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 SIR 12.0139U issue No.:0	Certificate history:
Status:	**Current**	
Date of Issue:	**2012-11-13**	Page 1 of 3

Applicant: **Trolex Limited**
Hazel Grove
Stockport
Cheshire SK7 5DY
United Kingdom

Electrical Apparatus: **P5476.11 Flammable Gas Sensor**
Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: Ex ia I Ma

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:
(for printed version)

Date: 2012-11-13

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:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira CERTIFICATION

IECEx Certificate of Conformity

Certificate No.: IECEx SIR 12.0139U

Date of Issue: **2012-11-13** Issue No.: **0**

Manufacturer: **Trolex Limited**
Hazel Grove
Stockport
Cheshire 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 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011-06 Edition: 6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*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/SIR/ExTR12.0271/00

Quality Assessment Report:

GB/SIR/QAR07.0017/02

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The Type P5476.11 Flammable Gas Sensor is a component approved intrinsically safe pellistor assembly comprising a catalytic (sensing element) and non-catalytic bead (reference element). The enclosure is cylindrical in shape and is made from Stainless Steel. One end of cylinder is fitted with a metal sinter; the other end is closed with a glass fibre filled epoxy resin printed circuit board (PCB) made from FR4. The PCB is cemented into the enclosure wall by epoxy resin potting compound, three connection pins pass through the PCB.

The equipment has the following safety description:

Ui = 16.5 V Ii = 1.163 A

Conditions of manufacture

The Manufacturer shall comply with the following:

1. Trolex Ltd shall take all reasonable steps to ensure that the Pellistor used complies with the drawings and are capable of passing a Small Component Ignition test in accordance with clause 26.5.3 of IEC 60079-0: 2011 in a 6.5% ±0.2% mixture of methane in air.
2. The Pellistor shall be constructed using the manufacturing process described by City Technology drawing No 4P50.3.
3. The sinter and sinter body shall provide adequate sealing against the ingress of dust inside the type P5476.11 Flammable Gas Sensor housing.

CONDITIONS OF CERTIFICATION: NO