



# IECEX Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification Scheme for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: IECEx MSC 15.0007X

Issue No: 1

Certificate history:

Status: **Current**

Issue No. 1 (2018-09-11)

Issue No. 0 (2015-06-24)

Date of Issue: **2018-09-11**

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Applicant: **CCG Cable Terminations**  
33 - 37 Forge road,  
Spartan Industrial Area,  
Kempton Park, 1619  
**South Africa**

Equipment: **No 1 CCG Ex d Box and No 1 CCG-SPG Ex d Box**

Optional accessory:

Type of Protection: **Flameproof "db" and Dust ignition protection by enclosure**

Marking:

Ex db I Mb  
Ex db IIC T6 Gb  
Ex tb IIIC T85°C Db  
IP 66/68 -20°C ≤ Tamb ≤ 55°C  
and  
Ex db I Mb  
Ex db IIA T6 Gb  
Ex db IIB T6 Gb  
Ex db IIC T6 Gb  
Ex tb IIIC T85°C Db  
IP 66/68 -20°C ≤ Tamb ≤ 55°C

Approved for issue on behalf of the IECEx  
Certification Body:


Geoff Slater

Position:

Manager

Signature:  
(for printed version)

Date:

  
12/9/2018

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 the [Official IECEx Website](http://www.iecex.com).

Certificate issued by:

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



Planning &  
Environment  
Resources Regulator



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Manufacturer: **CCG Cable Terminations**  
33 - 37 Forge road,  
Spartan Industrial Area,  
Kempton Park, 1619  
**South Africa**

Additional Manufacturing location(s):

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 apparatus 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:

<b>IEC 60079-0 : 2011</b> Edition:6.0	Explosive atmospheres - Part 0: General requirements
<b>IEC 60079-1 : 2014-06</b> Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
<b>IEC 60079-31 : 2013</b> Edition:2	Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"

*This Certificate **does not** indicate compliance with electrical 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 Report:

[AU/MS/ExTR18.0008/00](#)

[ZA/ICS/ExTR15.0005/00](#)

[ZA/ICS/ExTR18.0004/00](#)

### Quality Assessment Report:

[ZA/ICS/QAR14.0001/00](#)

[ZA/ICS/QAR14.0001/03](#)



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## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The No 1 CCG Ex d box:

The cast iron cylindrical junction box enclosure (approximately 154mm diameter and a height of 81 mm) consists of two parts, a base and a cover with a flanged joint. Four M6 x 20 LG Hex Socket Head cap screws (Stainless Steel, A2-70) are used to fasten the cover to the base.

The enclosure with internal volume 450ml has optionally four M20 / M25 x 1.5 (6H) gland entries equally spaced around the circumference of the base.

The junction box enclosures may be fitted with terminal blocks on a single rail or conductors may be internally connected by means of end connectors / insulated terminations.

The No 1 CCG-SPG Ex d box:

The cast iron cylindrical junction box enclosure consists of two parts, a base and a cover with a spigot joint. Four M6 x 20 LG Hex Socket Head cap screws (Stainless Steel, A2-70) are used to fasten the cover to the base.

The enclosure with internal volume of approximately 500ml has optionally four M20 / M25 x 1.5 (6H) gland entries equally spaced around the circumference of the base.

The junction box enclosures may be fitted with terminal blocks on a single rail or conductors may be internally connected by means of end connectors / insulated terminations.

### SPECIFIC CONDITIONS OF USE: YES as shown below:

1. The cover may only be secured with fasteners as in the description.
2. Some flamepaths are more restrictive than the minimum requirements in the standard. Information w.r.t. the flamepaths must be obtained from the manufacturer for consideration of maintenance / repair.
3. Suitably certified glands / adaptors / plugs shall be used to maintain the flameproof / Ex tb (including the IP rating) characteristics as applicable.
4. The nominal current (max continuous circuit current) per circuit in the junction box is limited by the size of the conductor and terminal block / connector ratings. The lower of the values in the table below and the maximum rated current of the terminal block / connector shall be used:

Conductor size	Current limitation
1.5 mm <sup>2</sup>	15 A
2.5 mm <sup>2</sup>	17 A
4 mm <sup>2</sup>	20 A
6 mm <sup>2</sup>	25 A



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## **DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):**

The No1 CCG Ex d box has been updated as follows:

- Updated marking drawing.
  - Minor changes and updates on drawings.
  - Minor updates on conditions of certification as for the No 1 CCG-SPG Ex d box.
  - Update to latest standard for IEC 60079-1: 2014.
- Additional No 1-SPG Ex d Box added.



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**Additional Information:**

Refer to the attached Annex

**Annex:**

[Annex of IECEx MSC 15.0007X-01 .pdf](#)



## IECEX Certificate of Conformity Annex

Annex for Certificate No.: IECEx MSC 15.0007X Issue No: 1

### Drawing list pertaining to Issue 1 of this Certificate:

Manufacturer's Documents				
Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
*100801-00	1 of 5	No 1 CCG FLP Ex d I/IIC ENCLOSURE ASSEMBLY	4	2018-07-10
100801-01	2 of 5	CCG Ex d BOX BASE	Original	2015-04-14
100801-02	3 of 5	CCG Ex d BOX COVER	Original	2015-04-14
100801-03	4 of 5	CCG Ex d BOX COVER GASKET	Original	2015-04-14
*100801-14	5 of 5	MARKING PLATE	4	2018-07-10
*100811-00	1 of 5	No 1 CCG FLP-SPG Ex d I/IIC ENCLOSURE ASSEMBLY	1	2018-07-09
*100801-01	2 of 5	CCG Ex d BOX BASE	Original	2016-10-10
*100801-02	3 of 5	CCG Ex d BOX COVER	Original	2016-10-10
*100801-03	4 of 5	CCG Ex d BOX COVER GASKET	Original	2016-10-10
*100801-14	5 of 5	MARKING PLATE – 1 FLP-SPG ENCLOSURE	1	2018-07-09

Note: An \* is included before the title of documents that are new or revised.

Reference Documents				
Drawing/Document Number:	Page/s:	Title:	Rev. Level:	Date: (yyyy-mm-dd)
*1008FLPBoxSPG-JB170718.pdf	1 to 2 of 2	FLAMEPROOF-SPG BOX	Original	undated
1008FLPBox-JB0170718.pdf	1 to 2 of 2	FLAMEPROOFBOX	Original	undated

Certificate issued by:



Mine Safety Technology Centre