



# 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](http://www.iecex.com)

Certificate No.:	<b>IECEX CML 15.0093X</b>	Page 1 of 4	<u>Certificate history:</u>
Status:	<b>Current</b>	Issue No: 4	Issue 3 (2020-11-10)
Date of Issue:	2022-10-17		Issue 2 (2020-05-04)
Applicant:	<b>Craig &amp; Derricott Ltd</b> Hall Lane Walsall WS9 9DP <b>United Kingdom</b>		Issue 1 (2016-12-21)
Equipment:	<b>EXZ1 SD Series Explosion-Proof Switch Units</b>		Issue 0 (2016-01-05)
Optional accessory:			
Type of Protection:	<b>Ex d, Ex e, Ex t</b>		
Marking:	Ex db eb IIC T* Gb Ex tb III C T* Db -40°C to +40°C/+55°C  *For all options of temperature class and ambient range, refer to certificate Annex.		

Approved for issue on behalf of the IECEx  
Certification Body:

**L A Brisk**

Position:

**Certification Officer**

Signature:  
(for printed version)

Date:  
(for printed version)

2022-10-17

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](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Eurofins E&E CML Limited**  
Unit 1, Newport Business Park  
New Port Road  
Ellesmere Port, CH65 4LZ  
**United Kingdom**





# IECEX Certificate of Conformity

Certificate No.: **IECEX CML 15.0093X**

Page 2 of 4

Date of issue: 2022-10-17

Issue No: 4

Manufacturer: **Craig & Derricott Ltd**  
Hall Lane  
Walsall  
WS9 9DP  
**United Kingdom**

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 60079-1:2014-06](#) Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"  
Edition:7.0

[IEC 60079-31:2013](#) Explosive atmospheres - Part 31: Equipment dust ignition protection by enclosure "t"  
Edition:2

[IEC 60079-7:2017](#) Explosive atmospheres - Part 7: Equipment protection by increased safety "e"  
Edition:5.1

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:

[GB/CML/ExTR15.0100/00](#)  
[GB/CML/ExTR20.0213/01](#)

[GB/CML/ExTR15.0100/01](#)

[GB/CML/ExTR20.0213/00](#)

Quality Assessment Report:

[GB/SIR/QAR13.0012/06](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX CML 15.0093X**

Page 3 of 4

Date of issue: 2022-10-17

Issue No: 4

**EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

EXZ1 SD Series Explosion-Proof Switch Units (Power Distribution box) consist of an increased safety and dust ignition protective enclosure and an arrangement of separately certified and appropriately rated and dimensioned components and accessories.

Refer to certificate Annex for full description and conditions.

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

Refer to certificate Annex



# IECEX Certificate of Conformity

Certificate No.: **IECEX CML 15.0093X**

Page 4 of 4

Date of issue: 2022-10-17

Issue No: 4

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

### Issue 1:

This issue introduces the following change:

1. Issued to amend typographical errors.

### Issue 2

This issue introduces the following change:

1. The QAR has been updated from GB/SIR/QAR13.0012/01 to GB/SIR/QAR13.0012/05. A new ExTR was not required to introduce this change.

### Issue 3:

This issue introduces the following changes:

1. Issue to amend label drawing.
2. Update to Standards
3. Minor Administrative Updates

### Issue 4:

This issue introduces the following changes:

1. Report R13481A/00 (GB/CML/ExTR20.0213/00) was re-issued as R13481A/01 (GB/CML/ExTR20.0213/01) under this certificate issue. This was to address a discrepancy between the issue date of issue 3 of this certificate and the date shown on report R13481A/00; further details are shown in report R13481A/01.
2. QAR reference updated.

### Annex:

[IECEX CML 15.0093X Issue 4 Annex.pdf](#)

**Annex to:** IECEx CML 15.0093X Issue 4  
**Applicant:** Craig & Derricott Ltd  
**Apparatus:** EXZ1 SD Series Explosion-Proof Switch Units

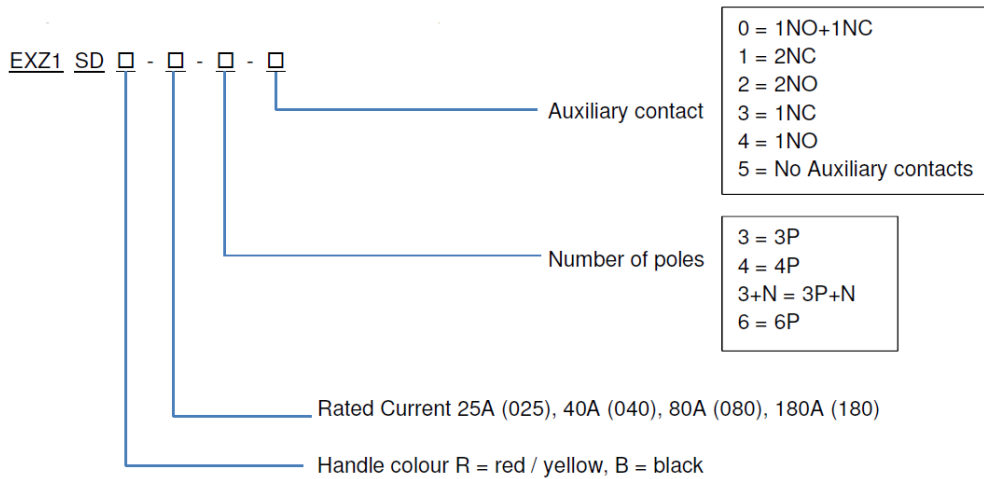


**Description**

EXZ1 SD Series Explosion-Proof Switch Units (Power Distribution box) consist of an increased safety and dust ignition protective enclosure and an arrangement of separately certified and appropriately rated and dimensioned components and accessories.

The CZ12□□ enclosure is constructed of glass fibre reinforced polyester and the CZ13□□ enclosure is constructed of carbon steel or stainless steel. The outer surfaces of the carbon steel enclosures are painted by a plastic spray process. Multiple CZ12□□ / CZ13□□ series explosion-proof boxes can be combined with the use of connection plates.

**Equipment Name/ Model Number**



The models and their ratings are shown below:

**Model: EXZ1 SD□-025/□-□**  
 Rated current: 25A  
 Rated voltage: Up to 690 V 50/60Hz  
 Temperature class/assigned max. surface temperature: T6 / T80°C (Ta: -40°C to +40°C)  
 T5 / T95°C (Ta: -40°C to +55°C)

IP65

Rated capacity of switch

Switch Module Code	AC3				AC15		DC13	
U	230V	400V	500V	690V	250V	400V	24V	250V
I	25A	25A	20A	16A	10A	8A	8A	1A
Wire Cross Section Area	4.0mm <sup>2</sup>		2.5mm <sup>2</sup>		1.5mm <sup>2</sup>		1.5mm <sup>2</sup>	
Ground Cross Section Area	4.0mm <sup>2</sup>		2.5mm <sup>2</sup>		1.5mm <sup>2</sup>		1.5mm <sup>2</sup>	

Unit 1, Newport Business Park  
 New Port Road  
 Ellesmere Port  
 CH65 4LZ

T +44 (0) 151 559 1160  
 E info@cmllex.com

[www.cmllex.com](http://www.cmllex.com)

Company Reg No. 8554022 VAT No. GB163023642



**Model EXZ1 SD□-040/□-□**

Rated current: 40A

Rated voltage: Up to 690 V 50/60Hz

Temperature class/assigned max. surface temperature: T6 / T80°C (Ta: -40°C to +40°C)  
T5 / T95°C (Ta: -40°C to +55°C)

IP65

Rated capacity of switch

Switch Module Code	AC3			
U	230V	400V	500V	690V
I	40A	40A	40A	32A
Wire Cross Section Area	10.0mm <sup>2</sup>			
Ground Cross Section Area	10.0mm <sup>2</sup>			

**Model EXZ1 SD□-080/□-□**

Rated current: 80A

Rated voltage: Up to 690 V 50/60Hz

Temperature class/assigned max. surface temperature: T6 / T80°C (Ta: -40°C to +40°C)  
T5 / T95°C (Ta: -40°C to +55°C)

IP65

Rated capacity of switch

Switch Module Code	AC3			
U	230V	400V	500V	690V
I	80A	80A	80A	63A
Wire Cross Section Area	25.0mm <sup>2</sup>			16mm <sup>2</sup>
Ground Cross Section Area	16.0mm <sup>2</sup>			

**Model EXZ1 SD□-180/□-□**

Rated current: 180A

Rated voltage: Up to 690 V 50/60Hz

Temperature Class/assigned max. surface temperature: T5 / T95°C (Ta: -40°C to +40°C)  
T4 / 130°C (Ta: -40°C to +55°C)

IP65

Rated capacity of switch

Switch Module Code	AC3			
U	230V	400V	500V	690V
I	180A	180A	150A	125A
Wire Cross Section Area	95.0mm <sup>2</sup>		70mm <sup>2</sup>	50mm <sup>2</sup>
Ground Cross Section Area	50.0mm <sup>2</sup>			

## Earth Plate Accessories

Brass Earth Plates listed below are for use with metal cable glands.

Reference	Description
EXEP0253	Brass Earth Plate For Use With EXZ1SD#02530
EXEP0254	Brass Earth Plate For Use With EXZ1SD#02540
EXEP0403	Brass Earth Plate For Use With EXZ1SD#04030
EXEP0404	Brass Earth Plate For Use With EXZ1SD#04040
EXEP0803	Brass Earth Plate For Use With EXZ1SD#08030
EXEP0804	Brass Earth Plate For Use With EXZ1SD#08040
EXEP1803	Brass Earth Plate For Use With EXZ1SD#18030
EXEP1804	Brass Earth Plate For Use With EXZ1SD#18040

## Conditions of Manufacture

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

- i. The minimum ambient temperature of the product depends on the minimum ambient temperature of all the installed component modules. The maximum ambient temperature of the product depends on the allowed service temperature of all the installed component modules.
- ii. The enclosures incorporate the use of separately certified and suitably dimensioned entry devices with Ex certificates. The IP protection level and the EPL should be not less than the original level of the enclosure.
- iii. Rated values are maximum value, the actual electrical values are determined by mounted electrical apparatus. The manufacturer specifies the final limiting values dependent on power supply specifications, operation pattern, using type etc., and within these limiting values complying with the appropriate standards.
- iv. The maximum power dissipation or contact resistance shall be in accordance with the certificates of the Ex components. Each component's power dissipation shall be determined by the actual input current ( $I$ ) when in operation and the contact resistance ( $R$ ) when operated at 20°C.
- vii. The equipment shall be subjected to electric strength tests as follows:
  - Primary – secondary at a test voltage of  $(1000 + 2U)$  Vac or 1500 Vac (whichever is the greater) where  $U$  is the highest of primary and secondary voltages
 The test voltage to be applied for 60 s. Alternatively, a voltage of 20% higher may be applied for 1 s. There shall be no evidence of flashover or breakdown and the maximum current flowing shall not exceed 5 mA.

- v. For tested and verified components, checks must be carried out to ensure the temperature class and the internal ambient temperature of the equipment does not exceed the ambient temperature and the service temperature of each component.  
For unverified components, a routine temperature rise test must be carried out in accordance with EN/IEC 60079-0 clause 26.5 on each unit to ensure the service temperature of each component is not exceeded.
- vi. The manufacturer shall mark the equipment with the types of protection of the components used.

#### **IECEx Conditions of Certification (Special Conditions for Safe Use)**

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

- i. Equipment incorporating the CZ1300 enclosure with a coating of epoxy powder must not be used in areas affected by charge producing processes, mechanical friction and separation processes, electron emission (e.g. in the vicinity of electrostatic coating equipment), and pneumatically conveyed dust to avoid electrostatic discharge.
- ii. The equipment shall be used with cable that has a suitable temperature rating.
- iii. Any replacement fasteners shall meet or exceed the yield stress of the original fasteners as defined by the components used.
- iv. The equipment incorporates components that have flamepath dimensions that differ from the requirements of EN/IEC 60079-1 Table 2. Therefore, the flamepaths shall not be repaired or modified by anyone other than the manufacturer.