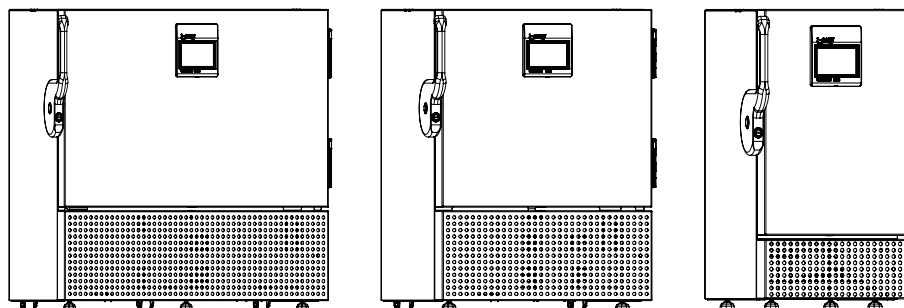


## SERVICE MANUAL - EN

MODEL - ULTF-7i ULTF-51i ULTF-91i



BIOMEDICAL SOLUTIONS  
**FREEZERS**



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## WARNING

### **WARNING:**

Keep ventilation openings in the appliance's cabinet or in the built-in structure clear of obstruction.

### **WARNING:**

Do not use other mechanical devices or other means to accelerate the defrosting process than those recommended by the manufacturer.

### **WARNING:**

Do not damage the refrigerant system.

### **WARNING:**

Do not use electrical appliances inside the refrigerated storage compartment, unless they are of a type recommended by the manufacturer.

### **WARNING:**

When positioning the appliance, ensure the power cord is not trapped or damaged.

### **WARNING:**

Do not locate multiple portable socket-outlets or portable power supplies at the rear of the appliance.

### **WARNING:**

The cable must be replaced with an approved cable.



**WARNING:** Danger: risk of fire or explosion flammable refrigerant are used. To be repaired only by trained personnel. Danger of electric shock.



**WARNING:** Turn of power before access remote alarm connection.



**CAUTION:** Possibility of electric shock.



**WARNING:** Crushing of hands and risk of hand injuries



**CAUTION:** Cold surface avoid contact. Temperature may cause frostbite or injury. Wear protective gloves.

**WARNING:**

The appliance must be connected to power minimum 12 hours before using it for storage of medicine.

- Always keep the keys in a separate place and out of reach of children.
- Children should be supervised to ensure that they do not play with the appliance.
- This appliance is not intended for use by persons (including children) with reduced physical, sensory or mental capabilities, or lack of experience and knowledge, unless they have been given supervision or instruction concerning use of the appliance by a person responsible for their safety.
- Before servicing or cleaning the appliance, unplug the appliance from the mains or disconnect the electrical power supply.
- 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.
- Frost formation on the interior evaporator wall and upper parts is a natural phenomenon. Therefore, the appliance should be defrosted during normal cleaning or maintenance.
- Please note that changes to the appliance construction will cancel all warranty and product liability.
- Do not store explosives, such as aerosol cans with flammable propellants in the unit.
- This device is intended to be used exclusively for medical products.
- If medicine is spilled in the appliance or the defrost water canal is has to be cleaned immediately to avoid the medicine to evaporate to the surroundings.
- If the instructions is lost please contact your supplier of the appliance to have a new instruction for use.
- If service needed to this device, please be aware of only using service personnel with education in handling medical devices.
- Turn of power when replacing battery.

**Flammable Material Storage Freezer**

Sparkfree interior to reduce the risk of internal explosion.

Interior temperature range: +1°C to 15°C

The interior comprise this safety marking:

CE  II 3G nA IIB T6

**NOTE:**

- Combustible materials may be stored inside cabinet. but the cabinet is not approved for potential explosive areas.
- Combustible materials shall be stored in approved containers.
- Danger of sparks due to electrostatic discharge. Do not use a dry cloth to clean plastic parts. Clean plastic parts with a damp cloth only!

# PRODUCT DESCRIPTION

## Before use

This user manual is intended for the following product models:

Units
ULTF-7i ULTF-51i ULTF-91i

We recommend that you read this user manual before using the unit for the first time. Vestfrost Solutions does not guarantee safe operation if the unit is used for anything other than its intended use. Contents of the user manual can be subject to change without notice. This manual should be considered an integral part of the unit and should be stored close to the unit and be easy to access. For current versions of the manual, please visit <https://www.vestfrostsolutions.com/>

Before operating your new appliance, please read the following instructions carefully:

1. Check to ensure the appliance has not been damaged during transport. Transport damage should be reported to the transporter delivery.
2. The foil on the shelves must be removed before cleaning and using the unit.
3. Clean the inside of the cabinet using warm water with a mild detergent. Use a soft cloth and rinse with clean water and dry thoroughly.
4. Allow the freezer to stay at an upright position for at least one hour before switched on.
5. Allow the freezer to operate at the desired temperature for a minimum of 12 hours before loading.

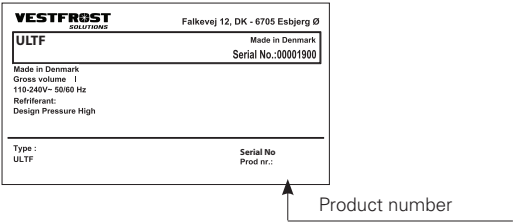
A-weighted emission sound pressure level is below 70 dB(A)

# Electrical connection

Wiring and connections in power supply systems must be all applicable (local and national) electrical codes. Consult these codes lengths and sizes prior to cabinet installation.  
This device complies with relevant EU directives including Low Voltage Directive 2014/35/EU and Electromagnetic Compatibility Directive 2014/30/EU  
The socket should be freely accessible.  
Connect the appliance only to 100-240V 50-60Hz alternating current via a correctly installed earthed socket.

The socket must be fused with a 10-13 A fuse.

If the appliance is to be operated in a non-European country, check on the rating plate whether the indicated voltage and current type correspond to the values of your mains supply.  
Information regarding voltage, current or power are given on the rating plate  
The power cord may be replaced by a technician only.  
The rating plate provides various technical information as well as type and serial number.






# Intended use

Vestfrost biomedical freezers are designed to provide reliable temperature stability and precision and ensure an ideal cold temperature storage for sensitive items is achieved. The products are designed for the following operating ranges:

Models	ULTF -7i	ULTF -51i	ULTF -91i
Temperature range	-60°C to -86°C	-60°C to -86°C	-60°C to -86°C
Factory Set Point	-82°C	-82°C	-82°C
Ambient Temperature	+30°C	+30°C	+30°C
Indoor use	Yes	Yes	Yes

 **WARNING:** This unit is not a “rapid-freeze” device. Freezing large quantities of liquid, or high-water content items, will temporarily increase the chamber temperature and will cause the compressors to operate for a prolonged time period. Avoid opening the door for extended time periods since chamber temperature air will escape rapidly. Also, keep the inner doors closed as much as possible. When room air, which is higher in humidity, replaces chamber air, frost may develop in the chamber more rapidly.

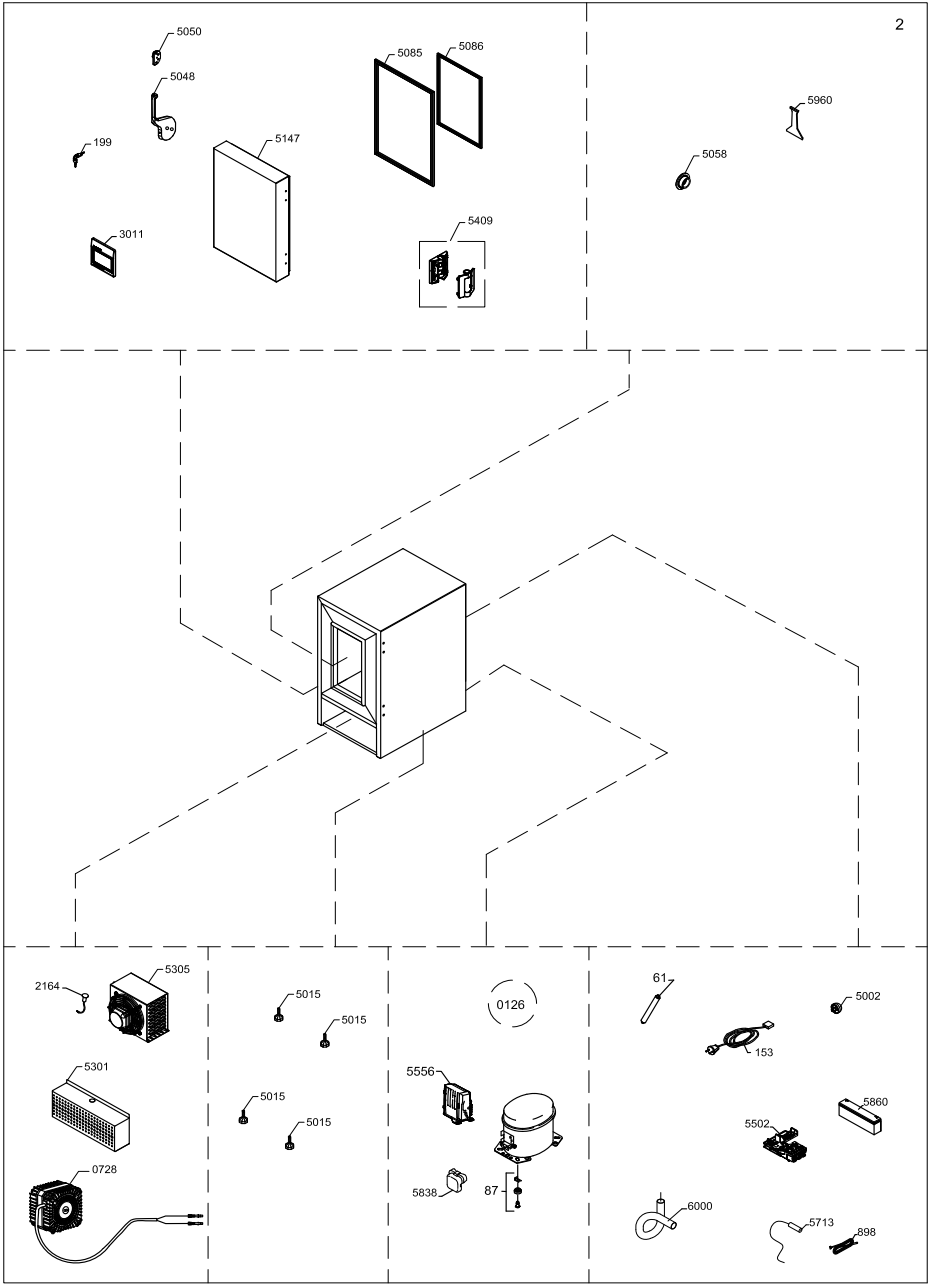
	ULTF -7i	ULTF -51i	ULTF -91i
Room climate class	4	4	4
Max room temperature °C	30	30	30
Relative humidity %	55%	55%	55%
Altitude	2000m	2000m	2000m
Mains supply	100-240V	100-240V	100-240V
Frequency range	50/60 Hz	50/60 Hz	50/60 Hz
Power	325W	400W	400W
BBU for controller	12V 9Ah	12V 9Ah	12V 9Ah
Alarm signal rating	60V 3A	60V 3A	60V 3A
Pollution degree	2	2	2

## SPARE PART LIST

### ULTF-7i

0061	6530123	Filter drier,
0087	0-6038175	Base plate fittings, complete
0126	8-036510026	Compressor - NLV8.0CN, Complete,
0153	7535234	Mains lead/Power cord UK plug with angled C13 connector
0153	7535254	Power cord EU H05VV-F 3G1 C13 jack 90° black 2500mm EU-plug
0153	7535400	Mains lead
0199	1510251	Key set 2 pcs EUROLOCKS
0728	7030348	Fan
0898	7020465	Thermostat phail
2164	7090453	Door switch
3011	8472201	Display
3104	7090466	Transformer
5002	6000959	Foot with pin/distance pieces
5015	1510216	Ajustable foot
5048	A9018471732	Handle
5050	8471314	Lock bearing
5058	3011127-03	Rubber plug for porthole
5085	3021334-03	Door gasket
5086	3021324-03	Cabinet gasket
5147	8471918	Door
5301	2043719-01	Front panel bottom
5305	6010526	Condenser unit
5409	1050178-01	Hinge frontdoor
5502	A903056	Dry contact for Alarm complete
5556	6520146	Inverter 105N4762/63
5838	6520127	Cover 103N2009 VDE
5860	7060350	Battery
5960	3010173-01	Ice scraper
6000	3020214	Hose for defrost water / Gégecső műanyag id16 PP
XXXX	1006698	Wire diagram

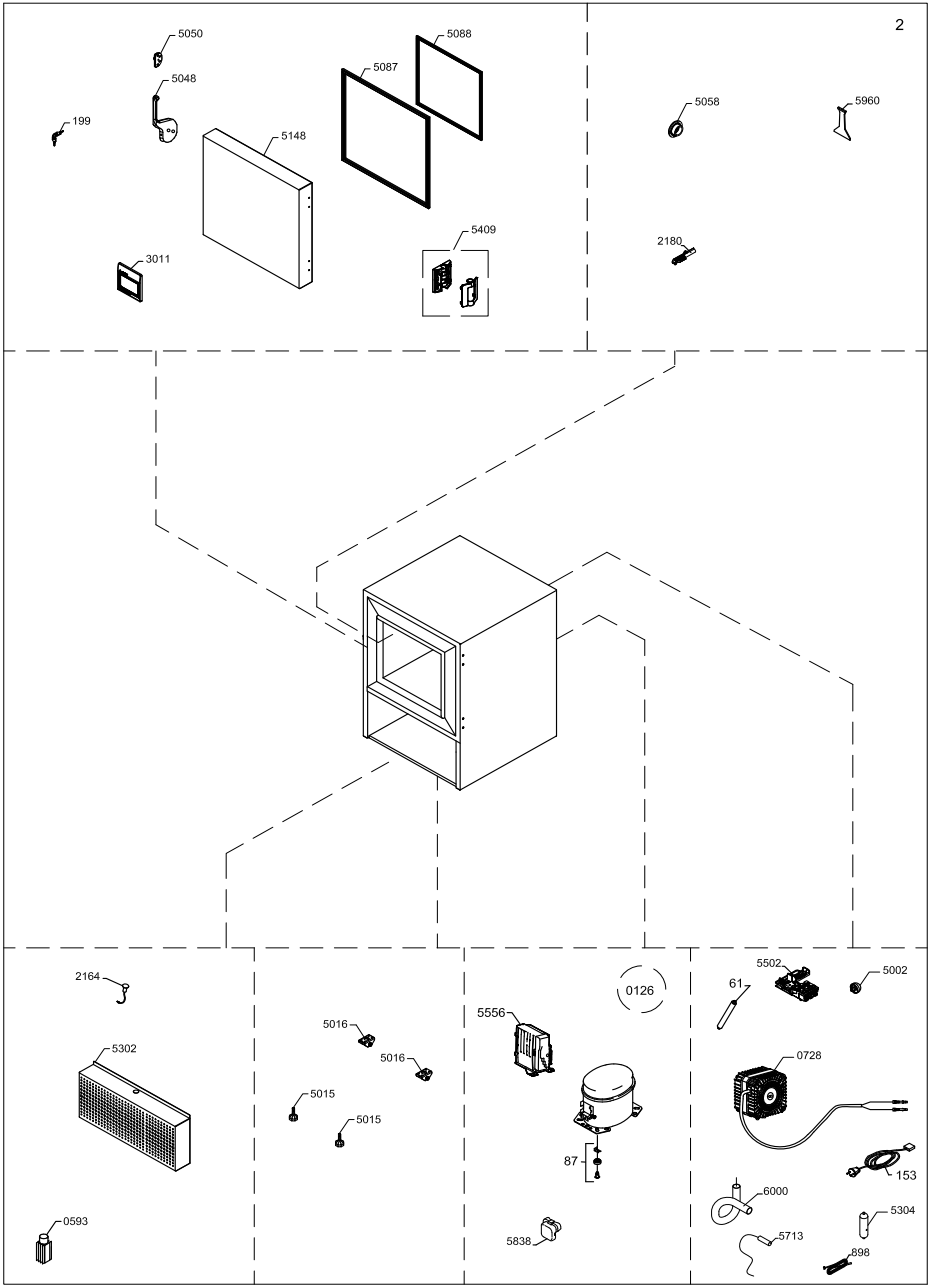
Subject to changes without prior notice.



## ULTF-51i

0061	6530123	Filter drier,
0087	0-6038175	Base plate fittings, complete
0126	8-036510176	Compressor -NLV12.6CN
0153	7535234	Mains lead/Power cord UK plug with angled C13 connector
0153	7535254	Power cord EU H05VV-F 3G1 C13 jack 90° black 2500mm EU-plug
0153	7535400	Mains lead
0199	1510251	Key set 2 pcs EUROLOCKS
0593	4838117	Vacuum valve
0728	7030348	Fan
0898	7020465	Thermostat phial
2164	7020404	Door switch, for external use
2164	7090453	Door switch
2180	0-5239382-19	Fittings for phial
3011	8472201	Display
3104	7090466	Transformer
5002	6000959	Foot with pin/distance pieces
5015	1510216	Ajustable foot
5016	1510152	Wheel
5048	A9018471732	Handle
5050	8471314	Lock bearing
5058	3011127-03	Rubber plug for porthole
5087	3021335-03	Door gasket
5088	3021325-03	Cabinet gasket
5148	8471919	Door
5302	2043720-01	Front panel bottom
5409	1050178-01	Hinge frontdoor
5502	A903056	Dry contact for Alarm complete
5556	6520137	Inverter 100-240V 50-60Hz
5838	6520127	Cover 103N2009 VDE
5860	7060350	Battery
5960	3010173-01	Ice scraper
6000	3020214	Hose for defrost water / Gégecső műanyag id16 PP
XXXX	1006699	Wire diagram

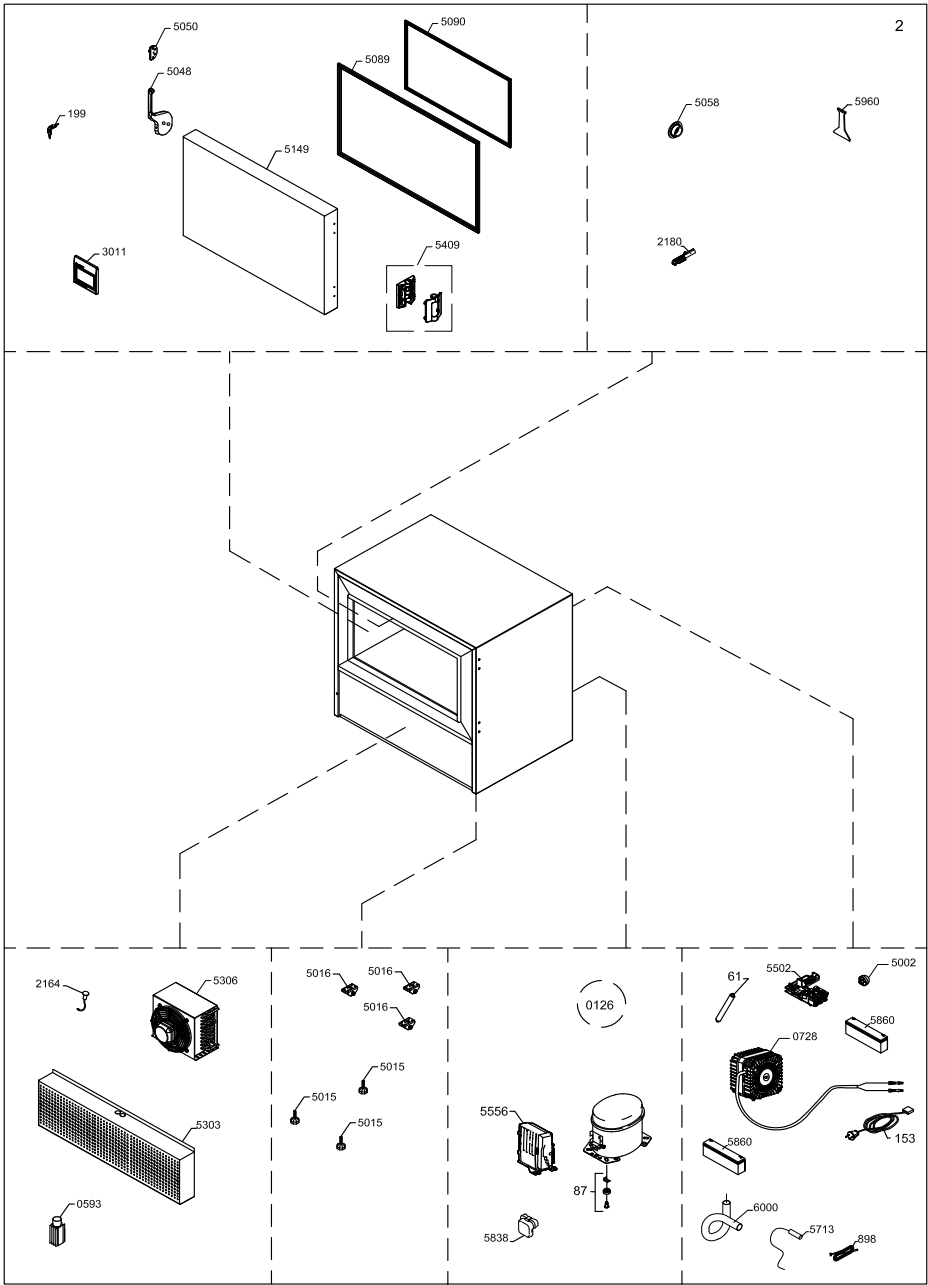
Subject to changes without prior notice.



## ULTF-91i

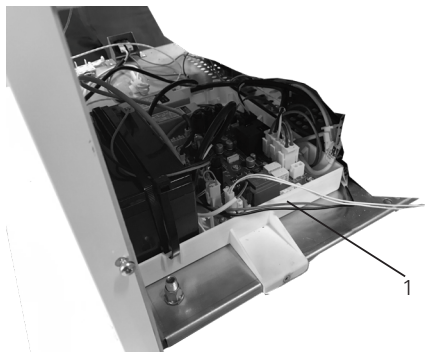
0061	6530123	Filter drier,
0087	0-6038175	Base plate fittings, complete
0126	8-036510176	Compressor -NLV12.6CN
0153	7535234	Mains lead/Power cord UK plug with angled C13 connector
0153	7535254	Power cord EU H05VV-F 3G1 C13 jack 90° black 2500mm EU-plug
0153	7535400	Mains lead
0199	1510251	Key set 2 pcs EUROLOCKS
0593	4838117	Vacuum valve
0728	7030348	Fan
0898	7020465	Thermostat phail
2164	7090533	Door switch
2180	0-5239382-19	Fittings for phial
3011	8472201	Display
3104	7090466	Transformer
5002	6000959	Foot with pin/distance pieces
5015	1510216	Ajustable foot
5016	1510152	Wheel
5048	A9018471732	Handle
5050	8471314	Lock bearing
5058	3011127-03	Rubber plug for porthole
5089	3021336-03	Door gasket
5090	3021326-03	Cabinet gasket
5149	8471920	Door
5303	2043721-01	Front panel bottom
5306	6010527	Condenser unit
5409	1050178-01	Hinge frontdoor
5502	A903056	Dry contact for Alarm complete
5556	6520137	Inverter 100-240V 50-60Hz
5838	6520127	Cover 103N2009 VDE
5860	7060350	Battery
5960	3010173-01	Ice scraper
6000	3020214	Hose for defrost water / Gégecső műanyag id16 PP
XXXX	1006700	Wire diagram

Subject to changes without prior notice.

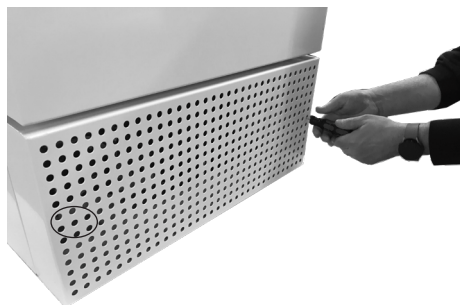


## GET ACCESTO THE ELECTRICAL BOX

### ULTF -7i



1. Electrical box



1. Use a screwdriver to loosen the 2 screws

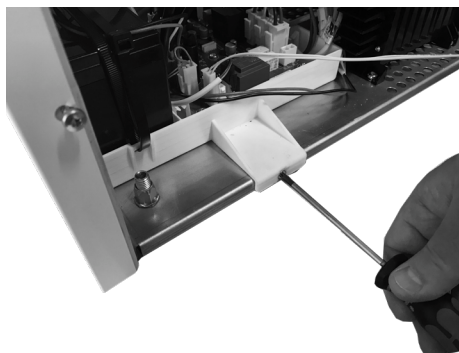


2. Open the door before you remove the front plate to access engine compartment





3. Electrical box can easily be accessed from front.

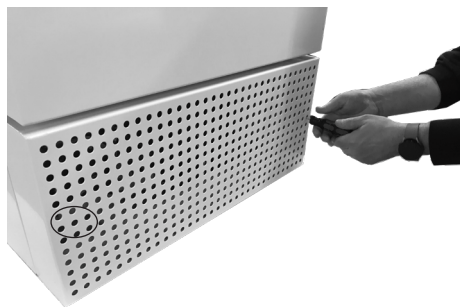


4. Use a screwdriver to loosen the electrical box

## ULTF -51i/91i



1. Inverter
2. Electrical box



1. Use a screwdriver to loosen the 2 screws



2. Open the door before you remove the front plate to access engine compartment

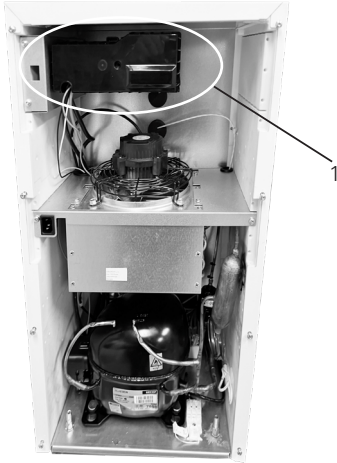


3. Electrical box can easily be accessed from front.

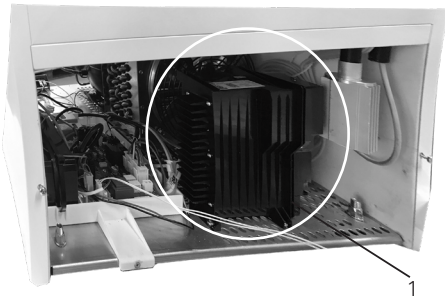


4. Use a screwdriver to loosen the electrical box

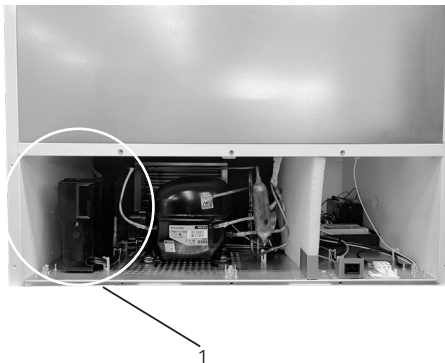
## Get access to the inverter



1. To take out the Invert loosen the screws
2. Inverter can easily be accessed from back on ULTF -7i

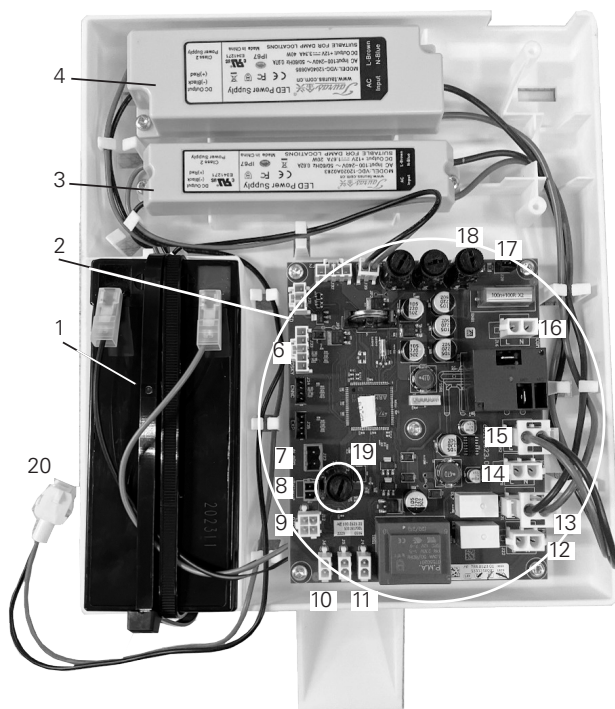


1. To take out the Invert loosen the screws
2. Inverter can easily be accessed from front on ULTF -51i.



1. To take out the Invert loosen the screws
2. Inverter can easily be accessed from back on ULTF -91i.

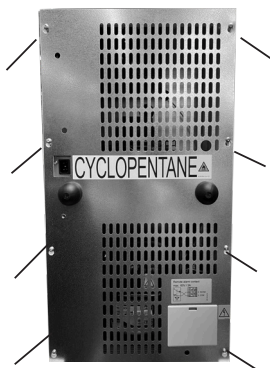
## ELECTRICAL BOX



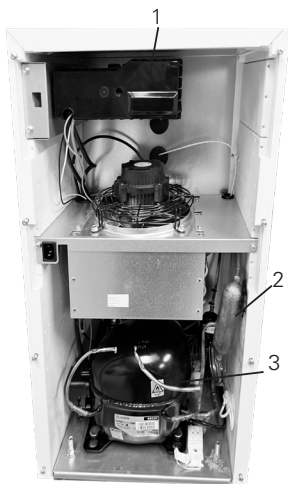
- |                                  |                             |
|----------------------------------|-----------------------------|
| 1. Battery                       | 11. Condensor sensor        |
| 2. Icare controller              | 12. Fan output              |
| 3. Power supply for controller   | 13. Frame heater output     |
| 4. Power supply for frame heater | 14. Mains input             |
| 5. 12V to controller             | 15. Power supply output     |
| 6. Display                       | 16. Compressor output       |
| 7. Alarm                         | 17. Compressor speed output |
| 8. Battery                       | 18. Controller fuse 1A      |
| 9. PT1000 sensor                 | 19. Battery fuse 500mA      |
| 10. Door sensor                  | 20. Connector frame heater  |

## GET ACCESTO THE COMPRESSOR

### ULTF -7i



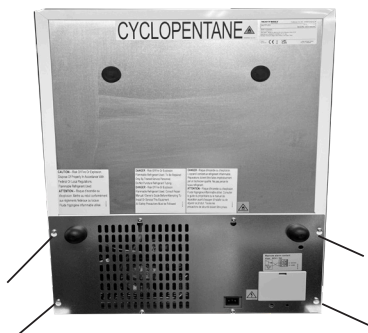
1. Use a screwdriver to loosen the screws on the back cover



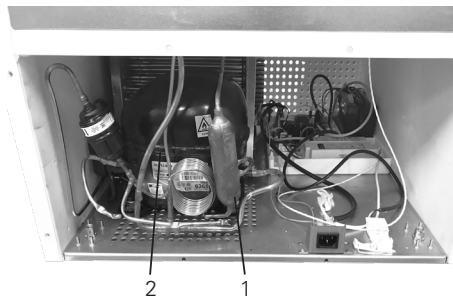
2. Access to compressor and inverter (7i)

1. Inverter
2. Dry filter
3. compressor

## ULTF -51i



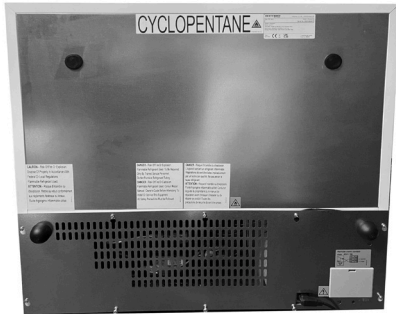
1. Use a screwdriver to loosen the screws on the back cover



2. Access to compressor

1. Dry file
2. Compressor

## ULTF -91i



1. Use a screwdriver to loosen the screws on the back cover



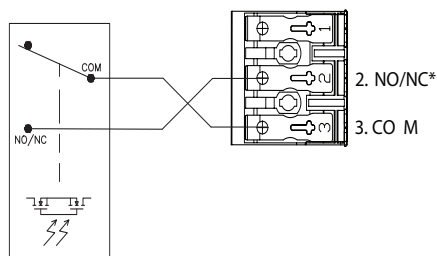
2. Access to compressor

1. Dry file
2. Compressor



## Remote alarm function

Fig. Internal controller with built-in alarm relay



\*) Configured by settings menu

Your device is equipped with a remote alarm connection to send alarm signals to a building management system, a monitoring unit, visual or acoustical warning device etc.

The alarm output is managed by the built in controller of the unit.

Alarm criteria may be too low temperature, too high temperature, power failure, open door or similar.

The alarm output is an electrical relay which acts like a ON/OFF switch.

A OptoMOS relay with maximum switch rating of 60V 3A is maintained by the build-in controller unit. The relay can be set to normally open or normally closed in the settings menu.

The relay terminals are explained this way:

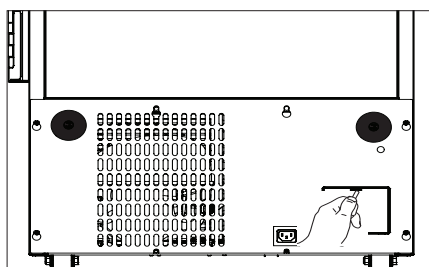
COM: COMMON terminal

NO/NC: NORMALLY OPEN/ NORMALLY CLOSED terminal. Normal position is set in the settings menu

An alarm interface cable of maximum 30 meters can be attached without the use of tools to the 3-pole alarm clamp connector.

Wire thickness must be within 0.5mm<sup>2</sup> to 2.5mm<sup>2</sup> and fitted with core crimp terminals.

## Access to alarm connection



Turn off the power before access to remote alarm connection.

If there is a need to access alarm connection you may use a pointed screw to click the lid open.

When you need to close it again, be aware of that it must be clicked again. Make sure it is locked.

MAINTENANCE

		Frequency			
TASK	Description	Quarterly	Annually	3 Years	As needed
The compressor compartment and the condenser must be kept free of dust and dirt.	1. Unplug unit from power supply 2. Remove the lower panel. 3. Use a vacuum cleaner to remove dust and dirt.	X			
The door gasket(s) around the door must be cleaned regularly.	1. Wipe the seal with a soft cloth and clean water 2. Check that it continues to provide a tight seal.				X
Clean vacuum release	1. Excessive frost accumulation in the vacuum release could restrict air flow. 2. Brush away any loose frost using a stiff nylon brush. 3. If frost has built up in the pipe of the vacuum release, thrust with a stick to remove the frost inside.				X
Defrost and clean the chamber to prevent ice building.	<b>Quick defrosting:</b> Small amounts of loose frost can be removed using a plastic scraper.				X
	<b>Complete defrost:</b> 1. Remove all products and place it in another ULT cabinet. 2. Disconnect the power supply. 3. Open the inner and outer doors. 4. Wait until the ice has thawed. 5. Dispose of the ice and wipe out water. 6. Dry the interior of the device. 7. Close the doors and start the freezer				X
Replace the battery backup for the controller every 3 years.	Only a certified technician must replace the battery.			X	
Clean the interior and exterior of the device.	1. Use warm water (max. 65°C) with a little mild, perfume-free detergent with a soft cloth. 2. Rinse with clean water and dry thoroughly. Note: It is important to prevent water from entering the control panel.				X

## GENERAL INFORMATION

### Warranty, spare parts and service

#### Warranty disclaimer

Faults and damage caused directly or indirectly by incorrect operation, misuse, insufficient maintenance, incorrect building, installation or mains connection. Fire, accident, lightening, voltage variation or other electrical interference, including defective fuses or faults in mains installations. Repairs performed by others than approved service centers and any other faults and damage that the manufacturer can substantiate are caused by reasons other than manufacturing or material faults are not covered by the warranty.

Please note that changes to the construction of the appliance or changes to the component equipment of the appliance will invalidate warranty and product liability, and the appliance cannot be used lawfully. The approval stated on rating plate will also be invalidated.

Transport damage discovered by the buyer is primarily a matter to be settled between the buyer and the distributor, i.e. the distributor must ensure that such complaints are resolved to the buyer's satisfaction.

Before calling for technical assistance, please check whether you are able to rectify the fault yourself. If your request for assistance is unwarranted, e.g. if the appliance has failed as a result of a blown fuse or incorrect operation, you will be charged the costs incurred by your call for technical assistance.

#### Spare parts

When ordering spare parts, please state the type, serial and product numbers of your appliance. This information is given on the rating plate. The rating plate contains various technical information, including product- type and serial numbers.

<b>VESTFROST</b> SOLUTIONS		Falkervej 12, DK - 6705 Esbjerg Ø
<b>ULTF</b>	Made in Denmark	
Made in Denmark		Serial No.: 30001900
Gross volume: l		
110-240V~ 50/60 Hz		
Refrigerant:		
Design Pressure High		
Type: ULTF	Serial No. Prod Nr.:	

Product number

## DISPOSAL

### Information for Users on Collection and Disposal of Old Equipment and used Batteries



These symbols on the products, packaging, and/or accompanying documents mean that used electrical and electronic products and batteries should not be mixed with general household waste. For proper treatment, recovery and recycling of old products and used batteries, please take them to applicable collection points, in accordance with your national legislation and the Directives 2012/19/EU and 2006/66/EC.

By disposing of these products and batteries correctly, you will help to save valuable resources and prevent any potential negative effects on human health and the environment which could otherwise arise from inappropriate waste handling.

Dismount battery before disposal.

For more information about collection and recycling of old products and batteries, please contact your local municipality, your waste disposal service or the point of sale where you purchased the items.

Penalties may be applicable for incorrect disposal of this waste, in accordance with national legislation.



#### For business users in the European Union.

If you wish to discard electrical and electronic equipment, please contact your dealer or supplier for further information.

#### Information on Disposal in other Countries outside the European Union

These symbols are only valid in the European Union. If you wish to discard this product, please contact your local authorities or dealer and ask for the correct method of disposal.



#### Note for the battery symbol:

This symbol might be used in combination with a chemical symbol. In this case it complies with the requirement set by the Directive for the chemical involved.

Dismount battery before disposal

### NOTE:

It is very important to dismount the door before disposal. This to prevent any accident by children playing with the cabinet and door.







Revision date: 12-11-2024  
Drawing no.: 8195165 rev 01