

MOD: NFT402-R2

Production code : ACE 430 CS PO

HORECA MODELS (EN)

Operating and Maintenance Manual
"Original instructions"

1. General Information	28
1.1. General Conditions	28
1.2. Restrictions of Usage and Maintenance	28
2. Safety Instructions	29
2.1. General Safety	29
2.2. Technical Safety	30
2.3. Recommendations for Use	32
3. Installation	33
3.1. Unpacking the Equipment	33
3.2. Transport and Handling of Equipment	33
3.3. Positioning of the Equipment	34
3.4. Application of Accessories	34
3.5. Before Switching On	36
3.6. Connecting to the Electricity Mains	36
4. Operation	36
4.1. Digital Thermostat Models	36
4.1.1. Carel Easy.....	36
4.1.2. Carel IJF.....	39
4.1.3. Dixell	42
4.2. Analog Thermostat Models	43
4.3. Product Load	44
4.4. Defrosting	45
4.4.1. Positive Storage Models	45
4.4.2. Negative Storage Models	45
5. Maintenance	46
5.1. Cleaning	46
6. Door Reversal	47
7. Replacement of Lights (models where applicable)	47
8. Troubleshooting Guide	48
8.1. Repair Guide	49
9. Recycling Instructions	50
9.1. Recycling the Packaging	50
9.2. Recycling of Used Equipment	50

Annexes I - Wiring Diagram

Anexo II – Declaration of Conformity

Annexes III - Product Data Sheet (when applicable)

1. GENERAL INFORMATION

1.1. GENERAL CONDITIONS

For your safety and the proper use of the equipment, please read these instructions carefully and comply with the warnings and recommendations contained therein before installing the equipment for the first time.

You should keep these instructions in a safe and dry place and always accessible to the user as they contain important information on equipment installation, operation, and maintenance. Keep all documentation for your own use or for another person who may come to own this equipment in the future.

Proper installation and rational use, in accordance with these instructions, will enable a better performance of the equipment.

1.2. RESTRICTIONS OF USAGE AND MAINTENANCE

The models ARV 4 FV; ARV 36; ARV 66; ARV 100; ARV 150; ARV 200; ARV 250; ARV 350; ARV 400; ARV 430; ARV 450; ARV 600; ARV 800; MM5; ATP 500; AP 600; ATG 600; ASP 400; AGP 700; AGP 1400; BRS; BRG; BRSB; BRGB; BPP; BPG; FGB; RK, and MRK (and their variants) are designed for the chilling and preservation of fresh produce and beverages.

The models ACE 66; ACE 150; ACE 400; ASP 400 N; ACV 420; ACE 430; ACE 450; MM5 N; ATP 500 N; ATG 600 N; AP 600 N; AGP 700 N; AGP 1400 N (and their variants) are designed for the preservation of frozen products.

The opaque door variants of the models ARV 36; ARV 66; ARV 100, ARV 150, FGB, BRS, BRG, BRSB and BRGB are considered refrigerated counters for professional use.

The opaque door variants of the models AP 600, MM5, ATG 600, ARV 450, ASP 400, ARV 800, AGP 700 and AGP 1400, ARV 200; ARV 250; ARV 350; ARV 400; ARV 430; ARV 600 and ATP 500 are vertical refrigerated equipment for professional use.

The models ASP 400 N, AGP 700 N and AGP 1400 N are vertical frozen storage equipment for professional use.

The glass door variants of the models ARV 4 FV, ARV 36, ARV 66, ACE 66, ARV 100, ARV 150, ACE 150, ARV 200, ARV 250, ARV 350, ARV 400, ACE 400, ASP 400, ARV 430, ACE 430, ARV 450, MM5, ATP 500, AP600, ARV 600, ATG 600, AGP 700, ARV 800, AGP 1400, BRS, BRG, and FGB, as well as the MRK 6, MRK 102, OC150, Fast Line, and MRV 400 are considered refrigerated equipment with a direct sales function.

Note 1: ARV (Vertical Refrigerated Cabinet) // 4; 36; 66; 100; 150; 200; 250; 350; 400; 430; 450; 600; 800 (size/series)

Note 2: MM5 (Marecos Cabinet 500 litres); ATP (Bakery Countertop Cabinet 600x400, 500 liters); AP 600 (Pastry Cabinet GN 2/1, 600 liters); ATG 600 (Countertop Gastronomy Cabinet GN2 / 1, 600 liters); ASP 400 (Professional Snack Cabinet, 400 liters); AGP 700/1400 (Professional Gastronomy Cabinet, 700 or 1400 Lts) ACV 420 (Ventilated Freezing Cabinet). Positive and negative models (N).

Note 3: BRS (Snack Refrigerated Counter); BRG (Gastronomy Refrigerated Bench); BRSB (Low Snack Refrigerated Counter); BRGB (Low Gastronomy Refrigerated Counter); BPP (Pizza Preparation Counter); BPG (Gastronomy Preparation Counter).

Note 4: FGB (Minibar); RK (Horizontal Cooler); MRK (Horizontal Cooler).

Note 5 : ACE (Fixed Cooler) // 66; 150; 400; 430 (dimension/ series).

Note 6: OC (Open Cooler, 150 Lts); MRV (Wall Cooler).

2. SAFETY INSTRUCTIONS

2.1. GENERAL SAFETY

The use and handling of this equipment is not recommended for children and persons with reduced mental, physical, or sensory abilities. The use of the equipment by persons with little experience or knowledge of the operation of the equipment is also not recommended unless accompanied and supervised by a person who has been duly instructed and made responsible for their safety.

Children should not play with the equipment.



Keep the packaging and all its components out of the reach of children.

Choking hazard! The package may contain cartons or films.

Before connecting the equipment, check if the cable and power cord have been damaged during transport. In the event of damage, it must be replaced immediately by the manufacturer or its authorized dealer in order to avoid risk of electrocution.

The operating conditions of the equipment are shown on the nameplate inside the equipment, by means of the climate class indicator. The equipment can be classified according to the classes below:

Climate Class	Max. Environment Temperature	Max. Relative Humidity
3	25 °C	60%
4	30 °C	55%
5	40 °C	40%

The minimum operating temperature is 10°C.

2.2. TECHNICAL SAFETY



This equipment has a small amount of refrigerant (R600a or R290, depending on the model) which, while not non-polluting, is flammable.

Care should be taken to ensure that the refrigerant tube is not damaged during transportation or assembly. The refrigerant may cause damage to the eyes or ignite when released.

In case of damage:

- Keep the equipment away from naked flames or ignition sources;
- Air out the cabinet well for a few minutes;
- Disconnect the plug from the mains;
- Contact the technical service.



The compartment where the equipment is installed should be as big as necessary for the refrigerant in the appliance. In very small spaces and in the event of a leak, a flammable gas/air mixture may form.



The compartment should be at least 1m³ for every 8 gr of refrigerant.

The amount of refrigerant in the appliance is indicated on the rating plate inside the same appliance.



Replacement of the electrical cable and other repairs may only be carried out by

qualified service personnel in order to prevent dangerous situations. Improper installation and repairs can result in a number of hazards to the user.

2.3. USAGE RECOMMENDATIONS

- Do not touch the appliance with wet or damp hands and feet;
- Disconnect the equipment from the socket by pulling on the plug, not the power cord;
- Never use electrical appliances inside the equipment (e.g. heaters, electric ice cream makers, etc.) Risk of explosion!
- Do not store flammable products in the appliance (e.g. spray cans) and explosive products. Risk of explosion!
- Keep alcoholic liquids with a high alcohol content in a hermetically sealed container and in a vertical position;
- To defrost and clean, unplug the appliance from the wall socket;
- Never use mechanical devices or other means to speed up the defrosting process other than those recommended by the manufacturer (e.g.

defrosting or cleaning the appliance with a steam cleaner! The steam can reach the electrical components and cause a short circuit. Electrical shock hazard!

- Do not use any pointy objects or with sharp edges to remove single or layered ice. This may damage the tubing where the refrigerant circulates, and this may freeze, ignite, or cause injury to the eyes! Do not damage the refrigerant circuit;
- In the case of lockable appliances, keep the key out of the reach of children!

3. INSTALLATION

3.1. UNPACKING THE EQUIPMENT

Unpack the cabinet by removing the packaging as well as its protective packaging and packing base. Choose the storage place for the removed products carefully, keeping them out of the reach of the children, trying whenever possible to leave them in a place where they can be recycled.

3.2. TRANSPORT AND HANDLING OF EQUIPMENT

Make sure the equipment has not been damaged during transportation. If you find any damage, you must notify the carrier and mention it on the delivery note.

If the equipment is moved horizontally during transportation, it must remain vertically for a period of not less than six hours before being connected to the mains.

Lifting, moving, and transporting the appliance without proper equipment can cause personal injury or damages. Use proper lifting means to load, unload, and move equipment whenever necessary.

Never move the equipment with products inside. Before moving the equipment, unplug the equipment from the socket and remove the products from inside, storing them away.

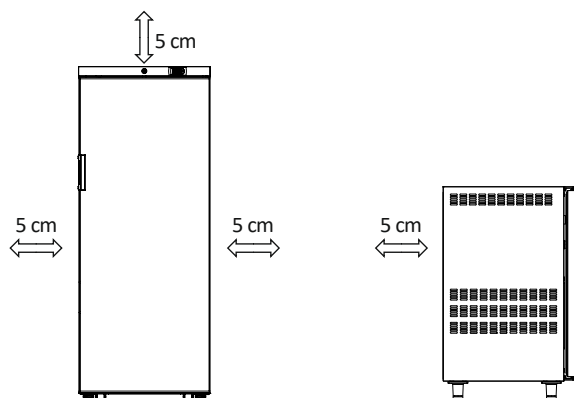
After proper storage, check that the power cord is not damaged. A damaged power cord may cause electric shock or fire. If the power cord is damaged, it must be replaced by the manufacturer, authorized dealer, or qualified personnel in order to avoid danger.

3.3. POSITIONING OF THE EQUIPMENT

The equipment must be installed in a dry and ventilated area, on a levelled floor with the capacity to support its weight, including its maximum load. It must be positioned so that the plug is accessible.

You should avoid moving the cabinet when it has products inside.

Install the equipment leaving 5 cm between the appliance and any other furniture or wall, thus allowing for a natural circulation of air.



In order to reduce energy consumption, the equipment should be kept away from any source of heat and out of direct sunlight. Do not obstruct the lower and/or upper fan grills to allow for ventilation and maintenance.

3.4. APPLICATION OF ACCESSORIES

The following accessories must be installed as applicable:

- Apply the two levellers underneath the equipment at the front by screwing them into the two holes;

- Apply stainless steel feet or rollers to the holes in the lower part of the unit using an Allen key;
- Place the handle on the rear and the door of the appliance by tightening the screws in the holes.
- Before placing the shelves, apply the brackets provided inside the equipment to the respective shelf rails.
- Place the recipient provided inside the equipment under it, according to the following image.

Ensure that the drain pipe is directed towards the recipient.



- Application of a bottle cap catcher:

To Place:



- 1 – Insert lower groove into the bracket
- 2 – Pull it up and engage the upper groove on the bracket
- 3 – Lower the catcher

To Remove:



- 1 – Make the catcher go up
- 2 – Dislodge from the upper groove
- 3 – Lower the catcher until it comes out of the lower bracket

3.5. BEFORE SWITCHING ON

Before you start the appliance for the first time, you should clean it inside with a non-alkaline cleaning solution (do not use corrosive products) and then dry thoroughly. The equipment must be disconnected from the mains while this is done.

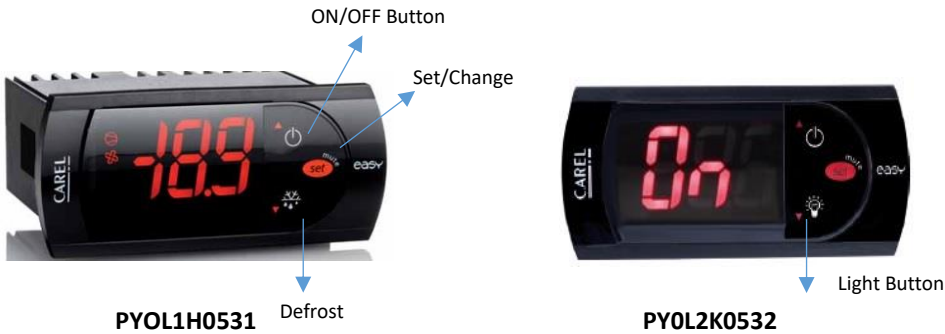
3.6. CONNECT TO THE MAINS

Before connecting the equipment to the mains, check that the voltage and frequency are in accordance with the specifications on the rating plate. The appliance must be connected to an earthed socket; ensure that the connecting cable does not become entangled. If the length of the cable is not enough, it should be replaced by a qualified person. Do not use an extension cord.

4. OPERATION

4.1. DIGITAL THERMOSTAT MODELS

4.1.1. CAREL EASY



Led		Function
1	Compressor	
2	Fan	
3	Defrost	
4	Auxiliary Output	
5	Clock (RTC) (some models)	
6	Alarm	
7	Algorithms	

The operation of the equipment is totally controlled by the digital thermostat, which allows for the selection of temperature and controls the operation of the lighting using the button  models with glass door and opaque door with lighting). Connect the equipment to the mains. If "OFF" appears in the digital display, press the ON/OFF button for 3 seconds.

The factory set point in positive refrigerated equipment of Simplify range is +3°C, and can be set on the thermostat between +1°C and +8°C.

In the negative cold models of Simplify range, the factory set point is -20°C, and can be adjusted in the thermostat between -16°C to -22°C.

In sub-zero models, the factory set point is -1°C, and can be adjusted between -3°C and +10°C.

The ACE 66 model, developed as a glass freezer, has a factory set point of -10°C, allowing the temperature to be regulated between -8°C and -12°C.

In ACE 150 models with a glass door, the factory set point is -18°C, allowing the temperature to be regulated between -16°C and -20°C.

In the backbar coolers, the factory setpoint is +3°C, and can be adjusted on the thermostat between +2°C and +8°C.

The factory setpoint in the positive cold equipment and opaque door of the Professional range is +3°C and can be adjusted on the thermostat between -2°C and +8°C. In the glass door references, the thermostat can be adjusted between +1°C and +8°C.

In the negative cold models of the Professional opaque door range, the factory setpoint is -20°C and can be set from -15°C to -25°C. In the glass door versions, the temperature can be set between -15°C and -22°C.

The thermostat is locked at the factory, allowing only the set point to be adjusted. To do this, press the "Set" button, after the set value starts blinking, get to the desired value with the "" ▲" and " ▼" buttons and press the "Set" key again to set the value.

The temperature shown on the display is the equipment's internal temperature. The equipment's noise level is less than 70dB.

Note: The equipment's difference in temperature (difference between maximum and minimum permissible temperature) is set at 3°C at the factory for the refrigerated counters and backbar coolers, in models ARV 800, BRS, BRG, BPP, BPG, and FGB, the difference is 4°C, and in models ARV 36; ARV 66, ARV 150, ARV 350, and ARV 450 the difference is 2°C.

When fully loading the cabinet, it is possible for the alarm to go off after 2 hours if it has not reached the set temperature, and "Hi" is visible in the display.

Press the "mute" button to turn the alarm off and wait 12 hours for the temperature to stabilize. If the set temperature has not been reached within this time, please contact our technical service.

The following messages may appear on the thermostat:

Operating Message	
Message	Description
E0	Ambient Probe Failure
E1	Defrost Probe Failure
L0	Low Temperature Alarm
HI	High Temperature Alarm
DF	Defrosting in progress
OFF	Standby
Dor	Open Door
ENS	Energy Saving Mode

To switch off, press the ON/OFF button (information "OFF" on the display, equipment off) or disconnect the plug from the mains. Wait 10 minutes before turning the equipment back on.

MODO (ENS (ENERGY SAVING)/ECO (WHERE APPLICABLE))



PJS4C4H001

ENS/ ECO - Energy saving - after 2 hours without opening the door, the equipment automatically switches to Energy saving, turning off the light and increasing the set point by + 3°C. After 4 hours, the cabinet will return to the normal temperature. To switch from ENS/ECO to normal operation, simply open the door for more than 10 seconds or press the ES button on the digital

(switch  ON, light always on).

When fully loading the cabinet, it is possible for the alarm to go off after 2 hours if it has not reached the set temperature, and "Hi" is visible in the display. Press the "mute" button to turn the alarm off and wait 12 hours for the temperature to stabilize. If the set temperature has not been reached within this time, please contact our technical service.

With this command, the equipment has its own characteristics:

- A day and night mode (ENS/ECO night mode visible on the display). Automatic temperature adjustment for energy saving without the need to follow the common practice of turning the equipment off;
- The products are preserved, for example, at four (4) degrees during the day and at 7 degrees overnight, according to factory setting;
- The lights and the power saving mode are set to switch on and off according to the time the door is kept closed. There is, however, a lighting button if you prefer to keep the light always on;
- Optimization of automatic defrost;
- Reducing power consumption by stopping the fan when it is not needed;
- Adjustable cabinet temperature;
- The automatic detection of ice in the evaporator and detection of lack of gas.

4.1.2. CAREL IJF



The operation of the equipment is totally controlled by the digital thermostat, which allows for temperature selection and controls the operation of the lighting (if any).

Connect the equipment to the mains. If OFF appears (cabinet off) in the display, press  until --- appears in the display to unlock the thermostat, press , ON appears (cabinet on).

To change the Setpoint:

- Press  until --- appears on the Display to unlock the thermostat;
- Press SET and the current Setpoint appears, to change the temperature, press:

SET to go up or  to go down and confirm with the key  (if it is not confirmed, the temperature entered will not be recorded).

Turn on/off light

- Press  until --- appears on the display to unlock the thermostat;

- Press the symbol  to change the lighting status from ON to OFF or vice versa.

HACCP function (when active) – HACCP On

HF – HACCP alarm ON and symbol  flashing symbol (due to power failure or when powering on for the first time).

 Symbol lit after unlocking keypad. This function warns of a high temperature inside the equipment for a prolonged period, which may consequently affect the quality of the products.

When this alarm occurs, the display shows the symbol  the symbol  (if the temperature remains high), and flashing symbol , with an audible alarm.

The internal temperature and the type of alarm that occurred also appear alternately. HA = high temperature alarm/ HF high temperature alarm after power outage.

H1 = temperature too high alarm may also appear

To consult the alarm and turn off the audible alarm

Press  = HAn

Press  = number of high temperature alarms

Key  to go down HFn

Press  = name of high temperature alarm after power outage

Key  to go down = rHP

Press  = 0 appears

Key  1 appears, press  and the number of alarms is cleared.

Alarms in memory

For total reset in the HACCP alarm in memoy (eliminate HA or HF and flashing  symbol);

Press  to unlock keyboard - - -

Press  again, psd appears

Press  again and with "Set" insert password= 11 press .

Dir appears, with the key  navigates until ALM press, AH appears and go to rSA press in =0 with "set" put 1, and press  = rSA (clear memory)

Press  = Esc to return to ALM, navigate with  to Esc, press  and return to unlock menu ---. Do not press on any key. After some time, the thermostat returns to the normal menu, or simply disconnect the cabinet from the power outlet and turn it back on.

Note: Do not change any of the other parameters that appear with the introduction Pass= 11.

Pressing the key  to unlock, the --- symbol  appears that allows, while pressing it, to use the keys "Set" or  view the type of alarms occurred.

In addition to the conventional mode of access to parameters, this controller has a system that allows access to various features through Bluetooth or NFC. The operation of the connectivity mode is explained in the QULick Guide provided with this manual.

The factory setpoint in the positive cold equipment and opaque door of the professional range is +3°C, and can be adjusted in the thermostat between -2°C and +8°C. In the glass door references, the thermostat can be between +1°C and +8°C.

The ASP 400 FISH model is specific for the conservation of fish, having a factory setpoint of +3°C, and the temperature, between 0°C and +5°C, can be regulated on the thermostat.

In the negative cold models of the professional opaque door range, the factory setpoint is -20°C and can be set from -15°C to -25°C. In the glass door versions, the temperature can be set between -15°C and -22°C.

The BPG reference is specific for the preparation of meals and salads, with the factory setpoint set at +3°C, and can be regulated between 0°C and 6°C.

The temperature shown on the display is the equipment's internal temperature.

When fully loading the cabinet, it is possible for the alarm to start sounding after 2 hours if it has not reached the set temperature, and "Hi" is visible in the display.

Press the "mute" button to turn the alarm off and wait 12 hours for the temperature to stabilize. If the set temperature has not been reached within this time, please contact our technical service.

The following operating messages may appear on the thermostat.

Message	Description
AFr	Ice protection
CHt	Condenser high temperature alarm
cht	Condenser high temperature warning
dor	Open door
E1	Problem probe 1 environment
E2	Problem probe 2 evaporator
E3	Problem probe 3 condenser
E5	Problem probe 5
Ed1	Defrost terminated after maximum time
H1	High temperature
Lo	Low temperature
HA	High temperature alarm during operation
HF	High temperature alarm after power outage
rsF	Gas leak alarm

4.1.3. DIXELL



XR60CH / XR70CH

The operation of the equipment is controlled in its entirety by the digital thermostat, which allows for the selection of the temperature and controls the operation of the lighting (if any).

Connect the equipment to the mains. If "OFF" appears in the digital display, press the ON/OFF button for 3 seconds.

The factory set point on positive refrigerated equipment is +2°C, and can be adjusted on the thermostat between -2°C and +8°C.

The factory set point on positive cold equipment for Fish is + 2°C, and can be set on the thermostat between 0°C and + 5°C.

In the negative cold models, the factory set point is -20°C, and can be adjusted in the thermostat between -10°C to -22°C.

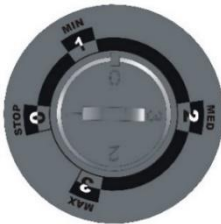
The thermostat is locked at the factory, allowing only the set point to be adjusted. To do this, press the “Set” key, after the programmed value starts to blink, get to the desired value with the “▲” and “▼” keys and press the “Set” key again to set the value.

The following messages may appear on the thermostat:

Operating Messages	
Message	Description
P1	Ambient Probe Failure
P2	Evaporator Probe Failure
P3	Third Probe Failure
HA	Maximum Temperature Alarm
LA	Minimum Temperature Alarm
dA	Open Door
EA	External Alarm
CA	Severe External Alarm (i2F=bAL)
CA	Pressure Alarm (i2F=bAL)
rtc	Real-time clock
rtF	Real Time Clock Plate Failure

To switch off, press the ON/OFF button (information "OFF" on the display, equipment off) or disconnect the plug from the mains. Wait 10 minutes before turning the equipment back on.

4.2. ANALOG THERMOSTAT MODELS



Analog Thermostat



Digital Thermometer

The operation of the equipment is controlled by a general 0/1 switch, a lighting switch and a thermostat that allows for the temperature selection inside the unit.

The range is divided into 4 positions:

- Position 0: Equipment does not work;
- Position 1: Minimum (temperature +6°C; 10°C);
- Position 2: Medium (temperature +3°C; +6°C);
- Position 3: Maximum (temperature +1°C; +3°C).

Note: In position 3, the internal temperature of the equipment may be 0°C or lower, making it dangerous for some beverages or food by freezing them.

The equipment with an analogue thermostat has a thermometer for reading the equipment's internal temperature. This thermometer can be analogue (usually placed inside the equipment), or digital (example of the previous image, placed on the outside of the equipment, usually in the front grill).

In glass door models, the internal lighting is controlled by the light switch. For greater energy savings, the internal lighting should be switched off, for example, during the night.

To turn off the appliance, press the 0/1 switch, turn the thermostat to the "0" position, or simply unplug the appliance. Wait 10 minutes before turning the equipment back on.

4.3. PRODUCT LOADING

Load the products in the equipment ensuring they are properly packed, avoiding accidents when handling.

Some equipment may have a load limit and are marked with a special sticker if this is the case. Do not place products above this limit otherwise it will affect the normal operation of the unit. The maximum permissible load per shelf is 40 kg/m.

On digital thermostats, when the equipment is fully loaded, it is possible for the alarm to go off after 2 hours if it has not yet reached the set temperature. Press the "mute" button to turn the alarm off and wait for 12 hours for the temperature to stabilize. If the set temperature has not been reached within that time, please contact our technical services or our dealers.

4.4. DEFROSTING

4.4.1. POSITIVE COLD STORAGE MODELS

In the case of models with digital thermostat, defrosting is automatic and controlled by the thermostat itself. The cycle is pre-set at the factory for 20 minutes every 4 hours, except for equipment with two probes in which the time between defrosting is 6 hours for 20 minutes (only if necessary), and in the case of ARV 36; ARV 66; ARV 150; ARV 350, and ARV 450, where the time between defrosting is 5 hours for 20 minutes.

The water from the defrosting process is drained through a hole to a recipient and subsequently evaporated, except in the ASP 400 model, where there is a drainage hole in the bottom of the equipment, with connection to a tray that must be manually dumped when necessary.

Make sure that the drain hole is not blocked.

On models with analogue thermostats, defrosting is manual and the equipment must be turned off for at least 2 hours. The water from the defrost process is drained to the compressor compartment through a hole into a recipient and is subsequently evaporated. Make sure that the drain hole is not blocked. When possible, connect the drain hole to the sewage system.

4.4.2. NEGATIVE COLD STORAGE MODELS

In the ASP 400 N, ACV 420, AGP 700 N and AGP 1400 N models, defrosting is automatic and controlled by the thermostat itself. The cycle is pre-set at the factory to run every 6 hours for 20 minutes (only if necessary).

The water from the defrosting process is drained through a hole to a recipient in the bottom of the equipment, which must be manually dumped when necessary.

Make sure that the drain hole is not blocked.

For other negative cold equipment, defrosting is manual and should be carried out at least every 6 months. Disconnect the mains plug from the wall outlet and allow the unit to defrost.

Place a container under the front drain pipe, remove the plug from the inner drain hole and wait for the ice to thaw (do not use hot water).

Do not use sharp objects to remove ice as these may damage the inside of the equipment. Do not use mechanical, electrical, or chemical processes to speed up the defrosting process.

5. MAINTENANCE

CAUTION: The equipment's power cord must be disconnected from the mains before any inspection, maintenance, and cleaning work so as to avoid any electrical shock or injury. During maintenance, do not breathe in dust or aerosols near the equipment as they may be harmful to your health. Frequent and correct maintenance is essential to ensure performance and functionality of the equipment, consequently, maintenance is recommended at least twice a year and cleaning at least once a month;

The following operations must be carried out for efficient maintenance:

- Lubricate the hinges and gaskets. Wipe off any excess lubricant;
- Check that the appliance is levelled. If necessary, adjust the levellers/feet;
- Inspect all seals and gaskets. Make sure they are still soft and flexible.

Keep the equipment clean by avoiding the build-up of dust or other materials in the ventilation grills.

Maintenance operations must be carried out by the manufacturer, the service agents, or qualified personnel in order to avoid danger. They should not be carried out by children without supervision.

5.1. CLEANING

The equipment should be cleaned at least once a month. The following operations are to be carried out:

- Always keep the equipment free of ice. Use a soft cloth or soft brush to remove loose ice. Never use sharp tools and be careful not to damage the seal. Keeping the equipment free of ice prolongs its useful life;
- Clean the outside and inside of the appliance with a dry, soft cloth or water and a neutral detergent solution;
- Clean all seals and gaskets using a damp cloth. Remove all dirt and wipe off with a dry cloth afterwards;
- Do not spill water directly into the equipment. Water spills can damage insulation materials and electrical components;
- Remove dust from the inside of the compressor compartment using only a dry brush or vacuum cleaner;
- The cooling system parts of this unit are completely sealed. They do not require any lubrication.

6. REVERSING THE DIRECTION OF THE DOOR

Instructions applicable to models ARV 36, ARV 66, ARV 150, ARV 350, ARV 450 in all versions, and in the opaque door models ACE 66, ACE 150, ARV 400, ACE 400, ASP 400, ARV 430, ACE 430, AP 600, MM5, ATP 500, ATG 600 and AGP 700. For other models, the change must be made at the factory.

The equipment must be disconnected from the mains. Unscrew the top cover or bottom grill, removing the two screws on the front and rear or bottom and top.

Pay attention to the connections of the digital thermostat, so that they do not become disconnected.

Remove the bottom bracket from the door and loosen the door's top spring using a star screwdriver and an Allen key 10mm.

Remove the door and turn it 180°. Reapply the spring hinge and the bearing so that there is enough spring pressure to close the door.

Tighten the spring on the top bracket and tighten the lower bracket. The handle should be inserted into the existing holes.

Adjust the door so that it has a correct seal. Confirm that the connections of the digital thermostat remain connected properly and close the top cover.

7. REPLACEMENT OF LIGHTING (applicable Models)

LED lights, with power equal to 12W/m. 12V DC power supply.

This operation must be carried out by the manufacturer, authorized representatives, or qualified personnel in order to avoid danger.

8. TROUBLESHOOTING GUIDE

Problem	Solution
The Appliance is not working	Check for power outage
	Check if there is current in the socket
The equipment works, but it is not very cold	Check for the build-up of dust on the condenser
	Check controller setting
	Check if fans (when applicable) are working or are stuck
	Check ice build-up on the evaporator
	Check that the door is properly closed
Water appears on the bottom of the equipment	Check that the drain hole is not blocked or that the tube is not in the direction of the recipient in the compressor compartment
	Check equipment levelling
High temperature alarm (HI)	Check ice build-up on the evaporator
	Check that the fans work (when applicable)
	Make sure the door was not left open for too long
Low temperature alarm (LO)	Check thermostat temperature
	Turn the equipment off for 5 minutes and then switch on again
Lighting does not work	Turn the digital key on/off with the light switch function
Excessive build-up of ice (negative cold storage models)	Check the temperature and humidity of the environment in which the equipment is inserted, according to the climatic class shown on the nameplate.
	Check door seal
Damaged power cord	If the power cord is damaged, it must be replaced by the manufacturer, authorized service agent, or qualified personnel in order to avoid danger

8.1. REPAIR GUIDE

Internal fan does not work									
Temperature below the limits									
LED lights do not light up									
Light does not turn off									
Led light flashing									
Does not reach the temperature, but stops and starts									
Suction line ice									
It is cold, it does not reach the temperature									
Possible cause / Repairs									
•									Fan wires off /Check connection
•				•					Incorrect wire in the thermostat
•		•	•						Door open (door open alarm/ close the door and see door micro connection)
•	•								Faulty fan/ Replace fan
•									Faulty Digital thermostat relay/ Replace digital thermostat
•									Temperature of evaporator above 10°C, fan off/ Wait for equipment to cool down
	•				•				Fan stuck/ Check fan position
	•								Set Point temperature / Check settings
	•				•				Wrong thermostat connections / Check connections
		•	•						Safety thermostat/ See position
		•	•						Glass door Thermostat/ Press AUX
		•		•					Opaque door/ Close door open door
		•		•					Incorrect transformer wires/ Check Connections
		•		•					Faulty transformer/ Replace transformer
									Faulty Led lights / Replace led lights
						•	•		Too much gas/Check gas charge

If the malfunction continues after these checks, technical assistance should be requested from your authorized dealer.

Please indicate the type of malfunction, type of appliance, serial number, and date of purchase (invoice). The serial number and type of appliance are described on the equipment information label (normally located inside the equipment, on the side). In case of need for accessories or spare parts, you should also request them from your authorized dealer, always mentioning the equipment data described above.

Note: For the protection of persons and property against direct/ indirect contacts, the use of a differential protection of the power outlet directly to this equipment with a trip sensitivity of 300 mA is mandatory

9. RECYCLING INSTRUCTIONS

9.1. RECYCLING OF THE PACKAGING

The packaging protects your equipment from damage during transportation. The materials used are reusable.

Be attentive to the storage area of the products used for packaging the equipment and always keep them out of the reach of children, leaving them, whenever possible, in a place where they can be recycled.

Help us protect the environment by recycling the packaging. Contact your service agent or municipal services for information on how to proceed.

9.2. RECYCLING OF USED EQUIPMENT

This appliance is marked in accordance with the European Directive 2012/19 EC on electrical and electronic equipment (Waste of electrical and electronic equipment - WEEE). The Directive defines the manner for collection and treatment of end-of-life appliances in EC countries. Used appliances are not worthless rubbish. Disposing of them while respecting the environment will allow us to get back precious raw materials.

WARNING!



This is an out-of-service appliance therefore:

- Disconnect the plug from the mains;
- Do not use the power supply cord.

Refrigeration equipment contains refrigerant and chemical compounds in the insulation. Both should be properly disposed of.



Care should be taken not to damage the refrigerant tubing until it is properly recycled.

Do not puncture the compressor or piping (risk of explosion and oil spill)