



EU Type Examination Certificate CML14ATEX3036X Issue 3

- 1 Equipment intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU
- 2 Equipment **Posi Fit Junction Boxes**
- 3 Manufacturer **CCG Cable Terminations (Pty) Ltd.**
- 4 Address **33-37 Forge Road,
Spartan Industrial Area,
Kempton Park, 1619,
South Africa**
- 5 The equipment is specified in the description of this certificate and the documents to which it refers.
- 6 CML B.V., Chamber of Commerce No 6738671, Hoogoorddreef 15, Amsterdam, 1101 BA, The Netherlands, Notified Body Number 2776, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 12.

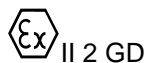
- 7 If an 'X' suffix appears after the certificate number, it indicates that the equipment is subject to conditions of safe use (affecting correct installation or safe use). These are specified in Section 14.
- 8 This EU Type Examination certificate relates only to the design and construction of the specified equipment or component. Further requirements of Directive 2014/34/EU Article 13 apply to the manufacture of the equipment or component and are separately certified.
- 9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the confidential report, has been demonstrated through compliance with the following documents:

EN IEC 60079-0:2018

EN IEC 60079-7:2015+A1:2018

EN 60079-31:2014

- 10 The equipment shall be marked with the following:



Ex eb IIC T6 Gb

Ex tb IIIC T70°C Db

Ta = -60°C to +40°C/55°C

IP66/IP67/IP68 (2m cont.)



Ex eb I Mb



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11 Description

The Posi Fit Junction boxes comprise of a non-metallic Posi Fit enclosure component certified under CML 14ATEX3037U that is fitted with terminals, as detailed in table 1 below:

Type and size	Dimensions (Dia. x height)	Gland entry sizes (1.5mm pitch)	Max. amount of terminals and size	Max. No. of cable gland entries and arrangement
Posi Fit / Tx box Size 0	100 x 78	M16-M20	9 x 4 mm ² mini terminals, 12 x 2.5 mm ² terminals or 12 x 2.5mm ² mini terminals	CCG Posi Fit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
Posi Fit / Tx box Size 1	118 x 91	M16-M20	10 x 2.5 mm ² , 8 x 4mm ² , 6 x 6 mm ² , 5 x 10 mm ² , 4 x 16 mm ² terminals or 8 x 4 mm ² mini terminals	CCG Posi Fit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
Posi Fit / Tx box Size 2	140 x 114	M16-M25	12 x 2.5 mm ² , 10 x 4mm ² , 8 x 6 mm ² , 7 x 10 mm ² , 6 x 16 mm ² , 3 x 35 mm ² terminals or 10 x 4 mm ² mini terminals	CCG Posi Fit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
Posi Fit / Tx box Size 3	203 x 142	M16-M32	20 x 2.5 mm ² , 16 x 4mm ² , 12 x 6 mm ² , 12 x 10 mm ² , 10 x 16 mm ² , 6 x 35 mm ² , 5 x 70 mm ² terminals or 14 x 4 mm ² mini terminals	CCG Posi Fit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
Posi Fit / Tx box Size 4	298 x 186	M16-M40	46 x 2.5 mm ² , 32 x 4mm ² , 28 x 6 mm ² , 23 x 10 mm ² , 18 x 16 mm ² , 14 x 35 mm ² , 10 x 70 mm ² terminals or 35 x 4 mm ² mini terminals	CCG Posi Fit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
Bottom entry angle box Size 1	118 x 98	M16-M20	8 x 4 mm ² mini terminals	CCG Bottom entry angle box 3 entries positioned at the bottom of the box. One entry closest to the rim of the box and two entries to the base of the box
Bottom entry angle box Size 2	140 x 105	M16-M25	12 x 2.5 mm ² , 10 x 4mm ² , 8 x 6 mm ² , 7 x 10 mm ² terminals or 8 x 4 mm ² mini terminals	CCG Bottom entry angle box 3 entries positioned at the bottom of the box. One entry closest to the rim of the box and two entries to the base of the box



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Type and size	Dimensions (Dia. x height)	Gland entry sizes (1.5mm pitch)	Max. amount of terminals and size	Max. No. of cable gland entries and arrangement
Bottom entry angle box Size 3	202 x 140	M16-M32	20 x 2.5 mm ² , 16 x 4mm ² , 12 x 6 mm ² , 12 x 10 mm ² , 10 x 16 mm ² , 6 x 35 mm ² terminals or 14 x 4 mm ² mini terminals	CCG Bottom entry angle box 3 entries positioned at the bottom of the box. One entry closest to the rim of the box and two entries to the base of the box
3 way bottom entry box Size 1	128 x 112	M16-M20	8 x 4 mm ² mini terminals	CCG Bottom entry box 3 entries positioned at the bottom of the box. One entry closest to the base of the box and two entries to the rim of the box
3 way bottom entry box Size 2	162 x 160	M16-M25	12 x 2.5 mm ² , 10 x 4mm ² , 8 x 6 mm ² , 7 x 10 mm ² , 6 x 16 mm ² , 3 x 35 mm ² terminals or 12 x 4 mm ² mini terminals	CCG Bottom entry box 3 entries positioned at the bottom of the box. One entry closest to the base of the box and two entries to the rim of the box
Y box Size 0	102 x 81	M16-M20	6 x 4 mm ² mini terminals	CCG Posi Fit Y box – 2 entries positioned on the side of the box and 1 entry positioned on the opposite side of the box
Y box Size 1	118 x 111	M16-M20	10 x 2.5 mm ² , 8 x 4mm ² , 6 x 6 mm ² , 5 x 10 mm ² or 8 x 4 mm ² mini terminals	CCG Posi Fit Y box – 2 entries positioned on the side of the box and 1 entry positioned on the opposite side of the box
Y box Size 2	138 x 123	M16-M25	12 x 2.5 mm ² , 10 x 4mm ² , 8 x 6 mm ² , 7 x 10 mm ² , 6 x 16 mm ² , 3 x 35 mm ² terminals or 10 x 4 mm ² mini terminals	CCG Posi Fit Y box – 2 entries positioned on the side of the box and 1 entry positioned on the opposite side of the box
Y box Size 3	200 x 150	M16-M32	20 x 2.5 mm ² , 16 x 4mm ² , 12 x 6 mm ² , 12 x 10 mm ² , 10 x 16 mm ² , 6 x 35 mm ² , 5 x 70 mm ² terminals or 14 x 4 mm ² mini terminals	CCG Posi Fit Y box – 2 entries positioned on the side of the box and 1 entry positioned on the opposite side of the box
H box Size 1	118 x 94	M16-M20	10 x 2.5 mm ² , 8 x 4mm ² , 6 x 6 mm ² , 5 x 10 mm ² , 4 x 16 mm ² terminals or 8 x 4 mm ² mini terminals	CCG Posi Fit H box – 2 entries positioned on the side of the box and 2 entries positioned on the opposite side of the box



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Type and size	Dimensions (Dia. x height)	Gland entry sizes (1.5mm pitch)	Max. amount of terminals and size	Max. No. of cable gland entries and arrangement
H box Size 2	138.5 x 100	M16-M25	12 x 2.5 mm ² , 10 x 4mm ² , 8 x 6 mm ² , 7 x 10 mm ² , 6 x 16 mm ² , 3 x 35 mm ² terminals or 10 x 4 mm ² mini terminals	CCG Posi Fit H box – 2 entries positioned on the side of the box and 2 entries positioned on the opposite side of the box
ST Box Strut box Size 1	100 x 96	M16-M20	4 x 2.5 mm ² or 6 x 4 mm ² mini terminals	CCG Posi ST Box strut box – 2 entries positioned on opposite sides with multiple gland entry sizes.
Angle Box Size 2	121 x 100	M20-M25	12 x 2.5 mm ² , 10 x 4mm ² , 8 x 6 mm ² , 7 x 10 mm ² , 6 x 16 mm ² , 3 x 35 mm ² terminals or 10 x 4 mm ² mini terminals	CCG Angle Box 3 entries positioned at the bottom of the box.
Multi Box PosiFit Assembly B	(Rectangular) 196 x 132 x 109	See entry amount and arrangement	20 x 2.5mm ² , 16 x 4mm ² , 12 x 6mm ² , 12 x 10mm ² , 10 x 16 mm ² , 6 x 35mm ² , 6 x 50mm ² , 5 x 70mm ² terminals or 14 x 4mm ² mini terminals.	The entries could vary, with the A/C of the gland being the min distance between the entries.
Multi Box PosiFit Assembly C	(Rectangular) 278 x 200 x 117	See entry amount and arrangement	46 x 2.5mm ² , 32 x 4mm ² , 28 x 6mm ² , 23 x 10mm ² , 14 x 16 mm ² , 6 x 35mm ² , 12 x 50mm ² , 10 x 70mm ² , 8 x 95/120mm ² terminals or 35 x 4mm ² mini terminals.	The entries could vary, with the A/C of the gland being the min distance between the entries.

Variation 1

This variation introduces the following modifications:

- i. To update the certificate reference to the 2014/34/EU Directive.
- ii. To allow WDU and WPE feed through terminals to be fitted.
- iii. To allow an alternative 4 screw lid arrangement.

Variation 2

This variation introduces the following modifications:

- i. Inclusion of new terminal options within the Posi Fit / TX size 0 model
- ii. Addition of a new junction box model; Multi Box Posi Fit Assembly
- iii. Assessment of the Posi Fit Junction Boxes for increased safety Group I explosive atmospheres.
- iv. Inclusion of an additional O-ring material option
- v. Transfer of CML UK ATEX Certificates to CML BV
- vi. Update of standards to the latest editions



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12 Certificate history and evaluation reports

Issue	Date	Associated report	Notes
0	19 Jun 2014	R178A/00	Issue of Prime Certificate
1	16 Sep 2016	N/A	Addition of IP rating to certificate marking
2	29 Aug 2017	R11250A/01	Introduction of Variation 1
3	20 Mar 2020	R12877A/00	Introduction of Variation 2

Note: Drawings that describe the equipment or component are listed in the Annex.

13 Conditions of Manufacture

The following conditions are required of the manufacturing process for compliance with the certification.

- i. The Junction boxes covered by this certificate incorporate previously certified devices, it is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with these devices. The manufacturer shall inform CML of any modifications of the devices that impinge upon the explosion safety design of their products.
- ii. A copy of the certificate and instructions shall be supplied / made available to the end user.

14 Specific Conditions of Use (Special Conditions)

The following conditions relate to safe installation and/or use of the equipment.

- i. For enclosures that do not utilise locking screws on the cover / lid, only the CCG tool supplied shall be used for opening and closing.
- ii. Under certain extreme circumstances, the polycarbonate (clear) cover incorporated in the enclosure may generate an ignition-capable level of electrostatic charge. Therefore the enclosure shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
- iii. When fitted with the polycarbonate (clear) cover, the enclosure shall be installed to prevent direct UV exposure of internal components.
- iv. Suitably certified cable glands and/or plugs shall be used in the enclosures threaded entries.
- v. The Posi Fit Junction boxes shall only be used with the following terminals. Specific installation conditions as set by the terminal manufacturer / terminal certification, shall be considered. This includes considering the use of the applicable partitions and end plates for the terminal blocks, conductor installation, tightening down of terminal block screws etc.

Manufacturer	Certificate No.	Ex coding	Type	Size
Weidmuller	TUV 18ATEX8221U	Ex e II	AKZ4 and AKE4	4 mm ²
Weidmuller	TUV 18ATEX8221U	Ex e II	AKZ 2.5	2.5 mm ²



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Manufacturer	Certificate No.	Ex coding	Type	Size
Weidmuller	DEMKO 14 ATEX 1338 U	Ex eb IIC Gb	WDU & WPE 2.5, 4, 6, 10, 16, 35 and 70N	2.5 mm ² , 4 mm ² , 6 mm ² , 10 mm ² , 35 mm ² and 70 mm ²

- vi. Terminal blocks shall only be utilised on the applicable rail and shall allow sufficient space to make connections and to close the cover / lid.
- vii. The creepage and clearance between terminal blocks and from the terminal block to any earthed / bonded metallic part shall comply with the EN 60079-7 requirements for the applicable voltage of the terminal blocks.
- viii. The current per circuit in the junction box is limited by the size of the conductor and shall not exceed the following:

ix. Max. current		Conductor / terminal block size
≤55°C ambient	≤40°C ambient	
8.34 A	11.90 A	2.5 mm ²
11.12 A	15.86 A	4 mm ²
14.25 A	20.33 A	6 mm ²
19.81 A	28.26 A	10 mm ²
26.42 A	37.68 A	16 mm ²
43.46 A	61.98 A	35 mm ²
52.50 A	74.88 A	50 mm ²
66.75 A	95.21 A	70 mm ²
82.75 A	-	95 mm ²
94.57 A	-	120 mm ²

- x. The equipment/components have been subjected to impact tests equating to low risk of mechanical danger for Group I equipment in accordance with EN 60079-0 clause 26.4.2. When the equipment/components are used in Group I explosive atmospheres, the user shall ensure that they are additionally protected or installed in an area where they are at low risk of mechanical impact.
- xi. The equipment/components have not been subjected to the tests for resistance to chemical agents for Group I equipment in accordance with EN 60079-0 clause 26.11. The user shall ensure that the equipment is not exposed to oils, greases, hydraulic fluids or any other chemical agents that may damage the equipment or invalidate the type of protection.

Certificate Annex

Certificate Number CML 14ATEX3036X
Equipment Posi Fit Junction Boxes
Manufacturer CCG Cable Terminations (Pty) Ltd



The following documents describe the equipment or component defined in this certificate:

Issue 0

Drawing No	Sheets	Rev	Approved date	Title
1003-0 - 100304	1 of 1	-	19 June 2014	POSIFIT / TX BOX Ex
1003-0 – 100304-M	1 of 1	-	19 June 2014	POSIFIT / TX BOX Ex MATERIAL
100701-ALID	1 of 1	-	19 June 2014	ADAPTA LID COVER ASSEMBLY
1009-0 – 100903 - M	1 of 1	-	19 June 2014	POSIFIT Y BOX Ex - MATERIAL
1009-0 – 100903	1 of 1	-	19 June 2014	POSIFIT Y BOX Ex
065001-S M	1 of 1	-	19 June 2014	STRUT BOX MATERIAL
065001-S	1 of 1	-	19 June 2014	STRUT BOX
100201 - 100202	1 of 1	1	19 June 2014	3 WAY BOTTOM ENTRY BOX
100201 – 100202-M	1 of 1	-	19 June 2014	3 WAY BOTTOM ENTRY BOX - MATERIAL
100301-H – 100303-H	1 of 1	-	19 June 2014	POSIFIT H BOX Ex
100301-H – 100303-H-M	1 of 1	-	19 June 2014	POSIFIT H BOX Ex - MATERIAL
100922 - M	1 of 1	-	19 June 2014	ANGLE BOX Ex - MATERIAL
100922	1 of 1	-	19 June 2014	ANGLE BOX Ex
100921 – BE – 100923 - BE	1 of 1	-	19 June 2014	BOTTOM ENTRY ANGLE BOX Ex
100921 – M – 100923 - M	1 of 1	-	19 June 2014	BOTTOM ENTRY ANGLE BOX Ex - MATERIAL
100300-M-X	1 of 1	-	19 June 2014	“X” POSI BOX MARKING

Issue 1

No additional drawings issued.

Issue 2

Drawing No	Sheets	Rev	Approved date	Title
100301-SF – 100304-SF	1 of 1	-	29 Aug 2017	POSIFIT / TX BOX Ex

Certificate Annex

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Drawing No	Sheets	Rev	Approved date	Title
10050B – 10050C	1 of 1	1	20 Mar 2020	“X” Multi Box Posifit Assembly
10050-M-X	1 of 1	1	20 Mar 2020	“X” Posi Multi Box X-Marking
100300-M-X	1 of 1	1	20 Mar 2020	“X” Posi Box X-Marking
100301-SF-100304_SF	1 of 1	1	20 Mar 2020	“X” ALL Type CCG Screw Fit Box Assembly
065001-S M	1 of 1	1	20 Mar 2020	Strut Box Material
100201 – 100202-M	1 of 1	1	20 Mar 2020	3 Way Bottom Entry Box- Material
1003-0 – 100304	1 of 1	1	20 Mar 2020	PosiFit / TX Box Ex
1003_0 _ 100304 M	1 of 1	1	20 Mar 2020	PosiFit / TX Box Ex - Material
100701-ALID	1 of 1	1	20 Mar 2020	Adapta Lid Cover Assembly
1009-0 - 100903	1 of 1	1	20 Mar 2020	Posifit Y Box Ex
100921 – M – 100923 – M	1 of 1	1	20 Mar 2020	Bottom Entry Angle Box Ex- Material
100922 – M	1 of 1	1	20 Mar 2020	Angle Box Ex – Material