HUSSMANN®

ARCH DTVS

MODULAR DUAL TEMP VARIABLE SPEED ISLAND CABINET

MAINTENANCE AND OPERATION



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Caption
Warnings and safety notes.



WARNING - Dangerous situation that may indirectly lead to a serious injury or death if not avoided.



CAUTION - Dangerous situation that may lead from mild to moderate injuries if not avoided.

NOTES - Important collective notes or an individual note for avoiding material or property damage.

NOTES AND SIMBOLS



General Warning
"DANGER!" or "CAUTION!"



Warning
"RISK OF ELECTRIC SHOCK!"



Warning
"RISK OF FLAMMABLE SUBSTANCES IGNITING!"



Warning
"RISK OF HAND INJURY!"



Mandatory Action Sign
"USE PROTECTIVE GLOVES!"



Prohibited Action Sign
"DO NOT STEP"



Disposal Indication
"HAZARDOUS RESIDUES AND ELECTRONIC MATERIAL
- Disposal only according with local authority guidelines. "

If you want the Instruction Manual in digital format, you can consult the equipment supplier.

Legal Notices

Read this maintenance and operation manual carefully and make it available to other people responsible for handling and using this appliance.

The equipment contained in this instruction manual has been designed to preserve previously frozen products. Thus, any other use is considered not to be in accordance with the purposes for which it was intended.

The manufacturer does not assume any liability for damages to people, objects, or equipment that result from the following:

- Any improper use;
- Failure to comply with safety regulations contained in the manual;
- Failure of electrical safety equipment or power failure;
- Unauthorized equipment modifications and technical changes made by the customer;
- Use by unauthorized personnel;
- Use of replacement parts that are not authorized by the manufacturer.
- The manufacturer reserves the right to make technical modifications as a result of improvements made to the equipment and new developments.

Safety Instructions and General Warnings



WARNING

- Do not store in this device explosive gases such as aerosols containing inflammable propellants.
- Do not obstruct the ventilation grids. Do not damage the refrigerator circuit.
- Do not use mechanical devices in order to accelerate the defrosting other than the ones recommended by the manufacturer;
- Do not use electrical appliances in the compartment designated for food preservation!
- Each shelf supports a uniformly distributed maximum load of 45 kg.
- The values on the characteristics label have been measured in the climatic class according to the specific EN ISO 23953-2 standard, as indicated:
    - For equipment with climate class 3 the temperature and humidity values are, respectively, 25 °C and 60 %HR.
    - For equipment with climate class 4 the temperature and humidity values are, respectively, 30 °C and 55 %HR.
- These equipments were measured and assessed under the device-specific ANSI / NSF 7 standard, as indicated:
    - For equipment with Type I climate class the temperature and humidity values are respectively 24 °C and 55 %HR.
- Do not use power strips or extension cords as these present a fire or electric shock hazard.
- Before any cleaning or maintenance operation disconnect the appliance from the power source by removing the plug from the outlet!

- If the power cord is damaged, it must be replaced by personnel qualified for this task so as to prevent hazardous situations.
- Do not, under any circumstances, connect damaged equipment to the electric circuit. Otherwise, there is a risk of electric shock or refrigerant leaks!
- Do not make technical changes to the equipment to prevent injury or electric shock!
- To unplug the equipment, pull the plug and not the cable; (Fig.1)
- Do not load the equipment with products until it reaches the desired temperature.
- Check the equipment temperatures regularly.
- Do not interrupt the cooling chain. Keep products cold before loading the equipment.
- The maximum level of sound pressure emission is below 70 dB(A).
- Do not obstruct the ventilation grids such as the central separator (as shown in Fig. 2) between the equipment. This separator is part of the ventilation circuit and cannot be blocked.



Fig. 1 - Never pull the cord

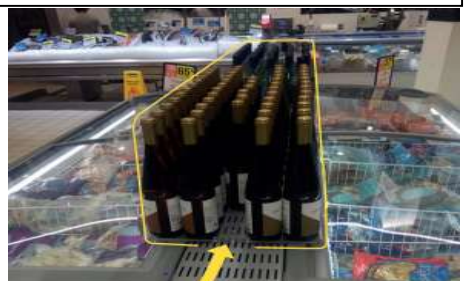


Fig. 2- Do not obstruct the ventilation grid



CAUTION

- Do not climb or go inside the equipment!
- Do not place objects on top of the appliance. This presents a risk of injury if these objects fall.
- Loading the cabinets with frozen products may result in frostbite to the hands. Use protective gloves!
- Do not store bottles of any kind in the freezer equipment. Glass bottles containing fluids may burst from freezing and cause injuries.
- Care must be taken during use, transport, assembly, disassembly when out of service, testing or foreseeable breakdowns, if these operations come to bring consequences for the stability of the equipment, as there may be a risk of overturning, falling or uncontrolled movements of the equipment or its components.
- Check the irregularity of floors during transportation, assembly, disassembly, scrapping and any action involving the device so as not to compromise its mechanical stability.
- Unplug the equipment by removing the plug from the power supply and expose the power plug so that it is visible from any of the equipment's access points.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or a lack of experience and knowledge, unless they have been supervised or instructed in the use of the appliance by a person responsible for their safety. (IEC standard scope)

- Children should be supervised to ensure that they do not play with the equipment. (IEC standard scope)
- This appliance may be used by children aged 8 years and older, and by persons with reduced physical, sensory or mental capabilities, or a lack of experience and knowledge, provided that they have been properly supervised or instructed in the safe use of the appliance and understand the hazards involved. (EN standard scope)
- Children should not play with the appliance. (EN standard scope)
- Maintenance and cleaning should not be carried out by children without supervision. (EN standard scope)

NOTES:

- Upon unpacking the equipment, check if there are any loose components in the package. Check whether they belong to or are accessories of the appliance before disposal.
- In case of damage not initially apparent, contact technical assistance within the first 15 days after delivery.
- Do not leave food in the equipment if it is not in operation.
- Do not expose the equipment to atmospheric agents.
- Do not use direct or indirect water jets on the equipment.
- Do not puncture the equipment. Failure to comply with this rule implies losing warranty.
- The appliance must be transported or stored in the horizontal position of operation.
- The equipment must be placed in areas with proper air circulation, and must always be, at least, 150mm away from the walls and ceiling to allow the necessary ventilation.
- Operation of the appliance is not permitted without doors or with them open. Doors can only be opened briefly to load or remove products. They must be fully closed immediately afterwards.
- Defrosting is a feature designed to eliminate the ice formed inside the unit. It works by reversing the refrigeration system through a valve where the hot gas is redirected inside the unit. Defrosting is terminated by the time or temperature set on the controller.
- In the event of manual defrosting do not use heaters or sharp objects, as there is danger of damaging the equipment.
- Pre-frozen products must be stored, so as not to interrupt the product's cooling chain.

Safety Instructions and Special Warnings

Equipment with refrigerant:

R290 (Propane)  **WARNING**

- The refrigerant R290 (PROPANE) is classified in the A3 (flammables and explosives) refrigerant group, according to the DIN EN 378-1 standard. In certain limits, this can trigger an exothermic reaction with air and corresponding ignition energy (source of ignition)!

- **Equipment using refrigerants like R290 are marked with the warning label (flammable gas). R290 refrigerant has a higher density than air, so it will gather in lower areas which can lead to recirculation by fans. Each and every maintenance operation must be performed by technicians properly qualified to deal with flammable refrigerants!**

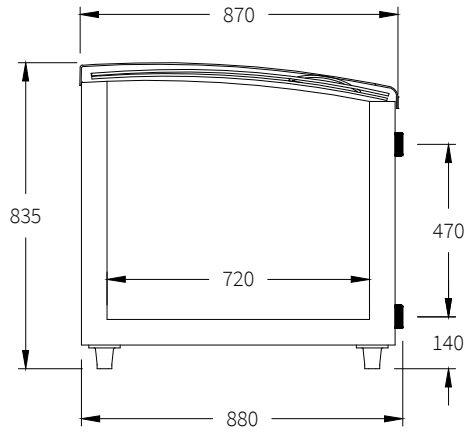
FAILURE TO FOLLOW THIS WARNING MAY LEAD TO AN EXPLOSION, INJURY, DEATH AND PROPERTY DAMAGE.

R404a / R452a  **WARNING**

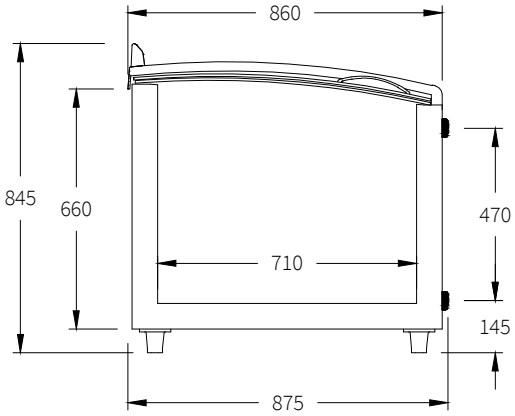
- R404a refrigerant is composed of: (44% R125, 4% R134a, 52% R143a).
- R452a refrigerant is composed of: (30% R1234yf, 11% R32, 59% R125).
- This is a **non-flammable gas**. If released into the atmosphere, it contributes to **global warming**.

This gas must always be recovered by a qualified technician.

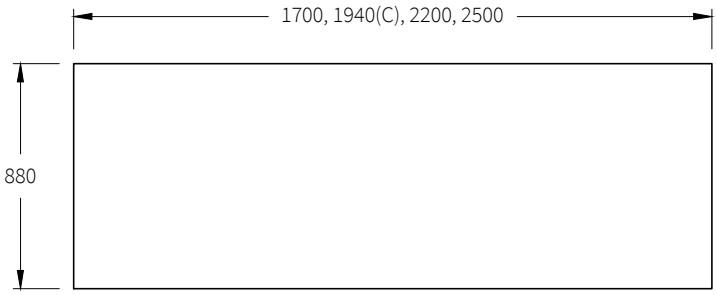
Case Dimensions



ARCH250-DTVS
ARCH220-DTVS
ARCH170-DTVS



ARCH194C-DTVS



Additional Information
All Dimensions shown in Millimetres (mm) unless otherwise stated. Dimensions and features are subject to change. Please obtain current technical information prior to order confirmation.

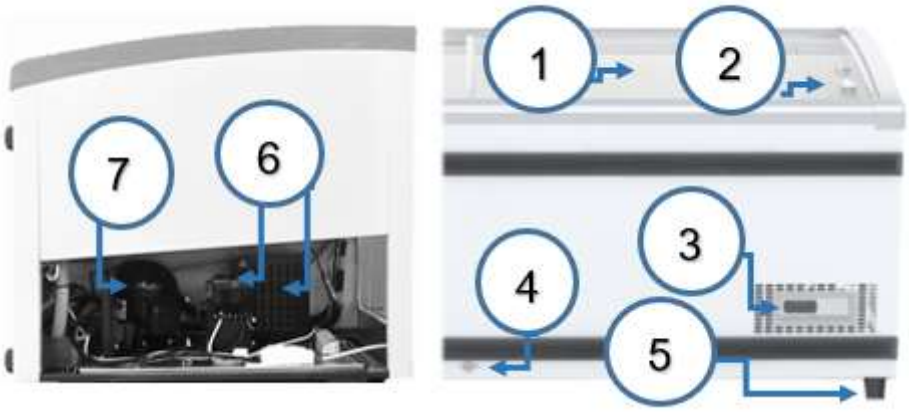
1. Introduction

Our goal is to provide our customers with a wide range of high-quality equipment while maintaining the premise of high efficiency and low consumption in order to meet the diverse needs of customers operating in the Food Retail segment. In the development of this equipment, the environmental impact of its equipment was taken into account, mainly of the gas used R290. R290 refrigerant has no effect on the ozone layer and has a very low greenhouse effect potential.

In order to ensure the best quality of the product, during the manufacturing the products are subjected to rigorous safety and operational tests, which attest to reliability and control the safety required by national and international standards in various areas.

To reach the equipment's maximum performance we recommend that you read this instruction manual carefully. It contains important instructions for installation, operation and maintenance. If you need support, you can contact the supplier of this equipment.

2. Description of the Equipment



1. Glass Cover
2. Handle
3. Controller
4. Drain Cap
5. Feet
6. Condenser and Fan
7. Compressor

Fig.3 - Example of ARCH equipment



Fig. 4 - Location of Characteristics Label

Technical information on characteristics label:

- Serial Number
- Designation and type of equipment
- Nominal current and electric power
- Nominal voltage and frequency
- Consumption
- Gross and net volume
- Climate classification*
- Refrigerant and quantity used
- Other technical information.

Climate classification* ISO 23953-2	ºC	%Hr
3	25	60
4	30	55

Classification NSF 7	ºC	%Hr
Type I	24	55

3. Environmental Instructions

The WEEE symbol on the product or on the packaging indicates that this product may not be processed as household waste.
To discard the appliance, take it to a local recycling center. It must be delivered to the selective collection center for recycling electrical and electronic equipment. Ensuring this product's appropriate disposal will help prevent eventual negative consequences to the environment and public health, which may be brought on by improper treatment of the product. During the correct disposal of the equipment, make it unusable, disconnect it from the power supply and cut the power cable. Dispose of the refrigerant and polyurethane foam insulation material in a safe and environmentally friendly manner.
For more detailed information on recycling this product, contact your local municipal services, the selective collection center in your residential area, or the establishment where you acquired the product.

4. Unpacking

NOTES:

- To protect the preservation equipment from damages, it must be transported in its position of operation. Failure to comply with this rule results in loss of warranty.
- Before and during unpacking the appliance must be visually inspected for eventual transportation-caused damages. Pay attention to loose parts, bulges, hazards, visible fluid losses, among others. Eventual damages should be

immediately reported. For all the other issues the contract conditions are applied.

- The handling of packed equipment must be done with appropriate equipment, such as a pallet truck or a forklift.

WARNING

- Do not allow children to play with the packaging or its parts as they present risk of asphyxiation.
- Damaged equipment may cause a short circuit or ground fault. Do not, under any circumstances, connect damaged equipment to the electric circuit.
- Care must be taken when transporting this equipment as there may be rollover risk.
- Do not carry the equipment on uneven floors.

5. Installation

NOTES:

- For the equipment's proper installation, check if it is placed on a levelled surface and not near sources of heat and/or direct solar radiation or near doors, windows, fans, and vents, as these might severely impair the product's performance.
- Advertising labels may only be placed in the form of thin film. Do not affix thick insulation materials on the outer walls.
- Shelves and dividers need to be assembled and no product shall be placed on the base plates.
- In equipment with an automatic defrost system, to conserve and display frozen products in bulk, appropriate crates must be used to prevent the products from falling or touching the walls of the equipment.
- In humid environments and/or with a large concentration of salt - such as fish markets - pay special attention so that water does not come directly into contact with the compressor area.
- Make sure that air circulates freely around the equipment and observe the minimum 150mm distances illustrated in Fig. 5.

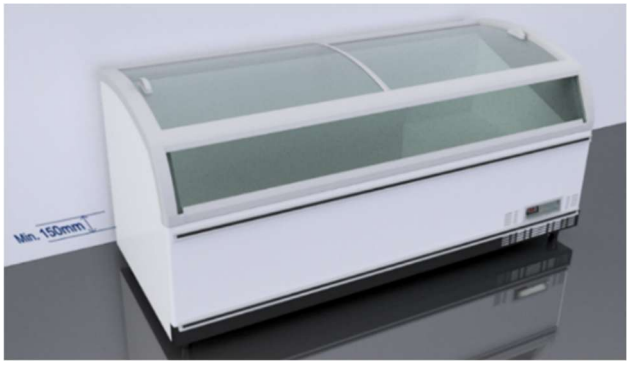


Fig. 5 - Minimum Distances for Installation

- Push the equipment through structural areas and do not push through areas with glass, as shown in the example in Fig.6.



Fig. 6 - Example of allowed Push zones

⚠ WARNING

- Put water in the defrost water drain corner (about 15cL) of the equipment.





5.1. Placement and adjustment of levelers

- To place the leveler (Fig.7) it is necessary to lift the equipment.
- First place the leveler on the foot of the equipment by hand, as shown in Fig.8.
- With the equipment in position, it is possible to adjust it with a No. 36 spanner in order to level the equipment, as shown in Fig.9.



Fig. 7–Leveler



Fig. 8- Placement of the leveler at the foot of the equipment



Fig.9- Leveling adjustment

6. Electrical Connection

NOTES: ⚠

- Connect the appliance to an outlet that is properly grounded. Said connection is mandatory.

- Check if the power source's voltage and respective frequency correspond to the recommendations in the appliance's characteristics label found on the back (Fig.4).
- The maximum impedance of the equipment's power supply network should be 0.33 ohms.



WARNING

- Work on the electrical system, repair or replacement, must be carried out by authorized technicians. To request assistance, contact the supplier's customer service.
- Do not use inappropriate adapters, power strips, or extension cords. They may cause overheating and burn. The manufacturer will decline any liability for damages caused to people or objects resulting from non-compliance with this standard.

7. Operation

This equipment is projected to operate at a certain room temperature and relative humidity found in the climate classification indicated on the characteristics label, as seen on chapter 2.
Make sure that the wall and floor racks are always inside the equipment.

NOTES:

- Doors are standard with the equipment. Doors are necessary for the equipment to operate appropriately. They should only be opened to place and remove products.
- **In units with an automatic defrost function, the defrost times are preset in the controller. Defrosting takes place automatically every day, outside of store opening hours (night time).** Instructions for manual regulation are found under point "8.1 Manual Defrost".
- During the defrosting period, products do not suffer any damages as the temperatures prescribed in the regulation are not exceeded.
- In non-ventilated equipment, when in Chiller mode, there must be no products below the step height due to freezing risk.



CAUTION

- Defrosting water may come out of the equipment. If that is the case, said water must be removed to avoid slipping hazard.



CAUTION

- Do not climb on or get inside the equipment. The material could break and there is a risk of physical damages and damages to the equipment.

7.1. Loading

For conservation and refrigeration equipment, before placing the products, the equipment must be switched on and remain in operation until the desired interior temperature is reached. After this time, the previously frozen or refrigerated products can be loaded inside.

CAUTION

In the compartment designated for freezing products, frost burns may develop on hands upon loading products into the equipment. The use of safety gloves is mandatory!

The equipment must be loaded up to the load limits indicated on the inside of the equipment (see Fig.10).



Fig. 10 - Load Limit

In no case should the goods be loaded above the “Load Limit”; from that level the storage temperature is no longer guaranteed, as well as the storage temperature of all the equipment.

8. Controller

The appliances come with pre-set factory temperature settings. To activate manual defrosting (if applicable) follow the instructions in this chapter, below.

NOTE:

- All the instructions in this chapter refer to the standard control panel Carel IR33+ (Fig.11) used in the equipment. Nevertheless, there are other types of control panels that may be used in the products. If that is the case, please refer to the table below.

Controller	Page to search
Danfoss AK-CC 211	Page 24
Dixell XWI70K	Page 25
RDM	Page 27
Carel IJ	Page 29
Elitech ECS – 180 EZ	Page 36

Carel IR33+ Controller



Fig. 11 - Carel IR33+ Controller

Key	Press Key
PRG/MUTE	Press down for more than 3 seconds, access the "F" parameters (frequent) or the menu to define the password or access the “C” (settings) parameters menu; if there is an active alarm: silences the alarm.
ON-OFF/UP	Press down for more than 3 seconds to turn OFF the control panel; Press down for more than 1 second to turn ON the control panel; Upon defining parameters, increase the amount exhibited or switch over to the next parameter.
AUX/DOWN	If pressed for more than 1 second, it activates / deactivates the auxiliary output (lighting); when setting the parameters, decrease the displayed value or change to the previous parameter.
SET/DEF	Press down for more than 1 second to VIEW and / or allow the user to define the set point; press down for more than 5 seconds to initiate manual defrosting.

Manual Defrosting

Aside from automatic defrosting, it is possible to activate manual defrosting when the temperature conditions occur.

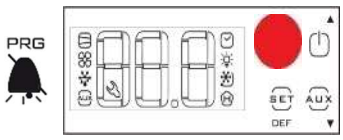
Pressing the button SET DEF for 5 seconds until the DEF message appears on the screen.



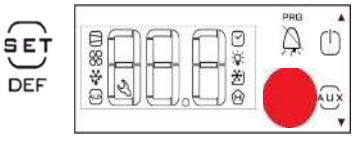
Adjust Clock

Go into Parameters:

- Press the key for 3 seconds PRG.



- Input the corresponding password: “22”.
- Pressing the button SET DEF for 5 seconds until the DEF message appears on the screen.



Navigate through the corresponding parameters by pressing the keys and / or AUX and change according to the following table.

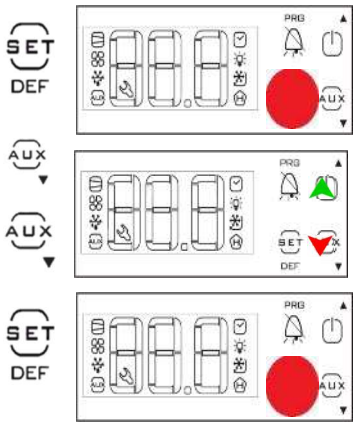
Parameters to change	Meaning	Action
tc - y	Current year	Confirm by pressing the key. SET DEF
tc - m	Current month	
tc - d	Current day of the month	
tc - u	Current day of the week	
tc-h	Current hour	
tc - n	Current minute	

NOTES:

- After modifying all the parameters, record them by pressing down the key PRG continuously until the temperature appears.
- During new installation, adjust the clock; otherwise, it may defrost outside the pre-set time. Also adjust the time for turning the light on / off.

Set-Point Adjustment

- Press the button SET DEF (one touch).
- Change the Set-Point value using the arrow buttons.
- Validate with button SET DEF (one touch).

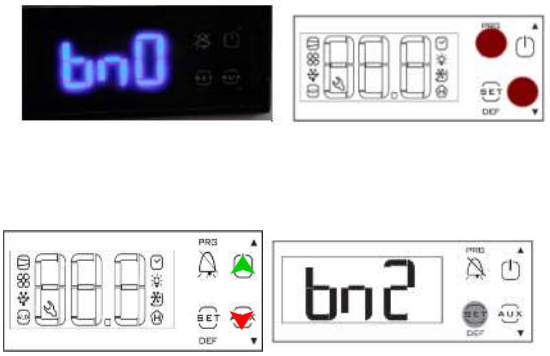


NOTE:

- Pay attention to the preservation temperature specified for your products!

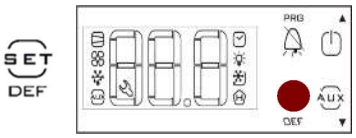
Chiller – Freezer mode change

- Press button PRG plus button AUX until the screen shows “bn0”. During the process, the controller will restart. Press the button until "bn0" appears.
  - bn0" appears on the screen
  - bn0" appears on the screen
  - Use the up and down arrow buttons to select different settings:



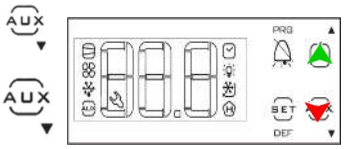
a. bn1 - Freezer mode=
b. bn2 - Chiller mode

- Press button SET DEF to select the desired mode. The controller will restart.
- After restarting, press SET DEF to check which mode is selected.



Modify the light timer:

- Navigate through the parameters using the arrow buttons.



Possible parameters to be changed:

Light on

Parameters to change	Meaning	Action
ton - d	Select ON day (11 = ON every day)	Confirm by pressing the key. SET DEF
ton - h	Select ON hour	
ton - n	Select ON minute	

Light off

Parameters to change	Meaning	Action
toF – d	Select OFF day (11 = OFF every day)	Confirm by pressing the key. SET DEF
toF – h	Select OFF hour	
toF – n	Select OFF minute	

- Press key PRG for 5 seconds to save



Modify the defrost timer

- Navigate through the arrow buttons to see the different parameters.
- Possible parameters to be changed:

Parameters to change	Meaning	Action
td1 – d	Select Defrosting day (11 = DEFROST every day)	Confirm by pressing the key. SET DEF
td1 – h	Select Defrosting hour	
td1 – n	Select Defrosting minute	

- Press key PRG for 5 seconds to save



9. Maintenance and Cleaning

WARNING

Before performing any cleaning or maintenance operation, unplug the equipment by removing the plug from the power supply and expose the power plug so that it is visible from any of the equipment's access points.

Do not use sharp metal objects to remove dirt.

Do not use hair dryers or other electric heating appliances to defrost the equipment.

Using these appliances may destroy the electrical insulators and damage the refrigerant circuit and presents a risk of electric shock and refrigerant leaks. The equipment must be completely dry before connecting it to the power source again.

Use Gloves and Goggles to perform this maintenance.



To ensure normal operation of the food preservation equipment, the following aspects need to be observed:

- Do not use mechanical devices in order to accelerate the defrosting other than the ones recommended by the manufacturer;
- Do not destroy the refrigerator circuit.
- Do not operate electrical appliances that are not recommended by the manufacturer in the compartment for storing products.
- Keep the defrosting drain hole clean and ensure that no grids are standing on it.

It is recommended, for hygiene reasons, complete defrosting of the equipment from once to twice a year, in order to remove any deposit of ice, by cleaning the inside and outside of the appliance. Cleaning the doors is also recommended if they make it difficult to showcase the product on the equipment. Ice accumulation is a normal phenomenon. The quantity and speed in which ice accumulates depend on environmental conditions and the frequency with which the doors are opened.

CAUTION

The use of gloves is mandatory during cleaning. The sharp extremities of the equipment may cause cuts on hands.

Cleaning the inside:

- Remove all products from inside the appliance.
- Disconnect the equipment from the electrical current for the time needed to completely defrost the appliance walls.
- Clean the equipment with a soft cloth when at room temperature.



- Wash the interior with pure water, to which a little neutral detergent may be added.
- To clean the defrost chute:
  - Wet a cloth with a non-reactive cleaning product to clean the defrost chute.
  - To clean the corners of the defrosting chute a brush is recommended.
- Finally, dry it with a soft cloth.
- Connect and wait for the appliance to reach operational temperature again.
- Place the products inside.
- During defrosting some water may remain on the bottom of the equipment, it is necessary to open the inner and outer cover to remove the water (Fig. 12/13).



Fig. 12-Interior cover of the equipment

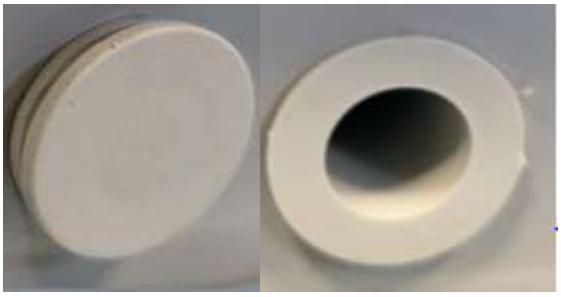


Fig. 13- Outer cover

Cleaning the outside:

- Disconnect the equipment from the electrical current before cleaning the exterior so that there is no risk of electric shock.
- Clean the equipment's exterior with a soft sponge soaked in warm water and soap.
- Then clean it with a soft cloth and dry.
- The refrigerator circuit's exterior (compressor, condenser, connection tubes, and remaining components) must be cleaned with a soft brush or vacuum cleaner.
- Pay special attention while cleaning the condenser. If obstructed, it will affect the equipment's performance.
- While cleaning, be careful not to twist the tubes or disconnect cords.
- To access the internal components and clean the condenser, you need to remove the outer grille. To remove it, unscrew the screws indicated (Fig.14) and slide the grille upwards (Fig.15). This way you can clean the condenser.



NOT TO USE SHARP OBJECTS NEAR THE CONDENSER.



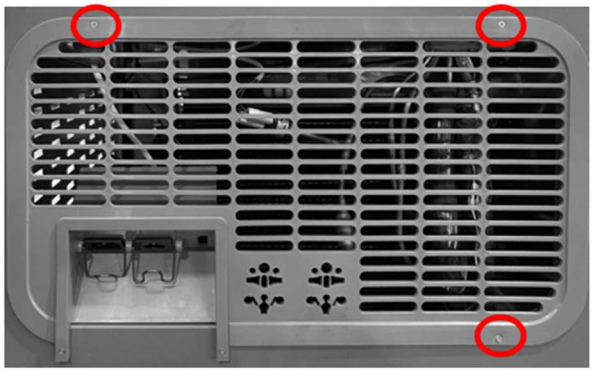


Fig. 14 – Indication of the screws to be removed.

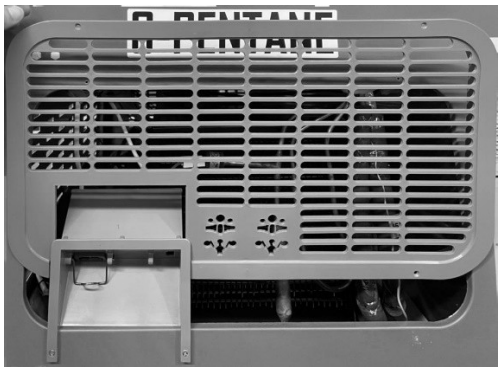
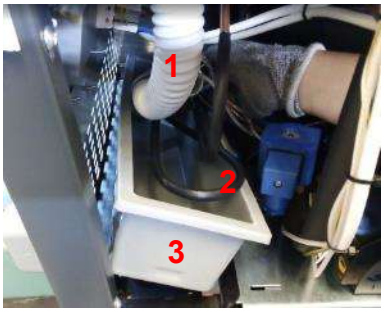


Fig. 15 – Indication of the orientation of the grille removal.

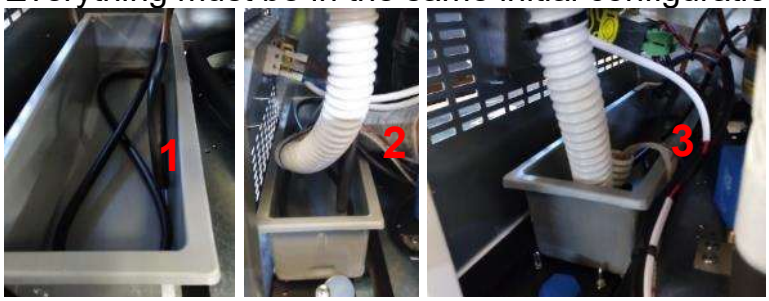
- There are two types of water reservoirs:
  - Cleaning the type, **A** defrosting water tank:



(1) -Remove the drain pipe
(2) -Remove the hot gas pipe for reservoir evaporation.
(3) -Then remove the defrost water tank and clean it.

After cleaning it, place the tank in the same position.
(1) -First, place the hot gas tube inside the reservoir.
(2) Second, insert the drain pipe.

Everything must be in the same initial configuration.



- Cleaning the type **B** defrosting water tank:



Remove the reservoir as shown in figure 2.
After cleaning it, place the tank in the same position, as seen in figure 1.

Cleaning Glass Doors:

- Cleaning with abrasive microfibers cloths and all types of coarse sponges is prohibited.
- Make sure to avoid large quantities of water from being applied on the glass surfaces to be cleaned and that the surfaces are thoroughly dry afterwards.

- You can only clean the inside of the lid with a soft cotton cloth moistened with the following solution: 90% distilled water + 10% isopropyl alcohol and clean the entire area. Cleaning products can destroy the coating.
- The outer part of the lid can be cleaned with normal cleaning products.

NOTES:

- Do not use hot water on glass doors while they are cold: the temperature difference might break them.
- Do not remove fixed parts for cleaning. If necessary, they must be cleaned by qualified personnel.
- Do not use hot water on glass doors while they are cold: the temperature difference might break them.

Component Replacement:
If any component of the equipment is damaged, it must be replaced by personnel qualified for this task.

10. Problem Resolution Guide

10.1. The equipment does not work

- Check if there is electrical current.
- Check if the plug is properly inserted in the source outlet and if the voltage and frequency are appropriate for operation.

10.2. Unsatisfactory temperature

- Check if the equipment has been connected long enough to have reached operation temperature.
- Check if the appliance is not near heat sources.
- Check if the doors are properly closed.
- Check the temperature regulation.
- Check if the products do not exceed the load limit.
- Check if the room and defrosting probe thermostats are turned on correctly.
- Check if the condenser fan is working.
- Check if the condenser is unobstructed.

10.3. Very noisy equipment

- Check if the equipment is placed on a leveled surface.
- Check if the vents are unobstructed.
- Check if the screws and nuts are perfectly fastened.
- Check if the cooling fan has any problems / does not work properly.
- Check if the compressor has any problems / does not work properly.
- Check if any of the condenser's support parts are loose / broken.

10.4. Light does not work

- Check that the light has power.
- Check that the light has been turned off by the timer (Carel controller).

10.5. Too much ice on the equipment walls

- Check that the AD equipment performs automatic defrost.
- Check that the lid seals are correct.
- Check if there is a product leaning against the inside walls.
- Check if the defrost chute resistor is damaged.
- Check if the local conditions exceed the equipment's climate classification (found on the characteristics label).

10.6. High energy consumption

- Check if the set-point is at maximum.
- Check if the condenser is blocked.
- Check if the doors are properly closed.
- Check if the local conditions exceed the equipment's climate classification (found on the characteristics label).
- Check the equipment's ventilation channels (correct distance between objects or if cooling fan motor is operating).

10.7. Condensation in the equipment

- Check if the set-point is at maximum.
- Check if the products are over the load limit.
- Check if the glass is dirty or obstructed with adhesives.
- Check if the external conditions exceed the limit of the equipment's normal operation.

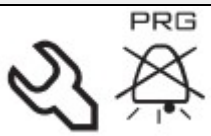
If none of the above scenarios apply, we advise that you contact an authorized dealer.

⚠ WARNING

- Never attempt to repair the equipment or its electrical components by your own endeavour. Any repairs made by an unauthorized individual are dangerous to the user and may result in the warranty's nullification.
- In case of gas leak, keep your distance from the equipment, do not try to repair or locate the leak.
- In case of gas leaks or fire, do not use water to extinguish the flames, but only dry-agent extinguishers.
- In case of accident / failure:
  - Air the place where the equipment is located.
  - Do not cause a spark near the equipment.
  - Cut the power of the equipment.
  - Check the windows for damage before cleaning.
  - Contact technical assistance.

11. Common Carel IR33+ controller errors

Table with the most common errors that may appear on the controller display.

Code on the display	Description	Flashing icon on the display	Possible solution
E0	Faulty ambient probe		Damaged probe cable. Check that the probe is well connected to the controller.
E1	Defective defrost probe		Damaged probe cable. Check that the probe is well connected to the controller.
LO	Low temperature alarm.		Refer to point 10.2.
HI	High temperature alarm.		Refer to point 10.2.
ETC	Defective clock.		Refer to point 8.2.
EE	EEPROM error parameter unit.		Call technical assistance.

For more information about the controller, you can contact the supplier technical assistance or access the Carel controller support website.

12. Prolonged Non-Operation

If you intend to **disconnect** the equipment for a long period of time, you must proceed as follows:

- Remove the products from inside the equipment.
- Disconnect the equipment by removing the power cord from the outlet.
- Open the doors and let it adapt to room temperature.
- Clean the equipment.
- Leave the doors slightly opened to prevent odors.

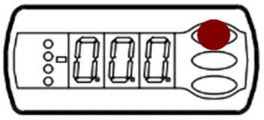
When you intend to **activate** your equipment again after not using it for more than 6 months, it is possible that the clock needs to be adjusted. To consult the instructions for adjusting the clock, see Chapter “8.2 Adjust Clock”.

13. Controllers
Danfoss AK-CC 211

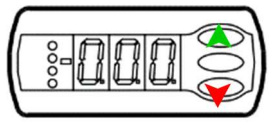


Go into parameters:

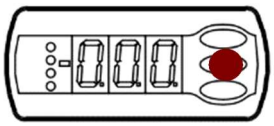
- Long press the PRG button



- Enter the password (56), using the marked buttons.

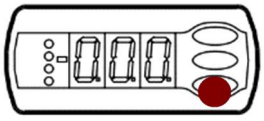


- Validate with SET button.

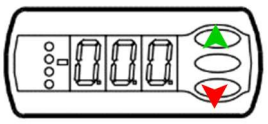


Manual defrosting

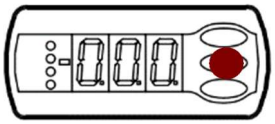
- Press the bottom button for 3 seconds.



- Enter the password (56), using the marked buttons.

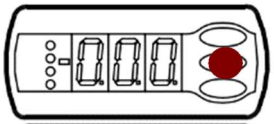


- Validate with SET button.

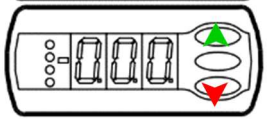


Set-Point adjustment:

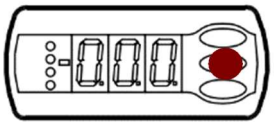
- Press the SET button.



- Change the value using the marked buttons.

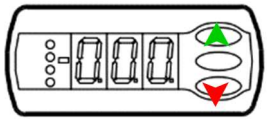


- Validate with SET button.



Modify the defrost timer:

- Navigate through the parameters and change.



Parameters to change:

Parameters to change	Meaning	Action
t01	Hour for first defrost	Validate by pressing the SET key
t11	Minute for first defrost	
d02	Temperature to stop defrosting	
d03	Defrost interval, when defrost time is off	
d06	Time with the compressor off to allow water to drain	

Dixell XWi70K/XR75CH Controller

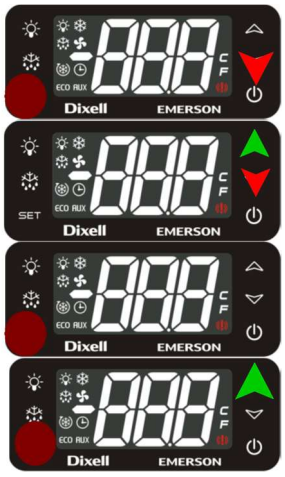


Fig. 16 - Dixell XWi70K Controller

Tecla	Função
SET DEF	To switch the equipment on and off (when onF = oFF).
	To turn the light on and off
	(when oAx = LiG (ON)).
SET + ↓	To lock and unlock the keyboard.
SET + ↑	To go into programming mode.

Go into parameters:

- Press the SET + ↓ button (3 sec.) release and press SET + ↓ again (7 sec.).
- Navigate the parameters with ↑ and ↓.
- Navigate the parameters with SET.
- To exit press SET +↑ for 15 seconds.



Set clock:

- Enter the parameters as indicated.



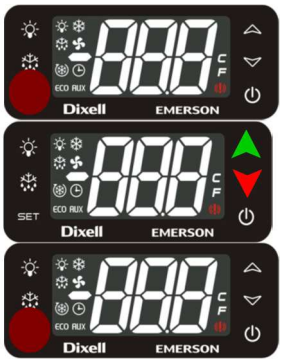
- Navigate using the arrows until you find the parameters.



Parameters to change:

Parameters to change	Meaning	Action
Hur	Hour	Validate by pressing the SET key
Min	Minute	
dAy	Day of the week	
dyM	Day of the month	
Mon	Month	

Set-Point Adjustment



- Press the SET button for 3 seconds.
- Change value with ↑ and ↓.
- Validate with SET button

Manual Defrosting



- Press the button  for 3 seconds.

Modify the defrost timer

Parameters to change:

Parameters to change	Meaning	Action
Dd1…dd6 - YES	Activates the defrost every day	Validate by pressing the SET key
Ld1 – 2:30	A defrost at 2:30	
Ld2…Ld6 - nu	Not used	

Change between Chiller and Freezer



- Press the button  for 3 seconds.

Common errors on Dixell XWi70K/XR75CH controller

Code on the display	Description	Possible solution
P1	Thermostat probe failure.	Damaged probe cable. Check that the probe is well connected to the controller.
P2	Second probe failure	Damaged probe cable. Check that the probe is well connected to the controller.
P3	Third probe failure	Damaged probe cable. Check that the probe is well connected to the controller.
P4	Fourth probe failure	Damaged probe cable. Check that the probe is well connected to the controller.
HA	Maximum temperature alarm.	Door / Lid open. Otherwise contact technical assistance.
LA	Minimum temperature alarm.	Call technical assistance.
DA	Door open above limit time.	Close the door. Otherwise contact technical assistance.
EE	Memory failure.	Contact technical assistance.
NOL	No communication with the keyboard	Check the connection to the keyboard. Otherwise contact technical assistance.

RDM Mercury 3 Controller

ENTER
DEFROST



UP
DOWN

Enter parameters

- Press the ENTER button and the DOWN button for approximately 3 seconds until the message “Ent” appears on the screen.
- Then press the ENTER button.
- You can browse the list with the UP and DOWN buttons



Exit parameters



- Browse the list until “ESC” appears then press ENTER.

Set the clock



- Enter parameters.
- Use the UP and DOWN buttons until “rtc” appears on the screen.
- Press ENTER and the screen will show “t-1”.

Parameters to change:

Parameters to change	Meaning
t-1	Hours (0-23)
t-2	Minutes (0-59)
t-3	Seconds (0-59)
t-4	Day up to 31
t-5	Month up to 12
t-6	Year up to 99

Set Point Adjustment







- Enter parameters.
- Select the “PArA” parameter from the functions menu.
- Select the UP and DOWN buttons to select the “P-01” parameter, validate with the ENTER button.
- Adjust value with the UP and DOWN buttons. To validate, press ENTER.

Manual Defrosting



- Enter parameters.
- Press the Defrost button for a few seconds to activate manual defrost

Change the defrost timer

- Enter parameters.
- Parameters to change:

Parameters to change	Meaning
P-40	Defrost mode
P-41	Defrost start
P-42	Number of defrosts per day
P-43	Non-defrost time

Change lighting parameters

- Enter parameters.
- Parameters to change:

Parameters to change	Meaning
P-61	Sunday → Lights on (hh:mm)
P-62	Sunday → Lights off (hh:mm)
P-63	Monday → Lights on (hh:mm)
P-64	Monday → Lights off (hh:mm)
P-65	Tuesday → Lights on (hh:mm)
P-66	Tuesday → Lights off (hh:mm)
P-67	Wednesday → Lights on (hh:mm)
P-68	Wednesday → Lights off (hh:mm)
P-69	Thursday → Lights on (hh:mm)
P-70	Thursday → Lights off (hh:mm)
P-71	Friday → Lights on (hh:mm)
P-72	Friday → Lights off (hh:mm)
P-73	Saturday → Lights on (hh:mm)
P-74	Saturday → Lights off (hh:mm)

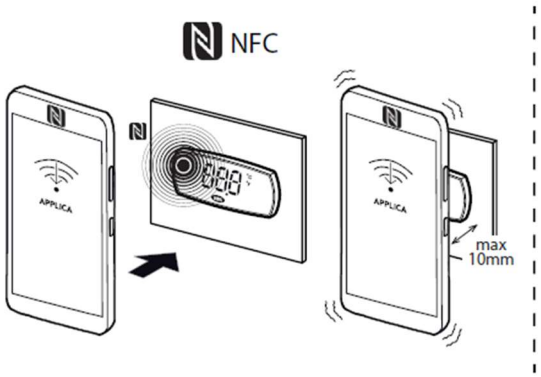
Controller CAREL IJ

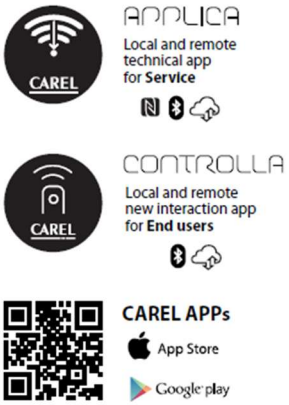


Controller Carel IJ

Applica App

The Carel apps can be used to confi gure the controller from a mobile device (smartphone, tablet), via NFC (Near Field Communication).





Modify Parameters

Procedure (modify parameters):

• download the CAREL “Applica” or “Controlla“ app from Apple Store or Google Play;

• (on the mobile device) enable NFC

• open Applica (or Controlla);

• select NFC

• move the mobile device near to the user terminal, maximum distance 10 mm (for NFC only), so as to recognise the configuration;

• select the access profile and enter the required password;

For final user, the password is: 0

• set the parameters as needed;

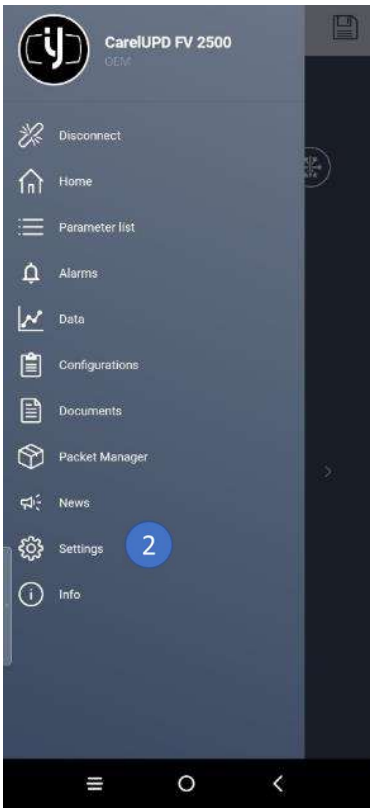
• move the mobile device near to the user terminal again to upload the configuration parameters (for NFC only).

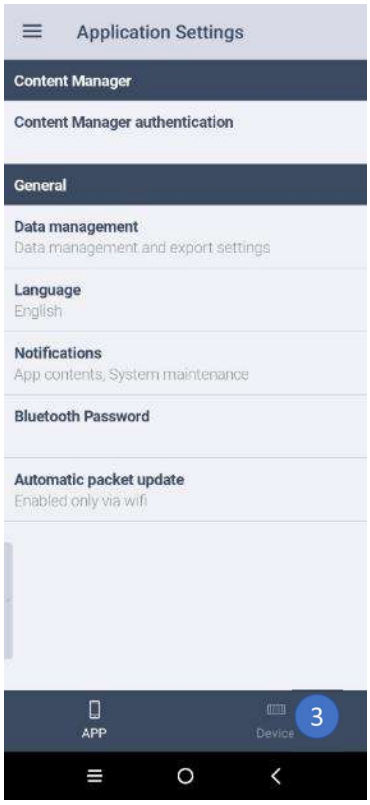
Notice:

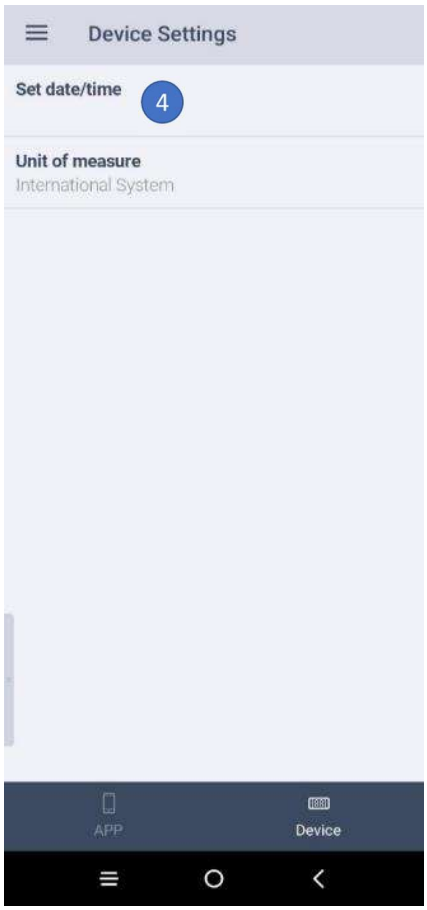
• make sure NFC has been enabled. Some smartphones may experience problems if location is not enabled.

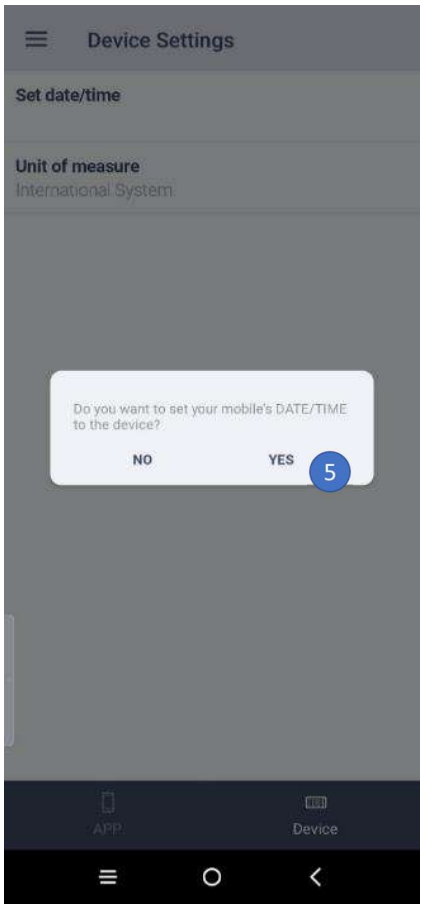
Set clock


Home
1
7 °C
4
Setpoint
-20.0
Temperature °C
SERVICE AREA

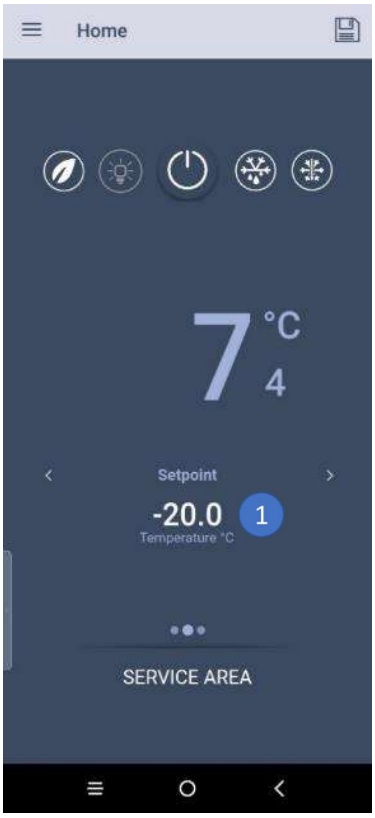

CarelUPD FV 2500
OEM
Disconnect
Home
Parameter list
Alarms
Data
Configurations
Documents
Packet Manager
News
Settings
2
Info


Application Settings
Content Manager
Content Manager authentication
General
Data management
Data management and export settings
Language
English
Notifications
App contents, System maintenance
Bluetooth Password
Automatic packet update
Enabled only via wifi
APP
Device
3


Device Settings
Set date/time
4
Unit of measure
International System
APP
Device


Device Settings
Set date/time
Unit of measure
International System
Do you want to set your mobile's DATE/TIME to the device?
NO
YES
5
APP
Device

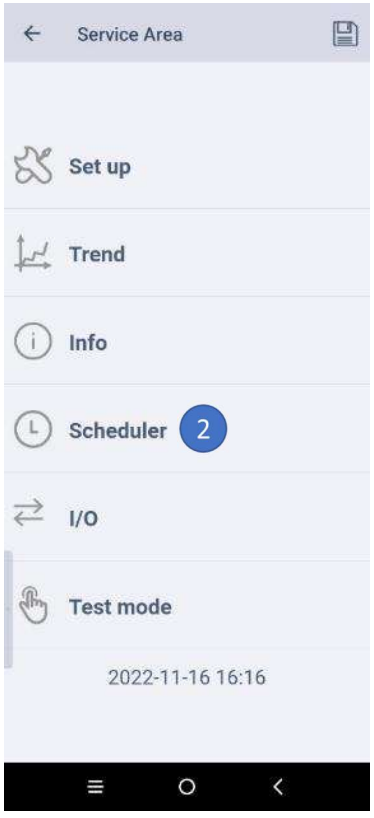
Set Point Adjustment



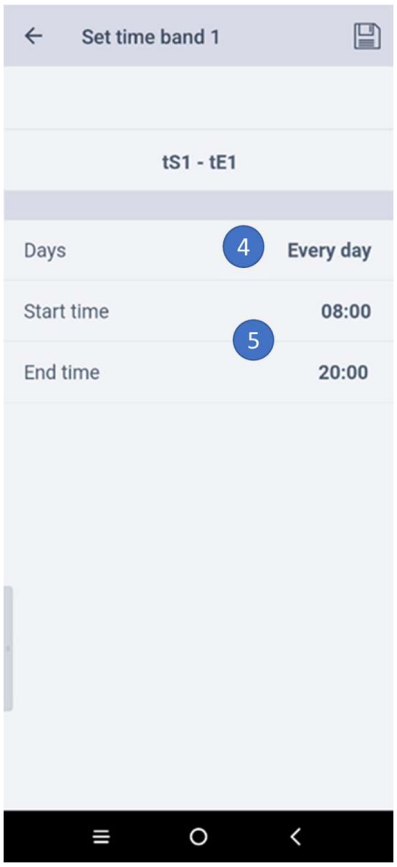


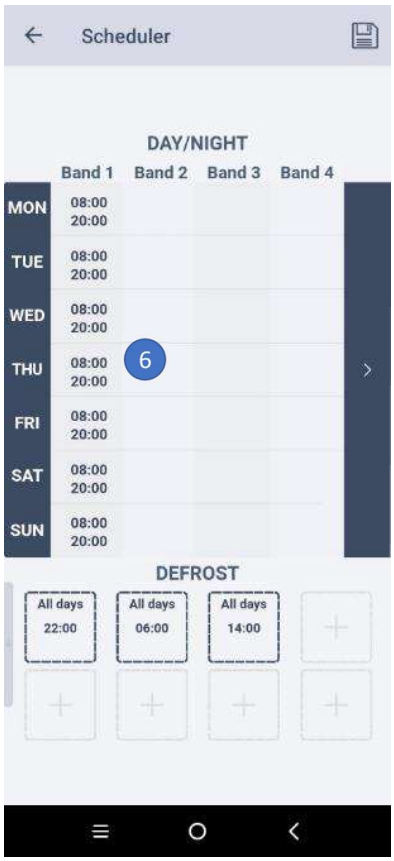
Change lighting parameters





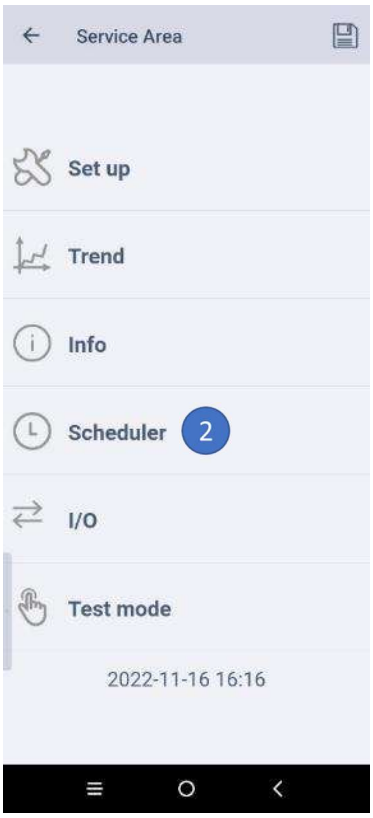




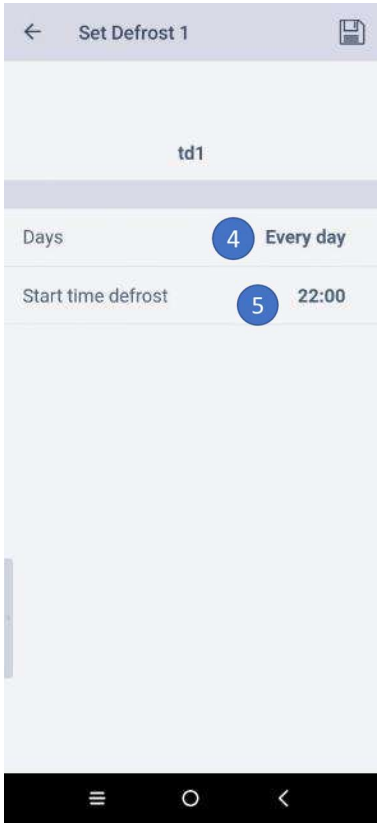


Change defrost parameters







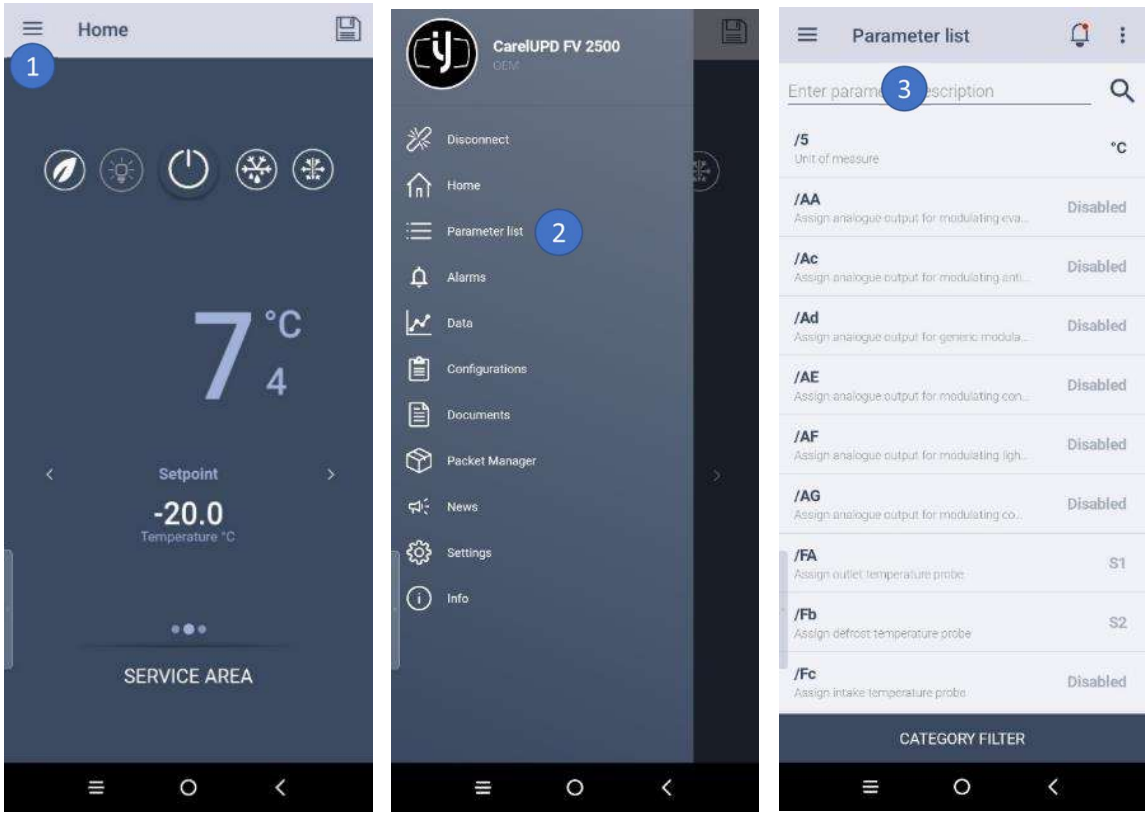


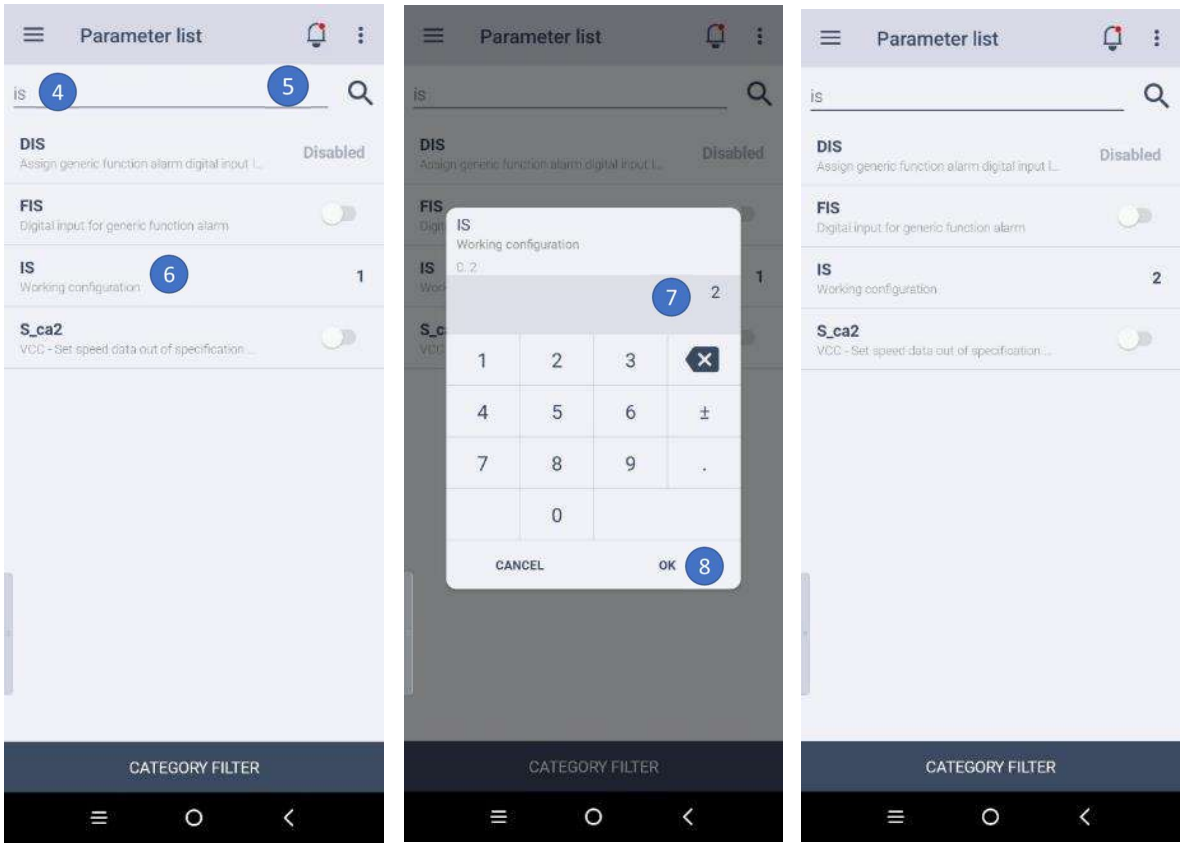
Manual Defrost activation



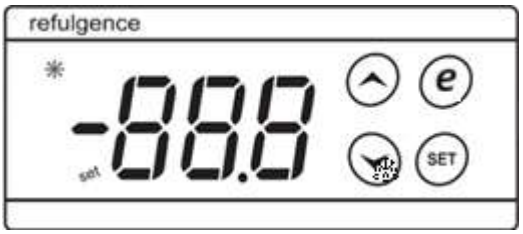


Change between Chiller and Freezer





Elitech ECS-180 EZ



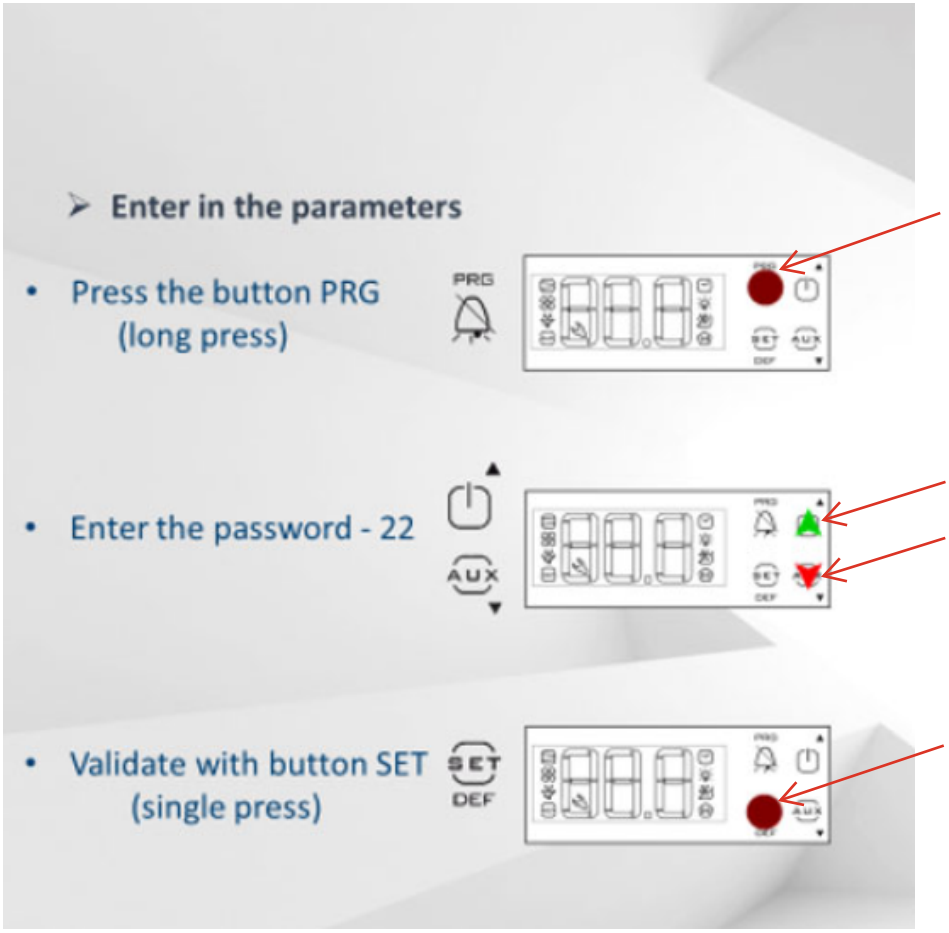
Name	Function	Action	Effect
SET	Change temperature	Press and release	"**SET**" light comes on Temperature value can be changed
⌃	Increases the value shown	Press and release	Increases operating temperature
⌄	Decrease the value shown	Press and release	Lowers the operating temperature

Island Cabinet Light Timer Set-up

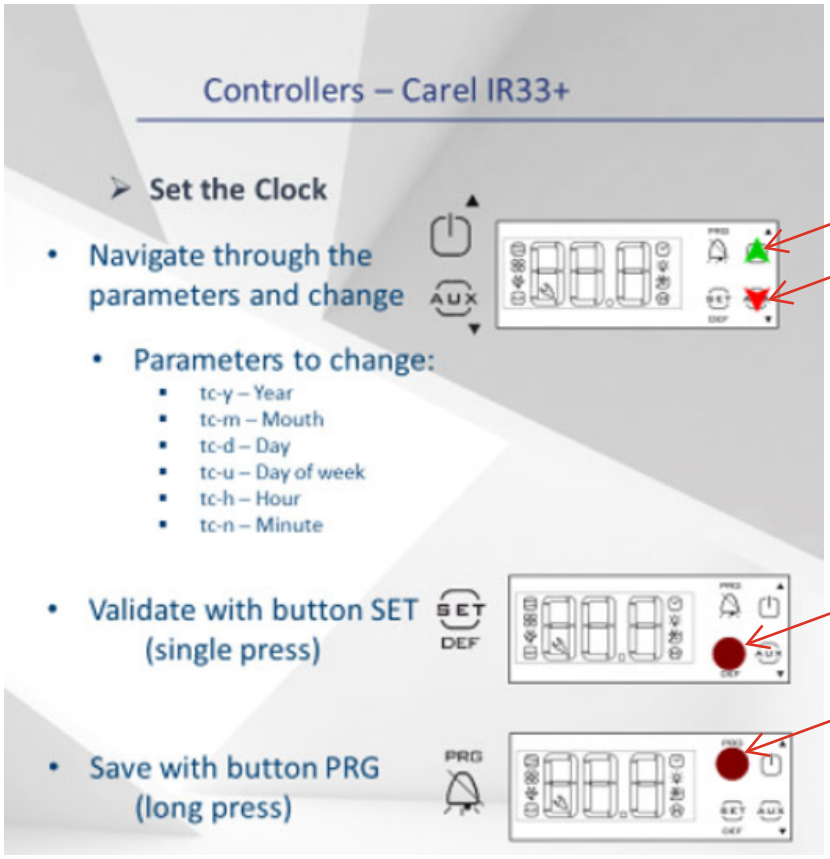


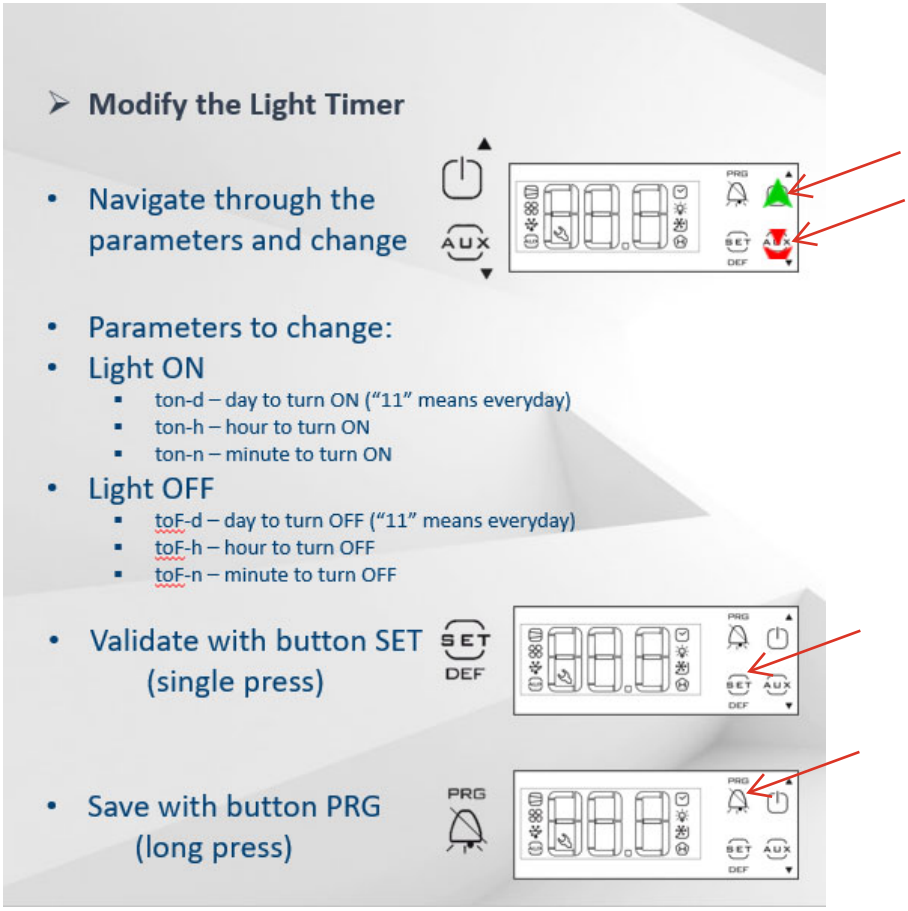


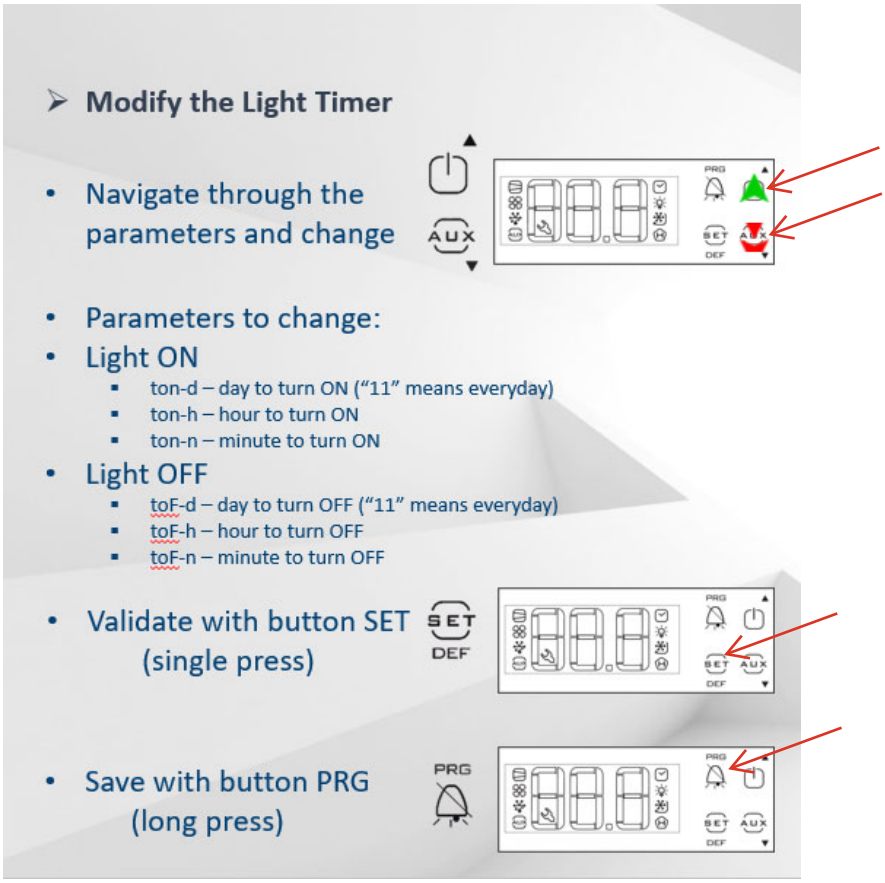
Enter Clock Mode



Set Clock Parameter






Modify the Light Timer
Navigate through the parameters and change
AUX
Parameters to change:
Light ON
ton-d – day to turn ON ("11" means everyday)
ton-h – hour to turn ON
ton-n – minute to turn ON
Light OFF
toF-d – day to turn OFF ("11" means everyday)
toF-h – hour to turn OFF
toF-n – minute to turn OFF
Validate with button SET (single press)
SET
DEF
Save with button PRG (long press)
PRG

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