



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

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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 (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 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 | 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 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 | |

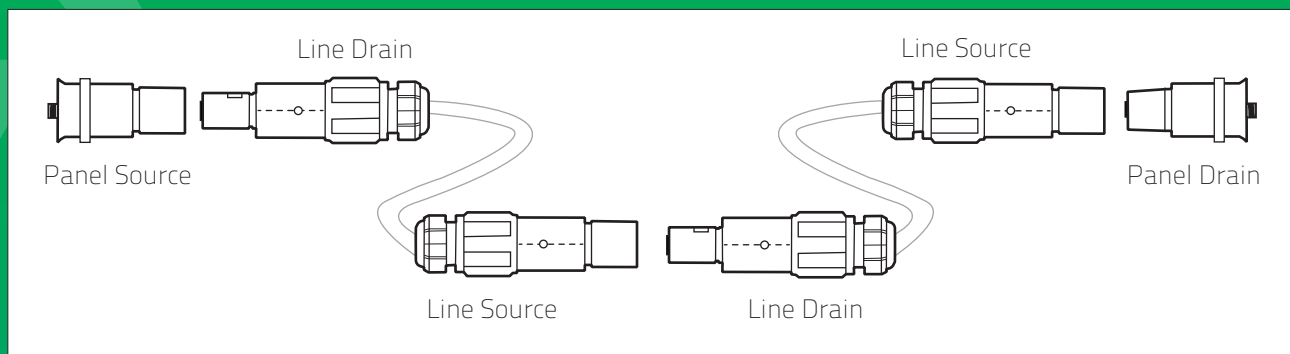
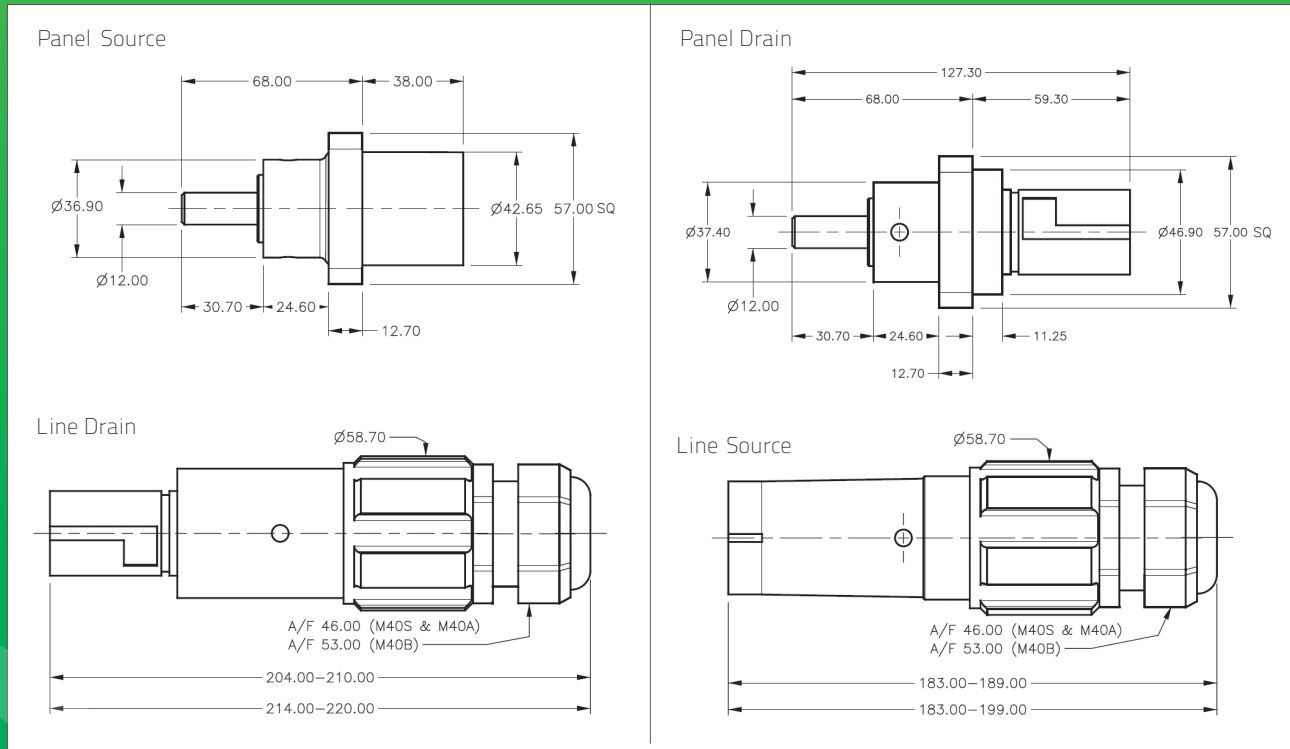
*Subject to environmental factors and cable choice etc.

**In accordance with EN60529.



POWERSAFE
RANGE

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 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 | |
| | | 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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