

### **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

Certificate No.:

IECEx BAS 09.0099X

Issue No: 8

Certificate history:

Status:

Current

Issue No. 8 (2019-07-30) Issue No. 7 (2015-06-25)

Date of Issue:

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Issue No. 6 (2014-06-12) Issue No. 5 (2014-03-24)

2019-07-30

Applicant: T.E.L. Engineering Limited (Trading as Trolex Engineering) Issue No. 4 (2013-10-22)

Unit 2 Levens Road, Newby Road Industrial Estate, Issue No. 3 (2012-10-05)

Hazel Grove.

Issue No. 2 (2011-11-28)

Issue No. 1 (2011-07-12) Issue No. 0 (2009-10-13)

Stockport, Cheshire,

SK7 5DL

**United Kingdom** 

Equipment:

Type TX4726, TX4727 and TX4728 Slip Ring Units

Optional accessory:

Type of Protection:

Flameproof, Increased Safety, Dust Protected and Optical Radiation

Marking:

Ex d e IIB T\* Gb Tamb -\*\*°C to +\*\*°C (for T\*, \*\*\*°C see table within Equipment Section, Page 3)

Ex to III C T\*\*\*°C Db (for T\*\*\*°C see table within Equipment Section, Page 3)

or TX472#FO:

(#=6, 7, or 8)

Ex d e op is IIB T4 Gb Tamb -40°C to +50°C

Ex tb III C T135°C Db

Approved for issue on behalf of the IECEx

R S Sinclair

Certification Body:

Position:

Technical Manager

Signature:

(for printed version)

Date:

- 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.

Certificate issued by:

SGS Baseefa Limited **Rockhead Business Park** Staden Lane Buxton, Derbyshire, SK17 9RZ **United Kingdom** 





THIS DOCUMENT IS NOT SUBJECT TO AMENDMENTS



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Manufacturer: T.E.L Engineering Limited also trading as Trolex Engineering

Unit 2 Levens Road,

Newby Road Industrial Estate,

Hazel Grove, Stockport, Cheshire,

SK7 5DL United Kingdom

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:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements

Edition:6.0

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-28 : 2006-08 Explosive atmospheres - Part 28: Protection of equipment and transmission systems using optical radiation

Edition:1

IEC 60079-31 : 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

IEC 60079-7: 2006-07 Explosive atmospheres - Part 7: Equipment protection by increased safety "e"

Edition:4

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:

GB/BAS/ExTR09.0140/00 GB/BAS/ExTR11.0160/00 GB/BAS/ExTR11.0304/00 GB/BAS/ExTR12.0203/00 GB/BAS/ExTR13.0151/00 GB/BAS/ExTR14.0078/00 GB/BAS/ExTR14.0359/00

Quality Assessment Report:

GB/BAS/QAR08.0003/07

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Schedule

#### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The Type TX4726, TX4726 and TX4728 Slip Ring Unit consists of a fabricated mild, stainless or carbon steel flameproof enclosure incorporating slip rings and associated brush gear. Increased safety terminals for external connections are housed within two increased safety junction boxes. The flameproof enclosure has a flange or foot at one end and a rotating end cover with a rolling element bearing at the other end. One increased safety junction box is attached to the fixed flameproof enclosure; the other is attached to the revolving end cover. The slip rings are rated between 10A and 800A and may be used for power, signal and intrinsically safe circuits.

The Type TX4726, TX4727 and TX4728 units differ only in current ratings, the length of the flameproof enclosure and the increased safety enclosure, to accommodate differing quantities of slip rings and terminals respectively.

### Marking

Equipment Marking Variations			
T* / T***	** - T amb	Unit Type	Current
T5/T100°C	-40°C to +50°C	TX4726	3000A
T4/T135°C	-40°C to +50°C	TX4727	3000A
Т4/Т135°С	-40°C to +50°C	TX4726FO (Fibre Optic variant, optional increased bore diameter)	3000A
T4/T135°C	-40°C to +50°C	TX4727FO (Fibre Optic variant)	3000A
T4/T135°C		TX4728FO (Fibre Optic variant)	3000A
T4/T135°C		TX4727HT (High Temperature, reduced current variant)	350A
Т4/Т135°С	-40°C to +50°C	TX4726HC (High Current, reduced T class variant)	3330A

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

- 1. The optical power through the Types TX4726FO, TX4727FO and TX4728FO slip ring units is to be limited to a radiated power of less than 35mW and a peak power density of less than 5mW/mm<sup>2</sup> as defined by IEC60079-28.
- 2. The TX4726 variant only makes use of flamepaths with dimensions different to those listed in Table 1 of IEC 60079-1; if further information is required the original manufacturer must be contacted

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

### Variation 8.1

This document permits existing information (for example on Schedule Drawings) to be replaced by the revised certificate holders address. No other changes may be made to the certified design

File Reference: 19/0450

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