



# 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](http://www.iecex.com)

Certificate No.: **IECEX TSA 09.0023X** issue No.: **1**

Status: **Current**

Certificate history:  
Issue No. 1 (2015-7-22)  
Issue No. 0 (2009-12-22)

Date of Issue: **2015-07-22** Page 1 of 4

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

Electrical Apparatus: **RRTT/EXTO Portable Reader RRTT-1442-PR**  
Optional accessory:

Type of Protection: **Ex ia I**

Marking: Trolex Ltd  
Portable Reader RRTT-1442-PR  
IECEX TSA 09.0023X  
Ex ia I  
Ta = -20 to +40°C  
(Electrical parameter as shown in Annex)  
Serial no.

Approved for issue on behalf of the IECEx  
Certification Body:

Ujen Singh

Position:

Quality & Certification Manager

Signature:  
(for printed version)

Date:

22 JULY 2015.

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





# IECEX Certificate of Conformity

Certificate No.: IECEx TSA 09.0023X

Date of Issue: 2015-07-22

Issue No.: 1

Page 2 of 4

Manufacturer: **Trox Ltd**  
Newby Road  
Hazel Grove  
Stockport  
Cheshire 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:

<b>IEC 60079-0 : 2004</b> Edition: 4.0	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
<b>IEC 60079-11 : 2006</b> Edition: 5	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:  
AU/TSA/ExTR08.0035/00

AU/TSA/ExTR08.0035/01

Quality Assessment Report:

GB/SIR/QAR07.0017/04



# IECEX Certificate of Conformity

Certificate No.: IECEX TSA 09.0023X

Date of Issue: 2015-07-22

Issue No.: 1

Page 3 of 4

## Schedule

### EQUIPMENT:

*Equipment and systems covered by this certificate are as follows:*

The RRTT/EXTO Portable Reader model RRTT-1442-PR is designed to be connected to a number of transponders via a single 2-core cable in a daisy chain manner. Upon activated and interrogated by the Portable Reader, each of the transponders will communicate data to the Portable Reader. The Portable Reader provides visual indication of the transponders' tell-tale information.

The Portable Reader comprises a printed circuit board, a LCD display and a rechargeable battery pack all contained in a plastic enclosure. There are a display window, an ON/OFF switch, a channel (transponder ID) selector, a battery voltage indicator, a 2-pin charger connector and two transponder terminal connectors (-VE, +VE) for the connection with external transponder cable. The plastic enclosure is protected from electrostatic hazards by a leather case with warning label.

### CONDITIONS OF CERTIFICATION: YES as shown below:

Refer to Annex for Conditions of Certification



# IECEX Certificate of Conformity

Certificate No.: IECEX TSA 09.0023X

Date of Issue: 2015-07-22

Issue No.: 1

Page 4 of 4

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

Change the applicant and manufacturer name from Golder Associates (UK) Ltd, Bretby Business park, Ashby Road, Burton on Trent, DE1S 0QD, Staffordshire, United Kingdom to Trolex Ltd, Newby Road, Hazel Grove, Stockport, Cheshire SK7 5DY, United Kingdom.



## IECEX Certificate of Conformity Annexe

Annexe for Certificate No.:	IECEX TSA 09.0023X	Issue No.:	1
-----------------------------	--------------------	------------	---

### Drawing list pertaining to Issue 1 of this Certificate:

Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
RMT-1445.02	1	RRTT/EXTO Portable reader label and case detail	A	2015-04

### Conditions of Certification pertaining to Issue 1 of this Certificate:

#### **Conditions of safe use**

- (1) The battery pack shall only be recharged in a safe area.
- (2) The leather case must be fitted while in the hazardous area.
- (3) The following parameters shall be taken into account when connecting with external equipment:

Electrical Parameters	Charger terminals
Maximum Input Voltage $U_m$	25 V
Electrical Parameters	Transponder terminals (+VE, -VE)
Maximum Output Voltage $U_o$	15 V
Maximum Output Current $I_o$	537 mA
Maximum Output Power $P_o$	1.29 W
Maximum External Capacitance $C_o$	5.8 $\mu$ F
Maximum External Inductance $L_o$	0.2 mH
Maximum External Inductance to Resistance Ratio $L_o/R_o$	231 $\mu$ H/ $\Omega$
Maximum Input Voltage $U_i$	0 V

Certificate issued by:



**TestSafe Australia**  
919 Londonderry Road  
Londonderry NSW 2753 Australia