



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 SIR 08.0009X issue No.:2

Status: Current

Certificate history:
Issue No. 2 (2011-9-13)
Issue No. 1 (2010-3-11)
Issue No. 0 (2008-4-9)

Date of Issue: 2011-09-13 Page 1 of 5

Applicant: **Status Scientific Controls Limited**
Kings Mill Way
Mansfield
Nottinghamshire NG18 5ER
United Kingdom

Electrical Apparatus: FGD 10 series of gas detectors
Optional accessory:

Type of Protection: Flameproof

Marking: Ex d IIC
T4 (Ta = -20°C to + 60°C)
T5 (Ta = -20°C to + 50°C)
T6 (Ta = -20°C to + 35°C)

Approved for issue on behalf of the IECEx Certification Body: C Ellaby

Position: Deputy Certification Manager

Signature:
(for printed version)

Date:

2011-09-13

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:

SIRA Certification Service
Rake Lane
Eccleston
Chester
CH4 9JN
United Kingdom

sira
CERTIFICATION



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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The FGD10 Series of Gas Detectors are rated up to 24 V , 5 W and have a relay switching maximum capacity of 300 Va.c. 3 A, see EQUIPMENT (continued) for product description.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The gap between the SI-IR sensor and its housing in the gas detector is 0.11 mm maximum and should not be enlarged during maintenance etc.
2. Only Loctite 243 or a compound equal strength shall be re-applied to the threads of the type SI-M sensor after replacing the sensing element.
3. The SI-IR sensors shall not be installed or removed when an explosive gas atmosphere is present.
4. When FGD10 gas detector is provided with a remote GSH4 gas sensor, the integral conductors shall be suitably mechanically protected and terminated in a suitably certified ATEX/IECEx junction box facility have the following minimum marking requirements:

Junction box		Cable glands for Junction box		Cable glands for FGD10 Gas detector	
Marking	Ambient range	Marking	Operating range (Min)	Marking	Operating range (Min)
Ex d IIC or Ex e IIC	-20°C to 60°C	Ex d IIC or Ex e	-20°C to 80°C	Ex d IIC	-20°C to 80°C

5. When FGD10 gas detector is provided with a remote GSH4 gas sensor, the integral conductors shall be suitably clamped within 100 mm of the point at which they exit the body of the Gas Sensor Type GSH4.
6. When gas detector is supplied with a GSH4 sensor for remote connection, it is the user's responsibility to ensure that the earth continuity is maintained via the mounting arrangement



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EQUIPMENT(continued):

The FGD10 Series of Gas Detectors use one of the following enclosures:

- either: A Type XD-lwin, certified to IECEx FMG 06.0003U, coded Ex d IIC (Ta -40°C to + 85°C) and afforded ingress protection level IP 68, this enclosure has a threaded cover with a window.
- or: A Type XD-l, certified to IECEx FMG 06.0003U, coded Ex d IIC (Ta -40°C to + 100°C) and afforded ingress protection level IP 68, this enclosure has a threaded, plain cover.
- or: A Type XD-I80, certified to IECEx FMG 06.0003U, coded Ex d IIC (Ta -40°C to + 100°C) and afforded ingress protection level IP 68, this is a smaller enclosure that has a threaded, plain cover.

The enclosures have three bosses, two are used for cable entries and the third accommodates either a gas sensing head or gas sensor insert, designated SI-IR and SI-M respectively. The type SI-IR gas sensing head is a Type MSH or MSH-P to IECEx SIR 05.0053U, coded Ex d IIC (Ta = -20°C to + 60°C), the type SI-M gas sensing insert contains electrochemical or pellistor type gas sensors with a mesh between the external gas and the sensing element.

The enclosures can be provided with size M20, 1/2" NPT or 3/4" NPT cable entries and contain up to four PCBs mounted on pillars, in the case of the Type XD-I80 enclosure, the PCBs are replaced by a single PCB containing terminals.

Conditions of manufacture

The Manufacturer shall comply with the following:

1. When FGD10 gas detector is provided with a GSH4 gas sensor, the product shall only be marked with a T4 temperature class.
2. When FGD10 gas detector is provided with a GSH4 gas sensor, it is the manufacturer's responsibility to ensure that the earth continuity is maintained via the mounting arrangement.



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

Issue 1 – this Issue introduced the following changes:	
1.	The introduction of the XD-I80win Model.
2.	The recognition of Minor machining detail changes
Issue 2 – this Issue introduced the following changes:	
1	The introduction of an alternative, separately certified sensor housing type GSH4 mounted either directly on to the detector housing or remotely via separately certified junction boxes was allowed.
2	The introduction of a stainless steel enclosure option, utilising the XD-SI & XD-SIwin enclosures certified under IECEx FTZU 10.0010U was endorsed.
3	The introduction of additional Conditions of Certification and Conditions of Manufacture