



## 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



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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, PHASE3 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>, PHASE3 Powersafe connectors are, at present, amongst the highest rated and safest connectors of their type on the market.



CONNECTORS

- 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<br>KEY E | NEUTRAL<br>KEY N | LINE 1<br>KEY 1 | LINE 2<br>KEY 2 | LINE 3<br>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                                  |



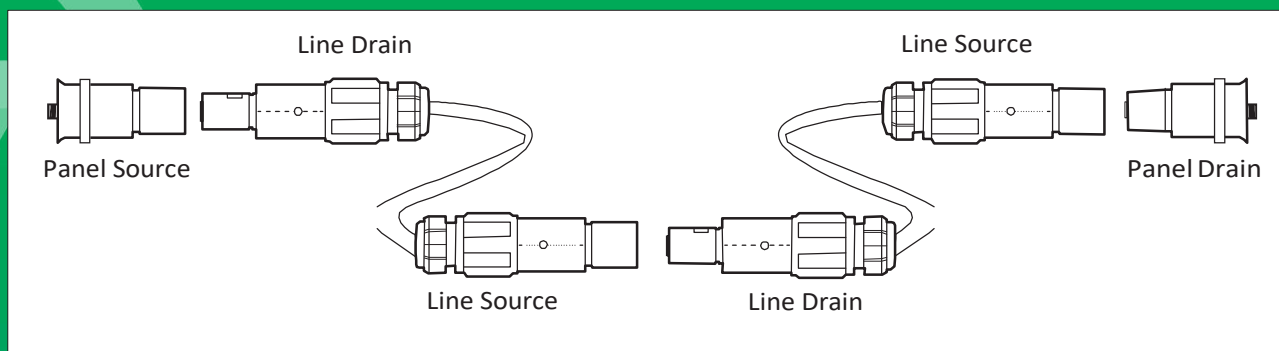
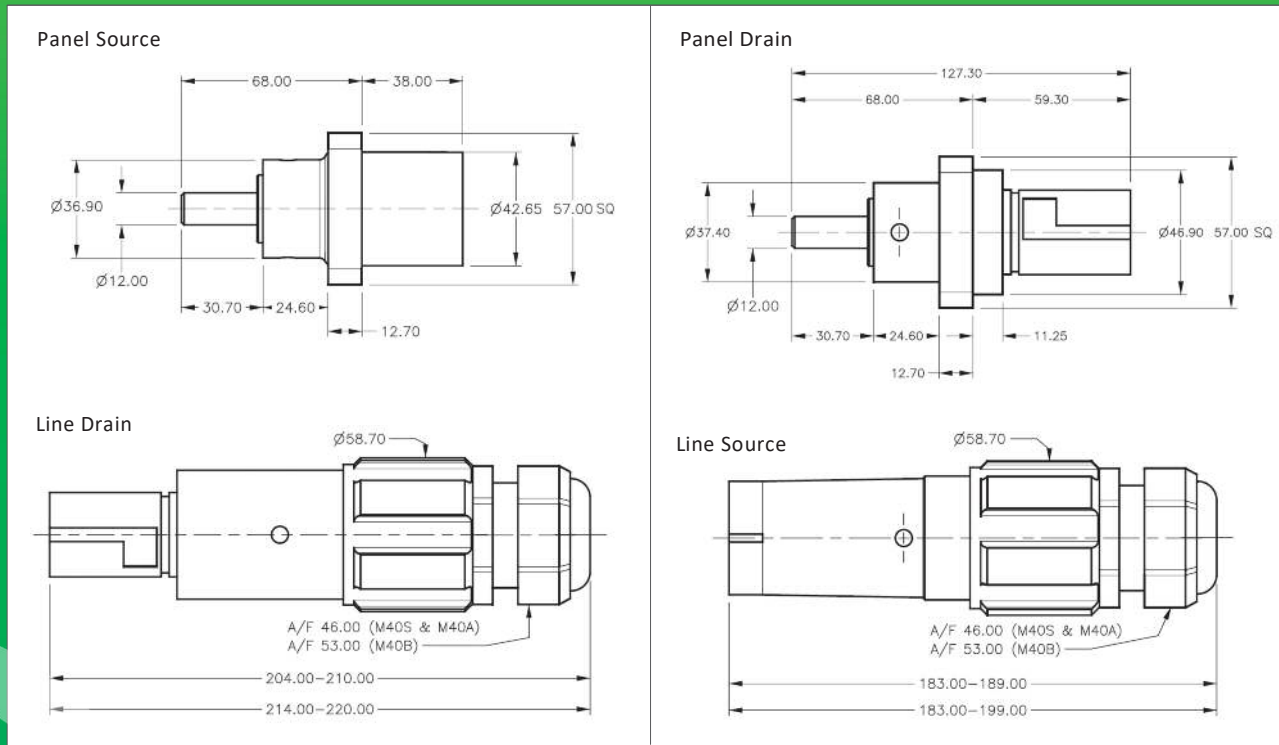
\*Subject to environmental factors and cable choice etc.

\*\*In accordance with EN60529.



**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 = Setscrew          | 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.



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