INOMAK
COMMERCIAL REFRIGERATORS & STAINLESS STEEL PRODUCTS
ΕΠΑΓΓΕΛΜΑΤΙΚΑ ΨΥΓΕΙΑ & ΑΝΟΞΕΙΔΩΤΕΣ ΚΑΤΑΣΚΕΥΕΣ

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REFRIGERATED COUNTER INSTALLATION, OPERATING AND MAINTENANCE INSTRUCTIONS

Models
PN(M)N99
PN(M)N999
PN(M)N9999

Version: ***E28112014Peng***

Chapter

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1

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.

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RECYCLING OF THE APPLIANCE

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.

RoHS 2002/95/EC

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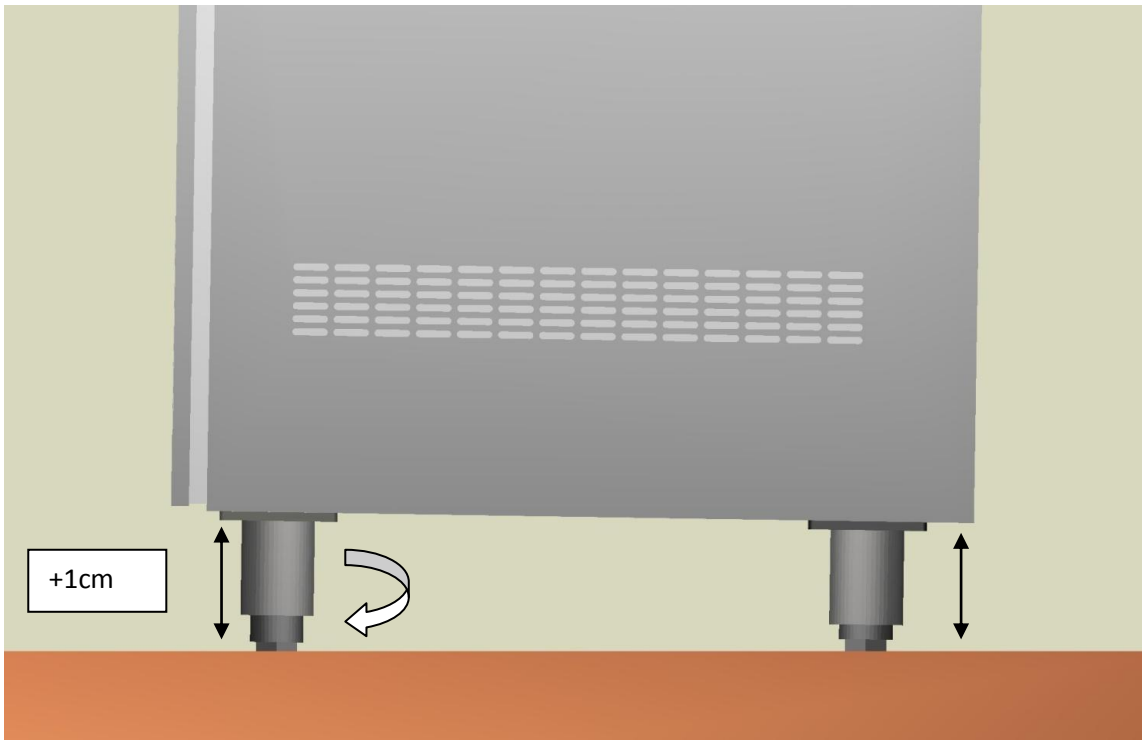
Transportation – Positioning – Installation

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.

Remove all packaging. Move carefully the device to its final position.

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

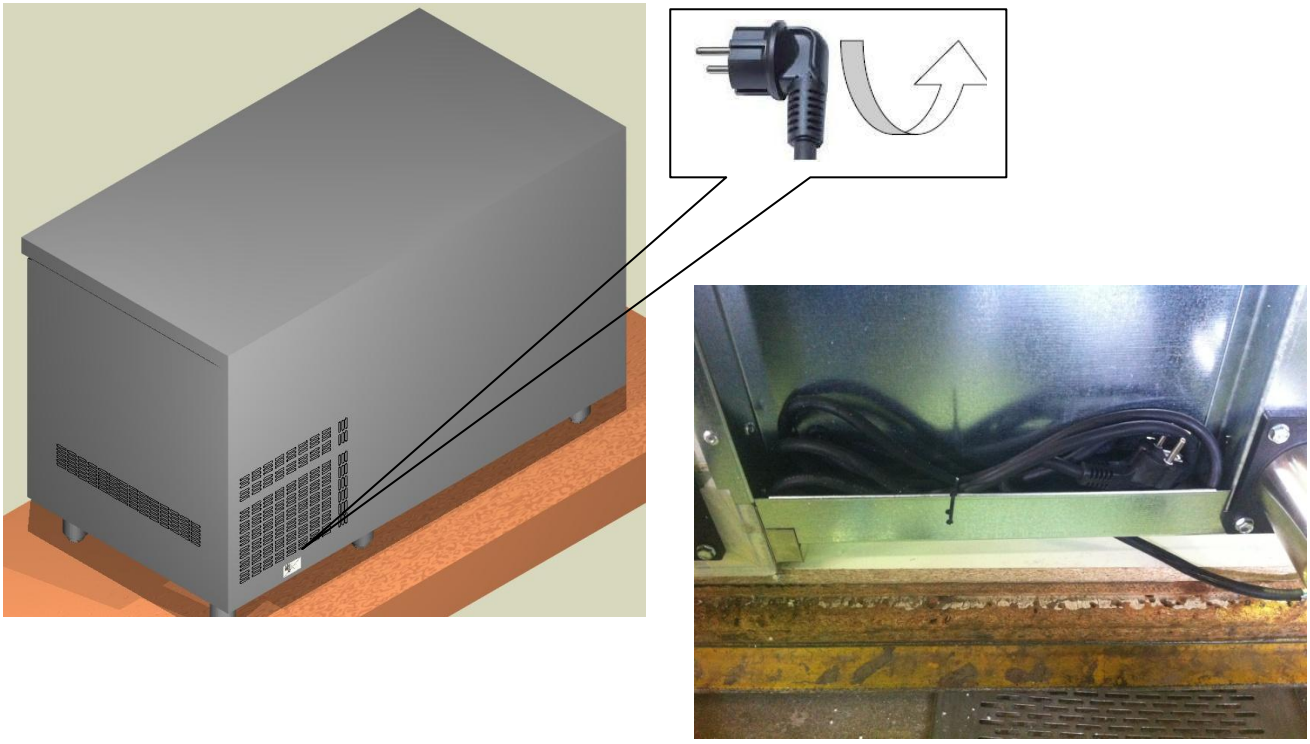


To ensure efficient operation do not place the device near heat sources. The appliance is designed to operate in an ambient temperature of up to 43 °C.

4

Starting Up

The appliance is supplied with a power plug.
The power plug is stored in the back side of the appliance, under the condensing unit. Remove it and connect it to the power socket.



The power socket that your appliance will be connected must be provided with ground.

The thermostat will perform a self check for 4 seconds and will display “oFF”.
Do not touch the display during self test.

Press the on/off switch on the thermostat continuously. The figure that will appear in the display shows the temperature in the cabinet.
The compressor starts after 2 minutes.

Do not store products in the appliance until the appliance reaches the regulated temperature (pag. 9, ch. 6). Do not load your appliance with big quantities of products at once.

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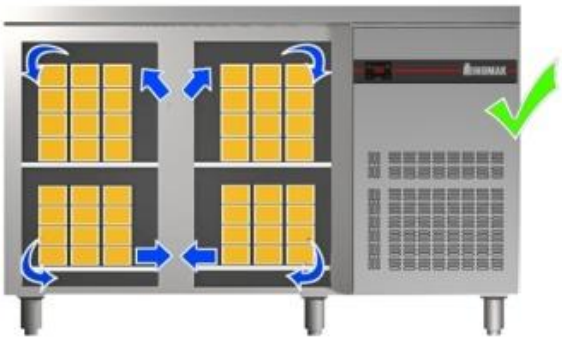
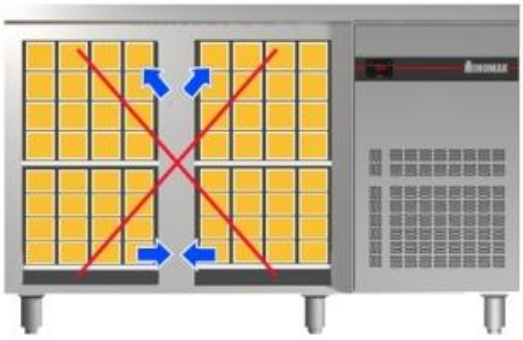
Instructions for correct operation

To ensure the correct function of your appliance, please follow the instructions below.

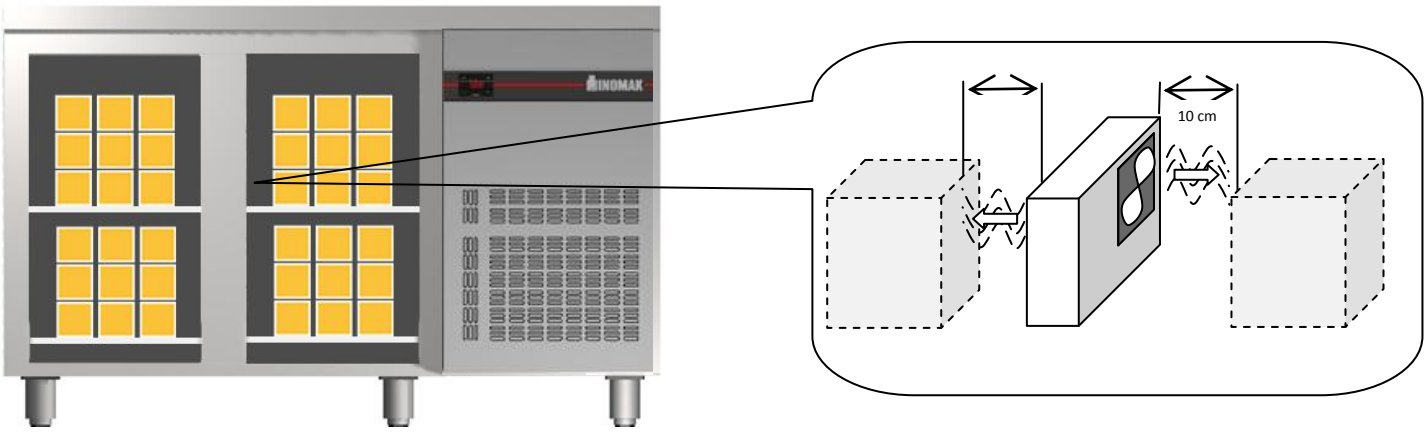
Do not cover the intake air slots when the appliance is working.

Store all products in such way, to avoid blocking the air circulation. Do not store products outside the margins of the shelves.





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



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

Cover the food with a plastic wrapper before storing it into the appliance <u>and seal properly products containing or are based on vinegar, lemon, onions or have other acidic fumes.</u>

Your evaporator is painted with special epoxy anti-corrosion and anti-bacterial coating.

6

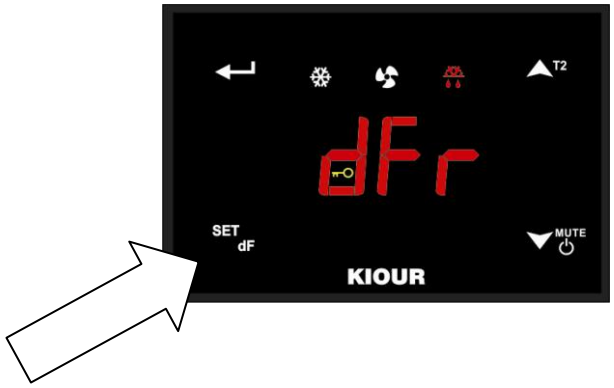
Temperature regulation

Unlock the Thermostat (page 13). Press [↵] and then [SET] to see the temperature setting. If you wish to change, press the arrows [▲] or [▼] accordingly. To save the new value press again [↵].

7

Defrosting

Defrosting is automatically performed every 4 hours so ice is not accumulated on the evaporator. It can also be performed manually by pressing the key [dF] until “dFr” appears on the display. If the refrigerator is on heavy load conditions (frequent door opening) manual defrosting may become necessary.

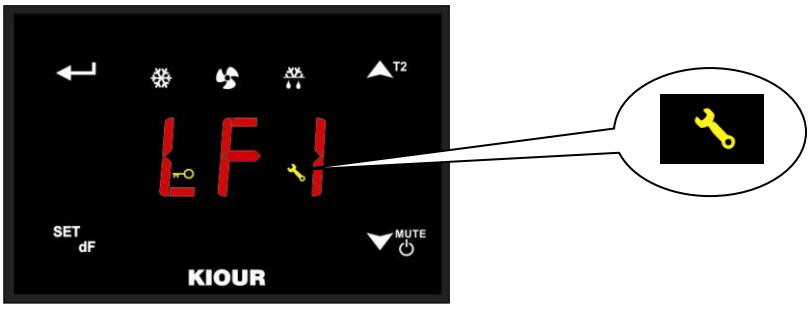


The water from the defrosts evaporated automatically.

8

Fault codes on the display

In all alarms, the alarm code alternating with temperature.



[LF1]: Sensor failure. If the sensor fails, the compressor remains on for 4 minutes and off for 4 minutes. **Technical assistance should be requested.**

[AHi] : High temperature alarm.

[ALo] : Low temperature alarm.

9

Cleaning	Καθαρισμός	Nettoyage	Reinigung

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.

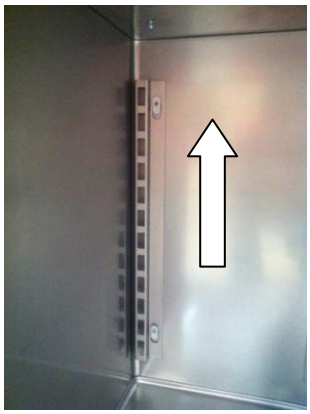
Clean the inside and outside surfaces with a mild soap solution.

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

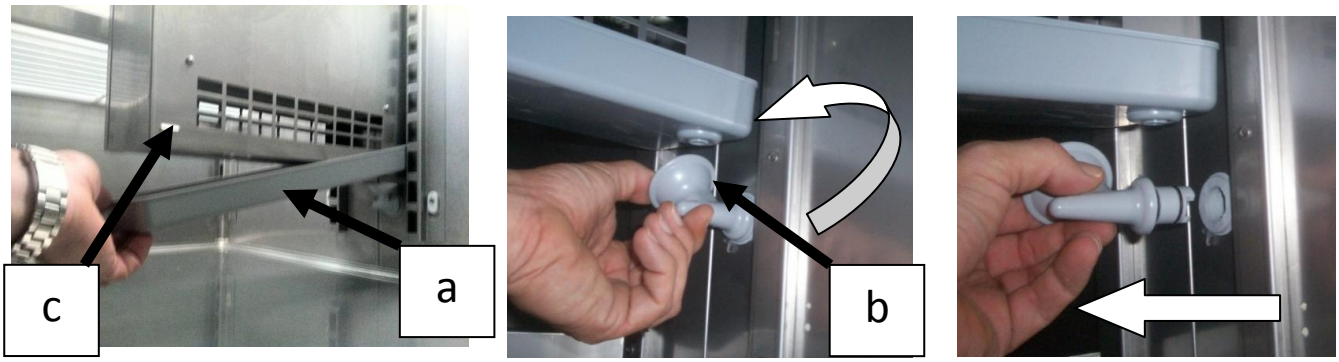
GENERAL CLEANING TIPS

- Clean the Stainless Steel surfaces with WATER + MILD SOAP!
- DO NOT use chlorine based cleaners!

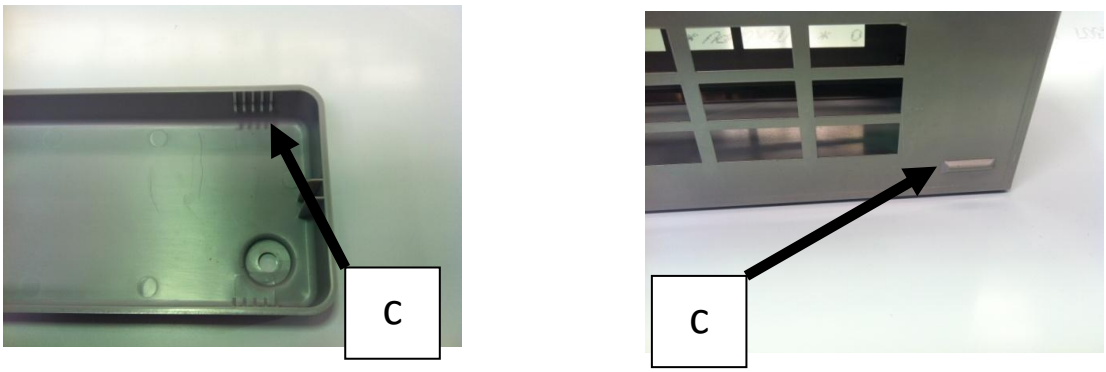
For easier cleaning of the interior of the device, you can remove the shelves, the removable guides and removable support bars.



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



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



10

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.

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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.

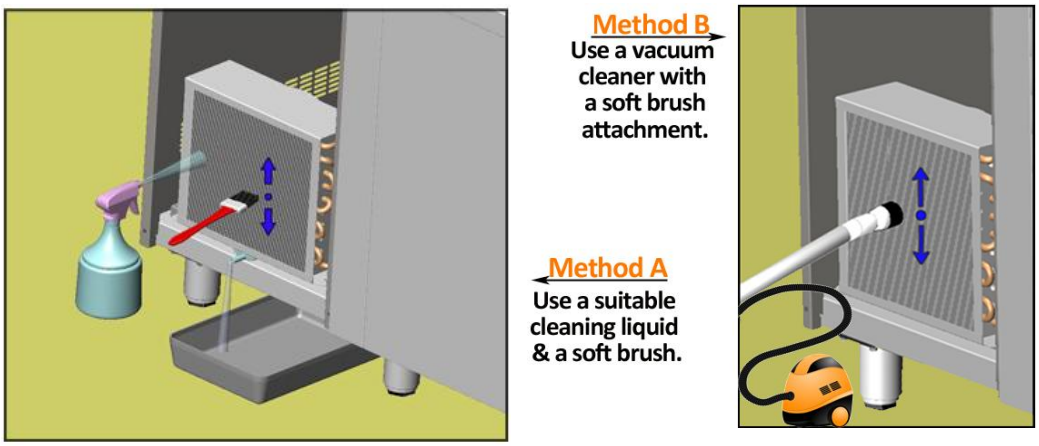
Do not fill at once your appliance with big quantities of products, because this will increase energy consumption.

12

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.



13

TEMPERATURE SENSOR COVER REMOVAL

Pull the sensor out of the cover and turn the cover counter clockwise.

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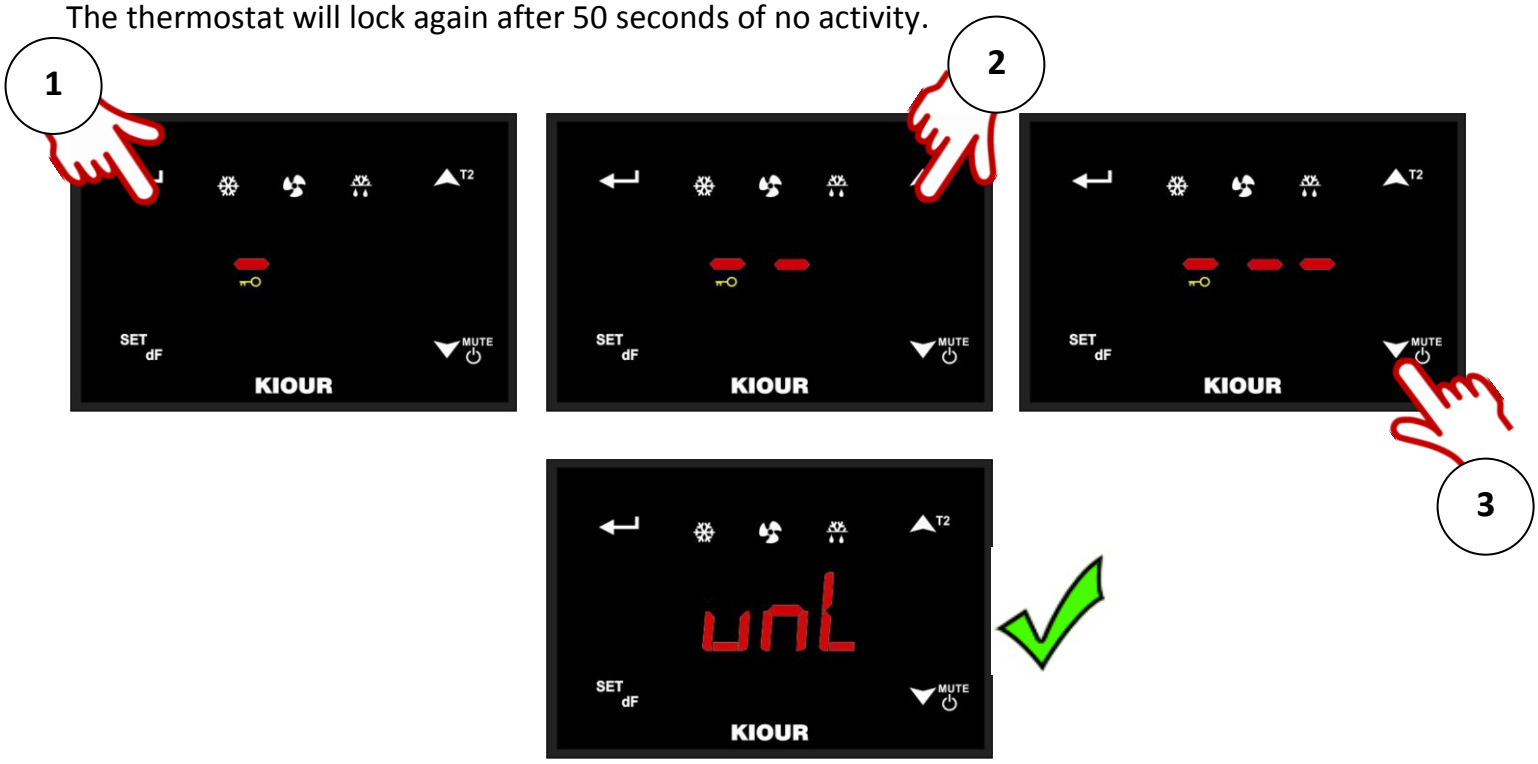
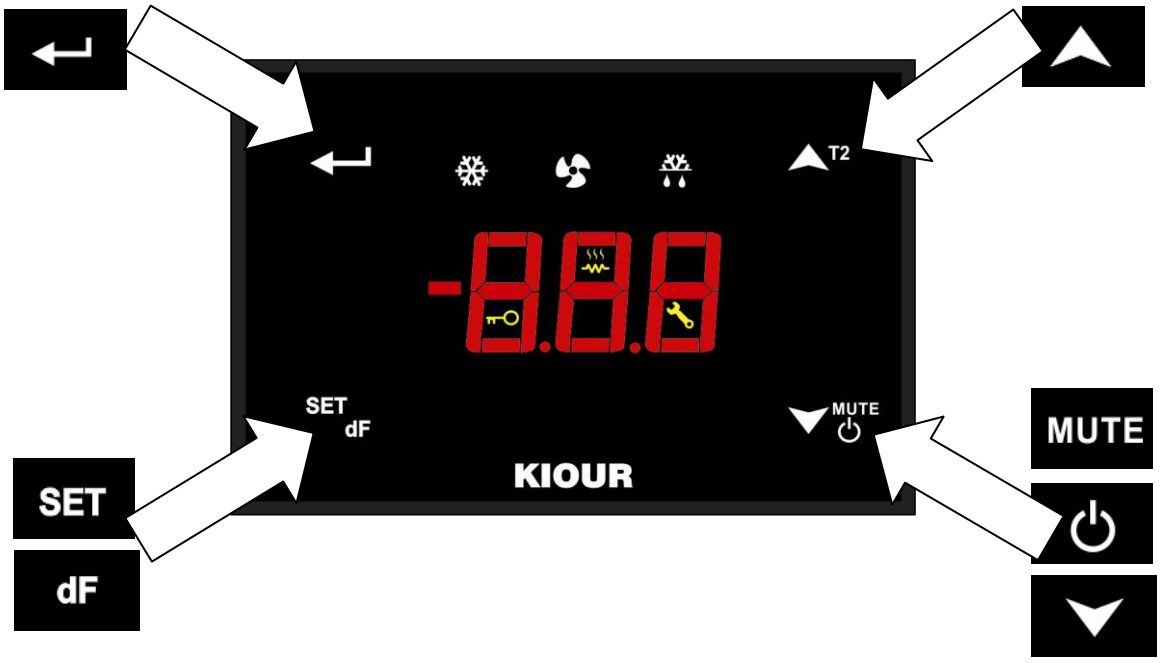
Thermostat KIOUR-RSD - Controller Instructions manual

To unlock the thermostat, use only one finger to press the 3 buttons sequentially in the order shown below. After each button press, a corresponding dash will appear in the display. After all 3 dashes are displayed the message "unL" will be displayed.

The thermostat will lock again after 50 seconds of no activity.



1	Press [↵]. The first parameter (SPo) shows up. Scroll the parameter list by pressing key [▲] or [▼]. To change the parameter value press [SET].
2	To exit the parameter menu press [↵].
3	On/off switch: Press [⏻] continuously to switch the device off.
4	Mute [MUTE]: In case of temperature alarm situation, press to deactivate.
5	Defrost: Press key [dF] continuously to start a manual defrost cycle.



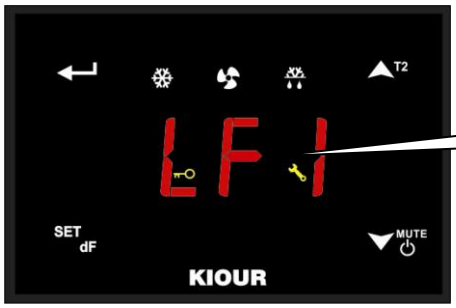
THERMOSTAT INDICATIONS	ΕΝΔΕΙΞΕΙΣ ΘΕΡΜΟΣΤΑΤΗ	INDICATIONS DU THERMOSTAT	ANZEIGE DES TEMPERATURREGLERS

The refrigerator is in standby mode.

The compressor is running.

The evaporator fan is running.

The refrigerator is defrosting.



Room sensor failure. **Technical assistance should be requested.**

Thermostat locked.

Door Alarm **Technical assistance should be requested.**

(flashing) High temperature Alarm

(flashing) Low temperature Alarm

Memory fault.

Press buttons [↵] + [▲] simultaneously.

Set the thermostat's parameters as described in the parameters table.

In case of temperature alarm, press the [MUTE] button. The buzzer will mute but the alarm message will continue flashing.

PARAMETERS TABLE

	Code	Description	Max. Min.	Set.
1	***SPo***	Temperature setpoint	SLo . . .SHi	0.0
2	***ALo***	Low temperature alarm	-50…AH	-4.0
3	***AHi***	High temperature alarm	AL…+150	12.0
4	***dFr***	Defrost repetition time per 24h	0 . . . 12	6
5	***Cod***	Access code		22
6	***diF***	Thermostat delay	0.1 . . 25.0 ^{0}C	3,0
7	***CfA***	Compressor control for sensor fault	0= 40%: 3 min on & 4 min off, 1=100%: compressor on	0
8	***Crt***	Minimum compressor off time	0 . . . 4 min	2

9	***dti***	Defrost maximum duration	1 . . . 90 min	12
10	***dLE***	Defrost maximum temperature	0.0 . . . 25 ^{0}C	10
11	***doP***	Defrost type	----------	--------
12	***dri***	Dripping time	0 . . . 10 min	0
13	***tdF***	Defrost display time	0 . . . 99 min	20
14	***AJ1***	Probe T1 offset	-9 . . +15 ^{0}C	
15	***AJ2***	----------	----------	--------
16	***tSd***	Display slowdown	0 . . . 20 sec	0
17	***F_C***	Measurement Unit	0 = ºC, 1 = ºF	0
18	***BrA***	----------	----------	--------
19	***trE***	Responce time on network (mSec)	5 . . .100 msec	20
20	***FFu***	Evaporator Fan control	0 = start/stop with compressor, 1 = always On	1
21	***Ufu***	Serial output	0=connection with network 1=connect with external alarm (when “add=0” Uf automatically = 0	0
22	***SLo***	Minimum temperature setting	-50 . . .SHi ^{0}C	-2.0
23	***SHi***	Maximum temperature setting	SLo . +150 ^{0}C	8.0
24	***Odo***	Door alarm activation	0=off 1=on (NO) 2=on (NC)	0
25	***At2***	Alarm delay after defrost	0…120 min	20
26	***U3***	----------	----------	--------
27	***U4***	----------	----------	--------
28	***U5***	----------	----------	--------
29	***Add***	Network adress	0 . . .250	0

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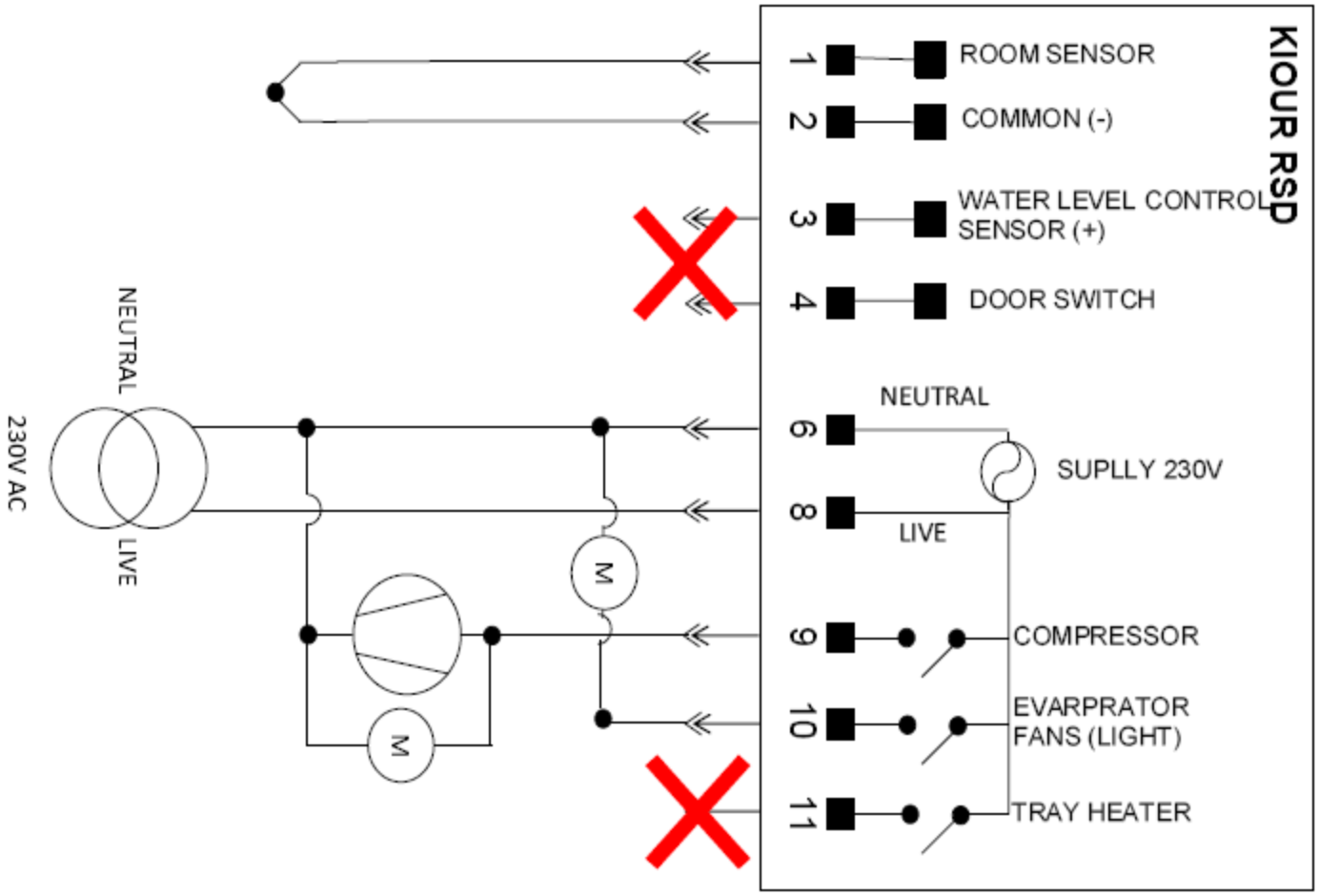
Electric diagram for refrigerated counters (KIOUR RSD)

1	TEMPERATURE PROBE
2	COMMON / (-) blue cable
6	LIVE
8	NEUTRAL
9	COMPRESSOR
10	EVAPORATOR FANS



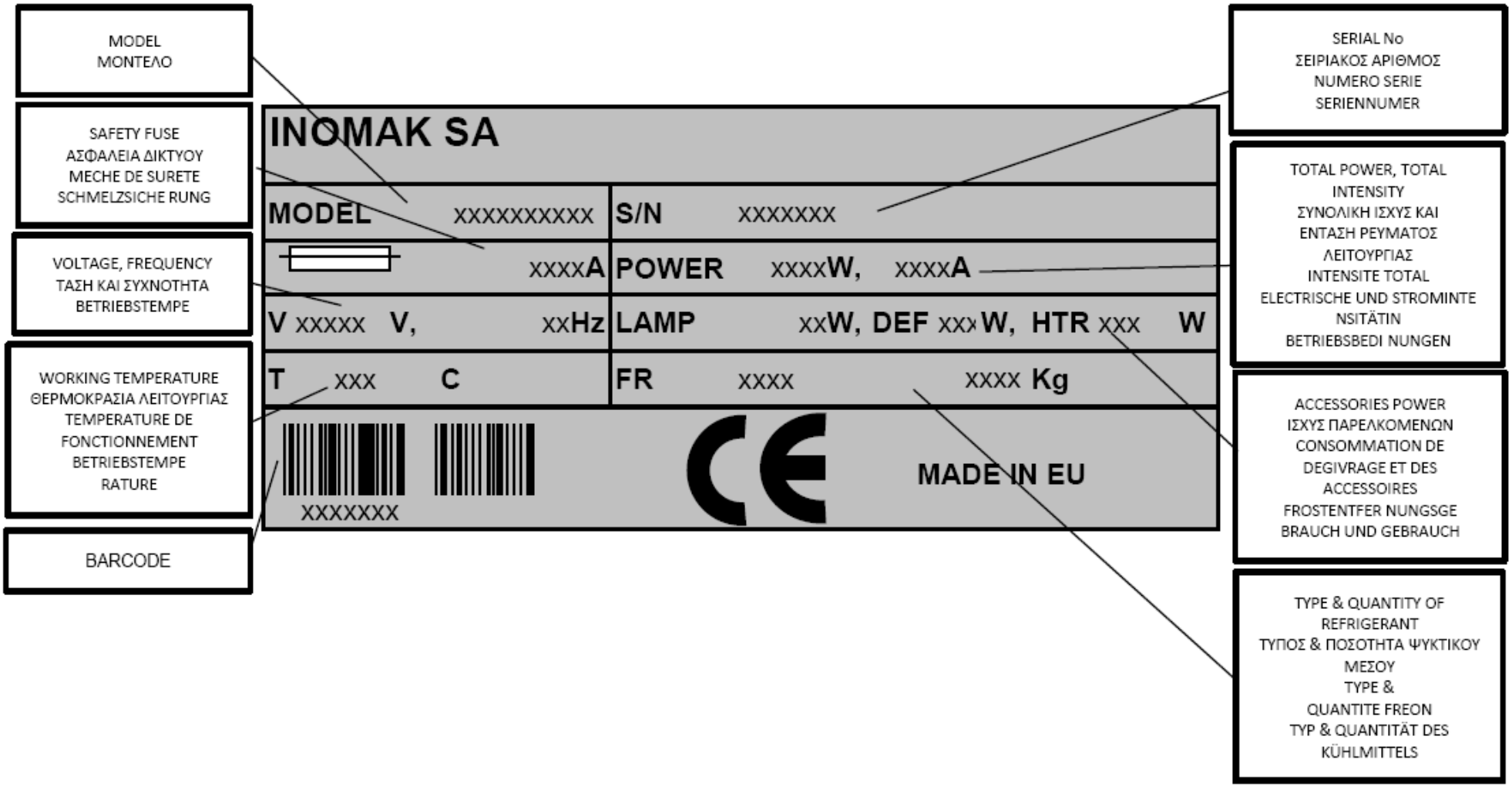
16

Troubleshooting

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

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.


MODEL
ΜΟΝΤΕΛΟ
SAFETY FUSE
ΑΣΦΑΛΕΙΑ ΔΙΚΤΥΟΥ
MECHE DE SURETE
SCHMELZSICHE RUNG
VOLTAGE, FREQUENCY
ΤΑΣΗ ΚΑΙ ΣΥΧΝΟΤΗΤΑ
BETRIEBSTEMPE
WORKING TEMPERATURE
ΘΕΡΜΟΚΡΑΣΙΑ ΛΕΙΤΟΥΡΓΙΑΣ
TEMPERATURE DE
FONCTIONNEMENT
BETRIEBSTEMPE
RATURE
BARCODE
INOMAK SA
MODEL XXXXXXXXXX
S/N XXXXXXX
XXXXA
POWER XXXXW, XXXXA
V XXXXX V, XXHz
LAMP XXW, DEF XXXW, HTR XXX W
T XXX C
FR XXXX XXXX Kg
XXXXXXX
MADE IN EU
SERIAL No
ΣΕΙΡΙΑΚΟΣ ΑΡΙΘΜΟΣ
NUMERO SERIE
SERIENNUMER
TOTAL POWER, TOTAL
INTENSITY
ΣΥΝΟΛΙΚΗ ΙΣΧΥΣ ΚΑΙ
ΕΝΤΑΣΗ ΡΕΥΜΑΤΟΣ
ΛΕΙΤΟΥΡΓΙΑΣ
INTENSITE TOTAL
ELECTRISCHE UND STROMINTE
NSITÄTIN
BETRIEBSBEDI NUNGEN
ACCESSORIES POWER
ΙΣΧΥΣ ΠΑΡΕΛΚΟΜΕΝΩΝ
CONSOMMATION DE
DEGIVRAGE ET DES
ACCESSOIRES
FROSTENTFER NUNGSGE
BRAUCH UND GEBRAUCH
TYPE & QUANTITY OF
REFRIGERANT
ΤΥΠΟΣ & ΠΟΣΟΤΗΤΑ ΨΥΚΤΙΚΟΥ
ΜΕΣΟΥ
TYPE &
QUANTITE FREON
TYP & QUANTITÄT DES
KÜHLMITTELS