

unis

Refrigerated showcase

CUBE II



Operating manual

unis

Dear Customer,

thank you for purchasing the product of the company UNIS COOL sro, which is a long-time successful manufacturer and supplier of a specialized range of professional refrigeration and catering equipment. We believe that with the help of this facility you will attract a lot of attention to the exhibited goods and your guests will be happy to return.

► Symbols used in this manual

SYMBOL	MEANING
	These symbols are the " WARNING " and " CAUTION " and point to the fact that the activity can cause damage and / or serious injury to the user.
	
	This symbol indicates an important instruction, property, process or matter, which is necessary during the servicing and maintenance of equipment comply or be aware of.
	Symbol points to useful information related to the device or accessories.
	Symbol is a reference to another section of this manual.

► For whom is the guidance intended

This manual is intended for all persons who come into contact with the device during the installation, operation and maintenance. Each of these persons must be thoroughly familiar with its content before beginning any activity with the device.

► Necessary notice

Carefully follow the instructions therein, to make the use of equipment, but also ensure its optimum use and long life.

Do not turn-on the unit until you are thoroughly familiar with all instructions, restrictions and recommendations that are included in this manual, especially the chapter "Safety in use".

The illustrations used in this manual may not always agree with reality; their purpose is to describe the main principles of the device.

► If you are unsure

In practice there are often unpredictable situations that can not be included in this instruction and described. Therefore, whenever you are not sure, contact your supplier.

When contacting the supplier or trained technicians, please prepare the basic data on the device.

You can read the nameplate, located in the upper right corner of the enclosure cooling units, see the last page.

1 | DELIVERY

1.1 | Packaging and Content Delivery

During transport the rear sliding doors, shelf brackets and shelves are removed. Everything is packed and placed on exhibition board.

Inside the exhibition space you will find individually wrapped dismantled smaller portion of the case.

1.2 | Transport to the installation site

It is recommended to transport showcase in the original packaging to the place of its installation.



During transport, showcases and subsequently during its establishment in the site is prohibited exert a force (push) to all glass showcases.

When receiving the unit from forwarder visually check that the display case was not damaged during transport. Unpack also all individually packaged parts and check them. In case of any damage, contact the supplier immediately and do not install the machine. Fill the report with the driver.

1.3 | Storage

If you do not unpack the showcase after delivery immediately, it must be stored under the following conditions:

1. Showcase should be kept in their original packaging in a dry and dark place.
2. Do not turn upside down nor to side the showcase. Do not place any objects on it.
3. Keep the showcase away from direct sunlight, frost and moisture. The optimum storage temperature is between +5 to +30 ° C. Humidity of storage room must not exceed 60%.

1.4 | Unpacking

1. Use the suitable tool, remove all individually packaged parts and remove all reinforcing elements and packaging materials.
2. Visually check that the display case was not damaged during transport. Unpack also all individually packaged parts and check them. In case of any damage, contact the supplier immediately and do not install the machine. Fill the report with driver.
3. Remove the display case of the pallet. Due to the weight of unit we recommend to use of at least four persons for removing it.



How to complete a showcase after unpacking can be found in section 3.2.



After unpacking ensure a proper disposal and recycle all packaging materials. Dispose according to the relevant law valid in showcase user's country. If you are unsure, entrust the disposal to a specialized company.

2 | INTRODUCTION

2.1 | Using of the showcase

Attractive CUBE II showcase is designed to display and maintain the temperature of refrigerated pre-packaged snacks, such as desserts, sweets, packaged bagels, packaged salads and the like for the purpose of presentation or sales. Showcase allows easy installation inside the shop and is therefore ideal for pastry shops, bakeries, shops, restaurants, pumps and the like. Showcase **CUBE II** may be performed in the **serve over** and **self-service** (so called open) design that allows your customers easy access to the offered goods.



Any use of equipment, employing in excess of this region, including modifications to security or functional elements without the permission of the manufacturer, is deemed inappropriate purpose. For any damage resulting from such an activities, the equipment manufacturer is not liable, the risk is covered by the user solely.

2.2 | Improper use

- Showcase is not intended to chill the merchandise on display.
- Showcase is not intended for permanent storage of refrigerated goods.

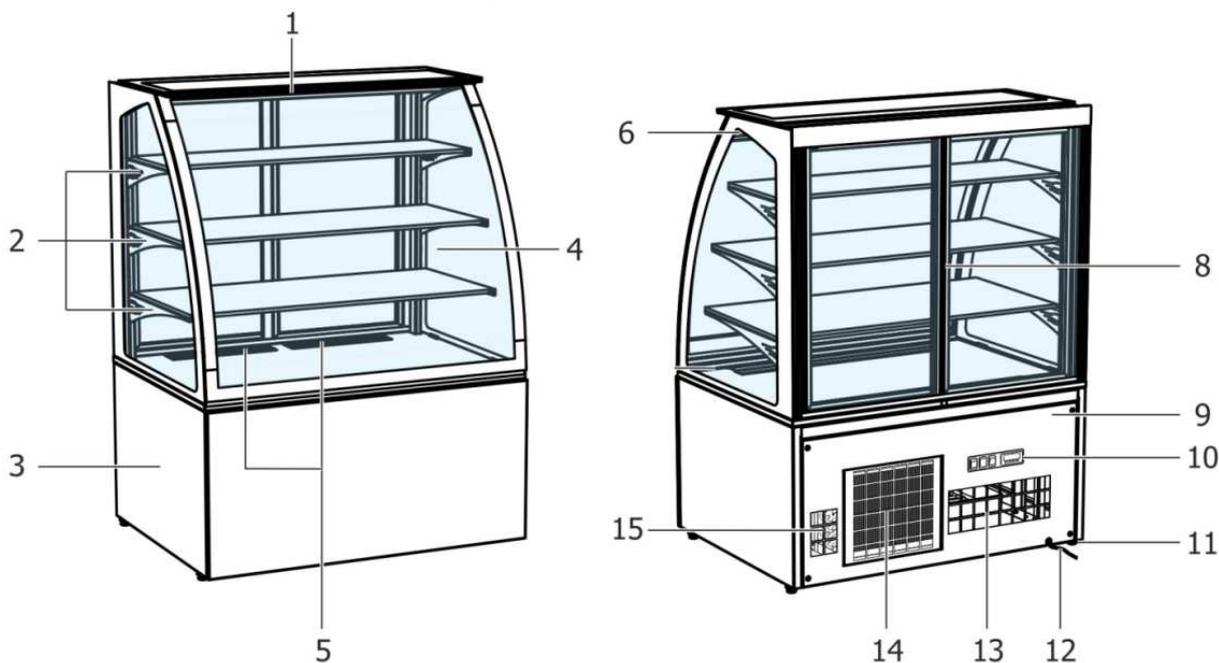
2.3 | The main parts of the case

The most important part of the exhibition space, which is equipped with glass shelves for arranging snacks, is lit on the top by the friendly LED lighting. The access to the exhibition space is possible through the back sliding door.



According to the version you ordered front glass are then either full (serve over version) or open (self-service version). See charter 2.5.

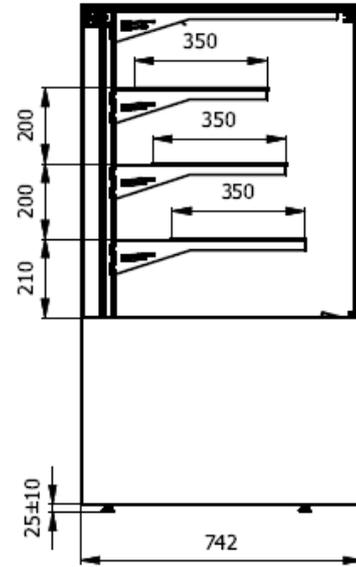
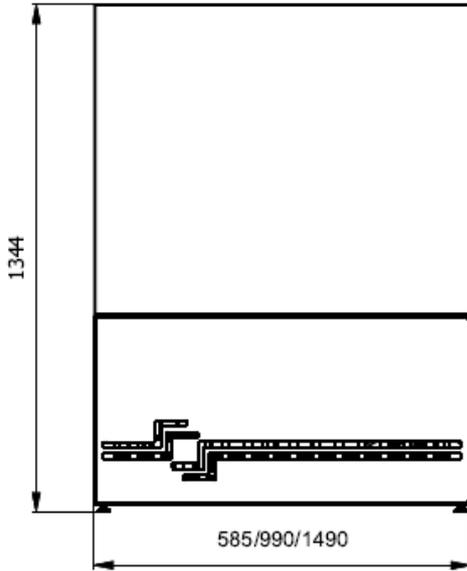
The case is equipped with a **ventilation cooling system**, automatic defrost and evaporation and electronic control.



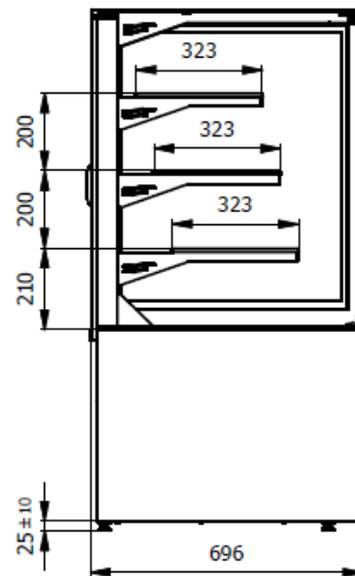
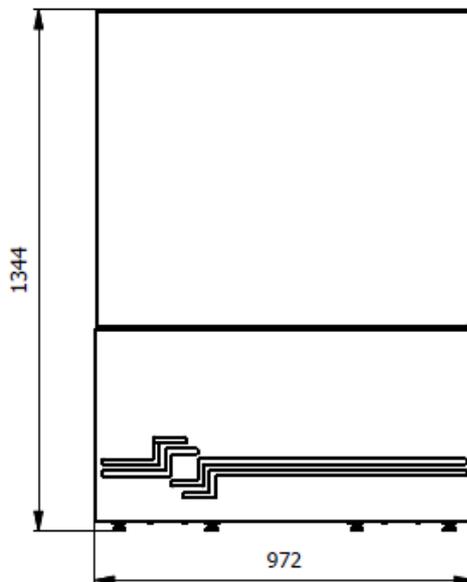
Pos.	Name	Pos.	Name
1	Main frame	9	Cover of cooling unit
2	Consoles and glass shelves	10	Controls
3	Bottom decorating panel	11	Adjustable feet
4	Front glass (full or open)	12	Power supply
5	Vents	13	Main vent
6	Top LED lighting	14	Condenser
7	-	15	Side vent
8	Back sliding doors		

2.4 | Dimensions

CUBE II 600/1000/1500



CUBE II 45° CORNER



More of technical information can be found in Chapter 9.

2.5 | Versions

Standard (serve over)



Self-service



45° neutral corner



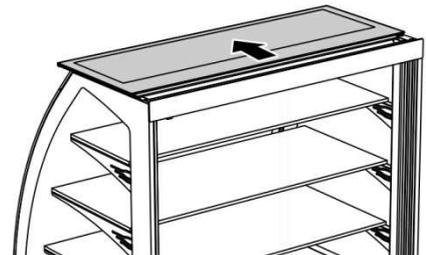
3 | OPERATION**3.1 | Place of operation**

- 1) The showcase will work correctly:
 - At the workplace with temperature from +16°C to +25 °C
 - With ambient humidity max. to 60% RH
- 2) Do not operate the showcase:
 - near the heating sources
 - in the place where sunlight can affect operation of the unit
 - in the place with draught (from air-conditioner or near the entry)
 - near other objects which could prevent proper ventilation

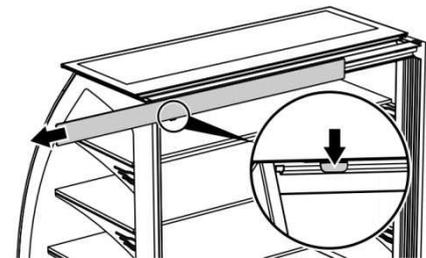
3.2 | Assembling

- 1) Showcase should be align to the horizontal position by using the adjustable feets on the bottom of the display case. Align the showcase by turning the adjustable feet with wrench nr. 24 into horizontal position. After the establishment, secure the position of the feets by tightening the nut wrench nr. 17.
- 2) Insert consoles in the brackets.
- 3) Insert glass shelves.
- 4) Hang back doors:

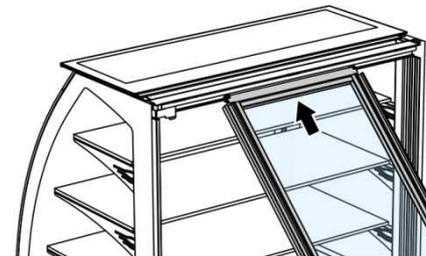
- a) Slide the upper glass slightly forward.



- b) Press the clips on the lower left side of back cover strip and slide it to the left.



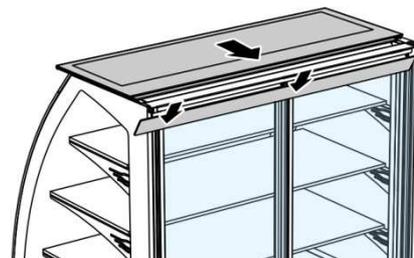
- c) While the angle is about 45 ° fit the **inner** rear door.



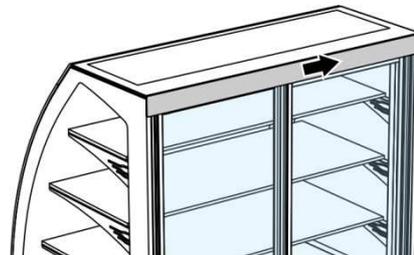
- d) While the angle is about 45 ° fit the **outer** rear door.



- e) Insert the rear cover strip and replace the top glass back.



- f) Push the rail back (to the right).



3.3 | Connection to the electric power

The case is designed for single-phase voltage 230V / 50 Hz. The power supply socket must be separately grounded and protected by a fuse of 10A or 16A. Other devices must not be attached to this separately fused circuit.

3.4 | Before first turn-on

- 1) Clean the exhibition space and shelves with a slightly damp cloth and a suitable detergent.
- 2) Dry the surface of washed surfaces with a dry cloth.
- 3) Chill the interior properly, see chapter 5.2 Turn on.

4 | SAFETY IN USE

For personal safety when operating equipment is mainly responsible operator. Manufacturer of the showcase is not responsible for personal injury or property damage and environmental damage caused while the unit is not used and serviced in accordance with the instructions for operation and maintenance and the applicable safety regulations.

4.1. | In general

- ! Showcase may be used by the **trained personnel only**. Never allow anyone, who is not authorized to use the display case and is not familiar with its functions, to manipulate it, carried its maintenance or other activities contrary to its intended use. Such improper operation may result in injury or damage showcases.
- ! Showcase may be used only for their intended purpose and in accordance with the instructions. Any other use is in contrary with its purpose and it is considered as dangerous.
- ! For safety reasons, do not remove the cover or attempt to get into the case. There are no parts which you, as the user, can manipulate. Repair of any faults and maintenance, beyond that described in this manual, must be carried out by qualified service technicians.
- ! Do not block the ventilation holes of the equipment.
- ! Before use, check the exhibition space. Remove the remnants of food, unremoved cleaners or other objects and clean the exhibition space thoroughly.
- ! Do not place the device on or near ignitable sources.
- ! Check the correct positioning and securing of shelves. Incorrect placement of shelves may lead to fall and cause injury.

4.2. | While using the showcase

- ! If the device is damaged in any way, turn it off immediately, unplug it from the power supply and contact your supplier.
- ! Operate the control panel buttons by using fingers exclusively. Using a sharp, pointed or other objects to control the device will affect the warranty of equipment.
- ! Ensure that the load of shelves and exhibition space does not exceed the maximum permissible load (Chapter 5.4).
- ! When opening showcase do not press on the glass surface and do not use excessive force. Glass can break and cause injury.

4.3. | After working with a showcase

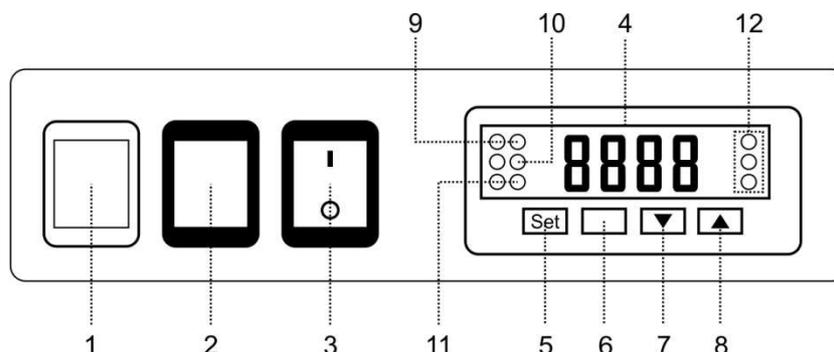
- ! For cleaning, use only non-aggressive cleaning agents.
- ! For cleaning, do not use sharp objects.
- ! Never use water stream, there is a risk of electrical short circuits. Clean only with a damp cloth.
- ! During periods of disuse device, turn off the power supply.

4.4. | Electrical safety

- ! If there is any damage to the electrical parts of the equipment, it is necessary to ensure the immediate repair. The damaged equipment must not be operated.
- ! Do not damage, alter or bend the power cord excessively. Do not tighten it and avoid its twisting. Placing heavy objects on the power cord and other compression may result in electric shock or fire.
- ! Use a single dedicated AC socket only. Do not use extension cords or multiple sockets, can cause overheating and electric shock or fire.
- ! The device is intended for indoor use only. It must not be exposed to rain, there is a risk of electric shock.
- ! If the installation of showcase in a moist environment is unavoidable, install a circuit breaker with effective protection against current leakage. If the circuit breaker is not installed, there is a risk of electric shock.

5 | OPERATION

5.1 | Control panel



- | | |
|--------------------------|--------------------------------|
| 1 - Light (white) | 7 - Lower value (temperature) |
| 2 - Power light (green) | 8 - Higher value (temperature) |
| 3 - Main switch (orange) | 9 - Cooling |
| 4 - Display | 10 - Defrosting |
| 5 - Setting | 11 - Evaporator fan |
| 6 - Not used | 12 - Not used |

5.2 | Turn on

- 1) Connect the power supply to the display case. The green LED (2).
- 2) Turn the power switch (3). The display shows the last setup of cooling temperature and the unit starts to cool the interior based on this setup.
- 3) Turn on the light (1).

! | *Let the empty showcase run for at least one hour or until the desired temperature is reached.*

After turning on the showcase starts cooling the evaporator and the fans start to begin to circulate cool air through the rear exhaust vents in the exhibition space up to the highest shelf. Cool air is thus injected into all display shelves toward the windshield. Warm air is sucked through grid disposed at front of the exhibition board to the evaporator, where it is cooled for further circulation.

The collection, drainage and evaporation of condensate from the evaporator is done automatically. The device is equipped with automatic defrosting, set by the manufacturer (every 6 hours for 30 minutes). The condensed water is drained automatically from the evaporator into an evaporating dish and subsequently evaporated into space.

5.3 | Setting

► Check the temperature setup of the cooling space:

Press button **Set**. The set value is displayed for about 15 seconds.

► Increasing the temperature:

Press the button **▲** to get required value. Press and release the button **Set** to save it.

► Decreasing the temperature:

Press the button **▼** to get required value. Press and release the button **Set** to save it.

► Manual defrosting:

Press and hold the button **▲** for **4 seconds**. Symbol of defrosting will light (10) and defrosting is activated.

i | *The defrost does not start if the evaporator has insufficient minimum temperature.
During defrost the measured temperature is blocked, ie. remains the same. After the defrost termination the temperature measurement goes back to normal.*

📖 | *Information about other symbols which can be displayed on the screen are given in Chapter 6.6.*

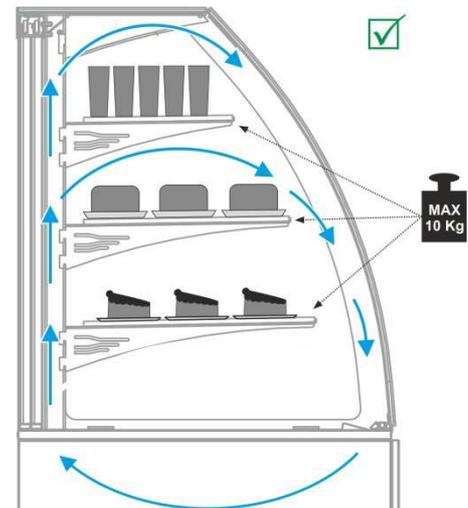
5.4 | Placing of goods in the display case

Showcase is not designed for cooling goods, but to maintain the temperature of pre-chilled goods during its presentation in the display case. Goods whose temperature is higher than the temperature inside the display case, may not be placed in the unit.

Place the goods on the shelves, so that:

- between pieces is a **gap of at least 1 cm**
- goods do **not exceed the edges of shelves**
- **total weight** of the goods on one shelf **does not exceed** the carrying capacity **per shelf (10 kg)**

Improper storage of goods slows the circulation of air inside the display case and **raises its temperature**.



The front vents and rear exhaust vents must not be covered by goods or other items!

Also, the space between the shelves and the rear sliding door must remain free - goods shall not exceed the edges of the shelves!

When loading and unloading goods, open and close the door as quickly as possible to shorten the length of time that the door is open, to prevent leakage of cool air.

5.5 | Turn off

- 1) Turn off the light **(1)**.
- 2) Turn off the main switch **(3)**.
- 3) Disconnect the showcase from power supply. Green control **(2)** will not light.
- 4) Remove all the goods and clean the showcase, see **■ 6.1** Daily maintenance.
- 5) To prevent mold and unwanted odors, leave the door open to dry up the exhibition space completely.

6 | MAINTENANCE

Showcase does not require any special maintenance. However, it must be kept clean and remove the residues of exhibited goods and other contaminants.

Instructions for maintenance is obligatory to follow, otherwise void the warranty. Just regular maintenance windows and following all instructions is to ensure its long life and trouble-free function.



Before starting any maintenance or service work the showcase must be disconnected from the electricity supply by pulling the power plug from the socket, otherwise there is a danger of electric voltage!

Before starting any maintenance or service work the responsible person must be thoroughly familiar with all instructions, prohibitions and recommendations contained in chapter 4.

Damage caused by improper cleaning and maintenance is not covered by warranty.

Elements that were set by the manufacturer or authorized service agent must not be adjusted by the user.

Plan of maintenance:

INTERVAL	PART	ACTION	DETAILS
Daily	Exhibition space, shelves and glass	Cleaning	■ ■ 6.1
Monthly	Condenser	Cleaning	■ ■ 6.2
Quarterly	Basin and evaporator + bottom space	Cleaning	■ ■ 6.3
Regularly	The power supply cable	Control	■ ■ 6.4
	Doors gasket	Cleaning	

6.1. Daily maintenance

Daily clearing of exhibition space from the remnants of the exhibited goods includes:

- Sweeping or vacuuming of the crumbs.
- Washing with damp cloth or towel.



When cleaning, do not use aggressive cleaning agents or sharp objects.

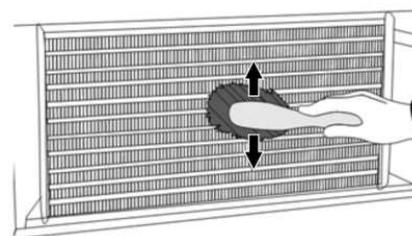
Never use water stream when cleaning, there is a risk of electrical short circuits and electric shock.

- If it is necessary to polish the front glass and rear doors by ordinary detergent, leave the door open to exhibition space until the showcase dries up completely. To prevent mold and unwanted odors.

6.2. Monthly maintenance

Dirt can impede the exchange of heat between the condenser and the environment, which causes an increase in electricity consumption and shortens the life of the compressor. Thus, **each month clean the condenser:**

- Unscrew and remove the cover grille.
- Use a soft brush or brush to clean the condenser lamellas. If the condenser is extremely dirty (fins are clogged with dust and other impurities), use a vacuum cleaner, compressed air or compressed nitrogen (performed by professional service company) to blow the dirt through the lamellas.



Never use wire brushes and other sharp objects that could damage the condenser lamellas.

6.3. | Quarterly maintenance

Clean the bottom of tub with an evaporator:

- Disconnect the showcase from power supply.
- Empty showcase and let it reach room temperature.
- Remove the front and rear grids of the exhibition board.
- Make sure the bottom of the tub with an evaporator is not soiled by debris (crumbs) - if so, use a vacuum cleaner to remove them.
- Clean the entire bottom area.

6.4. | Regular maintenance

Regularly check the **power cable**:

- Pull out the cord from the power supply socket.
- The cable must be in perfect condition, unbroken and untwisted. If there is any damage it must be repaired or replaced by a qualified person immediately.

6.5. Troubleshooting

PROBLEM	CHECK
The unit does not cool	<ul style="list-style-type: none"> ▶ Is not the current supply interrupted? ▶ Is not the power cord damaged? ▶ Is not the plug of power cord pulled out of the power supply socket? ▶ Are not the fuse or circuit breaker blown? ▶ Is not the unit in the defrost mode? (el. control unit lights the indicator of defrosting)
Showcase cool a little	<ul style="list-style-type: none"> ▶ Is the correct temperature set? ▶ Are not the circulation of cool air or intake grids blocked by goods? ▶ Are not the goods too close together? ▶ Is not the door opened or its opening frequency too high? ▶ Is not the condenser clogged with dust or other impurities? ▶ Is not the evaporator covered by ice?
Showcase produces excessive noise	<ul style="list-style-type: none"> ▶ Are all adjustable feet in contact with the floor? ▶ Are not other devices contiguous or follow too closely of the unit's furniture? Does not the compressor vibrate too much? ▶ Is not the showcase in contact with other unwanted objects?
On the outer surface of the case is condensation (water)	Condensation on the outer surface of the display case can occur during hot, humid day, or depending on the site of installation. It occurs when there is high humidity of ambient air and water from the air is coming into contact with cold surfaces. This is normal. In this case, wipe the showcase with a dry cloth.
Showcase works, but light does not light	<ul style="list-style-type: none"> ▶ Are the the lights on? (control panel, button 1) ▶ Is the LED strip damaged? If so, contact service.

If you meet the above conditions and showcase still does not work, unplug showcase from the power supply and call your supplier.



Power failure:

Showcase turns on automatically after a power failure.

6.6. Errors

While using showcase error messages may appear. Their meanings are as follows:

SYMBOL	ERROR	RESULT	CORRECTION
AL	There is low temperature in the cooling space for too long.	The goods is too cold.	Turn off and turn on the display case. If the message appeal again, contact your service provider.
AH	There is high teemperature in the cooling space for too long.	The goods is not cold enough.	
PR1	Temperature sensor defect.	Showcase will be switched on and off at regular intervals.	
PR2	Evaporator sensor defect.		



The showcase can be repaired by the authorized service only. In case of improper or unauthorized service warranty does not apply!

7 | SPARE PARTS AND WARRANTY

7.1 | Spare parts

For information about spare parts, please contact your supplier.

7.2 | Warranty

The warranty does not cover damage or disruptions caused by incorrect operation, disregarding this instruction manual, using harsh chemical cleaning agents and improper cleaning of the device. The warranty excludes damages resulting from improper installation, which is not in accordance with the manufacturer's recommendations, factually incorrect repairs, as well as defects that have been caused by foreign intervention or force majeure.

8 | DISPOSAL

Once the service life of showcase expired, it must be properly disposed of.

During the disposal of the showcase and its parts, the operator is obliged to follow the procedure under Art.8 REGULATION OF THE EUROPEAN PARLIAMENT AND COUNCIL REGULATION (EU) No. 517/2014.



The cooling device comprises a container with gas. This container is under pressure. If you remove it out of the showcase due to disposal, do not expose it to direct sunlight or temperatures above 50 ° C or throw it in fire, even though the container might be empty.

Components better be disposed of at the site, which is specialized and thus will be possible to recycle the materials.



Showcase nor its parts must not be discarded in the municipal waste!

Showcase contains electric components, which can cause harm to the environment or health in case of improper disposal.

9 | TECHNICAL INFORMATION**9.1 | Technical data**

	Cube II 45°	Cube II 600	Cube II 1000	Cube II 1500
Temperature (°C)	+4 / +8			
Dimensions (mm)	972/400 x 696 x 1344	585 x 742 x 1344	990 x 742 x 1344	1490 x 742 x 1344
Electric power (W)	45	510	720	910
Exhibition area (m²)	1,09	1,00	1,71	2,60
Weight (kg)	110	150	200	265
Refrigerant	R134a			
Operation conditions	Temperature	max +25 °C		
	Humidity	max 60 % ambient relative humidity		
Capacity shelves (kg)	10			
Noise	Less than 80 dB			

9.2 | Production plate

1	Unis cool		
2	Na Baštici 201 Staré Město 73801 Frýdek - Místek		Tel.: 558 655 211
3	Typ Cube II 1000 Inox	CE	Výrobní číslo XXXXXXXXXXXX
4			
5	Napětí 230 V~	Proud 4,5 A	
	Frekvence 50 Hz	Příkon osvětlení 2x21 W	
	Klimatická třída 3	Množství 0,25 Kg	
	Chladivo R 134a	Celková hmotnost 200 Kg	
	Kompresor GP 16 TB		
6	Datum 22.2.2014		

Pos.	Name	Pos.	Name
1	Producer	4	Serial number
2	Contact	5	Technical data
3	Model	6	Production date

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