

### Distribution Assemblies for Outdoor Events & Exhibitions

A range of single and three-phase distribution assemblies and accessories specifically developed for the Event, Exhibition and Generator Hire markets.

High current assemblies (above 125A) are fabricated from sheet steel and can be supplied in standard or fleet colours. To aid handling and provide protection to the enclosure when in use and in transit, heavy duty, galvanized crash frames can be incorporated with integral fork lift pockets, Hi-Ab lifting points and crash bars.

High current products include: Generator Interface Units (which enable fluctuating loads to be shared amongst a group of generators, allowing generators to operate at maximum efficiency); AMF Panels; Manual Changeover Switches and Mains Distribution Assemblies with incomers rated up to 2000A and beyond. Cable connections can be hard wired or via single-pole connectors rated up to 800A, or via multi-pole connectors rated up to 250A.

At lower current ratings (below 125A), assemblies are considered to be portable and are made from insulated materials. Enclosures incorporate lifting handles or recessed pockets and on many assemblies sockets and switchgear are recessed to minimise damage whilst in use and in transit. Incoming and outgoing connections are generally via multi-pin connectors to BS EN 60309-2 rated at 16A, 32A, 63A and 125A, 230V and 400V.

Special assemblies can also be designed and manufactured to meet specific customer requirements.

A range of accessories is also offered, including single and multi-core extension leads, loose cable, and plugs, panel sockets and connectors.



# High Current Assemblies

## Distribution Assemblies

High current Distribution Assemblies for the Event and Exhibition sectors are usually made to order and have incoming switchgear ranging in rating from 125A to 2000A. The supply connection can be via hard wired, multicore cables (armoured or flexible) or by single pole connectors rated at 500A or 800A.

Distribution can be via: 16A, 32A, 63A and 125A multipin sockets to BS EN 60309-2; 250A multipin sockets to BS EN 60309-1; single pole connectors rated up to 800A; or hard wired to MCBs and MCCBs. Fixed and adjustable RCD protection is offered across the range. It is generally recommended that circuits are individually RCD protected but "group" RCD protection can be provided for low rating circuits. Adjustable RCDs protecting circuits up to 125A rating incorporate a 30mA undelayed setting to provide supplementary Basic Protection (previously referred to as Direct Contact Protection).

Enclosures are fabricated from 1.5mm to 3mm thickness mild steel but they can also be fabricated from stainless steel if required. Enclosures can be mounted on stands or within heavy duty, galvanized crash frames, which provide impact protection for the enclosure and sockets, as well as fork lift pockets and Hi-Ab lifting points to simplify handling on site and in transit.

## Automatic Mains Failure Panels (AMF)

AMF panels and manual changeover switches are available in ratings from 100A to 2000A and are housed in heavy duty, mild steel enclosures, similar in design to those used for high current distribution assemblies with optional stands and crash frames. All AMF panels incorporate mechanically and electrically interlocked changeover devices. Contactors are used from 100A to 800A and ACBs are used above 800A. The changeover circuitry can be tailored to suit different generator control systems.

## Generator Interface Units (GIU)

GIUs allow fluctuating loads to be shared amongst a farm of generators, ensuring individual generators are optimally loaded, thus maximising fuel efficiency, etc. A typical GIU can be fed from up to six, synchronised generators supplying a bus bar rated up to 3200A. The GIU feeds high current sub-distribution assemblies via MCCBs. At times of peak demand, all available generators can share the load but, as the load drops, individual generators can be shut down. GIUs are also ideal for allowing the servicing of individual generators to take place, without loss of supply to the installation. Please note: all load sharing circuitry needs to be provided by the generator supplier. The GIU provides a common point enabling the supply and load to be matched as closely as possible.



125A 8W Distribution Board



250A Assembly c/w sockets



Distribution Assemblies with 230V & 400V sockets



500A Automatic Mains Failure Panel



GIU with 6 x Incomers, 3200A bus bars and 6 x Feeders

## Medium Current Assemblies

Our range of medium current, portable, plug-in Distribution Assemblies has been developed to meet the special requirements of applications such as Film and TV Lighting, Outdoor Broadcasts, Events, Exhibitions and Concerts. Standard versions are stocked (please see over the page for part numbers) and non-standard items to meet individual customer requirements are made to order.

### IDA series

#### Enclosures

IDA enclosures are fabricated from grained, high density polypropylene and are stackable. To provide maximum mechanical protection, sockets and MCBs / RCDs are recessed. Lifting points are also recessed and larger enclosures incorporate a plinth section giving 150mm ground clearance for equipment, which can be a vital benefit for assemblies used in locations where the effectiveness of basic drainage is unknown.

#### Supply Input

Via an Appliance Inlet (fixed plug) to BS EN 60309-2 rated at 32A, 63A or 125A, 3P 230V or 5P 400V.

#### Distribution and Protection

IDAs incorporate sockets to BS EN 60309-2 rated at 16A, 32A, 63A and 125A, 3P 230V or 5P 400V. As standard, IPX4 sockets are fitted at 16A and 32A and IPX7 sockets are fitted at 63A and 125A. Please specify if IPX7 sockets are required throughout. Sockets that have a current rating lower than the input appliance inlet must be MCB protected. MCBs are to BS EN 60898 and "C" trip devices are fitted unless specified otherwise at the time of order. Sockets can have associated "mains on" indicators and "supply" phase indicators incorporated.

In most instances, sockets should be protected by 30 mA RCD. Protection can be Individual (one RCD per socket) or Group (one RCD protecting a group of sockets). In practice, to avoid nuisance tripping, it is recommended to protect individually 400V 5P sockets and 230V sockets above 32A rating. At the time of inquiry, please specify preferences regarding the use of RCBOs versus separate MCBs / RCDs.

For supervised Film Lighting Installations to BS5550 Part 7, RCDs with the facility to be disarmed via a key operated switch can be incorporated.

### PDA series

#### Enclosure

The PDA series utilises a lightweight but robust, injection moulded enclosure with a carrying handle and stacking facility. Sockets and MCBs are semi-recessed, which provides mechanical protection when in use and in transit.

#### Supply Input

Via a flexible cable and plug rated at 32A or 63A, 3P or 5P

#### Distribution and Protection

Similar to the IDA series described above but the maximum rating socket is 32A.



PDA series



IDA series - P10



IDA series - P20



IDA series - P30



IDA series - P30

## Low Current Assemblies & Accessories

To complement our high and medium current Event products we also produce a range of 230V final distribution assemblies and associated accessories.

### Low Current Distribution Assemblies

We offer a standard range of 16A and 32A, 230V portable distribution assemblies as described below and illustrated alongside. In addition we can manufacture non-standard versions to meet the requirements of individual customers.

### Multi-core Extension Leads

We also offer a standard range of multi-pin extension leads rated from 125A to 16A; details are given below. Non-standard extension leads can be made to order.

### Single-core Extension cables

Single core flexible cables, made to order, fitted with single-pole Powerlock connectors rated up to 800A.

### Loose Cable, Plugs and Sockets

We stock a wide range of loose cable, plugs, sockets and spares. We are able to offer these at competitive prices and our Customer Service Centres in Crayford and Leeds would be pleased to receive any inquiries.

#### Details of Standard Items

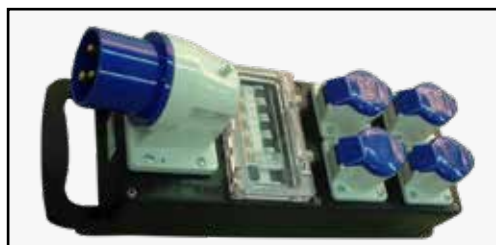
Part No.	Type No.	Description
S010110	AMF100/DSC/IP55	Automatic mains failure assembly, 100A, 4P
S010111	AMF200/DSC/IP55	Automatic mains failure assembly, 200A, 4P
S010113	AMF500/DSC/IP55	Automatic mains failure assembly, 500A, 4P
S010115	AMF800/DSC/IP55	Automatic mains failure assembly, 800A, 4P
S141470	MCO/1100-4P/IP55	Manual changeover switch, 100A, 4P
S141471	MCO/1160-4P/IP55	Manual changeover switch, 160A, 4P
S141472	MCO/1250-4P/IP55	Manual changeover switch, 250A, 4P
S141468	MCO/1400-4P/IP55	Manual changeover switch, 400A, 4P
S141469	MCO/1630-4P/IP55	Manual changeover switch, 630A, 4P
S090017	P10/AI-32/400/S6	Refer to IDA data sheet for details of the socket and protection arrangements for stock IDA assemblies.
S090018	P20/AI-63/400/I-63/S9	
S090022	P30/AI-125/400/I-125/S13	
S170177	PDA/32/230/RCD/S6-16	32A 230V Input Lead (3m H07); 6 x 16A sockets, 1 x RCD, 6 x MCBs
S170179	PDA/63/230/RCD/S6	63A 230V Input Lead (3m H07); 4 x 16A sockets, 2 x 32A sockets, 1 x RCD, 6 x MCBs
S190296	RDA/AI-32/230/RCD/S4	32A 230v Inlet; 4 x 16A sockets, 1 x RCD, 4 x MCBs
S050150	EXL/35/14/125/400/H07	Extension lead, 125A, 400V, 5P, IPX7, 14m, 35mm <sup>2</sup>
S050194	EXL/16/14/63/400/H07	Extension lead, 63A, 400V, 5P, IPX7, 14m, 16mm <sup>2</sup>
S050182	EXL/6/14/32/400/H07	Extension lead, 32A, 400V, 5P, IPX4, 14m, 6mm <sup>2</sup>
S050190	EXL/16/14/63/230/H07	Extension lead, 63A, 230V, 3P, IPX7, 14m, 16mm <sup>2</sup>
S050147	EXL/4/14/32/230/H07	Extension lead, 32A, 230V, 3P, IPX4, 14m, 4mm <sup>2</sup>
S050145	EXL/2.5/14/16/230/H07	Extension lead, 16A, 230V, 3P, IPX4, 14m, 2.5mm <sup>2</sup>



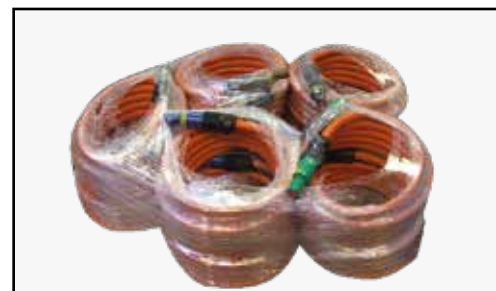
Part S050138



Part S050144



Part S190296



Cables with Powerlock Connectors



Part S050147



Part S050194