# MODELS IN-3B-SQ-06/09/12/15

PRODUCT MANUAL 26174 REV I MAY 2022



# INLINE

3000 SERIES SQUARE/BAIN MARIE



WIDTHS: 600/900/1200/1500mm FIXED FRONT/SLIDING REAR DOORS FREESTANDING/IN-COUNTER/ON-COUNTER



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# **Warnings**

Operational Safety

This appliance is not intended for use by young children or infirm persons, unless they have been adequately supervised by a responsible person, to ensure that they can use the appliance safely.

Young children should be supervised, to ensure that they do not play with the appliance.

Water

THIS UNIT IS NOT WATERPROOF. DO NOT USE A WATER JET SPRAY TO CLEAN THE INTERIOR OR EXTERIOR OF THIS CABINET.

Caution

Do not store explosive substances, such as aerosol cans with flammable propellant, in this appliance.

Mains Supply Cord

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.

Hazardous Substances The cabinet does not contain any of the following, in its construction:

**Asbestos** 

PCBs (Oils containing polychlorinated biphenyl)

Mercury



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### INTRODUCTION

#### Welcome

**HEATED CABINETS - INTRODUCTION** 

#### Future Products Group (FPG)

Welcome to the world of FPG! Our products are designed and engineered to give you the optimal performance that you deserve with innovative visual merchandising appeal.

We are confident that you will be delighted with your state of the art inline food service cabinet, and that it will become a valued appliance in your store.

# Guidance and Help

Any new appliance can seem very complex and confusing at first glance. To ensure you receive the utmost benefit from your new inline cabinet, there are two things you can do.

- Before operating the cabinet, please read the instruction book carefully and follow its recommendations. The time taken will be well spent. These instructions both general and technical tell you how to install, operate and look after your inline food service cabinet so that you can receive the full benefits that this cabinet has to offer.
- These instructions cannot, however, cover all eventualities. If you are
  unsure of any aspect of the installation, instructions or performance of your
  cabinet, contact your dealer promptly or contact us via email to
  support@fpgworld.com.

## Warranty

HEATED CABINETS - INTRODUCTION

#### Warranty Period

Future Products Group Limited warrants, to the original purchaser of an FPG manufactured food service cabinet, that for ONE YEAR (12 months) from the date of purchase, any defect in workmanship or material resulting in the product malfunctioning while under correct use will be rectified.

For refrigerated cabinets with integral or near-remote refrigeration the warranty is extended to THREE YEARS (36 months), for refrigeration condenser units. Conditions apply, see Liability Exceptions.

Liability under this warranty is limited to replacing or repairing a part, without charge.

Continued on next page



### Warranty cont.

HEATED CABINETS - INTRODUCTION

# Liability Exceptions

Liability under this warranty does not include:

- Any loss, damage, or expenses directly or indirectly arising from the use of, or inability to use, the product or from any other cause.
- Any part of the cabinet which has been subject to misuse, neglect, alteration, incorrect installation, accident, or damage caused by transportation, use of abrasive or caustic chemicals, flood, fire or acts of God.
- Any damage or malfunction, resulting from the use of non-FPG supplied spare parts.

#### Specific Exclusions

The following are specifically excluded from warranty:

- Breakage of glass or plastic components, or the replacement of LED lighting and lamps, or gaskets.
- Maladjustment of the electronic temperature controller, by an unqualified person.
- Failure to re-assemble the cabinet correctly after cleaning.
- Fair wear and tear.

#### Assessment

The liability under this warranty is dependent on an assessment by FPG, to determine the defect in workmanship or materials.

#### **Time Limit**

FPG does not guarantee that any service to be performed under this warranty will be carried out within any particular time limit.

#### Caution

FPG will not be held responsible for any servicing costs incurred prior to FPG's acceptance of a warranty claim.



### **OPERATION**

### **Cabinet Layout**

**HEATED CABINETS - OPERATION** 

#### 3000 Square Series Cabinets

The standard 3000 Square Series, Dry Well Bain-marie cabinet has a fixed glass front and sliding glass rear doors.

Models are available for On-Counter mounting, In-Counter mounting and Free Standing.

Custom Open Back versions are available for hot chip dispensing.

There are no internal shelves, but food dishes are provided in the base.

#### Lighting

Internal lighting is provided by halogen heat lamps, mounted on the top of the cabinet.

#### **Controls**

**HEATED CABINETS - OPERATION** 

#### **Control Panel**

The controls are mounted on the back of the cabinet, at the top.

There is a main switch, a thermometer and a thermostat.



#### **Main Switch**



To turn the cabinet on, rotate the switch, with the on/off symbol.

#### Heating



Set the desired temperature with the thermostat control knob. Turn it to the off mark when heating is not required.

#### **Thermometer**



The thermometer indicates the temperature of the cabinet well.

## INLINE 3000 SERIES SQUARE/BAIN MARIE

### **Preparation**

**HEATED CABINETS - OPERATION** 

#### **Power Supply**

Ensure that power is connected to the cabinet, the overhead heat lamps will come on when the Main Switch is turned on.

The well heating is controlled by the thermostat, and can be turned off by rotating the control knob fully anti-clockwise.

# Set the Temperature

Set the thermostat to the desired temperature, 75 degrees Celsius is the recommended setting to maintain food temperature within food safety quidelines.

**NOTE** Setting the dial to a higher temperature than required will not speed up the heating process. **Set it to the desired temperature.** 

# Fumes and Odours

Before use, operate the cabinet for 4 hours to remove any fumes or odours, which may be present. This will avoid possible tainting of food.

#### **Load Cabinet**

Load the cabinet with **pre-heated** product.

The cabinet is designed to maintain the temperature of pre-heated product above 65°C.

It is not an oven, and consequently, if cold product is introduced, there could be a considerable delay before the operating temperature rises to the normal operating level.

#### WARNING: Aluminium Foil

Do NOT place aluminium foil on the base trays. This will disrupt the convection circulation of air, and cause uneven heating.



#### Close all Doors

It is important to keep all cabinet doors closed. If doors are not fully closed, an even temperature will not be maintained within the cabinet.

#### **Door Opening**

Closed cabinets are designed to maintain food at a temperature above 65°C. The heating system is designed to maintain this temperature with the doors being opened and closed up to sixty times per hour.

If the doors are left open for an extended period, the temperature will fall. Once the doors are closed the temperature will take some time to rise to the normal operating level.



# **TROUBLE SHOOTING**

FAULT	POSSIBLE CAUSE	REMEDY
Doors are not sliding smoothly	Door not in track	Install door correctly in track
	Debris in track	Clean door tracks (see cleaning)
Doors are not shall gerneeting	Lack of lubricant	Apply food grade lubricant to door track
	The mains isolating switch on the wall, circuit breaker or fuses are off at the power board	Turn isolating switch circuit breaker or fuses on
Cabinet does not operate/start	The main switch is off	Rotate the switch to the ON position
	The thermostat is in the OFF position	Turn control knob to desired temperature
	Internal fuse blown	Have wiring checked and replace fuse (5A Slow Blow)
	One or more doors is open	Close doors and re-test temperature after thirty minutes
Cabinet does not reach temperature	Thermostat setting disturbed	Re-set thermostat and re-test after thirty minutes
	Thermostat is faulty	Have thermostat replaced
	An element is blown	Have the element replaced
Cabinet lights not working	The main switch is OFF	Turn main switch ON
	Fuse has blown	Check wiring and replace fuse (5A Slow Blow)
Aluminium parts corroded	Caustic detergent damage	Order replacement parts

Service Personnel Only The table entries in *italics* indicate actions to be taken only by qualified Service Personnel.



### **CLEANING**

#### **Cautions**

**HEATED CABINETS - CLEANING** 

#### **Power**

#### ALWAYS TURN THE POWER SUPPLY OFF BEFORE CLEANING.

#### Water

THIS UNIT IS NOT WATERPROOF. DO NOT USE A WATER JET SPRAY TO CLEAN THE INTERIOR OR EXTERIOR OF THIS CABINET.

#### **Exterior**

HEATED CABINETS - CLEANING

#### **Metal Surfaces**

Stainless steel or aluminium surfaces should be cleaned with hot soapy water or a good quality metal cleaning compound. DO NOT clean surfaces with abrasive pads or cleaners, as paint, stainless steel and aluminium surfaces will be damaged.

#### Glass

All glass should be cleaned using a good quality glass cleaner and a clean cloth.

**DO NOT** use abrasive pads or cleaners, because they will damage the surface of the glass.

#### **Sliding Doors**

Sliding glass doors are located by plastic guides at the top and bottom.

The doors can be removed for cleaning by sliding the door to a central position, placing hands either side of the door, lifting it up and then swinging it out at the bottom.

When replacing doors,

freely.

make sure that they are located in the correct slots, top and bottom.

The left door should be in the inner slots, and the right door in the outer slots. Sliding door tracks should be vacuumed out regularly to keep doors sliding

Continued on next page



#### Interior

HEATED CABINETS - CLEANING

#### Standard Configuration Cabinet Well

To clean the cabinet well, remove the doors and lift out the dishes and dividers. Sweep out or vacuum away any loose debris.

This cabinet is a dry well unit, so the well is not waterproof.



Do NOT pour water into the well as it will leak out and damage insulation and electrical wiring.

# Dishes and Dividers

Stainless steel dishes and dividers should be cleaned with hot soapy water. Do not use abrasive pads or cleaners, as these may damage surfaces.

These parts may also be cleaned in a dishwasher.

#### Open Back Configuration Cabinet Well

On the open back configuration, the "chip dump" parts can be removed for cleaning. Sweep out or vacuum away any loose debris.

This cabinet is a dry well unit, so the well is not waterproof.

Do NOT pour water into the well as it will leak out and damage insulation and electrical wiring.





# **Routines**

HEATED CABINETS - CLEANING

Schedules	To maintain optimum performance, cleaning schedules must be regular and thorough.
Inspection	As part of the cleaning routine, the controls, mechanical parts and electrical wiring should be inspected for damage, deterioration or need of adjustment.
Correction	If any small faults are found, have them attended to promptly by a competent serviceman. Don't wait until they cause a complete breakdown.



### **INSTALLATION**

## Regulations

HEATED CABINETS - INSTALLATION

Compliance with Local Requirements

It is very important that your inline food cabinet is installed correctly and that the operation is correct before use. Installation must comply with local electrical, health & safety and hygiene requirements.

### **Setting Up**

**HEATED CABINETS - INSTALLATION** 

#### Unpacking

Unpack and check unit for damage and report any damage to the carrier and supplier. Report any deficiencies to your supplier. The cabinet is supplied fully assembled.

#### Site Preparation

Ensure the cabinet location and any bench cut outs conform to the dimensions shown in the Mechanical Drawings. Use a spirit level to ensure the cabinet is level from side to side and front to back.

# Cabinet Preparation

Remove all tapes, ties and packers, used to prevent movement of components during transit. Lift out the dishes and divider bars, access the cabinet well.

Check that all plastic film protection has been removed from surfaces, otherwise it will melt when the cabinet heats up.

Re-assemble the dividers and dishes.

#### Grounding

#### WARNING: THIS APPLIANCE MUST BE GROUNDED TO EARTH

The earth lead, in the mains cable, must always be connected to ground.

A binding post is also provided, to allow the cabinet to be bonded to a surge grounding conductor or to adjacent equipment, should this be required.

#### **Power Supply**

Before connecting to the power supply, check that the local supply is correct to that shown on the rating plate, located on the rear of the cabinet.

#### Isolation

If the cabinet is not connected by a plug and socket, but is hard wired to the mains supply, a means of isolation must be provided.

If a plug and socket are used, they should still be accessible after the cabinet is installed.

Continued on next page



# Location

HEATED CABINETS - INSTALLATION

Ventilation	The Bain-Marie cabinet is designed to meet the HACCP specification with free room air circulation.
Access	Access to the back of the cabinet is required for loading, cleaning and operation of the control panel.
Fumes and Odours	Before use, operate the cabinet for 4 hours at 90°C, to remove any fumes or odours, which may be present. Open the doors periodically during this period, to allow a change of air. This will avoid possible tainting of food.



### **SERVICING**

#### **Control Gear**

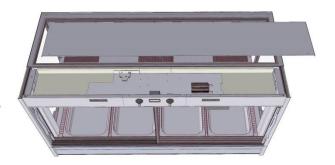
HEATED CABINETS - SERVICING

#### Location

The electrical control gear is located in the top of the cabinet.

Remove the top plate to access the control gear.

The chassis has a mains switch, a thermometer, a thermostat and a protective fuse.



# Lighting

**HEATED CABINETS - SERVICING** 

#### Caution

### Do <u>not</u> service lights without isolating the cabinet from the mains supply.

#### Illumination

Illumination is provided by halogen lamp fittings, mounted in the top of the cabinet.

These lamps provide both light and a degree of heating.

Blown lamps can be replaced after



opening the fitting. Be sure to use the same wattage rating lamp.

The ceramic end connectors are also available as spares, should they become faulty.

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## INLINE 3000 SERIES SQUARE/BAIN MARIE

### **Heating**

**HEATED CABINETS - SERVICING** 

#### Caution

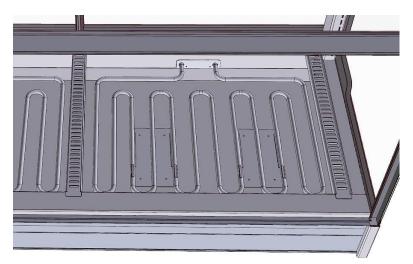
DO NOT attempt to replace heating elements without isolating the cabinet at the supply switch or by unplugging it from the mains supply.

#### Element Replacement

#### **CAUTION:**

This must only be carried out by a qualified service person. Remove the doors and base trays from the cabinet, to reveal the heating elements.

To access the element terminals, remove the screws securing the element to the rear bulkhead. Unclip the element from its support brackets



and withdraw it to reveal the connections.

Disconnect the old element, connect the replacement, taking care to replace and refit any insulation material. Position the new element against the bulkhead, clip it into the support brackets and replace the two fixing screws.

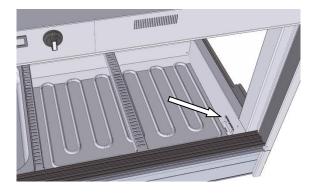
#### Test

Turn the power on and test the heating operation. If the heating is now working, replace the divider bars, dishes and doors.

If normal operation cannot be restored, by replacing the element, other circuit elements will have to be checked, see Fault Finding.

# Temperature Probes

The temperature probes for the thermostat and the thermometer are located in the cabinet well.





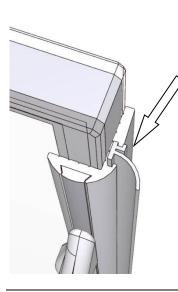
### **Door Seals**

HEATED CABINETS - SERVICING

#### Seal Replacement

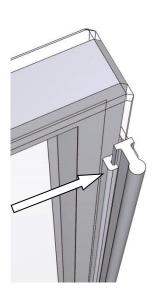
The doors should be removed to allow the old seals to be removed and the new ones fitted. See the Cleaning section for details.

### **Sliding Doors**



Each sliding door has a rubber seal between the door and the cabinet end panel. The seal slides into a groove in the door extrusion, and can be withdrawn and replaced, if damaged.

A centre seal is fitted between the inner and outer doors. The Qlon seal is located in a slot in the aluminium extrusion, and can be replaced if damaged.





# **SPECIFICATIONS**

# **Mechanical**

HEATED CABINETS - SPECIFICATIONS

	CABINET MODEL			
	IN 3B06S	IN 3B09S	IN 3B12S	IN 3B15S
Height	778 mm	621 + 157 mm	778 mm	778 mm
Width	600 mm	900 mm	1200 mm	1500 mm
Depth	685 mm	685 mm	685 mm	685 mm
Dry Weight				
Cabinet Well Material		Stainless steel		
Cabinet Colour	Grey, stainless steel and natural anodised aluminium.			
Top Lighting	Halogen Heat Lamps			
Glass Type	Double Glazed and Toughened			
Rear doors	Open/Sliding	Sliding glass	Sliding glass	Sliding glass
Cabinet front	Fixed glass	Fixed glass	Fixed glass	Fixed glass
Cabinet top	Fixed glass	Fixed glass	Fixed glass	Fixed glass
Climatic Class & IP	All cabinets are suitable for class N climates and have an IP 22 rating			

# **Electrical**

HEATED CABINETS - SPECIFICATIONS

	CABINET MODEL			
	IN 3B06S	IN 3B09S	IN 3B12S	IN 3B15S
Voltage	220 - 240 V 50 Hz 1φ			
Power	1.15 kW	1.05 kW	1.8 kW	2.0 kW
Current	5 A	4.6 A	7.8 A	8.7 A
Connection	3 pin plug, 10 A lead			
HACCP Temp. Range	65° - 80° C	65° - 80° C	65° - 80° C	65° - 80° C
Max. Temp. Range	30° - 110° C	30° - 110° C	30° - 110° C	30° - 110° C
Linear Halogen Heat Lamps	1 x 300W	2 x 100W	2 x 100W	3 x 100W



# **Compliance**

**HEATED CABINETS - SPECIFICATIONS** 

#### **Standards**

FPG heated food display cabinets are designed to meet and exceed:

- International safety standards for electrical heated appliances: IEC 60335-1, IEC 60335-2-49, IEC 60335-2-50 and the equivalent country-specific standards including AS/NZS and BS EN.
- International standards for electromagnetic compatibility/emissions: CISPR 14-1, and the equivalent county-specific standards including AS/NZS CISPR and BS EN 55014-1.
- Essential safety requirements: AS/NZS 3820 and AS/NZS 4417

Please contact FPG to discuss your requirements for meeting country-specific standards.

# Performance Aspects

The cabinet is HACCP compliant, with the following performance:

Cabinet Operating Temperature	Test Conditions
>65°C	22°C Ambient with 65% RH

#### **Improvements**

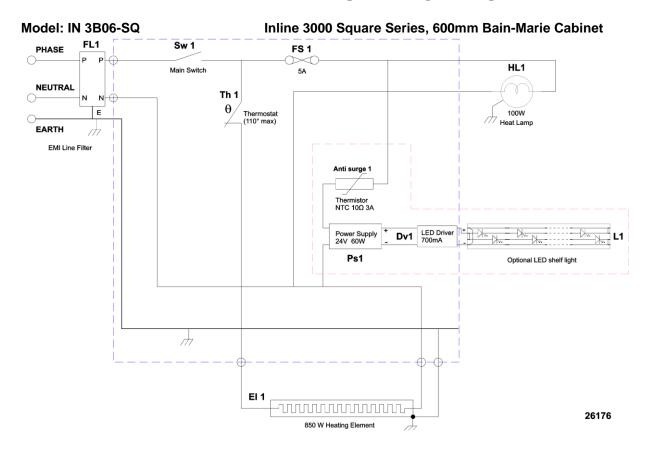
**HEATED CABINETS - SPECIFICATIONS** 

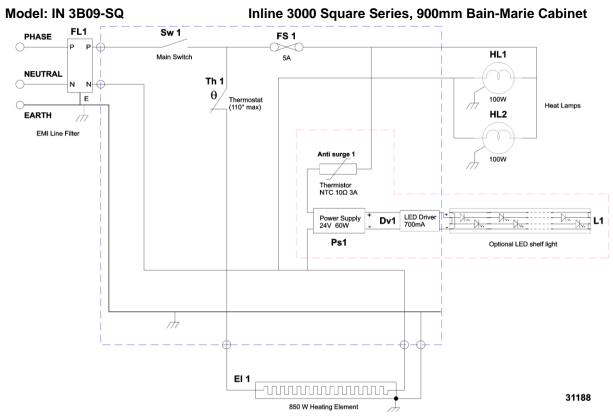
# Ongoing Development

FPG reserves the right to change specifications and construction, as part of ongoing product improvement.



# **ELECTRICAL CIRCUIT DIAGRAMS**

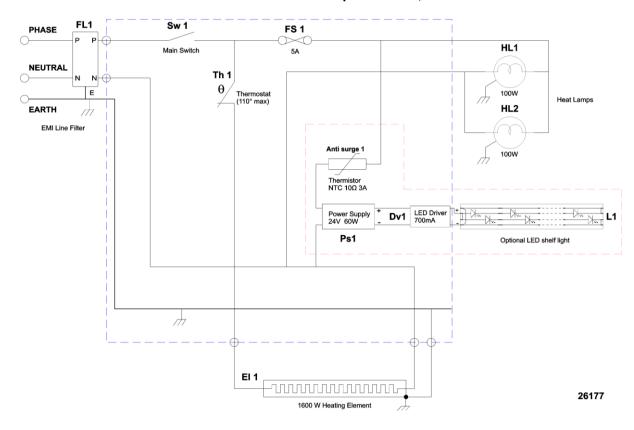






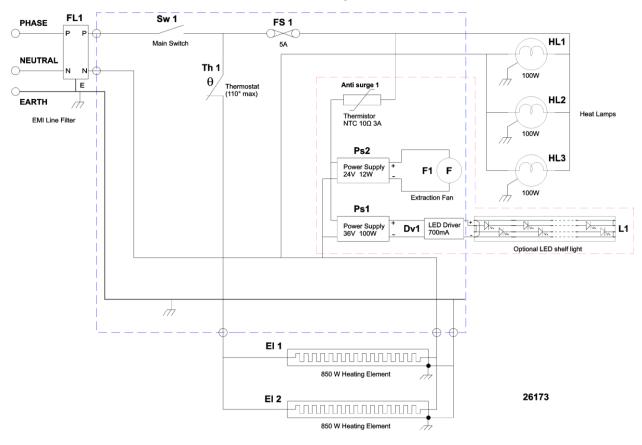
#### Model: IN 3B12-SQ

#### Inline 3000 Square Series, 1200mm Bain-Marie Cabinet



#### Model: IN 3B15-SQ

#### Inline 3000 Square Series, 1500mm Bain-Marie Cabinet





# **SPARE PARTS**

# Cabinet Serial Number

When ordering spare parts, it is important to quote the Serial Number printed on the label fixed to the control panel. This will enable FPG to ensure that spare parts are fully compatible with your cabinet.

To satisfy warranty conditions, and ensure optimum performance, use only FPG supplied spare parts.

Part Description	FPG Part No.
EMI Line Filter 10A 250V	30828
Main Switch EGO	14372
Knob (main switch)	14374
Replacement LED light kit, 600mm cabinet	70321
Replacement LED light kit, 900mm cabinet	69402
Replacement LED light kit, 1200mm cabinet	70380
Replacement LED light kit, 1500mm cabinet	70383
Light Cover 720mm Clear	29404
Light Cover 1120mm Clear	29405
24V 12W LED Power Supply	25184
24V 60W LED Power Supply	21613
36V 100W LED Power Supply	25922
LED Driver 700mA	25762
Anti-surge Thermistor 10 Ohm 3A	22354
Extraction Fan 24V dc	23282
Knob (thermostat, 30-110°C)	15854
Thermostat	11929
Thermometer	11925
Heating Element 850W	23989
Heating Element 1600W	20779
100W 230V R7S Infra-Red Halogen Lamp	24860
300W 230V R7S Infra-Red Halogen Lamp	22907



# Spare Parts cont.

**Location of Glass Parts** 

In the following table, handed glass parts are labelled as viewed from the REAR of the cabinet.

Part Description	FPG Part No.
Qlon centre door seal	12922
Slide-in rubber door seal	11424
Gastro Dish 65mm deep	11000
Gastro Dish 65mm deep, half size	11026
LH Square DG End Glass Replacement Kit	70367
RH Square DG End Glass Replacement Kit	75992
600 Square DG Fixed Front Glass Replacement Kit	75986
600 Square DG Top Glass Replacement Kit	75941
Rear Inner Sliding Door (600)	68139
Rear Outer Sliding Door (600)	68140
900 Square DG Fixed Front Glass Replacement Kit	75983
900 Square DG Top Glass Replacement Kit	75988
Rear Inner Sliding Door (900)	69407
Rear Outer Sliding Door (900)	69408
1200 Square DG Fixed Front Glass Replacement Kit	75989
1200 Square DG Top Glass Replacement Kit	75984
Rear Inner Sliding Door (1200)	69018
Rear Outer Sliding Door (1200)	69019
1500 Square DG Fixed Front Glass Replacement Kit	75990
1500 Square DG Top Glass Replacement Kit	75985
Rear Inner Sliding Door (1500)	68871
Rear Outer Sliding Door (1500)	68872
Product Manual for Inline 3000 Square Series Heated Cabinets	26174

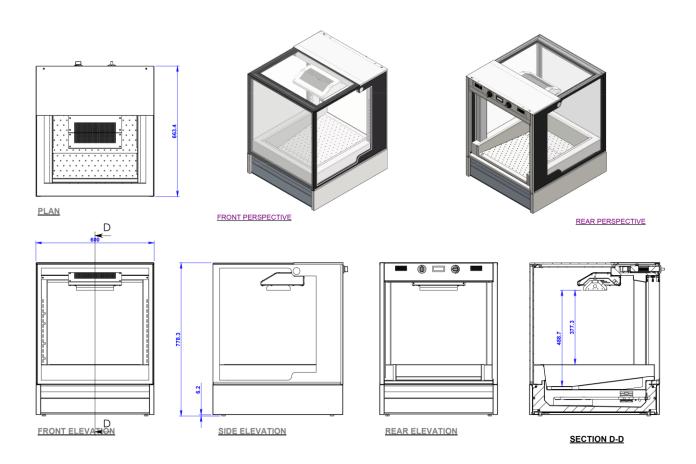


# **MECHANICAL DRAWINGS**

# **Dimensions**

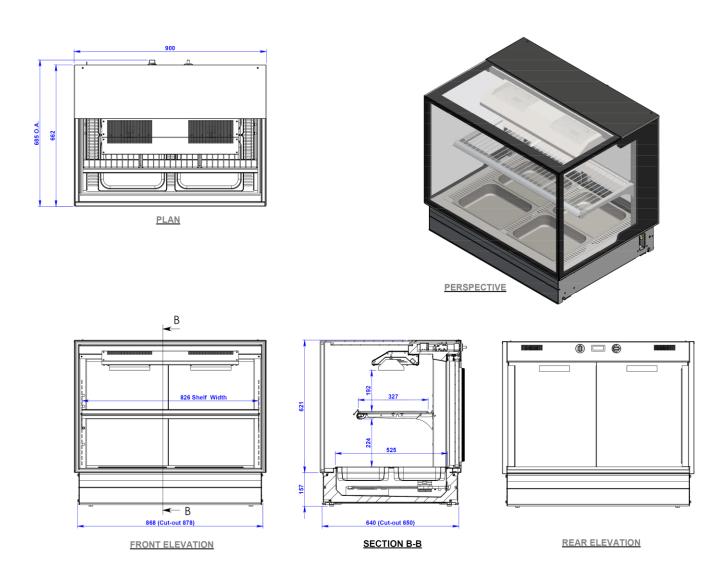
HEATED CABINETS - MECHANICAL DRAWINGS

### IN 3B06-SQ-FF Open-Back Configuration



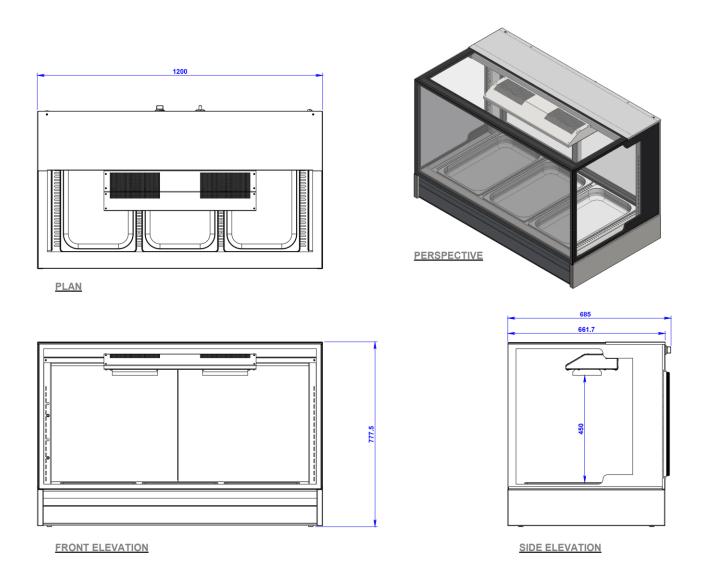


# IN 3B09-SQ-FF In Counter Mounting



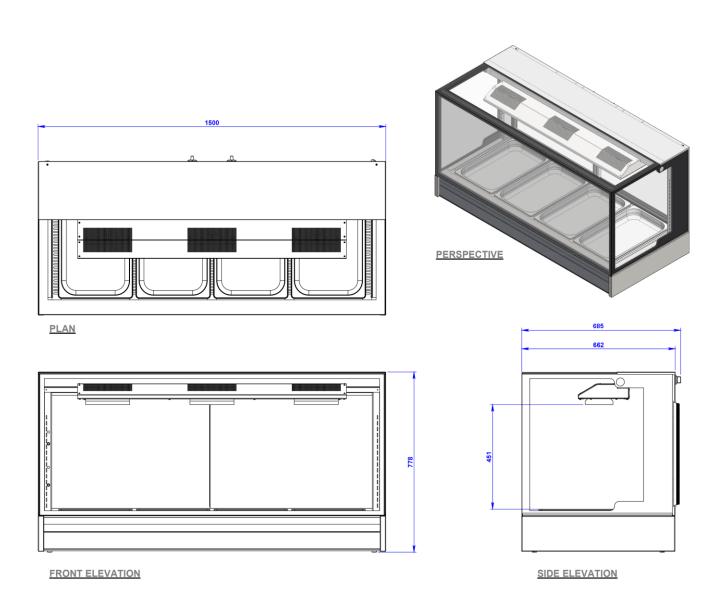
# INLINE 3000 SERIES SQUARE/BAIN MARIE

# IN 3B12-SQ-FF On Counter Mounting





# IN 3B15-SQ-FF On Counter Mounting



# INLINE 3000 SERIES SQUARE/BAIN MARIE



# PRODUCT MANUAL 26174 REV I MAY 2022

In line with our policy to continually develop, improve and support our products, Future Products Group Ltd reserves the right to change specifications and design without notice.

Worldwide **A F** contact **& F** details: **1** 

