



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 TSA 11.0047X** issue No.:2

Status: **Current**

Certificate history:
Issue No. 2 (2013-11-5)
Issue No. 1 (2012-7-6)
Issue No. 0 (2011-11-2)

Date of Issue: **2013-11-05** Page 1 of 4

Applicant: **Trolex Ltd**
Newby Road, Hazel Grove
Stockport, SK7 5DY
United Kingdom

Electrical Apparatus: **TX6386 and TX6387 Methane Monitor**
Optional accessory:

Type of Protection: **Intrinsic Safety 'ia'**

Marking: Trolex
TX6386 / TX6387 Methane Monitor
Ex ia Ma I
IECEX TSA 11.0047X
S/N _____

Approved for issue on behalf of the IECEx
Certification Body:

Ujen Singh

Position:

Quality and Certification Manager

Signature:
(for printed version)

Date:

05 NOVEMBER 2013

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:

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

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 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 : 2011 Explosive atmospheres - Part 0: General requirements
Edition: 6.0

IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition: 6.0

*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/TSA/ExTR10.0023/00

AU/TSA/ExTR12.0024/00

AU/TSA/ExTR13.0032/00

Quality Assessment Report:

GB/SIR/QAR07.0017/04



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Methane Monitor has two models:

- 1) TX6387: fixed model with large 100 mm display and remote sensing head.
- 2) TX6386: fixed model with 20 mm display and fixed/remote sensing head.

The TX6387 fixed model has a stainless steel enclosure with a glass window. A large LED display is on the front panel. At the bottom there are four M20 cable entries used by the supply cable and cable to the remote sensing head. The TX6386 has a plastic enclosure. An LED display is on the front panel. At the bottom there are two M20 cable entries used by the supply cable and connection to the fixed or remote sensing head.

The instrument is powered by an external intrinsically safe nominal 12 V power supply.

CONDITIONS OF CERTIFICATION: YES as shown below:

Please refer to Annexe of the certificate.



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

Please refer to Annexe of the certificate.



IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 11.0047X	Issue No.:	2
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Conditions of Certification pertaining to Issue 0 of this Certificate:

It is a condition of safe use that the following parameters shall be taken into account during installation:

Terminals T1, T2 (Power)		T3, T4, T5, T6 (Relays)	
Maximum Input Voltage U_i	14.4 V	Maximum Input Voltage U_i	30 V
Maximum Internal Capacitance C_i	0 μ F	Maximum Internal Capacitance C_i	0 μ F
Maximum Internal Inductance L_i	0 mH	Maximum Internal Inductance L_i	0 mH
		Maximum Output Voltage U_o	0 V

Drawing list pertaining to Issue 0 of this Certificate:

Document No.	Sheets	Document Title	Issue	Date
P5559-12-01	1	STX3265.47 Methane Monitor Large Format Display General Arrangement	C	2010/11/04
P5559-12	1	STX3265 Methane Monitor General Arrangement	C	2010/11/03
P5559.01	1 of 2	P5559 Display Schematic Methane Monitor	A07	2011/10/19
P5559.01	2 of 2	P5559 Display BOM Methane Monitor	A07	2011/10/19
P5559.30	1	STX3265 Methane Monitor PCB, Display	A	2011/09/20
P5559.03	1 of 2	Methane Monitor P5559 Output Schematic	B	2011/09/20
P5559.03	2 of 2	Methane Monitor P5559 Output Board BOM	B	2011/09/20
P5559.04	1	STX3265 Methane Monitor PCB, Output	B	2009/05/29
P5559.05	1 of 2	P5559 Large Display Schematic Methane Monitor	A02	2009/05/29
P5559.05	2 of 2	P5559 Large Display BOM Methane Monitor	A02	2009/05/29
P5559.06	1	STX3265.47 Methane Monitor Large Display PCB, Display – Large	B	2009/05/29
P5093.27	1	TX7000 Series Monitoring Modules Reed Relay	C	1997/01/21
P5559.28	1	Certification Label Details	B	2011/10/12

Variations permitted by Issue 1 of this certificate:

This apparatus was assessed in Test Report 31121 (AU/TSA/ExTR10.0023/00) to the earlier edition of the intrinsic safety standard. The client now requires compliance assessment to the standards IEC 60079-0:2011 and IEC 60079-11:2011. The client has also incorporated a diode change in the apparatus.

These changes were assessed in Test Report 33727 (AU/TSA/ExTR12.0024/00).

Certificate issued by:

	TestSafe Australia 919 Londonderry Road Londonderry NSW 2753 Australia
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IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 11.0047X	Issue No.:	2
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Conditions of Certification pertaining to Issue 1 of this Certificate:

Conditions of Certification are unchanged from the Issue 0 of this certificate.

Drawing list pertaining to Issue 1 of this Certificate:

Document No.	Sheets	Document Title	Issue	Date (yyyy-mm-dd)
P5559.03	1 of 2	Methane Monitor P5559 Output Schematic	C	2012-03-19
P5559.03	2 of 2	Methane Monitor P5559 Output Board BOM	C	2012-03-19

Variations permitted by Issue 2 of this certificate:

To change the model number on the certificate and specific certified drawings from STX3265 / STX3265.47 to TX6386 / TX6387. The description of equipment was changed accordingly.

There are no changes on schematic and parts.

These changes were assessed in Test Report 34308 (AU/TSA/ExTR13.0032/00).

Conditions of Certification pertaining to Issue 2 of this Certificate:

Conditions of Certification are unchanged from the Issue 0 of this certificate.

Drawing list pertaining to Issue 2 of this Certificate:

Document No.	Sheets	Document Title	Issue	Date (yyyy-mm-dd)
P5559-12	1	TX6386 Methane Monitor General Arrangement	D	2012-08-28
P5559-12-01	1	TX6387 Methane Monitor Large Format Display General Arrangement	D	2012-08-28
P5559.30	1	TX6386 & TX6387 Methane Monitor PCB, Display	B	2012-08-28
P5559.04	1	TX6386 & TX6387 Methane Monitor PCB, Output	C	2012-08-28
P5559.06	1	TX6387 Methane Monitor, Large Display PCB, Display – Large	C	2012-08-28
P5559.28	1	Certification Label Details	C	2012-10-23

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