FOREWORD **8**

READ AND SAVE THESE INSTRUCTIONS **9**

1. Warning and safety information **9**

1.1 General information 9
1.2 Personal protection equipment 11
1.3 General safety 12
1.4 General safety rules 12
1.5 Transport, handling and storage 14
1.6 Installation and assembly 15
1.7 Positioning 18
1.8 General safety rules 18
1.9 Product loading and unloading 21
1.10 Machine cleaning and maintenance 22
1.11 Service 22
1.12 Dismantling 23

2. General information **24**

2.1 Introduction 24
2.2 Additional indications 24
2.3 Intended use and restrictions 24
2.4 Testing and inspection 24
2.5 Mechanical safety characteristics, hazards 24
2.6 Copyright 24
2.7 Keeping the manual 24
2.8 Recipients of the manual 24
2.9 Definitions 24
2.10 Machine and manufacturer's identification data 25
2.11 Responsibility 25

3. Normal machine use **26**

3.1 Characteristics of personnel trained for normal machine use 26
3.2 Characteristics of personnel enabled to operate on the machine 26
3.3 Operator qualified for normal machine use 26

4. Transport, handling and storage **26**

4.1 Introduction 26
4.2 Handling 26
4.3 Procedures for handling operations 26
4.4 Shifting 27
4.5 Placing the load 27
4.6 Unpacking 27
4.7 Storage 27

5. Technical data **27**

6. Installation and assembly **28**

6.1 Introduction 28
6.2 Appliance space limits 28
6.3 The customer's responsibilities 28
6.7 Disposal of packing 28
6.8 Four pieces of Castor 29

7. Appliance start-up **29**

7.1 Digital temperature controller 29
7.2 Storing food 29
7.3 How to turn the machine in ON / STAND-BY status 29
7.4 How to see and modify the set point 29
7.5 Automatic defrost 30
7.6 Manual defrost 30
7.7 How to turn ON / OFF the light 30

8. Features **30**

9. Care **30**

10. Power failure **31**

10.1 Signalling 31
10.2 Alarms 31

11. Machine cleaning and maintenance **31**

11.1 Ordinary maintenance 31
11.1.1 Precautions for maintenance 31
11.1.2 Cleaning the cabinet and accessories 31
11.1.3 How to clean the condenser filter 32
11.1.4 Precautions in case of long idle periods 32
11.2 Extraordinary maintenance 32
11.2.1 Maintenance intervals 33

12. Machine disposal **33**

12.1 Waste storage 33
12.2 Procedure regarding appliance dismantling macro operations 34

13. Enclosed documents **34**

14. Troubleshooting guide **35**

FOREWORD

The installation, use and maintenance Manual (hereinafter Manual) provides the operator with information necessary for correct and safe installation and use of the machine (hereinafter "machine" or "appliance").
The following must not be considered a long and exacting list of warnings, but rather a set of instructions suitable for improving machine performance in every respect and, above all, preventing injury to persons and animals and damage to property due to improper operating procedures.
All persons involved in machine transport, installation, commissioning, use and maintenance, repair and disassembly must consult, carefully read and fully understand this manual before carrying out the various operations, in order to avoid wrong and improper actions that could compromise the machine's integrity or endanger people. Make sure to periodically inform the appliance user regarding the safety regulations. It is also important to instruct and update personnel authorised to operate on the machine, regarding its use and maintenance.
The manual must be available to operators and carefully kept in the place where the machine is used, so that it is always at hand for consultation in case of doubts or whenever required.
If, after reading this manual, there are still doubts regarding machine use, do not hesitate to contact the Manufacturer or the authorised after-sales service centre, to receive prompt and precise assistance for better operation and maximum efficiency of the machine.
During all stages of machine use, always respect the current regulations on safety, work hygiene and environmental protection. It is the user's responsibility to make sure the machine is started and operated only in optimum conditions of safety for persons, animals and property.

IMPORTANT
- The Manufacturer declines any liability for operations carried out on the appliance without respecting the instructions given in this manual.
- The manufacturer reserves the right to modify the appliances presented in this publication without notice.
- NO part of this manual may be reproduced.
- This manual is available in digital format by contacting the dealer or reference customer care.
- The manual must always be kept in an easily accessed place near the machine. Machine operators and maintenance personnel must be able to easily find and consult it at any time.

WARNING
For your safety read the manual carefully before installing or using this product. Save this manual for future reference.

READ AND SAVE THESE INSTRUCTIONS

As previously said, these instructions include information which is intended to assure the operator of correct installation, operation and service. Before attempting installation, adjustment or maintenance, be certain of the following:

- that you have read and fully understand the instructions;
- that you have all the tools required and are trained to use them;
- that you have met all installation and usage restrictions and are familiar with the functions and operations of the unit;
- that you follow all instructions exactly as given.

All the fittings, measurements, recommendations and procedures are significant. Substitutions and approximations must be avoided. Improper handling, maintenance, installation and adjustment, or service attempted by anyone other than a qualified technician, may void the future warranty claims and cause damage to the unit and/or result in injury to the operator and/or bystanders.

1. Warning and safety information

1.1 General information

To ensure safe use of the machine and a proper understanding of the manual it is necessary to be familiar with the terms and typographical conventions used in the documentation.
The following symbols are used in the manual to indicate and identify the various types of hazards:

WARNING
Danger for the health and safety of operators.

WARNING
Danger of electrocution - dangerous voltage.

CAUTION
Risk of damage to the machine or the product.

IMPORTANT
Important instructions or information on the product.

Read the instructions before using the appliance.

NOTE
Clarifications and explanations.

- Only specialised personnel are authorised to operate on the machine.

  -Do not let children play with the appliance.
  -Keep all packaging and detergents away from children.
  -Cleaning and user maintenance shall not be made by children without supervision.

- Do not store explosive substances, such as pressurized containers with flammable propellant, in this appliance.
- Do not remove, tamper with or make illegible the safety, danger and instruction signs and labels on the machine.
- Refer to the data given on the machine's data plate marking for relations with the Manufacturer (e.g. when ordering spare parts, etc.).
- When scrapping the machine, the marking must be destroyed.
- Before carrying out any operation on the machine, always consult the manual which gives the correct procedures and contains important information on safety.
- Save these instructions carefully for further consultation by the various operators.

1.2 Personal protection equipment

Summary table of the Personal protection Equipment (PPE) to be used during the various stages of the machine's service life.

Stage	Protective garments	Safety footwear	Gloves	Glasses	Safety helmet
Transport	—	●	○	—	○
Handling	—	●	○	—	—
Unpacking	—	●	○	—	—
Installation	—	●	○	—	—
Normal use	●	●	●*	—	—
Adjustments	○	●	—	—	—
Routine cleaning	○	●	●*	○	—
Extraordinary cleaning	○	●	●	○	—
Maintenance	○	●	○	—	—
Dismantling	○	●	○	○	—
Scrapping	○	●	○	○	—
Key:					
●	**PPE REQUIRED**				
○	**PPE AVAILABLE OR TO BE USED IF NECESSARY**				
—	**PPE NOT REQUIRED**				

(*) During **Normal use**, gloves protect hands from the cold product when being removed from the appliance.
Note: the gloves to be worn during Cleaning are the type suitable for contact with the cooling fins (metal plates).
Failure to use the personal protection equipment by operators, specialised technicians or users can involve exposure to chemical risk and possible damage to health.

1.3 General safety

- The machines are provided with electric and/or mechanical safety devices for protecting workers and the machine itself. Therefore the user must not remove or tamper with such devices. The Manufacturer declines any liability for damage due to tampering or their non-use.
- Never operate the machine, removing, modifying or tampering with the guards, protection or safety devices.
- Several illustrations in the manual show the machine, or part of it, without guards or with guards removed. This is purely for explanatory purposes. Do not use the machine without the guards or with the protection devices deactivated.
- Do not remove, tamper with or make illegible the safety, danger and instruction signs and labels on the machine.

1.4 General safety rules

Materials and fluids used

The areas in contact with the product are in steel or coated with non-toxic plastic material.

⚠ **WARNING**
For your safety read the manual carefully before installing or using this product. Save this manual for future reference.

Consult Local and National Standards to comply with the following:

1. Health and Safety at Work Legislation
2. Fire precautions
3. IEE Wiring Regulations
4. Building Regulations
5. DO NOT use the appliance outside
6. DO NOT attempt to service the item yourself
7. DO NOT use damaged appliances. If you are in any doubt, consult service agent.

8. DO NOT use electrical appliances inside the appliance (e.g. heaters, ice-cream makers, etc.), unless they are of the type recommended by the Manufacturer.
9. Keep ventilation openings, in the appliance enclosure or in the built-in structure, clear of obstruction.
10. DO NOT use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the Manufacturer.
11. DO NOT damage the refrigerant circuit.
12. DO NOT stand or support yourself on the base, drawers or doors.
13. DO NOT allow oil or fat to come into contact with plastic components or door seal. Clean immediately if contact occurs.
14. This unit can be used by children aged above 8 years and persons with reduced physical, sensory or mental capabilities or lacking of experience and knowledge who have been given supervision or using instruction of the device and understand the resulting risks (for European market).
15. Do not let children play with the appliance.
16. Cleaning and user maintenance must not be carried out by children without supervision.
17. DO NOT place combustible, explosive or volatile articles, corrosive acids or alkalis or liquids in the appliance.
18. DO NOT use this appliance to store medical supplies.
19. DO NOT use jet/pressure washers to clean the appliance.
20. DO NOT allow children to play with the packaging, and dispose plastic bags, safely.
21. Bottles that contain a high percentage of alcohol must be sealed and placed vertically in the refrigerator.
22. Always carry, store and handle the appliance in a upright orientation and move by holding the base of the appliance.
23. Always switch off and disconnect the power supply to the unit before cleaning.
24. If the supply cord is damaged, it must be replaced by the Manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.

25. This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety (for market beyond European).
26. Children should be supervised to ensure that they do not play with the appliance.
27. For indoor use only. Not suitable for installation in an area where a water jet could be used. Shall not be cleaned by a water jet.
28. To guarantee safe operation, ensure that the appliance is set up and connected as described in the instruction manual.
29. Any repairs and work on the appliance should only be carried out by the customer service department/qualified technician.
30. The key to the electrical cabinet should be kept out of the reach of children and users.
31. Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
32. This unit can be used by children aged above 8 years and persons with reduced physical, sensory or mental capabilities or lacking of experience and knowledge who have been given supervision or using instruction of the device in a safe way and understand the resulting risks (for European market).

The quantity of gas used is given on the data plate.

1.5 Transport, handling and storage

- Do not stand under suspended loads during loading/unloading operations. Unauthorised personnel must not enter the work area.
- The weight of the appliance alone is not sufficient to keep it steady.
- For machine lifting and anchoring, do not use movable or weak parts such as: casings, electrical raceways, pneumatic parts, etc.
- Do not push or pull the machine to move it, as it may tip over. Use proper tool to lift the machine.
- Machine transport, handling and storage personnel must be adequateluinstructed and trained regarding the use of lifting systems and personal protection equipment suitable for the type of operation

carried out.

1.6 Installation and assembly

Introduction

- Machine installation and assembly operations must only be carried out by specialised personnel provided with all the appropriate personal protection equipment, tools, utensils and ancillary means, with adequate enclosure of the assembly area to keep out unauthorised persons.
- The operations described must be carried out in compliance with the current safety regulations.
- Disconnect the appliance from the power supply before carrying out any installation and assembly procedure.

Location and installation

- Remove the appliance from the packaging. Make sure that all protective plastic film and coatings are thoroughly removed from all surfaces. To prevent injury or damage to the unit, we recommend that the appliance should be unpacked and set up by two people.
- Maintain a distance of 20 cm (7 inches) between the appliance and walls or other objects for ventilation. Increase this distance if the obstacle is a heat source.
- The appliance should be placed on a solid flat and stable floor to reduce noise and vibration. Level the appliance by adjusting the feet.
- The temperature in the place where the unit is located must be between 10°C and 32°C (Climatic Class 4).
- Avoid locating the unit in direct sunlight or near heat sources such as ovens or radiators.
- Please make sure the appliance is properly ventilated.
- Check that the power supply and voltage used comply with the details on the rating plate. The plug must be accessible after installation.
- Correctly connect and disconnect the plug. When inserting ensure the plug is fully engaged. While unplugging hold the body of the plug. Never pull the supply cord directly.
- If the unit is to be shut down for long period, switch it off and disconnect the plug from socket outlet. Clean the appliance and leave the door open to prevent odour.

WARNING

For your personal safety, this appliance must be properly grounded (earthed). This appliance is equipped with a cord having a grounding wire with a grounding plug. The plug must be inserted into an outlet that is properly grounded and installed. Consult a qualified electrician or service center if you do not completely understand the grounding instructions. If doubt exits whether the appliance is properly grounded, have a qualified electrician check the circuit to make sure the outlet is properly grounded.

- If the cable does not reach the nearest socket, either rearrange your store layout or ask a qualified electrician to fix a new socket.
- If power is cut off, wait for at least 3 minutes before restarting the appliance to avoid damaging the compressor.
- Do not place any appliance such as microwave oven, toaster, etc, which give off heat on the appliance.
- Slide the shelf/drawer into place.

IMPORTANT

If the unit has not been stored or moved in an upright position, let it stand upright for approximately 12 hours before operation. Before using the appliance for the first time, clean the shelves and interior with soapy water.

Electrical connection

- Work on the electrical systems must only be carried out by a qualified electrician.
- Connection to the power supply must be carried out in compliance with the regulations and provisions in force in the country of use.
- The information regarding the appliance power supply voltage is given on the dataplate.
- These guidelines must be followed to ensure that safety mechanisms in the design of this appliance will operate properly.
- Avoid fire hazard or electric shock. Do not use an extension cord or an adapter plug. Do not remove any prong from the power cord.
- **If the voltage varies by 10 percent or more, appliance performance**

may be affected. Operating the appliance with insufficient power can damage the compressor. Such damage is not covered under the warranty. If you suspect your voltage is high or low, consult your power company for testing.

- To prevent the appliance from being turned off accidentally, do not plug the unit into an outlet controlled by a wall switch or pull cord.
- DO NOT pinch, knot, or bend the power cord in any manner.
- **NEVER** unplug the appliance by pulling on the power cord. Always grip the plug firmly and pull straight out from the receptacle.
- To avoid electrical shock, unplug the appliance before cleaning.

NOTE
Turning the control to "OFF" turns off the compressor but does not disconnect power to other electrical components.

To connect, just insert the power cable plug in the corresponding mains socket, **first making sure**:

- the socket has an efficient earth connection and the mains voltage and frequency match that given on the dataplate. In case of any doubts regarding the efficiency of the earth connection have the system checked by qualified personnel;
- the system power supply is arranged and able to take the actual current absorption and that it is correctly executed according to the regulations in force in the country of use;
- the plug must be accessible after positioning the appliance in the place of installation;
- the plug must be in a position always visible to the operator performing the intervention during maintenance operations.
- A differential thermal-magnetic switch suitable for the absorption specified on the dataplate, with contact gap enabling complete disconnection in category III overvoltage conditions and complying with the regulations in force, is 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.
- The system power supply is arranged and able to take the actual current absorbed and that it is correctly execute according to the regulations in force in the country of use;

- after making the connection, with the appliance running check that the power supply does not fluctuate by ±10% the rated voltage.
- The manufacturer declines any liability for damage or injury resulting from breach of the above rules or non-compliance with the electrical safety regulations in force in the country where the machine is used.

1.7 Positioning

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

WARNING
Keep the ventilation openings in the appliance casing free of any obstructions.

1.8 General safety rules

Protection devices installed on the machine

- The guards on the machine are:
  - fixed guards (e.g. casings, covers, side panels, etc.), fixed to the machine and/or frame with screws or quick-release connectors that can only be removed or opened with tolls;
  - interlocked movable guards (door) for access inside the machine;
  - machine electrical equipment access doors, made from hinged panels openable with tools. The door must not be opened when the machine is connected to the power supply.

Safety signs to be placed on the machine or near its area:

Prohibition	Meaning
	do not remove the safety devices
	do not use water to extinguish fires (placed on electrical parts)
Danger	**Meaning**
	danger of burns
	danger of electrocution (shown on electrical parts with indication of voltage)

End of use

- When the appliance is no longer to be used, make it unusable by removing the mains power supply wiring.

Instructions for use and maintenance

- Risks mainly of a mechanical, thermal and electrical nature exist in the machine. Where possible the risks have been neutralised:
    - directly, by means of adequate design solutions.
    - indirectly by using guards, protection and safety devices.
- Any anomalous situations are signalled on the control panel display.
- During maintenance several risks remain, as these could not be eliminated, and must be neutralised by adopting specific measures and precautions.
- Do not carry out any checking, cleaning, repair or maintenance operations on moving parts. Workers must be informed of this prohibition by means of clearly visible signs.
- To guarantee machine efficiency and correct operation, periodical maintenance must be carried out according to the instructions given in this manual.
- Make sure to periodically check correct operation of all the safety devices and the insulation of electrical cables, which must be replaced if damaged.
- Extraordinary machine maintenance operations must only be carried out by specialised personnel provided with all the appropriate personal protection equipment, tools, utensils and ancillary means.
- Never operate the machine, removing, modifying or tampering with the guards, protection or safety devices.

Reasonably foreseeable improper use

Improper use is any use different from that specified in this manual. During machine operation, other types of work or activities deemed improper and that in general can involve risks for the safety of operators and damage to the appliance are not allowed. Reasonably foreseeable improper use includes:

- lack of machine maintenance, cleaning and periodical checks;
- structural changes or modifications to the operating logic;

- tampering with the guards or safety devices;
- failure to use personal protection equipment by operators, specialised personnel and maintenance personnel;
- failure to use suitable accessories (e.g. use of unsuitable equipment or ladders);
- keeping combustible or flammable materials, or in any case materials not compatible with or pertinent to the work, near the machine;
- wrong machine installation;
- placing in the machine any objects or things not compatible with its use, or that can damage the machine, cause injury or pollute the environment;
- climbing on the machine;
- non-compliance with the requirements for correct machine use;
- other actions that give rise to rsks not eliminable by the Manufacturer.
- Failure to insure complete closure of the door, through forgetfulness or carelessness.
- Place the product in the compartments so as to block proper air circulation or hinder the perfect closing of the door.
- Exceed product weight allowed for each shelf:

The previously described actions are prohibited!

Residual risks

- The machine has several risks that were not completely eliminated from a design standpoint or with the installation of adequate protection devices. Nevertheless, through this manual the Manufacturer has taken steps to inform operators of such risks, carefully indicating the personal protection equipment to be used by them. Sufficient spaces are provided for during the machine installation stages in order to limit these risks.

To preserve these conditions, the areas around the machine must always be:

- kept free of obstacles (e.g. ladders, tools, containers, boxes, etc.);
- clean and dry;
- well lit.

For the Customer's complete information, the residual risks remaining on the machine are indicated below: such actions are deemed improper and therefore strictly forbidden.

Residual risk	Description of hazardous situation
Slipping or falling	The operator can slip due to water or dirt on the floor.
Burns/abrasions (e.g. heating elements, cold pan, cooling circuit plates and pipes)	The operator deliberately or unintentionally touches some components inside the machine without using protective gloves.
Electrocution	Contact with live parts during maintenance operations carried out with the electrical panel powered.
Tipping of loads	When handling the machine or the packing containing it, using unsuitable lifting systems or accessories or with the load unbalanced.
Chemical (refrigerant gas)	Inhalation of refrigerant gas. Therefore always refer to the appliance labels.

⚠ **IMPORTANT**
In case of a significant anomaly (e.g. short circuits, wires coming out of the terminal block, motor breakdowns, worn electrical cable sheathing, etc.) the operator must immediately deactivate the machine.

1.9 Product loading and unloading

⚠ **WARNING**

- Do not use mechanical devices or other means to speed up the defrost process, unless recommended by the manufacturer.
- Do not damage the circuit.
- Do not use electrical appliances inside the appliance compartments for storing frozen food.

1.10 Machine cleaning and maintenance

- Before carrying out any cleaning or maintenance, disconnect the appliance from the power supply. For details see the Electrical Connection paragraph in this manual.
- Do not touch the appliance with wet hands or feet or when barefoot.
- Do not remove the safety guards.
- Use suitable personal protection equipment.

Ordinary maintenance

- Disconnect the power supply before cleaning the appliance. For details see the Electrical Connection paragraph in the manual.
- Do not clean the machine with jets of water.

Precaution in case of long idle periods

- Machine maintenance, checking and overhaul operations must only be carried out by specialised personnel or the After-Sales Service, provided with adequate personal protection equipment, tools and ancillary means.
- Work on the electrical equipment must only be carried out by specialised personnel or the After-Sales Service.
- Put the machine in safe conditions before starting any maintenance operation.
- Respect the requirements for the various routine and extraordinary maintenance operations. Non-compliance with the instructions can create risks for personnel.

Extraordinary maintenance

- Extraordinary maintenance must be carried out by specialised personnel, who can ask the Manufacturer to supply a servicing manual, or by the After-Sales Service.

1.11 Service

- Only original spare parts can ensure the safety standards of the appliance.
- Only repairs undertaken by an Electrolux approved service technician are covered by the guarantee.

1.12 Dismantling

- Dismantling operations must be carried out by specialised personnel.
- Work on the electrical equipment must only be carried out by specialised personnel, with the power supply disconnected.
- Make the appliance unusable by removing the power cable and any compartment closing devices, to prevent the possibility of someone becoming trapped inside.

2. General information

WARNING
Refer to "Warning and Safety Information"

2.1 Introduction

Given below is some information regarding the machine's intended use, its testing, and a description of the symbols used (that identify the type of warning), the definitions of terms used in the manual and useful information for the appliance user.

2.2 Additional indications

The drawings and diagrams given in the manual are not in scale. They supplement the written information with an outline, but are not intended to be a detailed representation of the machine supplied.
The numerical values given on the machine installation diagrams refer to measurements in millimeters and/or inches.

2.3 Intended use and restrictions

Only use this appliance for cooling and storage of food and beverage for commercial purposes. Any other use is deemed improper.

CAUTION
The machine is not suitable for installation outdoors and/or in places exposed to atmospheric agents (rain, direct sunlight, etc.).

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

2.4 Testing and inspection

Our appliances are designed and optimised, with laboratory testing, in order to obtain high performance and efficiency. The product is shipped ready for use.
Passing of the tests (visual inspection - electrical test - functional test) is guaranteed and certified by the specific enclosures.

2.5 Mechanical safety characteristics, hazards

The appliance does not have sharp edges or protruding parts. The guards for the moving and live parts are fixed to the cabinet with screws, to prevent accidental access.

2.6 Copyright

This manual is intended solely for consultation by the operator and can only be given to third parties with the permission of Electrolux Professional Inc.

2.7 Keeping the manual

The manual must be carefully kept for the entire life of the machine, until scrapping. The manual must stay with the machine in case of transfer, sale, hire, granting of use or leasing.

2.8 Recipients of the manual

This manual is intended for:

- the carrier and handling personnel;
- installation and commissioning personnel;
- the employer of machine users and the workplace manager;
- operators for normal machine use;
- specialised technicians - after-sales service (see service manual).

2.9 Definitions

Listed below are the definitions of the main terms used in the manual. Read them carefully before use.

Operator
machine installation, adjustment, use, maintenance, cleaning, repair and transport personnel.

Manufacturer
Electrolux Professional Inc.

Operator for normal machine use
an operator who has been informed and trained regarding the tasks and hazards involved in normal machine use.

Technical assistance or specialised technician
an operator instructed/trained by the Manufacturer and who, based on his professional and specific training, experience and knowledge of the accident-prevention regulations, is able to appraise the operations to be carried out on the machine and recognise and prevent any risks. His professionalism covers the mechanical, electrotechnical and electronics fields.

Danger
source of possible injury or harm to health.

Hazardous situation
any situation where an operator is exposed to one or more hazards.

Risk
a combination of probabilities and risks of injury or harm to health in a hazardous situation.

Protection devices
safety measures consisting of the use of specific technical means (guards and safety devices) for protecting operators against risks.

Guard
an element of a machine used in a specific way to provide protection by means of a physical barrier.

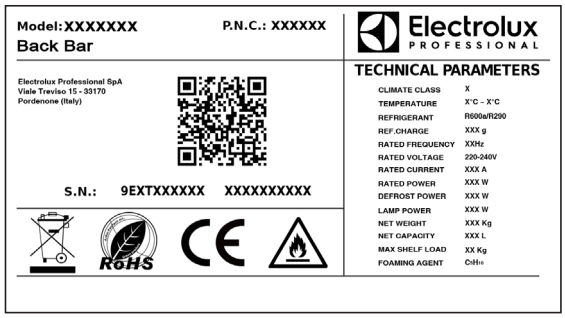
Safety device
a device (other than a guard) that eliminates or reduces the risk; it can be used alone or in combination with a guard.

Customer
the person who purchased the machine and/or who manages and uses it (e.g. company, entrepreneur, firm).

Electrocution
an accidental discharge of electric current on a human body.

2.10 Machine and manufacturer's identification data

A reproduction of the marking or dataplate on the machine is given below:



The data plate gives the product identification and technical data.

Model	Factory product
PNC	Product number code
SN	Serial number
Climate class	Item climate class
Temperature	Item Temperature Range
Refrigerant	Type of the refrigerant gas
Ref. Charge	Ammount of the gas inside cooling system
Rated Frequency	Power supply frequency
Rated Voltage	Power supply frequency
Rated Current	Current absorbed
Rated Power	Wattage consumption
Defrost Power	Heating element power (if is present on the item)
Lamp Power	Total wattage consumption of the lights
Net weight	Net weight of the items without packaging
Net capacity	Nominal capacity
Max shelf load	Maximum capacity of the shelves
Foaming agent	**C5H10** Expanding gas used in insulation

When installing the appliance, make sure the electrical connection is carried out in compliance with that specified on the data plate.

2.11 Responsibility

The Manufacturer declines any liability for damage and malfunctioning caused by:

- non-compliance with the instructions contained in this manual;
- repairs not carried out in a workmanlike fashion, and replacements with parts different from those specified in the spare parts catalogue (the fitting and use of non-original spare parts and accessories can negatively affect machine operation and invalidates the warranty);
- operations by non-specialised technicians;
- unauthorised modifications or operations;
- inadequate maintenance;
- improper machine use;
- unforeseeable extraordinary events;
- use of the machine by uninformed and untrained personnel;
- non-application of the current provisions in the country of use, concerning safety, hygiene and health in the workplace.

The Manufacturer declines any liability for damage caused by arbitrary modifications and conversions carried out by the user or the Customer.
The employer, workplace manager or service technician are responsible for identifying and choosing adequate and suitable personal protection equipment to be worn by operators, in compliance with regulations in force in the country of use.
Electrolux Professional SPA declines any liability for inaccuracies contained in the manual, if due to printing or translation errors.
Any supplements to the installation, use and maintenance manual the Customer receives from the Manufacturer will form an integral part of the manual and therefore must be kept together with it.

3. Normal machine use

WARNING
Refer to "Warning and Safety Information"

3.1 Characteristics of personnel trained for normal machine use

The Customer must make sure the personnel for normal machine use are adequately trained and skilled in their duties, as well as ensuring their own safety and that of other persons.
The Customer must make sure his personnel have understood the instructions received and in particular those regarding work hygiene and safety in use of the machine.

3.2 Characteristics of personnel enabled to operate on the machine

The Customer is responsible for ensuring that persons assigned to the various duties:

- read and understand the manual;
- receive adequate training and instruction for their duties in order to perform them safely;
- receive specific training for correct machine use.

3.3 Operator qualified for normal machine use

He must have at least:

- knowledge of the technology and specific experience in operating the machine;
- adequate general basic education and technical knowledge for reading and understanding the contents of the manual;
- including correct interpretation of the drawings, signs and pictograms;
- sufficient technical knowledge for safely performing his duties as specified in the manual;
- knowledge of the regulations on work hygiene and safety.

In case of a significant anomaly (e.g. short circuits, wires coming out of the terminal block, motor breakdowns, worn electrical cable sheathing, etc.) the operator for normal machine use must:

- immediately deactivate the machine.

4. Transport, handling and storage

WARNING
Refer to "Warning and Safety Information"

4.1 Introduction

Transport (i.e. transfer of the machine from one place to another) and handling (i.e. transfer inside workplaces) must occur with the use of special and adequate means.

CAUTION
The machine must only be transported, handled and stored by specialised personnel, who mist have:

- specific technical training and experience in the use of lifting systems;
- knowledge of the safety regulations and applicable laws in the relevant sector;
- knowledge of the general safety rules;
- personal protection equipment suitable for the type of operation carried out;
- the ability to recognise and avoid any possible hazard.

4.2 Handling

Arrange a suitable area with flat floor for machine unloading and storage operations.

4.3 Procedures for handling operations

Before lifting:

- send all operators to a safe position and prevent persons from entering the handling area;
- make sure the load is stable;
- make sure no material can fall during lifting.
- handle the machine, keeping it at minimum height from the ground.

For correct and safe lifting operations:

- use the type of equipment most suitable for characteristics and capacity (e.g. electric pallet truck or lift truck);
- cover sharp edges;
- check the forks and lifting procedures according to the instructions given on the packing.

WARNING
For machine lifting and anchoring, do not use movable or weak parts such as: casings, electrical raceways, pneumatic parts, etc.

4.4 Shifting

The operator must:

- have a general view of the path to be followed;
- stop the manoeuvre in case of hazardous situations.

WARNING

Do not push or pull the appliance to move it, as it may tip over.

4.5 Placing the load

Before placing the load, make sure the way is free and that the floor is flat and can take the load.

4.6 Unpacking

IMPORTANT

Immediately check for any damage caused during transport. Inspect the packaging before and after unloading.

Remove the packaging. Take care when unpacking and handling of the appliance to not cause any shocks on itself. Keep all the documentation contained in the packaging.

NOTE

- The forwarder is responsible for the goods during transport and delivery.
- Make a complaint to the forwarder in case of visible or hidden damage.
- Specify any damage or shortages on the dispatch note.
- The driver must sign the dispatch note: the forwarder can reject the claim if the dispatch note is not signed (the forwarder can provide the necessary form).
- For hidden damage or shortages becoming apparent only after unpackaging, request the forwarder for inspection of the goods within and no later than 15 days after delivery.

4.7 Storage

The machine and/or its parts must be stored and protected against damp, in a non-aggressive place free of vibrations and with room temperature between 14°F (-10°C) and 122°F (50°C).
The place where the machine is stored must have a flat support surface in order to avoid any twisting of the machine or damage to the support feet.

CAUTION

Do not make modifications to the parts supplied with the appliance. Any missing or faulty parts must be replaced with original parts.

5. Technical data

WARNING
Refer to "Warning and Safety Information"

Model	Refrigerator (2 Doors- 3 Doors - 4 Doors)
Climate Class	Please refer to the information indicated on the product. You will find the information on the rating label on the back of the unit as well as inside the cooling compartment. The circuit diagram is displayed on the back of the unit as well as inside the cooling compartment.
Refrigerant Gas	
Refrigerant Charge	
Temperature Range (°)	
Input Power	
Rated Frequency	
Rated Voltage	
Internal Volume	
Net Weight	
Gross Weight	
Foaming Agent	
External Dimension (mm)	

WARNING

Risk of fire and explosion with flammable refrigerant R600a/R290.

6. Installation and assembly

WARNING
Refer to "Warning and Safety Information"

6.1 Introduction

To ensure correct operation of the appliance and maintain safe conditions during use, carefully follow the instructions given below in this section.

WARNING
Wear protective gloves and unpack the machine, carrying out the following operations.

CAUTION
Before moving the appliance make sure the load bearing capacity of the lifting equipment used is suitable for its weight.

6.2 Appliance space limits

Make sure to position the appliance following the indications given below (close proximity can create problems of condensate forming on the walls of the appliance), also taking into consideration the space needed for door opening.

6.3 The customer's responsibilities

The tasks and works required of the Customer are:

- for information regarding the electrical connection, refer to par. "Electrical connection";
- check the flatness of the surface on which the machine is placed.

When positioning to take into account the following distances:

- 20 mm from the sides;
- 20 mm from the back.

This space must be increased in case of use and/or transfer of other equipment and/or means or if exit routes are necessary inside the workplace. There must be free air circulation above the appliance, at the refrigerating unit. There must be no obstructions caused by trays, cardboard boxes, jars or other materials.
Never cover the condenser, even temporarily, as this can compromise proper operation of the condenser and therefore the appliance.

The machine must be taken to the place of installation and the packing base removed only when being installed.
Arranging the machine:

- position the machine in the required place;
- make sure the appliance is levelled also checking correct door closing.

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

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

6.7 Disposal of packing

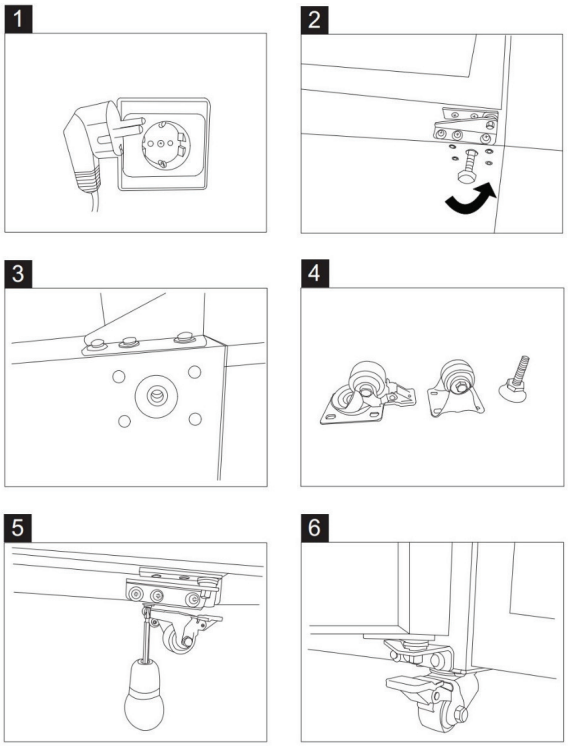
The packing must be disposed of in compliance with the current regulations in the country where the appliance is used.
All the packing materials are environmentally friendly. They can be safely kept, recycled or burned in an appropriate waste incineration plant. Recyclable plastic parts are marked as follows:

PE	**polyethylene:**	outer wrapping, instruction booklet bag
PP	**polypropylene:**	straps
PS	**polystyrene foam:**	corner protectors

The parts in wood and cardboard can be disposed of, respecting the current regulations in the country where the machine is used.

6.8 Four pieces of Castor

Positioning: Two castors with break to be fixed at the bottom front and two castors with no break to be fixed at the bottom rear.
Procedure: Follow the 6 steps below to change the footings to casters.
NOTE: If you intend to purchase optional accessories, please ask our sales staff for advice.



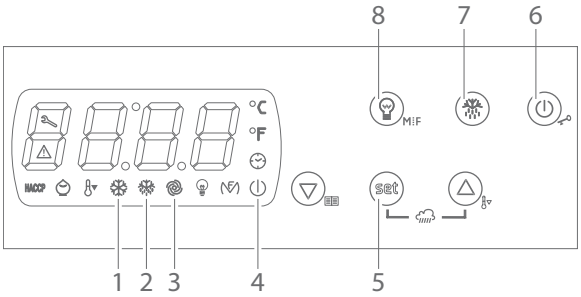
WARNING

- Unplug the appliance from main socket before change.
- Securing the fork lift before change.
- Securing all drawers, shelves, lids and doors before change.
- Empty the cabinet before change.
- Lock the brake on the caster after change.

7. Appliance start-up

WARNING
Refer to "Warning and Safety Information"

7.1 Digital temperature controller



1	Compressor operation light
2	Defrosting light
3	Energy saving light
4	Stand-by light
5	Programming key (service agent only)
6	Machine On / Stand-by (keep pushed)
7	Manual defrost (keep pushed)
8	Light on/off

7.2 Storing food

To get the best results from your appliance, follow these instructions:

- only store foodstuffs in the appliance when it has reached the correct operating temperature;
- do not place uncovered hot food or liquid inside the appliance;
- wrap or cover food where possible;
- do not obstruct the fan inside the appliance;
- avoid opening the doors for prolonged periods of time;
- the food must be put into container before placed into cabinet or on the shelf. Food must not be placed into food cabinet directly.

7.3 How to turn the machine in ON / STAND-BY status

- Press and hold the ⏻ key for 4s, the machine will turn from ON to STAND-BY status and vice-versa.
- During the button hold the ⏻ LED will blink to show status changing.

7.4 How to see and modify the set point

- Push and immediately release the SET key, the set point will be showed and starts blinking.
- To change the set value push ∧ or ∨ arrows within 20s.
- To memorize the new set point value push the SET key again or wait 20s.

7.5 Automatic defrost

The appliance will automatically run defrost cycles.
NOTE: the cycle starts from the time the appliance is initially powered up.

7.6 Manual defrost

- Press and hold the **DEFROST** button for 3 seconds.
- The defrost cycle will start immediately and the Defrost LED illuminates.

NOTE: starting a manual defrost also resets the automatic defrost timer.

7.7 How to turn ON / OFF the light

- Press and release the key, the light will switch ON or OFF.

NOTE: Light logo is present and active only for model with glass door.

WARNING
Do not pull the drawer out of its full open position to avoid any hurt.

8. Features

WARNING
Refer to "Warning and Safety Information"

WARNING
The appliance is supplied complete with the lock kit and keys. It is advisable to keep the keys in a place only accessible to authorised personnel. To prevent unauthorised personnel from using the appliance, it is advisable to always close it with the key.

9. Care

WARNING
Refer to "Warning and Safety Information"

WARNING
Do not use mechanical devices or other means to speed up the defrost process.

Be careful not to damage the circuit.

10. Power failure

WARNING
Refer to "Warning and Safety Information"

10.1 Signalling

LED	MODE	FUNCTION / EXPLANATION
	ON	Compressor Operation Indicator
	Flashing	Compressor Start Delay Indicator
	ON	Defrost enabled
	Flashing	Drip time in progress
	ON	Fan Operation Indicator
	Flashing	Fan Delay Indicator (After Defrost)
	ON	Light Indicator (active on glass door)
°C / °F	ON	Measurement Unit Indicator
	Flashing	Programming Mode
	ON	Stand By Mode (Compressor OFF, Light and fan function with normal operation)

10.2 Alarms

ALARM	CAUSES
AL	MINIMUM TEMPERATURE alarm (the minimum temperature of the cell during the alarm).
AH	MAXIMUM TEMPERATURE alarm (the maximum temperature of the cell during the alarm).
id	Door microswitch input alarm (the maximum temperature of the cell during the alarm); see also parameter i4.
PF	POWER SUPPLY interruption alarm (cell temperature when power is restored) see also parameter A10 and A12.

11. Machine cleaning and maintenance

WARNING
Refer to "Warning and Safety Information"

11.1 Ordinary maintenance

WARNING
Switch off and disconnect from the power supply before cleaning.

- Clean the enclosure and interior of the appliance as often as possible.
- Clean the unit with moist cloth. Never allow the switch, control panel, cable or plug to get wet.
- Do not use abrasive cleaning agents. These can leave harmful residues. Use only mild soapy water.
- Clean the door seal with water only.
- Ensure that no cleaning water penetrates into the electrical components.
- Must not be cleaned by a water jet.
- Always wipe dry after cleaning with soft cloth.
- Do not allow water used in cleaning to run through the drain hole into the evaporation pan.
- Take care when cleaning the rear of the appliance.
- An agent or technician must carry out repairs if required.
- If the appliance is to be left inactive for long periods, unplug the appliance after having turned the switch to OFF position, empty the refrigerating compartment and clean thoroughly.

11.1.1 Precautions for maintenance

CAUTION
The Manufacturer declines any liability for operations carried out on the machine without following these instructions.

11.1.2 Cleaning the cabinet and accessories

Before using the appliance, clean all the internal parts and accessories with lukewarm water and neutral soap or products that are over 90% biodegradable (in order to reduce the emission of pollutants into the environment), then rinse and dry thoroughly. Do not use solvent-based detergents (e.g. trichloro-ethylene) or abrasive powders for cleaning. The shelves can be removed in order to thoroughly clean the compartment, therefore remove it before cleaning.

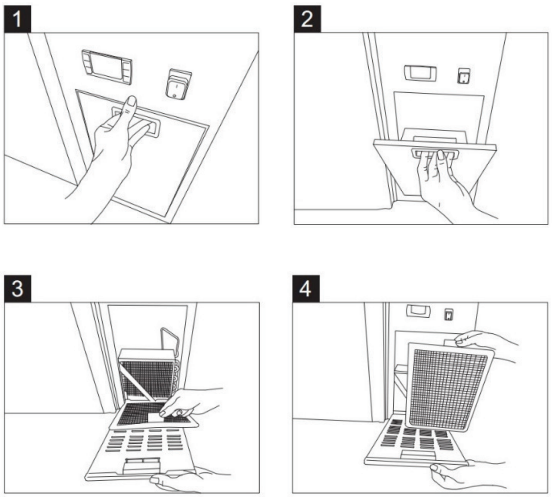
Check the power cable regularly and replace it in case of signs of wear.
Have the appliance checked periodically (at least once a year).

WARNING
Do not clean the machine with jets of water.

CAUTION
Do not use steel wool or similar material to clean the stainless steel surfaces. Do not use detergents containing chlorine, solvent-based detergents (e.g. trichloro-ethylene) or abrasive powders or agents, scouring pads or sponges that could damage the surface. Do not use organic solvent substances or essential oils. These substances could damage the parts of the appliance made from synthetic material.

Do not use products (even if diluited) containing chlorine (sodium hypochlorite, hydrochloric or muriatic acid, etc.) to clean the floor under the appliance.

11.1.3 How to clean the condenser filter



11.1.4 Precautions in case of long idle periods

If the appliance is not going to be used for some time, take the following precautions:

- periodically air the premises.

After carrying out maintenance make sure the machine is able to work safely and, in particular, that the protection and safety devices are efficient.

11.2 Extraordinary maintenance

NOTE
Extraordinary maintenance must be carried out by specialised personnel, who can ask the Manufacturer to supply a servicing manual.

- Periodically clean the condenser using suitable tools (vacuum cleaner or soft brushes) can extend the life of the appliance.
- Check that the electrical connections are not loose.
- Check that the thermostat and the sensor are in proper working order.

11.2.1 Maintenance intervals

The inspection and maintenance intervals depend on the actual machine operating conditions and ambient conditions (presence of dust, damp, etc.), therefore precise time intervals cannot be given. In any case, careful and periodical machine maintenance is advisable in order to minimise service interruptions.
It is advisable to carry out the checks with the frequency given in the following table.

Maintenance, inspections, checks and cleaning	Frequency	Responsibility
Routine cleaning general cleaning of machine and surrounding area	**daily**	**Operator**
Mechanical protection devices check their condition and for any deformation, loosening or removed parts	**monthly**	**Service**
Door frame and Gasket Check the integrity status of the door frame and door gasket. Check the cleanliness of the door frame and door gasket. Replace in case broken	**monthly**	**Service**
Control check the mechanical part, for cracks or deformation, tightening of screws: check the readability and condition of words, stickers and symbols and restore if necessary	**yearly**	**Service**
Machine structure tightening of main bolts (screws, fixing systems, etc.) of machine	**yearly**	**Service**
Safety signs check the readability and condition of safety signs	**yearly**	**Service**
Electrical control panel check the electrical components installed inside the electrical control panel. Check the wiring between the electrical panel and machine parts.	**yearly**	**Service**
Electrical connection cable and plug check the connection cable (replace if necessary) and plug	**yearly**	**Service**
General machine overhaul check all components, electrical equipment, corrosion, pipes…	**every 10 years***	**Service**

(*) the machine is designed and built for a duration of about 10 years. After this period of time (from commissioning) the machine must undergo a general inspection and overhaul. Some examples of checks to be carried out are given below.

- check for any oxidised electrical components or parts; if necessary, replace them and restore the initial conditions;
- check the structure and welded joints in particular;
- check and replace bolts and/or screws, also checking for any loose components;
- check the electrical and electronic system;
- check the functionality of safety devices;
- check the general condition of protection devices and guards.

NOTE
It is advisable to stipulate a preventive and scheduled maintenance contract with the After-Sales Service.

12. Machine disposal

WARNING
Refer to "Warning and Safety Information"

12.1 Waste storage

At the end of the product's life-cycle or if the appliance is no longer of use and you wish to dispose of it, make sure it is not dispersed in the environment. The doors must be removed before scrapping the appliance in order to prevent any small child from be trapped inside. Then please do in an environmentally correct way.
SPECIAL waste materials can be stored temporarily while awaiting treatment for disposal and/or permanent storage. In any case, the current environmental protection laws in the country of use must be observed.
Contact a qualified service technician:
1. to recover all Freon/refrigerant
2. to remove the compressor or remove the oil from the compressor
3. to remove the flammable insulation blowing gases

Then the distributor/retailer can contact their local metal recycling center to pick up the remaining cabinet, shelves, etc.

There may be special requirements or conditions. You can obtain information on the disposal of refrigeration appliances from:

- Your supplier
- Government authorities (The local council, Ministry of the Environment, etc.)

By law, disposal of hazardous wastes may be subject to fines and imprisonment under the provisions of the environmental regulations.

- The refrigerant of this unit is a hydrocarbon refrigerant and is covered by the Kyoto Protocol.
- Releasing the refrigerant to the atmosphere will harm the environment by contributing to the global warming. The Global Warming Potential (GWP) of R134a is 1430, of R404a is 3922, of R600a/R290 is 3.

12.2 Procedure regarding appliance dismantling macro operations

Before disposing of the machine, make sure to carefully check its physical condition, and in particular any parts of the structure that can give or break during scrapping.
The machine's parts must be disposed of in a differentiated way, according to their different characteristics (e.g. metals, oils, greases, plastic, rubber, etc.).
Different regulations are in force in the various countries, therefore comply with the provisions of the laws and competent bodies in the country where scrapping takes place.
In general, the appliance must be taken to a specialised collection/scrapping centre.
Dismantle the appliance, grouping the components according to their chemical characteristics, remembering that the compressor contains lubricant oil and refrigerant fluid which can be recycled, and that the refrigerator components are special waste assimilable with urban waste.

The symbol on the product indicates that this product should not be treated as domestic waste, but must be correctly disposed of in order to prevent any negative consequences for the environment and human health.
For further information on the recycling of this product, contact the local dealer or agent, the after-sales service or the local body responsible for waste disposal.

Discarded electric appliances are recyclable and should not be discarded in the domestic waste! Please actively support us in conserving resources and protecting the environment by returning this appliance to the collection centres (if available).

20
PAP

Dispose of packaging in accordance to applicable legal regulations.

NOTE
When scrapping the machine, the data plate, this manual and other documents concerning the appliance must be destroyed.

13. Enclosed documents

- Wiring diagram (included in dataplate)
- Installation diagram
- Declaration of Conformity

14. Troubleshooting guide

In some cases, faults can be eliminated easily and quickly by following a brief troubleshooting guide:

FAULT	POTENTIAL FAILURE	PROBLEM SOLVING ACTION
The appliance is not working	The unit is not switched on	Check the unit is plugged in correctly and switched on
	Plug and/or lead are damaged	Call your agent or qualified technician
	Fuse in the plug has blown	Replace the fuse (UK Plug)
	Power supply	Check power supply
The appliance turns on, but the temperature is too high/low	Too much ice on the evaporator	Defrost the appliance
	Condenser blocked with dust	Call your agent or qualified technician
	Doors are not shut properly	Check doors are shut and seals are not damaged
	Appliance is located near a heat source or air flow to the condenser is being interrupted	Move the refrigerator to a more suitable location
	Ambient temperature is too high	Increase ventilation or move appliance to a cooler position
	Unsuitable foodstuffs are being stored in the appliance	Remove any excessive hot foodstuffs or blockages to the fan
	Appliance is overloaded	Reduce the amount of food stored in the appliance
The appliance is unusually loud	Loose nut/screw	Check and tighten all nuts and screws
	The appliance has not been installed in a level or stable position	Check installation position and change if necessary
The appliance is leaking water	The appliance is not properly leveled	Adjust the screw feet to level the appliance (if applicable)
	The discharge outlet is blocked	Clear the discharge outlet
	Movement of water to the drain is obstructed	Clear the floor of the appliance (if applicable)
	The water container is damaged	Call your agent or qualified Technician
	The drip tray is overflowing	Empty the drip tray (if applicable)
Vibrations	The appliance is not properly leveled	Check to assure that the appliance is level.

The door will not close properly.	▸ The appliance is not properly leveled	▸ Check to assure that the appliance is level.
	▸ The door was reversed and not properly installed.	▸ Call Technical Support.
	▸ The gasket is faulty (magnet or rubber is spoiled).	▸ Call Technical Support.
	▸ The shelves are out of position.	▸ Check and, if necessary, reposition the shelves correctly.
The light does not work.	▸ Appliance not plugged in.	▸ Please check that the appliance is correctly connected to the power supply.
	▸ The circuit breaker tripped or a blown fuse.	▸ Call Technical Support.
	▸ The bulb is out of order.	▸ Call Technical Support.
	▸ The light button is "OFF":	▸ Please check that the Light button is positioned on "ON".

If the fault persists after carrying out the above checks, contact the After-Sales Service, remembering to specify:

4. **the type of fault;**
5. **the appliance PNC (product number code);**
6. **the Ser.No. (appliance serial number).**

NOTE
The appliance PNC and serial number are essential for identifying the type of appliance and date of manufacture. The dataplate giving the product and technical data is located inside the appliance.

When installing the appliance, make sure the electrical connection is carried out in compliance with that specified on the data plate.