



POWERSAFE CONNECTORS

500A and 800A Connections



OVERVIEW

Powersafe single pole connectors provide a safe, reliable solution for high-current power distribution across temporary power, industrial, entertainment and critical infrastructure applications. Designed for single and three-phase power circuits, they feature finger-safe contacts and a secondary locking mechanism for enhanced safety. Available in cable and panel mount versions with crimp or screw contacts, Powersafe connectors are rated up to 500A and 800A for 25–300mm² single core cables, delivering dependable performance in the most demanding environments.

Specification

Value

Number of Contacts

1

Max. Continuous Current Rating*

Up to 800A

Surge Current

75kA

Short Circuit Rating

Up to 35.5kA

Cable Size

25mm² – 300mm²

Contact Termination

Screw or Crimp

Mating Method

Bayonet Lock

Operating Voltage

1000V AC

Maximum Rated Voltage to Earth

2kV AC / 3kV DC

Minimum Flashover Voltage

9.5kV AC Peak / DC

Insulation Resistance

>5MΩ @ 500V DC

Ingress Protection**

IP67

Protection Against Electric Shock

IP2X

Flammability Rating

UL94 V-0

Mating Cycles

>500

Shell Material

High Temperature Thermoplastic

Contact Plating

Silver

* Subject to environmental factors and cable choice etc.

** In accordance with EN60529



TDS 1 OF 3



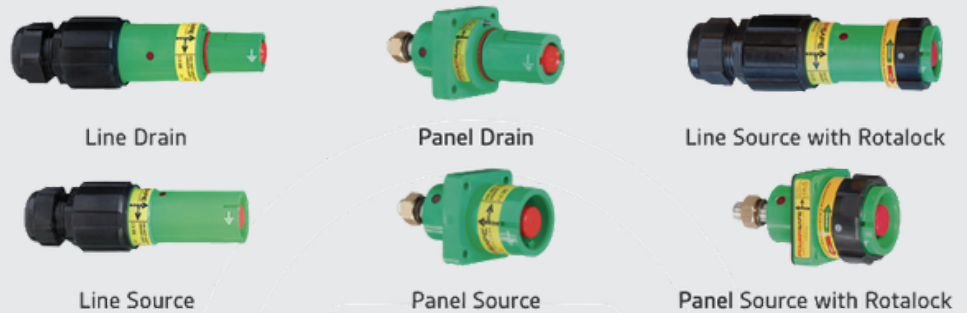
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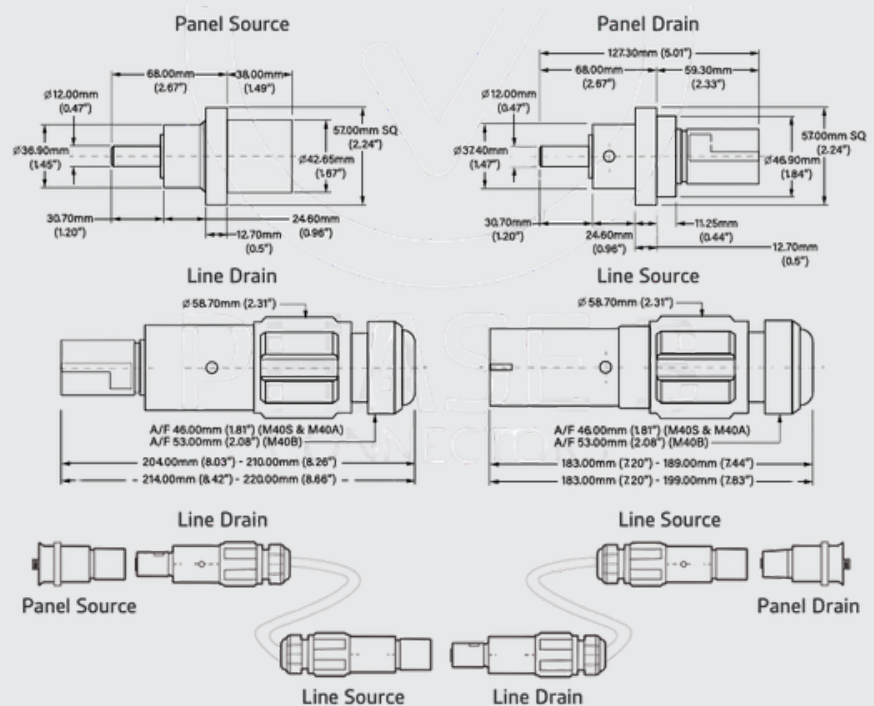
Key Features	Key Features
800A maximum (505A UL Product)	Colour coded & mechanically keyed to prevent connection errors
Flame retardant (UL94-V0)	Locking mechanism to prevent accidental disconnection under load
Finger-proof contacts to prevent access to electrical contacts when uncoupled (M & F)	IP67 ingress protection
Cables from 25mm ² to 300mm ² CSA, with screw or 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	Protective caps to protect connectors from moisture, dirt and abrasion when uncoupled (optional)

ALL FIGURES QUOTED ARE APPROXIMATE

Connection Types



Technical Diagrams



TDS 2 OF 3



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International Electrical Colour Coding Standards

REGION	GROUND	NEUTRAL (N)	LINE 1 (L1)	LINE 2 (L2)	LINE 3 (L3)
EUROPE & UK	GREEN	BLUE	BROWN	BLACK	GREY
UK (OLD)	GREEN	BLACK	RED	YELLOW	BLUE
USA (LV)*	GREEN	WHITE	BLACK	RED	BLUE
USA (HV)*	GREEN	GREY	BROWN	ORANGE	YELLOW
AUSTRALIA	GREEN	BLACK	RED	WHITE	BLUE
Canada	GREEN	WHITE	RED	BLACK	BLUE

*(HV) HIGH VOLTAGE > 1000VAC or 1500VDC

*(LV) LOW VOLTAGE 50 TO 1000VAC or 120-1500VDC

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			

*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.

E&OE. Manufacturers reserve the right to amend the specification without prior notice.

TDS 3 OF 3

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