

# Certificate of Assessment

## CML 17Y11251

Issue 0

- 1 Equipment Non-metallic Industrial Junction Box Series
- 2 Manufacturer CCG Cable Terminations (Pty) Ltd
- 3 Address **33-37 Forge Road, Spartan** Industrial Area, Kempton Park, 1619, South Africa
- 4 The components specified have been evaluated against the requirements of the standard specified in Section 7.
- 5 This evaluation is based on the following documents:

CML report R11251A/00

6 Specification: BS EN 62208:2011 / IEC 62208, Ed. 2 (2011)

BS EN 62262:2002 / IEC62262, Ed. 1.0 (2002)

- 8 Assessment The components specified have been evaluated against the requirements of the standard specified in Section 7, with the respect to the requirements for empty enclosures for low-voltage switchgear and control gear assemblies-General requirements. Additionally, the components listed have been evaluated against the requirements for IK10 for electrical equipment against external mechanical impacts.
- 9 The equipment shall be marked with the following:

EN/IEC 62208 EN/ IEC62262

IK10

10 Date: 31 August 2017

D R Stubbings MIET Technical Director



#### 11 Description

#### ALL JUNCTION boxes:

- Are manufactured from a DMC (Dough Moulding Compound).
- Include pressed metallic inserts in the side of the enclosure with threaded entries for sufficiently IP rated glands or plugs.
- Have an o-ring(s) which is utilized between the housing and the cover of the enclosure to maintain the IP rating.
- Can be manufactured to be used for terminal blocks located on the internal rail, fitted to the base of the junction box.

#### Handifit boxes:

The Handfit enclosures have a cylindrical shaped body with a screw on cover, secured/opened with a special tool that engages into splines on the cover of the enclosure.

An optional polycarbonate/DMC cover (Adaptalid) may be screwed on with four M5 countersink screws into metallic inserts in a DMC adaptor, which is threaded to replace the normal threaded cover. An o-ring is utilised between the polycarbonate section and adaptor to maintain the IP rating.

#### Handifit Screw Fit boxes:

The Screw Fit non-metallic junction box enclosure has a cylindrical shaped body with a cover, secured with four M5 stainless steel pan-pozi screws in metallic threaded inserts moulded in the base of the enclosure. An o-ring is utilised with the cover to maintain the IP rating.

Туре	Box size	Dimensions (Dia, X height) (mm)	Gland entry sizes	Maximum Gland entry amount and arrangement	
Handifit Junction box	0	100 x 78	M16-M20	Four entries positioned	
	1	118 x 91	M16-M20	orthogonal around the side walls with multiple gland	
	2	140 x 114	M16-M25	entry sizes.	
	3	203 x 142	M16-M32		
	4	298 x 186	M16-M40		
Handifit Bottom	1	118 x 98	M20-M25	Three entries positioned at	
entry angle Box	2	140 x 105	M16-m32	the bottom of the box: - one entry closest to the base of	
	3	202 x 140		the box and two entries closest to the rim of the box	

#### The range of enclosures consists of the following:



				UK	
Туре	Box size	Dimensions (Dia, X height) (mm)	Gland entry sizes	Maximum Gland entry amount and arrangement	
Handifit 3 Way Bottom entry box	1	128 x 112	M16-M20	Three entries positioned at the bottom of the box: - one	
	2	162 x 160	M16-M25	entry closest to the base of the box and two entries closest to the rim of the box.	
Handifit Y Box	0	102 x 81	M16-M20	Two entries positioned on	
	1	118 x 111	M16-M20	the side of the box and one entry positioned on the	
	2	138 x 123	M16-M25	opposite side of the box.	
	3	200 x 94	M16-M32		
Handifit H Box	1	118 x 94	M16-M20	Two entries positioned on the side of the box and two	
	2	138.5 x 100	M16-M25	entries positioned on the opposite side of the box	
Handifit ST Box strut box	1	158 x 104	M16-M20	Four entries positioned on opposite sides with multiple gland entry sizes	
Handifit Angle Box	2	121 x 100	M20-M25	Two entries on flat section and two on cylindrical side.	
Handifit Screw Fit Box	All	Similar to above	As above	Same options as for above types	

The following terminal blocks are allowable with the junction boxes:

Box Size	Terminal Type	Size	Continuous Current MAX	Max Voltage STD	Max Quantity STD
0	AKZ-4	4mm <sup>2</sup> mini terminal	41A	400V	8
0	WDU 2.5	2.5mm <sup>2</sup>	32A	800V	4
1	WDU 2.5	2.5mm <sup>2</sup>	32A	800V	12
1	AKZ-4	4mm <sup>2</sup> mini terminal	41A	400V	11
1	WDU 4	4mm²	41A	800V	9
1	WDU 6	6mm²	57A	800V	7
1	WDU 10	10mm <sup>2</sup>	76A	1000V	5
1	WDU 16	16mm²	101A	1000V	4
2	WDU 2.5	2.5mm²	32A	800V	16

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Box Size	Terminal Type	Size	Continuous Current MAX	Max Voltage STD	Max Quantity STD
2	AKZ-4	4mm <sup>2</sup> mini terminal	41A	400V	14
2	WDU 4	4mm <sup>2</sup>	41A	800∨	13
2	WDU 6	6mm²	57A	800V	10
2	WDU 10	10mm <sup>2</sup>	76A	1000V	8
2	WDU16	16mm <sup>2</sup>	101A	1000V	6
2	WDU 35	35mm²	150A	1000V	53
3	WDU 2.5	2.5mm <sup>2</sup>	32A	800V	25
3	AKZ-4	4mm <sup>2</sup> mini terminal	41A	400V	23
3	WDU 4	4mm <sup>2</sup>	41A	800V	20
3	WDU 6	6mm²	57A	800V	16
3	WDU 10	10mm <sup>2</sup>	76A	1000V	12
3	WDU 16	16mm²	101A	1000V	10
3	WDU 35	35mm²	150A	1000V	8
3	WDU 70	70mm <sup>2</sup>	232A	1000V	5
3	AKZ-4	4mm <sup>2</sup> mini terminal	41A	400V	23
4	WDU 2.5	2.5mm <sup>2</sup>	32A	800V	45
4	AKZ-4	4mm <sup>2</sup> mini terminal	41A	400V	35
4	WDU 4	4mm <sup>2</sup>	41A	800V	35
4	WDU 6	6mm²	57A	800V	28
4	WDU 10	10mm <sup>2</sup>	76A	1000V	22
4	WDU 16	16mm²	101A	1000V	18
4	WDU 35	35mm²	150A	1000V	13
4	WDU 70	70mm <sup>2</sup>	232A	1000V	10



The earthing construction parameters:

### - Max continuous current allowable according to IEC 60947-7-2)

Item	Plate thickness	Rated Current (Amps)
Box size No. 0	0.3mm brass	32.8
Box size No. 1	0.3mm brass	76.1
Box size No. 2	0.3mm brass	127.0
Box size No. 3	N/A	192.8
Box size No. 4	N/A	192.8

- Short circuit current according to IE 62444 and IEC 60947-7-2

Box size	Plate thickness	Continuous current	IEC 62444 Short circuit (1 sec)	IEC 60947 Short Circuit (1 sec)
No. 0	0.5mm brass	32A	500A	480A
No. 1	0.5mm brass	76A	500A	1920A
No. 2	0.5mm brass	125A	500A	1920A
No. 3	N/A	192A	500A	1920A
No. 4	N/A	192A	500A	1920A