



# IECEx Certificate of Conformity

## INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit [www.iecex.com](http://www.iecex.com)

Certificate No.: **IECEx ExTC 19.0008X** Page 1 of 3 [Certificate history:](#)

Status: **Current** Issue No: 0

Date of Issue: 2019-10-23

Applicant: **Trolex Nome Limited**  
Unit 10a Newby Road  
Hazel Grove Stockport SK7 5DY  
United Kingdom

Equipment: **RockMonitor XR System**

Optional accessory:

Type of Protection: **Intrinsic Safety**

Marking: **Ex ia I Ma**  
**-20°C ≤ Tamb ≤ +50°C**

Approved for issue on behalf of the IECEx  
Certification Body:

**Justin Gavranich**

Position:

**Certification Authority**

Signature:  
(for printed version)

Date:

**2019-10-23**

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 [www.iecex.com](http://www.iecex.com) or use of this QR Code.



Certificate issued by:

**Ex Testing and Certification Pty Ltd**  
1/30 Kennington Drive  
Tomago NSW 2322  
Australia



TESTING & CERTIFICATION



# IECEx Certificate of Conformity

Certificate No.: **IECEx ExTC 19.0008X**

Page 2 of 3

Date of issue: 2019-10-23

Issue No: 0

Manufacturer: **Trolex Limited**  
Unit 10a Newby Road  
Hazel Grove Stockport SK7 5DY  
**United Kingdom**

Additional  
manufacturing  
locations:

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 equipment 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 Explosive atmospheres – Part 25: Intrinsically safe electrical systems  
**60079-25:2010-02**  
Edition:2.0

This Certificate **does not** indicate compliance with 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/ExTC/ExTR19.0041/00](#)

Quality Assessment Report:

[GB/SIR/QAR07.0017/07](#)



# IECEx Certificate of Conformity

Certificate No.: **IECEx ExTC 19.0008X**

Page 3 of 3

Date of issue: 2019-10-23

Issue No: 0

## **EQUIPMENT:**

Equipment and systems covered by this Certificate are as follows:

The RockMonitor XR System comprises a TX5002 RockMonitor XR Controller or a TX5003 RockMonitor XR Reader and up to 300 TX5001 RockMonitor XR Telltale units - the TX5002 or TX5003 powers and communicates with the TX5001 telltales in the system. The system measures displacement of the strata at anchor points in the roof or rib in an underground mine using the TX5001 Telltales. The TX5001 communicates the data back to the TX5002 controller or TX5003 Reader. The TX5002 controller is powered from a separately certified IS associated equipment and provides communication to surface monitoring equipment using Ethernet and/or RS485 signals and also contains two solid state relays that provide voltage free contacts. The TX5003 Reader is portable and powered by an integral battery pack. The TX5002 and TX5003 each provide user interface via keypad and LCD screen.



Refer to document P5625.129.IECEx for sytem details.

## **SPECIFIC CONDITIONS OF USE: YES as shown below:**

Refer to Annexe for details

## **Annex:**

[Certificate Annex IECEx ExTC 19.0008X-0 Final.pdf](#)

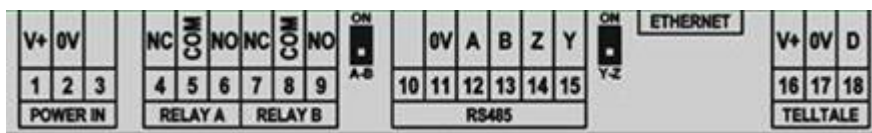
<h1 style="text-align: center;">IECEX Certificate of Conformity</h1> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <h2 style="margin: 0;">Annexe</h2> </div>  </div>			
Annexe for Certificate No.:	IECEX ExTC 19.0008X	Issue No.:	0

**Specific Conditions of Use pertaining to Issue 0 of this Certificate:**

The parameters listed below are for external connection to the TX5002 RockMonitor XR Controller for the connection of associated apparatus not specifically covered in the system block diagram (drawing P5625.129.IECEX) and must be considered in conjunction with the requirements shown in this table.



	Conn. P4 (Supply to TX5002)	Conn. P8 (Relay contacts – Relay A and Relay B)	Conn. P7 (RS485) - parameters for individual lines	Conn. J1 (Ethernet) – all lines combined
Terminal no.	1 wrt 2	4, 5, 6, 7, 8, 9	12, 13, 14, 15 wrt 11	
Ui	16 V or 14.4 V (as marked on the equipment)	30 V	8.4 V	17.64 V
Ii	3.33 A	0.32 A		
Pi		530 mW		
Ci	4 µF	0 µF	0 µF	0.48 µF
Li	0 µH	0 µH	0 µH	30 µH
Uo		0 V	5.88 V	0 V dc
Io		0 A	66 mA	0 A dc
Po			97 mW	0 W dc
Co			1000 µF	1000 µF
Lo			26 mH	97 µH
Lo/Ro				145 µH/Ω

Refer below for example terminal number identification. The TX5002 Telltale connector shown in the example below may only be connected to the TX5001 RockMonitor XR Telltale units:



Conditions of use and user manuals applicable to each separately certified equipment comprising the system shall be observed.

Note that the Controlled System Limited 9474-ET Ethernet Interface (IECEX CML 16.0025X) listed as an option in the System Control Drawing (P5625.129.IECEX) is not certified by an Australian certification body and shall be taken into account as necessary.

<h1 style="text-align: center;">IECEX Certificate of Conformity</h1> <div style="display: flex; justify-content: space-around; align-items: center;">  <div style="text-align: center;"> <h2 style="margin: 0;">Annexe</h2> </div>  </div>			
Annexe for Certificate No.:	IECEX ExTC 19.0008X	Issue No.:	0

**Drawing list pertaining to Issue 0 of this Certificate:**

Manufacturer's Documents				
Title:	Drawing No.:	Pages	Rev. Level:	Date:
RockMonitor XR System Control Drawing (Various titles)	P5625.129.IECEX	8	A	2019-10-11