



OPERATING INSTRUCTIONS

REFRIGERATED SHOWCASES

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Model type

Model	External dimensions WxHxD, mm	Volume, l*	Net weight , kg
"Frost Stream" Freeze	800x910x640	202	47
"Frost Stream" Freeze Flat	800x910x640	222	49
"Frost Stream" Prima	1060x910x640	295	60
"Frost Stream" Prima Flat	1060x910x640	322	62
"Frost Stream" Nix	1350x910x640	399	68
"Frost Stream" Nix Flat	1350x910x640	435	72
"Frost Stream" Victory	1640x910x640	503	86
"Frost Stream" Victory Flat	1640x910x640	547	86
"Frost Stream" Star	620x910x640	139	38
"Frost Stream" Aurora	800x910x640	205	47
"Frost Stream" Storm	1060x910x640	297	60
"Frost Stream" Legend	1350x910x640	404	68
"Frost Stream" King	1640x910x640	519	76
"Frost Stream" Freeze Solid	800x910x640	222	48
"Frost Stream" Prima Solid	1060x910x640	322	54
"Frost Stream" Nix Solid	1350x910x640	435	62
"Frost Stream" Victory Solid	1640x910x640	547	69
<p>* The total volume of the refrigerating showcase. Flat – a refrigerated showcase with a flat glass lid. Solid – refrigerating showcase with a heat-insulating cover.</p>			

Security

Explanation symbols

Safety instructions and warnings are marked in this manual with symbols and signal words

Symbol	Explanation
 WARNING	Danger of medium degree. Can result in serious injury or death
 ATTENTION	A hazard with a low degree of risk
 Notification	Individual information or general important information to avoid property damage
 Electric voltage	Risk of electric shock
 Flammable substances	Substances ignite from slight heating, a small source of fire
 Separate collection of electrical and electronic equipment	Special disposal - it is not allowed to be thrown out together with the rest of the waste, special conditions are required for recycling .

General information

- Carefully read this instruction manual before using the equipment, and pass it on to other persons who are entrusted with the operation and maintenance of this equipment.
- Make sure that the manual is read and understood by the people involved in the operation and maintenance of the equipment.
- Make sure that the operating instructions are available and in an accessible place.
- Only trained personnel may operate and clean the equipment. Only a qualified technician authorized by the manufacturer may carry out maintenance and repairs.

Manufacturer's responsibility

All information in this manual was compiled taking into account current standards and legal norms, as well as empirical values of the manufacturer. The manufacturer is not responsible for damage to people or property (equipment, goods, etc.) resulting from:

- Failure to comply with the instructions and safety rules contained therein
- Improper use
- Engagement of untrained operational and service personnel
- Unauthorized conversion and technical changes by the customer himself
- Use of spare parts not approved by the manufacturer
- Malfunction of the power supply or electrical safety devices

Failure to comply with the above points may also void the warranty.

The manufacturer reserves the right to make technical changes to optimize and improve the efficiency of the equipment.

General safety instructions and warnings



WARNING

- Never connect damaged equipment to the mains. In this case, immediately contact the manufacturer's service department. Otherwise, there is a risk of electric shock or refrigerant leakage.
- Do not use multiple outlet blocks or extension cords. Thermal overload occurs, creating a risk of smoldering/burning and electric shock.
- Do not under any circumstances remove the protective devices or covers attached to the device by the manufacturer. There is a risk of injury from moving parts or voltage.
- Do not make technical changes to the equipment. Otherwise, there is a risk of injury or electric shock.
- Damaged network cables can only be replaced by an authorized service technician. Otherwise, there is a risk of electric shock.
- Before starting work with the electrical system and the cooling system, it is necessary to disconnect the cable from the equipment network. Otherwise, there is a risk of electric shock.



Carefully

- When loading freezers with products, there is a risk of frostbite. Therefore, use protective gloves.
- The sharp edges of the device can cut your hands during cleaning. Therefore, use protective gloves.
- Mechanical damage to the device, for example caused by product carts that do not disrupt the technical function, must be repaired by the store operator. In the event of damage to the cooling system or the electrical system, the service department must be notified immediately. There is a risk of injury.



Notification

- The equipment can be transported, stored and used only in a horizontal position, standing on the designated rollers or legs.
- Inspect the equipment for shipping damage and test it for functionality immediately after delivery. If you find any defects, contact the manufacturer's service department immediately.
- The equipment must be operated in the climate class indicated on the rating plate ([see point 2](#)). Operation above the values indicated in the climate class will lead to a decrease in energy efficiency and productivity.
- Do not expose the equipment to direct sunlight or high-temperature radiators.
- For the correct operation of the equipment, the ambient temperature should not be lower than +16°C and not exceed the temperature indicated on the sign ([point 2](#)) of the climate class for which the equipment is intended.
- The equipment works immediately after connecting to the electrical network. Any other use is considered inappropriate.

- The equipment is intended only for storing frozen products.
- In the event of a power outage, the stored goods must be checked by a responsible person.
- The equipment can be operated only with the cover closed. Icing may occur on the cooling surfaces. Otherwise, the required temperatures cannot be maintained.
- The lids can be opened for a short time only to load and unload the product. After that, they need to be completely closed again.
- With effective cooling, condensate or moisture contained in the air appears, freezing on the cooling surfaces. Therefore, it is necessary to regularly defrost the equipment manually ([see point 8.2](#)).
- Do not use heaters or sharp objects for defrosting. This may damage the equipment.

Safety techniques for operating equipment with refrigerant R -290 (propane).



ATTENTION!



Flammable substances

- Refrigerant R -290 belongs to safety group A3 according to DIN EN 378-1.
- refrigerant is extremely flammable. In case of leakage of the refrigerant due to the leakage of the system, it can form an explosive mixture. Which could cause a fire or explosion with further risk of fire. Therefore, there should be no ignition sources nearby (hot surfaces, sparks, open flames, etc.).
- Liquid refrigerant can cause frostbite on the skin.

- Do not cover the ventilation openings in the equipment housing (engine compartment). If accessories are installed, care must be taken to ensure that the ventilation openings are not blocked.
- Keep a minimum distance (100mm) to walls and other equipment
- Do not use other mechanical devices or means to accelerate defrosting, except those recommended by the manufacturer.
- Work with the electrical system and the cooling system can only be performed by a service specialist authorized by the manufacturer. Work with the circuit of the cooling system is allowed only in well-ventilated rooms.
- Before maintenance work, it is necessary to turn off the equipment from the network.

Instruction

1. Standards and directives

Product responds position following directives:

- Directive on machines, mechanisms and machine equipment 2006/42 / EU;
- Electromagnetic Directive compatibility 2014 / 30EU;
- Directive on low voltage equipment 2014 / 35EU.

Output products at the enterprise is carried out in an integrated management system in accordance with the requirements standards

ISO 9001:2015;

ISO 1400:2015;

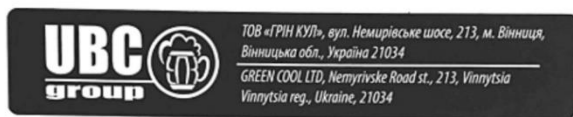
ISO 45001:2018, IDT .

Standards used in the design and manufacture of products:

EN 16901:2016

2. Rating plate

When working with the equipment, it is necessary to observe the information on the sign . This is a sticker on the back of the equipment that contains important technical data.



	Назва продукції/ Model:			1
2	Напруга/ Voltage:		Частота/ Frequency:	3
4	Клас захисту/ Protect class:		Потужність/ Power consumption:	5
6	Кліматичний клас/ Climatic class:		Маса нетто/ Net weight:	7
8	Маса холодоагенту/ Refrigerant charge:		Холодоагент/ Refrigerant:	9
	Температурний клас всередині холодильної вітрини/ Temperature class inside refrigeration showcase			10
11	Інв. №/ Inv. №:		Дата/ Date:	12
13	Завод №/ Serial №:			14
15	ТУ У 28.2 - 40469992 - 001:2018			

Fig.1. Rating plate

1. Showcase name;
2. Voltage (V);
3. Frequency (Hz);
4. Protection class (IR);
5. Maximum used power (W);
6. Climatic class of the showcase;
7. Net weight of the showcase (kg);
8. Refrigerant mass (g)
9. Refrigerant type;
10. Temperature class inside the showcase;
11. Inventory number;
12. Date of manufacture;
13. The serial number;
14. Country of manufacture and certification marks
15. Product conformity conditions;

3. Unpacking, installing and connecting

Before and during the unpacking of the equipment, it is necessary to conduct a visual inspection to detect possible damage during transportation.

Pay attention to loose parts, dents, scratches, etc. If any damage is detected, it is necessary to notify the service department before putting it into operation.

When installed, pay attention to the following points:

- Make sure that the equipment is installed stably and horizontally.
- The ventilation holes (grid) of the equipment must be clean. Install the equipment in a well-ventilated area.
- When installing the equipment, observe minimum distances of at least 100 mm from walls and other equipment.
- Avoid drafts and excessive heat radiation at the installation site. Do not place the equipment near radiators, heaters, under air conditioners and ventilation ducts (inflow of warm air when opening the door will increase the temperature of the product).
- After installation, lock the rollers (option, fig. 2).



Fig. 2. Roller with a brake



ATTENTION!



Damaged equipment can cause a short circuit. Never plug in damaged equipment.

The minimum temperature of the equipment must be at least +16°C before commissioning.

The first connection of the equipment should be carried out no earlier than 1 hour after its installation.

5. Temperature control

The temperature display (option) shows the internal temperature of the equipment, which is not directly related to the temperature of the product.

In equipment with a thermostat, the display is an external thermometer or an internal thermometer on the front wall.

In the case of equipment without temperature indication, it is recommended to place the thermometer on the top layer of the product, but please note that it does not show the temperature of the product, but a slightly higher temperature.

Freezer showcases are designed only for "—" (minus temperatures).

Depending on the field of application (purpose), different temperature ranges are available.

Appointment	Temperature range, °C	Management mode
Standard	-18..-23	Mechanical thermostat
" Scooping "	-12..-18	Mechanical thermostat
Deep freezing	-30..-35	Electronic controller

6. Temperature regulator

The display temperature is set at the factory to maintain the temperature class/mode of the product specified by the manufacturer.

To ensure optimal storage temperature, it is recommended to save the settings.

A change in the temperature regime can lead to spoilage of the product.

6.1. Mechanical thermostat

The temperature regulator (thermostat) is located on the side of the ventilation grill (Fig. 1).

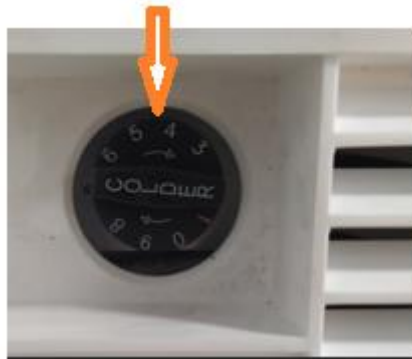


Fig. 3. Location of the thermostat in the side ventilation grill.

Thermostat settings:

Level 1: Less cold mode

Level 6: Factory settings (depends on the customer)

Level 9: The coldest mode

To set the desired temperature, turn the thermostat (plastic handle).





- along the time arrow of decreasing temperatures
- against a temporary increase in temperature

6.2. Eliwell electronic temperature controller

controller is placed on the front panel. Control elements are buttons (Fig. 2), which are programmed as follows:



Fig. 4. Indication and control elements of the controller Eliwell .

Control element	Functions
 Above	Increase variable value Scrolling through menu items
 down	Decrement the variable value Scrolling through menu items
 Entrance	Return to the previous menu level Confirm the new value Long-term hold (5 sec .) Starting and exiting Standby mode
 Input	Display of accidents Opening the main menu Long-term hold (5 sec .) Opening the programming menu Command confirmation

6.3. Regulation of the temperature range

Press the "Enter" button to display the set value.

Changing the set value:

Press the "Enter" button. The setpoint value will appear on the display. Press the "Up"/"Down" keys to change the set value. Press the "Enter" button to confirm the changes.

7. Loading

Check the internal temperature 2 hours after turning on the equipment.

- Wait until the required storage temperature of the product is reached.

The equipment can be loaded only up to the loading line mark in the middle of the equipment (see Fig. 3).



Fig. 5. Loading line sticker

The specified storage temperature of the product above the loading line is not guaranteed.

8. Maintenance, defrosting and cleaning

8.1. Service

It is recommended to clean the condenser at least once a month. To clean the condenser, it is necessary to dismantle the grilles (see Fig. 6) to gain access to the engine room.

Remove dirt (dust, fluff, etc.) from the surface of the condenser and install the grids back (Fig. 7).

- If the recommendation is not followed, in the event of a breakdown, the manufacturer is not responsible.



Fig. 6. The location of the protective grills of the engine room.

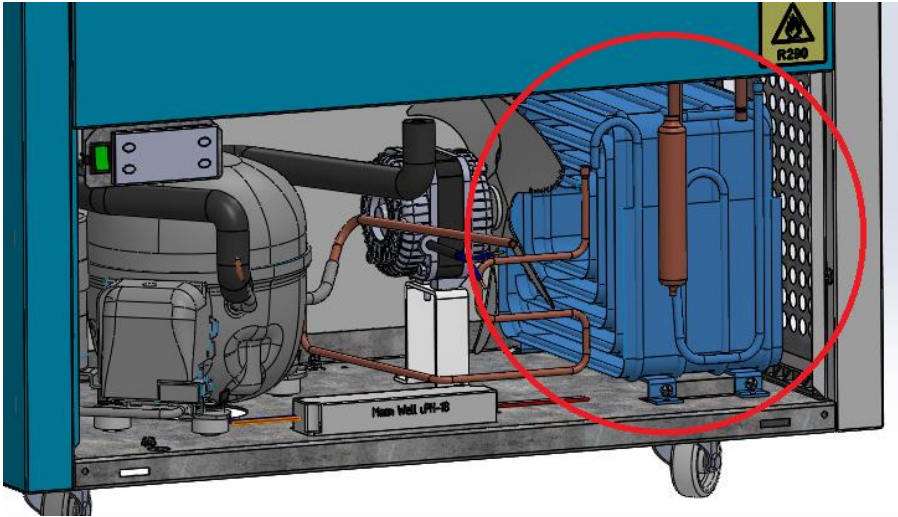


Fig. 7. Location of the capacitor

8.2. Defrosting and cleaning

- Strong icing of the inner walls can lead to a decrease in productivity and deviation of temperature readings.
- Defrosting is recommended when the frost layer exceeds 10 mm.
- The formation of frost (icing) depends on the environmental conditions at the place of installation (humidity) and on how the equipment is used (frequent openings or an open lid). Thin layers of frost should be scraped off with the included plastic ice scraper.
- Hot steam and water under high pressure or high temperature can damage electrical insulation, electronic parts and the refrigerant circuit. Therefore, do not use hot steam, high temperature or high pressure water.

Defrosting /cleaning process:

1. Move the product to another freezer display.
2. Disconnect the power cable.
3. Open the lid for better defrosting.
4. Take out baskets or partitions.
5. Remove the melted water.
6. Remove any remaining product that has been stored.
7. Wash the equipment using the manufacturer's recommended detergents and equipment.
8. Wipe the device dry.
9. Put back the baskets or partitions.
10. Connect the power cable to the electrical network.
11. Wait for the required temperature to store the product.
12. The product can be stored again.

We recommend using detergents:

Detergent	Cleaning area
Clean water	External and internal surfaces of the equipment. External and internal glass surfaces
Detergents (eg soap and water) in case of heavy contamination	External and internal surfaces of the equipment. External glass surfaces
Windscreen wiper	External glass surfaces

When cleaning, use the following inventory:

Cleaning supplies	Cleaning area
Wet soft cotton fabric	External and internal surfaces of the equipment. External and internal glass surfaces

A damp absorbent cloth or sponge	External and internal surfaces of the equipment. External and internal glass surfaces
For drying	
Wet soft cotton fabric	External and internal surfaces of the equipment. External and internal glass surfaces

9. Storage

If you take the equipment out of operation for a long period of time, you must:

1. Take out all the goods.
2. Disconnect the power cable.
3. Open the lid and allow the equipment to warm to ambient temperature. Clean the equipment.
4. Open the lids (about 2-4 cm). Ventilation prevents the formation of odors and spores inside.



Notification

Never expose the equipment to direct sunlight with the lid closed. High internal temperatures can damage the equipment.

10. Disposal



Improper disposal harms the environment.



Pay attention to the safe disposal of refrigerant, insulating foam (polyurethane foam), compressor oil, power supply unit.

Dispose of the equipment properly in accordance with applicable national disposal regulations and the regulations of your local disposal partner.

Devices cannot be disposed of together with household waste.

11. Possible malfunctions and recommendations for their elimination

The equipment has been thoroughly tested for performance and safety. However, in the event of a malfunction, check the following:

- Is the power cord plugged into the outlet?
- Presence of voltage in the outlet.

If the temperature is too high:

- Does the thermostat position correspond to the required temperature?
- Were the covers open and for how long?
- Was warm product stored/loaded?
- Were there power outages?

If the malfunction is not related to any of the above reasons, contact the service department and report the type of malfunction.



Notification



Danger of electric shock and ignition of flammable gases.

Untrained and unauthorized personnel may not perform any work on the electrical system and cooling system.



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