

02/2019

# **Mod: IN/RCX12-PVV**

**Production code: 19058508**

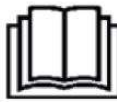
# DROP IN

REFRIGERATED VENTILATED WELL/ CUBA REFRIGERADA VENTILADA/  
CUVE RÉFRIGÉRÉE FROID VENTILÉ



|       |            |
|-------|------------|
| Ref:  | A070200008 |
| Vers. | 1          |

Please check your equivalent model in the equivalent table  
Consulte su modelo equivalente en la tabla de equivalencias  
Consultez votre modèle équivalent dans le tableau d'équivalences

|                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |
|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|  |  |  |  |  |
| PRECAUCIÓN                                                                        | TENSIÓN PELIGROSA                                                                 | LEA LAS INSTRUCCIONES                                                             | TIERRA DE PROTECCIÓN                                                               | EQUIPOTENCIALIDAD                                                                   |
| PRÉCAUTION                                                                        | TENSION DANGEREUSE                                                                | LISEZ LES INSTRUCTIONS                                                            | TERRE DE PROTECTION                                                                | ÉQUIPOTENTIALITÉ                                                                    |
| WARNING                                                                           | HAZARDOUSVOLTAGE                                                                  | PLEASE READINSTRUCTIONS                                                           | PROTECTIVEEARTH                                                                    | EQUIPOTENTIAL BONDING                                                               |

**Instruction manual**  
Installation and Operation

MACHINES DRAWING ELECTRICAL & DRAIN SITUATIONS / PLANOS TÉCNICOS EN SITUACIONES ELÉCTRICAS O, DRENAJE / PLAN TECHNIQUE EN SITUATION DU ÉLECTRICITÉ OU VIDANGE

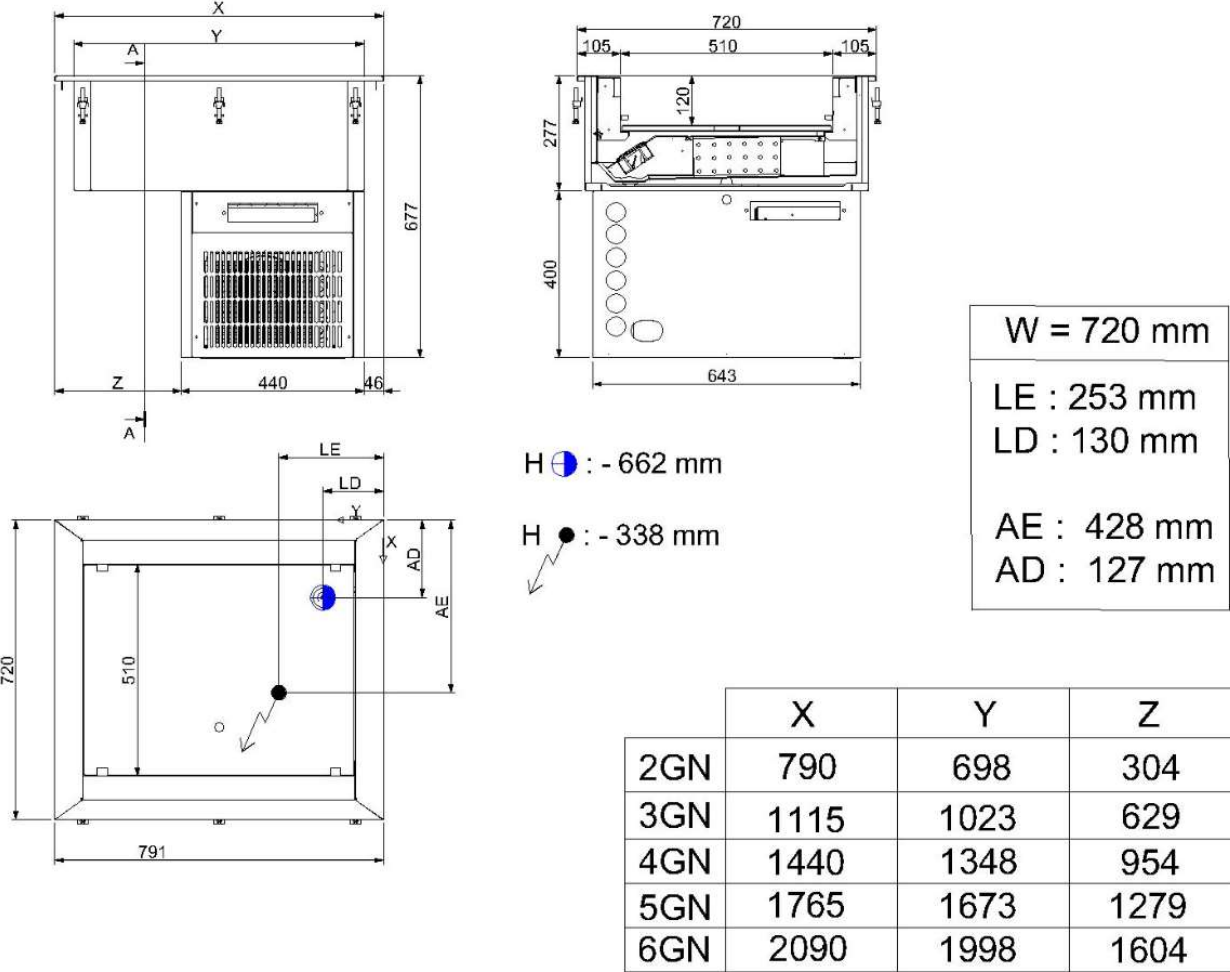


Fig 1.

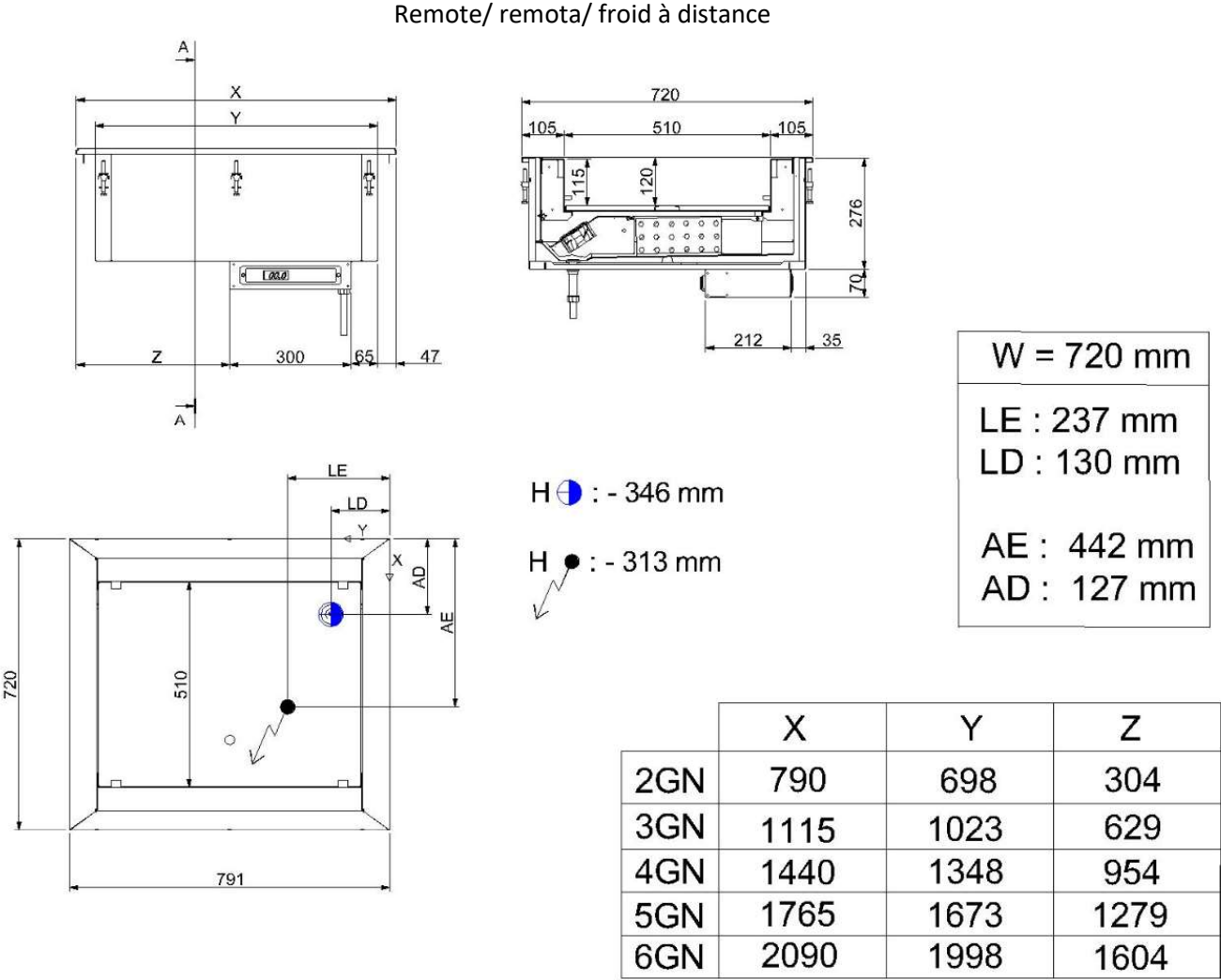


Fig. 2

# TECHNICAL CHARACTERISTICS / CARACTERÍSTICAS TÉCNICAS / CARACTÉRISTIQUES TECHNIQUES

| Model/<br>Modelo | Capacity<br>(GN)/<br>Capacidad<br>(GN)/<br>Capacité<br>(GN) | Dimensions<br>(mm)/ Medidas<br>(mm)/ Mesures<br>(mm) | Cut-Out<br>Dimensions<br>(mm)/<br>Medidas<br>Encastre<br>(mm)/<br>Mesures<br>Encastrées<br>(mm) | Voltage/<br>Voltaje/ Voltage | Electrical Power<br>(W)/<br>Potencia<br>Eléctrica<br>(W)/<br>Puissance<br>Électrique<br>(W) | Cooling Power<br>(W) -10°C T <sub>a</sub><br>evap./<br>Potencia<br>Frigorífica (W)<br>-10°C T <sub>a</sub><br>evap./<br>Puissance de<br>refroidissement (W)<br>-10°C T <sub>a</sub> evap. | Gas<br>Type/<br>Gas<br>Tipo/<br>Gaz<br>Type | Climatic<br>Class/ Clase<br>Climática/<br>Classe<br>Climatique | Work<br>Temperature (°C)/<br>Temperatura de Trabajo<br>(°C)/<br>Température de travail<br>(°C) |
|------------------|-------------------------------------------------------------|------------------------------------------------------|-------------------------------------------------------------------------------------------------|------------------------------|---------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------|----------------------------------------------------------------|------------------------------------------------------------------------------------------------|
| DV7-C2           | 2                                                           | 790x720x677<br>R: 790x720x348                        | 765x690                                                                                         | 230/ I / 50 HZ               | 280<br>R: 20                                                                                | 430                                                                                                                                                                                       | R452a                                       | IV                                                             | 0°C / 4°C                                                                                      |
| DV7-C3           | 3                                                           | 1115x720x677<br>R: 1115x720x348                      | 1090x690                                                                                        |                              | 395<br>R: 20                                                                                | 590                                                                                                                                                                                       |                                             |                                                                |                                                                                                |
| DV7-C4           | 4                                                           | 1440x720x677<br>R: 1440x720x348                      | 1415x690                                                                                        |                              | 535<br>R: 20                                                                                | 770                                                                                                                                                                                       |                                             |                                                                |                                                                                                |
| DV7-C5           | 5                                                           | 1765x720x677<br>R: 1765x720x348                      | 1740x690                                                                                        |                              | 710<br>R: 20                                                                                | 940                                                                                                                                                                                       |                                             |                                                                |                                                                                                |
| DV7-C6           | 6                                                           | 2090x720x677<br>R: 2090x720x348                      | 2065x690                                                                                        |                              | 760<br>R: 20                                                                                | 1110                                                                                                                                                                                      |                                             |                                                                |                                                                                                |

Tab 1.

DROP IN ASSEMBLY / MONTAJE DEL DROP IN / ASSEMBLAGE D'ENCASTREMENT

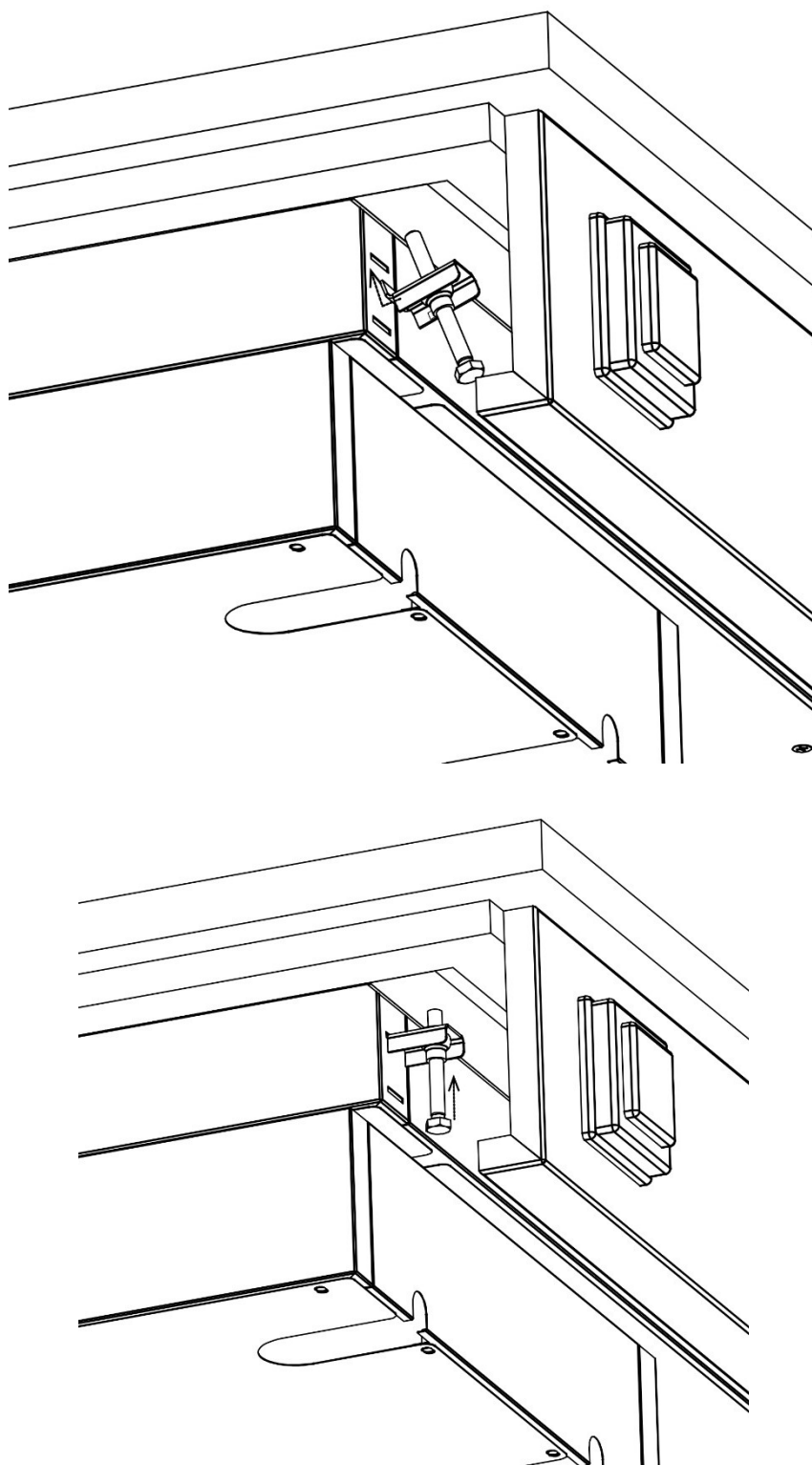


Fig 3.

DROP IN DISASSEMBLY / DESMONTAJE DEL DROP IN / DÉMONTAGE D'ENCASTREMENT

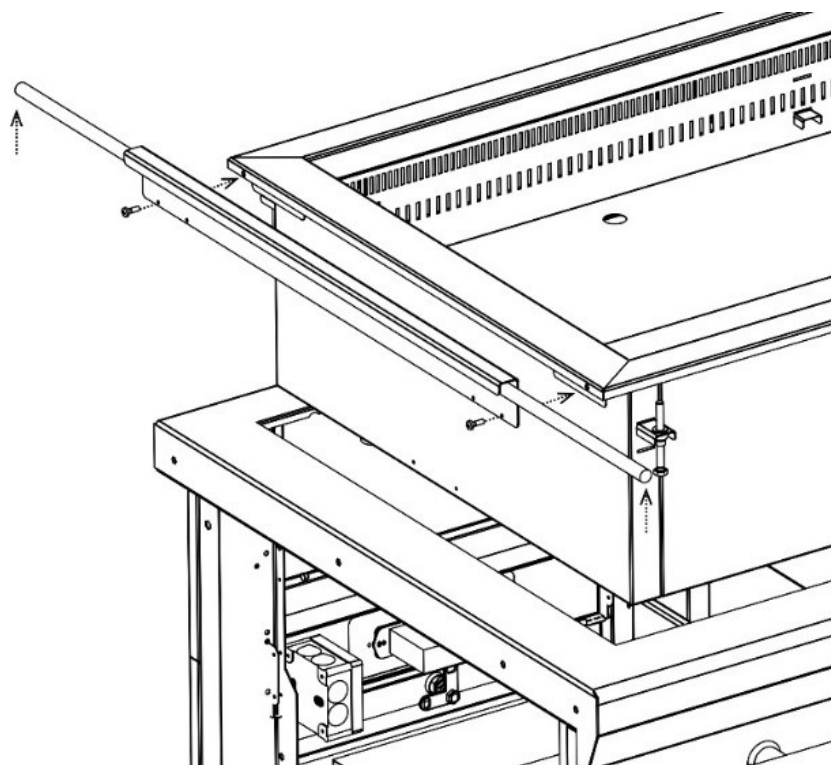


Fig 4.

CONTROL PANEL SCROLLING/ DESPLAZAMIENTO PANEL DE CONTROL/ PANNEAU DE  
COMMANDE DÉFILEMENT

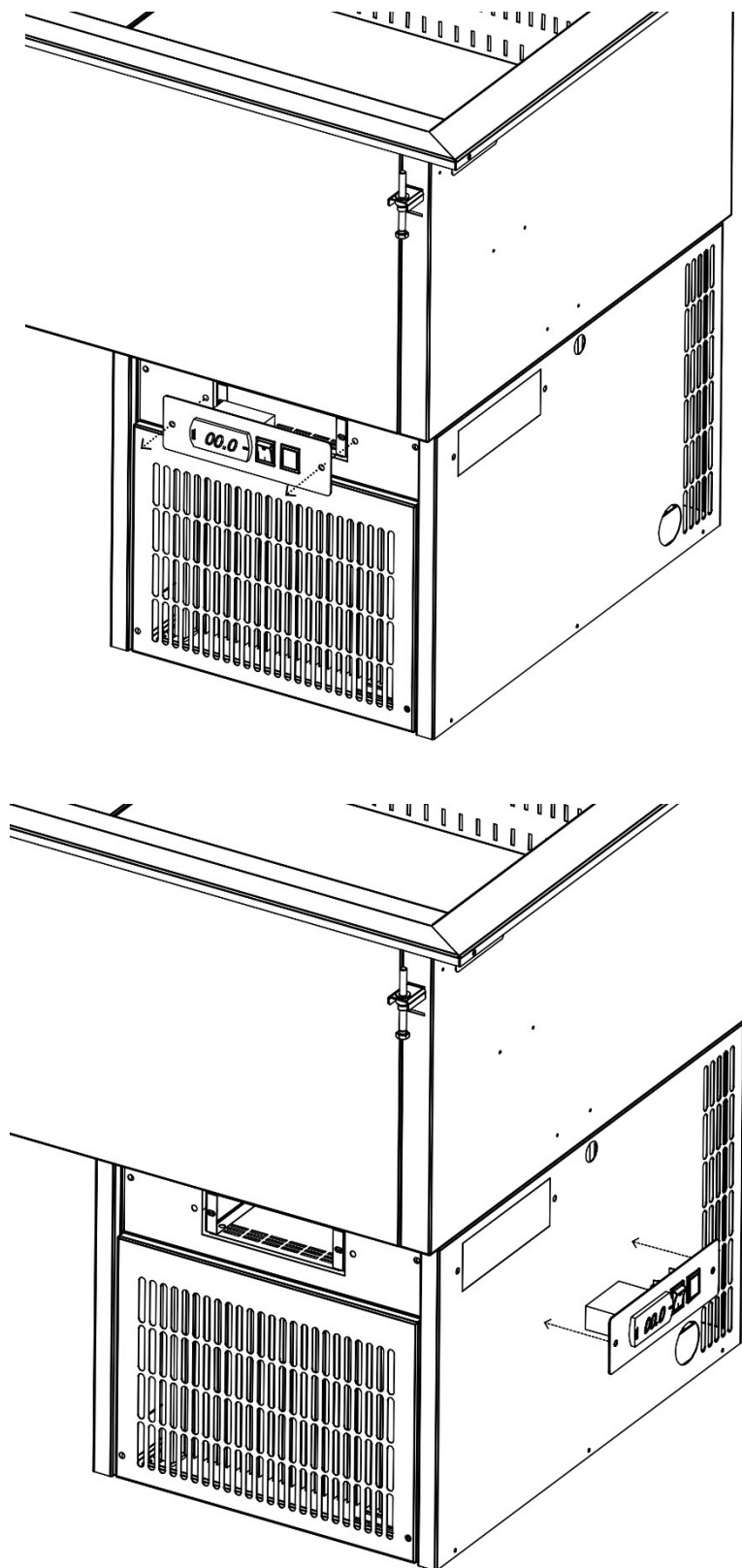


Fig. 5

DROP IN MAINTENANCE / MANTENIMIENTO DEL DROP IN / ENTRETEN D'ENCASTREMENT

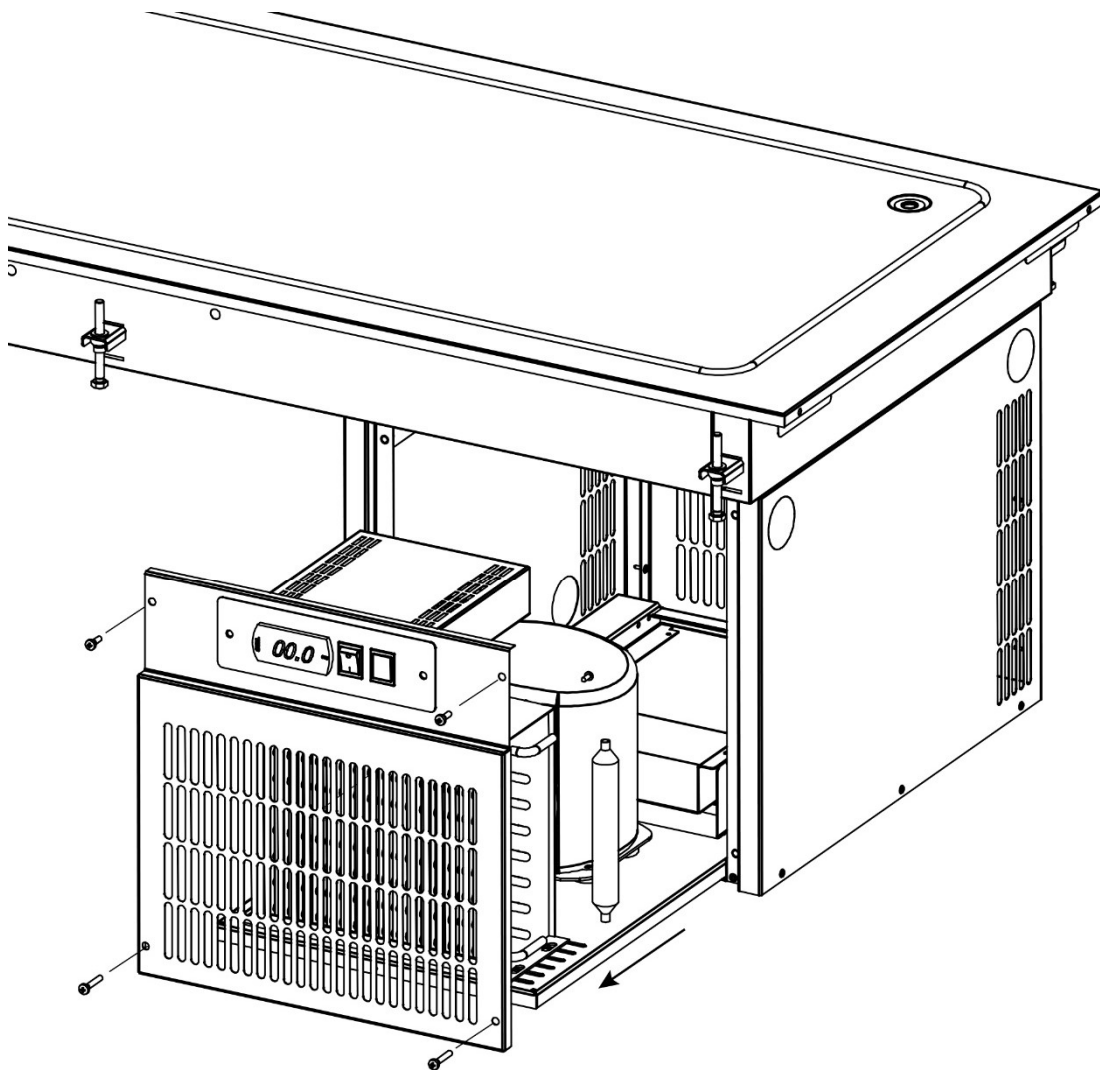


Fig. 6

COLD UNIT VENTILATION/ VENTILACION DE LA UNIDAD DE FRIO/ VENTILATION DE L'UNITÉ FROIDE

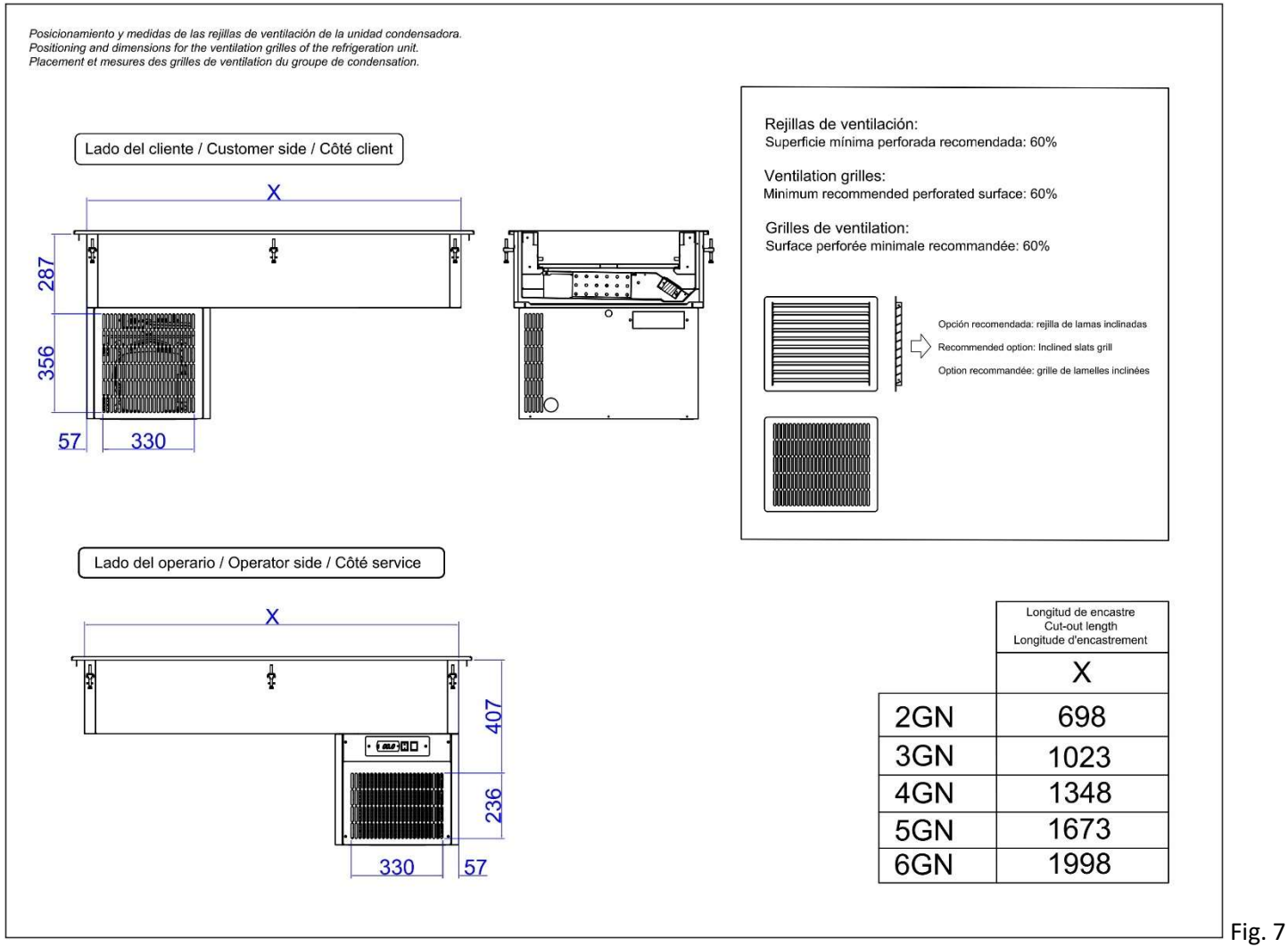


Fig. 7

CONTROL PANEL / PANEL DE MANDOS / PANNEAU DE COMMANDE

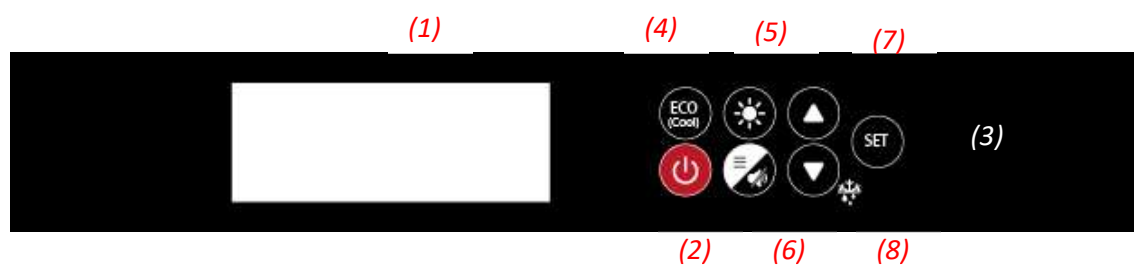


Fig. 8

HOLE TO ASSEMBLY THE CONTROL PANEL / AGUJERO PARA INSTALAR EL PANEL DE MANDOS /  
LE TROU POUR ASSEMBLER LE PANNEAU DE COMMANDE

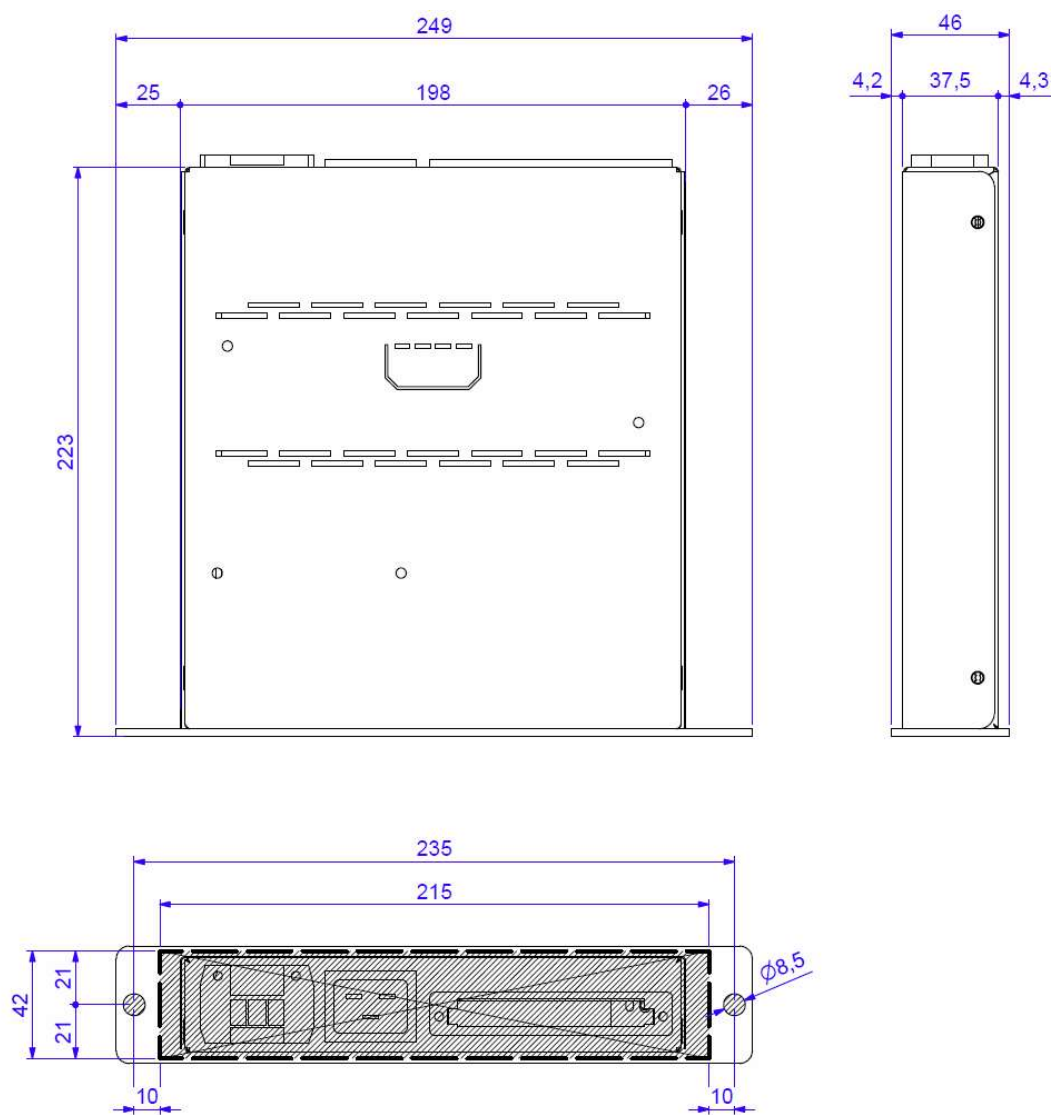


Fig. 9

# 1 INDEX

|     |                                                       |    |
|-----|-------------------------------------------------------|----|
| 1   | INDEX.....                                            | 12 |
| 2   | MACHINE INTRODUCTION .....                            | 13 |
| 2.1 | INTRODUCTION TO MACHINE & MODELS .....                | 13 |
| 2.2 | IMPORTANT SAFETY INFORMATION.....                     | 13 |
| 2.3 | SPECIFICATION CHART .....                             | 13 |
| 3   | INSTALLATION .....                                    | 14 |
| 3.1 | GENERAL INFORMATION.....                              | 14 |
| 3.2 | TRANSPORT, HANDLING, UNPACKING, LOCATION .....        | 14 |
| 3.3 | INTENDED USE AND RESTRICTIONS. ....                   | 14 |
| 3.4 | MANUFACTURER'S IDENTIFICATION LABEL DESCRIPTION. .... | 14 |
| 3.5 | INSTALLATION AND ASSEMBLY .....                       | 15 |
| 3.6 | CONNECTIONS.....                                      | 15 |
| 4   | OPERATION .....                                       | 16 |
| 4.1 | GENERAL INFORMATION.....                              | 16 |
| 4.2 | CONTROL PANEL DESCRIPTION .....                       | 16 |
| 4.3 | MACHINE SETTINGS AND PROGRAMS .....                   | 17 |
| 5   | MAINTENANCE .....                                     | 18 |
| 5.1 | GENERAL SAFETY RULES.....                             | 18 |
| 5.2 | MACHINE CLEANING AND MAINTENANCE ROUTINE.....         | 18 |
| 5.3 | MACHINE DISPOSAL .....                                | 18 |
| 6   | TROUBLESHOOTING CHART .....                           | 19 |
| 6.1 | TROUBLESHOOTING CHART .....                           | 19 |

## 2 MACHINE INTRODUCTION

---

### 2.1 INTRODUCTION TO MACHINE & MODELS

---

The purpose for which this equipment has been designed is to be built into a self-service buffet and is specially conceived for the display and service of cold food, maintaining the food in the best temperature condition during the period of time of the serving. Said conditions will depend on the initial temperature of the products when displayed and the environmental conditions of the premises. In no case can this technical appliance be used to freeze food.

The trays can house food pans of up to 100 mm in depth of 2 to 6 GN 1/1. If these pans are not used the food can be displayed on the inside shelves of the tray, which is adjustable in height.

The technical cabinet located on the lower part includes the electricity panel, the regulating thermostat and the condensing unit.

### 2.2 IMPORTANT SAFETY INFORMATION

---

The in-situ installation and start-up of this appliance must be carried out by qualified technical personnel.

The technical parameters inside this manual are subject to change without notification.

The appliance must be only repaired by qualified personnel. Please contact your distributor and do not attempt to open this appliance.

If the appliance is not going to be used for long periods of time, make sure it is empty, cleaned and disconnected from the mains electricity supply.

The working temperature of the appliance may be affected by the ambient temperature and its location.

Make sure that external sources do not influence the appliance that may prejudice its performance (heating or direct sources of heat, air currents or similar).

The suitable ambient temperature is from +16°C to +30°C. If the premises exceed 32°C the necessary performance for a correct cooling is not guaranteed.

This appliance is made of stainless sheet steel and there are risks of cutting inherent in its design and to being made of thin sheet steel. Please take extra special care when handling it and cleaning the same.

The inside of the technical cabinet where the condensing unit located has intrinsic risks such as electricity, cutting, trapping, burns and moving rotor (fan)..

The inside of the technical cabinet has intrinsic risks such as electricity, cutting, and burns.

- Never place hot food or recipients in the appliance.
- Keep the technical cabinet closed at all times.
- Do not allow children to handle the appliance under any circumstances.
- Keep to the recommendations made by the food manufacturers.
- Do not pour liquids into the tray.

### 2.3 SPECIFICATION CHART

---

Please check Table 1 for detailed information of the product.

## 3 INSTALLATION

---

### 3.1 GENERAL INFORMATION

---

The use instructions of the digital thermostat are attached to this manual. However, WE DO NOT RECOMMEND THE ADJUSTMENT OF THE THERMOSTAT BY UNQUALIFIED PERSONNEL. Please, CONTACT YOUR DISTRIBUTOR IN ORDER TO HAVE THE NECESSARY ADJUSTMENTS CARRIED OUT.

### 3.2 TRANSPORT, HANDLING, UNPACKING, LOCATION

---

The application with its packaging in wood makes a heavy item.

Be careful in transport, handling and location operations.

On receiving the device, make sure that it has not suffered any damage in transport. Otherwise, make all pertinent claims to your supplier or to our company.

When the device has been accepted, it is preferable to keep it unpacked until it is put into service in order to protect it from any possible mechanical knocks, dust, dirt, etc....

The packaging consists of a wooden palette, a plastic surround and wooden/cardboard corner pieces, all recyclable materials

The warranty will only cover manufacturing defects, excluding any incorrect handling or use of the material by the clients or users. Labour costs and travelling expenses are always on the account of the client. Any responsibility for defects attributable to transport will not be accepted, unless the relevant claim is placed within a maximum period of time of 24 hours after receiving the goods.

For correct and safe lifting and handling operations:

- Arrange a suitable area with flat floor for machine unloading and handling operations.
- Use the type of equipment most suitable for characteristics and capacity
- Make sure the load is stable;
- Handle the machine, keeping it at minimum height from the ground.

### 3.3 INTENDED USE AND RESTRICTIONS.

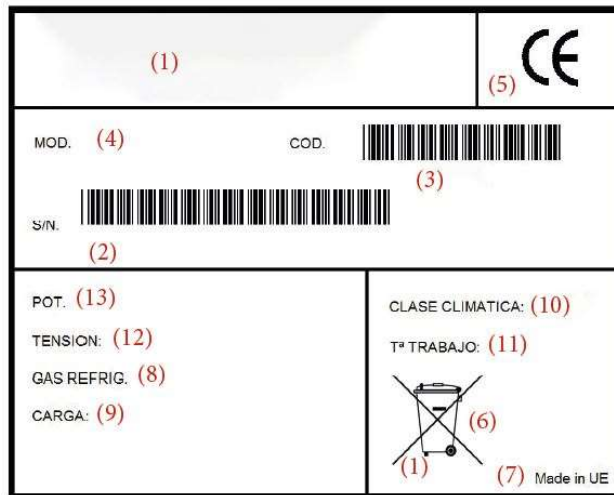
---

Check that the voltage and frequency of the electricity supply network coincide with those described in the characteristics plaque. It is essential that the electricity installation where the appliance is to be installed has an earth connection, as well as the necessary protection of a thermal magnetic switch and a circuit breaker. Do not connect other appliances in the same electric socket.

The manufacturer declines any liability for improper use of the product.

### 3.4 MANUFACTURER'S IDENTIFICATION LABEL DESCRIPTION.

---



Data in the identification label:

1. Brand
2. Serial number (code+ year+ serial number)
3. Code:
4. Model:
5. CE symbol
6. Waste disposal symbol
7. Manufacturing site
8. Gas Type
9. Gas quantity (gr)
10. Climatic class
11. Working range temperature:
12. Voltage:
13. Power consumption

### 3.5 INSTALLATION AND ASSEMBLY

Avoid having direct sources of heat, cold, humidity, sunlight and ultraviolet rays in the final location of this appliance. Heaters, radiators, air conditioning, air currents etc. can have a negative influence on the correct operation of the same.

Make sure the floor is level, in this way preventing any vibration or noise.

Make sure that the appliance has adequate ventilation. Do not block the ventilation grid of the condensing unit.

Follow the instructions in Figure 1-2 to assembly the product in the selected location and make the appropriate connections.

### 3.6 CONNECTIONS

Once the device has been fitted into the hole of the furniture destined for this purpose, the anchoring is carried out by means of the anchoring system supplied as shown in the figure 3.



The condensing unit should be well ventilated for an optimum performance of the cooling system. Please follow figure 7 for designing the furniture's ventilation grill.

The control box located on the lower part of the appliance can easily be moved to the side of the technical cabinet if required (for example in the case of having the front access of the appliance closed due construction reasons).

At the same time, it can be removed from the device and installed in any other panel (for example, in the front of buffet to operate and regulate the appliance without need to open the door). The control panel can be moved a maximum of 1.6m from the original position. This is explained in figure 5. At the same time, the control panel can be assembled in other furniture, for this purpose the hole described in figure 9 must be done in the panel.

In figures 4 it is explained how to move out the device from the furniture if maintenance or reparation is required.

The drainage from the cold tray collects the liquid that may have been accidentally spilled, and the evaporator defrosting water which on occasions and depending on the climate can be

considerable. Therefore, it is essential to connect said outlet to the drainage network. The present appliance does not have a collection tray and automatic evaporation of said liquid.

#### REMOTE UNIT OPTIONAL

All refrigerated inlet is supplied in copper pipes, both for connecting the high pressure (liquid) and low pressure (gas) lines of the refrigeration unit are sized 3/8". It is not included the thermostatic expansion valve, capillary tube, solenoid valve nor the cutoff valve.

The electrical connection socket for solenoid valve or refrigeration unit is provided by connection terminals, located in the junction box for a maximum compressor power of 1 1/2 ". For higher powers it is necessary to implement a relay or contactor, this element will not be supplied.

## 4 OPERATION

### 4.1 GENERAL INFORMATION

This appliance carries out defrosting to get rid of the ice generated by the evaporator. It may be necessary to sometimes slightly vary the default programme of said defrosting process due to climate reasons and/or conditions in the premises.

If there is an excessive accumulation of ice on the evaporator or in the event of a lack of cooling performance of the appliance, please contact your distributor for a diagnosis to be made and assess if an adjustment in the defrosting programme is necessary.

See figure 8 for the thermostat information.

### 4.2 CONTROL PANEL DESCRIPTION

- 1- Display
- 2- Main On-Off button (except light)
- 3- Set
- 4- ECO function
- 5- Light On-Off
- 6- Programing and disconnect sound/ alarm
- 7- Up ▲
- 8- Down ▼, manual defrosting (only in refrigeration)

The machine is switched on by pushing the on-off button of the thermostat for 5 seconds. For maintenance operations, disconnect the machine from the mains, because the machine is in stand-by situation when it is switch off. In the refrigerated equipment, there is delay of 3 minutes till the starting up, this delay is the protection programmed by default, it should not be modified by the user.

The regulation is made by electronic thermostat with a digital display, allowing to adjust the different working temperatures of the machine:

Pressing the **SET** (3) command for 1 second activates the set point to reach the desired temperature value displayed on the Display (1). To do this, press the cursors (8 or 9) ▲ ▼ until the desired temperature is reached. Once reached, press and hold the SET (3) command for 1 second to set the acquired value.

It is possible to activate the **ECO** mode (5) energy saving by pressing for 3 seconds this key. When activated, ECO will appear in the display (1). To return to the normal state, perform the same operation. This will display the word NOR in the display (1).

It is possible to activate or deactivate the light output by pressing the **LIGHT** (6) command for 1 second.

To access the **sounds and alarms** program (7), press and hold for more than 5 seconds. The parameter setting menu (F) will appear in the display (1) or in case of alarms, the alarm will be silenced and the alarm relay will be deactivated.

Pressing this command (7) and command **▲** (8) simultaneously for more than 5 seconds, all alarms are reset.

Pressing this command (7) and the **SET** (3) command for more than 5 seconds simultaneously accesses the parameter setting menu (C)

To change the parameters C or F once within the selected menu, move through the parameters with the cursors **▲** (8) and **▼** (9) until you reach the parameter to be modified or the sound and alarms key (7) to display the menu complete to reach the category more quickly. Pressing SET (3) selects the category or parameter to modify and is modified by **▲** (8) and **▼** (9). Once all the desired parameters are modified, they are memorized by pressing the sounds and alarms command (7) for more than 5 seconds. If nothing is pressed in 60 s you lose the Co F menu by losing data that has not been saved.

Pressing this command **▲** (8) and the SET (3) command simultaneously for more than 5 seconds activates the printout of the report.

#### BASIC PARAMETERS MODIFIED BY THE USER.

##### "Pro"

Pw (Password): Default value 22.

/ 5 (Selection °C or °F): Default value °C.

##### "Ctl"

St (Setpoint): Default value per model. Modify if applicable.

##### "ALM"

AL (Low temperature alarm activation): Default value 0 (disabled).

AH (High temperature alarm activation): Default value 0 (disabled).

| Code | Parameter                        | Models | UOM   | Type | Min | Max | Def. |
|------|----------------------------------|--------|-------|------|-----|-----|------|
| AL   | Low temperature alarm threshold  | MSYF   | °C/°F | F    | -50 | 200 | 0.0  |
| AH   | High temperature alarm threshold | MSYF   | °C/°F | F    | -50 | 200 | 0.0  |

##### "CnF"

H2 (Keyboard Disable): Default value 1.

| H2                                | Disable keypad/IR |
|-----------------------------------|-------------------|
| Parameter "H2"                    |                   |
| LIGHT                             |                   |
| ON/OFF                            |                   |
| AUX                               |                   |
| HACCP                             |                   |
| PRG/MUTE (mute)                   |                   |
| UP/CC                             |                   |
| DOWN/DEF                          |                   |
| SET                               |                   |
| Parameter F modification          |                   |
| Set point modification            |                   |
| Remote control modif.             |                   |
| 0                                 |                   |
| 1                                 |                   |
| 2                                 |                   |
| 3                                 |                   |
| 4                                 | .                 |
| 5                                 | .                 |
| 6                                 | .                 |
| Keypad function    ". "= Disabled |                   |

### 4.3 MACHINE SETTINGS AND PROGRAMS

#### COOLING SYSTEM:

The tray is equipped with a ventilated evaporator, which can be accessed for cleaning purposes and repairs by opening the hinged lids which cover the same.

The main components of the condensing unit include a hermetic compressor and an air condenser.

The gas used in the cooling circuit is described in table 1 and the working pressure is approximately 2,4 and 3,2 bar depending on the model. The gas expansion at the entrance of the evaporator is carried out by means of a capillary tube.

RECOMMENDED WORKING TEMPERATURES: See Table 1.

The use instructions of the digital thermostat are attached to this manual. However, WE DO NOT RECOMMEND THE ADJUSTMENT OF THE THERMOSTAT BY UNQUALIFIED PERSONNEL. Please, CONTACT YOUR DISTRIBUTOR IN ORDER TO HAVE THE NECESSARY ADJUSTMENTS CARRIED OUT.

## 5 MAINTENANCE

### 5.1 GENERAL SAFETY RULES

Remove the outside plastic and any remaining adhesive covering the steel.

Clean carefully before using by following the specific instructions detailed later in this manual.

Before carrying out any operation on the machine, always consult this manual which gives the correct procedures and contains important information on safety. In order to clean the appliance it is recommendable to firstly disconnect the same from the mains electricity supply.

### 5.2 MACHINE CLEANING AND MAINTENANCE ROUTINE

Any technical maintenance must be carried out by your distributor's technical assistance service

CLEANING ADVICES:

- Do not splash water on the electric components.
- To clean the stainless steel use a sponge or cloth, tepid water and neutral soap.
- Do not use abrasive products, solvents, metal cleaning liquids or undiluted detergents.
- Dry with a cloth afterwards
- Keeping the cooling unit clean, specifically the condenser is very important in order to optimise its operation and reduce electricity consumption. Use soft brushes or a vacuum cleaner for this.

The access to the electric parts of the device is by means of a removable condensing unit as shown in figure 6.

### 5.3 MACHINE DISPOSAL

The product is made up of metal parts and stone parts. The packaging is made of wood, plastic and cardboard. For any part of the appliance, please note that:

- At the end of the product's life-cycle, make sure it is not dispersed in the environment.
- Each part must be collected and disposed of separately, according to their different characteristics (e.g. metals, plastic, rubber, etc.)
- The public or private waste collection systems defined by local legislation must be considered.
- The equipment may contain hazardous substances: the improper use or incorrect disposal may have negative effects on human health and on the environment;
- In the event of illegal disposal of electrical and electronic waste, penalties are specified by local waste disposal legislation.

## 6 TROUBLESHOOTING CHART

### 6.1 TROUBLESHOOTING CHART

The appliance electric motor has a thermal protector included that trips in the event of overcurrent or lack of current. When this protector trips the appliance must be disconnected to prevent malfunctioning.

Connect the appliance after an hour and contact your technical service in the event the problem remains.

Some problems are due to causes that are easily resolved without having to contact the technical service. Please read the following table carefully:

| Problem                                                                    | Procedure                                                                                                                                                                            |
|----------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| The appliance does not work                                                | Check that the appliance is correctly connected to the electricity socket and the electrical panel, and that the automatic power limiter has not tripped.                            |
| Does not cool sufficiently                                                 | Check the regulation of the thermostat and/or influence or direct sources of heat and air currents on the tray. Make sure that the condenser of the cooling unit is completely clean |
| Excessive noise when operating                                             | Make sure that the appliance is correctly levelled.<br>Check the anchoring system of the appliance elements that may have moved or become loose.                                     |
| The evaporator is full of ice and the appliance does not cool sufficiently | Force defrosting manually, if the problem remains, contact your distributor or your Technical Assistance Service.                                                                    |
| All the basic checks have been carried out and the problem remains         | Contact your distributor or your Technical Assistance Service.                                                                                                                       |