

OPERATION MANUAL

HEATED SHOWCASE

VEGA SPACE QB HOT BM




freor
thinking green

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1. GENERAL INSTRUCTIONS

1.1. Manufacturer information

Manufacturer, address	FREOR LT, UAB Katiliskiu St. 92, LT - 02212 Vilnius, Lithuania T: +370 5 232 9188	
	Made in Lithuania	

Customer	
Installation date	
Installation place	
Start of the product operation	



The commercial heated showcase Vega Space QB Hot BM is labelled with technical data sticker. The sticker is attached to the rear wall. The sticker provides information about model, voltage, and product code. It is strongly recommended to read sticker information before starting any work with a showcase (**Fig. 1**).





FREOR LT, UAB Katiliskiu St. 92 LT-02212 Vilnius, Lithuania freor@freor.com www.freor.com			
Type:			
Serial no:			
Year:			
Product code:			
Rated voltage, [V]: Frequency, [Hz]: Rated current, [A]: Defrost power input, [W]: Anti-condensation heating element power input, [W]: High pressure, [Bar]: Low pressure, [Bar]: Max pressure, [Bar]: Climate class:			
Refrigerant:		GWP:	
Quantity of refrigerant, [kg]:			
CO2 equivalent mass of the F-gas, [t]:			
 <small>MADE IN LITHUANIA</small>			
			

Fig. 1. Example of sticker.

- The intention of this document is to provide information about maintaining and operating of heated showcase Vega Space QB Hot BM.
- In accordance with the EU Directive - the refrigeration unit is an electrical refrigeration machine; therefore, the focus is to ensure safety during operation.
- The operation manual of the heated showcase must be kept at the place of operation. It must be available to technical personnel, service personnel and repair specialists at any time.

1.2. Purpose of use

The heated showcase Vega Space QB HOT BM is intended to be used for the presentation of warm/hot products. Vega Space QB HOT BM provides an average product temperature of +60°C in the GN containers.

WARNING

- The showcase is not designed to heat up products; it is designed to hold warm products. Colder than +60°C products should not be placed in the showcase because it would take a longer time to heat them.
- Nevertheless, the heating of colder products may lead to the growth of harmful microorganisms.

To avoid heat loss and spoilage of products, the glass of the showcase must be closed immediately after opening it.

Vega Space QB Hot BM has two heaters. One is located on the top, the other is located under the BM tub. Infra-red lighting is not only used for lighting but also for heating.

With time the quality of products will be lost. It is recommended that products are held for no longer than 3 hours, although, according to the quality and type of product, the holding time varies. Sauces and dressings should be mixed regularly to save their texture.

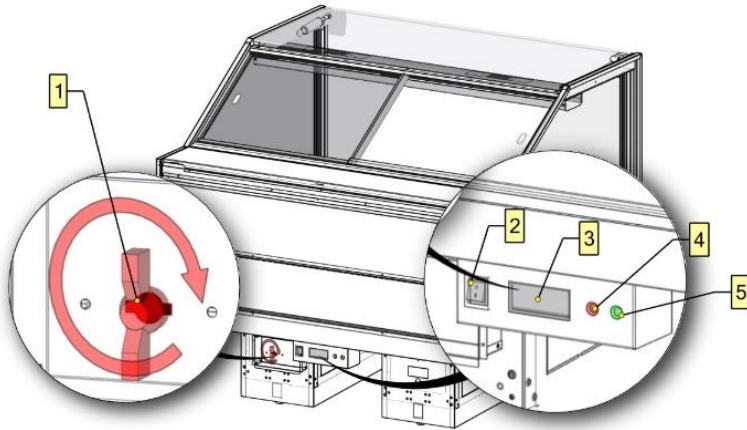
Only qualified personnel can fix and operate the showcase. When working with the showcase, remember that parts are hot.

In the event of the use for the unintended purpose, the manufacturer will be exempted from warranty obligations.

After connecting the heated showcase to a power outlet, turn on the main switch (**Fig. 2**). The BM tub should be filled with water automatically. The power of heating elements is regulated by the power regulator (**Fig. 2**). The doors of the showcase must be closed until the temperature of 60-80 °C is reached. Only when the temperature is reached, hot products should be stored, to avoid unnecessary heat losses, spoilage of products. The glass doors of the heated showcase should be closed shortly after being opened.



To drain the water from BM bath, turn off the main switch (to bypass the automatic water refill) and open the drainage valve (**Fig. 2**).



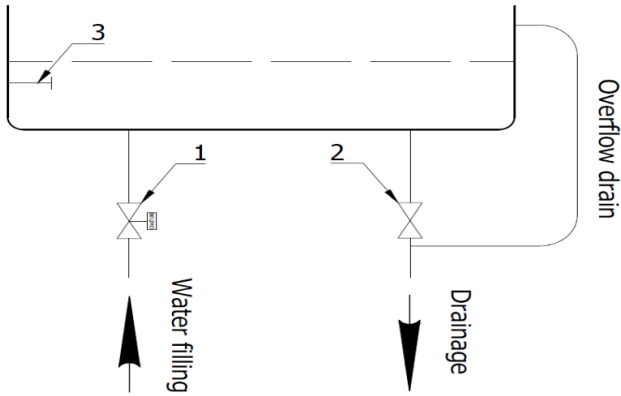
- 1 – Drainage valve.
- 2 – Main switch.
- 3 – Temperature controller with a screen.
- 4 – Red alarm indicator for water overflow.
- 5 – Green indicator – working temperature has been reached, doors can be opened to serve heated showcase.

Fig. 2. Location of main switch, power regulator and drainage valve.

Note: The arrangement of switches may differ according to the setup, type, or design of the heated showcase.

In case of overflow, the heating showcase will stop filling water and red indicator will turn on. Switch the drainage valve to drain water from bath, then turn off/on the showcase. If the overflow alarm repeats, contact service representatives. See the principle hydraulic scheme (**Fig. 3**).

Remember that the showcase and air inside are hot. Be careful!



- 1 – Belimo 2-way valve.
- 2 – Ball valve 1/2.
- 3 – Water level sensor.

Fig. 3. Hydraulic scheme of Vega Space QB Hot BM.

1.3. Dimensions

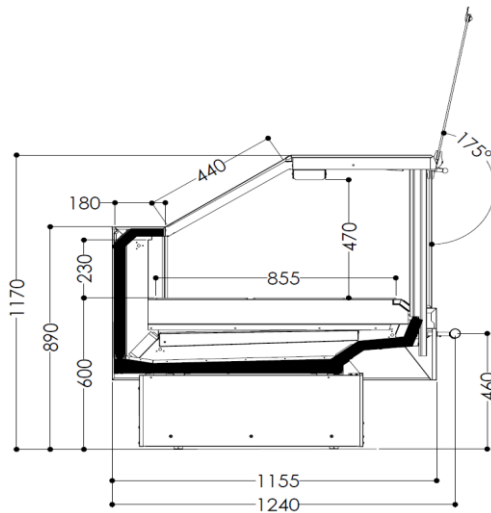


Fig. 4. Dimensions of Vega Space QB HOT BM.

For more detailed information visit www.freor.com.

1.4. Package dimensions

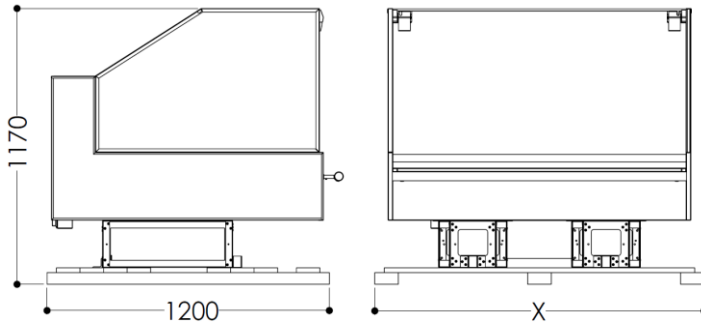


Fig. 5. Vega Space QB HOT BM package dimensions.

Length of showcase	Length of package (X)
3750 (mm)	3900 (mm)
2500 (mm)	2650 (mm)
1250 (mm)	1450 (mm)

1.5. GN container layout

Length of showcase, mm	GN 1/1, units	GN 1/4, units	Max Depth, mm
1250	4	4	80
2500	8	8	80
3750	12	12	80

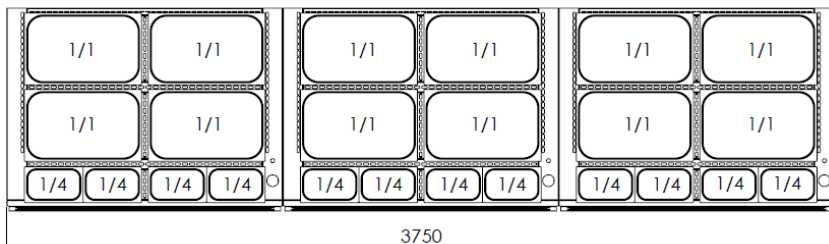


Fig. 6. GN container layout of Vega Space QB HOT BM 3750.

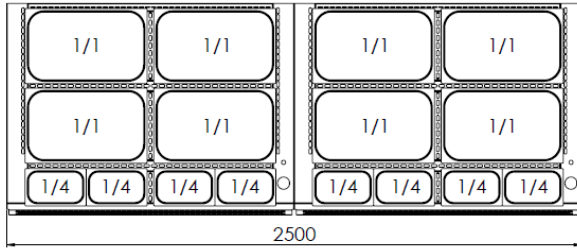


Fig. 7. GN container layout of Vega Space QB HOT BM 2500.

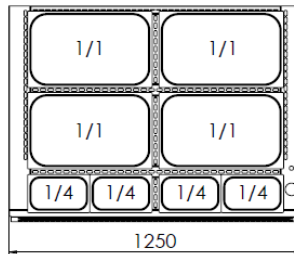


Fig. 8. GN container layout of Vega Space QB HOT BM 1250.

1.6. Fire safety

Fire extinguishers or automatic fire suppression systems must be placed in the area where the heated showcase is installed. The systems must be suitable to extinguish electrical devices.

2. UNPACKING

Note the following to prevent the collision or risk of injury to persons when transporting units with forklift:

- Observe transport routes for forklift.
- Secure transported units.
- Only trained personnel may operate industrial trucks.
- Note the center of gravity of the unit for safe lifting of the load with the forklift. Information is provided on the front and back of the unit packaging.



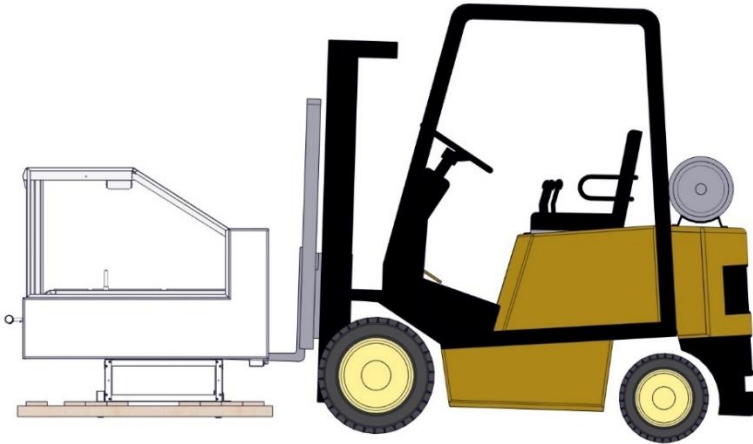
x 2



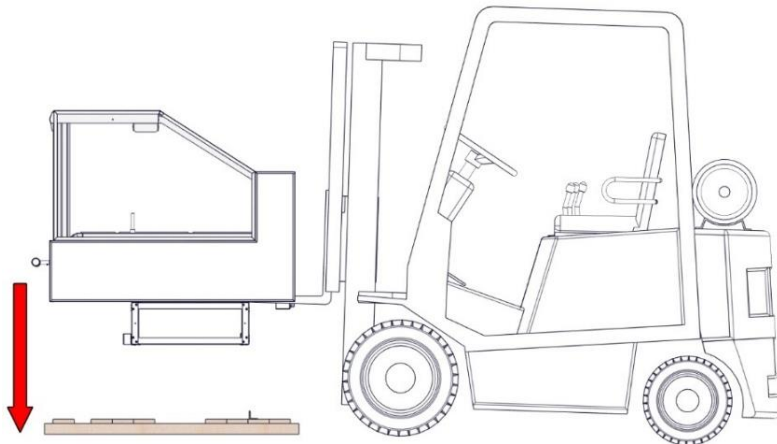
Size 13



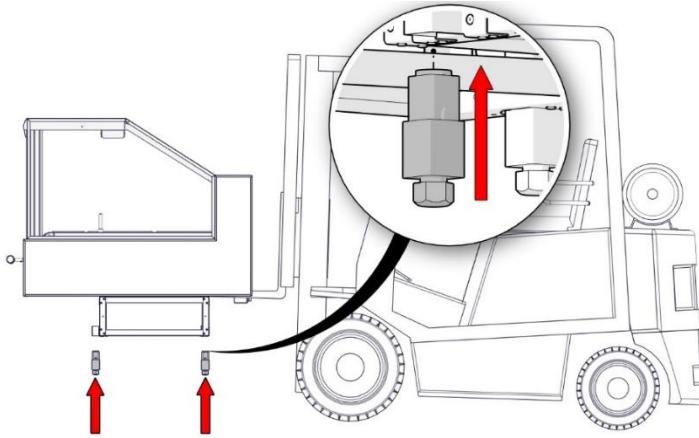
15 min



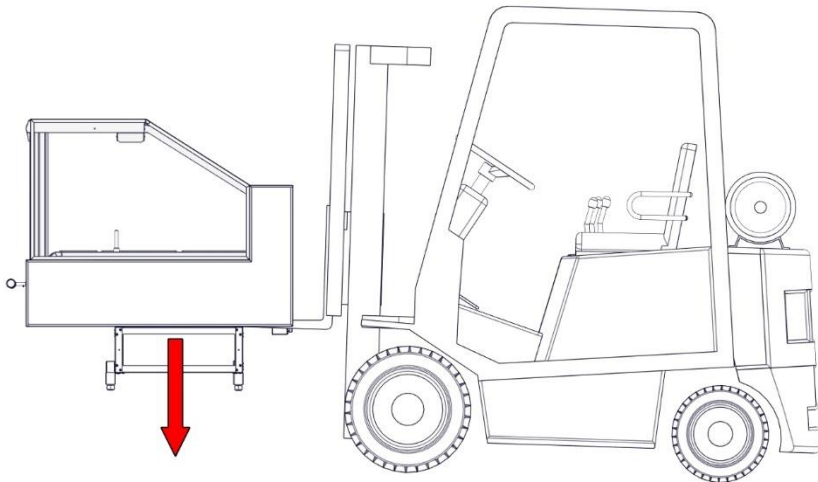
Use appropriate equipment for unit transportation (refer to unit weight and dimension information).



Lift the showcase. Remove pallet's screws. Remove the pallet. Screws M6x100 ISO 7380.



Install the plastic legs.



Lower the showcase. Carefully un-wrap the showcase and any other parts supplied. Remove all tape and ties etc.

3. INSTALLATION

The installation of the showcase can only be done by the manufacturer's representatives or personnel with the required qualifications.

The installation must be done according to the national normative documents and safety instructions.

To ensure that the showcase operates efficiently it is important to properly prepare the area for showcase installation. The heated showcase must be placed on a flat smooth surface showcases should always be located away from direct sunlight, draughts, water vapor.

It is important to properly level showcases, using adjustable plastic legs (adjustable up to 60 mm). The serve-over must be operated under suitable ambient conditions (climate class 3).

The connection to the water supply system is required for the showcase to operate. Water connection is on the back right side, connection thread is G1/2.

Drainage connection to the local sewage system is also required. Drainage connection on the rear right side, pipe diameter DN26.

4. INSTALLATION OF DUST COVERS



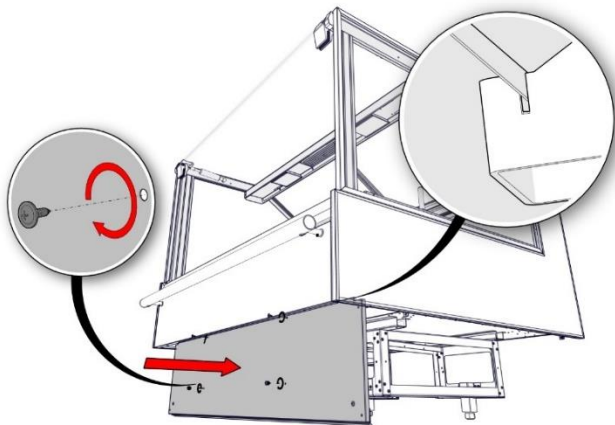
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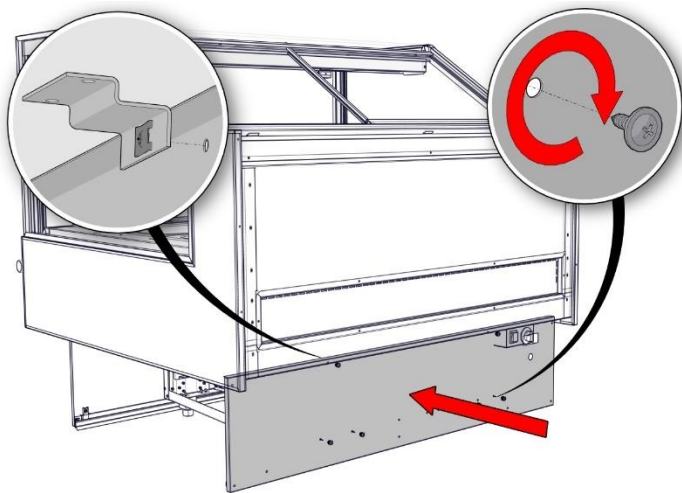
PH2



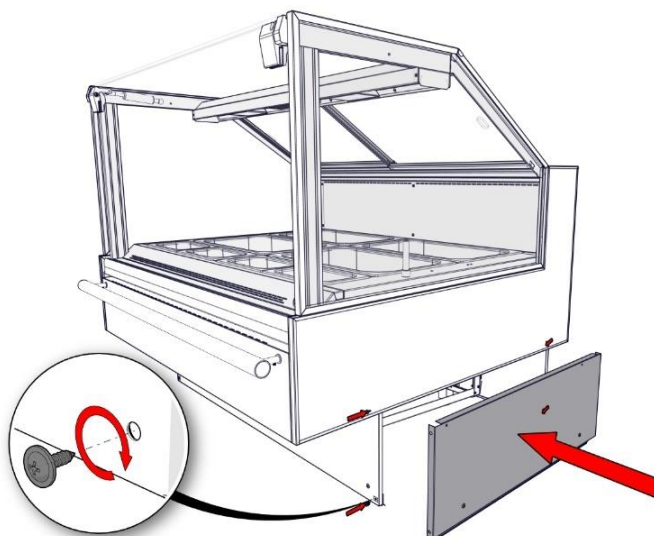
15 min



Fix the front panel in place with self-tapping screws D4,2x13.



Fix rear panel with self-tapping screws D4,2x13.



Fix the side panels in place with self-tapping screws D4,2x13.

5. EXPLOATATION OF HALOGEN LAMPS

Before turning on the halogen lamps, remove the packaging. Inspect, if the lamps are firmly secured in place and that the plinth does not squeeze the lamps.

Halogen lamps are sensitive to grease thus must be cleaned regularly and protected from dust particles. All contaminants, even fingerprints, quickly stick to the surface and burn because of high temperatures. When the contaminants are burnt, black marks are left on the surface. This affects the lamp's functionality and service life. The lamps can only be touched with soft cloth or cloth that does not leave contaminants on the surface.



The heated showcase is provided with a cover for halogen lamps to protect them from mechanical damage and possible contaminants. When changing the lamps, the cover must be removed. The cover itself must be cleaned regularly.

Whenever changing the lamps check the plinth, if needed change it. The exploitation quality of the plinth can be determined by an electrician.

Remember that after turning off the lamps, the surface is hot. Be careful!

5.1. Service of halogen lamps ant top heating element



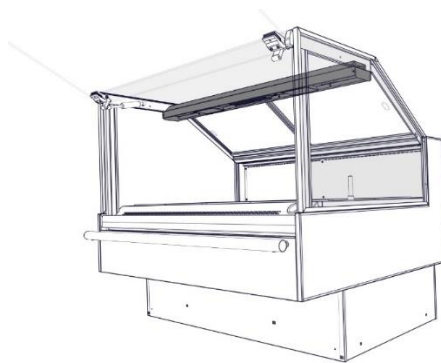
x 1



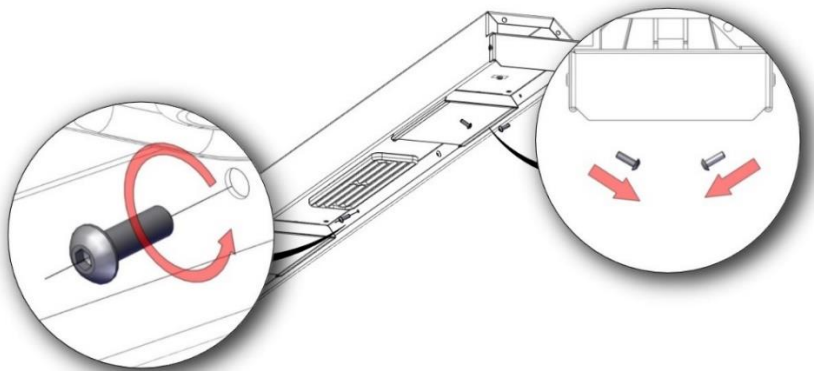
PH2, Hex 3



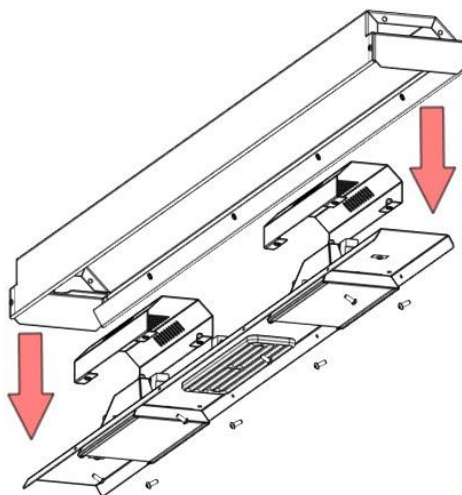
15 min



Halogen lamps ant top heating element is in lamp assembly indicated in figure above.

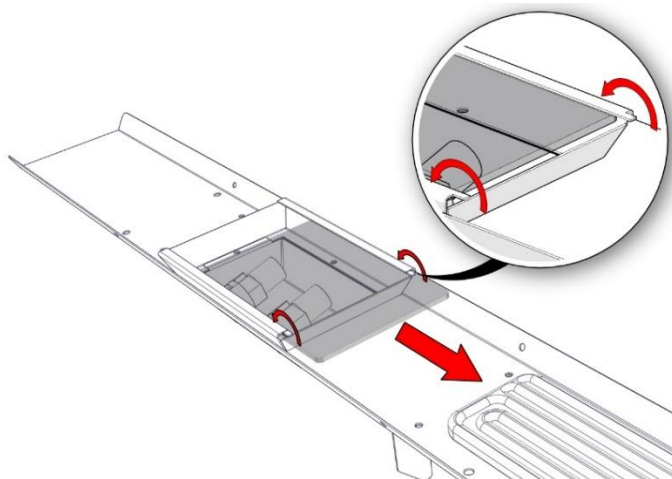


Remove the indicated screws. Screws ISO 7380 M5x12.



Remove the lamp base. Now lamps can be serviced.

Note: don't damage the electrical wires.



To replace the bulbs, gently bend the indicated tabs until it is possible to slide the glass out.

6. SERVICE OF LOWER HEATING ELEMENTS



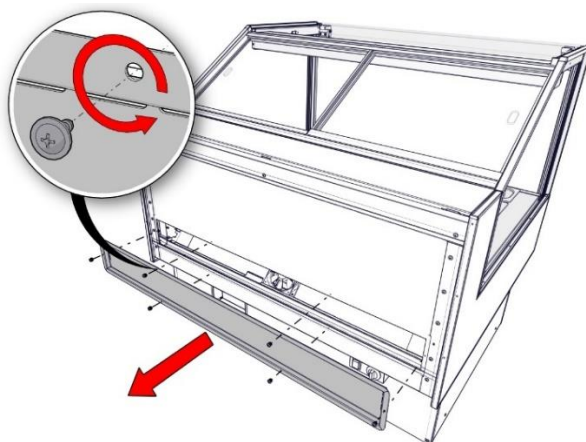
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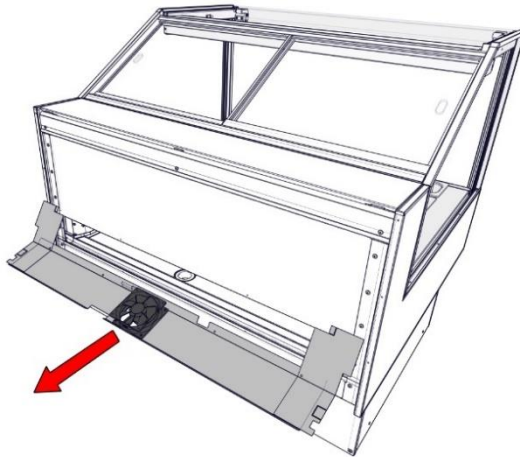
PH2, Hex 3



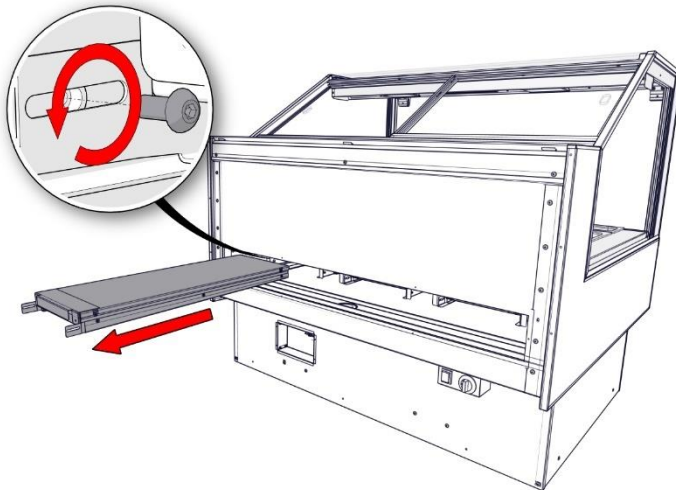
15 min



Unscrew and remove the lower heating element cover. Screws D4,2x13.



Unscrew and remove the fan unit.



Unscrew the indicated screws, so heating elements can be removed. Screws ISO 7380 M5x12. **Note: don't damage the electrical wires.**

7. CONNECTION OF THE POWER SUPPLY

INSTRUCTIONS

It is necessary to follow the requirements of the local power supply company in force in the respective region and the nationally valid and applicable standards as well as safety rules!

The network voltage and frequency must match the nominal values indicated on the operating data table of the unit!

Electricity outlets are pre-defined by the customer. The power supply of the heated showcase has 3 phases, ~400V.

The electric circuits of each device of the heating system must be protected with separate circuit breakers in the setup. The showcase must be connected to the stationary electrical panel with a residual current device of 30mA.

The housing of the devices must be securely grounded, and the safety circuits must be continuous. The stationary installation of the heated showcase must be connected to a rigid cable. The diameters of conductive center cores of the electric cable must be chosen according to the instructions of the electrical devices. The recommended parameters of the cables are specified in the specification. Electrical wiring is shown in the schemes.



The main power supply parameters:

1.Nominal voltage: ~400V/50Hz/3ph

2.Leakage protection switch: 30mA

8. CLEANING

After work hours the heated showcase must be turned off and electricity must be disconnected, and thoroughly cleaned.

It is important that the cabinet is regularly cleaned and serviced to achieve hygienic and efficient operation. Some advice on this is provided below:

- Always turn the showcase off before cleaning.
- The inside surfaces contacting with products must be disinfected.
- GN containers must be taken out of the showcase and cleaned.
- The lamps must only be cleaned with a soft cloth.
- Cleaning of electrical components must only be done with a dry cloth.
- Do not use bleach and other aggressive cleaning products that could damage the stainless steel and glass showcase surfaces.

- Ensure that the water in the BM tub is changed regularly, otherwise corrosive elements in hard water can build up on the tub.
- Perform BM tub descale at least 2 times a year, or more often if unit is filled with hard water.
- Clean the exterior with soapy water using a soft damp cloth. Never apply too much water and always be careful to minimize moisture on and near the electric components. Dry the exterior immediately afterwards.
- If present, gently lift up and remove sliding doors. These should be placed on a cloth on a level surface to be cleaned.
- If present, clear the door track of any debris.
- Clean the interior ceiling and walls.

**WARNING**

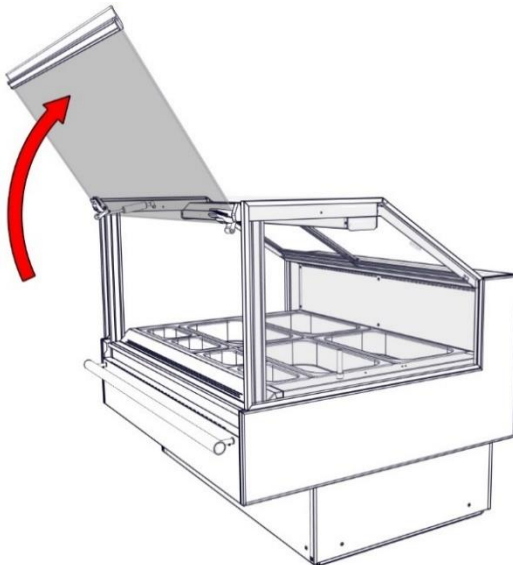
It is prohibited to clean the showcase with a high-pressure washer!

8.1. Regular maintenance

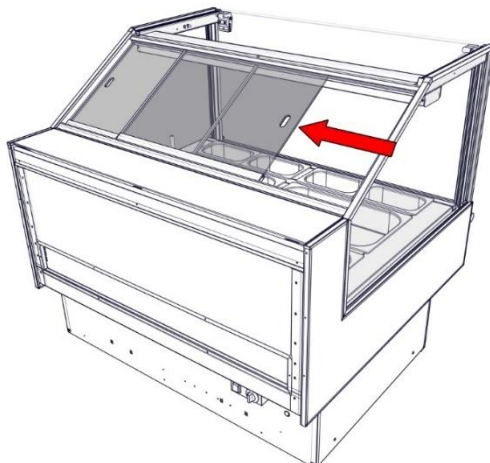
Every day the showcase must maintain the determined temperature. Do not leave products inside overnight. Remove all contaminants, sauces, crumbs of food products, scraps, especially if products become spoiled quickly. Control that the food is placed correctly and does not exceed the maximum load limit.



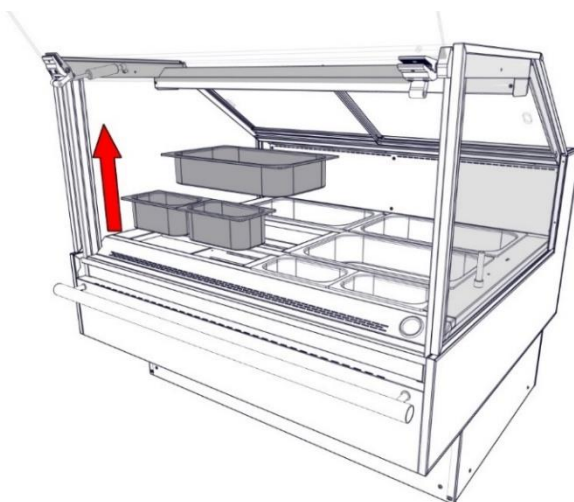
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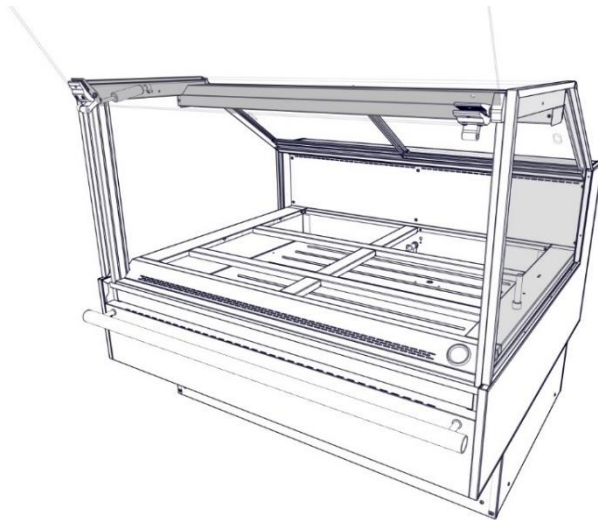
Lift the front glass to access the GN containers and clean the inside.



Slide the glass to access the GN containers and clean the inside.



Take out the GN containers and clean them.



Clean the inside of the showcase.

9. MEANINGS OF SYMBOLS

Symbol	Meaning	Type
	Qualified specialist	
	Work clothing	
	Protective gloves	
	Brittle surfaces;	
	Wrench	Sizes: 13, 32
	Screwdriver	PH2, Hex 3
	Rubber hammer	
	Protective goggles	
	Silicone pistol	
	Clamp	

Date	Work	Name

Date	Work	Name

Date	Work	Name

Date	Work	Name



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