

MEDCO

medical refrigeration



User and Maintenance Instruction Manual



MED1140F

Contents

Contents	1
Technical Data	2
Safety Instructions	2
Installation Instructions	3
Operating Instructions	3
Essential Maintenance	4
Airflow Diagram	6
Common Stacking Problems	7
Diagnosing a Problem	8
Warranty Policy	8
Additional Guidelines	8
Disposing Information	8

MEDCO

medical refrigeration



Instructions for all MEDCO medical freezer models fitted with Danfoss Energy Saving Controller

Thank you for selecting a new **MEDCO** medical freezer. We have designed a premium quality product which incorporates the latest innovations in refrigeration technology to save energy and improve performance. Properly maintained, it is designed to give many years of reliable service.

Model no: MED1140F	
Type: Upright Medical Freezer	
Total Volume: 925 Litres	
Voltage: 230V ac / 50Hz	H: 2020 mm
Mass: 190 kg	W: 1140 mm
Charge: 520g R404a	D: 635 mm
SABS IEC 60335 - 2 - 90	Class: 5 (40C/40% RH)

Please read the following instructions carefully



Do not connect the appliance to the mains supply until you have read the following information:

Safety Instructions

- ❖ Always disconnect the freezer from the mains before attempting any cleaning, maintenance or removing grill and / or the top electric cover.
- ❖ Should the supply cord be damaged, it must be replaced by the manufacturer, service agent or qualified refrigeration technician.
- ❖ Do not place or use any electrical appliance inside the storage compartment of the freezer. Do not store explosive substances such as aerosol cans with a flammable propellant in this freezer.
- ❖ This appliance is not intended for use by persons with reduced physical, sensory or mental capabilities, or lack of experience and knowledge unless they have been given supervision or instruction concerning the use of the freezer by a person responsible for their safety.

- ❖ Lighting should only be replaced by the type and wattage as what is to be replaced. A LED tube may not be replaced with a fluorescent tube or visa/versa.
- ❖ Do not exceed the max 50kg weight limit per shelf.
- ❖ Do not use the freezer for anything other than for medical purposes.
- ❖ Do not cover the front or rear grill as this will cause malfunction and potential fire risk. Do not probe any openings.
- ❖ Do not overload the power supply. Always ensure that the power supply is sufficient for the power requirements of the freezer. These are stated on the front page 2 of this manual. If in doubt consult a qualified electrician. Never use extension leads or multi adapters.
- ❖ **The freezer must be earthed at all times.**
- ❖ Keep the freezer upright during transportation or when moving it to a different spot

Installation instructions

- ❖ Unpack the freezer and be sure to dispose of the packaging in accordance with all local recycling laws and regulations. Please ensure that polythene and other articles are kept away from children.
- ❖ Remove the polystyrene/plastic support blocks carefully and gently place the freezer on the floor.** ***Refrigeration is delicate and may be damaged due to impact on the floor.*
- ❖ Position the freezer out of direct sunlight and as far as possible away from any other heat source.
- ❖ Remove the stoppers that have been installed on sliding door models. This is to prevent door movement during transport and are fitted on the bottom door guide.
- ❖ Unpack the grill and hook onto the two securing points, louvres facing down, at the front of the freezer base.
- ❖ The shelves are fitted by means of the shelf hooks supplied. Should the shelves be installed at an angle it is the responsibility of the user to ensure they are properly anchored.
- ❖ The cabinet “breathes” through the front grill and the freezer can thus be installed with its back hard against a wall.
- ❖ The freezer must be perfectly level to ensure the doors will work properly. This is done by adjusting the levelling feet installed on the bottom of the base.
- ❖ Freezers can be installed within a cavity as long as the front grill is unobstructed.
- ❖ A minimum gap of 100mm must be allowed for at the top of the cabinet. The power socket must be accessible for disconnection from the power supply without having to move the freezer.
- ❖ **Obstructing the front grill will invalidate the guarantee.**

Operating Instructions

- ❖ The freezer must be loaded in such a way the internal air vents are not blocked and cold air is allowed to circulate the contents freely. Failure to do so will cause cooling problems and invalidate the guarantee.
- ❖ Never attempt to use the freezer with the doors open and **avoid leaving the door open for lengthy periods.**
- ❖ Electrical efficiency is important and for this reason, no electrical elements to counter condensation are fitted.
- ❖ The freezer will evaporate condensate water from a drip tray in the compressor compartment and no external drainage is required.
- ❖ The freezer’s electronic controller has been factory set to run between -15 and -20 Centigrade (set point -22°C) and alteration is not recommended or required (set point can still be adjusted using the up/down arrow(s) on the controller).

Light Control

- ❖ To turn the lights On/Off, briefly press the light button on the bottom left on the controller.

Cleaning:

- ❖ The freezer should be cleaned periodically with a non-abrasive cleaner and damp cloth.
- ❖ Never use abrasive powders or scouring materials to clean the refrigerator.
- ❖ On sliding door models, the doors may be removed for ease of access. Move the right door to the fully open position. Pull bottom of the door slightly and tilt towards you. Move the door back to the closed position and gently lift the door out of the runner. The same will apply for the left door and refitting will be the reverse of the above.

Essential Maintenance:

- ❖ Before any monthly or weekly maintenance and/or repair work, the freezer must be disconnected from the mains supply.

Daily

- ❖ Check compartment temperature is within acceptable range (-15°C to -20°C)

Weekly

- ❖ Wipe clean freezer door seals

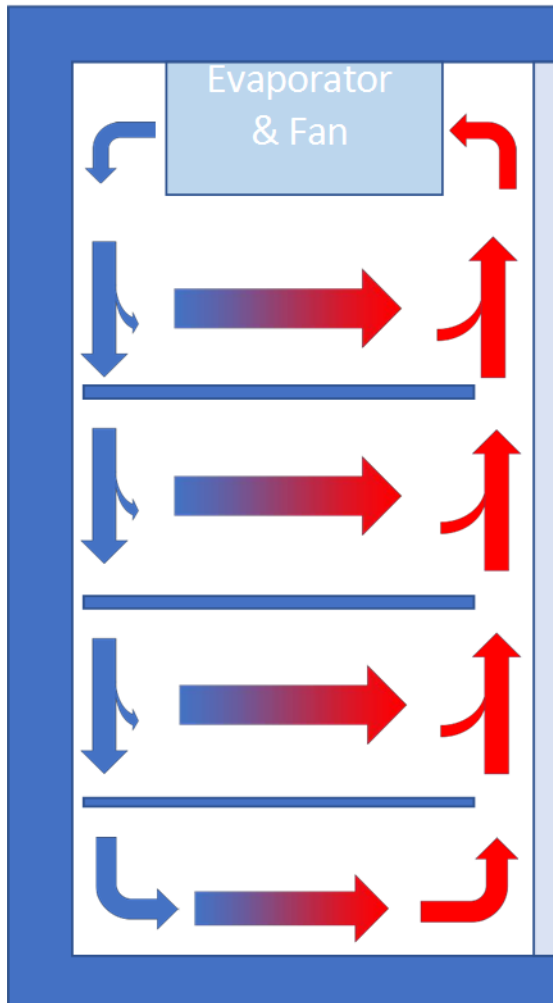
Monthly

- ❖ Check that the condenser is clean and air is free to move over the condenser/compressor compartment. In dusty environments cleaning should be done more often. The condenser looks like a radiator with a fan attached to it and is located behind the grill at the bottom of the freezer.
- ❖ Carefully clean the left side (air intake) of the condenser with a soft brush or vacuum cleaner.
- ❖ To remove the grill, lift each end slightly and then pull towards you.
- ❖ Before replacing the grill, please check that the fan is clear from obstructions and the drain pipe is discharging into the drip tray.
- ❖ **Failure to keep the condenser clean will invalidate the guarantee.**

Replacing light tubes:

- ❖ Before replacing the light tubes make sure the appliance is switched off and disconnected from the mains supply.
- ❖ Remove the light covers by gently pulling them outward.
- ❖ Gently pull the connectors from the tube ends and replace with the same type and dimensional tube.
- ❖ Reconnect the push on connectors and refit the covers and / or push the tubes into the clips.

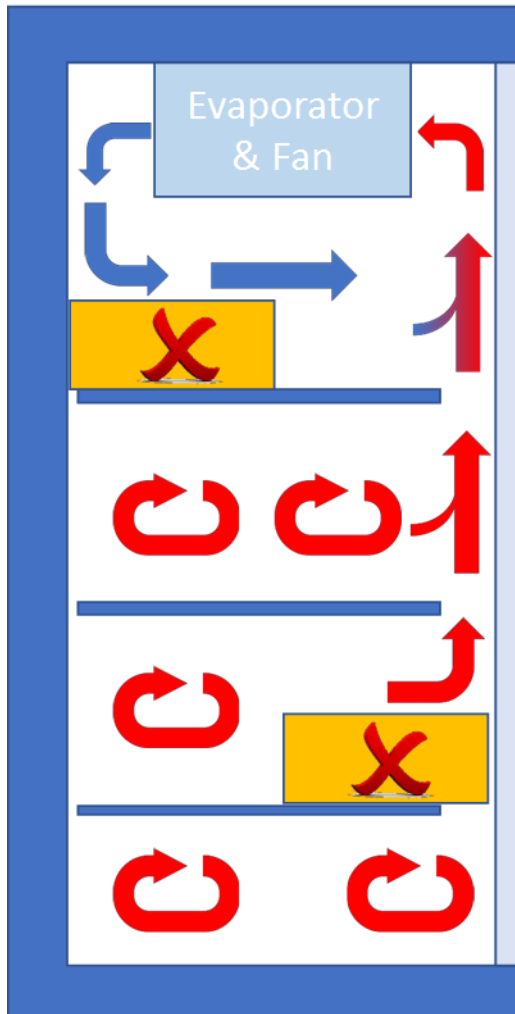
Air Flow in a MEDCO Fridge



- The evaporator and fan at the top of the unit sucks in air from the front, cools it down and then blows it out the back of the evaporator
- This cold air is deflected down the back of the unit where it passes through the product in the fridge cooling it down
- The air then reaches the front of the cabinet by the door and is sucked up again for the process to start once more
- This warmer air passing over the door also helps to remove the "haze" that forms when you open the door of the unit

Common Stocking problems

- If a solid object such as a box or tray is placed at the top of the fridge that blocks the airflow from going down the back it will short circuit the cycle
- This will mean that the air below the blockage will cool very slowly and will probably result in a poorly performing fridge with big temperature differentials, as well as large amounts of condensate build-up by the evaporator
- Items such as vials and bottled medication will not cause such a problem as the air travelling down the back of the cabinet will still pass by due to their shape.
- Boxes or trays should ideally be placed in the centre or towards the back of the fridge for optimum efficiency.



Diagnosing a problem

- ❖ Freezer temperature is above -10°C - call a technician to check the freezer
 1. Check door is closed and sealing properly.
 2. Check compartment temperature with a portable, well calibrated thermometer.
 3. Check mains supply and the connection to mains.
 4. Check if the unit has been receiving the correct voltage
- ❖ If the 1, 3 and 4 are all in order, please move vaccines to a safe place and call a technician.

Warranty Policy

- ❖ Kindly visit our page to access the warranty policy for your MEDCO Freezer:
www.zeromedical.co.za and click on "Warranty."

Additional guidelines

Extended periods of non-use

- ❖ Disconnect from the power supply.
- ❖ Remove all the products from the storage compartment.
- ❖ Thoroughly clean the freezer inside and outside. Leave the doors slightly open so that air can circulate freely. Use the stay open door catch on sliding doors for this purpose and a non-damaging item on the hinge doors

Breakdown

- ❖ Disconnect the freezer from the mains power supply. Please contact your dealer for advice and always insist on the use of genuine **MEDCO** spare parts.

Disposing of the freezer



Disposing of a freezer at the end of its life cycle must be done in accordance with local rules and regulations. Please check with your local Authority for up-to-date information on safe and compliant recycling of the appliance.

- This symbol means that the product is classed as Electrical or Electronic Equipment and is covered by the European Union WEEE Regulations.
- You should take great care in disposing of any such products and **MUST NOT** under any circumstances dispose of it with your normal waste as they pose a great risk to your community if they are accidentally sent for disposal in a landfill.

Thank you for choosing a MEDCO freezer manufactured under stringent supervision at our factory.

If we can be of any further assistance or if you would like to know more about our product range, please do not hesitate to contact us; www.zeromedical.co.za or phone 010 207 1600. In Association with:

