



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



**THORNE &
DERRICK**
INTERNATIONAL

Thorne & Derrick
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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 - 300mm², **PHASE 3** Powersafe connectors are, at present, amongst the highest rated and safest connectors of their type on the market.

- 800A maximum
- 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 25mm² to 300mm² 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	Black	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 ² to 300mm ²
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

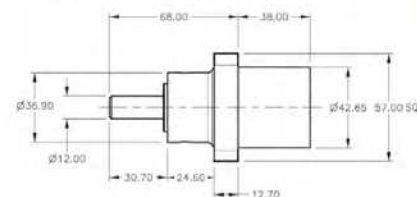


*Subject to environmental factors and cable choice etc. **In accordance with EN60529.

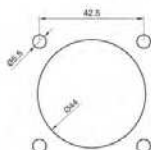


POWERSAFE
RANGE

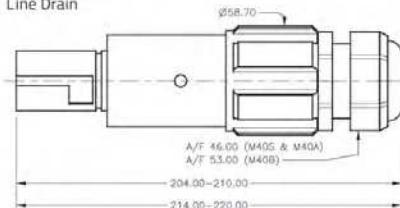
Panel Source



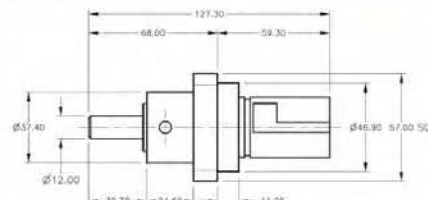
Panel Cutout



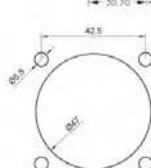
Line Drain



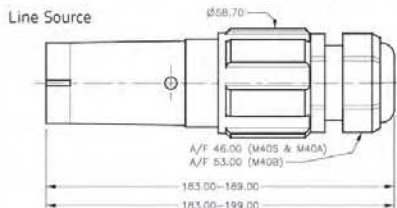
Panel Drain



Panel Cutout



Line Source



TYPE	KEY POSITION	COLOUR	CONTACT TYPE	CABLE SIZE	CABLE GRIP CLAMPING RANGE
LS = Line Source	E = Earth	GN = Green	S = Set screw	120 = 120mm ²	M40S = 15 - 23mm
LD = Line Drain	N = Neutral	BL = Blue	C = Crimp	150 = 150mm ²	M40A = 19 - 28mm
PS = Panel Source	1 = Line 1	BN = Brown	T5 = 500A Panel mount	185 = 185mm ²	M40B = 22 - 32mm
PD = Panel Drain	2 = Line 2	BK = Black	T8 = 800A Panel mount	240 = 240mm ²	M50 = 30 - 38mm
	3 = Line 3	GY = Grey		300 = 300mm ²	
		R = Red			
		Y = Yellow			
		W = White			
				*See below	**See below

*Set screw version available up to 150mm²; reduction sleeves available for cables sizes 25, 35, 50, 70 & 95mm². Caps and accessories also available, please ask for details. **Larger cable glands upon request.



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