



## EC-Type Examination Certificate

- (1)  
(2) **Equipment or Protective Systems Intended for Use  
in Potentially Explosive Atmospheres  
(Directive 94/9/EC)**

(3) EC-Type Examination Certificate Number:

**FTZÚ 11 ATEX 0072X**

- (4) Equipment or protective system: **TX 6351.01i.12 Sentro Methane Sensor / Transmitter**  
(5) Manufacturer: **Trolex Limited**  
(6) Address: **Hazel Grove, Stockport, Cheshire, SK7 5DY, United Kingdom**  
(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.  
(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°:

**11/0072 dated 24.05.2012**

- (9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:  
**EN 60079-29-1:2007, EN 50271:2001, EN 50270:2006**  
(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.  
(11) This EC-Type Examination Certificate relates only to the design, examination and testing of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.  
(12) The marking of the equipment or protective system shall include the following:

 **I M1 Ex ia I Ma**

This EC-Type Examination Certificate is valid till: **24.05.2017**

Responsible person:

  
Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 24.05.2012

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Physical Technical Testing Institute  
Ostrava – Radvanice

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Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0072X**

(15) Description of Equipment or Protective System:

The equipment is a stand - alone gas detection apparatus for fixed installation, contains one sensor for flammable gases in the module named Flammable eModule, LCD for measured value, switches for set-up, antistatic plastic enclosure with plastic window for LCD. The equipment has four wires where are two wires for interface 4-20 mA output and two wires for input power.

The performance tests have been done on the product for gas methane CH<sub>4</sub> and for range 0-100% LEL.

The explosion protection of this equipment is certified by Sira 09ATEX2352X as Ex ia I Ma.

There is one component named Flammable eModule TX6350.01.246 certified by Sira 10ATEX2046U inside the equipment.

There is one component named Flammable Sensor P5476.11 certified by Sira 00ATEX2059U inside the component Flammable eModule.

(16) Report No.: 11/0072

(17) Special conditions for safe use:

17.1 The equipment passed the Radiated RF Electromagnetic Field Immunity Test, Criteria A, Type of apparatus 1.

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standards mentioned in (9), according which the product was verified.

Responsible person:

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 24.05.2012

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tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz



Physical Technical Testing Institute  
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(13)

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(14) **EC-Type Examination Certificate N° FTZÚ 11 ATEX 0072X**

(19) List of Documentation:

ATEX Certificates:

Sentro (TX6351): Sira 09ATEX2352X Issue 3

Flammable eModule (TX6350): Sira 10ATEX2046U Issue 0

Flammable Sensor (P5476.11): Sira 00ATEX2059U Original Certificate

Drawing List:

Drawing No.	Sheets	Issue	Date	Title
Sentro:				
P5536.200	1 to 5	C	22.11.2010	Circuit Diagram – Analogue/Comms Output PCB
P5536.202	1 to 2	C	19.10.2011	Circuit Diagram – Control PCB
P5536.204	1 to 2	B	07.10.2009	Circuit Diagram – Display PCB
P5536.222	1 to 4	D	29.11.2010	Circuit Diagram – 5-15Hz/Relay Output PCB
P5536.224	1 of 1	C	19.10.2011	Sentro Block Diagram
P5536.244	1 of 1	C	08.05.2012	Label Details
-	-	A	08.2011	Installation and Operational Data
Flammable eModule:				
P5536.01	2 to 2	A2	24.04.2007	Circuit Diagram – CPU Board
P5536.40	2 to 2	C	16.03.2010	Circuit Diagram – 4 Series Flammable Baseboard
P5536.64	1 of 1	A	13.01.2010	4 Series Flammable Gas Block Diagram
Flammable Sensor:				
P5476.12	1 of 1	A	21.03.2000	Flammable Gas Sensor – General Arrangement
P5476.13	1 of 1	A	17.03.2000	Certification Labels

Software Documentation:

Drawing No.	Issue	Date	Title
Sentro:			
TR53TD02#1.01	Version 0.42	25.08.2011	TX6351 – Program Function Description
TR53TD03#1.01	Version 0.42	25.08.2011	TX6351 – Safety Discussion
Flammable eModule:			
TR53TD06#1.01	Version 0.42	25.08.2011	TX6350.240 – Program Function Description
TR53TD07#1.01	Version 0.42	25.08.2011	TX6350.240 – Safety Discussion

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(1) **Supplement No. 1 to  
EC-Type Examination Certificate**

(2) **Equipment or Protective Systems Intended for Use  
in Potentially Explosive Atmospheres  
(Directive 94/9/EC)**

(3) EC-Type Examination Certificate Number:

**FTZÚ 11 ATEX 0072X**

(4) Equipment or protective system: **TX 6351.01i.12 Sentro Methane Sensor / Transmitter**

(5) Manufacturer: **Trox Limited**

(6) Address: **Hazel Grove, Stockport, Cheshire, SK7 5DY, United Kingdom**

(7) This supplement of certificate is valid for new models: **TX 6351.01i.11  
TX 6351.01i.14  
TX 6351.01i.15**

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains other requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

**EN 60079-29-1:2007, EN 50271:2001, EN 50270:2006**

(11) Marking of equipment shall contain symbols:

 **I M1 Ex ia I Ma**

(12) This type examination certificate is valid till: **24.05.2017**

Responsible person:

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: **21.12.2012**

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(14)

Supplement No. 1 to  
EC-Type Examination Certificate N° FTZÚ 11 ATEX 0072X

(15) Description of Equipment or Protective System:

The performance tests have been done on the new models TX 6351.01i.11, TX 6351.01i.14 and TX 6351.01i.15. for gas methane CH<sub>4</sub>. The new models are the same as the current model, only there are changed the interface for communication. The model TX6351.01i.11 has a 0.4 to 2V output, the model TX6351.01i.14 has a dual relay output and the model TX6351.01i.15 has a RS485 output.

There are possible to use the Flammable eModules named TX6350.01.240 for range 0 to 100% LEL or named TX6350.01.246 for range 0 to 4% v/v inside all models of equipment.

There has been changed the software for all models and eModules. The models TX6351 has the actual version V0.58u and eModules has TX6350 version V0.55. These changes has no affect to performance tests.

Other description is the same as mentioned in basic certificate.

(16) Report No.: 11/0072/1

(17) Special conditions for safe use:

Remain unchanged also for new models TX 6351.01i.11, TX 6351.01i.14 and TX 6351.01i.15.

(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standards mentioned in (9), according which the product was verified.

(19) List of Documentation:

[1] Document: Sentro Issues Tracking List for SW, Sheet:1, Date: 20.12.2012

[2] Firmware source code in \*.c and \*.h for new versions v0.55 and v0.58u

Other documents are the same as mentioned in basic certificate.

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