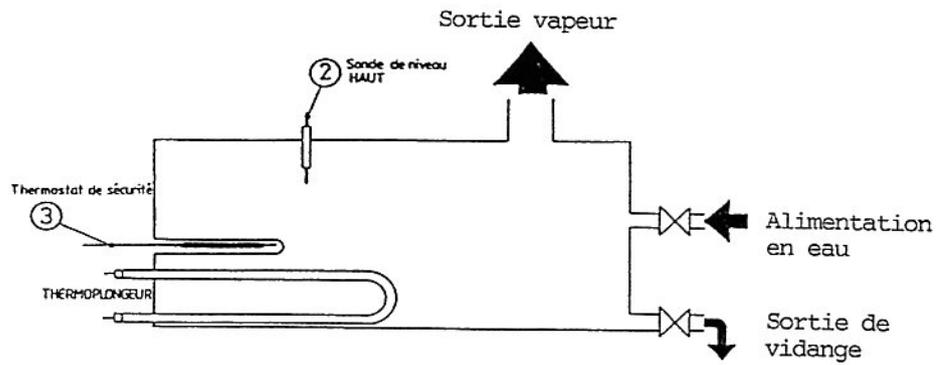
Its frequency varies according to the hardness of the water defined by the hardness measurement (TH) and by the length of use of the steam function:

- If TH < 8°F proceed at least a monthly descaling.

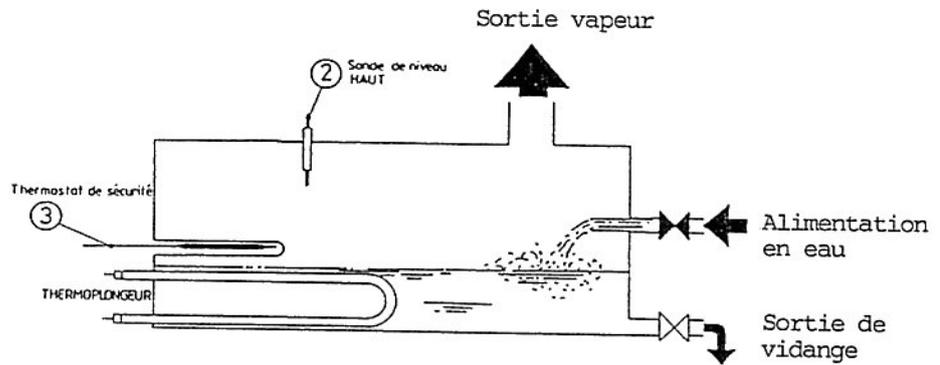
If TH > 8°F use a magnetic or electromagnetic scale remover and maintain a monthly descaling

# FITTER GUIDE

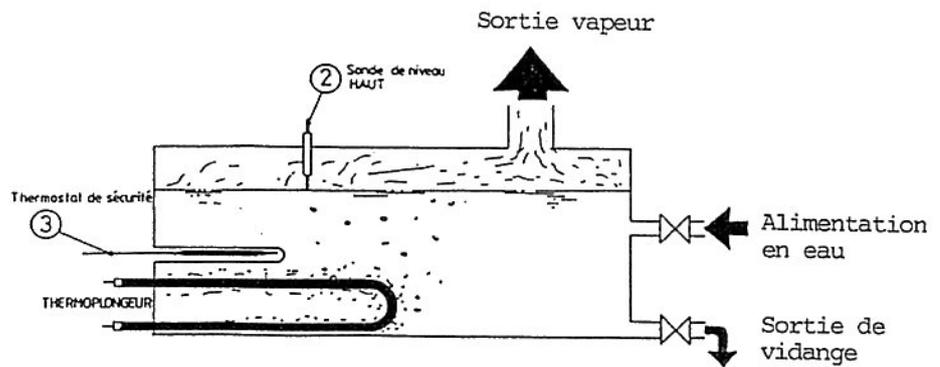
bouilleur vide



remplissage du bouilleur



DEPART CHAUFFAGE  
arrêt remplissage  
production vapeur



# FITTER GUIDE

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- If TH < 8°F proceed at least a monthly descaling.
- If TH > 8°F: use a magnetic or electromagnetic scale remover and maintain a monthly descaling

Any carelessness in the regular maintenance will lead the steam production to malfunction and will be harmful to the following components: control valves, piping, level tasters, immersion heaters.

**Please note that the failure to comply with the maintenance operations during the guarantee period would annul the guarantee.**

## OPERATIVE MODE:

### Descaling solution:

It is composed of a hydrochloric acid solution diluted in volume at 33%. You can obtain this product in specialized shops or prepare it yourself.

- Quantity to insert: Please refer to below tab

It is composed of a hydrochloric acid solution diluted in volume at 33%. You can obtain this product in specialized shops or prepare it yourself.

| MODEL           | GENERATOR (litres) | SOLUTION QTY (litres) |
|-----------------|--------------------|-----------------------|
| AC50N           | 5                  | 1                     |
| AC150N          | 10                 | 2                     |
| AC220N - AC240N | 15                 | 3                     |
| AC350N          | 23                 | 4                     |

## DESCALING PROCEDURE:

Depending on the safety regulations of your company, the descaling should preferably be done at the end of the day.

- A - Drain the boiler: push the pull tab in position 'drain' for 5 min then push it back to close the boiler.
- B - Insert the descaling solution advised above by the neck located on the top of the oven
- C - Complete the filling of the generator with water until the oven's interior is overflowed (cleaning of the piping).
- D - Leave the oven. The effectiveness of the descaling depends on the duration (all night if the descaling is made at the end of the day)
- E - Drain the boiler (as explained in A)
- F - Restart the oven as well as the steam function for 2 min.
- G - Carry out a 2<sup>nd</sup> rinsing following the explanations given in E & F.

### **4.2 - CAUSES OF POTENTIAL BREAKDOWNS IN THE STEAM PRODUCTION:**

#### **- Steam defect – red light indicator on:**

In a AIRCUISEUR; when the defect light is on, it means that the immersion heaters are warm up without water leading to an overheating inside the boiler and the start off of security thermostat preset at 130°C.

When it happens, it is not enough to reset the security thermostat as in most cases the same will happen again later causing more possibilities to damage the immersion heaters.

Firstly it's better to take down the immersion heaters in order to check their conditions (coating damages, malformation, insulation loss) and if necessary replace them. Then, look for the possible reasons of the breakdown. A steam defect can come from different reasons: too long level sensor, malfunctioning of the detection level map and more rarely a faulty safety thermostat.

#### **- Malfunctioning of the electronic level map:**

- The electronic map is rarely the direct cause of the malfunctioning of the detection level, and most of the time, it is due to a mass defect. This mass is either caused by the contact of the capillary of the safety thermostat against its connecting terminals on the command plate, either by the contact of the same capillary with the level sensor of the boiler.

During the research of the insulating defect of the control command, it is necessary to remove the map from its support as the map is linked to the boiler mass and so to the device mass group.

The solution consists in insulating the thermostat capillary by water tighten casing 5type GTE SILISOL) if non-existent or to replace the wire, the terminal or any other conductor touching the device

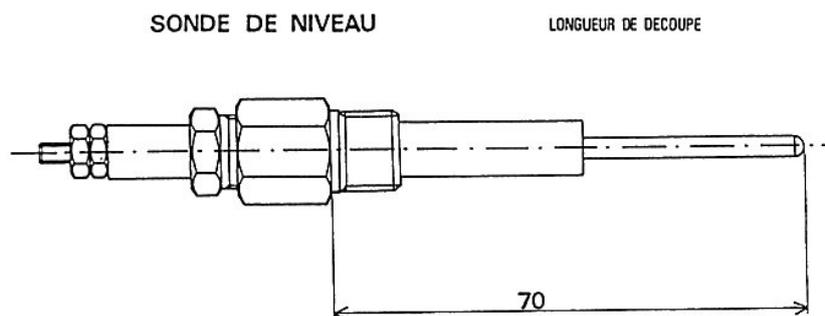
- To check the smooth functioning of the level map, you must manually link the mass sensor to the mass boiler by a conductor wire and notice that the heater stops when you remove the mass wire. The check must be done when the boiler is empty and must be very quick in order not to damage the immersion heaters. Please note that the transfer between water feeding and the heater is not direct, more or less 1 to 3 seconds but the transfer heater-water feeding is direct.

- If after all checks it is still not working properly the electronic map must be replaced.

#### **- Defect of the safety thermostat:**

- The smooth functioning of the safety thermostat will be called into question only after the checking the working of the level detection map and the good condition of the immersion heaters. In case the defect reappears, you must check the functioning temperature of the thermostat as the safety thermostat of

- To check, put the thermostat bulb in the cold oven ( $t^{\circ} < 50^{\circ}\text{C}$ ) and heat the oven to 200°C or about. If the thermostat start up before 110°C it's necessary to replace it otherwise more investigations are needed



## 4.3 – OPERATION SAFETY:

In case of power cut, the machine restarts automatically.

### ■ Ventilator defect:

The red light indicator sited in façade switches on and all the functions stop.

To rearm; press the push knob located near the lighting.

If the defect remains, check that the turbine does not rub against any other metallic piece and that the thermal security is correctly adjusted on the following values:

- 0,3 A en 400 V x3 et 0,8 A en 230 Vx3 for AC50N.
- 1,2 A en 400 V x3 et 1,8 A en 230 Vx3 for other models

### ■ overheating defect:

The device is equipped with a security thermostat limited at 320° and with a manual reset.

Its triggering cancels all functions of the oven but cannot be seen.

To reset, press the red knob sited on the upper part of the power plate, after having dismantled the control panel.

If the defect remains, check the smooth functioning of the temperature regulator and its taster. Also check that all contacts of heat connector are not stuck to each other's.

## 4.4 – COMPONENTS ACCESS :

- All components of control and automatic operations are fixed on a plate put on rails and are accessible by the front by dismantling the control panel. (4 screws)
- The resistances are accessible by dismantling the roof of the machine (4 screws on the top) for the model AC50N, and by dismantling the backside for all other models.

In case of taking apart and reassembly, take care of well insulating the connections of the metallic parts and also of the thermal insulator.

■ the seal of retort is just squeezed in the groove around the cavity of the oven. The replacement is to be done without tools but it must be sited in the bottom of housing. Its position and condition are essential for the smooth running of the electric equipment.

#### **4.5 – PREVENTIVE MAINTENANCE:**

Extract the dust from the ventilator grid of the electric bearing plate's cooling down system once a month (located at the back of the machine). Check the smooth performance of the piece of equipment.

#### **4.6 – LISTING OF THE MAIN COMPONENTS:**

| <b>CODE</b> | <b>DESCRIPTION</b>                | <b>AC50N</b> | <b>AC150N</b> | <b>AC220N</b> | <b>AC240N</b> | <b>AC350N</b> |
|-------------|-----------------------------------|--------------|---------------|---------------|---------------|---------------|
| E054059     | Level map                         | ●            | ●             | ●             | ●             | ●             |
| E054062     | Level detection probe             | ●            | ●             | ●             | ●             | ●             |
| E153010     | Immersion heater 4,5 kW           | ●            | ●             | ●             | ●             | ●             |
| E401008     | Safety Thermostat 130°C           | ●            | ●             | ●             | ●             | ●             |
| E050560     | Thermostat Map 0-270° C           | ●            | ●             | ●             | ●             | ●             |
| E403525     | Probe PT100 (automatic control)   | ●            | ●             | ●             | ●             | ●             |
| E050559     | Double threshold case             | ●            | ●             | ●             | ●             | ●             |
| E403514     | Probe CJ (double threshold)       | ●            | ●             | ●             | ●             | ●             |
| E050561     | 3 pusher map                      | ●            | ●             | ●             | ●             | ●             |
| E052515     | 4 positions commutator            | ●            | ●             | ●             | ●             | ●             |
| E402540     | Simmerstat                        | ●            | ●             | ●             | ●             | ●             |
| E452092     | Time switch 110 min               | ●            | ●             | ●             | ●             | ●             |
| E204042     | Buzzer                            | ●            | ●             | ●             | ●             | ●             |
| E254060     | Moto-turbine D225                 | ●            |               |               |               |               |
| E054077     | Magnet                            |              | ●             | ●             | ●             | ●             |
| E054076     | Magnetic detector                 |              | ●             | ●             | ●             | ●             |
| E254008     | Motor D29 0,37 Kw                 |              | ●             | ●             | ●             | ●             |
| E202046     | Body window lighting rectangular  | ●            | ●             | ●             | ●             | ●             |
| E202047     | Glass window lighting rectangular | ●            | ●             | ●             | ●             | ●             |
| E202048     | Joint frame window rectangular    | ●            | ●             | ●             | ●             | ●             |
| E202049     | Frame window rectangular          | ●            | ●             | ●             | ●             | ●             |
| E401003     | Thermostat limiter                | ●            | ●             | ●             | ●             | ●             |
| E401205     | Black electric lever              | ●            | ●             | ●             | ●             | ●             |
| E401330     | Seal joint lever                  | ●            | ●             | ●             | ●             | ●             |
| E150824     | Resistance 1500 W / 230 V         | ●            |               |               |               |               |
| E151131     | Resistance 2700 W / 230 V         |              | 6             | 9             | 12            | 18            |
| E050903     | Contacteur 9A / 230V              | ●            | ●             | ●             | ●             | ●             |
| E050932     | Contacteur 18A / 230 V            |              | ●             |               | ●             |               |
| E050956     | Contacteur 32A / 230 V            |              |               | ●             |               | ●             |
| E050571     | Cool down ventilator              | ●            | ●             | ●             | ●             | ●             |
| I101012     | Glass joint window rectangular    | ●            | ●             | ●             | ●             | ●             |

## FITTER GUIDE

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| CODE            | DESCRIPTION                            | AC50N | AC150N | AC220N | AC240N | AC350N |
|-----------------|--|-------|--------|--------|--------|--------|
| I304026         | Glass joint                            | ●     | ●      | ●      | ●      | ●      |
| I304016         | Lower part door joint                  |       |        |        | ●      | ●      |
| I304024         | Retort joint                           | ●     | ●      | ●      | ●      | ●      |
| I506050         | Motor joint 20x3                       |       | ●      | ●      | ●      | ●      |
| I506055         | Motor joint 30x4                       | ●     |        |        |        |        |
| Q054056         | Glass 428x428                          | ●     |        |        |        |        |
| Q054060         | Enamelled glass 638x458                |       | ●      | ●      |        |        |
| Q054061         | Light glass 638x458                    |       | ●      | ●      |        |        |
| Q054070         | Safety glass 1180x 588                 |       |        |        | ●      | ●      |
| Q101005         | Handle                                 |       | ●      | ●      | ●      | ●      |
| Q101007         | Sash-bolt mechanism                    |       | ●      | ●      | ●      | ●      |
| Q101009         | Sash-bolt                              |       | ●      | ●      | ●      | ●      |
| Q101011         | Sash-bolt strike                       |       | ●      | ●      |        |        |
| SE109028        | Sash-bolt strike                       |       |        |        | ●      | ●      |
| Q105512         | Short latch door                       | ●     |        |        |        |        |
| R101530         | Grease filter 370x370                  | ●     |        |        |        |        |
| R101540         | Grease filter 600x480                  |       | ●      | ●      | ●      | ●      |
| 233550          | Grease filter 620x430                  |       |        |        |        |        |
| L600505         | Solenoid valve 220V                    | ●     | ●      | ●      | ●      | ●      |
| E052535         | 5 positions commutator                 | opt   | opt    | opt    | opt    | opt    |
| E050560         | Map thermostat heart sensor            | opt   | opt    | opt    | opt    | opt    |
| E403516         | Dock sensor PT100                      | opt   | opt    | opt    | opt    | opt    |
| E000000<br>TX18 | Water inductor (vapours<br>suppressor) | opt   | opt    | opt    | opt    | opt    |

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