# INDEX

1.	GENERAL INFORMATION				
1.1.	. Manufacturer3				
1.2.	2. Service Centers				
1.3.	Certification	3			
1.4.	Guarantee	3			
1.5.	Prearrangements of Customer's Responsibility	3			
1.6.	Structure of the Manual	3			
	1.6.1. Aims and Contents	3			
	1.6.2. Who the Manual is for?	3			
	1.6.3. Safekeeping	3			
	1.6.4. Symbols Used	3			
1.7.	DESCRIPTION AND OPERATION OF THE APPLIANCE	4			
1.8.	Description	4			
1.9.	Operation	4			
2.	PREARRANGEMENTS	4			
2.1.	Illumination	4			
2.2.	Vibrations	4			
2.3.	Emission of Sound	4			
	2.3.1. Supplies on Request	4			
2.4.	Electromagnetic Environment	4			
3.	SAFETY	5			
3.1.	General Warning	5			
3.2.	Foreseen Use	5			
3.3.	Unsuitable Conditions for Use	5			
3.4.	. Danger Zone5				
3.5.	. Switching off the Appliance,				
3.6.	Plaques	6			
4.	TRANSPORT AND MOVEMENT6				
4.1.	. Transport and Movement				
4.2.	. Storage7				
4.3.	3. Checks				
5.	INStallation7				
5.1.	I. SETUP7				
5.2.	. PREARRANGEMENTS7				
5.3.	8. CONNECTION				

	5.3.1.	Electrical	8
	5.3.2.	Hydraulics	8
6.	DURIN	G USE OF HUMAN AND ENVIRONMENTAL	8
6.1.	Dispos	al Information	8
6.2.	Equipn	nent That Completed of Life	8
7.	use of	Information on error	8
7.1.	Safety	and Warning Information	8
8.	maınta	nance can be made by consumers	9
8.1.	Cleanir	וg	9
8.2.	Failure	· · · · · · · · · · · · · · · · · · ·	9
9.	CONNE	ECTION AND INSTALLATION	9
9.1.	INSTAL	LATION	9
9.2.	CONNE	ECTION	9
10.	manuf	acturer company information1	0
11.	author	ized services information1	0
12.	activat	ion1	0
12.1	. Pr	reparation Before Activation1	0
12.2	. Co	onnection1	0
	12.2.1.		
	12.2.2.	Drainage Connection	0
13.	OPERA	.TION1	0
13.1	. Pe	ersonal1	0
13.2	. Pu	utting into Operations1	1
13.3	. Te	emperature Regulation	1
13.4		orage of Food1	
14.		NE MAINTENANCE1	
14.1	. El	ementary Safety Regulations1	1
	14.1.1.	Prohibition of Removal Safety Devices1	1
	14.1.2.	Indication on Emergency Operations in Case of Fire1	1
	14.1.3.	Cleaning of the External Parts	1
	14.1.4.	Cleaning of the Condenser	1
	14.1.5.	Periodic checks to be carried out	2
15.		OUTINE MAINTANANCE AND REPAIRS1	
16.		BLESHOOTING1	
17.		PARTS1	
17.1		apply of Original Spare Parts	
18.	GENER	AL USER INFORMATION	3

18.1.	Proc	duct Storages	13
18.2.	Peri	odic Condenser Cleaning	13
18.3.	Refr	igerator Cleaning	13
19. MA	INTER	NANCE	13
20. HAI	NDLIN	IG AND TRANSPORTATION	13
21. ANI	NEXES	5	14
21.1.	Ann	ex I - Setting up the Steam Generator	14
21.2.	Ann	ex II – Placing the Panel Type Refrigerator	15
21.3.	Ann	ex III – Digital User Manual	16
21.3	3.1.	Navigation	. 17
21.3		Run Screen	
21.3		An Overview of the Functions	
21.3		Main Functions	
21.3	3.5.	Alarms	. 25

# 1. GENERAL INFORMATION

# 1.1. Manufacturer

As the company boasts considerable experience in the field of industrial refrigeration. The technological know-how acquired, created during years of research and close contact with the production and marketing at an international level, represent the best guarantee that the manufacturer can offer. This equipment has been studied inside, externally and in its components, according to the requirements specified by your market. Furthermore every aspect has been checked for functioning and for appearance before being dispatched, as shown documentation. To guarantee the long life of this product, use it according to the suggestions made in this manual.



(Sales, Service, Spare parts and Commercial Representation) For any requirement pertaining to use, maintenance or the request for spare parts, the Costumer should use an authorized Service Centre (directly care of the manufacturer), specifying the identification details of the equipment shown on the plaques.

# 1.3. Certification

The Condensed air Refrigerator Cupboards and Tables and Refrigerator Units are produces in accordance with the European Community Regulations applicable at this time of its appearance on the market. Because the refrigerator cupboard and the table do not come into the ENCLOSED IV of the REGULATION 98/37/CEE, the manufacturer provides self-certification with the CE marking.

# 1.4. Guarantee

The new equipment is covered by a guarantee. The GUARANTEE CERTIFICATE is included with this booklet inside every product. If this booklet is not present you can ask your supplier for it, specifying:

- The serial number (stamped on the relevant plaque see paragraph 4.6)
- The date of purchase

# 1.5. Prearrangements of Customer's Responsibility

It is the Customer's responsibility to carry out everything specified in the documentation. Unless different prior arrangements have been made, the following are usually the Customer's responsibility

- Predisposition of the area, including any building work and or canalization required
- Electric power supply in accordance with the power regulations in the country of use
- Cleaning materials

# 1.6. Structure of the Manual

The Customer must read the information contained in this manual very carefully, because the correct predisposition, installation and use are the basis of the Customer-Manufacturer agreement.

# 1.6.1. Aims and Contents

This Manual aims to provide the customer with all the information necessary for not only adequate use of the equipment, but also for the safest and most autonomous use possible. It contains information regarding Technical Aspects, Operation, Stopping, Maintenance, Spare Parts and Safety.

Before carrying out any operation on the equipment, the User and the Qualified Technicians must carefully read the instructions, call the Retailer for clarification.

# 1.6.2. Who the Manual is for?

The manual is aimed at the both Retailers and users and also to maintenance workers qualified to carry out work on the equipment.

The user must not carry out work reserved for qualified Maintenance workers and/or technicians. The Manufacturer is not responsible for any damage caused by lack of respect for this last regulation.

# 1.6.3. Safekeeping

The Manual for Use and Maintenance must be kept in the immediate vicinity of the equipment, in an appropriate holder and, above all, protected from liquids and other substances that could make it illegible.

-	-,	
SYMBOL	MEANING	COMMENT
!	WARNING	Indicates a warning or a note on a key function or useful information. Pay great attention to text indicated by this.
	CONSULTATION	It is necessary to consult the instruction booklet before carrying out the operation

# 1.7. DESCRIPTION AND OPERATION OF THE APPLIANCE

# 1.8. Description

The upright refrigerators are condenser air refrigerator units made up of:

- A condensing unit (outside cold storage room)
- A evaporating unit (inside cold storage room)
- Humidification unit (positioned behind the cold storage room)
- A control panel (positioned on the condensing unit)
- Defrosting is of the electric type and it is automatic
- Condensation is air based

# 1.9. Operation

The upright refrigerators are refrigerator units which function by means of refrigerator compressor of the airtight type. With air tight motion and alternative motion, powered by electricity (mono phase or three phase) and using refrigerant the fluid (R134a, R404a, R452a, R290, R600a according to your cabinet, region and request).

Principle of refrigerator operation cycle:

In thermodynamics for the refrigerator cycle we intend to change of state which a certain body undergoes (for example a refrigerating fluid). The passage of the refrigerating fluid from the liquid state to the gaseous state takes place in the evaporator. Because this is an endothermic phenomenon, it need heat which, when it happens, is taken from air which the evaporator comes into contact with. So, when coming out of the evaporator, the vapours of the refrigerating fluid are sucked out by an air compressor and sent to the condenser. If the latter takes away not only the heat that gaseous refrigerating fluid has acquired during the course of the evaporation, but also calorific equivalent of the compression work, then the fluid returns to the liquid state. Because liquefaction is an exothermic phenomenon, there is production of heat, which is disposed of through air and through water. The refrigerant fluid, leaving the condenser, passes through an expansion organ and returns to the evaporator, thus completing the cycle.

# 2. PREARRANGEMENTS

# 2.1. Illumination

The illumination of the area must conform with the power regulations of the country in which the equipment is installed and must, in any case, guarantee good visibility at all points, it must not create dangerous reflections and must allow for easy regarding of the control.

# 2.2. Vibrations

In conditions of use which comply with the indications for correct use, the vibrations are not enough to create dangerous situations

# 2.3. Emission of Sound

The refrigerator unit is designed to reduce the level of noise at source.

# 2.3.1. Supplies on Request

It is to be understood that any modification and/or addition of accessories must be explicitly approved of and carried out by the manufacturer.

SYMBOL	MEANING	COMMENT
	WARNING	Any alteration or modification of the fridge made by the operator and/or service operator is forbidden for
Ŀ		security reasons. The manufacturer decline any responsibility for unauthorized modifications.

# 2.4. Electromagnetic Environment

The refrigerator is designed to function correctly in an industrial electromagnetic environment, coming within the Emission and Immunities foreseen by the following regulations:

- (2006/95/EC) of 12 December 2006 Low Voltage Directive and (2004/108/EC)
- EN61000-6-4:2001 Electromagnetic Compability. EN61000-6-2:1999, IEC61000-6-2:1999 General regulation for immunity industrial environments.

# 3. SAFETY

# 3.1. General Warning

The user must read very carefully the information given in this manual, with particular attention to the appropriate precautions for safety listed in this chapter.

It is imperative that the user follows the list below:

- Keep the refrigerator clean and tidy,
- Do not remove or alter the plaques placed by the manufacturer
- Do not remove or bypass the safety systems
- Do not touch the equipment with damp or wet hands or feet
- Do not touch the equipment with bare feet
- Do not insert screwdrivers or anything else between the protective cover and moving parts
- Do not pull the power cable to disconnect the appliance from the power supply
- Before carrying out any cleaning or maintenance operation, disconnect the appliance from the electric power supply, first switching off the main switch and then removing the plug

# 3.2. Foreseen Use

The upright and/or table refrigerator has been conceived and built to be used in communities, restaurants, hotels etc.

# 3.3. Unsuitable Conditions for Use

The upright and/or table refrigerator must not be used:

- For purposes which differ from those shown in 4 2;
- In an explosive, aggressive atmosphere or where there is a high concentration of oily substances or powders suspended in the air;
- In the atmosphere with a fire risk;
- Exposed to bad weather;
- With adapters, multiple sockets or extension leads

# 3.4. Danger Zone

There are no danger zones during use because the upright and/or table refrigerator has all the necessary safety devices. If repairs or maintenance have to be carried out requiring the removal of the safety devices, it is necessary first to make sure that all power sources have been switched off.

For this reason in the upright and/or table refrigerator it is necessary to deactivate: The electric plant, putting the main switch off and pulling out the plug.

At the end of any work, it is absolutely imperative that all safety devices are re-activated.

# 3.5. Switching off the Appliance,

For switching off the fridge or table, is necessary to proceed as follow:

- Turn the main switch on off position
- Remove power cable

WARNING: If the power cable is damaged, only manufacturer, service or a trained person can change the cable.



WARNING: IF DAMAGED POWER CABLE, POWER CABLE CAN CHANGE ONLY AUTHORIZED SERVICE OR TRAINED PERSON.

PLAQUE REGARDING THE ELECTRICAL APPARATUS	PLAQUE A
$\triangle$	Remove the tension before removing the protection
PLAQUE REGARDING THE ELECTRICAL APPARATUS	PLAQUE B
	Earth connection
PLAQUE REGARDING THE ELECTRICAL APPARATUS	PLAQUE C
	Warning! The Manufacturer and the retailer decline all responsibility if the power line is not protected by high sensitivity magneto thermic switch(IN-16-A ID-30 mA)
PLAQUE INSIDE REFRIGERATOR	PLAQUE D
Max. Level	Max. High Load

# 4. TRANSPORT AND MOVEMENT

READ CAREFULLY THE WARNINGS CONTAINED IN THIS MANUAL AS THEY SUPPLY IMPORTANT INFORMATION REGARDING THE SAFETY OF INSTALLATION, USE AND MAINTENANCE. KEEP THIS MANUAL SAFE FOR FURTHER CONSULTATION.

# 4.1. Transport and Movement

The transport and movement of the upright and/or table refrigerators must take place in the upright position, respecting any indications shown on the packaging.

Transport must be carried out by qualified staff.

The upright and/or table refrigerators must be transported in such a way as to avoid any damage.

The appliance is prepared for transport with or without packaging depending on the means of transport and the route. If packaging, it is cardboard or wood, adequately protected.

Movement must be carried out using a lift truck or trans-pallets with suitable forks (length at least 2/3 of the dimensions of the object).

SYMBOL	MEANING	COMMENT
!	WARNING	Damage to the appliance caused during transport and movement is not covered by the GUARANTEE. Repairs or substitution of damaged parts is at the Customer's expense.

# 4.2. Storage

In the case of long periods of inactivity, the upright and/or table refrigerators must be stored with attention to relevant storage place and time:

- Store the upright and/or table refrigerator in an enclosed area;
- Protect upright and/or table refrigerator from bumps or stress;
- Protect upright and/or table refrigerator from high thermal variation;
- Avoid upright and/or table refrigerator coming into contact with corrosive substances.

# 4.3. Checks

Before putting upright and/or table refrigerator into operation, it is necessary to carry out a series of checks to prevent errors or accidents during the activating phase:

- Checks that there has not been any damage to the upright and/or table refrigerator during assembly.
- Check with care the integrity of the control panel, the electric cable and the tubes.
- Check the precise connection to external energy supply.
- Check the free movement and rotation of any moving parts.

# 5. INSTALLATION

For an optimum functioning of the unit it is advisable to place the refrigerator in a zone with a good exchange of air and far away from any sources of heat.

# 5.1. SETUP

- Carefully remove the packaging from the cabinet;
- Remove the white PVC protection film from the stainless steel and all the protection used by the company to reduce the risk of damage during transport;
- Place the cabinet on a flat level surface. (If your cabinet has adjustable feet you can use those)

Before use, clean the cabinet with clean, soft cloth or using a spray product. It is best use little water as it contains minerals which leave traces which are difficult to remove quickly;

- Wash the tray and all the internal parts using anti-bacterial detergents to be found commercially;
- Remove the detergent with a soft sponge soaked in water and dry with a clean soft cloth;

Do not use abrasive detergents or powders which could make the finish opaque. During these phases do not, as already stated, use great quantities of water which could damage electric parts; a damp sponge is sufficient.

• If your cabinet is panel type please find the annex for assembling.

# **5.2. PREARRANGEMENTS**

Check that the cables and the sockets are suitable for the power absorbed by the equipment.

# THE USE OF ADAPTORS, MULTIPLE SOCKETS AND/OR EXTENSION LEADS IS FORBIDDEN.

- Ensure that the upright and/or table refrigerator is not installed near to sources of heat like: ovens, radiators, direct sun-light etc.
- Leave a space of at least 75 mm (3 inches) between the back of the upright and/or table refrigerator and any wall, to avoid the formation of condensation.
- The motor must be free of any obstacle which could hinder or limit the circulation trough the condensing unit situated on the top side part of the refrigerator.
- The distance between the refrigerator and the ceiling must be less 50 cm (19 ¾ inches).
- Check that the environment has a sufficient change of air, in order to guarantee the cooling of the condenser and the compressor unit.
- For a perfect functioning of the equipment, the maximum temperature of the environment should not exceed +43°C (109 °F), except for static models which should not exceed +32°C (+95°F).

Lack of respect for these conditions will provoke a serious decline in the functioning of the equipment, early ageing of the compressor and a much higher consumption of energy than normal.

# 5.3. CONNECTION

To avoid any kind of problem when upright and/or tables are switched on is good to attend to the instruction as:

# 5.3.1. Electrical

The electrical connection of the upright and/or table refrigerator is the Customer's responsibility. The connection to the power supply must respect the power supply laws in the country in which the equipment is installed (see plaque A).

- Check that the tension of the power supply is exactly that shown on the plaque (see plaque A).
- Check that the socket conforms to power regulations.
- Pay particular attention that there are no uncovered wires.
- Check the earth.

# U THE EARTH CONNECTION IS A LEGAL SAFETY REQUIREMENT.

If more than one piece of equipment is placed in line, each one must have an independent power supply.

# 5.3.2. Hydraulics

If the model does not include a condenser unit, it is necessary to connect it to a drainage system for the discharge of water from defrosting using a suitable tube of appropriate dimensions.

Locks: all the upright refrigerators are predisposed for the installation of locks, even those models which do not include them.

# 6. DURING USE OF HUMAN AND ENVIRONMENTAL

# 6.1. Disposal Information

- The packaging is made of recyclable materials.
- Corrugated cardboard/paperboard.
- Foamed form boxes made of Polystrol.
- Belts made of Polyethylene tapes.
- Belts made of Polypropylene tapes.
- Packaging materials are not children's toys There is a risk of suffocation due to the foil!
- Take the packaging to an official collection center.

# 6.2. Equipment That Completed of Life

- Presently contains valuable materials and should be taken to different facilities of separated waste in residential areas.
- Make of unusable equipment that completed of life. Unplug, disconnect the cable.
- Careful not to damage the refrigerant circuit until delivered to the designated collection center.
- Information contained in the coolant, can be found on the type plate.
- You can take information from your municipality about collection places.

# 7. USE OF INFORMATION ON ERROR

# 7.1. Safety and Warning Information

- Avoid damage to the touch human and belongings, we recommend that device installed by two people removed from the packaging.
- In the event of any malfunction in the device, immediately (before connecting the device) consult the dealer.
- To work in a safe manner, mount and connect appliance according with the instructions contained in the user guide.
- Disconnect the power supply in case of failure of the device, Unplug or turn off the breaker or remove.
- Disconnect the device from the mains to not on the cable, grasp the power plug.
- Any repairs and work on the device should be done by the customer service, otherwise there can be major hazards for the user. The same is true for changing power cord.
- Do not operate something with an open fire and ignition sources inside the device. Keep away from sources of ignition in case of damage and the room well ventilated.
- Do not use the base to withstand, drawers or doors.
- Do not eat ice cream, frozen water or ice cubes and very cold from the fridge as you uninstall. Has a "burn hazard" due to the low temperature
- Do not use the food stored for too long, it may cause food poisoning.
- Do not keep in the device, explosive substances or propane, butane, pentane containing flammable materials such as spray cans.
- Do not use electrical appliances inside the appliance.
- In a lockable models, do not put key near device and reach of children.

This manual is valid for multiple models, may deviate from the values given here.

# **IMPORTANT NOTICE!**

Before commissioning the appliance defrost water drain plug provided with the appliance and close the hole in the bot-tom of the device! Important for regular work.

### 8. MAINTANANCE CAN BE MADE BY CONSUMERS

#### 8.1. Cleaning

Before cleaning disable the device. Unplug or turn off the breaker located in the installation.

Internal partitions, hardware parts and outer walls clean with warm water and a little detergent. Never use sand, cleaners containing acids and chemicals.

#### Do not operate steam cleaning appliances!

Damage and injury

- Cleaning water should not enter electrical components and ventilation grill.
- Dry everything thoroughly with a soft cloth.

Import and export air grill should be cleaned regularly with a brush machine. Accumulation of dust increases the energy consumption. Be careful not to damage the cables and other components.

#### 8.2. Failure

The following errors, you can fix yourself by checking the possible causes.

#### The device does not work, check lamp does not light up:

- Check mains plug is properly plugged into the power outlet
- Check whether the socket fuse intact

#### Too much noise, do the following checks

- The appliance should stand firm on the ground.
- Cold circuit current in the prevention of noise-other note of it.

#### The temperature is not low enough, you perform the following check

- Adjustment "Set Temperature" value in accordance with section set?
- Excessive amounts of fresh food have been placed on 24-hour watch the gauge.
- Established as a separate thermometer shows me the correct value?
- Outward flow of air eligible?
- The installation location is too close to a heat source?

If none of the above causes mentioned, if you cannot resolve the fault yourself, please contact your nearest customer service. Please type in the tag type of device, the device number. Devices on the label located on the upper side wall of the cabinet.

# 9. CONNECTION AND INSTALLATION

# 9.1. INSTALLATION

- Stay away from exposed to direct sunlight, over oven, heating and like installation places.
- The installation site must be flat and level ground.
- Keep a sufficient distance from the wall for opening and closing the cover hassle of device.
- Do not close the space between bottom freezer and ground. It is important for the compressor to provide cooling air.

#### 9.2. CONNECTION

Current type at the installation site (alternative current) and voltage, should be the same as stated on the label Progress. Model label in the core, on the left, is located next to vegetable eyes. Wall plug should be protected by a fuse or 10 A, must be in an easily accessible place.

# **11. AUTHORIZED SERVICES INFORMATION**

#### **12. ACTIVATION**

# 12.1. Preparation Before Activation

- Make sure the cables and electric power that connecting to product provide the necessary electrical power.
- Make sure counter type and vertical type refrigerator is placed away from hear sources. Such as furnaces, radiators, direct sunlight, etc.
- Leave space at least 75mm (3 inches) at the back of the refrigerator. This is important for condensation
- Cooling unit should be away from strong air obstructions, should be a place where comfortable and breathable.
- With the upper body of refrigerator and attic must be min 50cm (9inches) space.

Should be maximum ambient temperature of +43°C (+109°F) for products in order to work correctly. However, statically cooled systems can be operated at +32°C (+95°F) maximum ambient temperature.

Failure to comply with the above conditions, operating performance of the product will be serious decline, premature wear of the compressor and also consumes more energy than usual.

# 12.2. Connection

Please follow the instructions listed below before running;

#### 12.2.1. Electrical

Making horizontal and vertical connections in under user's responsibility. Check that the electrical connections according to the rules of electrical connection the country.

- Check even voltage be sure that the same written on the label.
- Check electrical outlet that according to electrical power rules
- Check whether exposed cable.
- Check the grounding.

#### USE OF DEVICE IS DANGEROUS AND ILLEGAL WITHOUT GROUNDING.

If you are connected multiple products to the same source, there should be a separate electrical outlet each other.

#### 12.2.2. Drainage Connection

If you do not have evaporator in your product, it must be connected for the water drainage hose for removal of water out.

# **13. OPERATION**

# 13.1. Personal

The staff who are to use and installed the appliance, must possess (or acquire through adequate formation and training) the following skills and must understand the contents of this manual and all the relevant Safety Information:

- General technical knowledge enough to understand the contents of the Manual.
- Awareness of the main hygiene, accident prevention and technological regulations.

# 13.2. Putting into Operations

If the equipment has been mistakenly positioned horizontally during transport, wait about 2 hours, after putting in into a vertical position, before it into operation.

# 13.3. Temperature Regulation

The choice of temperature must take into consideration:

- The type of product which is going to be kept in the cold storage room;
- The temperature of the environment;
- The frequency of door opening;

It is to be remembered that:

• Negative refrigerators (-10°C/-25°C) (14°F/32°F) are suitable for the conservation of frozen products for long periods of time and for the freezing of small quantities of fresh foodstuffs of small dimensions.

In any case, before loading the equipment, it is necessary to wait until the cold storage room have reached the correct temperature, checking it on its thermometer. If there are any brief interruptions to the electricity supply, it is probable that the compressor might start with some delay; this is perfect normal.

# 13.4. Storage of Food

In order to obtain the best possible working of the refrigerator, it is necessary to respect the following indications:

- Do not put hot foods or uncovered liquids into the cold storage room;
- Wrap up or cover all foods, especially those with strong aromas or cream;
- Organize the foodstuffs inside the cold storage room in such a way as not to block the circulation of air with superfluous objects;
- Avoid to keep open the door for long periods of time;
- Wait a few moments before opening a door which has just been closed.

# **14. ROUTINE MAINTENANCE**

The information contained in this chapter is aimed at the Use (non-specialized person) and at the Ordinary Maintenance Staff.

# 14.1. Elementary Safety Regulations

# 14.1.1. Prohibition of Removal Safety Devices

The removal of safety protection is absolutely forbidden for the carrying out of ordinary maintenance work. The Manufacturer decline any responsibility for any accident caused by the lack of respect for the above written regulation.

# 14.1.2. Indication on Emergency Operations in Case of Fire

- Remove the plug from the socket or switch off at the mains;
- Do not use water jets;
- Use powder or foam extinguishers.

# 14.1.3. Cleaning of the External Parts

The following are indicated for this purpose;

- Cleaning products water and neutral nonabrasive detergents (DO NOT USE SOLVENTS);
- Cleaning methods wash with a cloth or a sponge;
- Frequency weekly

# 14.1.4. Cleaning of the Condenser

The efficiency of the condenser unit is compromised by the blocking of the condenser which makes it necessary to clean in weekly. Before carrying out this operation, switch off the appliance, remove the power cable and proceed as follows:

• With the use of an air jet or dry brush with rigid bristles, eliminate, with a vertical movement given in in below figure, the dust and down from the wings.

In the case of oily deposits, use a brush soaked in spirit or similar product. When the operation is finished, start the appliance up in the normal way.



# 14.1.5. Periodic checks to be carried out

It is necessary to check periodically that the electric cables and the electric parts are undamaged.

# **15. NON-ROUTINE MAINTANANCE AND REPAIRS**

Non-routine maintenance and repairs must be carried out by qualified personnel authorized by the manufacturer. The manufacturer declines any responsibility for jobs carried out by unauthorized personnel or the use of non-original spare parts.

# **16. TROUBLESHOOTING**

The following table shows the most frequent problems, possible causes and remedies.

Problem Description	Possible Cause	Solution
The appliance does not come on	The main switch is "off" There is no tension Other Set point is reached	Main switch "on" Check plug, socket, fuse, electrical connection Contact technical assistance
The refrigerator, heating or humidification unit does not start	Defrosting is in operation In automatic procedure one of the process could not be working. Control panel is broken Other	Set new temperature Wait for end of the procedure or cycle, switch off and switch back on Contact technical assistance
The refrigerator is continuously working but does not reach the set temperature	Room is too hot Condenser is dirty Refrigerant is not sufficient Condenser fan has stopped Door not properly closed Evaporator is frosted up Evaporator fan has stopped Defrost valve is open	Place the cabinet that can take fresh air Clean condenser Contact technical assistance Check the door seals Manual defrosting Contact technical assistance
Refrigerator does not stop at the set temperature	Control panel is broken Temperature probe is broken Door is not airtight	Contact technical assistance Close the door correctly
Steam generator is not stopped at the set humidity	Control panel is broken Humidity probe is broken De-humidification process is on and couldn't reduce the humidity	Contact technical assistance At the beginning of de-humidification process reaching above the set point is normal, follow the humidity and it should not reduce, contact with technical assistance.
Pool of water or ice in drip tray	The hose is blocked Appliance not levelled	Clean drain line and discharge Contact technical assistance
Appliance is noisy	Appliance is not levelled Contact with external bodies Screws or nuts loose Copper pipe touching the vibrated elements such as compressor, condenser fan etc.	Check the appliance level Check that no tube or ventilator fan is in contact with external bodies Tighten the required screws or nuts Contact technical assistance

IN ORDER TO GUARANTEE THE EFFICIENCY OF THE APPLIANCE AND ITS CORRECT FUNCTIONING THE MANUFAC-TURER'S INTRUCTIONS MUST BE FOLLOWED AND PERIODIC SERVICING MUST BE CARRIED OUT BY PROFESSIONALY QUALIFIED PERSONNEL (LEGAL REQUIREMENT FOR THE PREVENTION OF ACCIDIENTS AT WORK AND THE INSTALLATION OF ELECTRICAL AP-PLIANCES). IT IS OBLIGATORY TO BE IN ACCORDANCE WITH POWER SUPPLY REGULATIONS.

# **17. SPARE PARTS**

# 17.1. Supply of Original Spare Parts

For the substitution of any parts, spares can be obtained at our authorized centers on giving;

- Serial number and year of manufacturer
- Component identification number

Any malfunctioning due to non-original spare parts will not be recognized by our technicians.

# **18. GENERAL USER INFORMATION**

# 18.1. Product Storages

• For vertical and horizontal equipment do not load the shelf completely (from one shelf to other which is placed above), for better performance please use half height of the shelves. With this type of loading air circulation of your cabinet would be much better.

# 18.2. Periodic Condenser Cleaning

As described in section 15.1.4, do not use water jets, solvents, or any other chemicals, to clean the condenser please use air blower or vacuum cleaner.

# 18.3. Refrigerator Cleaning

Water jets, solvents or any other chemicals is prohibited to use in refrigerator. Please clean your cabinet with water and soft cloth or sponge.

# **19. MAINTENANCE**

- Do not try to repair the appliance on your own
- If any fault occurs, contact with authorized services
- Interfere the device must be performed by qualified service personnel

# 20. HANDLING AND TRANSPORTATION

- Move products with box during the transportation
- Product box will protect against physical damage of products.

# 21. ANNEXES

#### 21.1. Annex I - Setting up the Steam Generator

Before plugging in please check the following instruction



Behind your cabinet there is a box which is placed as steam generator, on the right hand side there are two holes. One for is fresh water inlet and the second one is for excessive water outlet.

Fresh water inlet has solenoid value on it. Please be sure before using the cabinet contact region of sheet metal and solenoid value is well sealed and tightened.

If one of the components which is working for the water levelling is faulted this outlet prevents to excessive water filling inside of the tank and prevents to flooding inside of your cabinet. Suggested that connect this outlet to waste water line to prevent water flooding to the room that the cabinet placed.

21.2. Annex II – Placing the Panel Type Refrigerator



The main screen of the digital as shown in below:

	Tuesday 01/05/17 16:40		
manual	automatic	cookbook	pre-cooling
() ()			ل ا

The four interactive keys grant access to the following functions

Symbol	Definition
MANUAL	Select, set and start up a manual cooling or heating cycle
AUTOMATIC	Select, set and start up a complete automatic retarding-proofing cycle
СООКВООК	Select and/or change automatic retarding-proofing cycles saved in the memory
PRE-COOLING	Set and start up a cabinet pre-cooling cycle
<b></b>	Turn on/off the lights
し	Stand-by button

# 21.3.1. Navigation

Navigating the menus is intuitive, based on touch technology.

- To enter into a procedure touch the menu or the corresponding icon
- To exit the procedure and, in general, to return to the previous level, press the Back Key
- To scroll up and down a menu use the and keys
  To confirm the settings and/or changes press the Key
  To start up a cycle press
  To interrupt a cycle hold down for at least 4 seconds
- To regulate a setting, use the and + keys or press and drag the relevant bar
- To silence the buzzer touch any key while it is sounding.

# 21.3.2. Run Screen

Once a manual or automatic cycle has been started up, the Run Screen will appear for the type of cycle selected.

#### MANUAL REFRIGERATION MANUAL HEATING 5 # CB CB \* 🖩 & 🕆 🖓 🖗 \* Sunday 02/04/17 19:14 Sunday 02/04/17 19:14 MANUAL MANUAL % % 0 0 $\overline{\mathcal{C}}$ $\overline{\mathcal{C}}$ 388 888

AUTOMATIC



#### **Regulator Status Icons and Function Keys**

While a manual or automatic cycle is being run, the status of the principal loads are displayed as icons on the upper part of the screen. The table below gives their description when switched on:

# Symbols

#### Definitions

ලි \* G, () ||

**Compressor Active** 

**Heating Active** 

Fans working

Defrosting in progress

Humidification in progress

Dehumidification in progress



Alarm in progress

Switch light on/off

Manual commands for changing set points and activating manual defrost

Display input/output and alarm status

#### **Screen Saver**

After a period of inactivity, the run screen which is shown above will switch to screen saver showing the values detected by the probes in use.

Just touch the screen to exit the screen saver. When an alarm is in progress the screen will be restored.



# 21.3.3. An Overview of the Functions Automatic and Manual Cycles

The controller provides complete control for retarding-proofing cabinets or rooms for bread or pastry-making by managing the complete dough retarding-proofing cycle automatically.



An automatic retarding-proofing cycle consists of 5 different phases with different temperatures, relative humidity, fan speeds and durations, one run after the other in the following order.

#### 1. BLOCKING phase

Temperature regulation is active and has a neutral zone adjustment, the temperature set point, the humidity set point (if control of this is required), the fan speed and duration in hours and minutes for the phase are set by the end-user.

Relative humidity regulation depends on parameter rU4. If this is set to zero humidity control is not carried out in this phase.

#### 2. CONSERVATION phase

Temperature regulation is active and has a neutral zone adjustment, the temperature set point, the humidity set point (if control of this is required) and the fan speed are set by the end-user.

Moving from the blocking set point (previous phase) to the conservation set point can be gradual, with the incremental percentages set while the parameters are being set.

Relative humidity regulation depends on parameter rU4. If this is set to zero humidity control is not carried out in this phase.

The duration of this phase is calculated automatically by the controller on the basis of the duration of the blocking, re-awakening and proofing phases and the day and time for the end of proofing required for the dough.

#### 3. RE-AWAKENING phase

Temperature regulation is active and has a NEUTRAL ZONE adjustment, the working set point is set by the end-user. Moving from the conservation set point (previous phase) to the re-awakening set point can be gradual, with the incremental percentages set while the parameters are being set.

Relative humidity regulation is active and has a NEUTRAL ZONE adjustment, the working set point is set by the end-user.

The duration in hours and minutes and the evaporator fan speed are set by the end-user.

#### 4. PROOFING phase

Temperature regulation is active and has a NEUTRAL ZONE adjustment, the working set point is set by the end-user. Moving from the re-awakening set point (previous phase) to the proofing set point can be gradual, with the incremental percentages set while the parameters are being set.

Relative humidity regulation is active and has a NEUTRAL ZONE adjustment, the working set point is set by the end-user.

The duration in hours and minutes and the evaporator fan speed are set by the end-user.

5. BAKING DELAY phase

The baking delay phase is always disabled but it can be enabled, either when the cycle is being set up or while it is in progress, by the end-user.

Temperature regulation is active and has a NEUTRAL ZONE adjustment, the working set point is set by the end-user.

Relative humidity regulation is active and has a NEUTRAL ZONE adjustment, the working set point is set by the end-user as is the evaporator fan speed.

Theoretically this phase has an infinite duration as it terminates when the cycle is interrupted by prolonged pressing (for 4 seconds) of the stop key.

Two manual working cycles are also available: a MANUAL REFRIGERATION cycle (equivalent to a conservation cycle but with an infinite duration and without the regulating steps), and a MANUAL HEATING cycle (equivalent to a proofing cycle but with an infinite duration and without the regulating steps).

To make it possible to regulate in these ways, the controller must manage the loads associated with cooling (compressor, evaporator fan, defrost, pump-down solenoid valve), with heating (heater or heat pump working), with humidification (steam generator, humidifier) and with dehumidification (dehumidification by extractor fan or by activating the refrigeration plant). The way each function is regulated is described in subsequent sections.

#### **Other Functions**

As well as managing automatic and manual cycles, the controller is able to manage such other functions as:

- Pre-Cooling
- Engage/disengage "baking delay"
- Cabinet light
- Recipe book with 100 user recipes
- On-board USB port

# 21.3.4. Main Functions Manual Cycle



This area grants access to manual REFRIGERATION or HEATING cycles.



Before starting up the required cycle, press the screen inside the colored area (blue for REFRIGERATION and red for HEATING) to access all the functions for changing the set points for the cycles in question.



The required cycle is started by pressing the relevant **START** area. To interrupt the cycle hold down **STOP** for 3 seconds.



Manual cycles do not allow a duration to be set, they can only be terminated manually by pressing the **Store** key.

# Automatic Cycle



#### Start-up and interruption of an automatic cycle

This area grants access to the following screen displaying all the phases making up a RETARDING-PROOFING cycle: blocking, conservation, reawakening, proofing and baking delay (see section 7 FUNCTIONS).

<			Sunday 02/0	04 / 17 19:14
1	2	3	4	5
-49 ℃	-50 °C	-50 °C	-50 °C	-50 °C
O <sup>7</sup> 100 %	O <sup>7</sup> 100 %	O? 0 %	<b>()</b> 0 %	O 0 %
<b>ගි</b> 100 %	<b>6</b> 3 %	<b>6</b> 5 %	<b>6</b> 5 %	<mark>ගි</mark> 5 %
8 00:01		8 00:30	8 00:30	YES
END CYCLE	Sunday 04/04	1/04 04:04	( <sub>+24H</sub>	START

The automatic cycle starts up when the **START** area is pressed and it terminates automatically at the end of phase 4 and according to the time set for it to end, at which time a buzzer sounds.

If the end-time is later than the sum of all the timings for each phase, the controller will automatically increase the conservation time (phase 2) to fill the time gap.

The cycle can be interrupted manually during any phase by holding the **STOP** key down for 4 seconds.

Phase 5 (baking delay) is optional and does not require a duration to be set and therefore, if enabled, it can only be terminated manually by pressing the **STOP** key.



#### Making changes to an automatic cycle

Before starting up a cycle, the setpoint setting menu can be accessed for each of the retarding-proofing phases and pressing the corresponding coloured area will enable changes to be made to the phase in question.



Once OK has been pressed each time to confirm the changes, these will be saved and used as the settings for the automatic cycle which is started up by pressing the **START** area.



The CYCLE END icon is displayed on the bottom left of the screen showing the time set by the user for the end of the cycle, while the date and day of the week are calculated automatically by the controller on the basis of the sum of times set for each individual phase (from phase 1 to phase 4).

Pressing the CYCLE END area makes it possible to change the time of the cycle end and, provided this is confirmed by pressing the REFRESH key, the cycle end date can be changed although this can only be later than the first appropriate date calculated by the controller.



Alternatively, the cycle end date can be postponed using the **defense** quick key.

# Saving an Automatic Cycle

recipe. When the operation has been completed, press the

To name and save the cycles set before their start-up, press the icon, top left and scroll through the pages of the recipe book with the list of recipes using the or keys and choose the desired position in which to save the recipe, giving it a new name or overwriting an existing

key to confirm.

**RECIPE NAME** red meat â ã ä ê ñ ó ô ò õ ù ú û ü Ý ?123 1 OK

#### **Recipe Book**



This area grants access to the MY RECIPES screen listing the automatic retarding-proofing cycles saved with the name by the user, following the procedure described in the previous section 7.7.3. Users can save up to 100 recipes.



Press the name of the required recipe to gain direct access to the automatic cycle start-up page, from which it is possible to run a cycle or enter the various phases to change the settings and to create a new recipe from it, which can also overwrite an existing recipe or save it with a different name (see section 7.7.3).

It is not possible use dashes in memory names and when such a recipe on the list is pressed there will be no effect.

### Pre-cooling



This area makes it possible to activate pre-cooling of the cabinet in advance of selection of a retarding-proofing cycle.

Pressing the pre-cooling area opens up a screen in which the cabinet temperature set point can be regulated, starting the function by pressing the





When the function is active, the corresponding area will be colored blue and the temperature detected in the cabinet will be displayed. Once it first reaches the temperature set point, the controller will sound a buzzer. If the temperature in the cabinet is equal to or lower than the set point, the precooling function cannot be activated.

The pre-cooling function is of infinite duration and it terminates as soon as a manual or automatic cycle is started up or when it is interrupted by pressing the **STOP** key.



# 21.3.5. Alarms

An alarm event is signaled by a prolonged buzzer sound and it can be seen when the *icon* appears on the upper part of the screen. The type of alarm is shown in text on the lower part of the screen. The text does not appear on the settings page and if an alarm situation happens while the display is in screen-saver mode, the menu currently in use appears on the display.

To silence the buzzer, touch the screen at any point, while to remove the signal icon touch the screen over this and access the page listing the alarms on which those that are active are shown with the word ON alongside.

The table below lists the alarms that may be signaled. For the alarm that requires the parameter investigation please contact with your technical assistant.

Alarm	Description
	Maximum evaporator temperature alarm
Evaporator High Temperature	To correct
	- Check the evaporator temperature
	- Check the value of parameters A1 and A2
	Main results
	- All loads are deactivated
Cabinet High Temperature	Maximum cabinet temperature alarm To correct
	- Check the cabinet temperature
	- Check the value of parameters A3 and A4.
	Main results
	- All loads are deactivated until alarm stops
Door Open	<ul> <li>The alarm indication will disappear only by touching the alarm area.</li> <li>Door open alarm.</li> </ul>
	To correct
	- Check the door status.
	- Check the value of parameters i0, i1 and i2.
	Main results
	- The effect set by parameter i0.
High Pressure	High pressure alarm. To correct
	- Check the state of the high pressure input.
	- Check the value of parameters i3, i4 and i5.
	Main results
	- The effect set by parameter i3.
Low Pressure	Low pressure alarm.
	To correct - Check the state of the low pressure input.
	<ul> <li>Check the state of the low pressure input.</li> <li>Check the value of parameters i6, i7, i8 and i9.</li> </ul>
	Main results
	- Compressor and condenser fan are switched off
Compressor Thermal Switch	Compressor thermal switch alarm.
	To correct
	<ul> <li>Check the state of the compressor thermal switch input.</li> <li>Check the value of parameters i16, I7 and i8.</li> </ul>
	Main results
	- Compressor is switched off
Thermal Switch	Compressor thermal switch alarm.
	To correct
	- Check the state of the thermal switch input.
	- Check the value of parameters i10 and i11. Main results
	- All loads are deactivated
Power Failure	Power failure during a cycle run alarm.
	To correct
	- Check the device-power supply connection.
Condenser Overheat	Condenser overheat alarm.
	To correct - Check the condenser temperature
	- Check the value of parameter C6.
	Main results
	- The condenser fan will be switched on.
Compressor Locked	Compressor locked alarm.
	To correct
	<ul> <li>Check the condenser temperature</li> <li>Check the value of parameters C7 and C8.</li> </ul>
	<ul> <li>Disconnect the device from the power supply and clean the condenser.</li> </ul>
	Main results
	- If the error happens during an operating cycle, the cycle will be interrupted.

Pump Down	Pump down alarm
	To correct
	- Check the maximum pump-down time set by parameter u2
	- The alarm will be re-armed when the compressor is next activated or by pressing the buzzer silencing key Main results
	- Compressor switched off
	Cabinet probe error.
Cabinet Probe	To correct
	- Check the parameter PO value
	- Check probe integrity
	- Check the device-probe connection
	- Check the cabinet temperature.
	Main results
	- If the error happens during "stand-by", it will not be possible to start up an operating cycle.
	- If the error happens during a cycle, the cycle will be interrupted.
Evaporator Probe	Evaporator probe error.
	To correct
	- The same as for the cabinet probe error but with reference to the evaporator probe.
	Main results
	<ul> <li>If parameter P3 is set to 1, defrosting will last for the time set by parameter d3.</li> </ul>
Condenser Probe	Condenser probe error.
	To correct
	- The same as for the cabinet probe error but with reference to the condenser probe.
	Main results
	<ul> <li>The condenser fan will operate in parallel with the compressor.</li> <li>The condenser overheat alarm will never be activated.</li> </ul>
	The compressor locked alarm will never be activated.  Humidity transducer error.
Humidity Probe	To correct
	- Check transducer integrity
	- Check the device-transducer connection.
	<ul> <li>Check cabinet relative humidity.</li> </ul>
	Main consequences if parameter rU0 is set to 0:
	- If the error happens during "stand-by", it will not be possible to start up humidity management cycles.
	- If the error happens during a humidity control cycle, the cycle will be interrupted.
RTC	Clock error.
	To correct
	- Re-set the date and time.
	Main results
	- The device is unable to start up automatic cycles
	- Any automatic cycles in progress will be blocked.
Power Board Incompatibility	User interface-control module compatibility error.
	To correct
	- Check that the user interface and the control module are compatible.
	Main results
	Cycle in progress interrupted.
No Communication	User interface-control module communication error. To correct
	- Check the user interface-control module connection.
	An results
	- Cycle in progress interrupted.
ESP Incompatibility	Humidifier user interface compatibility error with the EASYSTEAM serial control (if E12 = 1).
	To correct
	- Check that the user interface and the humidification module are compatible.
No Esp Communication	Humidifier user interface with EASYSTEAM serial control communication error (if E12 = 1).
	To correct
	- Check the user interface-humidification module connection.
	Errors arising from the humidifier with EASYSTEAM serial control (if E12 = 1).
H Exx	To correct
	- Check the manual for the humidifier with EASYSTEAM serial control.