

# 3-WAY BOTTOM ENTRY™

## JUNCTION BOX - IP66/68

for General Industrial and Mining Electrical Installations

### Features and Benefits

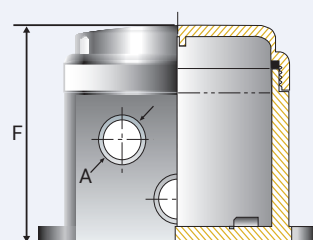
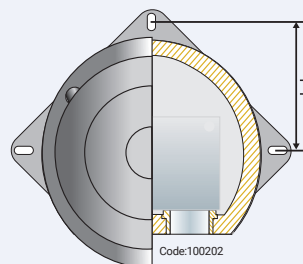
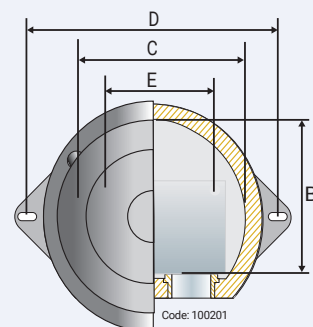
- 3-Way Bottom Entry™ Box for general industrial and mining electrical installations.
- Screw-on lid provides ease of installation. Lid locking with a special key prevents unauthorized tampering.
- Supplied complete with safety securing lid lanyard.
- Only approved CCG cable glands and terminals must 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.
- Red Fire Rated Box for emergency circuits available (925°C for 3-hours).

### Technical Data

Type:	3-Way Bottom Entry™ Box	
Box Material:	Impact corrosion and UV resistant glass reinforced polyester compound	
Seal Material:	Nitrile Rubber	
Inserts:	Brass internal earthing and rail mountings	
Optional Accessories:	Certified Terminals, 3-Blanking Plugs and Box Spanner (Lid Locking Key)	

### 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 14-SG124675-1PDA
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 safe use

- The CCG supplied tool must be used to open and close units that do not utilize the locking screw on the cover / lid.
- When fitted with the polycarbonate (clear) cover the equipment must be installed to prevent the generation of electrostatic charge.
- 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.
- Suitably certified glands / plugs must be used in the threaded entries.
- Information with regards to entries is indicated on the instructions.

Product Code	Box Size Reference	Entry Thread 'A'	Inside Diameter 'B'	Distance Between 'C'	Mounting Centres 'D'	Rail Mounting Centres 'E'	Outer Height 'F'	Dim. 'I'
100201	1	M20 x 1.5	61.0	90.0	125.0	60.0	112.0	-
100202	2	M25 x 1.5	100.0	92.0	162.0	92.0	160.0	81.0

All dimensions are in mm.

Fixing Holes - use with M6 hold down bolt.

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.

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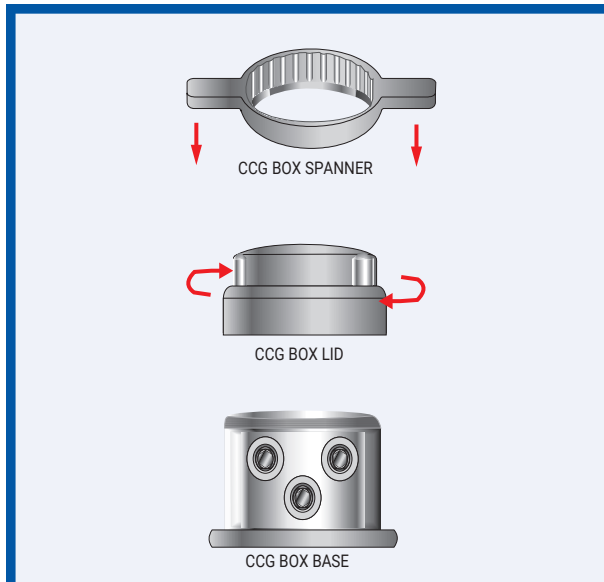
# 3-WAY BOTTOM ENTRY™ JUNCTION BOX

## Wiring and Installation instructions for 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 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
401501	20mm
401502	25mm

**TABLE 1**

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

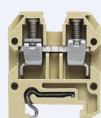
**TABLE 2**

### 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



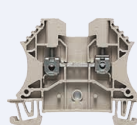
TS 15 Mini Rail



Mini Terminals for conductor sizes 0.5 to 4mm<sup>2</sup>



TS 35 Top Hat Rail



Terminals for conductor sizes 0.5 to 70mm<sup>2</sup>

**FIGURE 2**

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

