



PHASE 3  
CONNECTORS

## Powersafe Network Connection Devices

Phase 3's Powersafe **Network Connection Devices** are the choice of electrical utility and temporary power companies across the globe. Our innovative range of cable clamps and power connectors are specifically designed to allow the connection of temporary mobile generators direct to various equipment within the electricity network.



# CONTENTS

## CONNECTION DEVICES

Phase 3's **Network Connection Devices** allow Powersafe single pole connectors to connect onto low voltage Busbars and Circuits in a variety of ways. The range includes two sections, **converters** and **clamps**.

ASSEMBLY

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CLAMPS

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CONVERTERS

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### POWERSAFE

Phase 3's Powersafe single pole connectors are the highest rated, safest and finest quality single pole power connectors as used by the power industry worldwide. Standard use is a Source Connection with Network Devices, if you require Drain connectors please ask.

DRAIN CONNECTION



SOURCE CONNECTION





# Clamp Assembly

## Custom Network Connection Devices

# FULLY CUSTOMISABLE NETWORK DEVICES



### 1. CHOOSE YOUR HEAD

Choose from a range of insulated clamp heads on the following pages.



### 2. CHOOSE YOUR ARM

Choose from a range of insulated arms short, long or right angle.



### 3. CHOOSE YOUR LINE

Choose from a range of Phase Adapters to screw into the arm (L1, L2, L3, N, E)



# POWERSAFE INSULATED G-CLAMP

**Powersafe Insulated G-Clamp** enables power professionals to connect directly to a low voltage busbar. The fully insulated clamp is tightened onto the busbar with an insulated box spanner which meets the requirements of IEC 60900 (live working hand tools for use up to 1000Vac / 1500Vdc). A Powersafe connector (can be source or drain) is incorporated into the clamp to allow direct connection to the generator power cable. The electrical G-Clamp is rated at 800A continuous rating.

The Powersafe connectors on the G-Clamp are colour coded and mechanically keyed to distinguish between phases and prevent connection errors. The head of the G-Clamp is 45mm wide.

## G-Clamp Short Arm with Source Connection\*

Part Number	Description
SD00078	G-CLAMP E-GN-SHORT
SD00079	G-CLAMP N-BL-SHORT
SD00080	G-CLAMP L1-BN-SHORT
SD00081	G-CLAMP L2-BK-SHORT
SD00082	G-CLAMP L3-GY-SHORT

## G-Clamp Long Arm with Source Connection\*

Part Number	Description
SD00083	G-CLAMP E-GN-LONG
SD00084	G-CLAMP N-BL-LONG
SD00085	G-CLAMP L1-BN-LONG
SD00086	G-CLAMP L2-BK-LONG
SD00087	G-CLAMP L3-GY-LONG

## G-Clamp Right Angled Arm with Source Connection\*

Part Number	Description
SD00088	G-CLAMP E-GN-RIGHT ANGLED
SD00089	G-CLAMP N-BL-RIGHT ANGLED
SD00090	G-CLAMP L1-BN-RIGHT ANGLED
SD00091	G-CLAMP L2-BK-RIGHT ANGLED
SD00092	G-CLAMP L3-GY-RIGHT ANGLED

\* Standard use is Source Connection. If you require Drain connectors please ask.



AP000036 = Short Tool  
AP000028 = Long Tool





# POWERSAFE INSULATED MINI G-CLAMP

**Powersafe Insulated Mini G-Clamp** enables power professionals to connect directly to a low voltage busbar.

The fully insulated clamp is tightened onto the busbar with an insulated box spanner which meets the requirements of IEC 60900 (live working hand tools for use up to 1000Vac / 1500Vdc). A Powersafe connector (can be source or drain) is incorporated into the clamp to allow direct connection to the generator power cable. The electrical Mini G-Clamp is rated at 500A continuous rating.

The Powersafe connectors on the Mini G-Clamp are colour coded and mechanically keyed to distinguish between phases and prevent connection errors. The head of the Mini G-Clamp is 26mm wide. Available as with a short arm, long arm or right-angled arm.

## Mini G-Clamp Short Arm with Source Connection\*

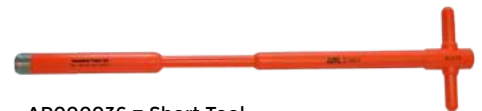
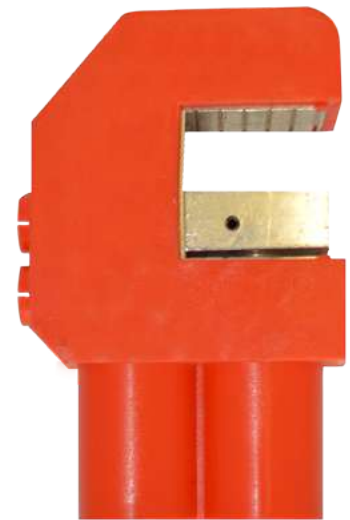
Part Number	Description
SD00063	G-CLAMP MINI-E-GN-SHORT
SD00064	G-CLAMP MINI-N-BL-SHORT
SD00065	G-CLAMP MINI-L1-BN-SHORT
SD00066	G-CLAMP MINI-L2-BK-SHORT
SD00067	G-CLAMP MINI-L3-GY-SHORT

## Mini G-Clamp Long Arm with Source Connection\*

Part Number	Description
SD00203	G-CLAMP MINI-E-GN-LONG
SD00204	G-CLAMP MINI-N-BL-LONG
SD00205	G-CLAMP MINI-L1-BN-LONG
SD00206	G-CLAMP MINI-L2-BK-LONG
SD00207	G-CLAMP MINI-L3-GY-LONG

## Mini G-Clamp Right Angled Arm with Source Connection\*

Part Number	Description
SD00208	G-CLAMP MINI-E-GN-RIGHT ANGLED
SD00209	G-CLAMP MINI-N-BL-RIGHT ANGLED
SD00210	G-CLAMP MINI-L1-BN-RIGHT ANGLED
SD00211	G-CLAMP MINI-L2-BK-RIGHT ANGLED
SD00212	G-CLAMP MINI-L3-GY-RIGHT ANGLED



AP000036 = Short Tool  
AP00028 = Long Tool

\* Standard use is Source Connection. If you require Drain connectors please ask.



# POWERSAFE INSULATED HORIZONTAL CLAMP

**Powersafe Insulated Horizontal Clamp** enables power professionals to connect directly to a low voltage busbar.

The fully insulated Horizontal Clamp is tightened onto the busbar with an insulated box spanner which meets the requirements of IEC 60900 (live working hand tools for use up to 1000Vac / 1500Vdc). A Powersafe connector (can be source or drain) is incorporated into the clamp to allow direct connection to the generator power cable. The electrical Horizontal Clamp is rated at 800A continuous rating.

The Powersafe connectors on the Horizontal Clamp are colour coded and mechanically keyed to distinguish between phases and prevent connection errors. The head of the Horizontal Clamp is 45mm wide. Available with a short arm, long arm or right-angled arm.

## Horizontal Clamp Short Arm with Source Connection\*

Part Number	Description
SD00165	HORIZONTAL CLAMP E-GN-SHORT
SD00166	HORIZONTAL CLAMP N-BL-SHORT
SD00167	HORIZONTAL CLAMP L1-BN-SHORT
SD00168	HORIZONTAL CLAMP L2-BK-SHORT
SD00169	HORIZONTAL CLAMP L3-GY-SHORT

## Horizontal Clamp Long Arm with Source Connection\*

Part Number	Description
SD00170	HORIZONTAL CLAMP E-GN-LONG
SD00171	HORIZONTAL CLAMP N-BL-LONG
SD00172	HORIZONTAL CLAMP L1-BN-LONG
SD00173	HORIZONTAL CLAMP L2-BK-LONG
SD00174	HORIZONTAL CLAMP L3-GY-LONG

## Horizontal Clamp Right Angled Arm with Source Connection\*

Part Number	Description
SD00175	HORIZONTAL CLAMP E-GN-RIGHT ANGLED
SD00176	HORIZONTAL CLAMP N-BL-RIGHT ANGLED
SD00177	HORIZONTAL CLAMP L1-BN-RIGHT ANGLED
SD00178	HORIZONTAL CLAMP L2-BK-RIGHT ANGLED
SD00179	HORIZONTAL CLAMP L3-GY-RIGHT ANGLED



AP000051 = Horizontal Clamp Tool

\* Standard use is Source Connection. If you require Drain connectors please ask.



# POWERSAFE INSULATED ROTARY CLAMP

**Powersafe Insulated Rotary 'FRED' Clamp** allows power professionals to connect directly to a low voltage slotted type busbar.

The fully insulated Rotary Clamp is tightened onto the busbar by means of the wheel using an insulated box spanner which meets the requirements of IEC 60900 (live working hand tools for use up to 1000Vac / 1500Vdc). A Powersafe connector (can be source or drain) is incorporated into the clamp to allow direct connection to the generator power cable. The electrical Rotary Clamp is rated at 800A continuous rating.

The Powersafe connectors on the Rotary Clamp are colour coded and mechanically keyed to distinguish between phases and prevent connection errors.

## Rotary Clamp with Source Connection\*

Part Number	Description
SD00127	ROTARY CLAMP E-GN
SD00128	ROTARY CLAMP N-BL
SD00129	ROTARY CLAMP L1-BN
SD00130	ROTARY CLAMP L2-BK
SD00131	ROTARY CLAMP L3-GY

\* Standard use is Source Connection. If you require Drain connectors please ask.



AP000027 = Tool



# POWERSAFE OVERHEAD LINE CLAMP

**Powersafe Overhead Line Clamp** is designed to allow direct connection of a generator unit to low voltage overhead line systems. The assembly consists of an insulated line clamp with 3m of flexible copper cable and a Powersafe Line Source connector. These assemblies are available in different lengths and diameters of flexible HO7RN-F cable ranging from 50mm<sup>2</sup> up to 120mm<sup>2</sup>. The maximum current rating is 500A.

## Overhead Line Clamp 3m Tail and Source Connection\*

Part Number	Description
SD00030	Overhead Line Clamp N-BL-50mm
SD00031	Overhead Line Clamp L1-BN-50mm
SD00032	Overhead Line Clamp L2-BK-50mm
SD00033	Overhead Line Clamp L3-GY-50mm
SD00034	Overhead Line Clamp E-EN-50mm
SD00039	Overhead Line Clamp E-EN-70mm
SD00040	Overhead Line Clamp N-BL-70mm
SD00041	Overhead Line Clamp L1-BN-70mm
SD00042	Overhead Line Clamp L2-BK-70mm
SD00043	Overhead Line Clamp L3-GY-70mm
SD00001	Overhead Line Clamp N-BL-95mm
SD00002	Overhead Line Clamp L1-BN-95mm
SD00003	Overhead Line Clamp L2-BK-95mm
SD00004	Overhead Line Clamp L3-GY-95mm
SD00201	Overhead Line Clamp E-EN-95mm
SD00202	Overhead Line Clamp E-EN-120mm
SD00074	Overhead Line Clamp N-BL-120mm
SD00075	Overhead Line Clamp L1-BN-120mm
SD00076	Overhead Line Clamp L2-BK-120mm
SD00077	Overhead Line Clamp L3-GY-120mm

\* Standard use is Source Connection. If you require Drain connectors please ask.





# POWERSAFE UNDERGROUND CONNECTOR

**Powersafe Insulated Underground Connector** is fitted with a Powersafe Source connector that allows the user to connect directly to a temporary mobile generator.

The rear of the underground connector is designed to accept solid alloy cable cores. The cable is excavated, cut and the Underground Connector is tightened down onto the cable core by 2 hex screws using an insulated ratchet tool (10mm hex key). The tool meets the requirements of IEC 60900 (live working hand tools for use up to 1000Vac / 1500Vdc). The generator cable end can then be plugged directly into the Powersafe connector incorporated on the Underground connector.

## Underground Connector (Source or Drain)

Part Number	Description
SD00035	UNDERGROUND CONNECTOR (SOURCE or DRAIN) E-GN
SD00036	UNDERGROUND CONNECTOR (S or D) N-BL
SD00037	UNDERGROUND CONNECTOR (S or D) L1-BN
SD00038	UNDERGROUND CONNECTOR (S or D) L2-BK
SD00039	UNDERGROUND CONNECTOR (S or D) L3-CY
AP00007	UNDERGROUND CONNECTOR RATCHET



# POWERSAFE PHASE COUPLER

**Powersafe Phase Couplers** have been designed to allow a quick and safe way of connecting two same sex connectors together e.g by using a Drain Coupler you can connect two Source Connectors together.

These are also useful if a generator hire company arrive on site with “drain” connectors attached to their cables and they needed to plug into a Panel Drain, you would simply connect a “Source Coupler” to the drain connector thus changing the sex of the connector. Both the Source and Drain Couplers are colour coded and keyed with a maximum rating of 800A.

### Drain Coupler

Part Number	Description
SD00375	COUPLER DRAIN-E-GN-800A
SD00376	COUPLER DRAIN-N-BL-800A
SD00377	COUPLER DRAIN-1-BN-800A
SD00378	COUPLER DRAIN-2-BK-800A
SD00379	COUPLER DRAIN-3-GY-800A

### Source Coupler

Part Number	Description
SD00380	COUPLER SOURCE-E-GN-800A
SD00381	COUPLER SOURCE-N-BL-800A
SD00382	COUPLER SOURCE-1-BN-800A
SD00383	COUPLER SOURCE-2-BK-800A
SD00384	COUPLER SOURCE-3-GY-800A



# POWERSAFE T-PIECE CONNECTOR

**Powersafe Insulated T-Piece** connectors allow the option to split one phase into two or combine two phases into one, in a quick and safe manner. The connectors are colour coded and mechanically keyed to avoid connection errors.



**EXAMPLE SHOWS: T-PIECE PD-1 PS-2 E G T8**

Type	Position A	Position B	Phase	Colour	Amps
T-Piece	PS-1	PD-2	Earth	G Green BL Blue GY Grey BK Black WH White Y Yellow BN Brown R Red	T5 (500)
	PD-1	PS-2	Neutral		T8 (800)
			L1		
			L2		
			L3		

# POWERSAFE FUSE HOLDERS 82MM/92MM

**Powersafe Fuse Holder** units allow a safe means of connecting a power generator supply cable to fully shrouded or non-shrouded low voltage feeders and cabinets. These units comply with EAT37-2. The unit consists of a fuse carrier and shroud with integral generator power connection point. Powersafe Fuse Holders are colour coded and keyed to prevent connection errors. The integral connector also benefits from our finger-proof safety feature (IP2X ingress protection).

These units are rated at 500A. The unit accepts standard BS88-5 fuses; dummy fuses to isolate the incoming and outgoing circuits can be supplied. Fuse Holder units are direct replacements for the JW4ST and JW4ST82 fuse units. The devices offer a safe, fast and cost effective way of upgrading existing distribution boards to have generator input connection points. no modifications to the existing equipment is normally necessary.

Fuse Holders are available in 82mm and 92mm pitches (3<sup>1</sup>/<sub>4</sub>" and 3<sup>5</sup>/<sub>8</sub>").



## Fuse Holders

Part Number	Description
SD00022	FUSE CARRIER 82mm JP L1-BN
SD00023	FUSE CARRIER 82mm JP L2-BK
SD00024	FUSE CARRIER 82mm JP L3-GY
SD00025	FUSE CARRIER 92mm JS L1-BN
SD00026	FUSE CARRIER 92mm JS L2-BK
SD00027	FUSE CARRIER 92mm JS L3-GY



# POWERSAFE PHASE CONVERTERS

**Powersafe Phase Converters** are double ended connectors that will allow you to change phases, e.g from L1 to L2, L2 to L3 etc. The Phase Converters come with an 800A Source Connection on one end and an 800A Drain Connection on the other.

These connectors are IP67 when mated. When ordering, the source connection is in the first part of the code, ie the photo on the right shows an SD00571 Phase Converter L2-L3-EU.

### Powersafe Phase Converters

Part Number	Description
SD00568	PHASE Converter-L1-L2-EU
SD00569	PHASE Converter-L1-L3-EU
SD00570	PHASE Converter-L2-L1-EU
SD00571	PHASE Converter-L2-L3-EU
SD00572	PHASE Converter-L3-L1-EU
SD00573	PHASE Converter-L3-L2-EU





# POWERSAFE RIGHT ANGLED CONNECTORS

**Powersafe Right Angled Connectors** allow cables to be hung at 90 degrees from Panel Mount Connectors. The device allows for reduced cable protrusion, this is a useful option where minimal space is available for connection of temporary power cables.

The Right Angled Connector is fully compatible with all other Powersafe connectors. Termination of the cable is simple with nothing more than spanner required. A cable lug can be locked onto a threaded post inside the backshell. Standard sizes are supplied with a 120 x M12 Lug. Source, Drain and Rotalock configurations can be supplied. Other colours and sizes are available.

## Powersafe Right Angled Connectors

Part Number	Description
SD00509	Connector 90 Source-E-GN-120mm
SD00510	Connector 90 Source-N-BL-120mm
SD00511	Connector 90 Source-1-BN-120mm
SD00512	Connector 90 Source-2-BK-120mm
SD00513	Connector 90 Source-3-GY-120mm
SD00449	Connector 90 Drain-E-GN-120mm
SD00450	Connector 90 Drain-N-BL-120mm
SD00451	Connector 90 Drain-1-BN-120mm
SD00452	Connector 90 Drain-2-BK-120mm
SD00453	Connector 90 Drain-3-GY-120mm
SD00444	Connector 90 Rotalock-E-GN-120mm
SD00445	Connector 90 Rotalock-N-BL-120mm
SD00446	Connector 90 Rotalock-1-BN-120mm
SD00447	Connector 90 Rotalock-2-BK-120mm
SD00448	Connector 90 Rotalock-3-GY-120mm



# POWERSAFE LUG CONVERTERS

**Powersafe Lug Converters** allow a standard cable lug to be temporarily or permanently terminated to a Powersafe connector. The cable lug is simply bolted to the Powersafe electrical contact and the connector is assembled as normal.

The Lug Converters come in 2 sizes, suitable for cable lugs with M12 through holes for cable sections of either 25- 150mm<sup>2</sup> OR 185-300mm<sup>2</sup> cables (300mm<sup>2</sup> requires a contained palm lug).

## Lug Converters

Part Number	Description
SLCS001	Lug Converter S150 Source E-GN
SLCS002	Lug Converter S150 Source N-BL
SLCS003	Lug Converter S150 Source 1-BN
SLCS004	Lug Converter S150 Source 2-BK
SLCS005	Lug Converter S150 Source 3-GY
SLCD001	Lug Converter D150 Drain E-GN
SLCD002	Lug Converter S150 Source N-BL
SLCD003	Lug Converter D150 Drain 1-BN
SLCD004	Lug Converter D150 Drain 2-BK
SLCD005	Lug Converter D150 Drain 3-GY
SLCS006	Lug Converter S300 Source E-GN
SLCS007	Lug Converter S300 Source N-BL
SLCS008	Lug Converter S300 Source 1-BN
SLCS009	Lug Converter S300 Source 2-BK
SLCS010	Lug Converter S300 Source 3-GY
SLCD006	Lug Converter D300 Drain E-GN
SLCD007	Lug Converter D300 Drain N-BL
SLCD008	Lug Converter D300 Drain 1-BN
SLCD009	Lug Converter D300 Drain 2-BK
SLCD010	Lug Converter D300 Drain 3-GY



# POWERSAFE CABCON LUG CONVERTERS

**CABCON Lug Converters** allow a simple and cost effective way of connecting two cable ends that are terminated with standard lugs. A bus bar is retained within a threaded section and via two bolts the lugs are connected to the bus bar. The outer housings and cable glands are then screwed onto the retainer, to provide a watertight enclosure around the connection. The housings are manufactured from high impact high dielectric insulation material for user safety and long life.

The Lug Converter can quickly be undone and reused time after time and the housing can be locked to prevent unauthorized opening. The thread form of the bus bar retainer is such that the thread requires only a few turns of the housings to tighten. The square thread form also resists abrasion damage, to prevent binding of the coupling thread.

CABCON Lug Converter is available in two sizes, CAB0001 for 185-300mm<sup>2</sup> cable and CAB0002 for 95-150mm<sup>2</sup> cable.

## CabCon Lug Converters

Part Number	Description
CAB0001	Cab-185-300-BK
CAB0002	Cab-95-150-BK

