



MOD: SY180/PL3

Production code : VR381022+KVPC0009

09/2025

REFRIGERATING DISPLAY CASES



INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS



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3. SAFETY


  It is recommended to carefully read the instructions and warnings contained in this manual before using the appliance. The information contained in the manual is fundamental for the safety of use and for machine maintenance.


 Keep this manual carefully so that it can be consulted when necessary. In case of transfer of the equipment, provide the new user with this booklet.


 Please contact the manufacturer if you do not fully understand the contents of this manual.


 The electric plant has been designed in compliance with the IEC EN 60335-2-89 Standard.


 Warning: R290 cooling gas is potentially flammable and explosive. Every possible safety precaution must be taken to avoid any danger.


 Installation, extraordinary maintenance and disposal of the equipment must be performed by qualified personnel, in accordance with the regulations in force in the country of use and in compliance with the regulations relating to installations and safety at work.

 The sound pressure level emitted by the equipment is less than 70dB (A). The value may increase depending on the workplace where it is measured.


 Maintain ventilation openings in the appliance casing or in the built-in structure free from all obstructions.


 Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.


 Do not damage the coolant circuit.


 Do not store explosives, such as pressurised containers with flammable propellant, in this unit.


This equipment is not suitable for storing pharmaceutical, chemical or non-food grade products.


 This equipment has not been designed to be installed in a potentially explosive atmosphere.


 Do not place anything on the bottom of the device. Use the appropriate racks to store the product.


 Replacement of the power cord must be performed by qualified personnel.


 Specific adhesives highlight the presence of mains voltage in the proximity of areas (however protected) with risks of an electrical nature. During the installation of the equipment, it is not allowed the transit or the permanence of people not involved in the installation near the working area; use individual protection devices (gloves, safety shoes, etc.) and operate in compliance with the rules related to the safety at work.


 In the design and construction phase, the manufacturer has paid particular attention to the aspects that can cause risks to safety and health of persons that interact with the equipment.

 Carefully read the instructions in the manual provided and those applied directly, especially those concerning safety.

 Do not tamper with, evade, eliminate or by-pass the installed safety devices. Failure to comply with this requisite can lead to serious risks for personal health and safety.

 It is recommended to simulate some test manoeuvres to identify the controls, in particular those relative to switch-on and switch-off and their main functions.

 The appliance is only destined for the use for which it has been designed; any other use must be considered improper.

 The manufacturer declines all liability for any damage to objects or injury to persons owing to improper or incorrect use.

! All maintenance interventions that require precise technical skill or particular ability must be performed exclusively by qualified staff.

! Do not under any circumstances stress the power cable.

! The safety devices must be subjected to periodic inspections as indicated in the chapter on extraordinary maintenance.

i In order to guarantee hygiene and protect the foodstuffs from contamination, the elements that come into direct or indirect contact with the foodstuffs must be cleaned very well along with

the surrounding areas. These operations must only be performed using detergents that can be used with foodstuffs, avoiding inflammable products or those that contain substances that are harmful to personal health.

i In the case of prolonged inactivity, as well as disconnecting all the supply lines, it is necessary to accurately clean all internal and external parts of the appliance.

4. REGULATIONS AND GENERAL INSTRUCTIONS

4.1. General information

i This manual has been designed by the manufacturer to provide the necessary information to those who are authorised to interact with the equipment.

i The persons receiving the information must read it carefully and apply it strictly.

! Reading the information contained in this document will allow the user to prevent risks to personal health and safety.

i Keep this manual for the entire operating life of the equipment in a place, which is well known and easily accessible, so that it is always

available when its consultation becomes necessary.

The equipment has been designed for the refrigeration of food. Any other use is considered improper.

i The equipment is not intended for use by:

- persons whose physical, sensory or mental capabilities are impaired.
- children
- persons with a lack of experience and/or knowledge of the product/process.

i The equipment is not suitable for installation outdoors and/or in environments subject to the action of atmospheric agents (sun, rain, etc.).

4.2. Warranty

The warranty of the appliance and the components we produce has duration of 2 years from the date of delivery and translates into the supply, free of charge, of parts that we consider to be faulty.

These faults must, however, be independent from incorrect use of the product in compliance with the indications stated in the manual.

Fees deriving from labour, journeys and transport are excluded from the warranty.

The materials replaced under warranty are our property and must therefore be returned under the responsibility and expense of the customer.

4.3. Replacement of Parts

! Activate all envisioned safety devices before carrying out any replacement intervention.

i In particular, deactivate the electrical power supply using the differential isolating switch and pull the plug to disconnect the equipment.

Only use original spare parts to replace worn components.

i The manufacturer is not liable for damage or malfunctions caused by:

- non-compliance with the instructions in this manual;
- repairs not performed in a workmanlike manner;
- use of non-original spare parts;
- interventions by non-skilled technicians;
- unauthorised intervention;
- lack of preventive maintenance;
- improper use of the equipment

- unforeseeable events
- use of the equipment by insufficiently trained staff
- non-application of the safety and hygiene regulations in force in the country of use.

i We accept no liability for damage caused by conversions and/or modifications made by the end user.

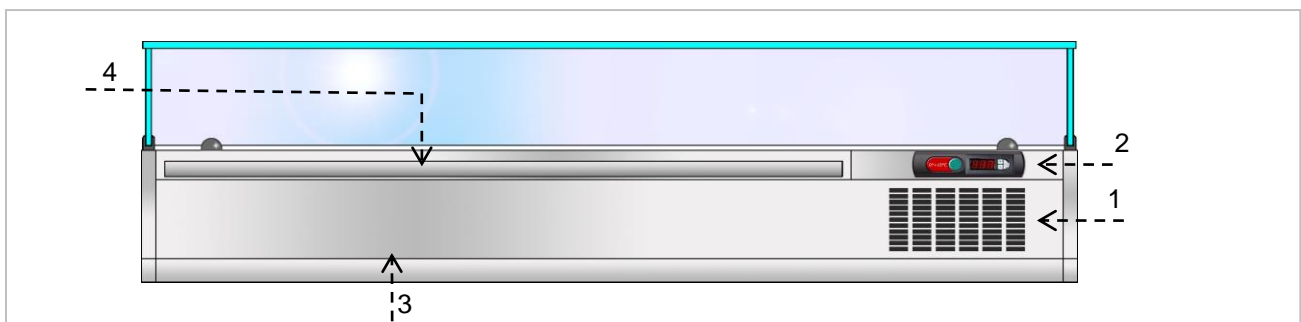
4.4. Description of the Appliance

The refrigerated display window, henceforth referred to as the equipment, is designed and constructed for food storage in professional catering.

- 1) **condensation area:** it is positioned in the right side and is characterised by the presence of the condensing unit.
- 2) **electric area:** it is positioned in the front part of the condensing unit and contains

the control and power supply appliance as well as electric wiring.





- 3) **evaporation area:** it is situated inside the refrigerated compartment in the right part.
- 4) **storage area:** it is situated in the small tanks located in the internal tank and is destined for the preservation of foodstuffs.



4.5. Features Plate

The identification plate shown is applied directly onto the appliance. It states the references and all indications indispensable for working in safety.

- 1) Equipment code
- 2) Equipment description
- 3) Serial number
- 4) Power supply voltage and frequency
- 5) Rated output
- 6) Defrosting output
- 7) Total lamps output
- 8) Climate Class
- 9) Type and Quantity of Cooling Gas
- 10) Number of the refrigerant of the main component of the foam insulation gas
- 11) WEEE mark

		2018
Code Kode Codice	XXXXXXXX	①
Descrizione / Description	XXXXXXXX XXXXXXXX	②
Serial No./ Serien Nr./ Matricola	XXXX.XXXX	③
Tension / Spannung / Tensione	xxx V~ xx Hz	④
Input / Leistungsaufnahme / Potenza	xxx W xxx A	⑤
 Defrost Power / Potenza Sbrinamento	xxx W	⑥
Climate Class / Klimaklasse / Classe Climatica	5	⑧
Refrigerant Kuehlmittel Refrigerante	xxxx xxxx Kg	⑨
Insulation Isolierung Isolamento	HFO1233zd	⑩
⑪ 		Max  xx W ⑦

The climate class described on the identification plate refers to the following values:

Climate Class	EN 60335-2-89	EN ISO 23953	
	Room Temperature	Room Temperature	Relative Humidity
4	32°C	30°C-	55%

4.6. Personal Protective Equipment

The identification and selection of appropriate personal protective equipment is the responsibility of the employer or workplace manager or service technician.

Operators are required to wear the identified equipment.

During ordinary use, gloves protect the hands from the cold pan.

Below is a list of the main personal protective equipment (PPE) to be used during the respective work operations.

Task	Protective clothing	Safety shoes	Gloves	Glasses	Helmet or hard hat
Transport and handling		■	□		□
Unpacking		■	□		
Assembly		■	□		
Ordinary use	■	■	□		
Ordinary cleaning	□	■	■	□	
Extraordinary cleaning	□	■	■	□	
Maintenance	□	■	□		
Dismantling	□	■	□		
Scrapping	□	■	□		

■ Mandatory personal protective equipment (MPPE)

□ Personal protective equipment (PPE) to be used if necessary

4.7. Further Risks

The proper design of the equipment and the installation of adequate protection do not completely exclude risks to the operator.

This manual lists the personal protective equipment to be used by the operator.

Sufficient space is provided during the installation of the equipment to limit the risks. To maintain

these conditions, the areas surrounding the equipment must be kept clean, dry, well lit and free of obstacles.

The following is a list of possible risks that may still occur.

Possible risks	Description
Slip or fall	The operator may slip due to water, oil or dirt on the floor.
Burns Abrasion	The user intentionally or unintentionally touches certain components inside the appliance (e.g. cold pans, cooling fins and cooling circuit tubes) without wearing protective gloves.
Electrocution	Contact with live electrical parts during maintenance operations performed without disconnecting the power supply.
Fall	The operator intervenes on the equipment using unsuitable means to access the upper part.
Injuries	The upper control panel may not be secured properly by qualified personnel. It may close abruptly.
Cooling gas	During equipment and packaging handling operations using unsuitable lifting and/or handling equipment or with an unbalanced load
Tipping	Inhalation of cooling gas. The type of refrigerant can be found on the equipment's identification plate.

5. TRANSPORT AND STORAGE

5.1. General Information

The equipment must be transported and handled using appropriate means with adequate capacity.



The equipment must only be transported, handled and stored by skilled staff.

Minimum requirements for skilled staff are as follows:

specific technical training and experience in the use of lifting systems;

knowledge of safety regulations and applicable laws;

knowledge of general safety requirements;

respect for the use of personal protective equipment in accordance with the operation performed;

the ability to identify in advance and avoid any possible danger.

5.2. Transport and Handling



It is forbidden to stand under suspended loads during handling and transport. Unauthorised personnel may not enter the work area. The transported load can move when braking, accelerating, cornering and on rough roads.



The equipment must be handled in a horizontal position. It is forbidden to move the equipment in a vertical position.

For the correct performance of lifting operations, use the most suitable type of equipment in terms of characteristics and load capacity: forklift or transpallet.



Avoid pushing or dragging the equipment when handling it.



Before lifting, secure the surrounding area and prevent access to personnel. Move the equipment to a minimum height above the ground and ensure the stability of the load.



Do not lift the equipment in any other way than explained in this manual.

Before placing the load, check that the floor is level and has sufficient load-bearing capacity to support the weight of the load.

5.3. Storage



The equipment must be stored in a non-aggressive, vibration-free environment.



The room temperature should be between -10°C and +50°C. Avoid excessively humid environments. The storage place must have an adequate support surface to prevent deformation of the machine or damage to the support feet.



Only skilled staff is allowed to perform positioning, assembly and disassembly of the equipment.

6. INSTALLATION

6.1. Packagind and Unpacking

Move and install the appliance respecting the information provided by the manufacturer, shown directly on the packaging, on the appliance and in this manual.



Wear protective gloves before unpacking.



Avoid pushing or dragging the equipment to avoid risks of tipping over and damage to the structure.

The lifting and transportation system of the packaged product envisages the use of a fork-lift truck or a pallet stacker, using which particular

attention must be paid to balancing the weight in order to prevent the risk of overturning (avoid excessive tilting!).

! ATTENTION: When inserting the lifting device, pay attention to the power cable.

The packaging is made of cardboard and the pallet of wood. A series of symbols is printed on the cardboard packaging, which highlights, in accordance with international standards, the provisions that the appliances must be subject to during loading, unloading, transportation and storage.



On delivery, check that the packaging is intact and has not suffered any damage during transportation.

Any damage must be notified to the transportation company immediately.

6.2. Installation

! Installation and assembly operations must be carried out by qualified personnel. If the equipment uses R290 cooling gas, every possible precaution must be taken to avoid any danger linked to the flammability of this gas.

i All the installation phases must be considered, from the moment of creation of the general plan.

! Installation and assembly operations must be carried out in accordance with current safety regulations.

! The equipment used for installation and assembly operations must comply with current safety standards.

The installation area must be equipped with all power supply and production residue drainage connections and must be suitably lit and respect current laws regarding hygiene and sanitary requirements.

The appliance must be unpacked as soon as possible to check that it is intact and undamaged. Do not cut the cardboard with sharp tools in order to prevent damage to the steel panels underneath.

After having unpacked the appliance, check that the features correspond to those requested in the order.

For any anomalies, connect the dealer immediately.

i On stainless steel equipment, carefully remove the protective film from the inner and outer walls, avoiding the use of metal tools. If adhesive remains on the walls of the machine, remove it using a non-corrosive solvent; rinse and dry thoroughly after cleaning. It is advisable to apply a protective oil layer to all steel surfaces.

! Packaging elements (nylon bags, polystyrene foam, staples ...) must not be left within reach of children.

Remove the protective PVC film from the internal and external walls, avoiding the use of metal tools.

i Packaging must be disposed of in accordance with the regulations in force in the country where the equipment is used.

i To optimise consumption and reduce wear of the machine, do not position it near heat sources or in environments where temperatures are too high.


Proceed with machine levelling, adjusting the individual feet.


! It is essential that the equipment is level; otherwise, the operation of the machine may be impaired

Install the equipment so that the workstation is positioned in front of the control panel.

i Do not push or drag the appliance during installation to avoid it toppling over or causing damage to parts or persons.


! This appliance can only be installed and operate in rooms, which are permanently ventilated, in order to guarantee correct operation.


 Connect and leave for a certain period of time (at least 2 hours) before checking functioning. During transport, it is probable that the compressor lubricant oil has entered the refrigerant circuit blocking the capillary: therefore, the appliance will function for a certain period without producing cold until the oil has returned to the compressor.


 The size of the compartment that houses the equipment must be such as to avoid excessive concentrations of gas in the event of a leak from

the refrigeration circuit and in any case, the compartment must have a free area NEVER smaller than 4 times the space occupied by the equipment. Adequate space must be provided to ensure effective escape routes at all times. The above-mentioned compartment must be well ventilated.


6.3. Electric Power Supply Connection


 Connection must be carried out by authorised and qualified staff, respecting the current laws regarding the subject and using appropriate prescribed material.


 Before connecting the appliance to the electric mains check that the voltage and the frequency correspond to the data stated on the registration plate applied on the rear of the appliance.


 The equipment is supplied with one of the following operating voltages:

- 220V/240V~ 50Hz

 Provide an earthed socket with a capacity appropriate to the absorption indicated on the identification plate.


 It is forbidden to operate the equipment connected to an ungrounded system.


 The plug must also be accessible after positioning the equipment where it is to be installed.

 The plug must always be visible to the operator performing the maintenance operation.

After the electrical connection, check that the supply voltage, when the equipment is running, does not deviate from the nominal value given on the specifications plate $\pm 10\%$.

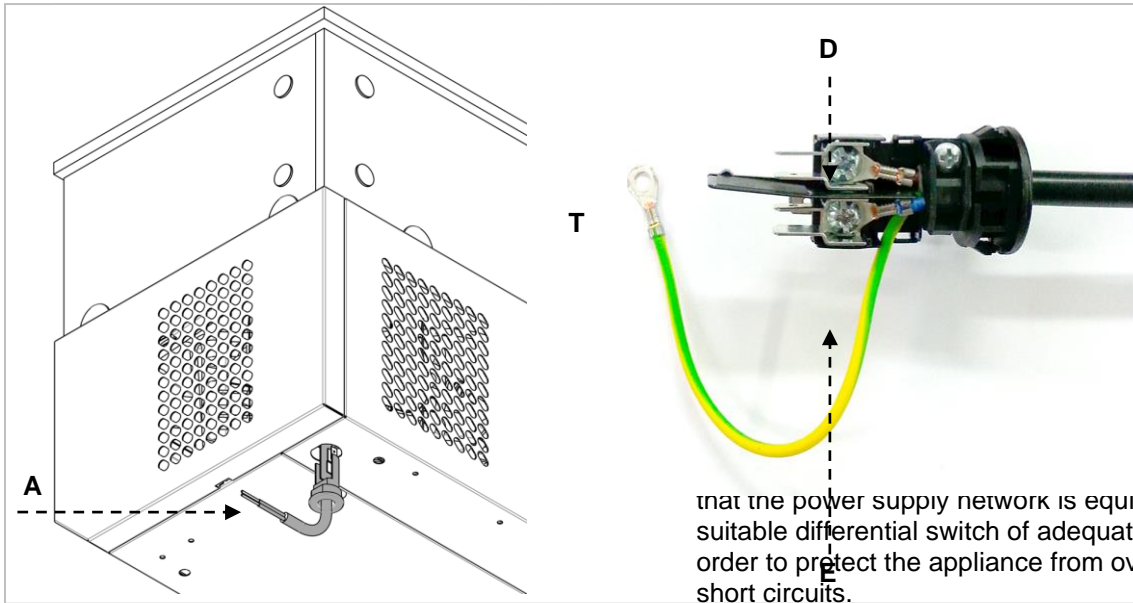
6.4. Power Cable Replacement

 Should the power cable be damaged, it must be replaced by the manufacturer or its authorised service centre, or alternatively by a similarly qualified person, in order to prevent any risk.

 Before any intervention, switch off the main power supply.

To ensure correct connection, follow the instructions.

1. Loosen the cable gland (**A**).
2. Disconnect the wires (**D**) (**E**) first and then the earthing cable (**T**).
3. Replace the power cable. Use a flexible cable of at least type **H05VV-F** - 60227 - IEC53.
4. Secure the cable gland (**A**).



6.5. Inspection

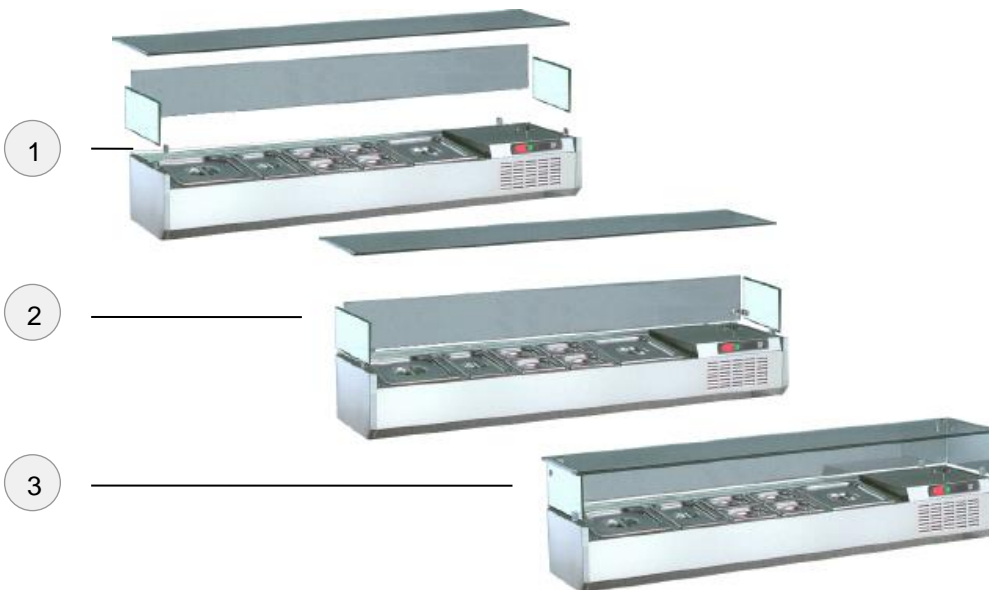
The appliance is delivered in conditions that it can be started-up by the user. This functionality is guaranteed by passing the tests (electric inspection - functional inspection,

appearance inspection) and relative certification through the specific attachments.

6.6. Assembly of Glasses

Follow the attached diagram and proceed as follows:

1. Screw the glass supports onto the casing of the display window and then fix the side and rear glasses.
2. Secure the side and rear glasses with the two supplied brackets.
3. Fasten top glass with the three-way brackets supplied.



7. USE AND FUNCTIONING

7.1. Description of Controls







1. Teletermostat ON/OFF key.
2. Setpoint setting key
3. Digital teletermostat
4. Operating status LED

2, +, - : Temperature change keys





7.2. Functions



Switching on and off Teletermostat

Switching on the device (ON) : press the key  for 4 seconds. While the key is pressed, the LED  flashes.

Switching off the device (OFF): press the key  for 4 seconds. While the key is pressed, the LED  flashes.

Working Temperature Setting

The temperature set during in-house testing is shown by pressing the key , LED  flashes. The value is displayed for 5 seconds during which it can be changed by pressing the two keys  and  which symbolise an increase or decrease in temperature respectively.





After 15 seconds of not pressing the  and  keys, the display shows the temperature of the refrigerated compartment again. The internal temperature of the compartment can be set by the user between the maximum level (parameter **r2**) and the minimum level (parameter **r1**) highlighted in the temperature range label.

Unlocking the keyboard


After 30 seconds of inactivity, the keyboard automatically locks. To unlock the keyboard,

press any key. The display will show the label 'UnL'.

Viewing the temperature probes

Make sure the keyboard is not locked.
 Press the  key for at least 4 seconds.
 The display shows the first available entry.
 Press the key  or  to display the entry "Pb1" (cell probe).
 To display the value read by the cell probe, press .





Press again the key  to display the entry "Pb1".


Press  : to exit the procedure: the display shows again the temperature read by the cell probe.

Compressor operating hours





To display the compressor operating hours, follow the instructions below.




Make sure the keyboard is not locked.
 Perform the following steps to reset the counter.

Make sure the keyboard is not locked.
 Press the  key for at least 4 seconds.
 The display shows the first available entry.
 Press the key  or  to display the entry "CH".
 Press the key  to display the data.

To exit the procedure, press the key : the display shows the temperature read by the cell probe again.

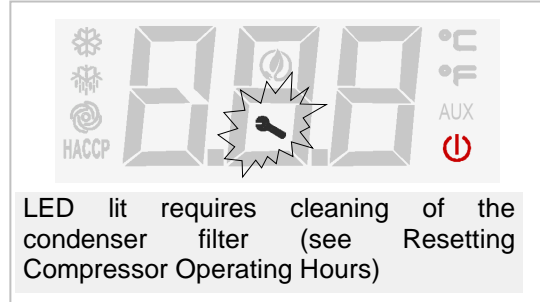
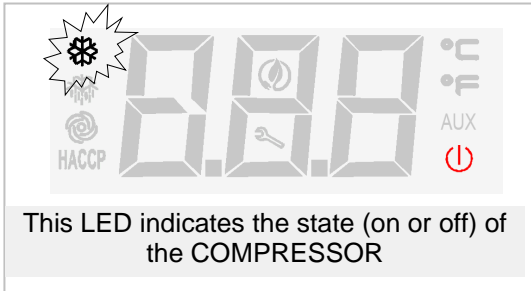
Resetting Compressor Operating Hours

Perform the following steps to reset the counter.
 Make sure the keyboard is not locked.
 Press the  key for at least 4 seconds.
 The display shows the first available entry.
 Press the key  or  to display the entry "rCH".
 Press the key  : password is requested in order to reset the counter.



Using the key  and  set the password **149** : press  to confirm. The display will show '---' flashing for 4 seconds, after which the device will exit the procedure and display the cell temperature again.




Viewing the LED Display



There are a number of graphic signals within the display area.








7.3. Parameter Setting

Follow the instructions below to set the configuration parameters.
 Make sure the keypad is not locked.
 Press and hold the key  for 4 seconds: the display will show 'PA'. Press the key .

Use the and keys  and  to set the password **-19**; press the key  to confirm. The display will show 'SP'.

Use the and keys  and  to scroll through the available parameters. To change a parameter,

select it with the key ; set the value with the  and  keys; confirm the change with the key .

To exit the procedure press and hold the key  for at least 4 seconds, or do not operate for at least 60 seconds.

Switch off the power supply after changing parameters.

7.4. Recommendations for Use

Prolonged Inactivity

If the appliance remains inactive for a long period, proceed as follows:

1. Use the automatic disconnecting switch to deactivate connection to the main electrical line.
2. Clean the appliance and surrounding areas thoroughly;

3. Spread a thin layer of cooking oil onto the stainless steel surfaces;
4. Carry out all maintenance operations;
5. Leave the doors ajar to prevent the formation of mould and/or unpleasant odours.

Recommendations for normal use

In order to ensure correct use of the appliance, it is advisable to apply the following recommendations:

- Do not obstruct the front and rear zones above the condensing unit in order to favour heat disposal from the condenser to a maximum.
- Always keep the front of the condenser clean using a soft brush and do not use rigid or metal tools that may damage the condenser fins.

Defrosting

Defrosting of the interior compartment should be regularly done as follows:

- Switch off the appliance.

- Check the planarity of the appliance rest surface.
- Do not introduce liquid or solid substances at temperatures above the environmental temperature and, however, introduce the material after the appliance has reached the functioning temperature.
- Do not stack the materials to be preserved in contact with the internal walls.

- Allow sufficient time for any traces of ice inside the refrigerated compartment to melt.
- Clean thoroughly and dry with a soft cloth.
- Switch the main switch back on.

8. CLEANING AND MAINTENANCE

8.1. Recommendations for Cleaning and Maintenance

! Activate all envisioned safety devices before carrying out any maintenance interventions. In particular, deactivate the electrical power supply using the automatic isolating switch. During maintenance, the cable and plug must be visible to the operator performing the operation. Do not touch the equipment with wet or damp hands or bare feet.

Do not remove safety guards. Use appropriate personal protective equipment. During maintenance, there are still some risks that cannot be avoided and which must be neutralised by adopting appropriate behaviour. It is forbidden to carry out inspection, cleaning and/or maintenance operations on moving parts.

8.2. Routine Maintenance

Routine maintenance consists of daily cleaning of all the parts which can come into contact with foodstuffs and the periodic maintenance of the burners, nozzles and draining pipes. Correct maintenance allows the user to maximise performance levels and operating life and constantly maintain safety requirements.

To remove hardened residues, use wooden or plastic spatulas or abrasive rubber pads.

During long periods of inactivity, spread a protective layer on all stainless steel surfaces by wiping them with a cloth soaked in Vaseline oil and airing the rooms periodically.

Do not spray the appliance with direct jets of water or high pressure appliances.

! Do not use products which contain substances which are harmful and dangerous for personal health (solvents, petrol etc.).

When cleaning stainless steel, do not use iron wool, brushes or scrapers as ferrous particles could be deposited which, on oxidising, could lead to rust.

8.3. Extraordinary Maintenance

! Extraordinary maintenance operations must be carried out by skilled technical staff, equipped with all personal protective devices.

! It is forbidden to remove or tamper with guards and safety devices while the machine is running.

! Procedures for topping up the refrigerant and repairing gas leaks may only be carried out by personnel who meet all the requirements of the regulations in force in the country where the equipment is used.

! In the case of flammable refrigerant gases, R290, R600a or other hydrocarbons, disconnect the machine from the power supply and completely purge the refrigerant circuit with an inert gas before proceeding with welding or other work requiring flames or sparks.

! For refrigerant gases such as R134a or other greenhouse gases comply with the regulations in force concerning the handling of Fgas.

! In the event of hazardous situations being observed, e.g. damage and exposure to sharp objects, damage to electrical or thermal insulation, the equipment must not be operated or used and must be secured as soon as possible, preventing access to the surrounding area if necessary.

i **Periodically** have the following operations carried out by specialised staff:

- Periodically clean the condenser using suitable tools (suction device or soft brushes).
- Check the perfect sealing of the door gaskets and replace them if necessary.
- Periodically clean the condensate evaporation tray.
- Check that the electric connections have not loosened.
- Check the efficiency of the heating element (in BT models).
- Check functioning of the remote-thermostat or cards and probes.
- check the efficiency of the electrical system.

8.4. Maintenance intervals




In order to assure constant efficiency of the equipment, it is advisable to inspect the equipment at intervals indicated in the following table:



Operation	Description	Interval
Routine cleaning	General cleaning of equipment and surrounding work area	daily
Mechanical protections	Inspection of the state of preservation of the external mechanical parts; check for any deformation, loosening or removal	yearly
Control	Check of the mechanical part; check for cracks or deformations; check for tightness of screws; check of the state of preservation of the stickers and danger/information symbols.	yearly
Machine structure	Check tightness of screws, main fasteners, etc.	yearly
Safety signs	Check legibility and state of preservation of signs	yearly
Electrical panel	Checking the state of preservation of electrical components and wiring between the switchboard and electrical components.	yearly
Connecting cable, socket and plug	Check the state of preservation of components (replace if necessary)	10 years

9. FAULTS

The information shown below aims to help with the identification and correction of any anomalies and malfunctions which could occur during use. Some of these problems can be resolved by the

user. For the others, precise competency is required and they must therefore only be carried out by qualified staff.


Problem	Causes	Solution
The refrigerator unit does not start	Switch-off by means of master switch	re-started, starts up after 3 minutes
	No voltage	check plug, sockets, fuses and electric mains
	Other causes	 If the problem persists, contact the after-sales centre.
The refrigerator unit functions continuously, cooling insufficiently	Room too hot	air the environment
	Dirty condenser	clean the condenser
	Insufficient quantity of refrigerant gas	 If the problem persists, contact the after-sales centre.
	Condenser fan at a standstill	 If the problem persists, contact the after-sales centre.


Problem	Causes	Solution
The refrigerator unit does not stop	Probe faulty	 If the problem persists, contact the after-sales centre.
	Remote-thermostat or thermostat faulty	 If the problem persists, contact the after-sales centre.
Appliance noise	Persistent vibrations	check there is no contact between the appliance and other objects inside or outside

9.1. Alarms Display

Reports / Alarms	Causes
"Pr1" Control probe error	Probe not compatible with instrument used
	probe cable interrupted or short-circuited
	faulty sensor



10. DISPOSAL OF THE APPLIANCE

 This appliance is marked in compliance with the 2002/96/EC European Directive, WASTE ELECTRICAL AND ELECTRONIC EQUIPMENT (WEEE).

 By assuring that this product is disposed of correctly, the user contributes to preventing the potential negative consequences on the environment and health.

The improper disposal of Waste Electrical and Electronic Equipment is liable to punishment under the relevant laws in the countries where the offence is committed.


Waste electrical and Electronic Equipment may contain hazardous substances with potential harmful effects on the environment and human health. You are urged to dispose of them properly.

 The  symbol found on the product or on the accompanying documentation indicates that this product must not be treated as domestic waste but must be taken to suitable collection points for the recycling of electric and electronic appliances.


10.1. Waste Storage


At the end of the product life, avoid release to the environment.


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.

 For further information regarding the treatment, recovery and recycling of this product, contact the relevant local office, the domestic waste collection service or the shop where the product was purchased.

10.2. Equipment disassembly procedure

 Dismantling operations should be carried out by qualified personnel.

 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.

 Dismantle the refrigerator 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.

11. TECHNICAL DATA SHEET OF REFRIGERANT R290

Name	Chemical Formula
HC-290	CH ₃ CH ₂ CH ₃

IDENTIFICATION OF DANGERS

- Extremely flammable
- Liquefied gas



GHS02



GHS04

FIRST AID

Inhalation: The intervention of a doctor is recommended. At high concentrations, it can

cause asphyxia. Symptoms may include loss of mobility and/or consciousness. Symptoms may include dizziness, headache, nausea and loss of coordination.

Move the victim to an uncontaminated area wearing self-contained breathing apparatus. Keep the patient relaxed and warm. Perform artificial respiration if breathing stops.

Skin and eyes contact: Wash with water for at least 15 minutes. Remove contaminated clothes

Ingestion: No action is necessary. Ingestion is not considered a means of exposure.

FIRE PREVENTION MEASURES:

Suitable extinguishing media:

Water spray, Dry powder.

NON-Suitable extinguishing media:

DO NOT use water jets to extinguish.

Carbon dioxide (CO₂).

12. TECHNICAL DATA SHEET OF REFRIGERANT R134a

Below is the chemical formula of fluid **R134a**:

Name	Chemical Formula
HFC-134a	CH ₂ FCF ₃

Below is the chemical formula of fluid **R452A**:

Name	%	Chemical Formula
HFC-125	59%	C ₂ HF ₅
HFC-1234yf	30%	C ₃ H ₂ F ₄
HFC-32	11%	CH ₂ F ₂

IDENTIFICATION OF DANGERS

The rapid evaporation of the liquid can cause freezing. The inhalation of high concentrations of vapour can cause irregular heartbeat, short-term

narcotic effects (including vertigo, headache and mental confusion), fainting and death.

Effects on the eyes: Freezing or cold burns caused by contact with the liquid.

Effects on the skin: Freezing or cold burns caused by contact with the liquid.

Effects of ingestion the ingestion is not considered means of exposure.

FIRST AID

Eyes: In the case of contact, wash the eye well using a large amount of water for at least 15 minutes. Consult a doctor.

Effects on the skin: Wash with water for at least 15 minutes after excessive contact. If necessary, cure freezing by gently warming the area in question. Consult a doctor in the case of irritation.

Ingestion: Ingestion is not considered means of exposure.

Inhalation: If large concentrations are inhaled, go into the open air. Keep the person calm. If the person cannot breath, perform artificial respiration. If breathing is difficult, apply oxygen. Consult a doctor.