



By Appointment to
Her Majesty Queen Elizabeth II
Suppliers of Commercial Refrigeration
Foster Refrigerator, King's Lynn

FDC Display Chillers

AD2-28 Controller & RU33 Display

English



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Foster Refrigerator
Oldmedow Road
King's Lynn
Norfolk, PE30 4JU
United Kingdom

A Division of ITW
Ltd



Call: +44 (0)843 216 8800

Fax: +44 (0)843 216 4700
www.fosterrefrigerator.co.uk

Email: support@foster-uk.com



Models Applicable to This Manual

Closed Front Models

FDC600C
FDC900C
FDC1200C
FDC1500C

Open Front Models

FDC600
FDC900
FDC1200
FDC1500

Climate Class

Climate class indicated on the serial plate, shows the temperature & humidity at which this appliance has been tested, for the purposes of establishing values in line with European standards.

Important Note to the Installer:

Please ensure that this document is passed to the user as it contains important guidelines on operation, loading, cleaning and general maintenance and should be kept for reference.

Electrical Safety

Foster Refrigerator recommends that the equipment is electrically connected via a Residual Current Device, such as a Residual Current Circuit Breaker (RCCB) type socket, or through a Residual Current Circuit Breaker with Overload Protection (RCBO) supplied circuit.

General Safety

-  Do not store explosive substances such as aerosol cans with a flammable propellant in this appliance.
-  Keep all ventilation openings in the appliance or in the structure of a built in unit clear of any obstructions.
-  Do not use electrical appliances inside the storage compartment.
-  The moving of the appliance should be carried out by competent personnel, ensure that two or more people are used to guide and support the appliance, the appliance should not be moved over uneven surfaces.
-  The emitted sound level of this appliance is 70db(A).
-  To ensure stability the appliance should be located on a flat, level surface, correctly loaded with the castors locked.
-  If the supply cord is damaged, it must be replaced by the manufacturer, it's service agent or similarly qualified persons in order to avoid hazards.
-  Care should be taken to avoid prolonged contact with cold surfaces with unprotected body parts, Correct PPE to be used at all time.

Disposal Requirements

If not disposed of properly, these cabinets have components that can be harmful to the environment. All cabinets must be disposed of by appropriately registered and licensed waste contractors, and in accordance with national laws and regulations.

Start-Up and Operation

After unpacking leave to stand for 60 minutes and clean before turning on (cleaning directions are supplied within this manual). Position the display cabinet with care on a level, flat, solid surface area. Avoid cold air from air conditioning units & direct sunlight as these factors will affect the unit's performance.

Warm air is produced from the rear of the unit & for this reason please leave a breathing area around the unit as follows:

Gap Position	Gap Measurement	Relevant Models
Each Side of the Unit to Wall or next Unit.	10mm	All
Top of Unit to Top of Recess (No Rear Ventilation)*	80mm	Assisted Service Closed Front Only
Top of Unit to Top of Recess (With Rear Ventilation)	10mm	Assisted Service Closed Front Only
Units Rear Wall Spacer to Wall	80mm	Grab & Go Open Front Only

*When positioned into a recess or similar small area.

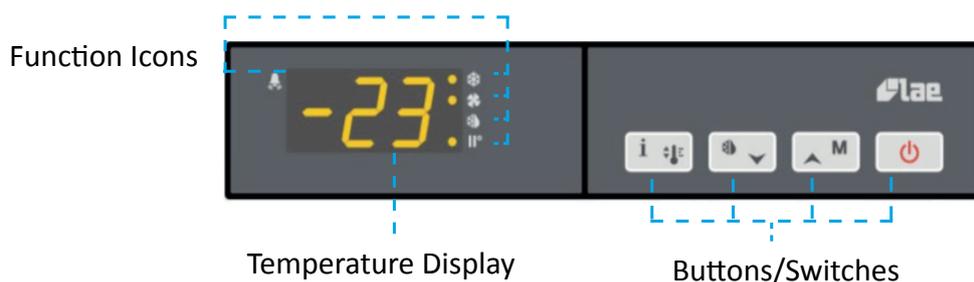
Insert the mains plug into the wall socket and switch on. Please do not plug or unplug the unit with wet hands. The display cabinet will start automatically, displaying the actual internal temperature of the unit (area where product is displayed). All models are preset at +4°C to +6°C, so no adjustments are required. Allow the cabinet to reach its normal operating temperature before loading.

With an interruption to the main power supply, the cabinet will re-start automatically after power is restored. The vaporiser tray (at the base of the unit) may overflow during a power cut but this is dependent on the length of time the power is off.

Standby

Pressing this button for 3 seconds will allow the unit to be turned on or put into standby.

Display Icons and Switches



Function Icons and Buttons/ Switches

	Info/Set Point Button		Increase Button/ Lights On/Off
	Manual Defrost/ Decrease Button		Exit/ Standby Button
	Compressor Output		Alarm
	Fan Output		Defrost Output
	Light Output		

Alarms/ Warnings

<i>Lo</i>	Unit Low Temperature Alarm	<i>E1</i>	T1 Air probe failure
<i>hi</i>	Unit High Temperature Alarm	<i>E2</i>	T2 Evaporator probe failure
<i>hP</i>	High pressure alarm (Mains lights will go off).	<i>E3</i>	T3 Product probe failure
<i>oFF</i>	Controller in Standby	<i>dEF</i>	Defrost in progress
<i>Loc</i>	Keypad Locked		

Set Point Display

Press button  briefly (at least half a second) to display the set point.

Keypad Security Settings

Press & release  then select  to show 'LOC'. Press and hold  to change from 'YES' to 'NO'. Leave for 10 seconds or briefly press  to resume to normal operation.

LED Lighting Display

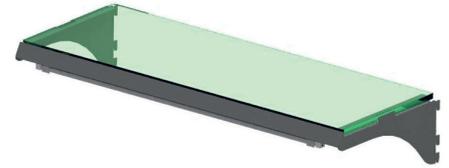
When pressed and released this button will switch on and off the display lights, with the unit running or in standby mode. If the lights do not come on this may be due to a fault warning, please see the troubleshooting section for more details.

Shelves and Supports (Including LED Support)

On delivery of the display cabinet these parts are supplied fitted in situ. We recommend that these still be cleaned before first use.

Supports can be fitted at different levels and each shelf will require two supports.

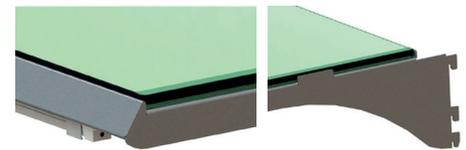
Slot the first support into one side of the ladder racking at the height the shelf is required then repeat this on the opposite side at the same height. Always allow space for air circulation not only around the shelves but also around the product displayed on them. Space between one shelf and the next should allow not only for the product height to be displayed but also the shelf supports.



LED Support Panel is situated on the front of each of the fully assembled shelves.

This piece should be fitted before the glass shelf is placed into position. When the shelf supports are in place lower the LED support panel onto the front of the shelf supports and rotate the panel forward to click into place. Not only is this where the LED lights are fitted but this also stops the glass shelves from sliding forward and or becoming detached from the unit.

Glass Shelves are fitted when all the supports are in place. Hold the shelf level and above the supports then lower into position. The shelf will sit flush to the front of the LED support panel but behind its raised lip. Note that on Assisted Service Closed Front models the shelf does not sit flush with the back of the unit and there is a gap of 48mm. This is for air circulation and should not be blocked.



Maximum Product Weight

Each shelf is capable of holding up to 30kg of product evenly distributed. This is relevant for all models regardless of bigger shelves on larger models.

Stainless Base Shelf can be removed by lifting straight up and away. This does not have any removable supports and should not be removed when the unit is switched on.

Ensure air can circulate around & through the product. Do not cover the front of the base shelf (and rear, on Closed Front models) grill. Maintain space between the top of the product and the shelf above. **Product must be cold before loading** - display cabinets are designed to maintain the merchandise temperature and not chill product from room temperature.

All these parts are removable by carrying out the instructions given in reverse. This should be carried out at regular intervals for cleaning purposes. Assisted Service Closed Front models should have all these parts removed from the rear doors only - **DO NOT** attempt to try and remove from the front.

Curved Glass Front - Assisted Service/Closed Front (C) Models Only

Safety chains are fitted to stop the glass front falling too far forward and to enable the user to clean the inside of the glass. **This is not to be used for loading product.**

Do not remove the safety chains, this should only be carried out by a competent engineer for repair reasons. Removing could lead to damage of the glass panel and/or injury.

To open the front position your hands either side of the curved panel and pull it towards you.

After wiping the glass, gently assist the panel back into position. Ensure fingers and chains are not trapped between the glass and cabinet sides.

Rear Sliding Glass Doors - Assisted Service/Closed Front (C) Models Only

These do not have a lock and slide from side to side on runner systems to gain access from the rear of the cabinet. These can be removed for cleaning by half opening a single door then with both hands lift the single glass door into the top runner. Tilt the bottom of the door outwards & away from the runner and then in a downward motion remove the door. Repeat this for the second. Refit in the opposite way to removal.

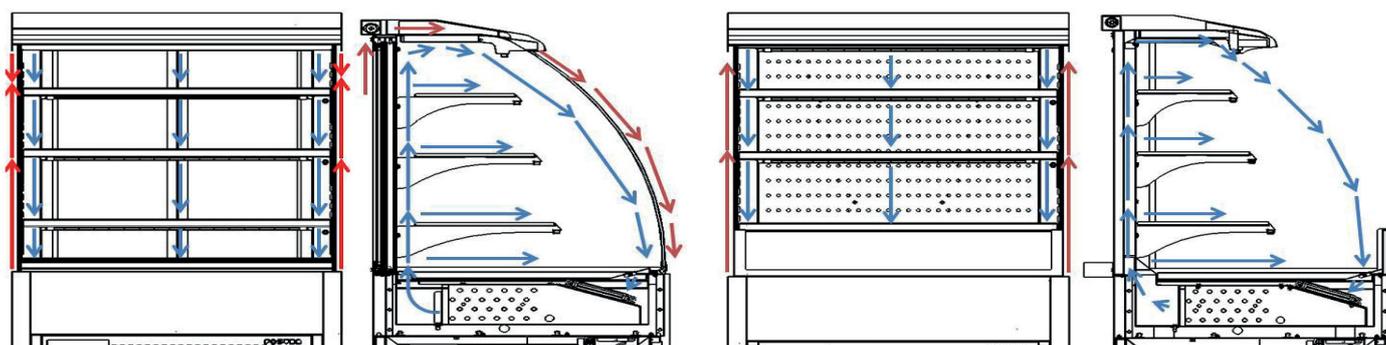
When access to the product is not required the rear doors and front glass panel should be kept closed at all times. This will conserve energy while assisting with maintaining product temperature.

ACT (Anti Condensation Technology) and Cold Air Circulatory Systems

ACT combats condensation gathering on the glass panels of the cabinet. The red arrows in the diagram below shows the flow of air for ACT purposes.

Along side this system the display cabinets have a Cold Air Circulatory System that maintains the product temperature (see blue arrows).

For optimum performance ensure that the side vents and inner vents are not covered or blocked.



Defrost

The cabinet automatically defrosts at regular time intervals, lasting a maximum of 20 minutes during which **dEF** will show. Defrost can be manually activated by pressing and holding .



Cleaning and Maintenance

Important: Before cleaning the power supply should be turned off at the mains, please do not plug or unplug the unit with wet hands. Only when cleaning has been completed and the unit is dry may the display cabinet be turned back on at the mains.

Regular Maintenance:

- > Air circulating in the unit should feel noticeably cooler than the ambient room temperature.
- > As and when required, remove all product and shelving from the unit (including the base shelf – beware of cold and or sharp components) . Clean exterior and interior surfaces with mild liquid detergent, following the directions on the pack at all times. Clean surfaces with a damp cloth and clean water. Never use wire wool or scouring pads/powders as these may cause damage.
- > Clean the condenser at least once a month (it is located behind the front grille). Remove the 3 screws at the base of the panel and drop it downwards (beware of hot and possible sharp components behind the grille). DO NOT use a wire brush to clean the condenser only use a soft brush or vacuum cleaner to remove dirt/dust. If there are any stubborn grease deposits left on or through the condenser, call your supplier to carry out a full service (this is normally a chargeable service). Re-fit the front grille after cleaning.
- > Failure to maintain the condenser will cause premature failure of the motor/compressor and in turn premature failure of the unit. This will invalidate the warranty of the unit and its parts.
- > When removing or replacing any part take care to avoid fingers becoming trapped. Although the glass parts are not sharp these parts are heavy and if not handled with care could cause injury.

Troubleshooting

Before calling your supplier please make sure that:

- >The plug is in the socket and the mains power supply is switched on i.e. are the lights and fans working?
- >The fuse for the unit has not blown
- >Are the lights working or able to be turned on? If not this may be due to high pressure
- >The unit is positioned correctly – cold air from air conditioning units & direct sunlight can affect performance
- >The condenser is clean and not blocked
- >The products are placed in the unit correctly
- >The unit's ACT & Cold Air Circulatory vents are not obstructed
- >Defrost is not in progress
- >Check at regular intervals that the operating noise of the unit is normal and the condenser is clean

If the reason for the malfunction cannot be identified, disconnect the electrical supply to the unit and contact your supplier.

When requesting a service call quote the model and serial number which can be found on the silver label located on the outside of the rear centre panel (starts E5.....).



UK Head Office

Foster Refrigerator
Oldmedow Road
Kings Lynn
Norfolk
PE30 4JU

a Division of ITW (UK) Ltd

Tel: +44 (0)843 216 8833

Fax: +44 (0)843 216 4707

Email: support@foster-uk.com

Website: www.fosterrefrigerator.co.uk