

# SCREW FIT® 3-WAY BOTTOM ENTRY JUNCTION BOX - IP66/68

# for General Industrial and Mining Electrical Installations

#### Features and Benefits

- Screw Fit® 3-Way Bottom Entry Box for general industrial and mining electrical installations.
- 20mm Box supplied complete with safety securing lid lanyard.
- Raised domed lid facilitates connections to be made outside of the box.
- Only approved CCG cable glands and terminals must be used.
- No exposed metal parts.
- · Dust and waterproof to IP66/68, when used with CCG sealed cable glands.
- · No drilling or tapping of cable entries required.
- Mounting studs provided for DIN rail if using Terminal Blocks.
- Internal earthing to all entries and rail provided.
- Screw Fit® 3-Way Bottom Entry Box can be buried for extended periods.
- Red Fire Rated Box for emergency circuits available (925°C for 3-hours).

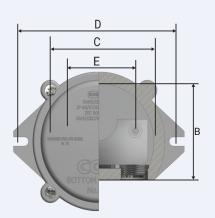
#### **Technical Data**

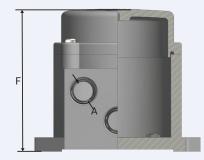
| Туре:                   | Screw Fit <sup>®</sup> 3-Way Bottom Entry Box                              |
|-------------------------|--|
| Box Material:           | Impact corrosion and UV resistant glass reinforced polyester<br>compound   |
| Seal Material:          | Nitrile Rubber   |
| Inserts:                | Brass internal earthing and rail mountings                                 |
| Optional Accessories:   | Certified Terminals, 3-Blanking Plugs and Box Spanner<br>(Lid Locking Key) |
| Standards and Certifica | tions  |
|                         |  |

| Service Temperature:          | -60°C to +110°C (Unfinished) |                        |
|-------------------------------|------------------------------|------------------------|
| Conformance:                  | Standard:                    | Certificate:           |
| IEC/BS/EN                     | 62208:2011                   | CML 17Y11251           |
| SANS                          | 62208:2012                   | MASC 16-1787           |
| Impact Protection IK10        | IEC/BS/EN 62262              | CML 17Y11251           |
| IP66/68 Protection            | IEC/BS/EN 60529              | CML 17Y11251           |
|                               | SANS 60529                   | MASC 16-1787           |
| Deluge Protection             | DTS 01                       | CML 14CA370-1          |
| Marine Approvals ABS          | IEC 60529                    | ABS 20-SG1952738-PDA   |
| DNV-GL                        | IEC 60529                    | DNV-GL TAE0000011      |
| Short Circuit Protection      | IEC 60947-7-2, IEC 62444     | CATAPULT OR/15/11677_2 |
| Continuous Current Protection | IEC 60947-7-2                | CATAPULT OR/15/11677_2 |
| UV Protection                 | ISO 4892-2                   |                        |
| Zero Halogen                  | BS7211, BS 50267-2-1         | TDW69-09-14            |
| Flammability                  | UL94V-0                      |                        |
| London Underground Approval   | IEC 62208, IEC 62262         | LU 3057                |









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#### Conditions for safe use

- Only the terminal blocks as per the description may be utilised in the junction box. Specific installation conditions as set by the terminal manufacturer/terminal certification must be considered. This includes considering the use of the applicable partitions and end plates for terminal blocks, conductor installation, tightening down of terminal block screws etc.
- Terminal blocks may only be utilized on the applicable rail and must allow sufficient space to make connections and to close the cover/lid.
- IP66/68 glands/plugs must be used in the threaded entries.
- Information in relation to entries is indicated in the instructions.

| • Information in  | • Information in relation to entries is indicated in the instructions. |                     |                              |                             |                            |                                 |                        |
|-------------------|--|---------------------|------------------------------|-----------------------------|----------------------------|---------------------------------|------------------------|
| Product<br>Code   | Box Size<br>Reference  | Entry Thread<br>'A' | Internal<br>Dimension<br>'B' | Internal<br>Diameter<br>'C' | Mounting<br>Centres<br>'D' | Rail<br>Mounting<br>Centres 'E' | Outer<br>Height<br>'F' |
| 100201-SF         | 1  | M20 x 1.5           | 68.0                         | 101.0                       | 132.0                      | 80.0                            | 124.0                  |
| All dimensions ar | re in mm.  |                     | -                            |                             |                            |                                 |                        |

CCG reserves the right to make alterations to the technical data, dimensions, designs and products available without notice. The illustrations cannot be considered binding. Please contact CCG for assistance.

# SCREW FIT® 3-WAY BOTTOM ENTRY JUNCTION BOX



#### Wiring and installation instructions for Screw Fit<sup>®</sup> 3-Way Bottom Entry Box with components

- Installation must be carried out by a competent person.
- Do not install under live current conditions.
- The box must not be modified in any way, as may compromise the integrity of the boxes.
- All wiring must be carried out in accordance with the relevant Codes of Practice.
- The wiring insulation must not extend by more than 1.0mm from the metal face of the terminal as shown in Figure 1.
- The voltage and current value of the terminals in Table 2 must not be exceeded.
- Only those terminals shown in the terminal schedule may be incorporated in the box, refer Table 1.
- Inner cable bedding must protrude into the box by a minimum of 20mm past the cable entry point.
   Not more than one single or multiple strand lead shall be connected to either side of the terminals.
- Not more than one single or multiple strand lead shall be connected to either side of the terminals.
  Only earth conductors of equal size shall be connected with rail mounted terminals.
- All terminal screws used and unused shall be tightened.
- A parallel shaft screwdriver of the correct size should be used for rail mounted terminals screws.
- Where cables enter the box they must be secured by CCG Cable Glands appropriate to the makeup of the cable.
- Unused entry apertures must be blanked with CCG Standard Blanking Plugs.
- To maintain IP66/68 a thread seal gasket between the box and cable gland must be installed.
- Before replacing the lid, ensure the lid gasket is in place.

## TABLE 1

| TABLE I                              |             |                                |                 |              |  |  |
|--------------------------------------|-------------|--------------------------------|-----------------|--------------|--|--|
| Вох Туре                             | Box<br>Size | Terminal Type<br>and Size      | Max<br>Quantity | Rail<br>Size |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 1           | 4mm <sup>2</sup> mini terminal | 8               | 15           |  |  |
| Screw Fit◎ 3-Way<br>BE_Box           | 2           | 2.5mm²                         | 12              | 35           |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 2           | 4mm²                           | 10              | 35           |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 2           | 4mm² mini terminal             | 12              | 15           |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 2           | 6mm²                           | 8               | 35           |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 2           | 10mm <sup>2</sup>              | 7               | 35           |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 2           | 16 mm²                         | 6               | 35           |  |  |
| Screw Fit® 3-Way<br>Bottom Entry Box | 2           | 35mm²                          | 3               | 35           |  |  |

#### TABLE 2

| VOLTAGE PER TERMINAL CONFIGURATION |      |                    |  |  |  |
|------------------------------------|------|--------------------|--|--|--|
| Terminals                          | Volt | Earth<br>Terminals |  |  |  |
| AKZ 4                              | 275V | AKE 4              |  |  |  |
| WDU 2.5                            | 550V | WPE 2.5            |  |  |  |
| WDU 4                              | 550V | WPE 4              |  |  |  |
| WDU 6                              | 550V | WPE 6              |  |  |  |
| WDU 10                             | 550V | WPE 10             |  |  |  |
| WDU 16                             | 550V | WPE 16             |  |  |  |
| WDU 35                             | 550V | WPE 35             |  |  |  |
| WDU 70 N                           | 550V | WPE 70 N           |  |  |  |



Insulated Terminal Connector 0.5mm to 16mm

## **Tools /Accessories**

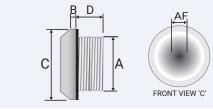
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#### **Pole Mounting Bracket**



| Product Code | Box Size Reference |  |  |
|--------------|--------------------|--|--|
| 401800       | M20                |  |  |
| 401801       | M20                |  |  |
| 401802       | M25                |  |  |

# Non Metallic Plugs IP66/68 complete with washer



| Product<br>Code | Metric<br>Dia 'A' | Dia<br>Max 'B' | Dia<br>Max 'C' | Dia<br>Min 'D' | Hex Size<br>Max A/F | Torque<br>Value<br>Nm |
|-----------------|-------------------|----------------|----------------|----------------|---------------------|-----------------------|
| 352820          | M20x1.5           | 5.0            | 28.0           | 12.0           | 10.0                | 7.0                   |
| 352825          | M25x1.5           | 5.0            | 33.0           | 15.0           | 10.0                | 9.0                   |

