IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Ex COMPONENT CERTIFICATE

Certificate No.:	**IECEx MSC 20.0004U**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 0	
Date of Issue:	2020-05-05		

Applicant: **CCG Cable Termination (Pty) Ltd**
33-37 Forge Road
Spartan Industrial Area
Kempton Park 1619
South Africa

Ex Component: PosiFit Range of Enclosures

This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).

Type of Protection: **Increased Safety "eb", "ec", Dust Ignition "tb", "tc"**

Marking:
Ex eb I Mb
Ex eb IIC Gb
Ex tb IIIC Db
Ex ec IIC Gc
Ex tc IIIC Dc
Ts = -60°C to +110°C
IP66/IP67/IP68 (2m cont.)

Approved for issue on behalf of the IECEx Certification Body: **Geoff Slater**

Position: **Manager**

Signature: (for printed version)

Date: 7/5/2020

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.

Certificate issued by:

MSTC Mine Safety Technology Centre
8 Hartley Drive
Thornton NSW 2322
PO Box 343
Australia

NSW GOVERNMENT | Planning, Industry & Environment

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Certificate No.: **IECEx MSC 20.0004U**

Date of issue: 2020-05-05 Issue No: 0

Manufacturer: **CCG Cable Termination (Pty) Ltd**
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Additional manufacturing locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements.This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :
The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-31:2013 Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"
Edition:2

IEC 60079-7:2015 Explosive atmospheres – Part 7: Equipment protection by increased safety "e"
Edition:5.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:
A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Reports:

AU/MSC/ExTR20.0006/00
GB/CML/ExTR15.0072/00
GB/CML/ExTR16.0132/00
GB/CML/ExTR17.0138/00
GB/CML/ExTR19.0225/00

Quality Assessment Report:

ZA/ICS/QAR14.0001/05

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Ex Component(s) covered by this certificate is described below:

The PosiFit enclosures are non-metallic enclosures manufactured from DMC (Dow Moulding Compound). The enclosures have a cylindrical shaped body with a screw-on cover, which is secured with a special tool that engages into the splines on the cover. There is an O ring between the enclosure base and its cover to assure the IP rating of the complete enclosure.

An optional arrangement is to have a polycarbonate / DMC cover secured using four countersunk M5 screws fastened into metal inserts in a body designed to accept this cover type.

A further optional arrangement is to have a polycarbonate / DMC cover secured using four countersunk M5 screws fastened into metal inserts in an adaptor which is then screwed to a standard body unit.

MultiBox enclosures are rectangular in shape and the enclosure lid is secured with screws. There is an O ring between the enclosure base and its cover to assure the IP rating of the complete enclosure

The enclosures can be manufactured in the following types and sizes:

Type	Box size	Dimensions (Dia. X height)	Gland entry sizes (1.5mm pitch)	Max. No. of cable gland entries and arrangement
PosiFit/Tx box	Size 0	100 x 78	M16-M20	CCG PosiFit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
PosiFit/Tx box	Size 1	118 x 91	M16-M20	CCG PosiFit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
PosiFit/Tx box	Size 2	140 x 114	M16-M25	CCG PosiFit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
PosiFit/Tx box	Size 3	203 x 142	M16-M32	CCG PosiFit 4 Way box 4 entries positioned orthogonal around the side walls with multiple gland entry sizes
PosiFit/Tx box	Size 4	298 x 186	M16-M40	CCG PosiFit 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	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	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 3	202 x 140	M16-M32	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	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	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	CCG PosiFit 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	CCG PosiFit Y box – 2 entries positioned on the side of the box and 1 entry positioned on the opposite side of the box

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Type	Box size	Dimensions (Dia. X height)	Gland entry sizes (1.5mm pitch)	Max. No. of cable gland entries and arrangement
Y box	Size 2	138 x 123	M16-M25	CCG PosiFit 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	CCG PosiFit 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	CCG PosiFit H box – 2 entries positioned on the side of the box and 2 entries positioned on the opposite side of the box
H box	Size 2	138.5 x 100	M16-M25	CCG PosiFit 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	CCG PosiFit ST Box Strut box - 2 entries positioned on opposite sides with multiple gland entry sizes.
Angle Box	Size 2	121 x 100	M20-M25	CCG Angle Box - 3 entries positioned at the bottom of the box.
Multi Box PosiFit	Assembly B	(Rectangular) 196x132x109	See number of entries and arrangement	The entries could vary, with the A/C of the gland being the min distance between the entries.
Multi Box PosiFit	Accembly C	(Rectangular) 278x200x117	See number of entries and arrangements	The entries could vary with the A/C of the gland being the min distance between the entries

SCHEDULE OF LIMITATIONS:

Condition of Manufacture:

A copy of the certificate and instructions shall be supplied / made available to the end user.

Schedule of limitations:

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

1. For enclosures that do not utilise locking screws on the cover / lid, only the CCG tool supplied shall be used for opening and closing.
2. 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.
3. When fitted with the polycarbonate (clear) cover, the enclosure shall be installed to prevent direct UV exposure of internal components.
4. Suitably certified cable glands and/or plugs shall be used in the enclosures threaded entries.
5. The Posi Fit enclosures have a service temperature range of -60°C to +110°C, when assessed as part of equipment, these temperature limits shall not be exceeded.
6. The equipment/components have been subjected to impact tests equating to low risk of mechanical danger for Group I equipment in accordance with IEC 60079-0 clause 26.4.2. When the equipment/components are used in Group I explosive atmospheres, the user shall ensure that the they are additionally protected or installed in an area where they are at low risk of mechanical impact.
7. The equipment/components have not been subjected to the tests for resistance to chemical agents for Group I equipment in accordance with IEC 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.

Refer to the attached Annex for further information.

Annex:

Annex of IECEx MSC20.0004U-00.pdf

IECEx Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 20.0004U Issue No:00

Drawing list pertaining to this Certificate:

Manufacturer's Documents				
Drawing/Document Number:	**Page/s:**	**Title:**	**Revision Level:**	**Date: (yyyy-mm-dd)**
10050B-10050C-AU	1	"X" Multi Box Posifit Assembly	---	2020-04-06
10050-M-U-AU	1	"X" Posi Multi Box U-Marking	---	2020-04-06
100300-M-U-AU	1	"X" Posi Box U-Marking	---	2020-04-06
100301-SF-100304-SF-AU	1	"X" ALL Type CCG Screw Fit Box Assembly	---	2020-04-06
065001-S M	1	Strut Box Material	1	2019-11-07
100201 – 100202-M	1	3 Way Bottom Entry Box- Material	1	2019-11-07
1003-0 – 100304	1	PosiFit / TX Box Ex	1	2019-11-07
1003_0 _ 100304 M	1	PosiFit / TX Box Ex - Material	1	2019-11-07
100701-ALID	1	Adapta Lid Cover Assembly	1	2019-11-07
1009-0 - 100903	1	Posifit Y Box Ex	1	2019-11-07
100921 – M – 100923 – M	1	Bottom Entry Angle Box Ex- Material	1	2019-11-07
100922 – M	1	Angle Box Ex – Material	1	2019-11-07

Reference Documents				
Drawing/Document Number:	**Page/s:**	**Title:**	**Revision Level:**	**Date: (yyyy-mm-dd)**
----------	4	Posi Fit JUNCTION BOX - Ex eb I, Ex eb IIC, Ex ec IIC, Ex tc IIIC, IP66/68 for Hazardous Area Installations	----	-----
----------	2	Angle Box Ex eb I, Ex eb IIC, Ex ec IIC, Ex t IIIC, IP66/68 for Hazardous Area installations	----	-----
----------	2	Screw Fit 4-WAYJUNCTION BOX - Ex eb I, Ex eb IIC, Ex ec IIC, Ex tc IIIC, IP66/68 for Hazardous Area installations	----	-----
----------	2	3-Way Bottom Entry JUNCTION BOX Ex eb I, Ex eb IIC, Ex ec IIC, Ex tc IIIC for Hazardous Area installations	----	-----
----------	2	Bottom Entry Angle Box Ex eb I, Ex eb IIC, Ex ec IIC, Ex tc IIIC, IP66/68 for Hazardous Area installations	----	-----
----------	2	Multi Box Ex eb I, Ex eb IIC, Ex ec IIC, Ex tc IIIC, IP66/68 for Hazardous Area installations	----	-----

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Mine Safety Technology Centre