

# POWERSAFE POWER DISTRIBUTION BOX ASSEMBLY GUIDE











www.p3connectors.com



#### Thank you for purchasing the Powersafe Power Distribution Box

Phase 3's Powersafe Sequential Mating Box controls the connection sequence of incoming / outgoing high current cable connections. The sequence ensures that the Earth connection is made first and disconnected last. (FMLB- First Mate Last Break).

### How to Connect Cables to the Unit

**1.** With key (included) turn the Earth lock clockwise (Fig 1). The Earth cover will pop open.

**2.** Raise the Earth cover fully open. Take the Earth cable end connector (not included) and plug into the Earth socket.



Figure 1

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The Powersafe connectors are mechanically keyed to prevent connection errors. So it is not possible to plug any other connector other than and Earth keyed connector into this position.

**3.** To mate the connectors align the arrow on the mating connector with the green circle on the Powersafe unit front panel. Push the connector fully into the box until it stops and then turn clockwise. The Neutral cover will now pop open.

**4.** Raise the Neutral cover to the fully open position. Repeat steps 2-4 until all 5 connectors (E, N, L1,L2 &L3) are connected.

## You can skip the Neutral connector step if you have purchased the 4 port Powersafe Box.

When covers are raised the previous connection cannot be disconnected without first closing the cover- for example when the Neutral cover is raised the Earth connector cannot be removed.



**5.** When the L3 connector is mated and turned fully clockwise to the locked position, take the key lock and turn the L3 lock clockwise. (Fig 2).

#### Turning this lock does two things:



**a)** It locks the L3 connector in place to prevent accidental disconnection under load and prevents further access to the unit.

**b)** It switches an integral micro switch, which can be used as a signal path for electrical protection device. A 3 pin connector plug is available which will plug onto the 3 pin connector on the rear of the unit, to allow for connection of such devices.

### How to Disconnect Cables from the Unit

The disconnect sequence is reversed. Therefore the connectors have to be removed from Right to Left starting with the L3 connector.

1. Turn L3 key lock anticlockwise to release the L3 connector.

**2.** Now turn the L3 connector fully anticlockwise and pull out of the port. Push the cover down.



The cover will not fully close at this point, however with the cover raised it will not be possible to remove the next connector.

**4.** Now turn the L2 connector fully anticlockwise and unplug (Note the L3 cover will automatically fully close during this action).

**5.** Once all connectors are removed, turn the Earth key lock anticlockwise. This locks the Earth cover preventing access to the unit.

#### **Product Features**



**800A Capacity** Phase 3's level of Quality is unmatched, Our Distribution Boxes have a high current rating of 800A, Max Capacity.



Locking Key System Keep the box secure with a Key locking system, ensuring only authorised individuals can operate.



M12 Cable Lug Universal Connections, like M12's, make the Distribution box so versatile. Compatibility for everyone.



**Remote Control** Each Distribution Box has a connection to allow remote control, for your convenience.

### **Order Codes**

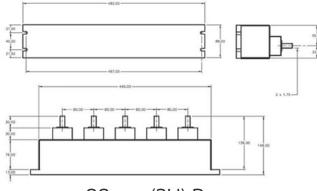
PART NUMBER	DESCRIPTION
SD00046	PS5-E-88 SEQUENTIAL BOX EURO
SD00047	PD5-E-88 SEQUENTIAL BOX EURO
SD00061	PS5-E-108 SEQUENTIAL BOX EURO
SD00062	PD5-E-108 SEQUENTIAL BOX EURO
SD00056	PS5-A-88 SEQUENTIAL BOX AUSTRALIA
SD00057	PD5-A-88 SEQUENTIAL BOX AUSTRALIA
SD00287	PS5-A-108 SEQUENTIAL BOX AUSTRALIA
SD00266	PD5-A-108 SEQUENTIAL BOX AUSTRALIA
SD00058	PS5-UK-88 SEQUENTIAL BOX UK
SD00059	PD5-UK-88 SEQUENTIAL BOX UK
SD00288	PS5-UK-108 SEQUENTIAL BOX UK
SD00354	PD5-UK-108 SEQUENTIAL BOX UK
SD00398	PS5-USA-108 SEQUENTIAL BOX UNITED STATES
SD00399	PD5-USA-108 SEQUENTIAL BOX UNITED STATES
PP00238	5m MICRO-SWITCH LEAD TO CONNECTOR TO REAR OF BOX
PP00262	SPARE KEY FOR BOX
SD00406	4 PORT SOURCE BOX - CAN BE USED WITHOUT EARTH LEAD
SD00297	4 PORT DRAIN BOX - CAN BE USED WITHOUT EARTH LEAD

HOW TO ORDER PD5 = Drain Box PS5 = Source Box LID = Optional Lid (for IP67 rating)

#### COLOURS/COUNTRY

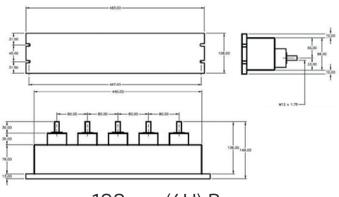
- 😳 E = European
- ទ 🗛 = Australian
- **UK** = 'Old UK'
- **= USA** = United States

## **Overall Dimensions**



88mm (2U) Box

Option 1 - (2U) Rack Mounting Height = 88mm Length = 483mm Depth = 130mm



108mm (4U) Box

Option 2 - (4U) Panel Mounting Height = 108mm Length = 483mm Depth = 130mm

For option 2 add '108' to part number

Maximum Rated Voltage to Earth: 2KVac Current Rating: Up to 800A Rear Terminals: M12 x 25 threaded studs (TIGHTEN NUTS TO A MAXIMUM OF 12 - 14Nm) Micro Switch rating: 250VAC / 3A



DO NOT INSERT UNASSEMBLED INSULATORS INTO THE BOX AS THIS CAN MISALIGN THE INTERNAL BARRELS. ONLY PLUG FULLY ASSEMBLED CONNECTORS INTO THE UNIT. IN THE EVENT THAT INSULATORS HAVE BEEN INSERTED AND THE BARREL ALIGNMENT IS LOST, THEN REINSERT THE INSULATORS AND MAKE SURE EACH IS TURNED FULLY TO THE LEFT. THIS WILL RESET THE MECHANISM.



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