



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

INLINE 4000S

FOOD CABINETS



Ambient Cabinets

Square Format

INSTALLATION - OPERATION - MAINTENANCE



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INTRODUCTION

Welcome

AMBIENT 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

AMBIENT 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.

AMBIENT 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 LED lighting assemblies 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

AMBIENT CABINETS - OPERATION

4000 Series Cabinets

The 4000 Series Square cabinets are available with either fixed glass or sliding glass front doors, and sliding glass rear doors.

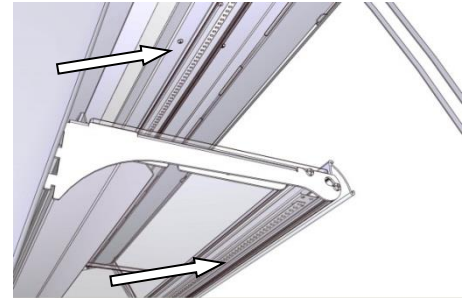
The series includes Ambient, Heated and Refrigerated models.

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



Lighting

All cabinets are fitted with high efficiency LED lighting strips in the ceiling of the cabinet and below each shelf as standard.



Controls

AMBIENT CABINETS - OPERATION

Light Switch



The control panel is located on the back of the cabinet.

Use the switch to control the lights, and fan.

Preparation

AMBIENT CABINETS - OPERATION

Shelf Location and Ticketing

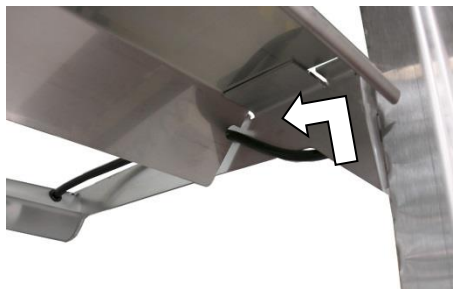
All shelves are adjustable in height and can easily be moved up or down, to match product size.

The movement is restricted to 50mm, because of the electric cables to the lights. For greater movement contact the manufacturer or supplier for advice, as electrical modifications may be required.

The front and rear edges of the shelves are profiled to carry ticketing/labels.



Shelf Adjustment



To move the shelf brackets, first remove the sliding doors and the shelf trays.

Using two people, one on each bracket, lift the brackets straight up firmly and then pull the brackets forward, to disengage them from the slots in the support posts.

Insert the brackets into their new position, and push bracket down firmly.

The brackets may be positioned to give two different degrees of slope to the shelves.

N.B. Make sure brackets are pushed down as far as they can go. Failure to do this may result in shelf collapse, when loaded with product.

Power Supply

Ensure that power is connected to the cabinet.

Load Cabinet

Load the cabinet with product.

The cabinet is designed to house product at room temperature. It is not temperature controlled, and consequently, if hot or cold product is introduced, there could be a considerable delay before room temperature is reached.

Turn on Lights

When ready for service, turn on the cabinet lights.

Ventilation

The cabinet is ventilated by a small extraction fan in the ceiling of the cabinet. Exhaust air is vented via louvers in the rear control panel.

If the louvers are blocked, heat from the lights will raise the internal temperature of the cabinet.

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	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
	Internal fuse blown	<i>Have wiring checked and replace fuse (5A Slow Blow)</i>
Cabinet Temperature High	Ventilation louvers blocked	Clean to remove blockage
	Ventilation fan failed	<i>Repair or replace fan</i>
Cabinet lights not working	The light switch is OFF	Turn light switch ON
	A failed LED power supply	<i>Replace the power supply</i>
	An LED strip has failed	<i>Replace the LED assembly</i>
	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

AMBIENT 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

AMBIENT 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 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 clean glass with abrasive pads or cleaners (e.g. Scotchbrite pads or Jif), as the glass will be damaged.

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.



Interior

AMBIENT CABINETS - CLEANING

Trays, Shelves & Air Grills

Stainless steel trays, shelves, grills etc. should be cleaned with hot soapy water. Do not use abrasive pads or cleaners, as these may damage surfaces.

Warning: Dishwasher detergents will damage any anodised aluminium parts.

Routines

AMBIENT 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.

Fault 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

AMBIENT 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

AMBIENT CABINETS - INSTALLATION

Unpacking

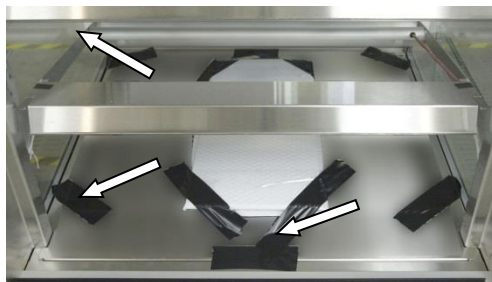
Unpack and check unit for damage and report any damage to the carrier and supplier. Report any deficiencies to your supplier.

The cabinet is supplied fully assembled, but the shelf trays are 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.

Cabinet Preparation



Remove all tapes, ties and packers, used to prevent movement during transit.

Check that all plastic film protection has been removed from surfaces.

Assemble the trays and shelves.

Shelf Trays

Remove the shelf trays from their packing, peel off the protective plastic coating and assemble them on the support members.

Continued on next page

Setting Up cont.

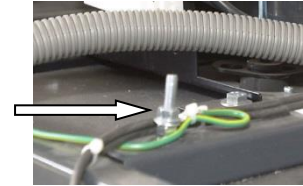
AMBIENT CABINETS - INSTALLATION

Grounding

WARNING: THIS APPLIANCE MUST BE GROUNDED TO EARTH

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

Terminals are also provided, to allow the cabinet to be bonded to a surge grounding conductor or to adjacent equipment.



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.

Location

AMBIENT CABINETS - INSTALLATION

Ventilation

The ambient cabinet is designed to operate with free room air circulation.

Access

Access to the back of the cabinet is required for loading, cleaning, re-positioning of shelves and operation of the control panel.

Fumes and Odours

Before use, operate the cabinet for 1-2 hours, with the lights on, 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

AMBIENT 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 light switch, power supplies for the lights and a protective fuse.

Lighting

AMBIENT CABINETS - SERVICING

Caution Do not service lights without isolating the cabinet from the mains supply.

Test Lighting Components

Before replacing an LED strip, check that the power supply is working.

If there is no dc voltage at the output, the power supply should be replaced.

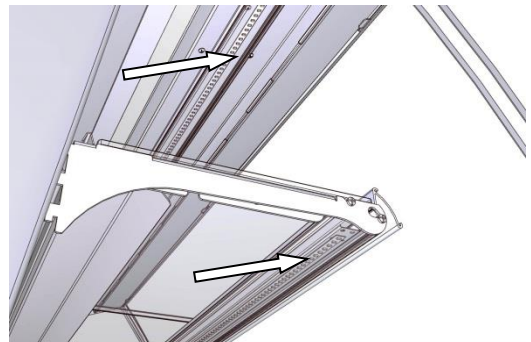
If there is a dc output, the LED strip must be replaced.

Access to LED Strips

The LED strips are protected with plastic covers. These clip into grooves in the aluminium extrusion.

Remove the plastic cover to access the LED strip.

The top light assembly is similar to the shelf lights, but the correct replacement unit must be used.

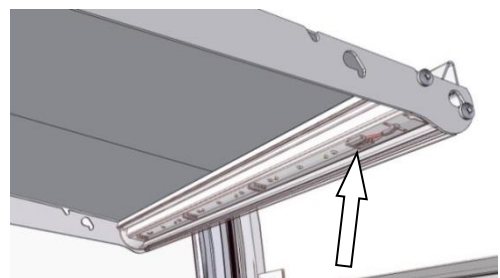


LED Strip Replacement

Individual LED modules cannot be replaced. A complete light unit must be used.

Connection is made with a plug and socket. Disconnect the supply lead from the faulty unit, and reconnect it to the replacement unit.

Replace the plastic cover.



Door Seals

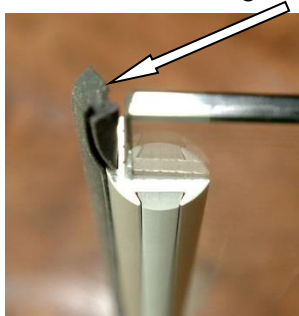
AMBIENT CABINETS - SERVICING

Seal Replacement

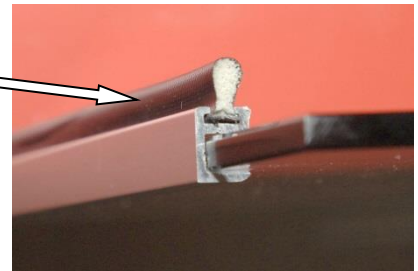
The doors should be removed to allow the old seals to be removed and the new ones fitted. See the Cleaning section for details.

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

AMBIENT CABINETS - SERVICING

Lead Replacement

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

SPECIFICATIONS

Mechanical

AMBIENT CABINETS - SPECIFICATIONS

	CABINET MODEL		
	IN 4A08S	IN 4A12S	IN 4A15S
Height	1405 mm	1405 mm	1405 mm
Width	803 mm	1203 mm	1503 mm
Depth	774 mm	774 mm	774 mm
Dry Weight	96 kg	130 kg	185 kg
Cabinet Well Material	Stainless steel	Stainless steel	Stainless steel
Cabinet Colour	Grey and natural anodised aluminium.	Grey and natural anodised aluminium.	Grey and natural anodised aluminium.
Top Lighting	Standard	Standard	Standard
Shelf Lighting	Standard	Standard	Standard
Glass Type (front/back)	Single glazed	Single glazed	Single glazed
Glass Type (ends)	Double glazed	Double glazed	Double glazed
Front Doors	Sliding or Fixed options	Sliding or Fixed options	Sliding or Fixed options
Number of Shelves	Three plus base	Three plus base	Three plus base
Display Area	1.0 m ² + base	1.6 m ² + base	2.0 m ² + base
Climatic Class & IP	Cabinets are tested under Climate Class 3 conditions and have IP 20 ratings		

Electrical

AMBIENT CABINETS - SPECIFICATIONS

	CABINET MODEL		
	IN 4A08S	IN 4A12S	IN 4A15S
Voltage	220 - 240 V 50 Hz 1φ	220 - 240 V 50 Hz 1φ	220 - 240 V 50 Hz 1φ
Power (with shelf lights)	54 W	66 W	90 W
Current (with shelf lights)	0.23 A	0.28 A	0.39 A
Connection	3 pin plug, 10 A lead	3 pin plug, 10 A lead	3 pin plug, 10 A lead
Temperature Range	Room Temp	Room Temp	Room Temp
Lighting	4 x LED strips	4 x LED strips	4 x LED strips



Compliance

AMBIENT CABINETS - SPECIFICATIONS

Standards

FPG refrigerated, controlled ambient and ambient food display cabinets are designed to meet and exceed:

- International safety standards for electrical appliances: IEC 60335-1, IEC 60335-2-89, and the equivalent country-specific standards including AS/NZS, BS EN and UL 471.
- 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
- Energy efficiency for refrigerated appliances: MEPS (Australia/New Zealand)

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

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.

Improvements

AMBIENT CABINETS - SPECIFICATIONS

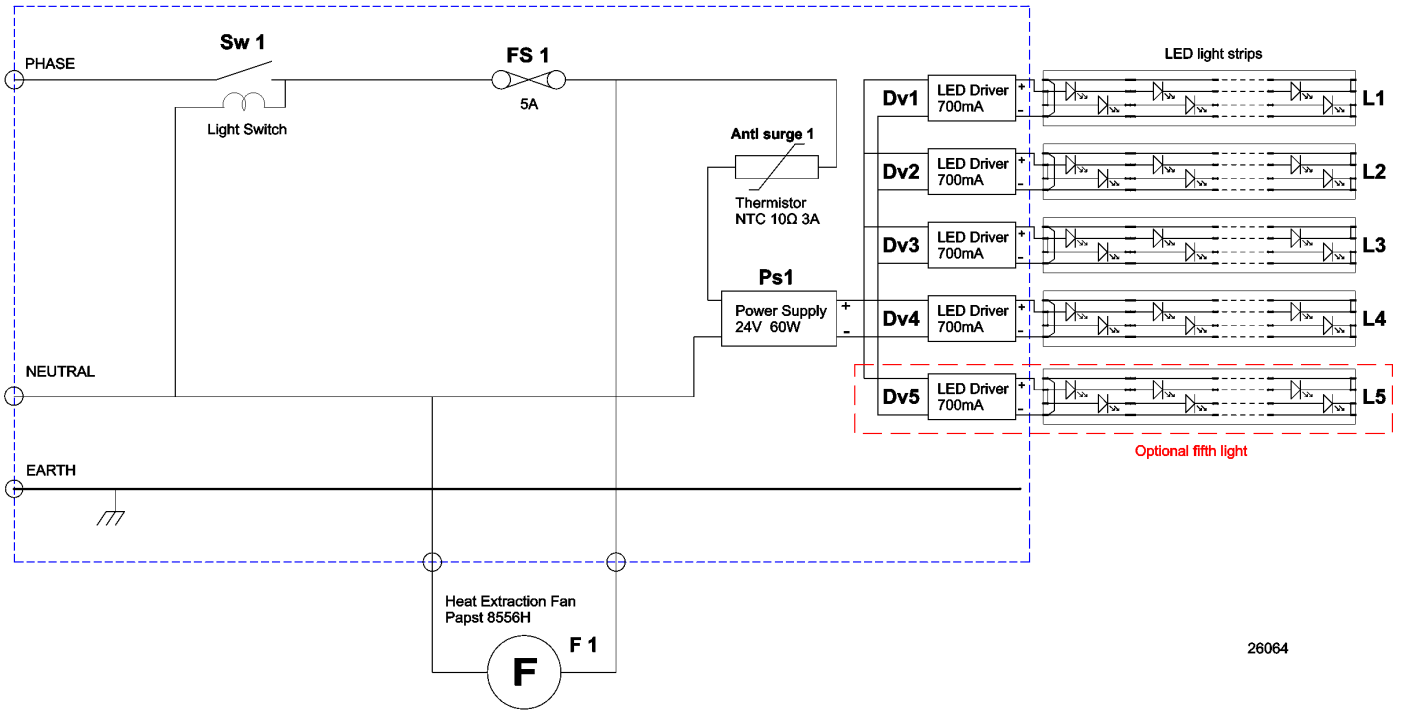
Ongoing Development

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

ELECTRICAL CIRCUIT DIAGRAMS

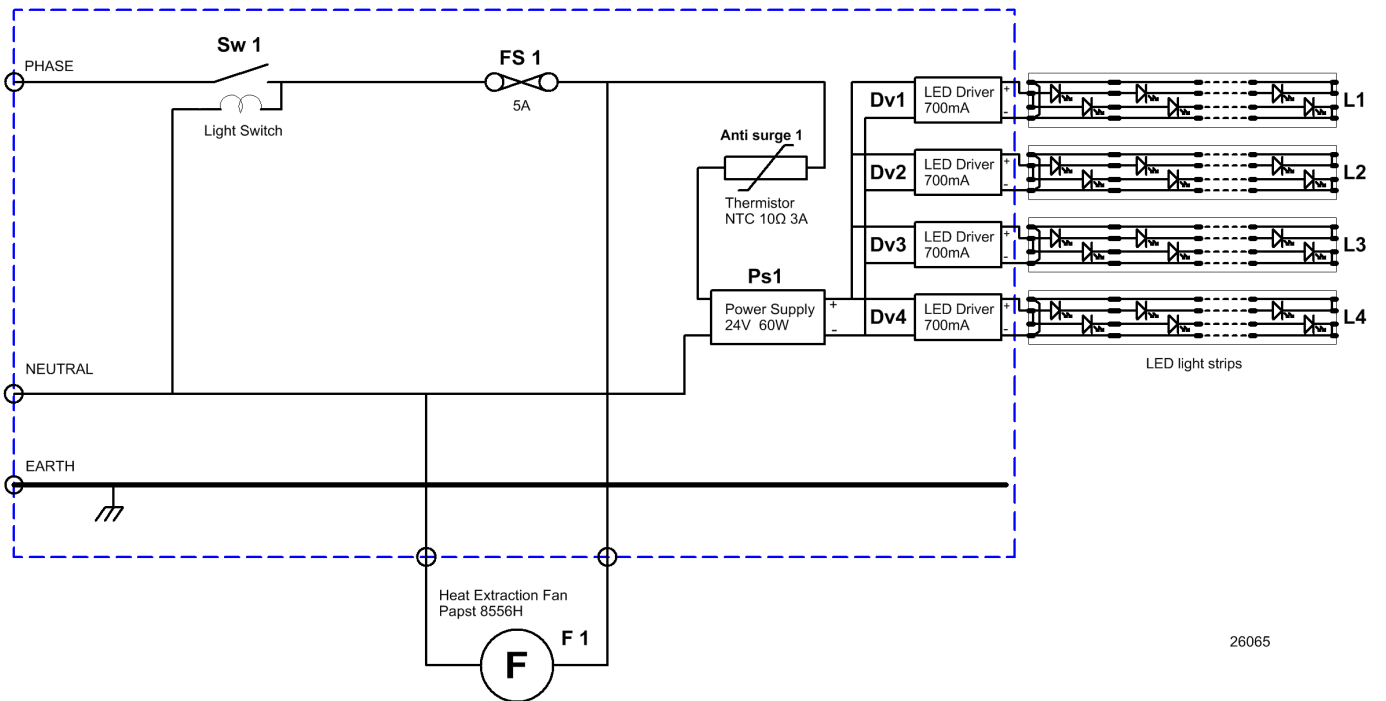
Model: IN 4A08 SQ

Inline 4000 Square Series, 800mm Ambient Cabinet



Model: IN 4A12 SQ

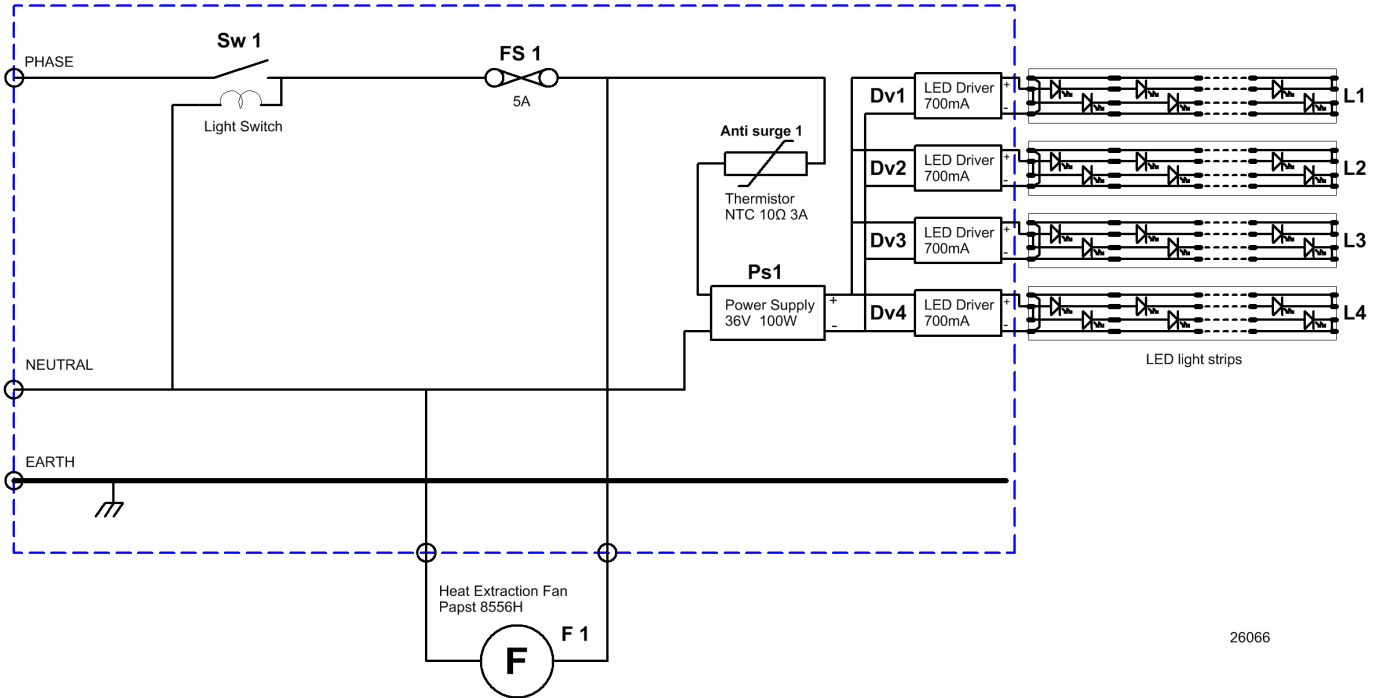
Inline 4000 Square Series, 1200mm Ambient Cabinet



Circuit Diagrams, continued

Model: IN 4A15 SQ

Inline 4000 Square Series, 1500mm Ambient Cabinet



26066

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.
Switch DPST 16A 250V 150A High Inrush Green Rocker	17287
Fuse Link (5A, 250V, Slow Blow)	13330
24V 60W LED power supply	21613
36V 100W LED power supply	25922
LED Driver 700mA	25762
Ant-surge Thermistor 10 Ohm 3A	22354
Polycarbonate Light Cover 1120mm	18113
Polycarbonate Light Cover 720mm	18114
Top Light Replacement Kit for 4A08	69871
Shelf Light Replacement Kit for 4A08	69839
Top Light Replacement Kit for 4A12	69858
Shelf Light Replacement Kit for 4A12	69869
Top Light Replacement Kit for 4A15	69863
Shelf Light Replacement Kit for 4A15	69424
Heat Extraction Fan Papst 8556N	10715
Qlon centre door seal	13677
Slide-in rubber door seal	11424

Location of Glass Parts

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

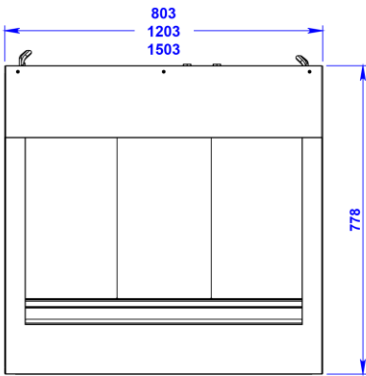
Square Cabinet End Glass LH & RH	21234
4K 800 Ambient Rear SG Flat Inner Slider Door	73618
4K 800 Ambient SG Flat Outer Slider Door	73619
4K 1200 Ambient SG Flat Inner Slider Door	73309
4K 1200 Ambient SG Flat Outer Slider Door	73310
4K 1500 Ambient SG Flat Inner Slider Door	73311
4K 1500 Ambient SG Flat Outer Slider Door	73312
Front Fixed Glass (800 SQ cabinets)	18879
Front Fixed Glass (1200 SQ cabinets)	21571
Front Fixed Glass (1500 SQ cabinets)	21572
Top Fixed Glass (800 SQ cabinets)	21249
Top Fixed Glass (1200 SQ cabinets)	21250
Top Fixed Glass (1500 SQ cabinets)	21251
Product Manual for 4000 Square Series Ambient Cabinets	26123

MECHANICAL DRAWINGS

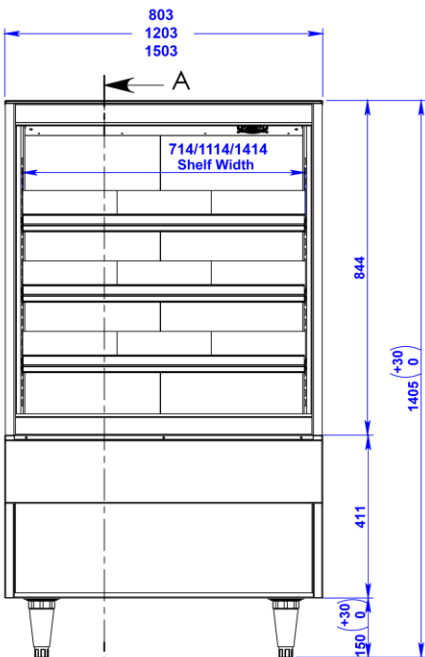
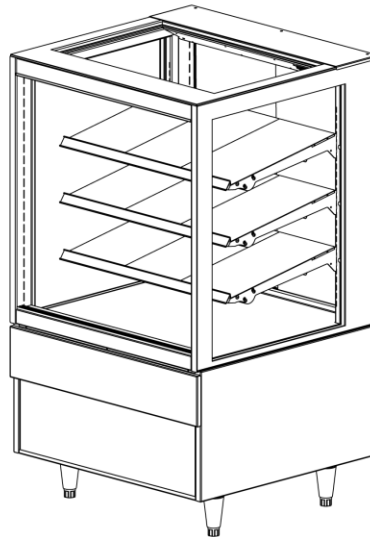
Dimensions

AMBIENT CABINETS - MECHANICAL DRAWINGS

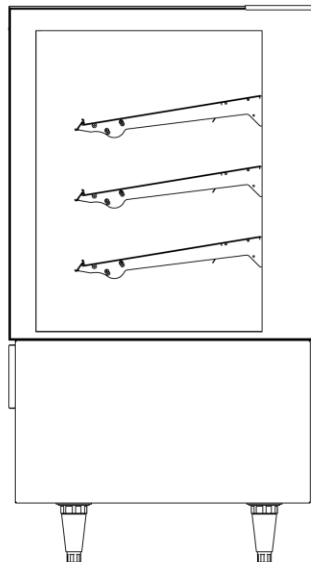
IN-4A08S/12S/15S Fixed Front



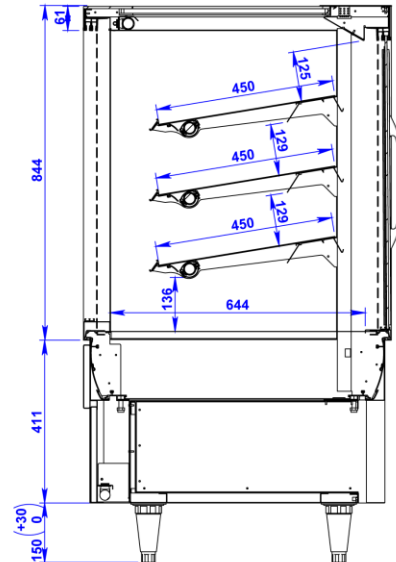
PLAN



FRONT ELEVATION

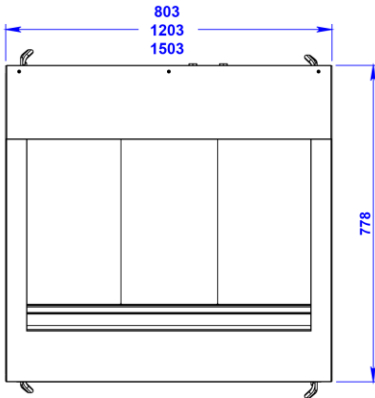


SIDE ELEVATION

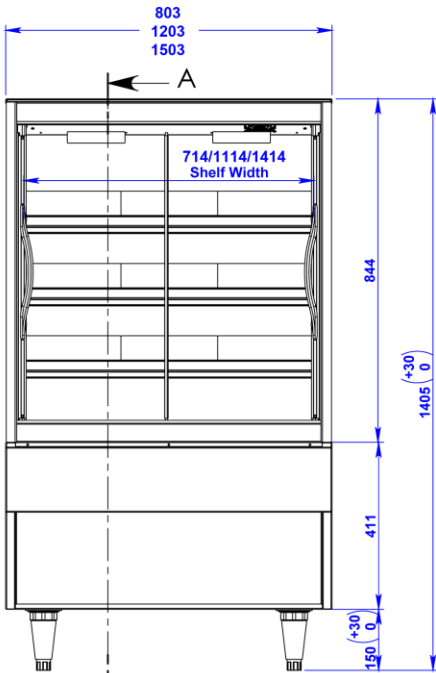
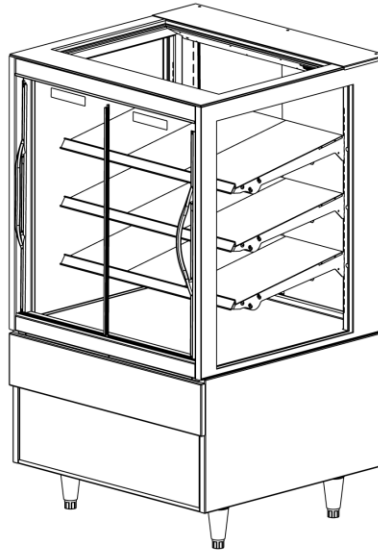


SECTION A-A

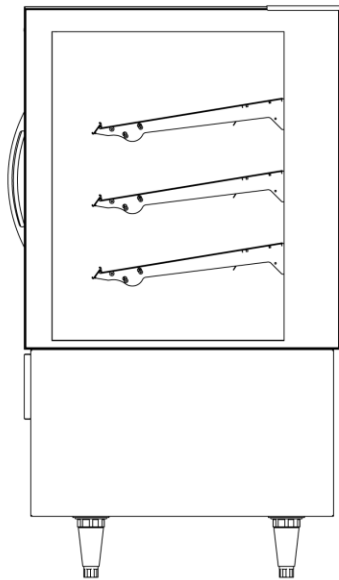
IN-4A08S/12S/15S Sliding Front Door



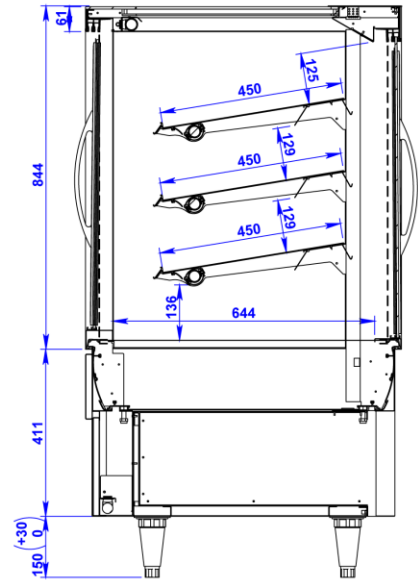
PLAN



FRONT ELEVATION



SIDE ELEVATION



SECTION A-A

Cabinet Sizes

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

For full contact details please visit the Contacts page on **FPGWORLD.COM** or email us at support@fpgworld.com
In line with policy to continually develop and improve its products, Future Products Group reserves the right to change specifications and design without notice.

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