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

Certificate No.: **IECEx BAS 05.0059**

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Status: **Current**

Issue No: 17

Date of Issue: 2020-08-10

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

Equipment: **TETRA 3**

Optional accessory:

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

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

Certificate history:

Issue 16 (2018-04-25)
Issue 15 (2017-01-16)
Issue 14 (2016-07-14)
Issue 13 (2015-08-07)
Issue 12 (2014-09-11)
Issue 11 (2014-08-06)
Issue 10 (2013-02-06)
Issue 9 (2009-11-30)
Issue 8 (2008-06-13)
Issue 7 (2007-07-05)

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

Position: **Technical Manager**

Signature: (for printed version)

Date: 11.8.2020

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 or use of this QR Code.

Certificate issued by:

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

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Date of issue: 2020-08-10 Issue No: 17

Manufacturer: **Crowcon Detection Instruments Ltd**
172 Brook Drive
Milton Park
Abingdon
Oxfordshire
OX14 4SD
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 60079-0:2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0

IEC 60079-1:2014-06 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

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 Reports:

GB/BAS/ExTR06.0029/00
GB/BAS/ExTR06.0058/00
GB/BAS/ExTR06.0104/00
GB/BAS/ExTR06.0162/00
GB/BAS/ExTR06.0172/00
GB/BAS/ExTR06.0177/00
GB/BAS/ExTR07.0191/00
GB/BAS/ExTR09.0168/00
GB/BAS/ExTR13.0035/00
GB/BAS/ExTR14.0249/00
GB/BAS/ExTR15.0234/00
GB/BAS/ExTR16.0195/00
GB/BAS/ExTR16.0368/00
GB/BAS/ExTR18.0011/00
GB/BAS/ExTR20.0114/00

Quality Assessment Report:

GB/BAS/QAR06.0070/08

IECEx ATR:
UK/BAS/05/0554
UK/BAS/05/0256/4

File reference:
05/0554
05/0554

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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 Europe Sp. z.o.o, to IECEx SIR 04.0014U, or 4P series by City Technology to IECEx SIR 04.0013U, with a Code of Ex db IIC Gb and a maximum permitted ambient temperature of +55ºC. These sensors are certified to IEC 60079-0:2011 Ed. 6 and IEC 60079-1:2014 Ed.7.

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

Charging Conditions:

The apparatus must only be recharged or connected to serial communications when in a non-hazardous area, using the following chargers:

Crowcon desktop charger part number C011018

Crowcon desktop charger / interface part number C011019

Crowcon desktop charger / Bluetooth interface part number C011022

Alternatively, any Crowcon charger with an output (U_m) of 9V may be used to charge the apparatus, although when both charging and data communications are required, only charger / interface part number's C011019 & C011022 may be used**.**

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Variation 17.1

To permit the use of an alternative Charger & Bluetooth Interface with the equipment.

The equipment description on page 3 of the certificate was revised to list details of the new accessory.

ExTR: **GB/BAS/ExTR20.0114/00**	File Reference: **19/0718**