



1 **EU-TYPE EXAMINATION CERTIFICATE**

2 Component intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

3 Certificate Number: **Sira 10ATEX2046U** Issue: **1**

4 Component: **TX6350 eModule - Flammable Gas Sensor (Group I)**

5 Applicant: **Trolex Limited**

6 Address: Hazel Grove
Stockport
Cheshire SK7 5DY
UK

7 This component and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

8 CSA Group Netherlands B.V., Notified Body Number 2813 in accordance with Articles 17 and 21 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this component has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of a component intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential reports listed in Section 14.2.

9 Compliance with the Essential Health and Safety Requirements, with the exception of those listed in the schedule to this certificate, has been assured by compliance with the following documents:

EN 60079-0:2006

EN 60079-11:2007

EN 50303:2000

EN 60079-0-2009 (used for guidance in respect of marking)

10 The sign 'U' is placed after the certificate number to indicate that the product assessed is a component and may be subject to further assessment when incorporated into equipment. Any limitations of use are listed in the schedule to this certificate.

11 This EU-Type Examination Certificate relates only to the design and construction of the specified component. If applicable, further requirements of this Directive apply to the manufacture and supply of this component.

12 The marking of the component shall include the following:



I M1

Ex ia I Ma

(Ta = -20°C to +40°C)

Project Number 2736

Signed:

Title: Director of Operations

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CSA Group Netherlands B.V.
Utrechtseweg 310,
6812 AR, Arnhem,
Netherlands



SCHEDULE

EU-TYPE EXAMINATION CERTIFICATE

Sira 10ATEX2046U

Issue 1

13 DESCRIPTION OF COMPONENT

The TX6350 eModule - Flammable Gas Sensor is an Ex Component designed to measure concentration of flammable gas by means of a pellistor type sensing head and to electronically convert the measured value into an output signal that can be monitored by suitably certified monitoring equipment, into which the sensor is plugged. The Flammable Gas Sensor contains a sub-assembly comprising a Sensing Board, Baseboard and a Connector Board. The sub-assembly fits inside a plastic enclosure with one face of the Connector Board exposed to connect with an external circuit.

Input Parameters at Connector CON 1			Output Parameters at Connector CON 1 Pins 3 to 6
Pin 1 wrt 2	Pin 3 & 4 combined wrt 2	Pins 5 wrt 2 and 6 wrt 2	
U _i = 14.4 V	U _i = 6.51 V I _i = 1.52 A P _i = 1.38 W	U _i = 6.51 V I _i = 27 mA P _i = 40 mW	U _o = 0 C _i = 8.64 µF L _i = 0

14 DESCRIPTIVE DOCUMENTS

14.1 Drawings

Refer to Certificate Annexe.

14.2 Associated Sira Reports and Certificate History

Issue	Date	Report number	Comment
0	29 July 2010	R21522B/00	The release of prime certificate.
1	31st October 2019	2736	<ul style="list-style-type: none"> Transfer of certificate Sira 10ATEX2046U from Sira Certification Service to CSA Group Netherlands B.V.. EC Type-Examination Certificate in accordance with 94/9/EC updated to EU Type-Examination Certificate in accordance with Directive 2014/34/EU. <i>(In accordance with Article 41 of Directive 2014/34/EU, EC Type-Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20 April 2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Variations to such EC Type-Examination Certificates may continue to bear the original certificate number issued prior to 20 April 2016.)</i>

15 SPECIAL CONDITIONS FOR SAFE USE

15.1 The Flammable Sensor has exposed external connections, which must be provided with an ingress protection of at least IP54.

16 ESSENTIAL HEALTH AND SAFETY REQUIREMENTS OF ANNEX II (EHSRs)

The relevant EHSRs that are not addressed by the standards listed in this certificate have been identified and individually assessed in the reports listed in Section 14.2.

Certificate Annexe



Certificate Number: Sira 10ATEX2046U

Component: TX6350 eModule - Flammable Group I Gas Sensor

Applicant: Trolex Limited

Issue 0

Drawing	Sheets	Rev.	Date (Sira stamp)	Title
P5553.95	1 of 1	B	24 Jun 10	General Assembly
P5553.90	1 of 1	A	18 Jun 10	Group I – Label details
P5553.64	1 of 1	A	18 Jun 10	Flammable Gas Sensor Block Diagram
P5553.40	1 to 2	C	18 Jun 10	Schematic - 4 Series Flammable Baseboard
P5553.01	1 to 2	A2	18 Jun 10	Schematic - CPU Board
P5553.41	1 of 1	C	18 Jun 10	PCB – 4 Series Flammable Baseboard
P5553.02	1 of 1	B	24 Jun 10	PCB - Sensing Module CPU
P5553.21	1 of 1	B	18 Jun 10	PCB - Connector Board
P5476-12	1 of 1	A	18 Jun 10	Pellistor construction

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