

# Instruction Manual

## NOC60CC-P / NOC90CC-P



**TEFCOLD**<sup>®</sup>   
Cool Products Worldwide

Note: REFRIGERANT R290



- ⚠ Be sure to keep the opening clear ventilation system free from closures or obstacles.
- ⚠ It is forbidden to set up or install the device near external ignition sources.
- ⚠ Pay special attention to the minimum capacity (volume) (cubic capacity) of the room in which the device will be installed. Minimum 1 m<sup>3</sup> for every 8g refrigerant R290 (amount of refrigerant given on the nameplate).
- ⚠ Repairs in the refrigeration system may only be performed by trained technical personnel authorized to work with flammable agents (R290).

***In devices it is necessary to pay special attention when working that they are located on flat and level ground. It is unacceptable to set the devices in an inclined position - on uneven surface – this may make it difficult to drain condensate and lead to failure.***

*The compressor of the device is adapted to work at a mains voltage not lower than 220 V and not higher than 240 V.*

*Operating the device outside of these power supply parameters can lead to irreparable damage to the unit.*

*In the case of contamination of the unit condenser, and at least once a month, it should be cleaned with a soft brush along the ribs, removing dust, powder, remains of package, etc.*

*For damage of compressor caused by contaminated/polluted condenser, the manufacturer doesn't take any responsibility.*

***If the non-detachable power cord is damaged, it should be replaced by the manufacturer or by a specialist repair facility or by a qualified person in order to avoid a hazard***

*Do not cover the ventilation holes of the condenser refrigeration unit.*

*Do not use any mechanical or electrical means during defrosting.*

*Protect the refrigeration circuit against damage*

*For proper operation of the device and low energy consumption, the doors should be closed.*

*Do not setting the device in a place exposed to direct sunlight.*

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# I. APPLICATIONS

Refrigeration devices such as pastry counters are intended for displaying previously cooled food products and sale in retail trade.

The construction of the device ensures obtaining optimal operating parameters, provided that all instructions contained in this manual are met. In order to ensure correct operation and obtain the best possible parameters, the manufacturer recommends familiarizing users with the operation, maintenance of the device and basic issues related to the safety of use. Accurate adherence to the instructions of the instructions will allow you to eliminate accidental damage.

# 2. EXPLOITATION

These products bear the **CE** marking to confirm compliance with the applicable legislation.

The Propane (R290) is a natural gas that does not affect the environment, but is flammable.

The manufacturer sends the device complete, assembled, packaged and marked with a nameplate.

After receiving the device, check the technical condition of any possible damage, notify the seller within 24 hours.

In the place of use, level the device, if the product has wheels, lock the brakes;

Keep the device in good technical condition;

Products intended for display in a refrigeration device must be placed in the device in a cooled condition to the storage temperature;

Do not overload the device. Ensure that the products are loaded in accordance with the technical data of the device and do not exceed the permissible load of 20 kg/m<sup>2</sup> of the shelf. (Fig. 1)

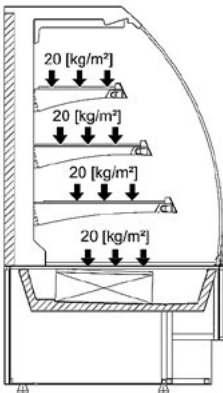


Fig. 1

Do not block grills !

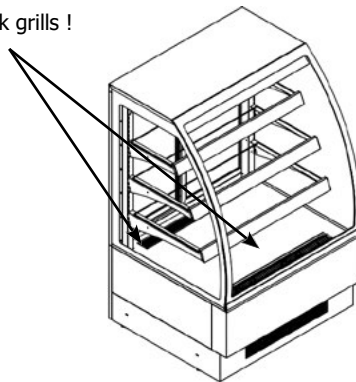


Fig. 2

The device can be filled up with products after the device has been cooled down.

Set the products inside such a way as to allow the air to circulate inside the device, do not block the air inlets and outlets holes (Fig. 2).

Washing should be done after disconnecting the device from the mains, using warm water and soft cloth or sponge. Use anti-static materials for cleaning.

The front surface of the condenser at least once for a month, in the case of greater dustiness, perform this operation more often (Fig. 7, 8).



**It is forbidden to:**

Tilting the device at an angle of more than 45°, but if it is necessary, wait about 1 hour before starting the compressor, until the oil flows to the compressor.



Replacing the light source only after disconnecting from the power supply. The power of the light sources is given on the product nameplate. In the event of a lamp failure, it should be replaced only after disconnecting from the power supply, the defective light source should be replaced with new ones of identical parameters

## **2.1. Refrigerating system**

The device is equipped with a single-stage compressor refrigeration circuit controlled by an electronic temperature controller with an automatic defrosting system - defrosting takes place every 4–6 hours. The cooling installation is filled with natural refrigerant R290.

The system does not require any maintenance operations except for periodical cleaning of the condenser.

### **Compressor**

The compressor is equipped with an internal redundant (thermal) switch that protects the motor against accidental overloads.

In the case of unnatural, noisy work or difficult start of the compressor, turn the device off, check the condition of the condenser (in case it is dirty, clean it). If the compressor is hot – wait for it to cool and re-start.

## **2.2. Electrical installation and power supply**

The power supply should be made from a low voltage circuit (230V / 50Hz) terminated with a socket equipped with a protective (grounding) pin.


It is unacceptable to use a device connected to a socket not equipped with a protective conductor.

The installation should be made in accordance with current standards, it should be protected by a residual current circuit breaker and an overcurrent switch adapted to the electric power of the device. Do not connect the device to mains using extension cords.

### **The electrical installation should be made by a qualified electrician.**

If the power cord is damaged, it should be replaced by the manufacturer or by a specialist repair facility or by a qualified person in order to avoid a hazard.

 **An improperly made electrical installation may lead to electric shock or fire.**

 **The compressor of the device is adapted to work at a mains voltage not lower than 220 V and not higher than 240 V.**

 **Operating the device outside of these power supply parameters can lead to irreparable damage to the compressor.**

### 2.3. Installation and use:

1. When installing refrigerated device, remember that they give off a lot of heat. If the store room is not sufficiently ventilated, this leads in a short time to excessive increase in the room temperature and, as a consequence, to too high temperature and condensation pressure and a decrease in the efficiency of the entire device. The compressor then works under overload conditions and in extreme cases it can lead to permanent damage to the refrigerant unit. For these reasons, it is recommended to:
  - Ensure good ventilation of the store room.
  - Do not install the device in a place exposed to direct exposure of sunlight.
  - Be sure to keep the openings ventilation holes devices, free from closures or obstacles.
  - Periodic (frequent) checking of condenser unit condition
  - Setting the refrigeration unit away from heat sources (e.g. radiators, etc.) and in a place not exposed to sunlight
  - Do not setting the furniture in the immediate operating range of the fans (e.g ceiling fans, air conditioner fans).



 **It is forbidden to set or install the device near external ignition sources.**

2. Accurate leveling of the device contributes to the reduction of the noise level of the unit, allows correct positioning of the glass and guarantees complete removing condensate from the drip trays.

 **It is forbidden to set the device in sloping position it may make it difficult to drain condensate and lead to failure.**

## 2.4. Turning on the device

1. Connect the device to the electric supply.
2. Turn on the main switch of refrigerant system (red switch – 1). **The Carel/Dixell** electronic controller with the programmed temperature is automatically switched on (setting). After max. 1 minute the compressor is started.
3. Turn on the lightening (green switch – 2).

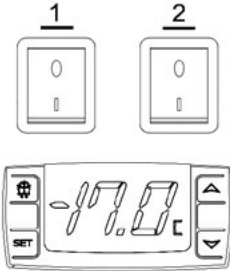


Fig. 3

## 2.5. Operating the thermostat – Carel



Fig. 4

### Change of the temperature setting

1. Press **SET** button for 1 seconds; the set value will show at the display, after 2 seconds the value will start flashing.
2. Increase or decrease the temperature using the ▼ or ▲ buttons to achieve the new value.
3. Press the **SET** button again to confirm the new temperature value.

### Additional defrosting

The device works in automatic defrosting mode at 4–6 hours intervals. If you notice incomplete defrosting, perform manual defrost, press and hold the ❄️ button for about 5 seconds.

### Operating diodes and thermostat messages

Compressor operation LED ⚡ – turns on when the compressor is running.


Defrost LED ❄️ – turns on when the device is in the process of defrosting.



### Alarm functions

„E0” – temperature sensor failure.

„E1” – defrost sensor failure.

If the word **OFF** appears, press and hold the button  for about 3 seconds.



In the event of an alarm, report to the nearest service center.

## 2.6. Operating the thermostat – Dixell




Fig. 5


### Change of the temperature setting

1. Press the button **SET** for 2 seconds: the temperature value will appear on the screen, the LED °C or °F will start flashing.
2. Increase or decrease the temperature using the  and  buttons to achieve the new value.
3. Press again **SET** button or wait 5 seconds to confirm the new temperature value.


### Additional defrosting

The device works in automatic defrosting mode at 4–6 hours intervals. If you notice incomplete defrosting, perform manual defrost, press and hold the  button for about minimum 2 seconds.

### Operating diodes and thermostat messages

Compressor operation LED  – turns on when the compressor is running.

Defrost LED  turns on when the device is in the process of defrosting.

Fan LED  – turns on when the fan is working.

### Alarm functions

„P1” – temperature sensor failure.

„P2” – defrost sensor failure.

In the event of an alarm, report to the nearest service center.

## 2.7. Individual decoration panel building of devices

**The manufacturer allows the individual housing (installation) of the device provided that:**

- Ensure proper air circulation in the device;
- Do not install, cover the rear of the condenser and the control panel.
- Ensure free access and the possibility of removing the rear grille for periodic cleaning of the condenser.
- Ensure that the compressor can be serviced, for this purpose the possible „front“ installation should be disassembled in order to ensure free access to the refrigeration system components. Ensure the possibility of pulling the entire device out of the body.
- In the case of the installation of the front grille, ensure the air flow through appropriate openings, air ducts, whose position and surface should be located parallel to the existing openings in the device. The area of holes in a new building cannot be smaller than the area of existing holes.

 **EXACT GUIDELINES FOR INSTALLATION OF INDIVIDUAL DECORATIONS IN DEVICES – CONTACT WITH THE MANUFACTURER.**

## 2.8. Transport

The device in transport requires careful protection against the effects of shocks, as well as accidental overturning. Glass elements and varnished coatings are particularly vulnerable.

The device should be in a horizontal position both during transport and transfer or removing time.

If the device must be tilted:

1. Disassemble the glass in a specific order and secure the connecting elements against loss,
2. After installing and setting the device in a specific place, reassemble the glass in reverse order. The connection to the mains should be made after a minimum of 6 hours to allow draining the compressor oil.

# 3. MAINTENANCE

1. The current maintenance of the device is carried out by the user on their own through periodic cleaning of the body, display part, glass, etc.
2. Washing should be done after disconnecting the device from the mains, using warm water without detergent. Use anti-static materials for cleaning
3. Window cleaning:

 **Do not leave the device with open front window unattended.**

A special care is required when performing the tilting window cleaning operation due to its weight.

Window cleaning operation that require the windshield to be opened should be performed by two service staff (one person holds the tilted glass, the other person cleans internal glass surfaces, see (Fig. 6).



Fig. 6

**⚠ Lines attached to the glass are not security, but only determine the degree of opening the windshield.**

**⚠ Do not spray water or detergent on electrical components and equipment.**

1. Do not use sharp tools to remove dirt from the external and internal surfaces of the device.
2. The electrical installation does not require any maintenance
3. Do not use sharp tools to remove dirt from the external and internal surfaces of the device.
4. The refrigeration system does not require any maintenance except for periodic cleaning of the condenser.

The condenser is serviced from the front or back of the device depending on the model.

Checking the purity of the condenser should be done:

- at least once a month,
- if necessary, e.g. in case of obstructed compressor start, abnormal noise or hot air exhausted underneath the unit or considerable reduction of cooling effectiveness.

If the unit condenser is contaminated / dirty, and at least once a month, clean it. To do this:

- disconnect the device from the power supply
- remove perforated plate or grille covering the refrigerating unit (Fig. 7)
- clean the filter mat (figure 8) mechanically with a brush or by a vacuum cleaner, removing dust, packaging waste, etc.;
- Mount again perforated plate or grille covering the refrigerating unit.

**ATTENTION !**

**IN THE CASE OF CONTAMINATION OF THE UNIT CONDENSER, AND AT LEAST ONCE A MONTH, IT SHOULD BE CLEANED WITH A SOFT BRUSH ALONG THE RIBS, REMOVING DUST, POWDER, REMAINS OF PACKAGE, ETC. FOR DAMAGE OF COMPRESSOR CAUSED BY CONTAMINATED/POLLUTED CONDENSER, THE MANUFACTURER DOESN'T TAKE ANY RESPONSIBILITY.**

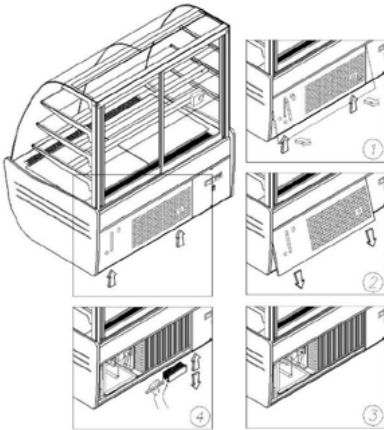


Fig. 7

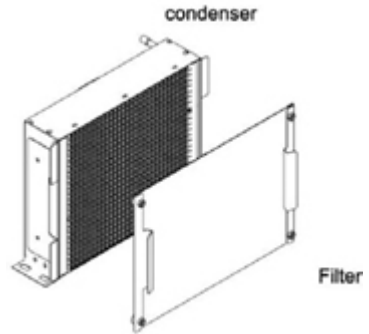


Fig. 8

## 4. CONDITIONS FOR SAFETY AND WORKING HYGIENE

1. Do not connect the device to the electrical network until protective devices have been installed.
2. Installation of the electrical installation should be made by a qualified electrician.
3. All repairs and adjustments in the electrical system may only be carried out by an authorized electrician. In the event of malfunctions such as: power punctures, sparking, etc., the device should be immediately disconnected from the power supply and an electrician should be called in to remedy the fault.
4. Wash and clean the device only after disconnecting from the power supply.
5. If the power cord is damaged, it should be replaced by the manufacturer or by a specialist repair facility or by a qualified person in order to avoid a hazard
6. In the event of refrigerant leakage, avoid using open flames or sources of ignition near the leak.
7. Repairs in the refrigeration system may only be performed by trained technical personnel authorized to work with flammable agents (R290).

## 5. WARRANTY REPAIRS

1. The user, when purchasing the device, receives a warranty card with the serial number and the date of production of the product. This data should be in accordance with the data on the device's rating plate
2. If the device is purchased from a wholesaler distributing JUKA's products, the Warranty Card that does not have the date of purchase and the Seller's stamp will not be honored.
3. The warranty repairs are performed by the manufacturer or the nearest authorized plant performing service services

The warranty period is extended by the duration of the repair

 **WARNING!**

**STRICT COMPLIANCE WITH THE RULES CONNECTED IN THE MANUAL IS GUARANTEEING THE DURABILITY AND RELIABILITY OF THE DEVICE.**

**THE MANUFACTURER IS NOT RESPONSIBLE FOR DAMAGE RESULTING FROM THE CAUSES OF OPERATION OF THE UNIT WITHOUT DESTINATION, WITHOUT A CHARACTERISTIC AND WITHOUT THESE INSTRUCTIONS.**

**The warranty does not cover:**

- damage caused during transport, unloading/loading;
- damage caused by unprofessional operation and operation of the device not in accordance with the operating instructions;
- damage of glass and elements subject to natural wear and tear: fluorescent lamps, igniters, wheels etc.

 **WARNING!**

**EQUIPMENT SHIPPED OUTSIDE POLAND IS NOT COVERED BY THE GUARANTEE.**

## **6. COMMENTS AND WARNINGS**

The company cannot be held liable in any way for any damage caused to people, animals or the product in the case of:

- Improper use of equipment or use by inadequate or unauthorized personnel.
- Incorrect installation or power supply for the device.
- Failure to follow this instruction.
- Unauthorized modification of the device.
- Installation of non-original spare parts on equipment.
- Installation and use of equipment for purposes different from those given in this document
- Manipulation or damage to the power cable.
- Interference of people without qualifications to perform service activities.

## 7. INFORMATION ON THE DISPOSAL OF THE EQUIPMENT

In accordance with Directive 2012/19/EU, it is forbidden to dispose of used electrical appliances together with normal waste. Such equipment should be handed over to the collection points designated by the local authorities.





## CHECK BEFORE YOU CALL A SERVICE...

Possible failure	Possible cause	Solution
<b>The device does not turn on</b>	Power cord is disconnected.	Connect the power cord.
	Power cord is damaged.	Call electric service.
	Main switch is turned off.	Turn on the main switch (check the fuse).
<b>Too high temperature in display or exposition</b>	Ambient conditions not in accordance with the instructions device exposed to sunlight – drafts (wind) – air conditioning disturbs the air circulation in the device.	Change the device location and ambient conditions to the guidelines in the instructions.
	Dirty condenser.	Clean the condenser.
	Furniture installation of the device does not comply with the guidelines.	Increase the area hot air inlets / outlets from the condenser. Check the air temperature in front of the condenser.
	Iced evaporator.	Turn on additional defrost (see instructions).
	Loading level exceeded.	Change loading according to the level indicators.
<b>Condensation on the windows / glasses</b>	Ambient conditions not in accordance with the instructions.	Ensure proper operating conditions (see instructions).
	Bad air circulation.	Ensure proper air circulation. Remove the obstacles on the intake and air outlet.
<b>Water on the floor</b>	PTC heater failure.	Call service.
	Ambient conditions not in accordance with the instructions.	Ensure proper operating conditions (see instructions).
<b>A sudden appearance of steam or condensation on the interior parts of the glass</b>	Defrost process was initiated automatically or manually.	After the defrost process, the steam, condensation will disappear.
<b>The sound of cracking, clicking</b>	Defrost process was initiated automatically or manually.	During the defrost process there appear stresses resulting from temperature differences. At the end of the process, the sounds will disappear.