



**LAB470SLF**

Congratulations on your new Minus40 Freezer!

This premium product incorporates the latest innovations in refrigeration technology with a highly durable design. Properly maintained, the unit(s) will provide many years of reliable service.

*Please read the following instructions carefully as it contains important information concerning the safety, installation, operation and maintenance of your Refrigerator.*

## SAFETY INSTRUCTION

- Always disconnect the unit from the mains supply before attempting to do maintenance or before removing the bottom grille.
- In case of unit failure, disconnect it from the power supply and contact your service technician or supplier for advice.
- If the supply cord is damaged it must be replaced by the manufacturer or its service agent or a similarly qualified person in order to avoid a hazard.

## INSTALLATION GUIDE

Follow these easy steps to Install your new Minus40 unit.

- Remove all wrapping and packing material.
- Be careful not to damage any of the delicate wiring or pipe-work in the compressor compartment.
- Position the unit out of direct sunlight and away from any other sources of heat.
- The maximum ambient temperature in which the unit will function is 30°C.
- The unit may not be built into a furnishing fixture, or have its back to the wall.
- The unit “breathes” through the grill, and if blocked, the unit will not operate properly, damaging the compressor.
- Ensure the unit is perfectly level for the door(s) to function properly.
- This freezer comes with a built-in Voltage Protector.

**Please note: The Voltage Protector has a 3 to 5-minute time delay once switched on**

### BUILT-IN VOLTAGE PROTECTOR

This premium product incorporates a built-in voltage protector that regulates the power supply and ensures a stable voltage supply to the refrigerator to maximise equipment efficiency and reduce damage and downtime caused by a power surge.

## POWER SUPPLY

DO NOT CONNECT THE UNIT TO THE MAINS SUPPLY UNTIL YOU HAVE READ THE FOLLOWING INFORMATION.

- A qualified person by all local standards and regulations should carry out any electrical alterations to the unit.
- The power supply should be in accordance with the electrical specifications listed on the rating plate. The rating plate can be located inside the unit on the top right-hand side.
- Always ensure that the electrical connection is suitably earthed.
- An inadequate electrical installation can result in voltage reduction at the compressor or cause damage to the motor.
- If in doubt about any of the electrical matters mentioned above, a suitably qualified electrician should be consulted.
- When all of the electrical requirements have been satisfied, the unit may be plugged into the mains socket.

## LOADING GUIDE

When loading the unit

- always ensure that you do not block the internal air vents and always allow space for the cold air to circulate the contents and the inside of the cooler.
- The Minus40 is designed to automatically evaporate the condensate water in the compressor compartment.

## MAINTENANCE INSTRUCTIONS

Repairs:

- Before carrying out any maintenance or repair work, please ensure that the unit has been disconnected from the mains supply.
- Any service performed on these refrigerators within the 1-year warranty period MUST be cleared and reported to the manufacturer. Failure to do this will void the standard warranty.

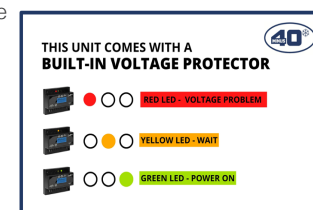
## BUILT-IN VOLTAGE PROTECTOR INSTRUCTIONS

This premium product incorporates a built-in voltage protector that regulates the power supply and ensures a stable voltage supply to the refrigerator to maximise equipment efficiency and reduce damage and downtime caused by a power surge.

Operation principles LED light:

The voltage protector is located at the top right of the motor compartment. The LED lights are visible through the grille.

- RED:** Under/ Over voltage
- Amber/Yellow:** Delay
- Green:** Good power supply



## TROUBLE SHOOTING CHECKLIST

SYMPTOM	CHECK
❖ The unit does not run & the controller or fans do not work or the lights are off	<ul style="list-style-type: none"> <li>❖ Make sure the unit is plugged in</li> <li>❖ Check for a tripped circuit breaker</li> </ul>
❖ Unit does not run, but the controller is on	<ul style="list-style-type: none"> <li>❖ Check the data record on the Carel Applica App.</li> <li>❖ Check the temperature setting on the controller</li> <li>❖ Unplug the unit, wait two hours and plug it in. If you hear it running, a problem is causing the compressor to overheat</li> <li>❖ Check if the evaporator fan is running</li> <li>❖ Listen if the compressor ever runs. If not the compressor might be faulty</li> </ul>
❖ Unit is not cold enough	<ul style="list-style-type: none"> <li>❖ Check the temperature setting</li> <li>❖ Assure that there is enough room for airflow in the fridge.</li> <li>❖ Check for airflow restrictions in front and at the back of the grille.</li> <li>❖ Clean the condenser coils</li> <li>❖ Check the door seal</li> </ul>
❖ Unit is too cold	<ul style="list-style-type: none"> <li>❖ Check the temperature setting</li> </ul>
❖ Unit is noisy	<ul style="list-style-type: none"> <li>❖ Hissing and popping sounds are normal.</li> <li>❖ Check that the fridge is level</li> </ul>
❖ Unit runs continuously	<ul style="list-style-type: none"> <li>❖ Check the door seals</li> <li>❖ Clean Condensor</li> </ul>
❖ In the event of a breakdown	<ul style="list-style-type: none"> <li>❖ Disconnect the fridge from power supply. Contact your supplier for advice.</li> </ul>
❖ Temperature control	<ul style="list-style-type: none"> <li>❖ Minus40 refrigerator regulates air temperature to control the product temperature.</li> <li>❖ During these defrost cycles air temperature can exceed 0°C for a very short time, but product temperature will remain in the safe vaccine temperature.</li> </ul>

## NOTICE

- Do not damage the refrigeration circuit, if you do so, open a window immediately to ventilate the area and seek assistance from a qualified professional to repair.
- This appliance may contain a flammable gas within its sealed refrigeration system. As such it is mandatory that the cabinet is serviced, and at end-of-life, recycled, by a professional organisation/skilled person who have the necessary qualifications, certificates, and expertise to do so. If in doubt, contact Minus40.
- The appliance must only be charged with the refrigerant indicated on the rating label; such refrigerant must be obtained from an authorized supplier. To use another type of refrigerant would be dangerous and is not permitted under any circumstances.
- The room into which the unit is to be installed must be well ventilated and free from sources of ignition. It must not be in a position where refrigerant could gather in the event of a leak. If it is below ground level, then extra precautions may be necessary, and an expert should be consulted

## CONDENSER CLEANING

Always follow these steps when cleaning the unit condenser.

### 1 Power off

Unplug the unit from the mains electricity supply.



### 4 Soft Brush

Take a soft brush and clean the fins.

CAUTION: The condenser is very delicate

- Do not to bend the fins.
- Never poke anything through the fins
- Never use water
- Never use a hard brush



### 5 Vacuum

If possible, use a vacuum to clean away the debris. Check the rest of the compartment for any foreign objects and remove.



### 6 Remove Tools

Ensure that all tools have been removed.



### 2 Open The Service Door

Open the service door situated underneath the main door by using the handle.

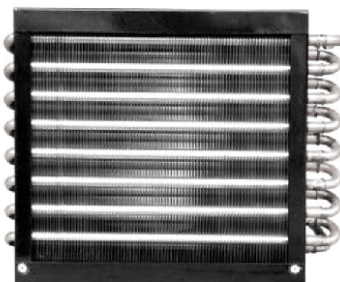
CAUTION: Some pipework & components might be hot



### 3 Locate Condenser

Locate the condenser next to, and attached to, the fan.

\*It looks similar to a car radiator



### 7 Log the Data

Log the date of the cleaning and make a dairy note to clean it again in 2 to 3 months

#### CONDENSER CLEANING SCHEDULE

Please indicate the DAYS that the condenser is cleaned on the chart

Date cleaned marked with an 'X'	Date cleaned marked with an 'X'										
	1	2	3	4	5	6	7	8	9	10	11
Jan											
Feb											
Mar											
Apr											
May											
Jun											
Jul											
Aug											

### 8 Interior and Exterior Cleaning Instructions

Interior and Exterior Cleaning

- Please ensure that the unit has been disconnected from the electricity supply.
- The unit should be cleaned periodically with a non-abrasive cleaner and soft cloth.
- Do not use any detergents or abrasive
- A damp cloth may be used provided that all surfaces are polished dry afterwards.



In the event of the unit not being used for extended periods

- Disconnect from the power supply.
- Remove all the medicines & vaccines to another fridge or suitable storage.
- Thoroughly clean the unit inside and out.
- Leave the door(s) slightly open so that air can circulate freely.
- The unit can now be put into storage.

### Why Clean the Condenser?

The function of the condenser is to dissipate the heat from within the fridge/freezer. By keeping the fins clear of dust, the unit will run more effectively with lower energy consumption and a longer product life.

### DATA MONITORING ACCESS

The controller records the temperature every 20 minutes (Please Note: The controller DOES NOT record when the power is off, but it retains previously recorded data).

Steps to access data:

1. Download the Carel Applica App.
2. Connect to the App and select “User” (User Password is: 23)
3. Access the data record (the data can be exported via email or via other cellphone apps).

The following can be accessed through the App -

- Temperature Record.
- Alarm History.
- Power Failure.
- Virtual Temperature Graph (Monthly, Weekly, Daily & Hourly).
- Compressor running monitoring.
- Live data access when connected to the App.



### LAB470SLF ALARMS

E1	Sensor 1 Disconnected or Faulty
E2	Sensor 2 Disconnected or Faulty
E3	Sensor 3 Disconnected or Faulty
dor	Open Door alarm indication
HI	High-Temperature Alarm
LO	Low-Temperature Alarm
cht	Dirty condenser alarm
EHI	High Power Supply Voltage alarm
ELO	Low Power Supply Voltage alarm



1.Download The App



2.Connect App



3.Enter Password



4.Review The Temperature Record

### CONDENSER CLEANING SCHEDULE

Please indicate the DAYS that the condenser is cleaned on the chart

Date cleaned marked with an 'X'																															
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31
Jan																															
Feb																															
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Jun																															
Jul																															
Aug																															
Sep																															
Oct																															
Nov																															
Dec																															

- Clean the condenser with a soft brush
- Check the condenser monthly
- If there is dirt or fluff on the condenser clean as above
- Mark the chart above with a cross on the DAYS that the condenser is cleaned

