

# 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 09.0109X

Issue No: 6

Certificate history:

Status:

Current

Issue No. 6 (2018-05-17) Issue No. 5 (2014-08-06)

Date of Issue:

2018-05-17

Issue No. 4 (2013-04-24) Issue No. 3 (2012-05-03)

Applicant:

Crowcon Detection Instruments Limited

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Issue No. 2 (2011-11-17)

172 Brook Drive Milton Park

Milton Park
Abingdon
Oxfordshire
OX14 4SD
United Kingdom

Issue No. 1 (2010-10-28) Issue No. 0 (2010-04-16)

Equipment:

IR Gas Detector

Optional accessory:

Type of Protection:

Flameproof & Protection by Enclosure 'tb'

Marking:

Ex db IIC T6 Gb (Tamb = -40°C to +50°C)

Ex db IIC T4 Gb (Tamb = -40°C to +75°C)

Ex tb IIIC T135°C Db (Tamb = -40°C to +75°C)

Approved for issue on behalf of the IECEx

Certification Body:

R S Sinclair

Position:

Signature:

(for printed version)

Date:

Technical Manager

- 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 Limited

172 Brook Drive Milton Park Abingdon Oxfordshire OX14 4SD **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 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 : 2007-10 Explosive atmospheres - Part 0:Equipment - General requirements

Edition:5

IEC 60079-1: 2007-04 Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"

Edition:6

IEC 60079-31: 2008 Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

Edition:1

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:

GB/BAS/ExTR09.0155/00 GB/BAS/ExTR10.0243/00 GB/BAS/ExTR11.0292/00 GB/BAS/ExTR12.0063/00 GB/BAS/ExTR13.0064/00 GB/BAS/ExTR16.0258/00

Quality Assessment Report:

GB/BAS/QAR06.0070/07



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Schedule

### **EQUIPMENT:**

Equipment and systems covered by this certificate are as follows:

The IR Gas Detector comprises a stainless steel housing with a transparent sapphire detector window fitted to the end and clamped in place. A protective weatherproof cover manufactured in an antistatic plastic material is fitted over the sapphire detector window. The housing contains optics and a stacked PCB assembly. At the opposite end to the window is an M50 threaded stainless steel endplate, secured against unintentional removal by a securing plate fixed in position by cap screws with an internal hexagon head.

The internal circuits of the IR Gas Detector circuits are rated up to a maximum of 32V and 5W.

Two cable entry holes are provided as specified on the certified drawings for the accommodation of a flameproof cable entry device, with or without the interposition of a flameproof thread adapter. One cable entry is M20, and the other is ½" NPT. The cable entry thread form for each cable entry is identified on the body of the IR Gas Detector by etched markings.

The cable entry device and thread adapter shall be suitable for the equipment, the cable and the conditions of use and shall be certified as Equipment (not a Component) under an IECEx Certificate of Conformity.

Any unused cable entry holes must be fitted with a suitable flameproof stopping plug certified as Equipment (not a Component) under an IECEx Certificate of Conformity.

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

1. The equipment must be earthed using the cable gland and steel armoured cable.



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

## Variation 6.1

To confirm the equipment meets the updated requirements of IEC 60079-0: 2011, IEC 60079-1: 2014 and IEC 60079-31: 2013

## Variation 6.2

Minor dimensional drawing changes which do not affect the certification

## Variation 6.3

Re-classification of window joint from a flanged flamepath to a cemented joint

ExTR: GB/BAS/ExTR16.0258/00	File Reference: 16/061	17