



# PHASE 3

CONNECTORS

## ULTIMATE PROVIDER OF SAFE POWER MANAGEMENT.

Designed to connect single & three phase high current power circuits, PHASE 3 **POWERSAFE** single pole connectors are at the forefront of both safety and technical capability.



**POWERSAFE**

500A / 800A



[www.P3CONNECTORS.com](http://www.P3CONNECTORS.com)

# ULTIMATE PROVIDER OF SAFE POWER MANAGEMENT.



With increased demand for temporary high power systems in entertainment & industrial applications, the choice of high current connectors is critical to ensure safety and reliability for every use.

Designed to connect single & three phase high current power circuits, PHASE 3 Powersafe single pole connectors are at the forefront of both safety and technical capability.

These connectors have been tried and tested in some of the harshest environments worldwide; from the oil fields of Canada to data centres in the Arctic Circle. Based on their impressive technical capabilities, added safety features, rugged construction, reliability and quality, they are a popular choice for professional engineers.

Standard safety features include a secondary locking system which requires a key to unlock the connection. This is in addition to finger-proofed electrical contacts on all connectors, which reduces the risk of accidental contact when the connector is live.

Connectors are available in cable and panel-mount formats with either crimp or screw contacts. Rated at 500A and 800A for single core cables from 25 - 300mm<sup>2</sup>, PHASE 3 Powersafe connectors are, at present, amongst the highest rated and safest connectors of their type on the market.

- 800A maximum (505A UL Product)
- Colour coded & mechanically keyed to prevent connection errors
- Flame retardant (UL94-V0)
- Locking mechanism to prevent accidental disconnection under load
- Finger-proof contacts to prevent access to electrical contacts when uncoupled (M & F)
- IP67 ingress protection
- Cables from 25mm<sup>2</sup> to 300mm<sup>2</sup> CSA, and a choice of screw & crimp terminals
- Multipoint, self-wiping contact area
- High impact bodies & high temperature resistant materials
- Integral cable strain relief
- Metric EN compliant cable glands, with increased cable clamping range
- No special tools required for assembly
- Daisy chain hook-up system
- Panel mount connector & mounting plates
- Rubber hand grip for ease of coupling and added impact protection
- Rubber protective caps to protect connectors from moisture, dirt and abrasion when uncoupled (optional)



### High Current Capacity

The PHASE3 Powersafe connector's advanced contact design achieves its 800A\* continuous rating by utilising an arrangement of 29 transfer bridges. Each transfer bridge is rated at 30A, giving a total of 870A\* per contact.

### International Electrical Colour Coding Standards

REGION	EARTH KEY E	NEUTRAL KEY N	LINE 1 KEY 1	LINE 2 KEY 2	LINE 3 KEY 3
Europe & UK (Harmonised)	Green	Blue	Brown	Black	Grey
UK (Traditional)	Green	Black	Red	Yellow	Blue
Australia	Green	Black	Red	White	Blue
USA	Green	White	Black	Red	Blue



### PHASE 3 Powersafe Range - Key Specifications

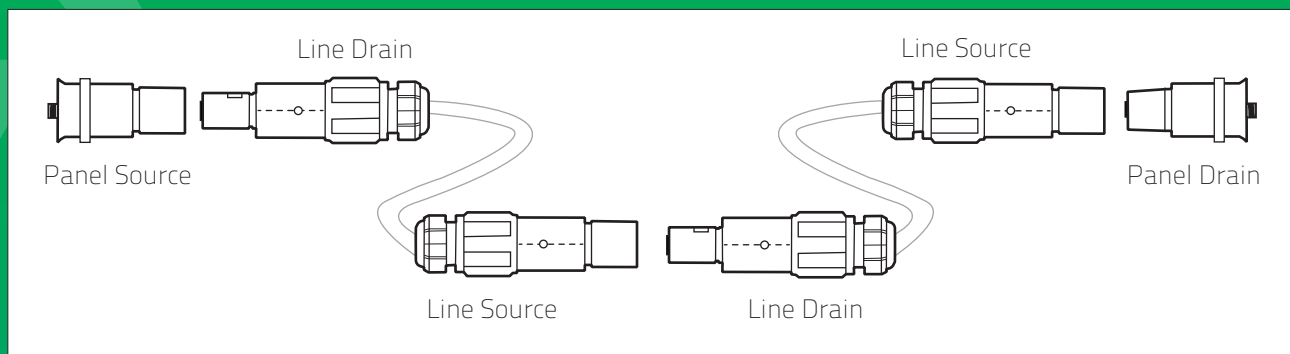
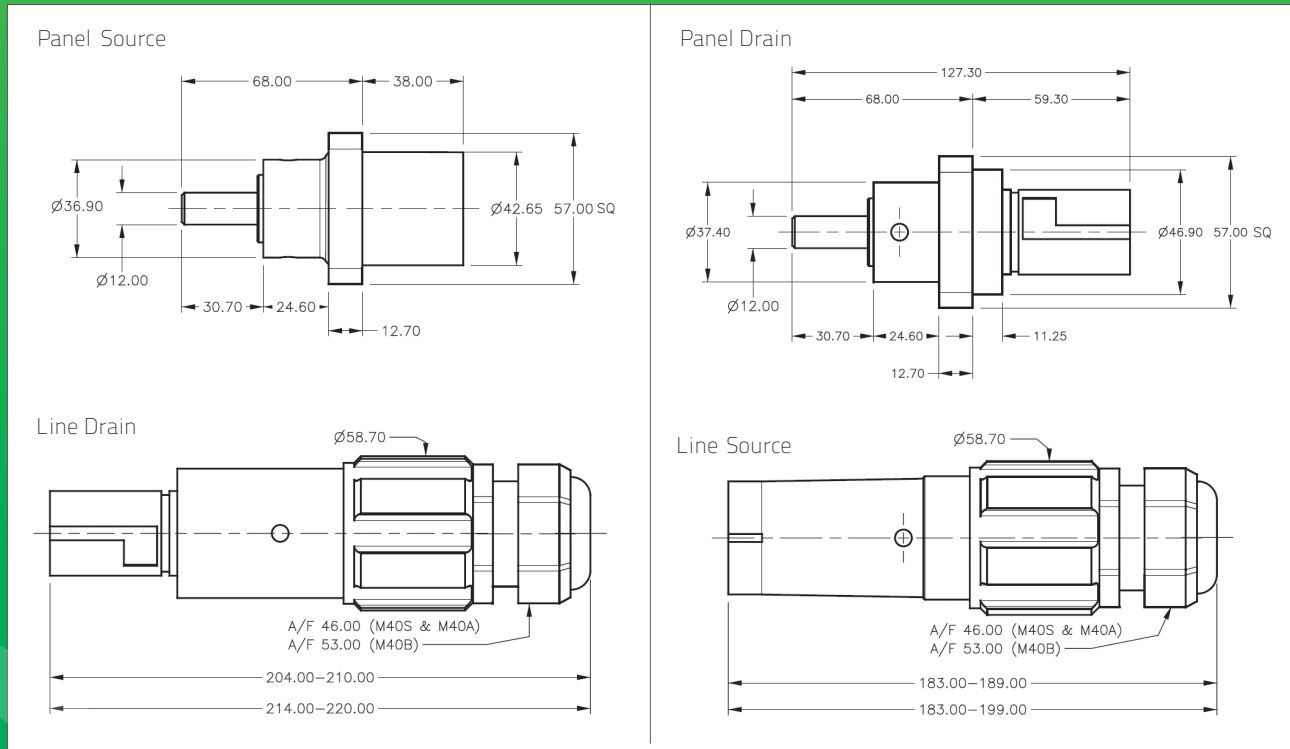
No of Contacts:	1	
Maximum Continuous Current Rating*:	Up to 800A	
Surge Current:	75kA	
Short Circuit Rating:	Up to 35.5kA	
Cables Cross Sectional Area C.S.A.:	25mm <sup>2</sup> to 300mm <sup>2</sup>	
Contact Termination:	Screw or Crimp	
Mating Method:	Bayonet Lock	
Operating Voltage:	1000V AC	
Max Rated Voltage to Earth:	2kV AC / 3kV DC	
Minimum Flashover:	9.5kV DC or AC Peak	
Insulation Resistance:	>5M ohms @ 500V DC	
Ingress Protection**:	IP67	
Protection against Electrical Shock:	IP2X	
Flammability:	UL94-V0	
Mating Cycles:	>500	
Shell Material:	High Temperature Thermoplastic	
Contact Plating:	Silver	

\*Subject to environmental factors and cable choice etc.

\*\*In accordance with EN60529.



PHASE 3 Powersafe Range - Diagrams (all measurements are in mm)



PHASE 3 Powersafe Range - Order Codes

TYPE	KEY POSITION	COLOUR	CONTACT TYPE	CABLE SIZE	CABLE GRIP CLAMPING RANGE
LS = Line Source	E = Earth	GN = Green	S = Set screw	120 = 120mm <sup>2</sup>	M40S = 15 - 23mm
LD = Line Drain	N = Neutral	BL = Blue	C = Crimp	150 = 150mm <sup>2</sup>	M40A = 19 - 28mm
PS = Panel Source	1 = Line 1	BN = Brown	T5 = 500A Panel mount	185 = 185mm <sup>2</sup>	M40B = 22 - 32mm
PD = Panel Drain	2 = Line 2	BK = Black	T8 = 800A Panel mount	240 = 240mm <sup>2</sup>	M50 = 30 - 38mm
		3 = Line 3		GY = Grey	
		R = Red			
		Y = Yellow			
		W = White		*See below	**See below

\*Set screw version available up to 150mm<sup>2</sup>, reduction sleeves available for cables sizes 25, 35, 50, 70 & 95mm<sup>2</sup>. Caps and accessories also available, please ask for details. \*\*Larger cable glands upon request.

61 Naysmyth Road  
 Southfield Industrial Estate  
 Glenrothes, Fife, KY6 2SD  
 Tel: +44 (1592) 775 995  
 Fax: +44 (1592) 775 996  
 Sales@P3Connectors.com



9 Cooper's Point  
 Knowsley Business Park  
 Liverpool, Merseyside, L33 7TU  
 Tel: +44 (151) 317 3860  
 Sales@P3Connectors.com