

# BOTTOM ENTRY ANGLE™

## JUNCTION BOX - IP66/68

for General Industrial Electrical Installations



### Features and Benefits

- Bottom Entry Angle™ Box for industrial lighting applications.
- Screw-on lid provides ease of installation. Lid locking with a special key prevents unauthorized tampering.
- Supplied complete with safety securing lid lanyard.
- Bottom Entry Angle™ Box is angled to allow ease of termination and inspection.
- Only approved CCG cable glands and terminals must be used.
- DIN Rail mounting studs are provided for use with terminal blocks.
- Dust and watertight to IP66/68, when fitted with CCG sealed cable glands.
- No drilling of the cable entries required.
- Internal earthing to all entries and rail.
- Red Fire Rated Box for emergency circuits available (925°C for 3-hours)

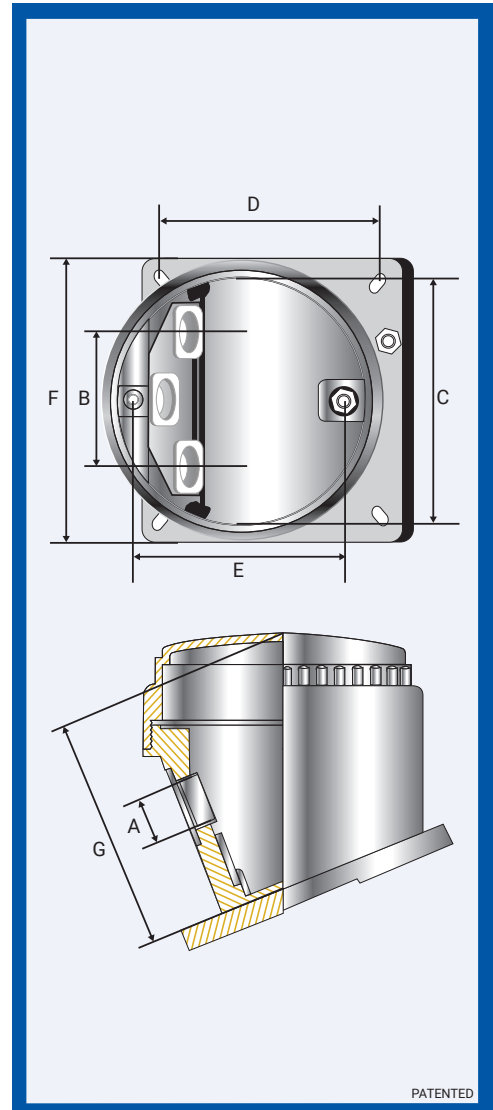


### Technical Data

|                       |   |  |
|-----------------------|---|--|
| Type:                 | Bottom Entry Angle™ Box   |  |
| Box Material:         | Impact corrosion and UV resistant glass reinforced polyester compound               |  |
| Seal Material:        | Low Temp. Nitrile Rubber  |  |
| Inserts:              | Brass, internal earth continuity ring and earth stud provided                       |  |
| Optional Accessories: | Certified Terminals, Box Spanner (Lid Locking Key)<br>3-Blanking plugs are provided |  |

### Standards and Certifications

|                               |                              |                        |
|-------------------------------|------------------------------|------------------------|
| 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 - 2m 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                |



### Conditions for safe use

- The CCG lid locking key must be used to open and close units that do not have locking screws such as “clear cover units”.
- When fitted with the clear lid, the unit must be installed to prevent UV exposure to the internal components fitted.
- 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 with relation to entries is indicated in the instructions.

| Product Code | Entry Thread 'A' | Internal Diameter 'B' | Distance Between Centres 'C' | Mounting Centres 'D' | Rail Mounting Centres 'E' | Outer Diameter 'F' | Overall Height 'G' |
|--------------|------------------|-----------------------|------------------------------|----------------------|---------------------------|--------------------|--------------------|
| 065301-BE    | M20              | 66.0                  | 101.0                        | 92.0                 | 81.0                      | 118.0              | 105.0              |
| 065302-BE    | M25              | 52.0                  | 123.0                        | 104.0                | 78.0                      | 120.0              | 105.0              |
| 065303-BE    | M32              | 110.0                 | 181.0                        | 165.0                | 156.0                     | 202.0              | 140.0              |

All dimensions are in mm.

Any combination of 20mm or 25mm entry threads available.

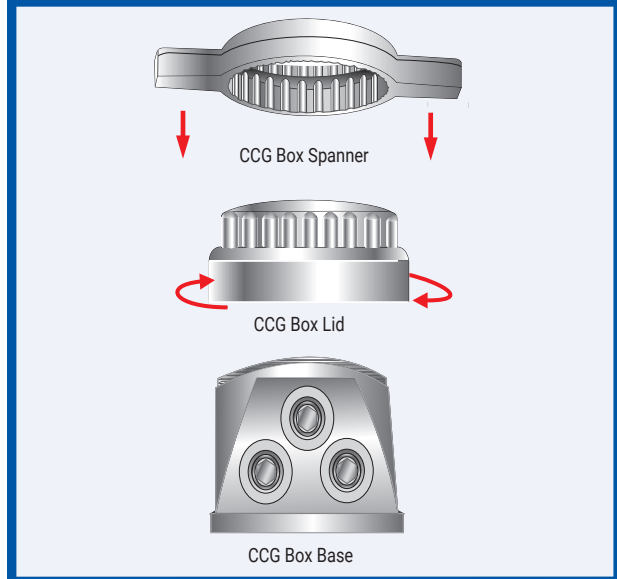
# BOTTOM ENTRY ANGLE™ JUNCTION BOX

## Wiring and Installation instructions for Bottom Entry Angle 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 this will invalidate the certification.
- 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 2.
- The voltage and current value of the box must not be exceeded, refer Table 2  
See relevant certificate for current limitations for conditions of use / schedule of limitations.
- 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 into 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 screw driver 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 make up of the cable.
- Unused entry apertures must be blanked with certified CCG 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.
- The use of a CCG Box Spanner (Lid Locking Key) is required to maintain the tamper proof integrity of the box, refer Figure 1.

**FIGURE 1**

To ensure the box apparatus is tamper proof:  
Screw on, tighten and lock lid in place by means of a CCG Box Spanner (Lid Locking Key).



**CCG Box Spanner**

| Product Code | Box Size |
|--------------|----------|
| 401201       | 1        |
| 401202       | 2        |

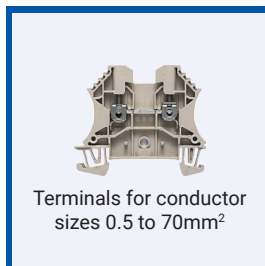
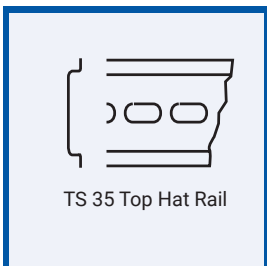
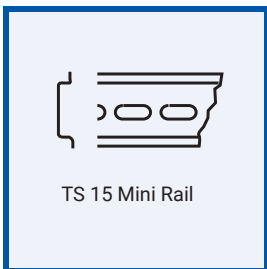
**TABLE 1**

| Box Type     | Box Size | Terminal Type and Size         | Max Quantity | Rail Size |
|--------------|----------|--------------------------------|--------------|-----------|
| BE Angle Box | 1        | 4mm <sup>2</sup> mini terminal | 8            | 15        |
| BE Angle Box | 2        | 2.5mm <sup>2</sup>             | 12           | 35        |
| BE Angle Box | 2        | 4mm <sup>2</sup> mini terminal | 8            | 15        |
| BE Angle Box | 2        | 4mm <sup>2</sup>               | 10           | 35        |
| BE Angle Box | 2        | 6mm <sup>2</sup>               | 8            | 35        |
| BE Angle Box | 2        | 10mm <sup>2</sup>              | 7            | 35        |
| BE Angle Box | 3        | 2.5mm <sup>2</sup>             | 20           | 35        |
| BE Angle Box | 3        | 4mm <sup>2</sup> mini terminal | 14           | 15        |
| BE Angle Box | 3        | 4mm <sup>2</sup>               | 16           | 35        |
| BE Angle Box | 3        | 6mm <sup>2</sup>               | 12           | 35        |
| BE Angle Box | 3        | 10mm <sup>2</sup>              | 12           | 35        |
| BE Angle Box | 3        | 16 mm <sup>2</sup>             | 10           | 35        |
| BE Angle Box | 3        | 35mm <sup>2</sup>              | 6            | 35        |

**TABLE 2**

### VOLTAGE PER TERMINAL CONFIGURATION

| Terminals | Volt | Earth 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        |



**FIGURE 2**

The wiring insulation must not extend by more than 1.0mm from the metal face of the terminal as shown below.

