

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

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IECEx TSA 11.0014U

issue No.:1

Certificate history:

Issue No. 1 (2011-12-22)

Issue No. 0 (2011-11-15)

Status:

Current

Date of Issue:

2011-12-22

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Applicant:

Trolex Ltd

Newby Road, Hazel Grove Stockport, SK7 5DY **United Kingdom**

Electrical Apparatus:

Type TX3705 Socket and Plug

Optional accessory:

Type of Protection:

Ex d

Marking:

Trolex

Model number

Ex d I Mb Ex d IIB Gb

S/N

IECEX TSA 11.0014U

Approved for issue on behalf of the IECEx

Certification Body:

Ujen Singh

Position:

Quality & Certification Manager

Signature:

(for printed version)

Date:

22 BECEMBER 2011

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:

TestSafe Australia 919 Londonderry Road Londonderry NSW 2753 Australia





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Manufacturer:

Trolex Ltd

Newby Road, Hazel Grove Stockport, SK7 5DY United Kingdom

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 electrical 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: 2007-10

Explosive atmospheres - Part 0:Equipment - General requirements

Edition: 5

IEC 60079-1: 2007-04

Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition: 6

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/ExTR10.0028/00

GB/BAS/ExTR11.0303/00

Quality Assessment Report:

GB/SIR/QAR07.0017/02



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

Type TX3705.SS Socket, rated at up to 240 V a.c. or 300 V d.c., 25 A per pin with a maximum through current of 100A. The assembly of the brass or stainless steel socket body and the cover shell is fitted with an insulating bushing insert which may be fitted with 26 or 37 tube or pin type electrical connectors. An internal and an external earth connection are provided. The assembly is held together using grade A2-70 min. socket cap head screws.

Type TX3705.PS Cable Mounted Plug, rated at up to 240 V a.c. or 300 V d.c., 25 A per pin with a maximum through current of 100A. The assembly of the brass or stainless steel plug body and the cover shell is fitted with an insulating bushing insert which may be fitted with 26 or 37 tube or pin type electrical connectors. An internal and an external earth connection are provided.

See the attached Annexe for more details.

CONDITIONS OF CERTIFICATION: NO

Schedule of Limitation - see the attached Annexe.



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| DETAILS OF | CERTIFICATE | CHANGES (for | issues 1 and above | ı١٠ |
|------------|-------------|--------------|--------------------|-----|

To permit alteranative cable entry size of M40. Refer to the attached Annexe.

Annexe: Annexe_IECEx TSA 11_0014U_1.pdf



IECEx Certificate of Conformity Annexe

Annexe for Certificate No.: | IECEx TSA 11.0014U | Issue No.: | 1

Equipment Description pertaining to Issue 0 of this Certificate::

Type TX3705.SS Socket, rated at up to 240 V a.c. or 300 V d.c., 25 A per pin with a maximum through current of 100A. The assembly of the brass or stainless steel socket body and the cover shell is fitted with an insulating bushing insert which may be fitted with 26 or 37 tube or pin type electrical connectors. An internal and an external earth connection are provided. The assembly is held together using grade A2-70 min. socket cap head screws.

Cable threaded entry holes are provided as specified on the certified drawings for the accommodation of flameproof cable entry devices, with or without the interposition of a flameproof thread adapter. Unused entries are to be fitted with certified flameproof stopping plugs. The cable entry devices, thread adapters and stopping plugs shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component).

Additionally, the cable entry device and cabling methods used in service must be suitable for their intended duty and the special types of cable when used in Group I mining applications.

The permitted variations are listed below:

- 1. Fitting of a brass or stainless steel socket blanking cover TX3705.BS for attachment to a disconnected socket. The cover is retained with two socket head cap screws.
- 2. Omission of the cover shell with a reduction in the current rating to 25 A per pin with a maximum through current of 100A. The cavity at the rear of the socket may be filled with an encapsulant. The unit formed by this variation is designated as the Type TX3705.S Socket.
- 3. Type TX3705.PS Cable Mounted Plug, rated at up to 240 V a.c. or 300 V d.c., 25 A per pin with a maximum through current of 100A. The assembly of the brass or stainless steel plug body and the cover shell is fitted with an insulating bushing insert which may be fitted with 26 or 37 tube or pin type electrical connectors. An internal and an external earth connection are provided.
- 4. Fitting of a brass or stainless steel plug blanking cover TX3705.BP for attachment to a disconnected plug. The cover is retained with two socket head cap screws.
- 5. Fitting of a stainless steel lanyard to retain a blanking cover for convenient use.

Schedule of Limitations pertaining to Issue 0 of this Certificate:

- 1. The socket designated as TX3705.S is to be mounted in the wall of an appropriate flameproof enclosure with an interface as shown on the drawing P3705-20.
- 2. The sockets are to be used in conjunction with a TX3705.PS plug or a TX3705.BP blanking plug.
- When a socket is not fitted with a plug or a blanking cover all the electrical circuits in the associated flameproof enclosure must be de-energized.
- 4. The maximum flamepath gaps shall not exceed 0.2 mm, as referred on the drawing P3705-20.
- 5. The ambient temperature range is -20°C to +55°C.

Certificate issued by:



TestSafe Australia 919 Londonderry Road Londonderry NSW 2753 Australia



IECEx Certificate of Conformity Annexe

Annexe for Certificate No.: IECEx TSA 11.0014U Issue No.: 1

Drawing list pertaining to Original Issue 0 of this Certificate:

| Document | Sheets | Document Title | Revision | Date |
|-------------|--------|---|----------|--------------|
| No. | | * | | (yyyy-mm-dd) |
| P3705-20 | 1 | TX3705 Exd Connectors IECEx – General Arrangement | В | 2011-11-03 |
| P3705-20-01 | 1 | TX3705 Exd Connectors IECEx – Component Details | Α | 2010-05-18 |
| P3705-20-02 | 1 | TX3705 Exd Connectors – Component Details – Plug & Socket Blanks | А | 2010-07-12 |
| P3705.22 | 1 | TX3705 Connectors IECEx – Testsafe - Label Details – Group I & II | Α | 2011-03-02 |

Variations permitted by Issue 1:

Inclusion of an optional cable entry size of M40 x1.5 to the cover shell of TX3705 connector.

Schedule of Limitations pertaining to Issue 1 of this Certificate:

All previous schedule of limitations pertaining to Issue 0 still apply.

Drawing list pertaining to Issue 1 of this Certificate:

| Document | Sheets | Document Title | Revision | Date |
|-------------|--------|---|----------|--------------|
| No. | | | | (yyyy-mm-dd) |
| P3705-20 | 1 | TX3705 Exd Connectors IECEx – General Arrangement | С | 2011-11-14 |
| P3705-20-01 | 1 | TX3705 Exd Connectors IECEx – Component Details | В | 2011-11-14 |
| P3705.22 | 1 | TX3705 Connectors IECEx – Testsafe - Label Details – Group I & II | В | 2011-11-29 |

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