



**FROSTAR FR60 AND FR90**

**INSTALLATION, OPERATING AND MAINTENANCE MANUAL**  
**PLEASE LEAVE WITH OPERATOR**



**FROSTAR FR60 AND FR90 SERIES 4**

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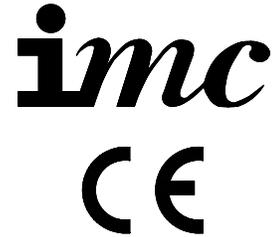
**A34/019 R3**

**ECN 8496 May 2016**

**EC DECLARATION OF CONFORMITY**

(Guarantee of Production Quality)

We, Imperial Machine Company Limited of:  
Unit 1, Abbey Road, Wrexham Industrial Estate, Wrexham, LL13 9RF  
Declare under our sole responsibility that the machine



**FROSTAR FR60 & FR90 – SERIES 4**

As described in the technical construction file (TCF) documentation, are in conformity with the protection requirements of the Electromagnetic Compatibility Directive 2004/108/EC.

These products are manufactured in accordance with harmonised standards EN 61000-6-1: 2001 Immunity and EN 61000-6-3: 2001 Emissions (plus product specific standards).

They also satisfy the essential health and safety requirements of the Low Voltage Directive 2006/95/EC and are manufactured in accordance with standards BS EN 60335-1 and BS EN 60335-24, and the relevant requirements of the Pressure Equipment Directive 97/23/EC.

A handwritten signature in cursive script, appearing to read 'E Plumb', is written in black ink.

Approved by E Plumb, Engineering Manager

Signed at Wrexham, Date

May 2016

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**GUARANTEE**

This equipment is guaranteed by IMC for 1 Year from the date of its purchase from IMC, or from one of its stockists, dealers or distributors. The guarantee is limited to the replacement of faulty parts or products and excludes any consequential loss or expense incurred by purchasers. Defects which arise from faulty installation, inadequate maintenance, incorrect use, connection to the wrong electricity supply or fair wear and tear are not covered by the guarantee.

Please observe these instructions carefully.  
The guarantee applies in this form to installations within the United Kingdom.

**DELIVERY**

The packaged machine consists of:

Frostar Unit	1
Instruction Booklet	1

The Frostar range is supplied fitted with shelves.

FR60	3 shelves (2 small and 1 large)
FR90	4 shelves (1 small and 3 large)

Please notify both the carrier and the supplier within three days of receipt if anything is missing or damaged.

Before connecting, check that the correct machine has been supplied and that the voltage, marked on the rating plate, is suitable for the mains supply available. The rating plate is located on the inside of the unit on the top left-hand side.

**Sample Rating Label**



IMPERIAL MACHINE COMPANY Ltd  
LL13 9RF, UNITED KINGDOM  
TEL +44 (0)1978 661155




FROSTAR - GLASS FROSTER		FREQUENCY(Hz)	50
TYPE / MODEL	FR60	IP RATING	IPX1
VOLTAGE RANGE	220/240	dB (A)	70
PHASE	1	AMPS (MAX)	2.71
SERIES #	4	CLASS	SN
R134A	155grms	LIGHT (MAX)	15W

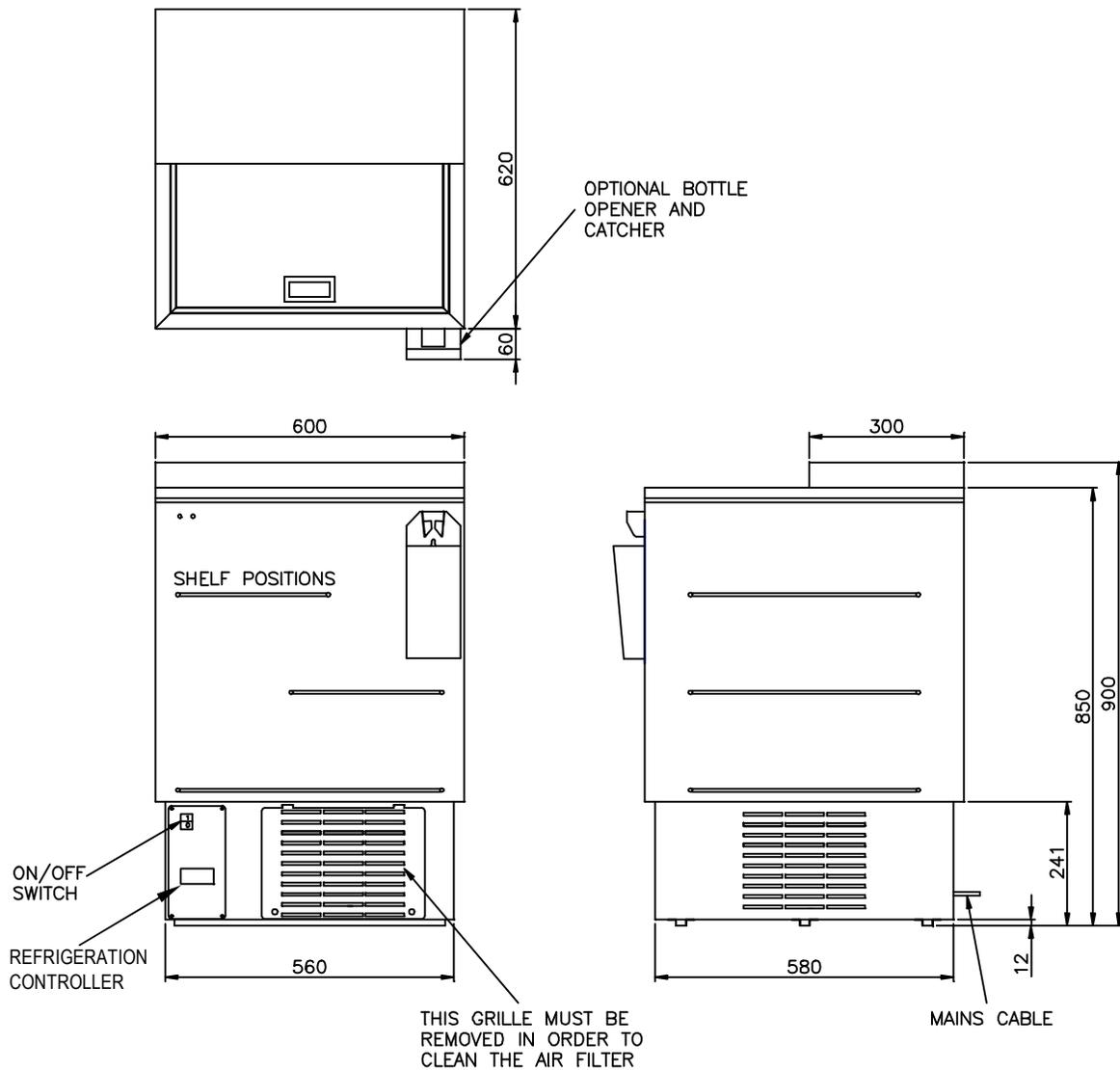
SERIAL NUMBER = 4911110001

www.imco.co.uk

## INTRODUCTION

The Frostar FR60 and FR90 are efficient, fast-cooling top loaders with sliding covers suitable for underbar use. The Frostar range is designed to produce a steady supply of chilled glasses.

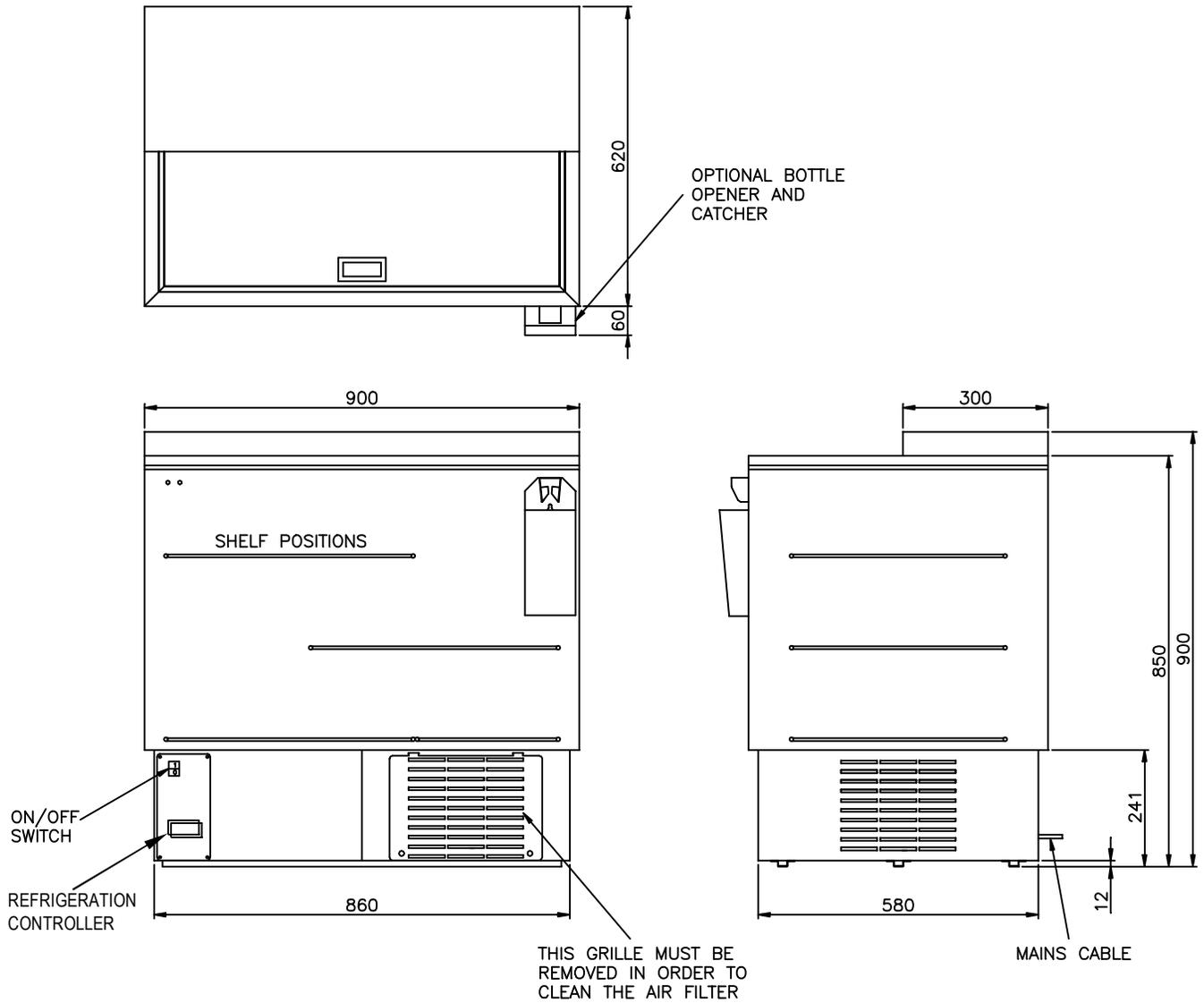
### Frostar FR60 Dimensions



### Internal Dimensions

The internal dimensions of the FR60 are 550mm high, by 526mm wide by 500mm deep.

**Frostar FR90 Dimensions**



**Internal Dimensions**

The internal dimensions of the FR90 are 550mm high, by 826mm wide by 500mm deep.

## INSTALLATION

### For the Installer:

These Instructions contain important information designed to help the user obtain the maximum benefit from the investment in a Froststar unit.

Please read them carefully before starting work, and consult with the supplier in the event of any queries.

Be sure to leave this Instruction Manual with the user after the installation of the units is complete.

### Procedure:

Install the unit on a flat and level floor, allowing space for ventilation at the front, back and sides.

Do not install the unit close to a heat source such as a radiator or the warm air outlet of another piece of refrigeration equipment.

If supplied, fit the bottle opener(s) and catcher(s) to the front of the unit.

If the cabinet has been stored on its front, back, or sides during transit, stand the cabinet upright for a minimum of two hours before starting. This will avoid damage to the compressor.

## PREPARATION

The electrical supply to the unit should be 220/240 Volt, 1 phase, 50 Hz.

All units are supplied with a standard mains plug fitted with a 10 Amp fuse. This should be plugged into a standard mains socket. The unit must be positioned so that the plug is accessible.

### Warning - This machine must be earthed

If the supply cord is damaged, the manufacturer, an approved service engineer or a qualified electrician in order to avoid a hazard, must replace it.

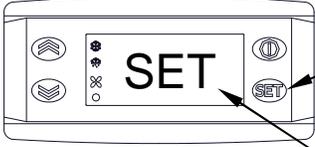
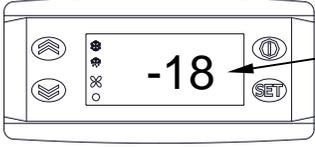
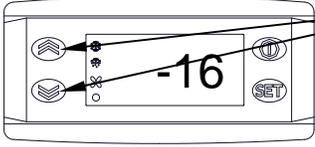
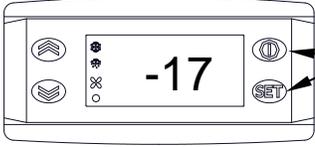
If a new mains supply is to be run to the machine, the work must be always undertaken by a reputable and competent electrician, and the IEE Codes of Practice must be observed.

Site conditions may vary with additional lengths of cable runs, encapsulation in trunking, bunched with other cables etc, needed. Should this apply, the electrician must alter the cable accordingly.

It is imperative that all electrical work must be carried out by a qualified electrician and in accordance with the current local regulations.

## CHANGING THE CONTROLLER SET POINT

The electronic temperature controller is factory set to  $-18^{\circ}\text{C}$  and will cycle the air temperature within  $\pm 2^{\circ}\text{C}$  of this set point. The set point can be adjusted above and below the factory setting (min  $-30^{\circ}\text{C}$ , max  $+5^{\circ}\text{C}$ ) by following the button sequence below:

- 1)  Press the SET button once  
%SET+ will appear
- 2)  Then press SET button again, current set point temperature is displayed
- 3)  Using the up and down buttons, scroll to the desired set point temperature (min  $-30^{\circ}\text{C}$ , max  $+5^{\circ}\text{C}$ )
- 4)  Press SET button to accept  
Then press stand-by button to esc. Display will revert back to current internal air temperature

## OPERATION

1. Plug in and switch on at the mains.
2. Switch the unit on using the On/Off, which is located at the front left-hand side of the plinth.
3. Check that the light is working.
4. Run the unit empty, and check that cold air is being circulated within the cabinet.
5. Load the cabinet with glasses by placing them on the wire shelves, ensuring that the glasses are standing in an upright position. Do not obstruct the air vents inside the cabinet.
6. All cabinets have an electronic off-cycle defrost controller that de-ices the evaporator for a maximum of 30 minutes every 4 hours using electric heaters. This evaporates the condensate water without the need for a drainage connection.
7. The controller also ensures that the cabinet temperature is maintained at  $-18^{\circ}\text{C} \pm 2^{\circ}\text{C}$  between automatic defrost cycles. Note that this temperature is adjustable (refer to above section **CHANGING THE CONTROLLER SET POINT**).
8. When the unit is not going to be used for several weeks, run it for 24 hours after emptying it, to ensure that all condensate water evaporates.

## MAKING THE BEST USE OF THE CABINETS

**Do not overload the cabinet.** There should be a gap of at least 40mm above the merchandise on the top shelf, and merchandise should be spaced to allow the circulation of cooled air throughout the cabinet. Do not load the cabinet with boxed goods as this prevents air circulation.

Do not place hot or warm goods in the cabinet. Only goods at room temperature or less should be placed in the unit otherwise performance will be affected.

Do not run unit with the lid open, as this will cause the evaporator to ice up preventing the unit from working efficiently.

Ensure that both the front grille cover attached to the plinth, and the air vents inside the cabinet are always unobstructed.

Clean lid and the surfaces, and occasionally remove all merchandise and clean interior surfaces with a damp soft cloth. **DO NOT USE CLEANING MATERIALS CONTAINING ABRASIVES OR BLEACHES.** In the case of heavy soiling use a mild liquid detergent. The unit can be washed on the inside using bicarbonate of soda to remove stale smells.

## MAINTENANCE

To achieve optimum performance Frostar requires regular care. Breakdowns caused by inadequate maintenance are NOT covered by the terms of the manufacturer's warranty.

1. Remove the front grille cover by releasing the ¼ turn fasteners.
2. Clean the compressor coil with a brush and vacuum cleaner every three months or when dirty (whichever is sooner).
3. Replace the grille cover, ensuring fasteners are fully tightened.
4. Ensure that the grille is always unobstructed.
5. Occasionally remove all merchandise and clean the interior surfaces with a damp cloth.
6. Other than regular cleaning the Frostar range requires no maintenance by the end user. It is recommended that an IMC approved engineer services the unit at least once a year.

For further advice or assistance, contact the supplier of your cabinet.

## ORDERING SPARE PARTS

In the event that spare parts or accessories need to be ordered, please always quote the SERIES AND SERIAL NUMBER of the machine. This is to be found on the rating plate located near the supply cable.

For installations outside the UK please contact your supplier.

For information on IMC spares and service support (if applicable), please call IMC on +44 (0)1978 661155. Alternatively, contact us via email or fax:

IMC Service Desk

Fax: +44 (0)1978 667766

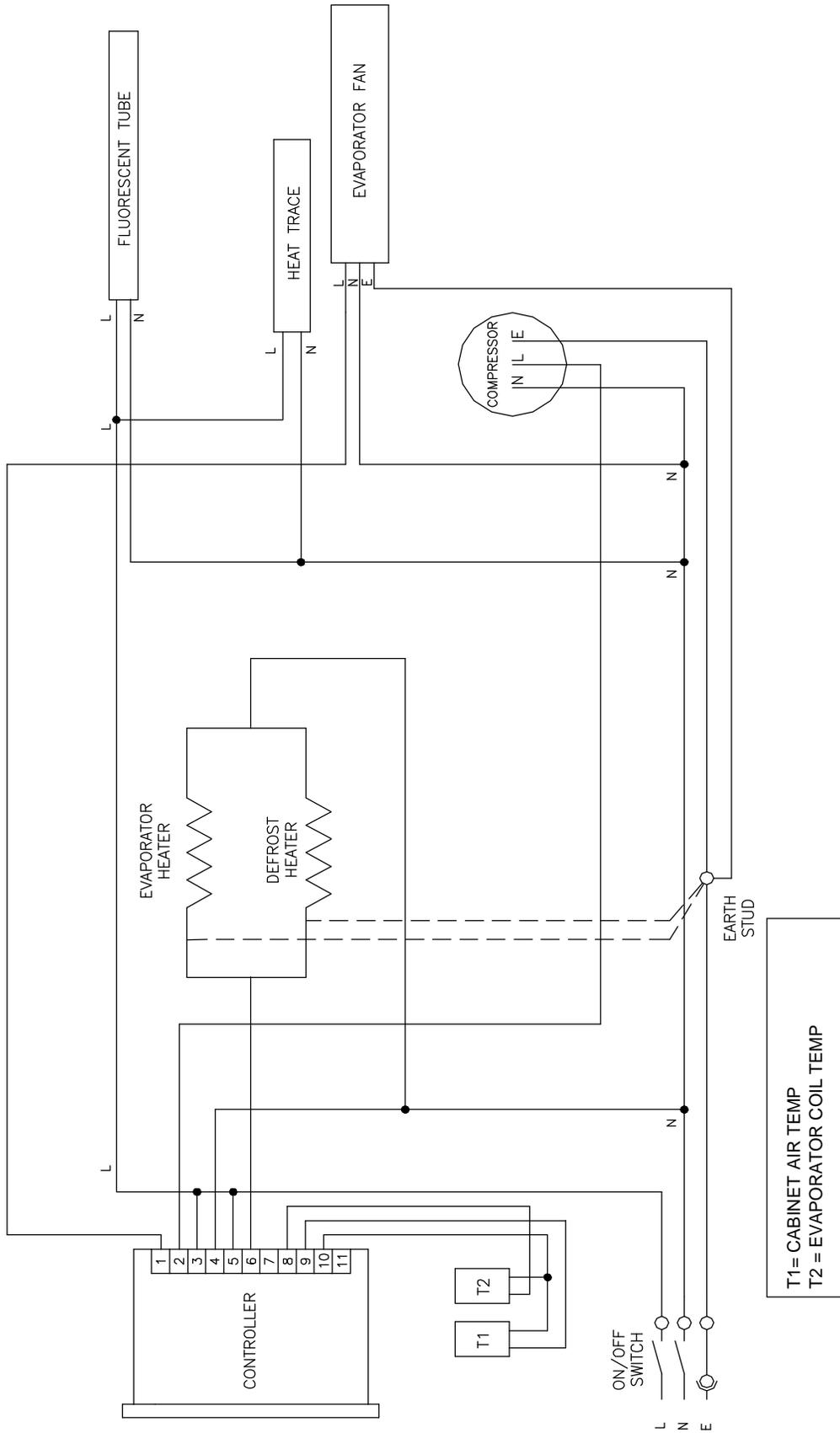
E-mail: [service@imco.co.uk](mailto:service@imco.co.uk)

IMC Spares Desk

Fax: +44 (0)1978 667759

E-mail: [spares@imco.co.uk](mailto:spares@imco.co.uk)

FR60 & FR90 WIRING DIAGRAM (G99/049-007)



**PARTS LIST**

<b>Frostar FR60</b>		<b>Frostar FR90</b>	
<b>Part No</b>	<b>Description</b>	<b>Part No</b>	<b>Description</b>
A12/047	Wire Shelf (large)	A12/047	Wire Shelf (large)
A12/048	Wire Shelf (small)	A12/048	Wire Shelf (small)
D28/035	¼ Turn Fastener	D28/035	¼ Turn Fastener
& D28/036		& D28/036	
E49/144 S	Plinth Grille Cover (Stainless Steel)	E49/144 S	Plinth Grille Cover (Stainless Steel)
E49/144 Z	Plinth Grille Cover (Black Painted)	E49/144 Z	Plinth Grille Cover (Black Painted)
G30/420	Defrost Controller	G30/420	Defrost Controller
G42/011	Compressor	G42/010	Compressor
G45/062	On/Off Switch	G45/062	On/Off Switch
G50/070	Fluorescent Light	G50/071	Fluorescent Light
G95/006	400W Element (Evaporator Heater)	G95/003	400W Element (Evaporator Heater)
G95/007	100W Element (Defrost Heater)	G95/004	100W Element (Defrost Heater)
G96/008	Condenser Fan	G96/040	Condenser Fan
G96/027	Evaporator Fan	G96/029	Evaporator Fan
S99/020	Bridge Assembly	S99/016	Bridge Assembly
S99/021	Lid Assembly	S99/018	Lid Assembly
S49/017	Bottle Opener	S49/017	Bottle Opener
BA52/060	600mm Speedrail (optional)	BA52/090	900mm Speedrail (optional)