



P R O D U C T M A N U A L

INLINE 3000

FOOD CABINETS



Dry Well Bain-Marie Cabinets

INSTALLATION - OPERATION - MAINTENANCE



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INTRODUCTION

Welcome

BAIN-MARIE 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

BAIN-MARIE 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.

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

Continued on next page

Warranty cont.

BAIN-MARIE CABINETS - INTRODUCTION

Liability Exceptions

Liability under this warranty does not include:

- Any loss, or damage or expenses directly or indirectly arising from use 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, flooding, 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 fluorescent tubes or gaskets.
 - 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

No warranty claim will be accepted unless authorised by FPG prior to commencement of service.

OPERATION

Cabinet Layout

BAIN-MARIE CABINETS - OPERATION

3000 Series Cabinets

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

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

The cabinet lighting and temperature controls are on the back of the cabinet.

The 3000 Series also includes Ambient, Heated and Refrigerated models.



Lighting

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

Controls

BAIN-MARIE CABINETS - OPERATION

Light Switch



The control panel is located at the top of the cabinet back.

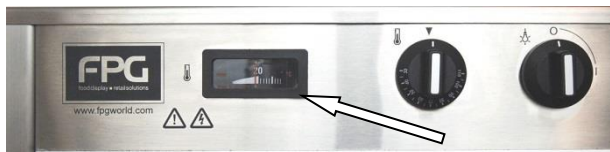
Rotate the light switch to turn on the heat lamps.

Heating



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

Thermometer



A thermometer indicates the internal temperature of the cabinet.



Preparation

BAIN-MARIE CABINETS - OPERATION

Power Supply Ensure that power is connected to the cabinet.

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

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, so do NOT place cold products in the cabinet.

WARNING:
Aluminium Foil



Do NOT place aluminium foil over the slots between the base dishes. This will disrupt the convection circulation of air, and cause uneven heating.

Blockage of air vents may cause severe overheating of the cabinet base.

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.

Turn on Lights When ready for service, turn on the cabinet lights.

Door Opening The cabinet is 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. The longer the doors are open the longer the time to restore normal operating temperature.



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)
	Lack of lubricant	Apply food grade lubricant to door track
Cabinet does not operate/start	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
	The thermostat is in the OFF position	Turn control knob to desired temperature
	Internal fuse blown	<i>Have wiring checked and replace fuse (5A Slow Blow)</i>
Cabinet does not reach temperature	One or more doors is open	Close doors and re-test temperature after thirty minutes
	Thermostat setting disturbed	Re-set thermostat and re-test after thirty minutes
	Thermostat is faulty	<i>Have thermostat replaced</i>
	An element is blown	<i>Have the element replaced</i>
Cabinet lights not working	The light switch is OFF	Turn light switch ON
	Halogen lamp has failed	Replace lamp
	Internal fuse blown	<i>Have wiring checked and replace fuse (5A Slow Blow)</i>
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

BAIN-MARIE 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

BAIN-MARIE 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 (e.g. Scotchbrite pads or Jif), 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 central position, placing hands either side of the door, lifting it up and then swinging it out at the bottom.

When replacing doors, 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 freely.

Continued on next page

Interior

BAIN-MARIE CABINETS - CLEANING

Cabinet Well



To clean the hot cabinet well, first lift out the dishes and dividers and then sweep out or vacuum away 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 & Air Grills

Stainless steel dishes and grills should be cleaned with hot soapy water. Do not use abrasive pads or cleaners (e.g. Scotchbrite pads or Jif), as these may damage surfaces.

Routines

BAIN-MARIE 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

BAIN-MARIE 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

BAIN-MARIE 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, but the food dishes and supports may be packed separately.

Site Preparation

Ensure the cabinet location and any bench cut outs are made to the precise measurements shown in the Mechanical Drawings. Position the cabinet in its allocated working position. Use a spirit level to ensure the cabinet is level from side to side and front to back. (If this is not carried out, uneven temperature distribution could occur).

Cabinet Preparation

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

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

Grounding

WARNING: THIS APPLIANCE MUST BE GROUNDED TO EARTH

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

A binding post is also provided adjacent to the control gear chassis, 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.

Continued on next page

Setting Up cont.

BAIN-MARIE CABINETS - INSTALLATION

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.

Location

BAIN-MARIE CABINETS - INSTALLATION

Ventilation



The heated cabinet is designed to meet the HACCP specification with free room air circulation.

Do not obstruct the vents in the rear top panel.

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.

Livery

BAIN-MARIE CABINETS - INSTALLATION

Custom Inserts The captive strips, above and below the front doors, can be removed and replaced with coloured or printed strips of decorative laminate, if desired. The cabinet top must be unscrewed, to allow the upper strip to be changed.



The lower strip is held captive by the cabinet ends, and has to be bowed for removal and insertion.



Insert the upper edge into the narrow groove, closest to the curved surface, bow the strip to insert the end into the lower groove, then, use your thumbs to work the rest of the strip into place.

If the strip is hard to bend, a length of wooden dowel can be placed underneath to aid bowing. The dowel should be progressively withdrawn as the strip is inserted.

Note: Most metals are too rigid for insertion in this position.

Maximum strip thickness is 0.75mm. See Mechanical Drawings for dimensions.

SERVICING

Control Gear

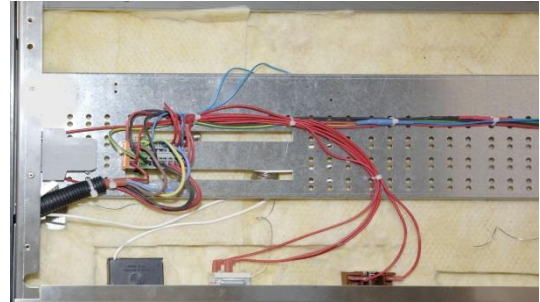
BAIN-MARIE CABINETS - SERVICING

Location

The electrical control gear is located in the top of the cabinet. Remove six screws to remove the top plate.

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

The incoming mains cable is terminated on a connecting block.



Lighting

BAIN-MARIE CABINETS - SERVICING

Caution

Do not 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.

Test

Turn the power on and test lighting operation. If normal operation cannot be restored, by replacing the lamp, call an electrician.

Heating

BAIN-MARIE 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

Remove all food dishes and dividers from inside the cabinet, to reveal the heating elements.



CAUTION:

This must only be carried out by a qualified service person.

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.

Temperature Probes

The temperature probes for the thermostat and the thermometer are located at the top of the cabinet.



Test

Turn the power on and test the heater operation. If normal operation cannot be restored, by replacing the element, other circuit components will have to be checked, see Fault Finding.

Re-assemble

If the heater is now working, re-assemble the food dishes and dividers inside the cabinet.

Door Seals

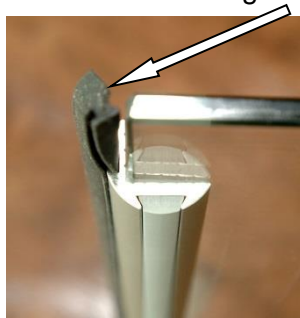
BAIN-MARIE CABINETS - SERVICING

Seal Replacement

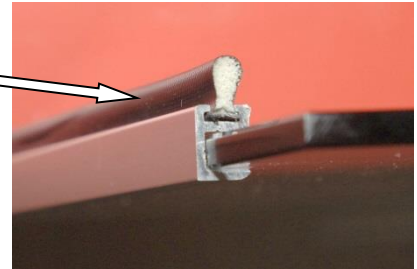
The doors should be removed to allow the old seals to be removed and the new ones fitted. See the Cleaning section for details.

Sliding Doors

Each sliding door has a 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.



Mains Lead

BAIN-MARIE CABINETS - SERVICING

Lead Replacement

If damaged, the mains lead must ONLY be replaced by a qualified service person.

SPECIFICATIONS

Mechanical

BAIN-MARIE CABINETS - SPECIFICATIONS

	CABINET MODEL		
	IN 3B08	IN 3B12	IN 3B15
Height	761 mm	761 mm	761 mm
Width	803 mm	1203 mm	1503 mm
Depth	663 mm	663 mm	663 mm
Dry Weight	45 kg	60 kg	75 kg
Cabinet Well Material	Stainless steel	Stainless steel	Stainless steel
Cabinet Colour	Grey, stainless steel and natural anodised aluminium.	Grey, stainless steel and natural anodised aluminium.	Grey, stainless steel and natural anodised aluminium.
Top Heat Lamps	Standard	Standard	Standard
Glass Type	Toughened	Toughened	Toughened
Glass (front/back)	Single glazed	Single glazed	Single glazed
Glass (ends)	Double glazed	Double glazed	Double glazed
Front Doors	Fixed	Fixed	Fixed
Display Area	0.3m ²	0.45m ²	0.6m ²
Climatic Class & IP	All cabinets are suitable for class N climates and have an IP 22 rating		

Electrical

BAIN-MARIE CABINETS - SPECIFICATIONS

	CABINET MODEL		
	IN 3B08	IN 3B12	IN 3B15
Voltage	230 - 240 V 50 Hz 1 ϕ	230 - 240 V 50 Hz 1 ϕ	230 - 240 V 50 Hz 1 ϕ
Power	1.1 kW	1.8 kW	2.0 kW
Current	4.8 A	7.5 A	8.7 A
Connection	3 pin plug, 10 A lead	3 pin plug, 10 A lead	10 A lead
HACCP Temp. Range	65° - 80° C	65° - 80° C	65° - 80° C
Max. Temp. Range	30° - 110° C	30° - 110° C	30° - 110° C
Heat Lamps	2 x 100W Linear Halogen	2 x 100W Linear Halogen	3 x 100W Linear Halogen



Compliance

BAIN-MARIE CABINETS - SPECIFICATIONS

Safety Aspects This cabinet has been designed to comply with the relevant requirements of the following specifications:

- AS/NZS 3100 : General Requirements for Electrical Equipment
 - IEC 335: Heated Food Cabinets
 - AS/NZS 3820 : Essential Safety Requirements
 - AS/NZS 4417 : Marking of Electrical Products
-

Performance Aspects The cabinet is HACCP compliant, with the following performance:

Cabinet Operating Temperature	Test Conditions
>65°C	23°C Ambient with 60% RH

Improvements

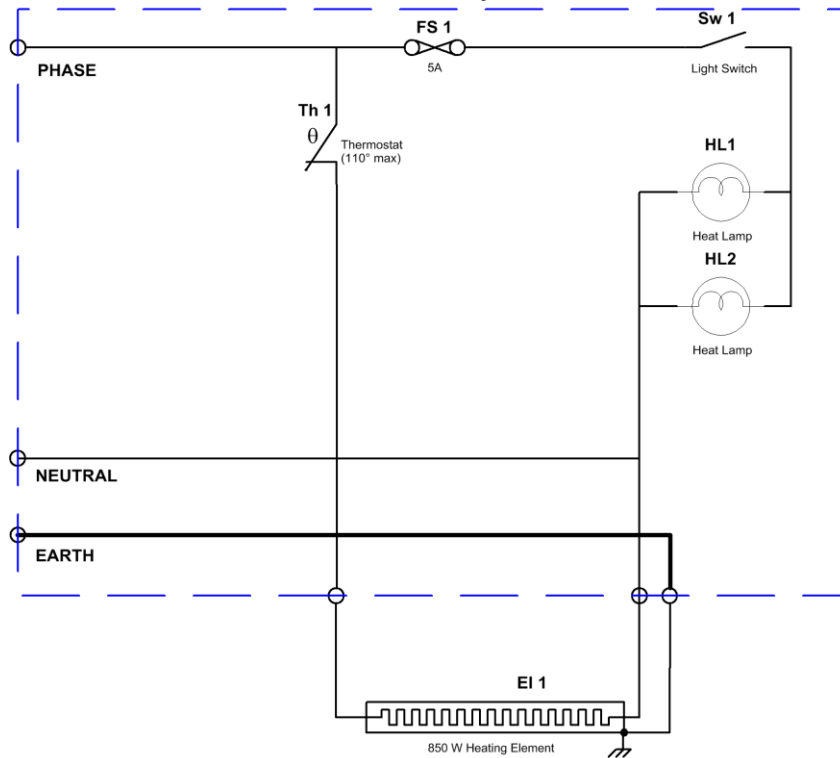
BAIN-MARIE CABINETS - SPECIFICATIONS

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

ELECTRICAL WIRING DIAGRAMS

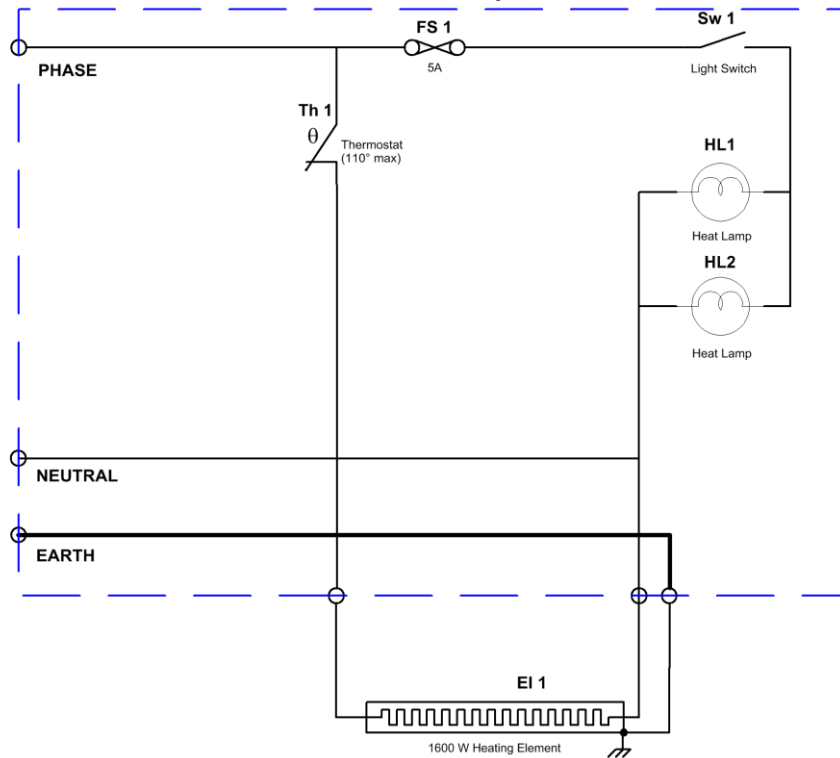
Model: IN 3B08

Inline 3000 Series, 800mm Dry Well Bain-Marie Cabinet



Model: IN 3B12

Inline 3000 Series, 1200mm Dry Well Bain-Marie Cabinet

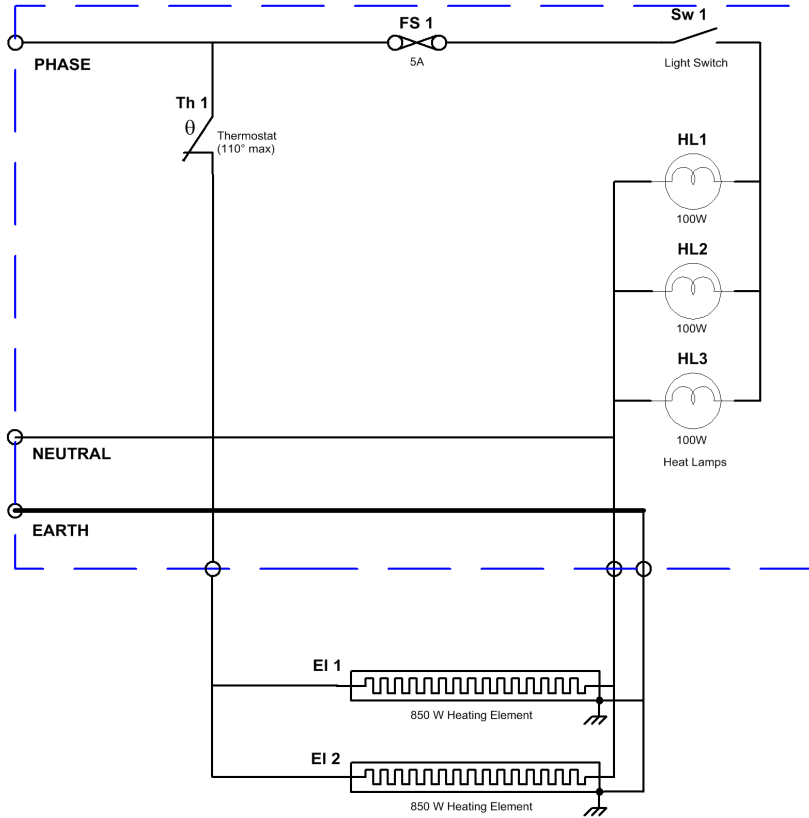


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ELECTRICAL WIRING DIAGRAMS, Continued

Model: IN 3B15

Inline 3000 Series, 1500mm Dry Well 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 serial number will enable FPG to trace details of the build specification of your particular cabinet, and hence ensure that spare parts are fully compatible.

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

Part Description	FPG Part No.
Light Switch EGO	14372
Knob (light switch)	14374
Knob (thermostat, 30-110°C)	15854
Thermostat	11929
Thermometer	11925
Fuse Link (5A, 250V, Slow Blow)	13330
100W 230V R7S Infra-Red Halogen Lamp	24860
Heating Element 850W 230V (800/1500 Cabinets only)	22557
Heating Element 1600W 230V with mounting plate (1200 Cabinets)	20779
Qlon centre door seal	13677
Slide-in rubber door seal	11424

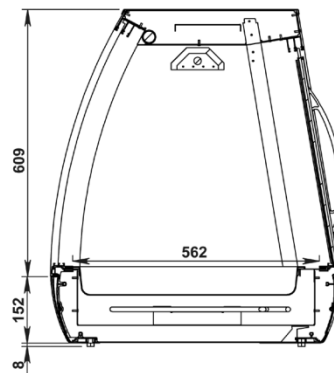
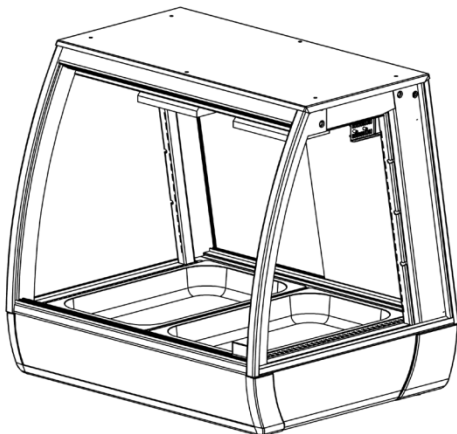
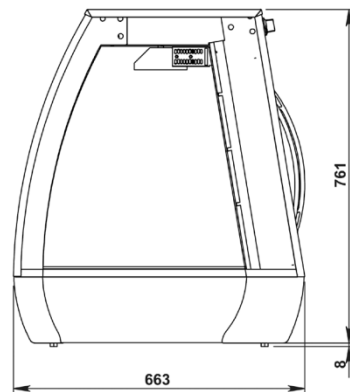
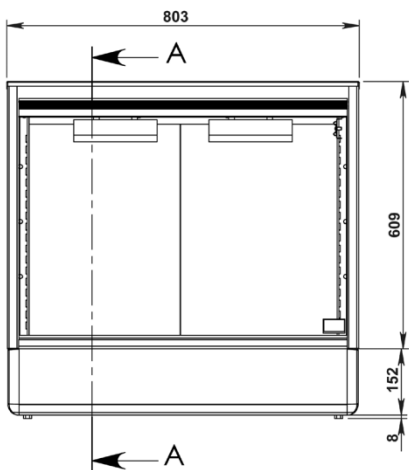
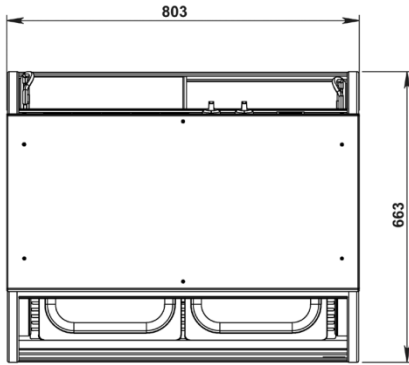
Part Description	FPG Part No.
LH End Glass Kit (viewed from back of cabinet)	62709
RH End Glass Kit (viewed from back of cabinet)	62710
Back Inner Sliding Door(800 cabinets only)	62662
Back Outer Sliding Door(800 cabinets only)	62663
Back Inner Sliding Door(1200 cabinets only)	62664
Back Outer Sliding Door(1200 cabinets only)	62665
Back Inner Sliding Door(1500 cabinets only)	62666
Back Outer Sliding Door(1500 cabinets only)	62667
Front Inner Curved Sliding Door (800 cabinets)	63342
Front Outer Curved Sliding Door (800 cabinets)	63343
Front Inner Curved Sliding Door (1200 cabinets)	63344
Front Outer Curved Sliding Door (1200 cabinets)	63345
Front Inner Curved Sliding Door (1500 cabinets)	63346
Front Outer Curved Sliding Door (1500 cabinets)	63347
Front Fixed Glass Kit (800 cabinets)	62643
Front Fixed Glass Kit (1200 cabinets)	62649
Front Fixed Glass Kit (1500 cabinets)	62653
Product Manual for Inline 3000 Series Dry Well Bain-Marie Cabinets	16894

MECHANICAL DRAWINGS

Dimensions

BAIN-MARIE CABINETS - MECHANICAL DRAWINGS

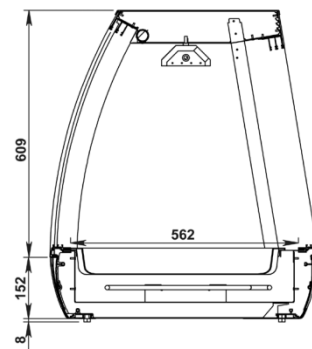
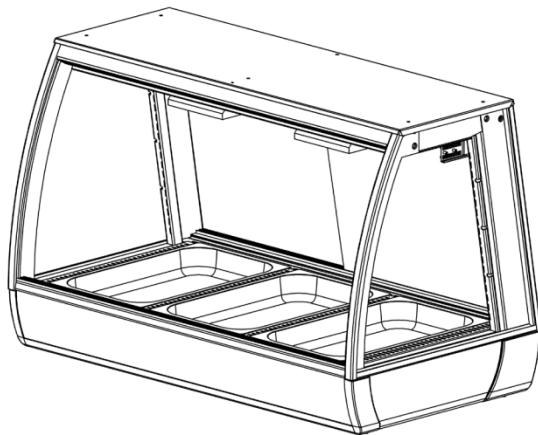
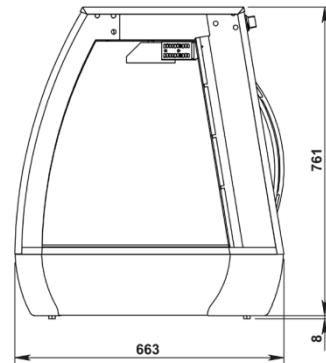
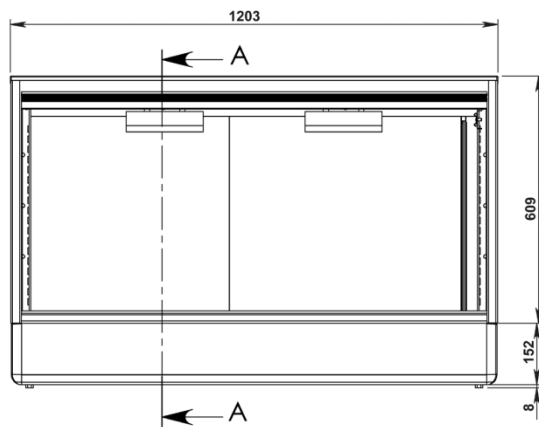
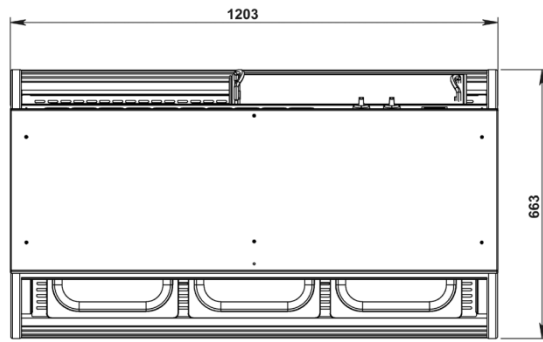
IN-3B08



SECTION A-A

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IN-3B12

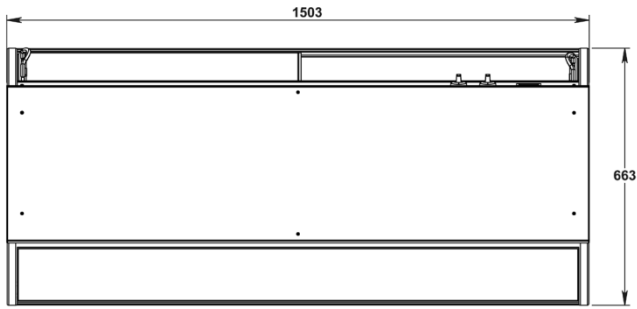


SECTION A-A

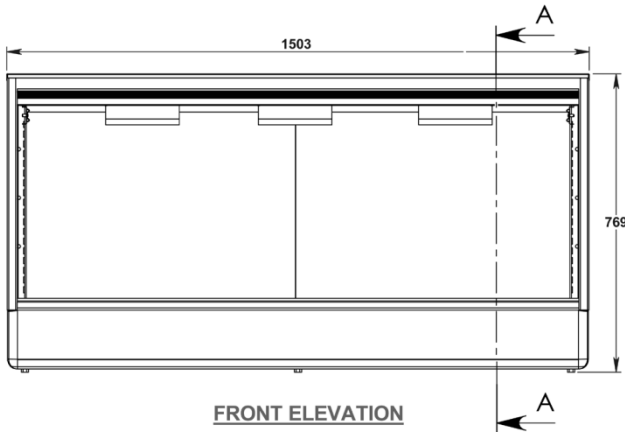
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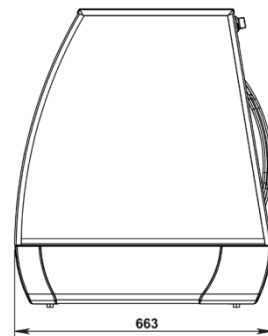
IN-3B15



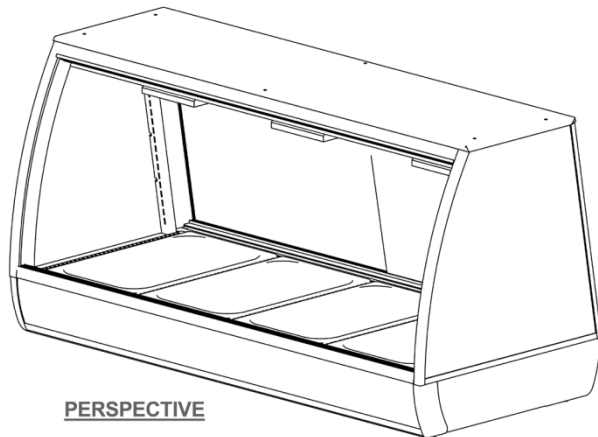
PLAN



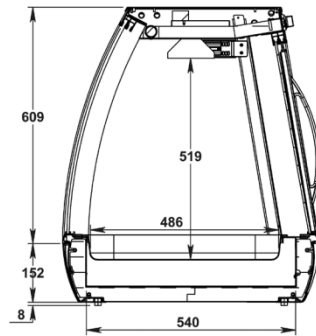
FRONT ELEVATION



SIDE ELEVATION



PERSPECTIVE



SECTION A-A

Cabinet Variants

The following drawings show the common overall dimensions for 800mm, 1200mm and 1500mm cabinets.

Livery

Top Insert 749 / 1149 / 1449 mm long x 50 mm wide

Bottom Insert 754 / 1154 / 1454 mm long x 134 mm wide

Colour / Text Inserts

Max. thickness 0.75 mm

If custom livery is applied to the cabinet, the insert material must be flexible, such as *Formica* decorative laminate or plastic sheet.

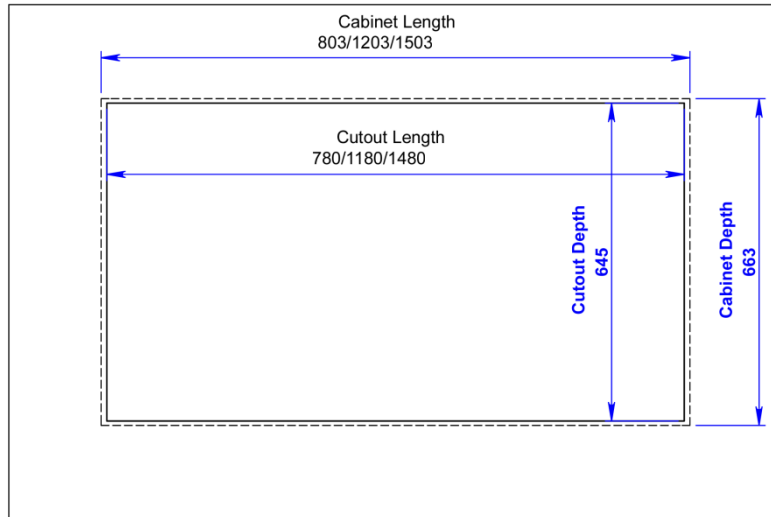
Most metals cannot be flexed sufficiently for insertion in the lower position.

Bench Cut-outs

BAIN-MARIE CABINETS - MECHANICAL DRAWINGS

In Bench Mounting

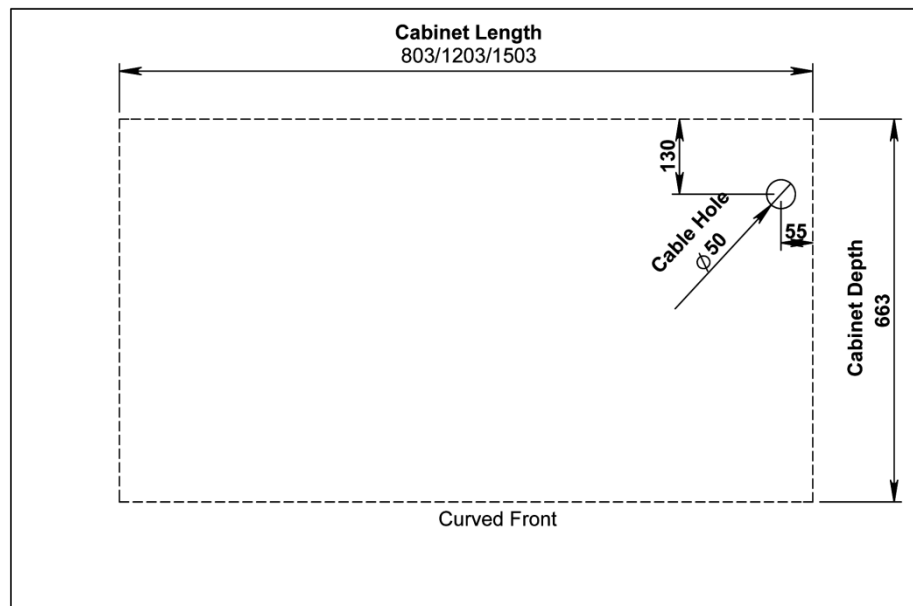
The following diagram shows the aperture dimensions, which will allow the cabinet well to enter the bench. The cabinet food dishes will then be just above bench height.



On Bench Mounting

The following diagram shows the size and location of the holes, required for the cabinets to sit on the bench.

The holes are always in the same location, with reference to the back, right hand corner of all cabinets.



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