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 BAS 05.0059 issue No.:12

Status: **Current**

Date of Issue: **2014-09-11** Page 1 of 4

Applicant: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Certificate history:
Issue No. 12 (2014-9-11)
Issue No. 11 (2014-8-6)
Issue No. 10 (2013-2-6)
Issue No. 9 (2009-11-30)
Issue No. 8 (2008-6-13)
Issue No. 7 (2007-7-5)
Issue No. 6 (2006-12-20)

Electrical Apparatus: **TETRA 3**
Optional accessory:

Type of Protection: **Intrinsic Safety and Flameproof**

Marking: **Ex ia d IIC T4 Gb (-20°C ≤ Ta ≤ +55°C)**

Approved for issue on behalf of the IECEx Certification Body: R S Sinclair

Position: General Manager

Signature:
(for printed version)

Date: 11-9-14

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.

SGS Baseefa Limited
Rockhead Business Park
Staden Lane
Buxton
Derbyshire
SK17 9RZ
United Kingdom

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Manufacturer: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
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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:

IEC 60079-0 : 2011 Edition: 6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2007-04 Edition: 6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 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

IECEx ATR:	File Reference:
UK/BAS/05/0554	**05/0554**
GB/BAS/ExTR13.0035/00	**12/1031**
GB/BAS/ExTR14.0249/00	**13/0719**

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Schedule

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

The TETRA 3 is a three bay four gas monitor, designed to monitor the concentration of oxygen (deficiency), toxic or flammable gas, and provide visual, audible and physical (vibrator) warnings if preset limits are exceeded. The presence of any sensor (known as an i-module) is optional and the maximum possible is one flammable i-module, one oxygen i-module and one toxic i-module. The toxic i-module may contain a dual sensor to measure two toxic gases.
The TETRA 3 comprises electronic circuits on printed circuit boards, a display, various LED indicators, a pump, a vibrator, a sounder and a rechargeable lithium-ion battery, all contained in a plastic enclosure providing a degree of protection of at least IP20.

The permitted sensors used in the i-modules are specified in the Crowcon documentation.

The flammable sensor used is either type VQ500 series by SGX Sensortech (IS) Ltd, to IECEx SIR 04.0014U, or 4P series by City Technology to IECEx SIR 04.0013U, with a Code of Ex d IIC Gb and a maximum permitted ambient temperature of +55°C. These sensors are certified to IEC 60079-0:2007 and IEC 60079-1:2007.

The apparatus must only be recharged or connected to serial data communications in a non-hazardous area, using a Crowcon desktop charger or charger / interface, part number C011018 or C011019.

The apparatus is not designed for use in oxygen enriched atmospheres.

CONDITIONS OF CERTIFICATION: NO

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

Variation 12.1

To permit minor drawing changes not affecting the original assessment.

ExTR: **GB/BAS/ExTR14.0249/00** File Reference: **13/0719**