



A. GENERAL INFORMATION

A.1.1 FOREWORD

The purpose of this booklet is to provide all the necessary information for correct installation, operation and maintenance of the appliance.

Carefully read the instructions in this booklet before carrying out any operation.

Failure to observe the instructions given in this booklet when carrying out any operations on the appliance, relieves the manufacturer of all liability.

No part whatsoever of this booklet may be reproduced.

A.1.2 DESTINATION OF USE AND RESTRICTIONS

This appliance has been designed for chilling and preserving foods. Any other use is to be considered improper.

ATTENTION: the appliances are not suitable for installation outdoors or in environments subject to the action of the elements (rain, direct sunlight, etc.).

The manufacturer cannot be held liable for improper use of its products.

A.1.3 FINAL TEST AND INSPECTION

Our appliances have been studied and optimised, with laboratory tests, to offer high performance and efficiency.

The product is dispatched ready for use. Specific enclosures (paragraph D.4) certify and guarantee that the tests have been passed (visual inspection - electric test - functional test).

A.1.4 GENERAL SAFETY NORMS

The appliance has been made in conformity with European directives on:

- **low voltage 2006/95/EEC, the electrical systems to standards EN 60-335-1, EN 60-335-2-89**

- **electromagnetic compatibility to standards EN 55014-1; EN 61000-3-2; EN 61000-3-3; EN 55104-2; (89/336/EEC+92/31).**

Current regulations in force are applicable.

A.1.5 CUSTOMER'S RESPONSIBILITIES

The customer must provide an earthed power socket of suitable capacity for the input specified on the dataplate. A high-sensitivity manual-reset differential omnipolar thermal magnetic circuit-breaker of adequate capacity complying with current regulations must be installed between the power cable and the electric line. For the correct size of the switch, refer to the absorbed current specified on the appliance dataplate.

Make sure the appliance is placed on a flat surface.

A.1.6 DATAPLATE POSITION

The dataplate giving all the appliance specifications is located on the right side in the unit compartment.

The plate giving the appliance PNC code and serial number is located below the logo.

A.2. TECHNICAL DATA

A.2.1 MATERIALS AND FLUIDS

The areas that come into contact with the product are in steel or covered in non-toxic plastic material.

An HFC refrigerant fluid, approved by current legislation, is used in the refrigerating units. The type and quantity of gas in the unit is indicated on the rating plate.

A.2.2 DIMENSIONS, PERFORMANCE AND CONSUMPTION

		1 module	2 modules
Gross capacity	I.	600	1300
Outside dimensions:			
- width	m m	720	1440
- depth	m m	780	780
- height	m m	2000	2000
Inside dimensions:			
- width	m m	600	1320
- depth	m m	665	665
- height	m m	1470	1470
Shelf dimensions	m m	530x650	530x650
Power supply	V	230	230

1 - Ventilated models with positive temperature - fully insulated door

Gross capacity	I.	600	1300
Consumption	kWh/24h	6,07	9,06
Temp. range, internal	°C	0/+10	0/+10
Max. room temp.	°C	+43	+43
Max. input power	W		see rating plate
Qty. refrigerant (R134a)	gr.		see rating plate

2 - Ventilated models with negative temperature - fully insulated door

Gross capacity	I.	600	1300
Consumption	kWh/24h	7,11	9,56
Temp. range, internal	°C	-2/+10	-2/+10
Max. room temp.	°C	+43	+43
Max. input power	W		see rating plate
Qty. refrigerant (R134a)	gr.		see rating plate

3 - Low temperature ventilated models (freezers)

Gross capacity	I.	600	1300
Consumption	kWh/24h	14,3	22,5
Temp. range, internal	°C	-22/-15	-22/-15
Max. room temp.	°C	+43	+43
Max. input power	W		see rating plate
Qty. refrigerant (R404A)	gr.		see rating plate

4 - Ventilated models with separate cells

		1 module	2 modules
Temperature range (1)	°C	-2/+10	-2/+10
Temperature range (2)	°C	-22/-15	-22/-15
Max. room temp.	°C	+43	+43

Capacity	I.	“300 + 300”	“600 + 600”
Consumption model with temp.:			
(1)+(1)	kWh/24h	5,71/5,71	7,11/7,11
(1)+(2)	kWh/24h	5,71/12,4	7,11/14,3
Max. input power	W		see rating plate
Qty. refrigerant (R134a/R404a)	gr.		see rating plate

A.2.2.1 CLIMATIC CLASS

The climatic class given on the dataplate refers to the following values:

T = 43°C

5= 40°C room temp. with 40% relative humidity

A.2.3 MECHANICAL SAFETY CHARACTERISTICS, RISKS

The appliance has no sharp edges, profiles or projecting parts. Moving or live electrical parts are protected by guards which are screwed onto the cabinet to prevent accidental access.

B.1. INSTALLATION

Scrupulously follow the instructions given in this section in order to ensure correct appliance operation and maintenance of safety conditions during use.

B.1.1 REMOVAL OF PACKING

B.1.1.1 Intact packing

Check that the packing and any protective pieces are intact before unpacking the appliance.

Any damage should be immediately reported to the carrier. Under no circumstances should a damaged appliance be returned to the manufacturer without warning and without having first obtained written permission.

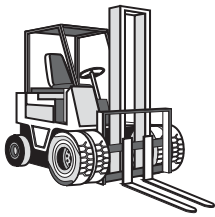
B.1.1.2 Removal of packing and handling

Remove the protective film, taking care not to scratch the surface if scissors or blades are used. Then remove the polystyrene protective pieces.

Remove the protective film from appliances with stainless steel housing very slowly without tearing it in order to avoid the glue remaining on the steel surface.

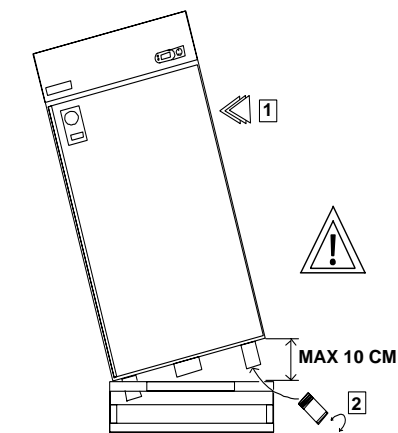
Should this happen, remove any glue with a non-corrosive solvent, then rinse and dry thoroughly. It is advisable to rub all the stainless steel surfaces with a cloth soaked in Vaseline oil in order to create a protective film.

Use a fork-lift truck to lift the appliance, inserting the forks under the pallet, and take it to the place of installation, making sure that the load is balanced.



ATTENTION:

the assembly of feet on appliances, which are supplied without, must be done by a technician. For the assembly always refer to the diagram placed on the external packaging.



B.1.1.3 Disposal of packing

Packaging materials should be disposed of in conformity with the laws and regulations in force in the country where the appliance is to be used.

Recyclable plastic elements are marked as follows:



polyethylene: outer wrapping, instructions booklet bag

PE



polypropylene: straps

PP



polystyrene foam: protective surround elements

PS



fullerboard: protective surround elements

ATTENTION: Do not push or drag the appliance when moving it, as it could tip.

B.1.2 POSITIONING

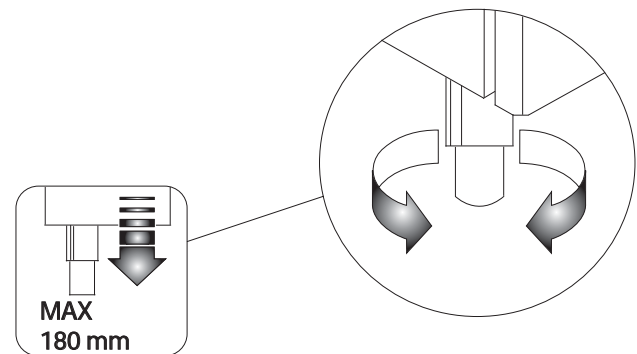
Install the appliance, taking all the safety precautions required for this type of operation, also respecting the relevant fire-prevention instructions.

Place the appliance in a ventilated room far from heat sources such as radiators or air-conditioning systems in order to allow correct cooling of the refrigerating unit components. Never cover the condenser, otherwise its operation and that of the appliance could be jeopardised. For trouble-free operation of the appliance, it is therefore recommended that a gap of at least 50 cm be left between the appliance and the ceiling and about 10 cm between the rear of the appliance and the wall. Also ensure that there is a gap of 10 cm to the sides.

If the appliance is installed in an environment where there are corrosive substances (chlorine, etc.), it is advisable to rub all the stainless steel surfaces with a cloth soaked in Vaseline oil in order to create a protective film.

The room temperature should not exceed +43 °C (+32°C for appliances with glass door) in order to maintain recommended internal temperatures.

Use the height-adjustable feet to make sure the appliance is level and at the same time check that the door closes properly.

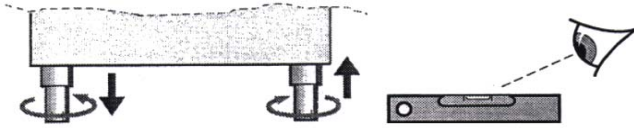


Make sure the appliance is standing level on a flat floor, in order to ensure its optimal operation.



IMPORTANT:

The appliance must be levelled; otherwise its operation could be affected.



IMPORTANT:

Wait at least 2 hours before starting the appliance, to allow the oil to flow back in the compressor.

Note: the plug should be accessible even after having placed the appliance in its final position for installation.

B.1.3 ELECTRICAL CONNECTION

The appliance operates on single-phase voltage, as indicated on the dataplate.

For connection, insert the power cable plug in the corresponding socket of the electrical system, **firstly making sure:**

- the socket is efficiently earthed and that the mains voltage and frequency correspond to those indicated on the rating plate. If in doubt regarding the efficiency of the earth, have the system checked by a qualified electrician.
- A suitable differential thermal magnetic circuit-breaker, with contact opening distance of at least 3 mm, is installed between the power cable and the mains line.
- After having connected to the mains, with the appliance in operation, check that the supply voltage does not deviate from the rated voltage value by more than $\pm 10\%$.

If the power cable is damaged, it must be replaced by the technical assistance service or in any case by qualified personnel in order prevent any risk.

The manufacturer cannot be held liable for any damage or injury due to failure to observe the above rules or the electrical safety regulations in force in the country where the appliance is being used.

B.1.4 REVERSING OPENING OF FULLY INSULATED DOORS (Fig.5)

Refrigerator cabinets are normally supplied with opening to the right.

Should it become necessary to reverse opening to the left, this can be done as follows:

- Unscrew the two clamping bolts from hinge plate "A" and the screw that secures hinge "B" (Det. 1).
- Remove the door, remove the hinge "B" and the component "E", which should then be re-assembled in the reverse order.
- Remove the component "C" and fit it on the opposite side of the door in the space provided below the plastic cover.
- Remove the lower hinge plate "D" and fit it in the relative place on the opposite side of the appliance (Det. 2).
- Fit the door into position by inserting the pin of the upper hinge "B" into the hole under the control panel and centering the upper pin of the lower hinge plate "D".
- Fit the spring loaded mechanism onto hinge "B" (this allows the door to swing automatically to the closed position) with the help of hinge plate "A".
- Fix the hinge plate "A" to the cabinet by screwing in the clamping bolts.

B.1.5 REVERSING OPENING OF HALF DOORS (Fig. 6)

Single-door refrigerated cupboards are normally supplied with right opening.

When changing to left opening, proceed as follows:

- disconnect the power supply;
- open the control panel, loosening the 2 screws located between the panel and door;
- undo the 2 fixing screws of bracket "A" and hinge securing screw "B";
- remove the door;
- remove the middle bracket "F" and the bottom door;
- remove the lower bracket "A", refitting it on the opposite side in the special seat;

- position the bottom door on the lower bracket "A";
- fix the middle bracket "F";
- position the top door on the middle bracket "F";
- position the upper bracket "A" between the door and the roof of the appliance, tightening the fixing bolts;
- before tightening the screws, align the door with the side of the cabinet, adjusting the lower and upper brackets and making sure the seal is perfectly fitted on all sides of the cabinet;
- then tighten the bracket fixing bolts.

Note: After performing the above operations, the holes in the appliance must be closed with the special plastic plugs.

C.1 OPERATION


C.1.1 CONTROL PANEL (see Fig. 4)

C.1.2 DIGITAL THERMOSTAT DISPLAY

The digital thermostat has a 3-digit electronic display for showing the temperature measured by the sensor, and six **ICONS** (see fig.1 and par. C.1.5).

C.1.3 BUTTONS

The digital thermostat has 4 buttons for control and programming the instrument.

- Multifunction "ON/OFF" and "UP" button  for switching the appliance on or off and increasing the values.


- "DOWN" and "DEFROST" button  for activating manual defrost and decreasing the values.

- "Prg/mute" button  for silencing the alarm buzzer.


- "SET" button  for accessing the Setpoint.

C.1.4 SWITCHING ON AND TEMPERATURE ADJUSTMENT


When switched on, the instrument carries out a Lamp Test, i.e. for a few seconds the display and Icons flash, verifying its correct functioning. If the instrument displays the compartment temperature when switched on, the appliance is already on. If "OFF" is displayed, press the "ON/OFF"

button for a few seconds to activate the appliance ;

the display shows "ON" and then the compartment temperature value.

To switch off the appliance, press the "ON/OFF" button for a few seconds ; the message "OFF" appears on the display.

To adjust the SET compartment temperature, proceed as follows:

- Press the button for a few seconds  and the SET

POINT value appears on the display.

- To change the SET value, press the "UP" increase value

button  or the "DOWN" decrease value button .

If no button is pressed for more than 60 seconds (“**TIME OUT**”) or pressing the “**SET**” key once, the digital thermostat memorizes the last set value and the normal display is restored.

The range of temperature regulation is calibrated from a minimum to a maximum, according to the following values:






- Max.** position = -15°C
- Min.** position = -22°C

- Max.** position = -2°C
- Min.** position = +10°C

- Max.** position = 0°C
- Min.** position = +10°C


C.1.5 DIGITAL THERMOSTAT ICONS

The digital thermostat has 5 ICONS:

- **Icon**  lit up indicates activation of compressor.
- **Icon**  lit up indicates manual defrost in progress.
- **Icon**  lit up indicates activation of compartment fans (if present).
- **Icon** “**aux**” lit up indicates activation of auxiliary users (if present).
- **Icon**  indicates that a temperature alarm has occurred during appliance operation.
- **Icon**  indicates that a service alarm has occurred during appliance operation.

C.1.6 ALARMS AND SIGNALLING


C.1.6.1 Service alarms and signalling for models 0°C/+10°C

The alarm is signalled by the **Icon lighting up**  alarm signalling is also indicated by the alarm code appearing on the display.

For example: alarm signalling due to a faulty sensor (compartment sensor) appears directly on the instrument display with the indication “E0” and “rE” flashing alternately (refer to position 1 of the alarms table).

The alarm goes off when the alarm condition ceases. Otherwise contact Technical Assistance.


C.1.6.2 Service alarms and signalling for models -15°C/-22°C and -2°C/+10°C

The alarm is signalled by the **Icon lighting up**  alarm signalling is also indicated by the alarm code appearing on the display.

For example: alarm signalling due to a faulty sensor (compartment sensor) appears directly on the instrument display with the indication “E0” and “rE” flashing alternately (refer to position 1 of the alarms table).

Alarm signalling due to a faulty evaporator sensor (evaporator sensor) appears directly on the instrument display with the indication “E1” flashing (refer to position 2 of the alarms table).

C.1.6.3 Temperature alarms and signalling (common to all appliances)

The alarm is signalled by the **Icon lighting up**  alarm signalling is also indicated by the alarm code appearing on the display.

Temperature alarm signalling, regarding the thermostatting sensor, appears directly on the instrument display with the

indication “HI” (max. temperature alarm) and “LO” (min. temperature alarm).

POSITION	DISPLAY	ALARM
1	E0/rE	Compartment sensor fault alarm
2	E1	Evaporator sensor fault alarm
3	HI	Compartment high temperature alarm
4	LO	Compartment low temperature alarm

C.1.7 DEFROST (fig.1)

- Automatic defrost

The appliance has an automatic defrost function.

This function is signalled by lighting up of the DEFROST **Icon**



The defrost water is run into a bowl and automatically evaporated.

- Manual activation of defrost

Keep the “**DOWN**” button pressed  for at least 5

seconds to start a manual defrost cycle.

This function is signalled by lighting up of the DEFROST **Icon**



If defrost conditions do not exist, the display shows the message “dFb”, indicating that the operation will not be carried out (**only for models -15°C/-22°C and -2°C/+10°C**).

Defrost can be stopped manually by pressing the “**DOWN**”

button for a few seconds  the display shows the message “dFE”. Defrost cannot be activated in the programming stage.

C.1.8 INTRODUCING THE PRODUCT

Distribute the product evenly inside the cell (away from the door and from the rear wall) to allow a good circulation of air (see fig. 1).

Cover or wrap the food before introducing it into the refrigerator and avoid putting in hot foods or steaming liquids. Do not leave the door open longer than necessary when putting in or taking out products.

It is advisable to keep the keys out of reach of children.

Use kitchen gloves when loading and unloading food products.

Regarding the max. load for each shelf, comply with that given in the table below:

MAX. LOAD FOR EACH SHELF	
GN 1/1	40 KG

D.1. ROUTINE MAINTENANCE

D.1.1 PRECAUTIONS FOR MAINTENANCE

Routine maintenance operations may be carried out by non-specialised personnel provided they scrupulously follow the instructions given in this chapter.



ATTENTION:

before carrying out any cleaning or maintenance operations, disconnect the appliance from the mains supply. Under no circumstances remove the safety devices for routine maintenance operations. Use protective equipment (safety gloves) when cleaning the condenser.



D.1.2 CLEANING THE APPLIANCE AND THE ACCESSORIES

Before using, clean the interior of the appliance and the accessories with lukewarm water and neutral soap or with products having a biodegradability of over 90% (in order to reduce environmental pollution), then rinse with clean water and dry thoroughly. Do not use detergents such as solvents (e.g. trichloroethylene, etc.) or abrasive powders.

Protect the sheet metal parts with silicon wax.

D.1.3 PRECAUTIONS TO BE TAKEN IF THE APPLIANCE IS NOT TO BE USED FOR A LONG PERIOD

During long periods when the appliance is not in use, take the following precautions:

- Pull the plug out of the mains socket;
- Remove all food in the cell and clean the interior and the accessories;
- Briskly rub a cloth soaked in Vaseline oil over all the stainless steel surfaces so that it forms a protective film;
- Leave the door ajar so that air can circulate inside preventing the formation of unpleasant odours;
- Periodically ventilate the rooms.

D.2. MALFUNCTIONING - EXTRAORDINARY MAINTENANCE

Extraordinary maintenance operations should be carried out by specialised personal only, who may request a service manual from the manufacturer.

D.2.1 PERIODICAL CLEANING OF CONDENSER (fig. 2)

Periodical cleaning of the equipment depends on the frequency of its use.



WATCH OUT FOR THE ELECTRICAL CABLES!

CAUTION: Make sure not to obstruct the air passage on models with wire and tube condenser; this type of condenser does not require cleaning. Periodic cleaning of the condenser is necessary to guarantee lasting good performance and trouble-free operation of the appliance. It is advisable to thoroughly clean the condenser slits of the refrigerating unit at least once a month in a dusty environment or once every three months in a closed and clean environment.

Use a brush or a vacuum cleaner to remove the dirt. Do not use pointed objects, as these could damage the condenser.



ATTENTION: Do not clean the appliance with jets of water.

D.2.2 REPLACING THE POWER CABLE

To replace the power cable, proceed as follows:

- Disconnect from the power supply;
- Lift the control panel and ensure that it will not drop down again (it is advisable to secure it with adhesive tape).
- Remove the metal guard from the electrical system.
- Replace the power cable;
- Remount the protective cover and lower the control panel;
- Connect to the power supply.

D.2.3 TROUBLESHOOTING

Malfunctioning during operation is often due to banal causes, which may nearly all be resolved without the help of a specialised technician. Consequently, before getting in touch with a service centre, check the following:

- The appliance does not start:
 - check that the plug is properly inserted into the socket.
 - check that there is voltage at the socket.
- The internal temperature is too high:
 - check the thermostat setting;
 - check for a heat source in the vicinity;
 - check that the door closes properly.
- The appliance is excessively noisy:
 - check that the appliance is standing level. A lopsided appliance could set off vibrations.
 - check that the appliance is not touching other appliances or parts which could resonate;

If the defect persists after having carried out the checks described above, contact the service centre giving:

- the nature of the defect;
- the PNC (production code) of the appliance;
- the Ser. No. (serial number of the appliance).

Note: the code and the serial number are indispensable to be able to trace the type of appliance and the date of manufacture

PNC 726317 00
Ser.No.90200040



.E.g.: PNC 726317 - Ser.No. 90200040


726317: appliance R134a

90200040: 2009 production, week 02, 40th piece.

D.3. WASTE DISPOSAL AND DEMOLITION

D.3.1 WASTE STORAGE

Appliances that have reached the end of their service life should be suitably disposed of. The doors should be removed before disposal. Temporary storage of special waste is permitted while waiting for disposal by treatment and/or final collection. Dispose of special waste in accordance with the laws in force with regard to protection of the environment in the country of the user.

The symbol  placed on the product indicates that it is **not** to be considered as domestic waste, but must be correctly disposed of, in order to prevent any negative consequences for the environment and the health of persons.

For further information on the recycling of this product, contact the local dealer or agent, the after-sales assistance service or the local body responsible for waste disposal.

D.3.2 PROCEDURE FOR ROUGH DISMANTLING THE APPLIANCE

All countries have different legislation; provisions laid down by the laws and the authorised bodies of the countries where the demolition takes place are therefore to be observed.

A general rule is to deliver the appliance to specialised collection/demolition centres. Dismantle the refrigerator/freezer, grouping together the components according to their chemical nature. The compressor contains lubricating oil and refrigerant, which may be recycled. The refrigerator components are considered special waste, which can be assimilated with domestic waste. Make the appliance totally unusable by removing the power cable and any door locking mechanisms in order to avoid the risk of anyone being trapped inside.

DISMANTLING OPERATIONS SHOULD BE CARRIED OUT BY QUALIFIED PERSONNEL.

D.4. ENCLOSED DOCUMENTS

- Set of test and inspection sheets
- Wiring diagram