

# COMMERCIAL REFRIGERATOR USER MANUAL ENG





# User Manual

## 1. Introduction

## 2. Guarantee

## 3. Installation And Assembly

### 1. INTRODUCTION

We would like to thank you for trusting us and purchasing this refrigerated unit. This manual has been prepared in order to provide the security of the user and ensure the correct use and maintenance of the refrigerated units. Please read it carefully before starting up your unit. This manual is considered to be an integral part of the refrigerated unit and as such, should be kept in a safe place. The certificate of guarantee is included inside this user maintenance manual together with the registration number of the unit. In the event of loss, please request a duplicate by indicating the model, serial number and date of purchase. Before carrying out any operation, whether as installation technician or as the user of the unit, you should be aware of the points explained in this manual. The manufacturer considers that both the installation technician and the user of the unit must have the most basic training in order to understand the contents of this manual, as well as an awareness of standard hygiene and safety principals. If required, this unit must be repaired exclusively by qualified technical personnel. If you have any question about the content of this manual, please contact the distributor or the manufacturer.

ZONE SERIAL NUMBER



## **The user will be responsible for the following items:**

- Suitability of the premises to the requirements of the purchased unit.
- Electricity supply in accordance with the current standards and sufficient for the consumption and safety of the unit.
- Necessary material to clean the unit.
- Water point or drainage outlet as necessary for the installation of the refrigerated unit. The manufacturer disclaims all liability in the following situations:
  - Inappropriate use of the purchased unit.
  - Installation not carried out following the procedures described in this manual.
  - Defects in the electricity supply.
  - Unauthorised modifications or interventions.
  - Use of spares not specific to the model.
  - Total or partial non-compliance with the instructions.
  - Incidents caused by the transportation company or movement of the unit to its place of installation.

## **2. GUARANTEE**

The guarantee for the unit and the parts that comprise it, is for one year starting from the date of sale, consists of the replacement (carriage unpaid) of the defective component or components, providing that, it is not the result of the misuse of it. The guarantee will not cover breakdown or breakage of components, even if it occurs within the established period, arising from subjecting the unit to working conditions other than those established in this manual and the details of each model contained in the catalogue (failure in the power supply, high ambient temperatures, windows, lighting, etc...).

## **3. INSTALLATION AND ASSEMBLY**

The unit must not be moved from its standard vertical position, however if it is necessary, some appliances may be placed face down only as indicated on the packaging. You are advised to unpack the unit standing on a solid, flat and stable surface. In order to transfer it to the installation location, a trolley or fork-lift may be used. It should not be dragged along the ground and it must always be watched out to ensure that it is not off-balance. Then, remove the packaging to leave the unit completely free of all coverings and packing material, whilst avoiding knocks to the appliance, scratching it or unscrewing the feet. Once it is levelled off, the protective film should be removed from the stainless steel using a blunt implement. When it is placed in its final location, it should be pulled away from the wall so that there is a space of 7 cm at the back and a minimum of 7 cm to the sides.



## FIRST CLEANING

First remove the pre-cut protective film from the steel, using any blunt implement. The first cleaning should be carried out using a cloth dampened in water and neutral soap. **DO NOT USE DETERGENTS OR ABRASIVE PRODUCTS**, taking special care not to wet the electric components.

Totally avoid the use of utensils or elements that could scratch or damage the unit.

We recommend that the cleaning of the outside of the unit should be done on a daily basis and with a damp cloth.

When it is cleaned and dried, place the accessories in their proper places.

## ATTENTION

Please do not use steel wire or nickel sponges to clean **STAINLESS STEEL** or leave them lying on the surface as the iron deposits can stick and cause formation of rust contamination, thus jeopardise the hygiene of the surface.

### Initial Notice

Before turning the unit on we recommend you to read the instructions and follow the steps as explained.

## INSTRUCTIONS FOR USE

### 1. SAFETY AND INSPECTION

### 2. GENERAL CONNECTIONS

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## 1. SAFETY AND INSPECTION

In order to inspect the unit, before starting it up, the following checks should be taken into account:

- Do not modify the specifications of plate or instructions issued by the manufacturer.
- Do not remove or modify the safety elements.
- Do not touch the unit with wet or damp hands and feet.
- Do not touch the unit when barefoot.
- Do not pull the cable to unplug the unit.
- Before carrying out any cleaning or maintenance operation, unplug the unit from the electricity supply, first turning off the main switch and then unplugging the unit.
- The unit should not be used in threatening atmosphere or fire risk conditions.
- Avoid the use of adapters, extension leads or multiple plugs.
- The unit must not be used by children, persons whose mental, sensory or physical capacities are impaired. Persons who lack experience or knowledge must be supervised or given instructions for use.
- Check that the voltage and power line frequency coincide with those indicated on the specification plate of the appliance.
- Check that if there are not defects on the unit resulting from its transportation. The manufacturer will not be liable for damage suffered during transportation or arising from incorrect storage.
- Check the operation of the moving components of the unit.
- Check the safety of the control board, electrical cables and connections.
- Check that all the interior and additional accessories are present.

## 2. GENERAL CONNECTIONS

Before connecting the unit to the power supply, check that if the voltage and the power line frequency coincide with those indicated on the specification plate of the appliance. **It is essential that the electrical installation to which the unit is going to be connected, has an EARTH LEAD, as well as the necessary thermal and differential magnetic protection. The power supply must have the suitable section for the consumption of the appliance.** When the unit is connected and started-up, depending on the model, a control light is displayed on the switchboard. If various units are installed in a row, each one must be connected independently to the power supply, avoiding the use of extension leads or multiple plugs. The manufacturer disclaims all liability, when any of the above points are not followed.



## 3. IDENTIFICATION OF THE UNIT

The unit, model and serial number are identified by means of the information displayed on the registration or on the data sheet that appears on all the products.

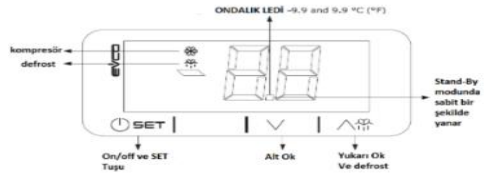
Apart from the identifying data of the unit, information relating to the gas refrigerant and electrical voltage to which the unit must be connected, is also displayed.



NUMBER	EXPLANATION
2	YEAR OF
3	MODEL
4	SERIAL NO
5	CLIMATE GROUP
6	COOLING CAPACITY
7	TYPE OF GAS
8	CURRENT
9	LIGHTNING

## 4. START-UP

- Once the inside of the unit is clean, connect the power supply and switch to the On or I position. The switch should be lit up.
- The thermostat display shows the air temperature inside the unit.
- One minute after turning on the switch, the LED showing the compressor is working will light up permanently.
- There is no need to make any program settings that are being sent halfway in the product program.
- The initial temperature that is shown on the thermostat display will be the ambient temperature. As the machine works, the temperature will drop until it reaches its operating temperature.
- The units for storage of frozen foods are programmed to defrost two hours after starting operation.
- It is important that the unit runs until it reaches its operating temperature before proceeding to load the unit with products.





## 5. USE AND LIMITS

- Each unit is designed for a determined range of temperatures.
- The temperature must be selected taking into account the following points:
- Type of product for refrigeration or conservation.
- Ambient temperature.
- Frequency with which the doors are opened.

<b>REFRIGERATION</b> (-2°C to +8°C)	Prepared to conserve fresh products or pre-cooked foods, as well as the refrigeration of drinks.
<b>FROZEN FOOD STORAGE</b> (-22°C to -18°C)	Conserves previously ultra frozen products for long periods of time.
<b>FISH COMPARTMENT</b> (-4°C to +2°C)	For storing fresh fish covered with ice for short periods of time.

FOODSTUFF	STORAGE CONDITIONS		APPROXIMATE STORAGE TIME
	TEMPERATURE(°C)	RELATIVE HUMIDITY (%)	
FISH	-1 ile 2	90-100	6-10 days
FROZEN FISH	-29 ile -18	90-95	6-12 months
MEAT	-2 ile 0	80-90	2-4 weeks
CHICKEN	-1 ile 0	80-85	3-5 days
DAIRY PRODUCTS	2 ile 4	75-80	4-6 days

Although it is possible to select or reprogram the temperature by manipulating the thermostat, it is not advisable, as this may cause the improper operation of the unit, changing the purpose for which it was programmed, and for this reason such manipulation should never be done.

The user of this unit will be responsible for the damage caused to it through non-compliance with the observation described in the above point.

The units designed for the storage of frozen foods are suitable for the conservation of frozen foods and not for freezing the product.

The operational limits established for the units are shown by climatic category:



CLIMATIC CATEGORY	DRY-BULB TEMPERATURE °C	RELATIVE HUMIDITY %
0	20	50
1	16	80
2	22	65
3	25	60
4	30	55
5	27	70
6	40	40
7	35	75
8	23,9	55

## 6. RECOMMENDATIONS

- You are recommended to wait until the chamber reaches its operational temperature before introducing any product.
- In order to obtain better performance, avoid the introduction of hot foods as well as drinks that are not in sealed packages.
- Protect foods and their odours by using some hermetic closing system, placing them in the unit in such a way that allows for a good circulation of air, respecting the maximum load indicated on the inside of the unit.
- Avoid as far as possible opening the doors frequently and above all, do not leave the doors open.
- Avoid placing sheets of cardboard or paper on the shelves as this will obstruct the circulation of air. When the unit has to be turned off for a long period of time, the following steps are recommended:
- Remove the products from the inside of the unit.
- Disconnect the main switch and unplug the unit.
- Clean the inside and outside of the unit.
- Partially open the door so that air can circulate and in this way avoid foul odours.





## 7. PRECAUTIONS

- The stability of the unit is guaranteed even when the doors are open. However leaning on the doors is completely prohibited.
- In those units equipped with metallic drawers, it is not advisable to load them with more than 30kg weight per drawer or 25kg in plastic boxes, ensuring in all cases that the load is uniformly distributed. For this reason sitting or leaning on the drawers is not allowed.
- Do not remove the protection from the movable components without having previously disconnected the power supply.
- Take necessary precautions before manipulating the condenser unit area, due to the existence of high temperatures of some of the components and the resultant risk of burns. **Children must be supervised to ensure that they do not play with the refrigerated unit.**

## 8. MAINTENANCE

Before carrying out any cleaning operation, disconnect the unit from the power supply and place the main switch in the OFF or 0 position. The units are equipped with a drainage outlet to make cleaning easier, as well as allowing for the eventual seepage of liquids from the foods. During cleaning, the drainage outlet cover has to be removed and cleaned in order to avoid being blocked by solid elements being pulled into it. The good operation and performance of the unit will largely depend on its correct maintenance, carried out periodically. The manufacturer is exempt from all liability arising from non-compliance with the procedures contained in this manual.”

### • GAS CONDENSER

The incorrect maintenance and lack of cleaning of the gas condenser of the refrigerated unit can considerably reduce the performance of the unit as well as shortening the life of the compressor motor. The cleaner the unit, especially the condenser fins, the greater the energy saving. In any event, it is recommended that this task is carried out by a service technician. In the case of any doubt, please contact your distributor. The cleaning of the gas condenser must be carried out with the unit unplugged and removing the protectors (grills) or taking out the condenser unit (depending on the model). In order to remove the dirt deposited between the condenser fins, any of the following procedures are recommended:

- Use a toothbrush or soft-bristle brush
- Blow the dirt using a suitable appliance
- Use air pressure to remove the dirt

We recommend that this operation is carried out at least once every three months and at the start of every summer.



## • EVAPORATORS

**Only for specialist personnel**

The only maintenance the evaporators require is proper cleaning. This has to be done with the machine stopped and once the ice that may be present on the fins has melted or once defrosting has been done by operating the controls. This process may be accelerated by using warm water, **NEVER** using hard or sharp objects.

In order to clean the coil or the casing, **DO NOT** use chemical de-greasers with acid compounds or bleach, chlorine, ammonia or salts as all these products aggressively attack copper and aluminium. Only water with well-diluted neutral detergents should be used or products especially designed for cleaning the evaporators of refrigerated units.

**The cleaner the unit, the greater the energy saving.**

## • AUTOMATIC EVAPORATION TRAY

**Only for specialist personnel**

The majority of the units are equipped with an automatic evaporation tray for the situations where an external outlet is not available to collect the defrosted water from the evaporators. If this tray is not included, the drainage tubes have to be connected directly to the appropriate device or a receptacle should be positioned in order to collect the water.

The manufacturer is exempt from all liability arising from non-compliance with the procedures contained in this manual.

## • DOOR SEALS

The rubber door seals are designed to ensure the closure of the doors to the cold chambers and to guarantee the sealing of the doors against external elements.

A magnetic strip is housed on the inside of the rubber seal, which adheres it to the frame of the unit. Over time, granular particles can stick in the seal due to the effect of the magnet and these can rust and cause stains.

It is recommended that these door seals are kept free from foreign bodies that can cause rust, as well as fatty deposits which, over a long period of time, can affect the rubber of the door seal.

Clean them with water, using neutral soap and a damp cloth.

**DO NOT USE DETERGENTS OR ABRASIVE PRODUCTS.**

## 9. OPERATIONAL TESTS

### • CHECKS IN THE EVENT OPERATIONAL FAILURE

In some situations, operational failure can arise due to simple causes that users themselves can solve, which is why prior to requesting the intervention of a specialised technician, we recommend that you carry out the following checks:



## **The appliance does not work**

- Check that if it is correctly plugged in.
- Check that if the electricity reaches the power outlet.

## **If the internal temperature is too high**

- Check that if there is no heat source nearby.
- Check that if the grill is not obstructed.
- In order to check the cut-off point of the thermostat, press the “set” button once then release.
- Check that if the loaded product is perfectly distributed without blocking the interior air ventilation’s exits and if the time is elapsed since the loading has been sufficient to chill the products.
- Check that if the doors are properly closed.

## **In the event of strange or excessive noises**

- Check the levelling of the unit as this may cause vibrations.
- Check that if there is no object rubbing against any movable element of the refrigerated unit.

In the event that these checks have not resolved the problem, please contact the customer service desk in your area providing the following information on the model, serial number and registration code shown on the specification plate.

## **• NOISE TESTING**

- The noise tests were performed in a room without any noise absorption elements and without any large item placed near to the refrigerated unit.
- The noise levels registered in the acoustic tests have been carried out in accordance with the ISO 230 to 235 standards.

Leq (continuous level) is less than 70 dB. (A)

Lp (acoustic pressure level) is less than 130 dB. (C)

NOTE. (A) and (C) indicate frequency weights.

## **10. CONSTRUCTIVE COMPONENTS**

The entire chamber where the foodstuffs are deposited is made from non-toxic material and approved by the Spanish Food Code. All the accessories and protectors comply with the same requirements, including all fastenings, nuts and bolts, which are made of stainless or zinc-based steel. The refrigerated unit is designed to be operated using ecological gas refrigerant, approved by the current EC standards.

## **• REFRIGERANT**

• REFRIGERATION: R290 or R600

• FREEZING: R290

## **• COMPOSITION OF THERMAL INSULATION**

- The thermal insulation is made from expanded polyurethane 40 kg/m<sup>3</sup>, using the substance R-290 as the expanding



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