

# EIDA

## **Dual Temperature Island**

**User manual** 

The following operating instructions provide information on the trouble-free use of the EIDA dual temperature island and do not constitute a commercial offer. Copying, distribution and sharing without the knowledge and consent of the manufacturer is prohibited.

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## 1. General information about the manual

## 1.1. Information on storing instructions

Please read this manual carefully before using the device and keep it near the device, in a safe place and easily accessible to all users. Pass on the instructions to other people entrusted with the use and maintenance of the device and make sure that they have read and understood it.

This manual presents safety rules, explains the conditions for transport, installation, assembly, connection, start-up, use, maintenance and disposal of the device. The information contained in it must be strictly followed. Local laws must be strictly observed.

#### 1.2. Limitation of liability

The manufacturer is not responsible for any injuries or damages resulting from:

- Failure to comply with the rules of transport, unloading, assembly, operation and disposal of the device resulting from this manual
- Lack of or improper performance of maintenance activities
- · Failure to comply with local laws
- · Failure to comply with the essential safety requirements and detailed safety requirements contained in this manual
- · Hiring unauthorized and untrained service
- · Unauthorized, independent modifications to the device by the customer
- · Use of spare parts not approved by the manufacturer
- · Voltage drops (e.g. damage to electrical components)

## 1.3. Symbols used in the manual

Symbol	Meaning
	General warning. Danger or caution.
КОТ	Reference to Technical Data Sheet.
4	Hazard due to energized equipment.
MAX KE/M <sup>2</sup>	Information about the maximum weight that can be placed on the shelf.
	Hazard related to the presence of a flammable agent.
Ð	General information.
	To perform the activities, appropriate tools are required.
	Personal protective equipment requirements.

#### 1.4. Purpose of the manual

This manual is intended for persons performing the transport, unloading, installation, assembly, start-up, operation, maintenance and disposal, as well as servicing of the EIDA dual temperature island.

## 2. Special instructions for safe operation of equipment

The device is intended for installation indoors.

If the device or any of its components are damaged, or if the device does not function properly, first check whether it poses a threat to people or property. If necessary, disconnect the device from the power supply and contact the manufacturer immediately.

All users of the device must be aware of how to use it properly and safely.

The device may only be connected to a network with a rated voltage and frequency consistent with the data given on the rating plate. The device should only be connected to a grounded electrical socket. Always check whether the plug is properly installed in the socket. If the non-detachable power cord is damaged, it should be replaced by a specialized service of the manufacturer or an authorized service.

During all cleaning, maintenance and installation work, the device must be completely disconnected from the mains (remove the plug from the power socket) and secured against being switched on again. The operator must be able to check from each of the points to which he has access that the plug has been removed. In the case of devices permanently connected to the mains, during all cleaning, maintenance and installation work, the device must be completely disconnected from the mains (disconnect the power supply at all poles) and secured against being switched on again. Details on the method and frequency of cleaning are described later in this manual. Do not store explosive substances in the device, such as aerosol cans with flammable gas. The maximum load weight for each shelf is given in the technical data.

This equipment is not intended for use by children. This equipment is not intended for use by persons with reduced physical or mental abilities or persons lacking experience and knowledge of the equipment unless supervision or instruction is provided regarding the safe use of the equipment so that the hazards involved are understood. Children should not play with or climb on the equipment. Children should not perform cleaning or maintenance on the equipment.



WARNING! Risk of electric shock. Live device.

WARNING! Before starting any work related to the electrical, refrigeration or maintenance installation, disconnect the device from the power supply and secure it against unintentional reconnection.

NOTE! Work on the electrical installation and cooling system of the device may only be performed by a specialized service center of the manufacturer or an authorized service center.

NOTE! Before connecting the device to the power supply, familiarize yourself with the information on the nameplate, local electrical safety regulations and the information contained in this user manual.



NOTE! A damaged connection cable may only be replaced by a specialized service center of the manufacturer or an authorized service center.

WARNING! It is not permissible to use power strips or extension cords. In the event of thermal overload, there is a risk of smouldering fire and electric shock!

WARNING! The device is filled with a flammable and explosive agent - propane (R290)



CAUTION! Protect the cooling system from damage.



NOTE! To reduce flammability hazards, equipment installation should only be performed by suitably qualified personnel.



NOTE! Please follow the detailed safety rules related to filling the device with flammable refrigerant (propane) described later in the manual.



NOTE! The device is intended only and exclusively for use in air-conditioned and ventilated rooms. Use in other places may result in failure, destruction or even explosion as well as excessive energy consumption.



CAUTION! It is not permitted to store flammable and hazardous substances in this device. Do not store explosive substances such as aerosol cans with flammable propellant.

**NOTE!** Do not cover the ventilation openings in the equipment housing.

**WARNING!** Do not use electrical appliances inside the food storage compartment other than those recommended by the manufacturer.

**NOTE!** In the event of a fault or incorrect installation, condensation may leak from the device. This must be removed immediately to reduce the risk of slipping.

**WARNING!** The device may become dangerous if used for purposes other than those for which it was intended or if it is installed by untrained personnel.

**NOTE!** To speed up the defrosting process, do not use mechanical means or any other means than those recommended by the manufacturer.

NOTE! Unauthorized alterations or modifications to the device are prohibited.

**NOTE!** If you notice a gross neglect of safety rules by unqualified persons, they should be denied access to the equipment.

**WARNING!** It is forbidden to enter the device or its upper part. Standing on any part of the device is prohibited. This may damage the device, and there is also a risk of an accident that endangers health and life.

**WARNING!** Do not lean or rest elements on the device, especially on glass elements. This may damage the device, tip it over, break fragile elements, which may pose a threat to health and life. In addition, there is a possibility of scratching the elements.

**WARNING!** The device has rotating elements and sharp edges. Maintenance work (cleaning) should be performed with protective gloves, after disconnecting the device from the power supply.

**WARNING!** It is not permitted to remove safety covers and covers permanently installed by the manufacturer (e.g. fan cover). Rotating parts, live parts and sharp edges can cause injuries.

NOTE! It is forbidden to load the display shelf with a weight greater than the permissible one.

**NOTE!** Please follow the detailed safety rules related to transport, unloading, use, maintenance and disposal of the device, described later in this manual.

## 3. Device characteristics and scope of application

## 3.1. Purpose of the device

The EIDA dual temperature island is a device designed for horizontal display, short-term storage at a reduced temperature and direct sale of packaged food products.

The device was tested in accordance with the standard 23953-2, in climatic class 3 conditions:

- Relative humidity: 60%
- Ambient temperature: 25 °C
- Air flow speed: < 0.2 m/s

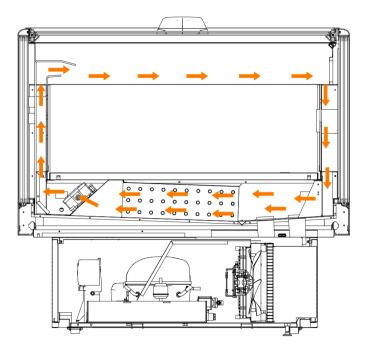
The device is designed to operate only with correct environmental parameters: in a ventilated and air-conditioned room, with a temperature of 16 to 25 °C, relative humidity up to 60% and a flow speed of ambient air up to 0.2 m/s, and while observing the conditions of location, assembly, storage, operation and maintenance of the device.

The manufacturer reserves the right to change the design of the device.

#### 3.2. Principle of operation of the device

The EIDA dual temperature island is used to display food products at an appropriately low temperature. Achieving the appropriate low temperature is ensured by a compressor refrigeration system placed inside the device (plug-in device). In this system, the refrigerant moving through the evaporator draws heat from the inside of the device. In order to increase the efficiency of the evaporator and achieve an even temperature inside the device, fans placed in the immediate vicinity of the evaporator were used. This method of operation is called dynamic cooling.

The air flowing through the evaporator is cooled and forced by the fan through the channels and air outlets. Then it washes the food products and cools them. Moving further through the air inlets, it returns to the evaporator again. This phenomenon is called internal circulation.



Air circulation in the device.

**NOTE!** In order to maintain proper and uninterrupted circulation, it is forbidden to block the air inlet and outlet ventilation holes. The second condition for maintaining proper circulation is to follow the rules of stocking.

The heat removed from the inside of the device is transported by the refrigerant through the compressor to the condenser. The condenser removes the heat to the outside of the device, thanks to the air circulation forced by the condenser fan.

Cooling devices (in plug-in version) operating in rooms produce heat. To enable its removal, free air circulation in the immediate vicinity of the device and ventilation (air conditioning) of the room in which the device will be installed are necessary.

Condensate generated during operation of the device is drained into a container placed in the base of the cooling unit, where it is automatically evaporated using hot gases. LED lighting placed in the upper part of the device ensures proper display of goods.

The device is controlled automatically and is implemented via an electronic controller that starts the unit depending on the temperature in the device and the temperature setting. The controller also supervises other operating parameters, such as: defrosting, alarm signaling, etc.

The device can operate in two temperature ranges (freezing operating temperature and cooling operating temperature). The temperature range is selected using a switch located on the base of the unit.

## 3.3. Technical data

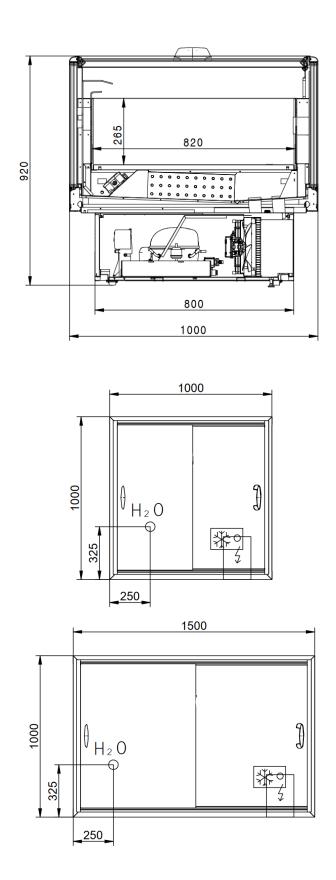
The given technical data refer to the standard version of the device. The parameters characterizing the exact configuration of the device can be found on the nameplate and on the energy label attached to the device.

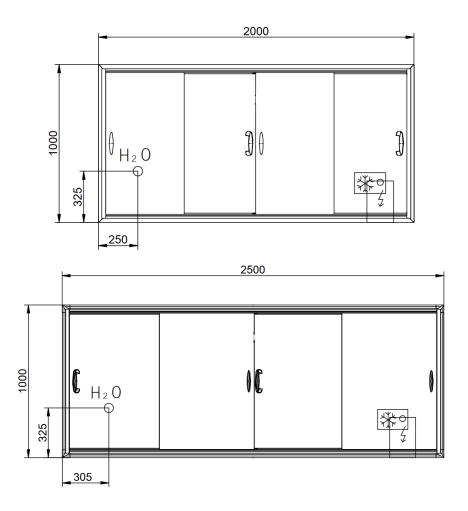
Device name		EIDA dual temperature island				
Module		1.0	1.5	2.0	2.5	
Length without sides	mm	1000	1500	2000	2500	
Height	mm		92	20		
Depth	mm		1(	00		
Side thickness	mm		5	0		
Climate class	-		:	3		
Temperature class	-		L1 /	′ M1		
Max ambient air speed	m/s		0	.2		
Sound pressure level	dB(A)		≤(	60		
Total exhibition area	m²	1.60	2.30	3.10	3.49	
Cooling surface of shelves	m²	0.71	1.11	1.51	1.92	
Usable capacity	dm <sup>3</sup>	190	298	406	514	
Max. shelf load	kg/m <sup>2</sup>		1:	50		
Refrigerant	-		R2	290		
Filling	g	100	150	180	2x150	
Temperature setting (factory value)	°C		-2	23		
Supply voltage (frequency)	V(Hz)		230	(50)		
Rated power	W	380	495	550	865	
Rated current	А	1.70	2.20	2.40	3.80	



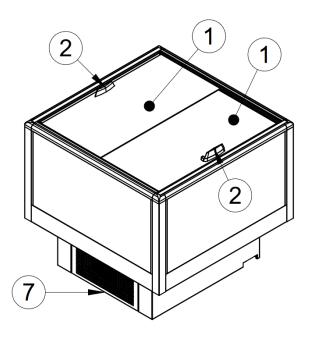
Detailed technical parameters of the device are presented in the Technical Data Sheet.

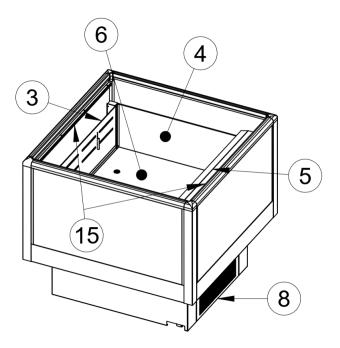
## 3.4. Technical drawings

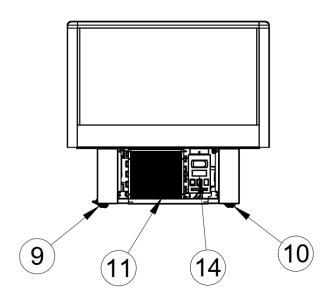


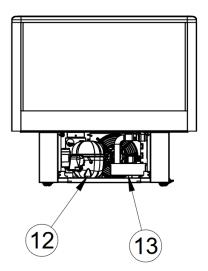


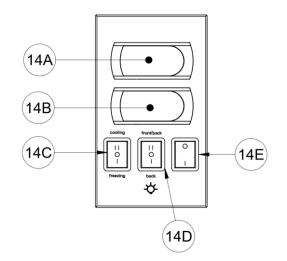
## 3.5. Construction of the device











1	Sliding covers (top and bottom)	11	Condenser
2	Lid handle	12	Compressor
3	Air intake plexiglass	13	Condensate drain container
4	Side window	14	Electric box
5	Air outlet plexiglass	14A	Controller - cooling mode
6	Display shelf	14B	Controller - freezing mode
7	Base flap (controller side)	14C	Operating mode switch
8	Base flap (compressor side)	14D	Light switch
9	Wheels with brake	— 14E	Evaporation heater switch (only in
10	Wheels without brake		modules: 1.5, 2.0, 2.5)
		15	LED lighting

#### 3.6. Temperature classes

The temperature class determines the temperature range of products in the device at a given temperature setting on the controller. It is indicated in the technical data of the device and on the nameplate.

Temperature class of freezing equipment	Maximum temperature of the warmest measurement package [°C]	Highest minimum temperature of all measurement packages [°C]
L1	-15	-18
L2	-12	-18
L3	-12	-15

Temperature class of refrigeration equipment	Maximum product temperature [°C]	Minimum product temperature [°C]
M0	-1	+4
M1	-1	+5
M2	-1	+7
H1	+1	+10
H2	-1	+10
S	Special classification	

## 3.7. Climate classes

The climate class determines the maximum ambient temperature and the maximum relative humidity in the environment for which the device was designed. It is indicated in the technical data of the device and on the nameplate.

Dry bulb temperature [°C]	Relative humidity [%]	Dew point temperature [°C]
20	50	9.3
16	80	12.6
22	65	15.2
25	60	16.7
30	55	20.0
40	40	23.9
27	70	21.1
35	75	30.0
24	55	14.4
	20 16 22 <b>25</b> 30 40 27 35	20     50       16     80       22     65       25     60       30     55       40     40       27     70       35     75

## 3.8. Refrigerant



**WARNING!** The device is filled with a flammable and explosive agent – propane.

The device is filled with R290 (propane), which is classified as A3 (flammable and explosive) according to EN 378-1. Propane may cause an exothermic reaction when combined with air and an ignition source within certain limits of its concentration in air.

For this reason, special precautions must be followed as set out below.



**NOTE!** A device with a propane charge of more than 150 g per cooling system may only be used in rooms with a specified, minimum area expressed in  $m^2$ . Devices to which this restriction applies have been marked with an appropriate symbol.



NOTE! If a refrigerant leak is suspected, ventilate the room.



**WARNING!** Avoid potential ignition sources near the device.



NOTE! The ventilation openings at the front and rear of the device must remain clear. They must not be blocked.



**NOTE!** When installing the device, the location rules specified in Chapter 5.1 must be followed. Otherwise, in the event of a leak, there is a possibility of propane accumulating and creating a flammable atmosphere.



**CAUTION!** Do not damage the refrigeration system of the device. In the event of damage, there is a possibility of leakage of flammable refrigerant into the room.



**CAUTION!** It is not permitted to store flammable and hazardous substances in this device. Do not store explosive substances such as aerosol cans with flammable propellant.



**NOTE!** Work on the refrigeration system may only be performed by a specialized manufacturer's service or an authorized service trained in the field of refrigeration systems filled with propane.

## 3.9. Nameplate

Technical data, identification and contact information for the device manufacturer can be found on the nameplate located on the device housing.

MODEL		
SERIAL NUMBER		REFRIGERANT
RATED SUPPLY V	Hz	REFRIGERANT QUANTITY Kg
RATED CURRENT	<u>A</u>	CLIMATE CLASS
LIGHTING POWER	W	TEMPERATURE RANGE
DEFROST HEATER POWER	W	MAX. ALLOWABLE PRESSURE bar
DRYING HEATER POWER	W	WEIGHTkg
EVAPORATION HEATER POWER	W	QUALITY CONTROL MARK
MAX. HEATERS POWER	W	FOAMING AGENT IS A FLUORINATED
PROTECTION DEGREE		GREENHOUSE GAS
≥ m <sup>2</sup>		MANUFACTURE DATE



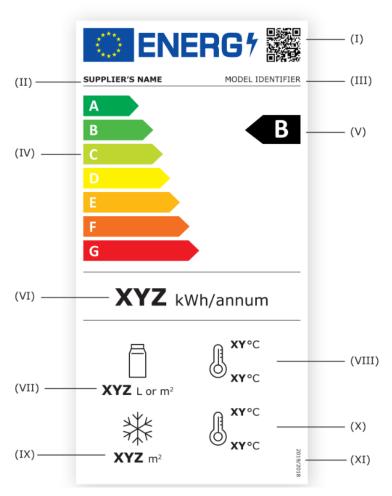
This symbol on the device indicates that it has been filled with a flammable fuel. The symbol is located near the nameplate.



This symbol on the appliance indicates the minimum room area in which the appliance can be used when charged with flammable refrigerant. It does not apply to appliances with a charge of 150 g or less per refrigerant system. The symbol is located on the nameplate if it applies to the appliance.

#### 3.10. Energy label

An energy label is attached to the device, in accordance with the requirements of Commission Delegated Regulation 2019/2018 (EU). The above does not apply to corner appliances.



- I QR code linking to the European Product Database
- II Supplier's name or trademark
- III Supplier Model Identifier
- IV Energy efficiency class scale from A to G
- V Energy efficiency class of the device
- VI Annual energy consumption of the device expressed in kWh/year
- VII Total exposure area with cooling operating temperatures
- **VIII** Top Temperature: The highest product temperature at refrigeration operating temperatures

Bottom Temperature: The lowest product temperature at refrigeration operating temperatures

- **IX** Total exposure area at freezing operating temperatures
- **X** Top Temperature: The highest product temperature at freezing operating temperatures.

Bottom Temperature: The lowest product temperature at freezing operating temperatures

XI Regulation Number

## 3.11. Product Database

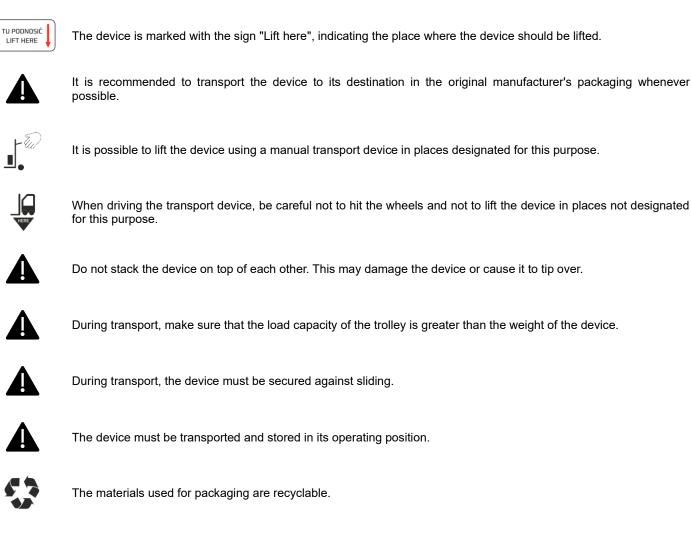
Freezing island EIDA dual temperature island and other refrigeration appliances with a direct sales function meet the requirements of Commission Delegated Regulation (EU) 2019/2018 of 11 March 2019 supplementing Regulation (EU) 2017/1369 of the European Parliament and of the Council with regard to energy labeling of refrigeration appliances with a direct sales function and are registered in the EPREL database (European Product Database). By scanning the QR code indicated below, you can go to the EPREL database and find devices to learn more information about the device.



QR code linking to the European Product Database.

## 4. Transport

As standard, the device is secured with cardboard angles and foil for transport. It is possible to change the way the device is packed, after prior arrangements with the manufacturer.



## 4.1. Unloading

Unpack the device and check for any damage that may have occurred during transport (e.g. dents, bends, scratches, loose elements, visible fluid leaks). If you notice any, immediately notify the party ordering the transport (manufacturer's sales representative, end seller) or the manufacturer and write a damage report. The damage must be confirmed by a signature by the driver on the device documents.



In the event of damage occurring after unpacking the device and clearly indicating negligence on the part of the customer, complaints will not be accepted.



Before throwing away the packaging, check that there are no loose functional parts of the device left inside.

During transport, loading and unloading, pay special attention to glass elements.

## 4.2. Storage

The device can be stored at an ambient temperature of -20 °C to +40 °C and a relative humidity of 30 to 80%. The device should only be stored indoors. The device must not be exposed to sunlight or other atmospheric phenomena (e.g. wind, precipitation).

## 5. Installation

#### 5.1. Device location conditions

The device may only be used indoors. It is prohibited to start and use the device outdoors - outside the building, in the open air. The room in which the device is to work should be dry and well-ventilated and air-conditioned.

When installing the device, make sure that the following conditions are met:

- The device is designed to operate in the following conditions: maximum permissible ambient temperature: 25 °C, minimum permissible ambient temperature 16 °C, maximum permissible relative humidity: 60%, maximum permissible air flow speed: < 0.2 m/s.</li>
- Do not install the appliance in a location exposed to increased air speed (greater than 0.2 m/s), for example near a door or in other intensively ventilated locations.
- · The surface on which the device will be placed is horizontal, stable and flat
- The device must not be located in close proximity to heat sources, such as radiators or spotlights focusing light, or ignition sources.
- The device cannot be located in a place where it is exposed to air flowing from air conditioners, fan coil units and ventilation.
- The device must not be exposed to direct sunlight or increased radiation from other sources (e.g. spot heaters). If necessary, use curtains/blinds on the windows.
- It is forbidden to place additional heat sources inside the device, e.g. light bulbs.
- Air access to the device must be ensured in places designated for this purpose (perforation in the rear cover of the unit, perforation of the front cover)
- The device cannot be placed in recesses with restricted air flow.
- Do not cover the ventilation holes and perforations in the device, as well as the air inlet and outlet in the exhibition space. This may disturb the air circulation and cause irreversible failure and may lead to loss of temperature in the device.
- In case of any doubts regarding the execution of the device installation, please contact the supplier or manufacturer of the device.





**NOTE!** The installation of the device elements should be done in such a way as to ensure their easy dismantling during service activities. It is forbidden to permanently install elements covering such components as aggregates, condensers, valves, filters, containers, boxes, electrical and cooling elements.



**NOTE!** The party performing the installation is responsible for any damage to the housing components during service activities caused by the need to dismantle the above-mentioned details that permanently cover the damaged components.



NOTE! When installing additional covers and construction elements, ensure adequate air circulation.

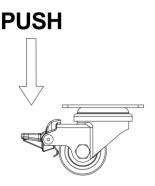


**NOTE!** Failure to comply with the device location conditions may result in failure, explosion and increased electricity consumption.

## 5.2. Assembly steps

The scope of assembly activities includes:

 Setting the device in its intended location and removing the protective foils and cardboard angles. The device is equipped with wheels. After setting the device in its intended location, lock the wheels equipped with a brake.



- 2) Preparation for first use, according to Chapter 5.5 (cleaning the device).
- 3) Connection to the electrical installation.

## 5.3. Condensate drain

A natural process during the operation of a refrigeration device is the formation of condensate on the evaporator and the formation of water in the process of defrosting the evaporator. The condensate is drained by gravity to the condensate container placed in the base of the refrigeration unit, where it automatically evaporates using hot gases. The device is factory-equipped with siphons.

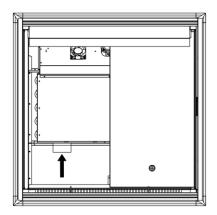
Modules 1.5, 2.0 and 2.5 are additionally equipped with a condensate evaporation heater, the purpose of which is to increase the evaporation efficiency. If necessary, it can be activated manually by the user using a switch located in the electrical box (see: Chapter 7.7).



**NOTE!** Before switching on the device, a detailed inspection of the condensate drain system should be carried out. It should be checked for leaks. In the event of a failure of the sanitary system, it should be reported to the nearest service.

## 5.3.1. Filling the siphon with water

Before starting to use the device, the siphon should be filled. To do this, lift the outermost display shelf and slowly pour water into the place marked with an arrow in the picture. The siphon should be filled with approximately 0.5 liters of water.



## 5.4. Connection to the refrigeration system

The EIDA dual temperature island is a device with its own cooling unit and does not require additional connection to the refrigeration system.

## 5.5. Preparation for first start-up

Before first use, thoroughly wash the interior and all shelves of the appliance using a mild detergent. After washing, carefully dry all surfaces.



NOTE! Make sure that cleaning agents are non-toxic and non-corrosive.



**NOTE!** If the device has been stored in low temperatures, it must be stored in an environment with a temperature between 16 and 25 °C for at least 24 hours before first use.

#### 5.6. Connection to the electrical installation

The EIDA dual temperature island is equipped with a connection cable. Before connecting the device to the network, please read the information below.

Module		1.0	1.5	2.0	2.5
Supply voltages (frequency)	V (Hz)		230	(50)	
Rated power	W	380	495	550	865
Rated current	А	1.70	2.20	2.40	3.80



WARNING! Risk of electric shock. Live device.



NOTE! Work on the electrical installation may only be performed by an authorized manufacturer's service center.



NOTE! Before connecting the device, carefully inspect the connecting cable.



**NOTE!** A damaged connection cable can only be replaced by an authorized manufacturer's service center.



NOTE! It is essential to observe and comply with regionally applicable national standards and safety requirements.



NOTE! Connection to the electrical installation should be performed by authorized persons.



**WARNING!** The device must not be connected to the mains without a properly functioning shock protection system.



**NOTE!** Before connecting the device to the mains, check that the voltage and frequency of the mains match the voltage and frequency to which the device is adapted (the voltage and frequency are shown on the rating plate).



NOTE! It is prohibited to connect devices via extension or splitter cables.



**NOTE!** The device must be connected to a separate, properly made electrical circuit with a plug socket and protective pin (according to PBUE).

The electrical installation diagram of the device is attached to this manual and is located on the control module.

## 6. Use

## 6.1. Activation

Before using the device for the first time, clean the inside of the device according to the information in Chapter 8.

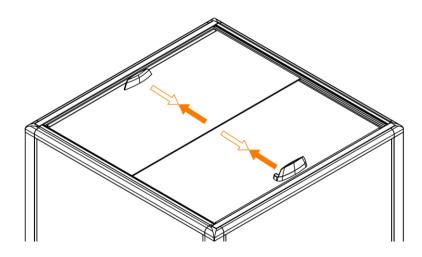
Once the device has been properly assembled and prepared in accordance with Chapter 5, you can start the device.

The device is started using the operating mode switch located under the controller. Set the switch to the desired position. Position "O" - device off. Position "I" - freezing mode. Position "II" - cooling mode.

To turn on the lighting, turn the lighting switch to the "I" or "II" position (see: Chapter 7.6.).

## 6.2. Merchandising

Before starting to load, make sure that the temperature inside the device has reached the expected value.



Method of opening/closing covers.

The following rules must be observed when loading:

- Do not throw items into the appliance.
- Do not exceed the shelf load the maximum load of the display area is included in the technical data table and in the drawing below.
- Products should be placed at least 10 mm apart on the display surface to allow for proper flow of cooled air.
- Products should be placed uniformly within the display area of the device.
- · Products must not protrude beyond the edges of the shelves and must not cover the air inlets and outlets.
- Please follow the guidelines regarding the stock limits of the device.



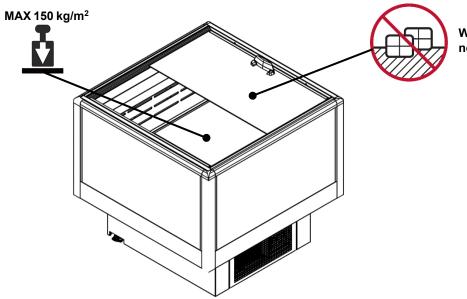
**NOTE!** This symbol indicates the stock limit inside the device. Exceeding this limit is not allowed.



**NOTE!** The appliance is used to store and display previously frozen products and is not intended for freezing them. Products with a temperature higher than the one set in the appliance should not be placed in it.



**NOTE!** Incorrect stocking of the device may disrupt air circulation inside the device, which will disrupt the correct operation of the device and may result in failure to maintain the desired temperature class.



WARNING! Loading the glass covers is not permitted!



NOTE! The maximum load of display shelves is 150 kg/m<sup>2</sup>.



NOTE! Loading the glass covers is not permitted.

## 6.3. Automatic defrosting

The evaporator defrosts automatically according to the settings on the device controller. It is possible to set a different defrost frequency depending on the needs and operating conditions, but only and exclusively in agreement with the manufacturer. It is also possible to manually force the defrost process.



For instructions on how to manually force a defrost, see Chapter 7.4.



Manual defrosting is recommended when there is a need for additional defrosting of the evaporator due to difficult operating conditions of the device (e.g. high humidity, frequent product rotation).

During defrosting, the temperature inside the device may rise compared to the expected temperature in the exhibition space, but this is a temporary process and has no negative impact on the products.

## 6.4. Reeding

Dew is the process of water vapor condensation on the surfaces of a device, which occurs when moist air borders surfaces with a temperature lower than the dew point. It is a natural and short-term phenomenon. It can occur, among others, during the defrosting process, and should disappear after its completion.

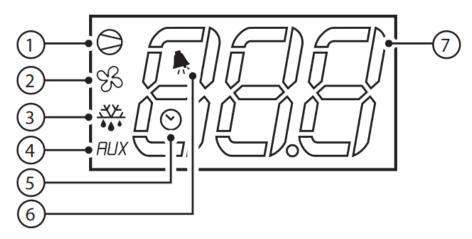


The condensation of sheet metal and glass surfaces is a natural process and occurs for a short time. A phenomenon that repeats frequently and for a long time is caused by improper environmental conditions. Due to the above condensation, do not call for service!

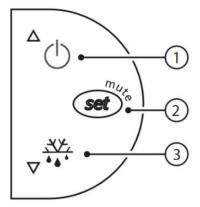
## 7. Controller use (Carel Easy)

The device is equipped with two controllers, one of which is active during freezing mode and the other during cooling mode.

## 7.1. Driver description



Designation	Symbol	Description
1	$\bigcirc$	Compressor. LED on – compressor is working. Flashing – compressor start delayed by protective procedure.
2 %		Evaporator fans. LED lit – evaporator fans are on. Flashing – evaporator fans start delayed by external shutdown or when another procedure is in progress.
3	<u></u>	Defrost. LED on – active defrost process. Flashing – defrost start delayed by external shutdown or when another procedure is in progress.
4	AUX	Auxiliary output. LED on – auxiliary output active. LED off – auxiliary output inactive.
5	$\odot$	Real-time clock. LED on – real-time clock is on and at least one of the time limits is set. LED off – real-time clock is off or no time limit is set.
6		Alarm. LED on – active alarm. LED off – no active alarms.
7		Current temperature inside the device or the value of the parameter selected on the controller or the alarm code if it occurs.



Designation	Symbol	Description
		<ul> <li>Normal operation:</li> <li>Pressing for more than 3 seconds turns the controller on/off.</li> </ul>
1	^ ()	<ul><li>Parameter review mode:</li><li>Go to the next setting parameter</li></ul>
		<ul> <li>Parameter value setting mode:</li> <li>Increase parameter value</li> </ul>
2	set "	<ul> <li>Normal operation: <ul> <li>A short press mutes the alarm sound.</li> <li>Pressing for 1 second displays the set point</li> <li>Pressing for more than 3 seconds takes you to the parameter settings menu.</li> </ul> </li> <li>Parameter review mode: <ul> <li>Pressing displays the value of the selected parameter and switches to the parameter value setting mode.</li> </ul> </li> <li>Parameter value setting mode: <ul> <li>Pressing temporarily saves the new parameter setting.</li> <li>Pressing for more than 3 seconds permanently saves the new parameter setting.</li> </ul> </li> </ul>
3	$\nabla \frac{\Delta Y}{\Phi \Phi}$	Normal operation: <ul> <li>Pressing for more than 3 seconds activates/deactivates the manual defrost function.</li> </ul> When powering on: <ul> <li>Pressing for 1 second will display information about the software version</li> </ul> Parameter review mode: <ul> <li>Go to previous setting parameter</li> </ul> Parameter value setting mode: <ul> <li>Decrease the parameter value</li> </ul>

## 7.2. Turning the controller on/off

$\hfill \Delta$ To turn on the controller, press the button	Ofor more than 3 seconds. The display will show the message "ON"
Z To turn off the controller, press the button current temperature inside the device.	for more than 3 seconds. The display will show the message "OFF" alternating with the

## 7.3. Temperature setting

To change the temperature setting inside the device (set point) you should:

- Press the button for 1 second, the set temperature will be displayed
- Increase or decrease the desired setting value using the desired setting value using
- Press the button set to confirm the new value

## 7.4. Manual defrosting forced

To manually start defrosting:

 Press the button <sup>\*\*\*</sup> for more than 3 seconds

To deactivate an active forced defrost process:

• Press the button  $\nabla^{\bullet \bullet \bullet}$  during forced defrost for more than 3 seconds

The icon is active during defrosting

## 7.5. Change of working mode

To change the operating mode, use the operating mode switch located under the controller. To change the operating mode, set it to the appropriate position. The device will automatically change the operating mode and switch the active controller.

Switch position	Active work mode	Active driver
0	Device turned off	Lack
I	Freezer mode	Bottom Controller (14B)
II	Cooling mode	Top Controller (14C)

## 7.6. Turning lighting on and off

The lighting is turned on using the switch located under the controller (chapter 3.5, position 14D). To turn on/off individual lighting panels, set the switch to the appropriate position.

Switch position	Description
0	Lighting off
I	Rear lighting ON Front lighting OFF
II	Rear lighting ON Front lighting ON

## 7.7. Turning lighting on and off

The condensate evaporation heater is started using the switch located under the controller (section 3.5, item 14E). To turn the heater on/off, set the switch to the appropriate position.

Switch position	Description
0	Heater OFF
I	Heater ON

## 8. Maintenance

The device must be kept clean and serviced periodically. This is the responsibility of the user.

## 8.1. Scope of work that can be performed by the user

The scope of work that can be performed by the user includes:

- Turning the device on/off
- · Change of working mode
- Monitoring device operation, including temperature control
- · Changing the temperature parameter of the cooled space on the temperature controller (set point)
- Manual defrosting
- Stocking/unstocking
- Internal cleaning of the device
- External cleaning of the device
- Condenser cleaning
- Cleaning the condensate container
- · Cleaning the condensate drain
- Manual defrost
- Replacing display shelves

Other work may only be performed by appropriate personnel.

## 8.2. Maintenance schedule

The minimum frequency of maintenance is shown in the table below. All maintenance activities shown, with the exception of service inspections, are the responsibility of the user.

				Fied	quency			
Action		Depending on the application and need	Every day	Once a week	Once every two weeks	Once a month	Once every six months	Once a year
Internal cleaning of the device		>						
External cleaning of the device		>						
Condenser cleaning						>		
Cleaning the condensate container	User	>						
Checking the tightness and patency of the sewage system		>						
Checking the condition of the magnetic seals of the storage chamber door						>		
Manual defrosting (turning off the device for at least 12 hours)				~				
Service inspection	Service							$\checkmark$

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## 8.3. General principles of maintenance activities



NOTE! For proper and long-term operation, the device requires regular maintenance and cleaning.



When cleaning and preparing the device for cleaning operations, special care should be taken. The interior of the device is made of sheet metal elements with sharp edges, therefore, hand protection (gloves) should be worn to avoid injuries.



**NOTE** ! The device should be washed and maintained in accordance with the frequency specified in Section 8.2, or more frequently if necessary.



To clean the exterior and interior of the device, do not use: steel bristle brushes, cleaning agents containing sharp abrasives, pastes, vinegar, abrasive and corrosive agents, cleaning agents containing: chlorides, fluorides, bromides, iodides, and acids containing these compounds, bleaches and hypochlorite-based agents, products dedicated to cleaning silver.



To clean the internal parts of the device, you can use: synthetic fiber brushes, delicate fabrics, sponges, lukewarm water, alkaline agents, agents based on phosphoric acid, citric acid, organic solvents, agents dedicated to chrome surfaces and stainless steel.



Only use glass cleaners for windows. It is not recommended to use plain water.



When washing, use circular motions. Dry the washed surfaces with a soft cloth.



**CAUTION!** Do not use pressure washers or hot steam.



NOTE! Always use soft brushes when using vacuum cleaners.

When performing a cleaning operation on the device, you should:

- · Empty the device of products and move it to a place with an appropriate temperature
- Set all switches on the controller to the "0" position
- · Disconnect the device from the power supply
- · Wait until the device reaches the ambient temperature
- If there is ice inside the device, wait until it melts.
- · Clean the device according to the instructions and recommendations provided later in this manual.
- Once cleaning is complete and any previously dismantled parts have been reinstalled, turn on the appliance by connecting it to the power supply and setting the switches to the "I" position (or "II" in the case of the operating mode switch)

## 8.4. Internal cleaning of the device

For hygienic reasons, the user should clean the interior of the device depending on the use and need. The scope of activities includes:

- · Removal of any remaining stored products, including removal of any contamination from the gaps between shelves.
- Cleaning of display shelves after their dismantling
- Cleaning the plexiglass air inlet and outlet and checking if nothing blocks the air flow in the perforated part
- Checking whether the air inlet and outlet plates are clear
- Cleaning the covers

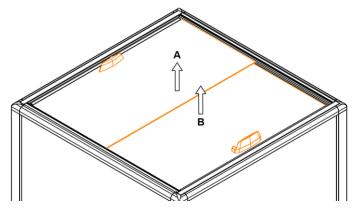
## • Cleaning the cover guides

The inside surfaces of the device should be cleaned with a damp sponge or cloth soaked in warm water with a neutral detergent. Do not use toxic or corrosive detergents. Then gently wipe the inside using only water and dry it with a dry, soft cloth.



**NOTE!** In the case of exposure to chemically aggressive goods, such as silage or fish, it is not possible to create a corrosion center. Therefore, the device should be washed daily. When washing the device with chemically aggressive exposure, the structural and electrical elements should be checked to prevent failure.

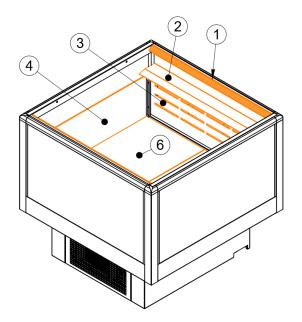
## Removing the covers:

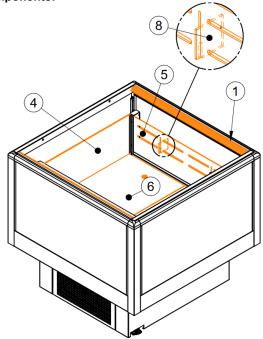


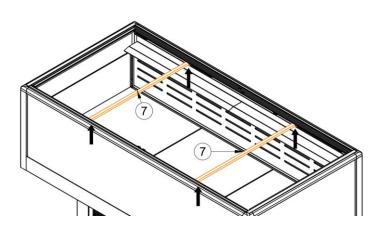
To remove the covers, lift them upwards (they are freely mounted on the guides), starting from the top cover.

WARNING! Glass elements. There is a risk of shattering and cutting.

#### **Disassembly of internal components:**







In order to thoroughly clean the interior of the device, it may be necessary to dismantle some elements. To dismantle the air inlet/outlet plexiglass and the internal side windows, proceed as follows:

- Dismantle the rear air outlet plexiglass (2) and the front air outlet plexiglass (3) by sliding them upwards. It will be necessary to dismantle the brackets (8). In longer modules, it is necessary to dismantle the spacers (7) they should be dismantled by unscrewing the screws marked with arrows.
- 2) Remove the air inlet plexiglass (5) by sliding it upwards. First remove the handles (8).
- 3) Remove the inner side windows (4)
- 4) Pull out the display shelves (6).

After disassembling and cleaning the above components, reassemble them in the reverse order.

## 8.5. External cleaning of the device

The user should perform external cleaning of the device depending on the application and need. When cleaning the outside, make sure that the perforations of the front frame cover and the unit cover are not clogged.

Clean exterior surfaces with a mild detergent and dry with a dry, soft cloth.

## 8.6. Condenser cleaning

The cause of frequent failures of refrigeration devices or their improper operation is the contamination of the condenser of the unit. The user should clean the condenser at least once a month, but its condition should be checked more often. If necessary, vacuum the condenser fins and check whether there is no dirt between the fins blocking the air flow (instructional video under the QR code).



**NOTE!** The condenser should be cleaned at least once a month, but its condition should be checked more often. If it is found to be dirty during the inspection, it should be cleaned. Failure to follow the above recommendations is grounds for loss of warranty!



NOTE! When cleaning the condenser, be careful not to damage its fins.



**NOTE!** The condenser has sharp edges and there is a risk of injury when cleaning it. Therefore, protective gloves should be used when cleaning the condenser.

To clean the condenser:

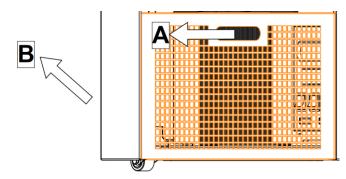
- 1) Remove the unit cover according to the instructions below
- 2) Use a soft brush and a vacuum cleaner to clean the dirty spaces between the condenser fins.
- 3) Install the unit cover.



QR code: Instructional video – condenser cleaning.

Also available at the link: https://www.youtube.com/watch?v=MQqw\_wYstEc

## Dismantling the generator cover:



To remove the condenser cover, grasp the handle (A) and pull the cover towards you and then upwards (B).

#### 8.7. Cleaning the condensate container

To prevent unpleasant odors, the user should clean the drip tray depending on use and need. In addition, the drip tray should be cleaned every time liquid food or other liquids are spilled inside the display area.

To gain access to the condensate container, remove the unit cover (as shown in section 8.6) and gently slide the unit out on the guides.

#### 8.8. Checking the tightness and patency of the sewage system

As part of maintenance activities, the user should check the end points of the water drain from the device. If there is visible contamination, it should be removed. Also check the tightness of the connections of the condensate drainage system elements.

#### 8.9. Other maintenance activities

The user should manually defrost the device once a week by turning it off for at least 12 hours.

#### 8.10. Service inspection

The frequency of a full service inspection of the device is once a year (minimum) or once every six months (suggested).

To perform a service inspection, please contact the manufacturer's service center.



NOTE! Service inspections may only be performed by the manufacturer's service or another authorized service.

## 9. Service and warranty information

Detailed information regarding the warranty is included in the product Warranty Card.



**NOTE!** Repairs to the device during the warranty period may only be performed by an authorized manufacturer's service . Repairs performed by unauthorized persons will void the warranty.

Basic device data is located on the nameplate. When contacting an authorized service center, always provide the device type and serial number, which are located on the nameplate. Each device is accompanied by an instruction manual, electrical diagram, KDT (Technical Data Sheet) and a warranty card. Recommended service intervals for the device are included in the warranty agreement.



**ATTENTION!** Only a qualified service technician may perform servicing and repairs to mechanical and electrical components.

It is recommended to use original manufacturer's spare parts.

#### 9.1. Spare parts list

For spare parts, please contact service.

#### 9.2. Contact with service

For any questions or complaints, please contact the service:

Phone number:	
Phone number:	

When reporting a fault, please provide:

- Description of the problem that occurred
- Device Status Information
- Serial number and model of the device (located on the nameplate or warranty card)
- Applicant's details
- Contact details for return

## 10. The most common failures and how to solve them

If the device is not working properly, before calling for service, check yourself to see if one of the situations described below is occurring.

Possible failure	Possible cause	The way to solve
	The main switch is off	Turn on the main switch
The device does not work	The power cable is disconnected	Connect the power cable
The device does not work	The power cable is damaged	Isolate the area around the fault and call for service.
	Power grid failure	Contact your electricity supplier
	The device was not set in accordance with the information contained in the instructions.	Correction of the installation location according to the guidelines
	Control system failure	You should call for service
	Condenser dirty	Clean the condenser
	Food load too large or incorrectly distributed	Load according to the instructions in the manual
Incorrect temperature in the device	Loading the device with previously uncooled products	Only place pre-chilled products into the appliance
	Covered air inlets/outlets	Air inlets/outlets must be uncovered
	Frosty evaporator	Perform manual defrosting on the controller
	Ambient temperature too high	Lower the temperature in the facility
	The device is set to the wrong operating mode	Set to the appropriate operating mode
The lighting is not working	The controller is frozen	Turn the controller on and off
	The light switch is off	Turn the light switch to the "I" position
	Condensate container overfilled	Empty the container
	The device operating conditions do not meet the recommended ones (too high humidity)	Proper environmental conditions must be ensured
Occurrence of water on the floor	Cooling system failure	You should call for service
	Clogged drain/siphon	Clear a clogged drain/siphon
	Leaking condensate drainage system	Check the tightness of the system
Retting	Working conditions not in accordance with the recommendations	Proper operating conditions must be ensured
	Clogged air inlet/outlet	The air inlet/outlet should be unclogged
	Device not leveled properly	Level the device carefully
The device works loudly	The screws/bolts are not tightened properly	Tighten the fasteners.
Unpleasant smell	The device has a dirty condensation container	Clean the condensate container

If other faults occur that are not covered in the instructions or if the solutions given above are not sufficient to eliminate the fault, please contact the service.

## 11. Utilization

EIDA dual temperature islands are covered by Directive 2012/19/EU of the European Parliament and of the Council of 4 July 2012 on waste electrical and electronic equipment (WEEE) and are marked with the WEEE sign. In Poland, the rules for handling waste electrical and electronic equipment are specified in the Act of 11 September 2015 on waste electrical and electronic equipment Journal of Laws 2022, item 1622 and implementing acts.



**WEE symbol:** A special symbol indicating that used electrical and electronic equipment must be returned to a designated collection point for the disposal of electrical and electronic waste.

Correct handling of used refrigeration equipment helps avoid consequences harmful to human health and the natural environment resulting from the presence of hazardous components and proper storage and processing of such equipment.

#### 11.1. User Responsibilities

Once the intended use period has ended, the user should hand over the device to a waste equipment collector or an entity authorized to collect waste equipment, from where it will be forwarded to a processing plant.

If you wish to return a used device, you can contact the manufacturer which will ensure its collection by an authorized entity.

## 11.2. Storage and disposal of the device

#### Storage:

The device should be stored in a dry place, free from harmful substances, water and radiation, on a stable base. The device should not be stored on or under another device. If the device is to be stored for more than one month, the protective tapes should be torn off.

The device should be protected against dust and impacts. The device should be stored in a place where it will not pose a threat to the health and life of third parties.

#### Preparation for disposal:

- In case of refrigerant regeneration, the device must be emptied and transferred to an appropriate unit dealing with the regeneration and disposal of refrigerants.
- For refrigerants that can be released into the atmosphere (e.g. R290), the refrigerant must be safely recovered from the equipment and released into the atmosphere, away from any sources of ignition
- The device must be emptied of oil.
- Specialist advice should be sought before disposing of substances that are harmful to the environment and materials that can be recycled.



**ATTENTION!** All operations, such as transportation and disposal of the device may only be performed by qualified persons.

## 12. Electrical diagram

