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This appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory, or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

- Children shall not play with the appliance
- Cleaning and user maintenance shall not be made by children without supervision



Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.



- WARNING: Keep clear of obstruction all ventilation openings in the appliance enclosure or in the structure for building-in.
- > WARNING: Place in well ventilated area to prevent accumulation of refrigerant.
- WARNING: Do not use mechanical devices or other means to accelerate the defrosting process, other than those recommended by the manufacturer.
- > WARNING: Do not damage the refrigerant circuit.
- > WARNING: Do not use electrical appliances inside the food storage compartments of the appliance, unless they are of the type recommended by the manufacturer.
- WARNING: The power socket that your appliance will be connected must be provided with ground. If the supply cord is damaged, it must be replaced by the manufacturer, its service agent or similarly qualified persons in order to avoid a hazard.
- > WARNING: Repair and disposal must be carried out by trained service personnel.
- > WARNING: No naked flame during service or repair.

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For RU (Remote Unit) models only

- WARNING: The installation of this appliance and the refrigerant unit must only be made by a suitably qualified person.
- WARNING: In case of an R290 unit, in order to reduce flammability hazards the installation of this appliance must only be carried out by a suitably qualified person.

2

Introduction

Thank you for purchasing this device. Selecting this device, you have chosen all the advantages of refrigeration technology that can guarantee you quality, durability, and reliability.

To familiarize yourself with all the features of your new appliance, please read carefully this manual.

We hope you will be satisfied with your new appliance.

Please retain this manual for use and installation. In case the device is sold to another owner, please accompany it with this manual.

3

Transportation - Positioning – Installation

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During the transportation, installation and handling of the device must be kept in an upright position. Failing to do so, it may cause problems in the operation of the refrigerator.

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To ensure efficient operation do not place the device near heat sources. This appliance belongs to the climatic class indicated on ANEX IV. <u>Appliances of climate class 5 are intended for use in ambient temperatures up to 40°C.</u>

Remove all packaging. Carefully move the device to its final position.

For RU (Remote Unit) models only

Your device is installed by a qualified technician and works with external condensing unit. Consult for technical details.

Adjust the legs so that the front side is approximately 1cm higher from the back to ensure that the doors are closing.





Adjust the legs so that the front side is a bit higher from the back to ensure that the doors are closing.



Leave at least 50**cm** gap between the canopy of the cabinet and the ceiling for best ventilation of the condensing unit.

Leave at least 25mm gap between upright cabinet sides to avoid condensation.





Models CES2144/SL/GL, CEP2144/SL/GL, CFS2144/SL/GL, CFP2144/SL/GL are intented to be used while fastened to the wall, in order to avoid risk of overturning.

The supporting kit includes the following





Fig.2: Screw for wall and screw anchor



Fig.3: Screw for supporting the bracket on the

Fig.1: Support bracket appliance

At the top of the appliance there are two holes as illustrated in Fig.4, for the installation of the bracket. Choose which side of the appliance is more easily accessible.



Fig. 4 Top View of appliance

Mark the point that you must drill at the wall as illustrated in Fig.4. Remove the bracket, drill with a D8 tool and install the screw anchor. Place the bracket again in place and tighten the 2 screws.

If your device has stainless cover for GN pans and extra worktop, place and screw the working plate with the screws provided (M5x20 3 pcs).

The sliding cover is placed with the three movements A, B and C.



Starting Up

The appliance is supplied with a power plug. The power plug is stored in the back side of the appliance, inside the condensing unit room.



Remove it and connect it to the power socket.

The figure that will appear in the display shows the temperature in the cabinet. **The compressor starts after 2 minutes.**

For RU (Remote Unit) models only

These functions or periods may vary according to the settings chosen your installer of the device. Consult for any differences. To turn on the lamp, use the key on the right of the thermostat. <u>Caution! Only refrigerators with a glass door or salad refrigerators with a showcase are equipped with a light.</u>



To turn on the lamp, use the switch on the right of the thermostat.



Do not store products in the appliance until the appliance reaches the regulated temperature.

Do not load your appliance with big quantities of products at once.



Store all products in such way, to avoid blocking the air circulation.

Do not store products outside the margins of the shelves or the floor of the unit. Use the last bottom self as base level!

Don't block the evaporator fans. Leave at least 10cm away otherwise the refrigeration in the appliance will be impaired.



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Do not store hot food or hot drinks in your appliance.



Cover the food with a plastic wrapper before storing it into the appliance.



1

Seal properly products containing or are based on vinegar, lemon, onions or have other acidic <u>fumes.</u>



Your chiller's evaporator is painted with special epoxy anti-corrosion coating.



Avoid opening the door immediately after you have closed it. The chilling of the warm air that just entered the refrigerator creates underpressure (vacuum) and does not allow the door to open.

15-25 sec

After a few seconds, the door opening is normally.

Do not cover the intake air slots when the appliance is working.

Always have the top covered with GN pans to avoid cooling loss.

When saladettes are operating, all GN trays must be placed on the right position without any gaps between them.





Before cleaning, always disconnect the plug from the electrical supply.

For correct operation and protection of your appliance, **frequent cleaning** is recommended.

Do not use sharp or other similar objects which may damage your appliance.

Clean the inside and outside surfaces with a **mild soap** solution.



Do not use detergents or substances based on <u>chlorine or acid</u> solvents. These may cause corrosion of stainless steel surfaces or and the copper pipes of the evaporator.

Never clean the appliance with jets of water, whether direct or pressurized.





For easier cleaning of the interior of the device, you can remove the shelves, the removable guides and removable support bars.







Clean frequently the plastic dip tray (a) of the evaporator and the drain siphon funnel (b) to avoid blockages.



Snack Series













Make sure that the plastic dip tray **locks** on the evaporator's slots (c) and the hole on the back side.







Be careful not to damage the flexible resistance (Freezer).



Here you can see the components of the drain pipe.





Maintenance



Before maintenance, always disconnect the plug from the electrical supply.

After the **first year** of service, maintenance should be performed by a **qualified technician**, who will recommend the **maintenance frequency** according to the working environment of your appliance.



Note: Inside the plastic profile of the freezers (cabinets and counters) there is a flexible heater installed to avoid the accumulation of condensate

In order to gain access to the monoblock cooling system:

1. Remove the front louver:



2. Unscrew the 4 hexagon screws M5 X 50 on the inner side:



3. Pull the monoblock cooling unit to the right and then out





7

Turning the appliance off for long periods of time

In case turning the appliance off for long periods of time is required:

- Turn the appliance off.
- Disconnect from the electrical supply.

- Empty the appliance and clean it as indicated above.
- Keep the doors open in order to prevent the formation of unpleasant odors.

8

Saving energy advices

Open the appliance's doors according to your needs. Avoid unnecessary use.





Do not place your appliance near heat sources such as radiators, ovens or under direct sunlight.







Do not fill at once your appliance with big quantities of products, because this will increase energy consumption.

9

	Troublesho	ooting
Malfunction	Possible cause	Solution
The appliance	There is ice accumulation in the evaporator.	See "Ice in the evaporator" below.
does not cool	The stocked products are obstructing the air	Remove the products which obstruct the air flow of the
	flow.	evaporator.
	The ambient temperature is very high.	Improve the temperature condition of the room.
Ice in the	The temperature adjustment is very low.	Check the temperature adjustment.
evaporator		Increase the temperature setting.
	High humidity environment.	Improve the environment condition. Increase the
		defrost frequency.
		Change the parameter FFu to continuous function
		(evaporator fans).
	Humid products have been placed in the	Cover the food with a plastic film before storing it in the
	refrigerator (ex. Vegetables).	refrigerator. Increase the defrost frequency and
		duration.
	The doors are opened frequently and for a	Minimize the time the doors remain open.
	long time.	
Water in the	The drainage pipe is blocked.	Clean the drainage pipe and the drain siphon funnel.
appliance	Condensation tray overflow (positive	Change the parameter FFu to continuous function (tray
	uprights).	heater).

ANEX I

In case of malfunction, contact the distributor of our company describing the problem, denoting the model and the serial number (S/N) of your appliance.

The identification tag bearing the technical characteristics of the device is located on the right wall, inside the refrigerator chamber.



ANEX II

We certify that the endurance of the guide and shelf system mounted on the upright refrigerators, when assembled as instructed, are capable of supporting **<u>100Kgr per shelf</u>** evenly distributed across the surface of the shelf.



We certify that the endurance of the guide and shelf system mounted on the refrigerated counters, when assembled as instructed, are capable of supporting <u>50Kgr per shelf</u> evenly distributed across the surface of the shelf.



This appliance is in compliance with the 2002/95/EC, 2003/108/EC (RoHS) and 2002/96/EC (WEEE) directives and all their following amendments.

Ambient conditions of climate classes 3, 4 and 5									
Test room climate class	Dry bulb temperature, °C	Relative humidity, %							
3	25	60							
4	30	55							
5	40	40							

 Declaration
This Appliance does not contain asbestos.
Oils containing polychlorinated biphenyl (PCB) are not being used in this appliance.

ANEX III

Install the handles in the sequence show the following figures.

3



4









COMMERCIAL REFRIGERATORS & STAINLESS STEEL PRODUCTS

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CHILLER – FREEZER THERMOSTAT Model RN5+ (COMPATIBLE WITH RN2 / RN3 / RN4 / RN4+ / RN5) ATTENTION

Read carefully these instructions before installing and using this device and keep them for future reference. Attention to installation and electrical wiring. Use this device only as described in this document and never use itself as a security device. Disconnect the power supply before performing any type of maintenance operation. Do not expose the device to liquid leakage, high temperatures over +55°C, high humidity over 80%. The device must be disposed of in accordance with local standards for the collection of electrical and electronic equipment.

DESCRIPTION

RN5+ is a thermostat for chiller or freezer cabinet, without plastic enclosure, suitable for all applications including the ones with anti-explosive standards and has the following specifications: room and evaporator temperature is controlled with NTC / PTC sensors; 3 indication digits with resolution 0.5°C and 5 buttons; one serial input for controlling the cabinet's door; 5 relays: compressor 30A 250VAC, fan 10A 250VAC, deFrost 10A 250VAC, lamp 10A 250VAC and door resistance in chillers or drainage resistance in freezers 10A 250VAC; defrosting may be electric or by hot gas; a buzzer in case of an alarm; a serial data port in order to connect either to cloud online IoT platform Cortex or to a computer via CAMIN software for full monitoring and data logging of the device (see page 2 - Serial input of the thermostat). The device is mounted through panel hole and secured by screws.

THERMOSTAT'S DIMENSIONS

Ø3.0mm

19.00

ATTENTION: Read carefully the technical specifications and make sure that the working conditions are appropriate. According to safety standards, the device must be fastened in such a way that it cannot be removed without the use of tools.

8,00

ω

Ø 3.0mm

0

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A

Dimensions are in mm. The device is mounted through panel hole and secured by 3 screws (Ф=3mm).

146 00 mm

(To

Ø3.0mm

156,00 mm



- 37.00 mm -

Dis	play indications			Keyboard
**	compressor ON			enter/exit the parameter's menu
dFr ⊀⊁ ♦♦	deFrost ON		(SET (M) (1)	confirm new value of a parameter display the parameter's value manual deFrost
\$	fan ON	<u> </u>		ON/OFF lamp
\triangle	alarm ON			down arrow mute buzzer
Loc TO	keyboard locked			ON/OFF cabinet
*	malfunction ON		T2	display the evaporator temperature T2 (and the room temperature if Set Point is constantly
	evaporator's sensor is deactivated			displayed)

For more indications regarding the alarms please see the alarm's table at page 6.

UNLOCKING THE THERMOSTAT

By pressing at the same time (5) (1) for 3 seconds, the countdown starts and the keyboard unlocks while the yellow small key on the display turns off. Instantly the temperature measurement unit °C/°F is displayed. The keyboard locks automatically after 60 seconds of inertia.

ADJUSTING ROOM'S TEMPERATURE - SET POINT

- Unlock the keyboard by pressing at the same time 🐨 🕥 and the countdown starts for 3 seconds. 1.
- Press 💛 to display the first parameter SPo. 2.
- to display its value. With \bigcirc or \bigcirc change its value. 3. Press









KIOUF

4. Press to save the new value. The cabinet is working properly with the new adjustment.

INDUSTRIAL FACTORY SETTINGS OF CABINET

- 1. Choose from the following table the corresponding program of your cabinet.
- 2. Unlock the keyboard by pressing at the same time (5) (7) and the countdown starts for 3 seconds.
- 3. Press 🗢 to display the first parameter **SPo**. Press 4 times 🎯 and the parameter **Cod** is displayed.
- 4. Press (set to display its value and press (r) to enter the cabinet's program. Press to store the cabinet's program to parameter Cod.
- 5. Press 🖵 again to exit the parameter menu. The indication "YES" is displayed and all appropriate settings are now stored.
- 6. Toggle cabinet's power supply in order to work properly and based on the registered settings.

Cabinet's model	Program
Upright chiller with freon R134a	33
Upright chiller with propane R290	38
Upright freezer with stainless door with freon R404A	36
Upright freezer with stainless door with propane R290	34
Upright freezer with glass door with freon R404A	37
Upright freezer with glass door with propane R290	35
Freezer counters	39
Refrigerated counters	31
Saladette	32

CAUTION!

When the temperature probe is PTC, parameter 27

must be changed to SEn = 0 PTC probes are as shown in the image:



ON / OFF CABINET

- 1. To activate the cabinet, press for 3 seconds .
- 2. To deactivate the cabinet, unlock the keyboard by pressing at the same time 🐨 🖘 and the countdown starts for 3 seconds. Press for 3 seconds .

CABINET'S LIGHT

1. If the cabinet has a light, press and hold to turn it ON or OFF.

MANUAL DEFROST

- 1. Unlock the keyboard by pressing at the same time 5^{10} 1^{10} and the countdown starts for 3 seconds.
- 2. Press for 3 seconds to start a manual defrost with duration based on the parameter **dd2** (table page 3).

For more information regarding the defrost check the description of parameter dt6 (table at page 4 - parameter No 11).

INDICATION OF THE EVAPORATOR'S TEMPERATURE T2 (AND ROOM'S TEMPERATURE WHEN THE SET POINT IS CONSTANTLY DISPLAYED)

- 1. Unlock the keyboard by pressing at the same time $\overset{}{\overset{}}$ $\overset{}{\overset{}}$ and the countdown starts for 3 seconds.
- 2. Press and hold (1) to display the evaporator's temperature for 2 seconds and then the cabinet's temperature (if parameter **diP** is adjusted to constantly display the Set Point and not the room's temperature).
- 3. If the evaporator's temperature is deactivated from the parameter OS2, it is displayed "---".

PROGRAMMING A PARAMETER

- ATTENTION: to gain full access to the parameter's menu, the 5th parameter Cod must be adjusted to 22 (see parameter table page 4).
 - 1. Unlock the keyboard by pressing at the same time $\underbrace{\textcircled{}}_{0}^{\texttt{s}}$ $\underbrace{\textcircled{}}_{12}$ and the countdown starts for 3 seconds.
 - 2. Press 💛 to enter the parameter menu.
 - 3. Choose the parameter you want to adjust by pressing 🐨 or 🐨 and press 🖭 to display its value.
 - 4. Press or (Tz) to change its value and then press (to store the new value.
 - Press if you want to cancel the new value and the parameter's name is displayed.
 - 5. Press 💛 to exit the parameter menu.

TECHNICAL SPECIFICATIONS OF THE THERMOSTAT

Model **RN+** power supply: 230VAC 50/60Hz / Maximum power consumption: 3W. Model **RNW+** switching power supply 100-264VAC 50/60Hz 5W It is recommended using a power supply safety fuse: 0.5A (not included)

Room and evaporator temperature sensors NTC 10K 1% 25°C IP68 with rubber tube and temperature range -50÷+112°C (-58÷+230°F) or PTC 1K 25°C with metal tube and temperature range -50÷+150°C (-58÷+302°F) / Accuracy: ±0.5°C

Alarm buzzer / Serial input with 5pin connector / Digital input door

5 anti-explosive relays: compressor relay 30A res. 250VAC normally open contact / fan relay 10A res. normally open contact / defrost relay 10A res. normally open contact / lamp relay 10A res. normally open contact / door resistance relay or drainage resistance 10A res. normally open contact / Max current load 16A.



Connections: cable cross section 2.5 mm² for all relays / cable cross section from 0.25 to 1.0 mm² for the sensors and door switch / Use cable with appropriate temperature ratings – terminal block temperature possible rise above 60°C

Connections with terminal blocks 18A using cable with cable cross section up to 2.5 mm² / It is recommended using a torque wrench with maximum torque 0.4Nm Operating temperature: -15÷+55°C / Storage temperature: -20÷+80°C

No plastic enclosure / Protection IP 00 / Device Class: 2

The device is mounted on appropriate panel holes and secured with 3 screws (Φ =3mm). The holes are created only for button and display access. An appropriate membrane with protection IP65 must be placed over the panel to secure the device from liquid leakage and human interference. Firmware: V4.1

SERIAL INPUT OF THE THERMOSTAT

RN5+ connects via serial input to cloud IoT and the online CORTEX platform or to a local computer with the CAMIN program or to any Modbus network.

- Cloud and CORTEX platform: connection to the cloud and the CORTEX platform for monitoring recording and managing the thermostat from your mobile, tablet or any computer.
- CAMIN program: local connection and monitoring recording and management of the thermostat through the CAMIN program installed on a local computer.

ELECTRICAL DIAGRAM OF THE THERMOSTAT

ATTENTION: according to safety standards, the device must be properly positioned and protected from any contact with electrical parts. The device must be fastened in such a way that it cannot be removed without the use of tools. Disconnect the main safety switch of the installation before proceeding to any maintenance. Disconnect the power supply of the device before proceeding to any maintenance. Do not place the device near heat sources, equipment containing strong magnets, in areas affected by direct sunlight or rain. Prevent electrostatic discharges and sharp objects from been inserted to the device. Separate signal cables from power supply cables to prevent electromagnetic disorders. Signal cables must never be in the same pipe with the power supply cables.



ELECTRICAL DIAGRAM OF THE CABINET

ATTENTION: according to safety standards, the device must be properly positioned and protected from any contact with electrical parts. The device must be fastened in such a way that it cannot be removed without the use of tools. Disconnect the main safety switch of the installation before proceeding to any maintenance. Disconnect the power supply of the device before proceeding to any maintenance. Do not place the device near heat sources, equipment containing strong magnets, in areas affected by direct sunlight or rain. Prevent electrostatic discharges and sharp objects from been inserted to the device. Separate signal cables from power supply cables to prevent electromagnetic disorders. Signal cables must never be in the same pipe with the power supply cables.

Refrigerated counters

Saladette / Counter with glass door

Upright freezer with stainless door







Upright chiller

Upright freezer with glass door





Freezer Counters



		PARAMETER'S TABLE												
									INDUSTRIAL I	FACTORY SETT	INGS OF THE CAB	INET		
No	code	description	min	max	M.M.	Upright chiller R134a Program	Upright chiller R290 Program	Upright freezer with stainless door R404A Program 36	Upright freezer with stainless door R290 Program 34	Upright freezer with glass door R404A Program 37	Upright freezer with glass door R290 Program 35	Freezer counters Program 39	Refrigerated counters Program 31	Saladette Program 32
1	SPo	SET POINT: room temperature setting		НСР	°C/°E	0.0	0.0	-20.0	-22.0	-18.0	-18.0	-20.0	0.0	3.0
2	Alo	Low alarm room threshold	-50.0	150	°C/°F	-5.0	-5.0	-25.0	-22.0	-22.0	-22.0	-25.0	-5.0	-5.0
3	AHi	High alarm room threshold	-50.0	150	°C/°F	15.0	15.0	0.0	0.0	0.0	0.0	0.0	15.0	15.0
4	dr1	Time between two successive defrost	1	100	hours	4	4	5	7	5	7	3	4	4
5	Cod	Access code to the following parameters Cod = 22.	0	255	-	22	22	22	22	22	22	22	22	22
6	diF	Differential of room temperature SPo (thermostat delay)	0.1	25.5	°C/°F	3.0	3.0	3.0	4.0	3.0	4.0	2.0	3.0	3.0
7	dd2	Defrost duration (manual and automatic), where 0 = defrost is deactivated.	0	120	min	20	20	35	35	35	35	30	25	25
8	dP3	Dripping timer, where the compressor is OFF after defrost	0	15	min	2	2	5	5	5	5	3	0	0
9	dY4	 Display indication during defrost -02 = indication SPo+diF when room's temperature is greater than SPo+diF -01 = indication dFr when room's temperature is greater than SPo+diF 0 = indication of room's temperature 1 to 40 min = indication dFr from 1 to 40 min counting from the beginning of defrost 	-02	40	min	25	25	35	35	35	35	15	25	25
10	dE5	Defrost end temperature with the evaporator's temperature sensor activated Automatic and manual defrost does not start if the evaporator temperature is greater than the defrost end temperature dE5. In case of evaporator's sensor malfunction (LF2), there is no check of defrost end temperature and defrosting is completed after time adjusted in parameter dd2 elapses. with the evaporator's temperature sensor deactivated Defrost end temperature is the room temperature. Automatic defrost does not start if the evaporator temperature is greater than the defrost end temperature dE5. Manual defrost starts regardless of the room's temperature and ends after time adjusted in parameter dd2 elapses.	0.0	100	°C/°F	20.0	20.0	30.0	30.0	30.0	30.0	8.0	20.0	20.0
11	dt6	Type of defrost 0 = electrical (compressor OFF, resistance ON), if SPo is smaller or equal than -0.1°C defrost occurs using the resistance based on time adjusted from the parameter dd2, if SPo is greater or equal than 0°C defrost occurs using the fan based on time adjusted from the parameter dd2. 1 = hot gas (compressor ON, resistance ON) Defrost with the evaporator's temperature sensor activated Automatic or manual defrost ends either with time adjusted from the parameter dd2 or with defrost end temperature dE5, whatever comes first. Automatic or manual defrost end temperature dE5. Defrost with the evaporator's temperature sensor deactivated Automatic or manual defrost end temperature dE5. Defrost with the evaporator's temperature sensor deactivated Defrost end temperature is the room temperature. Automatic defrost ends either with time adjusted from the parameter dd2, or with defrost ends either with time adjusted from the parameter dd2, or with defrost ends either with time adjusted from the parameter dd2, or with defrost ends either with time adjusted from the parameter dd2, or with defrost ends either with time adjusted from the parameter dd2, or with defrost end temperature dE5, whatever comes first.	0	1	-	0	0	0	0	0	0	1	0	0

		Manual defrost starts regardless of the room's temperature and												
		ends after time adjusted in parameter dd2 elapses.												
		Alarm setting												
		0 = automatic deactivation, where the alarm stops once the cause												
		of the alarm disappears.												
		1 = manual deactivation, where the alarm indication remains even												
		if the cause of the alarm disappears and it's cleared only by												
12	AF1		0	1	-	0	0	0	0	0	0	0	0	0
		pressing .												
		In any case by pressing $\textcircled{2}$ the buzzer stops and \bigtriangleup turns on												
		to state that the cause of the alarm still exists. Muting the alarm												
		buzzer by pressing 🕑 once is valid until all alarms disappear.												
		Time delay in activating "AHi", "ALo" and the buzzer among them.												
		This setting does not apply to sensor failure and door alarm.												
10	A 40	-01 = deactivate buzzer	01	100		05	05	<u>co</u>	00	<u> </u>	<u></u>	00	20	20
13	Atz	0 = Immediate buzzer activation	-01	120	min	25	25	60	60	60	60	60	20	20
		When the cabinet starts for the first time, the huzzer is deactivated												
		until the last alarm disappears.												
		Evaporator's temperature controlling the fan operation during												
14	E.1	defrost and normal operation (parameter oS2 = 1). If the	50	100	°C/9F	F 0	5.0	10.0	10.0	10.0	10.0	5.0	0.0	0.0
14	FUI	evaporator's sensor is deactivated, the parameter does not operate.	-50	100	U/ F	5.0	5.0	-10.0	-10.0	-10.0	-10.0	-5.0	0.0	0.0
		For more information check the parameters Ft2 and Fd3.												
		Evaporator's fan operation												
		-01 = continuous function												
15	Ft2	0 = parallel with the compressor	-01	15	min	0	0	0	0	0	0	-1	-01	-01
		1 to 15 min = functions at the same time with the compressor and												
		when the compressor stops, the fan stops after the selected minutes												
		Fan's operation during defrost for SPo smaller or equal than -0.1°C												
		temporature is smaller than Eq. During bet as where the												
		compressor is always ON the fan starts if the evaporator's												
		temperature is smaller than Fo1. This setting applies only with the											_	
16	Fd3	evaporator's sensor activated.	0	2	-	0	0	0	0	0	0	0	2	2
		1 = ON when the evaporator's temperature is smaller than Fo1 –												
		setting applies only with the evaporator's sensor activated												
		2 = always ON in both types of defrost (electrical / hot gas)												
		regardless of the evaporator's sensor operation												
17	Co1	Compressor's minimum time ON	0	15	min	0	0	0	0	0	0	0	0	0
18	CP2	Compressor's minimum time OFF	0	15	min	2	2	2	2	2	2	2	2	2
		Compressor s operation in case of room's sensor malfunction												
		0 = compressor ON while defrost starts based on timer dr1 and												
19	CE3	ends based on timer dd2 or temperature dF5 whichever comes	-01	150	min	3	3	3	3	3	3	3	3	3
10	010	first 1 to 150 min = compressor time ON while defrost starts based	01	100		Ũ	Ũ	0	Ŭ	Ũ	Ŭ	Ŭ	Ũ	0
		on timer dr1 and ends based on timer dd2 or temperature dE5.												
		whichever comes first.												
20	CF4	Compressor time OFF in case of room's sensor malfunction	1	150	min	3	3	3	3	3	3	3	4	4
21	SE1	Room sensor offset	-10.0	15.5	°C/°F	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
22	SE2	Evaporator sensor offset	-10.0	15.5	°C/°F	0.0	0.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

23	oS2	Evaporator's sensor operation 0 = deactivated sensor 1 = activated sensor When the sensor is deactivated, by pressing it is displayed "". During defrost and when the sensor is deactivated, the defrost end temperature dE5 is the room temperature	0	1	-	1	1	1	1	1	1	1	0	0
24	LSP	Lower setting limit of SPo	-50.0	150	°C/°F	-2.0	-2.0	-21.0	-22.0	-18.0	-18.0	-21.0	0.0	3.0
25	HSP	Maximum setting limit of SPo	-50.0	150	°C/°F	10.0	10.0	-10.0	-10.0	-10.0	-10.0	-10.0	10.0	10.0
26	C_F	Temperature measurement unit: toggling between °C/°F do not adjust automatically parameters regarding temperature, the user must change them manually 0 = °C 1 = °F	0	1	°C/°F	0	0	0	0	0	0	0	0	0
27	SEn	Sensor type NTC/PTC 0 = PTC 1 = NTC	0	1	-	1	1	1	1	1	1	1	1	1
28	trE	Response time of the device on network	20	100	msec	50	50	50	50	50	50	50	50	50
29	Add	Device address on network	0	255	-	1	1	1	1	1	1	1	1	1
30	diP	Display's indication 0 = room temperature indication 1 = SET POINT (SPo) indication unless an alarm appears. The first time that the cabinet turns on, room's temperature is displayed until the cabinet reaches for the first time SPo. Afterwards SPo is constantly displayed regardless of room temperature.	0	1	-	0	0	1	1	1	1	0	0	0
31	Odo	Door switch operation 0 = OFF 1 = NC (normally close) 2 = NO (normally open) If the cabinet's door remains open for 2 minutes, the alarm <i>dor</i> is activated and the compressor stops.	0	2	-	1	1	1	1	1	1	0	0	0
32	Pro	cabinet's program is displayed (industrial factory settings) – the parameter cannot be programmed	-	-	-	33	38	36	34	37	35	39	31	32
33	bAU	Baud rate: 0 = 2400 / 1 = 4800 / 2 = 9600 / 3 = 19200	0	3	-	3	3	3	3	3	3	3	3	3
34	tPE	Product number – not programmable	-	-	-	200	200	200	200	200	200	200	200	200
35	UEr	Firmware version - no access	-	-	-	4.2.X								

ALA	ARM'S TABLE						
1	LF1	Room sensor malfunction					
2	LF2	Evaporator sensor malfunction					
3	ALo	Low room temperature					
4	AHi	High room temperature					
5	dor	Open door (If the cabinet's door remains open for 2 minutes, the alarm dor is activated and the compressor stops)					
6	EEr	error in memory RAM: re-enter the SPo of the cabinet (see ADJUSTING ROOM'S TEMPERATURE – SET POINT page 1)					
The a	te alarms are automatically deactivated once the cause of the alarm disappears.						



CHIILER THERMOSTAT Model FSD3 ATTENTION

KIOUR

Firmware V5

Read carefully these instructions before installing and using this device and keep them for future reference. Attention to installation and electrical wiring. Use this device only as described in this document and never use itself as a security device. The device must be disposed of in accordance with local standards for the collection of electrical and electronic equipment.

DECRIPTION

*

*

4

fan ON

alarm ON

malfunction ON

dFr

FSD3 is a thermostat for chiller cabinets, suitable for all applications and has the following specifications: one NTC / PTC temperature sensor which controls the room temperature; 3 indication digits with resolution 0.5°C and 4 buttons; one digital input for controlling the cabinet's door; 3 relays: compressor 30A 250VAC, fan 10A 250VAC, ON/OFF 10A 250VAC; a buzzer in case of an alarm; it can connect to the monitoring and controlling network CAMIN via serial input using an interface with MODBUS protocol (see page 2 - Serial input of the thermostat).

THERMOSTAT'S DIMENSIONS

ATTENTION: Read carefully the technical specifications and make sure that the working conditions are appropriate. According to safety standards, the device must be fastened in such a way that it cannot be removed without the use of tools.

Dimensions are in mm. The device is mounted in panel hole 29x71mm and it is restrained with plastic side brackets.



▲_{T2}

up arrow

For more indications regarding the alarms please see the alarm's table at page 3.

ADJUSTING ROOM'S TEMPERATURE - SET POINT

- 17. Press to display the first parameter **SPo**.
- Press $\underbrace{\text{SET}}_{\text{WTE}}$ to display its value. With $\underbrace{\text{Ar}}_{\text{T2}}$ or $\underbrace{\text{VO}}_{\text{WTE}}$ change its value.
- to save the new value. The cabinet is working properly with the new adjustment. 19

INDUSTRIAL FACTORY SETTINGS OF CABINET

- Choose from the following table the corresponding program of your cabinet. 25.
- Press to display the first parameter **SPo**. Press 4 times we have and the parameter **Cod** is displayed. 26.
- to display its value and press (T2) to enter the cabinet's program. Press to store the cabinet's program to parameter Cod. Press 27.
- again to exit the parameter menu. All appropriate settings are now stored and the cabinet is working properly. 28.

Cabinet's model	Program
Counters RU	31
Saladette / Glass door RU	32

() ON / OFF CABINET

Press for 3 seconds (to activate or deactivate the cabinet

MANUAL DEFROST

11. Press for 3 seconds (set manual defrost with duration 20 minutes. Manual defrost starts regardless of the room temperature.

PROGRAMMING A PARAMETER

- 21. Press 🛃 to enter the parameter menu.
- 22. Choose the parameter you want to adjust by pressing $\underbrace{\underbrace{w}_{12}}_{w}$ or $\underbrace{\underbrace{s}_{12}}_{m}$ and press $\underbrace{\underbrace{s}_{12}}_{w}$ to display its value.
- 23. Press $\underbrace{\textcircled{w}_0}{wr_E}$ or $\underbrace{\textcircled{r}_2}{r_2}$ to change its value and then press $\underbrace{\textcircled{r}}{t}$ to store the new value.
 - Press if you want to cancel the new value and the parameter's name is displayed.
- 24. Press 🛃 to exit the parameter menu.

TECHNICAL SPECIFICATIONS OF THE THERMOSTAT

Power supply: 230VAC 50/60Hz / Maximum power consumption: 3W

It is recommended using a power supply safety fuse: 0.5A (not included)

Room and evaporator temperature sensors NTC 10K 1% 25°C IP68 with rubber tube and temperature range -37÷+110°C (-34÷+230°F) or PTC 1K 25°C with metal tube and temperature range -50÷+110°C (-58÷+230°F) / Accuracy: ±0.5°C

Alarm buzzer / Serial input with 5pin connector / Digital input door

3 relays: compressor relay 30A res. 250VAC normally open contact / fan relay 10A res. normally open contact / ON/OFF relay 10A res. normally open contact / Max current load 16A.

Connections: cable cross section 2.5 mm² for all relays / cable cross section from 0.25 to 1.0 mm² for the sensors and door switch

Connections with terminal blocks using cable with cable cross section up to 2.5 mm² / It is recommended using a torque wrench with maximum torque 0.4Nm

Operating temperature: -15++55°C / Storage temperature: -20++80°C

Dimensions: front 79x36mm and depth 79mm / Protection IP 65 front

The device is mounted on panel hole 29x71mm and it is restrained with plastic side brackets.

Firmware: V5

SERIAL INPUT OF THE THERMOSTAT

FSD3 can connect to CAMIN network or to data logger model Mini Logger or to any MODBUS network:

- CAMIN network: the thermostat can connect via a network interface NET-INS-485 to the CAMIN network. CAMIN is a software application designed to collect data, monitor and fully control a network of up to 250 thermostats using cable wiring. It can also send SMS and emails in case of an alarm.
- Mini Logger: the thermostat can connect to a data logger and store temperatures, relay status and alarms to a microSD. A cable is used to connect the data logger with the
 thermostat and parameter Add must be adjusted to 1.
- Parameter programming key: the parameter values can be stored or retrieved from the programming key.

ELECTRICAL DIAGRAMS

ATTENTION: according to safety standards, the device must be properly positioned and protected from any contact with electrical parts. The device must be fastened in such a way that it cannot be removed without the use of tools. Disconnect the main safety switch of the installation before proceeding to any maintenance. Disconnect the power supply of the device before proceeding to any maintenance. Do not place the device near heat sources, equipment containing strong magnets, in areas affected by direct sunlight or rain. Prevent electrostatic discharges and sharp objects from been inserted to the device. Separate signal cables from power supply cables to prevent electromagnetic disorders. Signal cables must never be in the same pipe with the power supply cables.

Thermostat FSD3

KIO	U	R							N	lode	I FSD	3
SERIAL PORT						$\left[\right]$						-
1	2	3	4	5	6	7	8	9	10	11	12	
ROOM		DOOR SWITCH				0	l on/off	- 				





PAR/	PARAMETER'S TABLE										
						INDUSTRIAL FACTORY SETTINGS					
No	code	description	min	max	UOM	COUNTERS RU	$\begin{array}{ c c c c c c c } \hline \text{IDUSTRIAL FACTORY SETTINGS} \\ \hline \text{UNTERS RU} & SALADETTE RU \\ \hline rogram 31 & Program 32 \\ 0.0 & 3.0 \\ -5.0 & -5.0 \\ +15.0 & +15.0 \\ 4 & 4 \\ 31 & 32 \\ 3.0 & 3.0 \\ 25 & 25 \\ 0 & 0 \\ 25 & 25 \\ 0 & 0 \\ 25 & 25 \\ 12.0 & 12.0 \\ \hline \hline 12.0 & 12.0 \\ \hline \hline 20 & 20 \\ \hline \hline 12.0 & 12.0 \\ \hline \hline 20 & 20 \\ \hline \hline 12.0 & 0 \\ \hline \hline 22 & 2 \\ 0 & 0 \\ \hline \hline 1 & -1 \\ 0 & 0 \\ \hline \hline 0 & 0 \\ \hline \hline 1 & 1 \\ 1 \\ 0.0 & 0.0 \\ \hline \hline 1 & 1 \\ 1 \\ 20 & 20 \\ \hline \hline 1 & 1 \\ \hline 1 & 1 \\ \hline 1 \\ 20 & 20 \\ \hline 1 & 1 \\ \hline 1 & 1 \\ \hline 1 \\ 20 & 20 \\ \hline 1 & 1 \\ \hline 1 \\ 0 & 0 \\ \hline 0 & 0 \\ \hline \end{array}$				
						Program 31	Program 32				
1	SPo	SET POINT: room temperature setting	LSP	HSP	°C/°F	0.0	3.0				
2	ALo	Low alarm room threshold	-50.0	AHi	°C/°F	-5.0	-5.0				
3	AHi	High alarm room threshold	ALo	150	°C/°F	+15.0	+15.0				
4	dr1	Time between two successive defrost, where 0 = defrost is deactivated.	0	12	hours	4	4				
5	Cod	Access code to the following parameters Cod = 22.	0	255	-	31	32				
6	diF	Differential of room temperature SPo (thermostat delay)	0.1	25.5	°C/°F	3.0	3.0				
7	dd2	Defrost duration. Manual defrost lasts 20 minutes.	1	90	minutes	25	25				
8	dP3	Dripping timer, where the compressor is OFF after defrost	0	10	minutes	0	0				
9	dY4	Display indication during defrost 0 = indication of room's temperature	0	99	minutes	25	25				
		1 to 99 minutes = indication dFr from 1 to 90 min counting from the beginning of defrost									
		Defrost end temperature									
10	dE5	Defrost end temperature is the room temperature. Automatic defrost does not start if the	0.0	25.5	°C/°F	12.0	12.0				
		evaporator temperature is greater than the defrost end temperature dE5.				-					
4.4	110	Manual defrost starts regardless of the room temperature and ends after 20 minutes.									
11	dtb	(not in use)									
12	AF1	(not in use)									
		Time delay in activating "AHi" and the buzzer. This setting does not apply to "ALo", sensor									
13	At2	malfunction and door alarm.	0	120	minutes	20	20				
		0 = immediate buzzer activation	, i i i i i i i i i i i i i i i i i i i								
		1 to 120 minutes = delay in buzzer activation									
14	Fo1	(not in use)									
		Evaporator's fan operation.									
15	Ft2	During defrost the fan operates.	-1	0	-	-1	-1				
	=	-1 = continuous function	-	-							
16	404	0 = parallel with the compressor	0	20		0	0				
10	Cod		0	20	sec	0	0				
17	001	(not in use)	0	4		0	0				
18	CP2	Compressor's minimum time OFF	0	4	minutes	2	2				
10	050	Compressor's operation in case of room's sensor malfunction	0	4		0	0				
19	CF3	0 = 40% ON compressor (3 minutes ON, 4 minutes OFF)	0	1	-	0	0				
		Serial input operation									
		$\Omega = 0$ operates with CAMIN network and key memory									
20	UEu	1 = connection with an external device for alarm output	0	1	-	1	1				
20	oru	ATTENTION: when parameter Add is different than zero, the UEu parameter automatically	Ŭ								
		is programmed to zero.									
21	SE1	Room sensor offset	min max UOM INDUSTRIAL FACTORY SETTINGS LSP HSP *C/F 31 Program 32 500 AHI *C/F 50 -50 ALo 150 *C/F -50 -50 defost is deactivated. 0 12 hours 4 4 =22. 0 255 - 31 32 idelay) 0.1 25.5 *C/F 3.0 3.0 i. 1 90 minutes 0 0 i.delay) 0.1 25.5 *C/F 3.0 3.0 i.defost 0 99 minutes 25 25 i.counting from the beginning of defost 0.0 25.5 *C/F 12.0 12.0 i.counting form the beginning of defost 0.0 25.5 *C/F 12.0 12.0 i.counting form the beginning of defost 0.0 25.5 *C/F 12.0 12.0 i.counting form the beginning of defost 0.0								
22	SE2	(not in use)									
23	oS2	(not in use)									
24	LSP	Lower setting limit of SPo	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$								
25	HSP	Maximum setting limit of SPo	LSP	150	°C	+10.0	+10.0				
		Temperature measurement unit: toggling between °C/°F do not adjust the SPo automatically,									
26	C F	it must be changed by the user	0	1	°C/°E	0	0				
20	0_F	0 = °C	0	1	0/ 1	0	0				
		1 = °F									
		Sensor type NTC/PTC									
27	SEn		0	1	-	1	1				
00	á:E	I = NIU Decrease time of the device on network	0	100		20	00				
20	ULE Add	Response ume or me device on network	0	255	msec	20	20				
20	diD		U	200	-	1	1				
30	ul	Door switch operation									
		1 = NO (normally open)									
31	Odo	2 = NC (normally close)	0	2	-	0	0				
		If the cabinet's door remains open for 2 minutes, the alarm <i>dor</i> is activated and the									
		compressor stops.									

ALARM TABLE

1	LF1	Room sensor malfunction
2	ALo	Low room temperature
3	AHi	High room temperature
4	dor	Open door (If the cabinet's door remains open for 2 minutes, the alarm <i>dor</i> is activated and the compressor stops)
5	EEr	error in memory RAM: re-enter the SPo of the cabinet (see ADJUSTING ROOM'S TEMPERATURE – SET POINT page 1)
The a	alarms a	re automatically deactivated once the cause of the alarm disappears.

Made in Greece.

RoHS C E

The device is under two year's guarantee. The guarantee is valid only if the manual instructions have been applied. The control and service of the device must be done by an authorized technician. The guarantee covers only the replacement or the service of the device. KIOUR preserves the right to adjust its products without further notice.

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V1.3.070121

IoTW Wi-Fi GATEWAY

ATTENTION

Before using this device, please read these instructions carefully and keep them for future reference. Only use the device as described in this document. Should internet or router connection be lost, logging stops.

ΕN

CONTENTS

- 1. Description
- 2. Connecting the refrigerator to the Cortex IoT cloud platform Step 1 - Account creation in the Cortex platform Step 2 - Connecting the IoTW gateway to Wi-Fi - Provisioning Step 3 - Connecting the IoTW gateway to the Cortex account
- Monitored refrigerator 3.
- 4. Log settings
- 5. Signal range
- 6. Alarm notifications
- 7. Remote restarting of gateway
- 8. Removal of existing Wi-Fi network from gateway
- 9. Alternative Wi-Fi connection



KIOUR

1. DESCRIPTION

IoTW is a Wi-Fi gateway which allows the refrigerator and the Cortex IoT cloud platform to communicate via the Internet. The user accesses the platform either via a mobile phone app or via a browser on a computer. The Cortex platform aims to fully monitor and control the refrigerator, and to send emails and notifications to the mobile phone upon activation and deactivation of an alarm. Connection is achieved via the Wi-Fi router in the area of the refrigerator. The IoTW has a multifunction button and a red indication lamp.

In the case of under-bench refrigerators, the IoTW is installed in the front vent, behind the protective cover, whereas in cooling chambers it is installed on the exterior ceiling of the refrigerator, beneath the protective cover.





Lamp	Gateway indications
2 times/sec	In Wi-Fi connection standby mode
1 time/sec (quick)	In platform account connection standby mode
1 times/sec (prolonged)	Restarts every time it lights up
Blinks	Sending data to the cloud
Steady on	No router connection

The gateway details - necessary for steps 2 and 3 below - are on the gateway label, which can be found on the right interior wall of the refrigerator.









2. CONNECTING THE REFRIGERATOR TO THE CORTEX IOT CLOUD PLATFORM

STEP 1 - ACCOUNT CREATION IN THE CORTEX PLATFORM

- 1. Download the Cortex KIOUR app on your smartphone and grant access. The smartphone connects to gateway via Bluetooth BLE, therefore, Bluetooth must be enabled on the smartphone and the app must have access to Bluetooth in the location of the device as well.
- Create an account by tapping the Create Account tab. <u>The registered email will receive notifications in case of updates or alarms and cannot be changed at a later</u> date. Only the password can be changed.
- 3. When an account is created, an activation email is sent to the registered email and this link must be confirmed in order to go to the main page of the Cortex platform. The link must be tapped from the smartphone to which the app was downloaded.
- 4. When you access the main dashboard, no device will be listed and the indication **No data to display** will appear.

13:43 ®.d 🕯	12:36 🔍 .i 🛔	Symbols on Cortex platform
കcortex	යාcortex	(?) Help
Login to your account	First name *	Information
	Last name *	() Gateway restart
Email	Email *	Edit gateway settings
Password	Create a password *	More details
Forgot Password?	Repeat your password * 🔊	Q List renewal
	Im not a robot Accept Privacy Policy	Open technical sheet
		Data export
		Q Search list
Log In	Sign up	C Maximise screen
New Uter? Create Account	Already have an account? Sign In	H Minimise screen

STEP 2 - CONNECTING THE IOTW GATEWAY TO WI-FI - PROVISIONING



- 1. Plug the refrigerator into the outlet. The gateway lamp blinks 2 times/second which means it is in Wi-Fi connection standby mode.
- 2. Tap < to find your device and to register the desired Wi-Fi network. The gateway details can be found on the label, which can be found on the right interior wall of the refrigerator.
- 3. If the network cannot be found, tap C at the top right repeatedly.
- 4. If the details are entered correctly, provisioning is completed *successfully*, *Done* pops up on the screen and clicking it takes you to the main dashboard. If the network details are entered incorrectly, provisioning is completed *unsuccessfully*, *Close* pops up on the screen and clicking it takes you to the main dashboard. The network details you just entered to gateway must be deleted and the Wi-Fi network registration procedure needs to be restarted. For more information refer to paragraph <u>Removal of existing Wi-Fi network from gateway</u>.

A once-off Wi-Fi connection is necessary and you will not be required to repeat the procedure, unless you want to change the gateway Wi-Fi network. <u>*If you are unable to connect due to your smartphone's incompatibility with the above method, refer to paragraph Alternative Wi-Fi connection.</u>

STEP 3 - CONNECTING THE IOTW GATEWAY TO THE CORTEX ACCOUNT



- 1. Tap the Set up my network tab at the bottom of the main page. The gateway lamp blinks 1 time/second which means it is in platform account connection standby mode.
- In the Set up my network page and the Claim my gateway window, enter the gateway name exactly as it is printed on the label, which is located on the right interior wall of the refrigerator (see page 1)
 <u>Ensure</u> that you enter the "_" correctly.
- 3. Click the *Connect* tab.
- 4. Successful registration appears at the bottom of the app and the device appears in the gateway list. An incorrect registration of details results in the message *Gateway not found*. Please ensure that the gateway name has been registered correctly as even a space at the end can prevent the connection.
- 5. At the top of the page, click Back to main to return to the main dashboard.

By following these steps, it is possible to link as many gateways as you like to an account. In the end, they will appear in the gateway list.

<figure><figure><figure>

Having successfully linked the Wi-Fi to the IoTW gateway, you can return to the main dashboard. The refrigerator that has been connected to the gateway should *automatically* appear. If it does not appear, unplug and re-plug the refrigerator and wait for it to appear automatically. By clicking the refrigerator tab, you will be taken to the refrigerator's dashboard for full control and logging. Temperatures are automatically renewed every few seconds, while logging can be changed in the gateway settings, refer to paragraph Log settings.

3. MONITORED REFRIGERATOR

4. LOG SETTINGS



1. Tap the Set up my network tab at the bottom of the main page.

2. In the *Gateway list* window, tap in next to the gateway whose setting you would like to change and then *Edit*. In the new window you can set the frequency of the logging in minutes and allocate a name to the gateway that will be sent with the notifications.

3. Once this is completed, tap the Update tab.

5. SIGNAL RANGE



- 1. Tap the Set up my network tab at the bottom of the main page.
- 2. The gateway signal intensity appears in the Signal column of the *Gateway list*. There are 4 signal levels: **Excellent**, **Good**, **Low**, **Very low**.

When "---" appears, there is no signal.

It is recommended that the gateway Wi-Fi be positioned in a Good range.

Cortex platform Wi-Fi signal						
	No signal Device is offline					
Excellent	Very good signal					
Good	Good signal					
Low	Low signal					
Very low	Weak signal					

6. ALARM NOTIFICATIONS

4:44 prtex	\$44 \$		>	Alarms from all devices on network						0	۹ ا	
			2	Created time \downarrow	End time	Device	Name	Туре	Status			
No data to display				2023-02-02 08:45:38	2023-02-02 08:45:42	G17Address4	017Address4	OFF device	Cleared		+	
	,			2023-02-02 08:45:29	2023-02-02 08:45:34	G17Address4	G17Address4	OFF device	Cleared			
				2023-02-02 08:35:50	2023-02-02 08:48:02	G177Address1	ΑΛΦΑ	High temperature	Cleared			
			2023-02-02 08:22:39		G77Address2	Panel entrance	No monitoring	Active		-		
		2023-02-02 08:11:39		G281Address2	Καλωδιακό 2	No monitoring	Active					
			2023-02-02 08:08:39	2023-02-02 08:30:10	G78Address3	ΥΠΟΠΡΟΙΌΝΤΑ ΕΞΩ	No monitoring	Cleared				
			2023-02-02 08:06:39		G281Address1	Καλωδιακό 1	No monitoring	Active				
			2023-02-02 02:31:00	2023-02-02 02:44:27	G177Address1	ΑΛΦΑ	High temperature	Cleared				
Setup m atwork	_			2023-02-01 23:45:39		G282Address1	ΠΑΓΟΛΕΚΑΝΗ	No monitoring	Active			
Alarms	No data to daplay		2023-02-01 21:02:11	2023-02-01 21:03:03	G124Address1	ΦΟΥΡΝΟΣ	High temperature	Cleared				
								Items per page: 10 💌 41 - 50 of 3339	<	<	>	×
									Back	to mai	n	

Computer image



Notifications regarding refrigerator alarms and communication failure with the Cortex platform are sent to the email that was initially registered to the platform and a message is automatically sent to the app.

To view the notifications that were sent to the app, tap the *Alarms* tab at the bottom of the main page. You will be taken to the a main dashboard which logs all the alarms for the account. Each line represents an alarm and shows the date/time the alarm was created, the date/time the alarm ended, the device address, its name, the alarm type and its status, i.e., if it is *Active* or *Cleared*.

7. REMOTE RESTARTING OF GATEWAY



To restart the gateway via the Cortex platform, the following steps need to be taken:

- 1. Tap the *Set up my network* tab at the bottom of the main page.
- 2. In the *Gateway list* window, click in the gateway you would like to restart and then the C *Restart*

tab. Wait 10 seconds until the *Status* column changes to *Online* at which time the gateway has been successfully restarted.

8. REMOVAL OF EXISTING WI-FI NETWORK FROM GATEWAY

To remove an existing Wi-Fi network from gateway and register a new Wi-Fi network, the following steps need to be taken:

- 1. The refrigerator must be unplugged.
- 2. Hold down the gateway tab while plugging in the refrigerator. The lamp blinks quickly indicating it is in set up mode. Let go of the tab.
- Retap and hold the tab down for at least <u>5 seconds</u>. Let go. The lamp blinks <u>2 times</u>/second: The data of the old Wi-Fi network has just been erased and it is in new Wi-Fi connection standby mode.
- 4. Follow the steps in Connecting the IOTW gateway to WI-FI Provisioning to register the new Wi-Fi.

9. ALTERNATIVE Wi-Fi CONNECTION

If you are unable to connect by following the steps in paragraph Connecting the IoTW gateway to Wi-Fi - Provisioning, the following steps need to be taken:

- 1. Tap and hold the gateway tab down while plugging in the refrigerator. The lamp blinks quickly indicating it is in set up mode. Let go of the tab.
- 2. Retap and hold the tab down for at least 20 seconds. Let go. The lamp blinks 3 times/second: Gateway is in new Wi-Fi connection standby mode via the alternative Wi-Fi connection method.
- 3. Find the BLE Name on the refrigerator label.
- 4. Download the ESP BLE Provisioning app ³ and grant access. Tap the **Provision new device** tab. From the list that appears, search for the BLE Name, select it and enter the PIN: abcd1234 when prompted.
- 5. You will then be taken to a list of available Wi-Fi networks. Enter the desired network. The gateway's connection to the available Wi-Fi network has been successfully completed.
- 6. The gateway lamp blinks 1 time/second which means it is in platform account connection standby mode. Follow the steps described under <u>Connecting the IoTW gateway</u> to the Cortex account to link gateway to your account.

If connection fails due to your smartphone's incompatibility, try downloading the app on another mobile phone. A once-off Wi-Fi connection is necessary and you will not be required to repeat the procedure, unless you want to change the gateway Wi-Fi network. This app is only used for this procedure and not for monitoring and controlling the device.

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The device is covered by a two-year good performance warranty. The warranty applies only if the instructions for use have been observed. The device must only be tested and repaired by an authorised technician. Warranty only covers the replacement or repair of the device. KIOUR reserves the right to adjust its products without notice. KIOUR Private Company implements a Quality Management System according to the Standard EN ISO 9001: 2015 with registration number 01013192.