



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 FMG 11.0026X Issue No: 1 Certificate history:
Status: **Current** Page 1 of 4 [Issue No. 1 \(2013-11-22\)](#)
Date of Issue: **2013-11-22** [Issue No. 0 \(2011-12-30\)](#)

Applicant: **Mine Safety Appliances Company**
1000 Cranberry Woods Drive
Cranberry Township, PA. 16066
United States of America

Electrical Apparatus: **UltraSonic EX-5 Acoustic Gas Leak Detector , Gassonic Observer-i
Acoustic Gas Leak Detector**

Optional accessory:

Type of Protection: **Flameproof enclosure Ex d with integral associated apparatus limiting energy to externally mounted
intrinsically safe microphone and piezo source Ex ia; Dust ignition protection by enclosure Ex tb**

Marking: Ex d ia IIB + H2 Gb T6 Tamb = -40°C to +60°C Ex tb IIIC T85°C Db Tamb = -40°C to +60°C; IP66

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

James E. Marquedant

Position:

Group Manager - Electrical

*Signature:
(for printed version)*

Date:

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:

FM Approvals LLC
1151 Boston-Providence Turnpike
Norwood, MA 02062
United States of America





IECEX Certificate of Conformity

Certificate No: IECEx FMG 11.0026X Issue No: 1

Date of Issue: 2013-11-22 Page 2 of 4

Manufacturer: **General Monitors Ireland Ltd**
Ballybrit Business Park
Galway
Ireland
Ireland

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 : 2007-10 Edition:5	Explosive atmospheres - Part 0:Equipment - General requirements
IEC 60079-1 : 2007-04 Edition:6	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2006 Edition:5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-31 : 2008 Edition:1	Explosive atmospheres – Part 31: Equipment dust ignition protection by enclosure 't'

*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:

US/FMG/ExTR11.0002/00 US/FMG/ExTR11.0002/01

Quality Assessment Report:

FR/INE/QAR08.0011/02 GB/SIR/QAR07.0014/03



IECEx Certificate of Conformity

Certificate No: IECEx FMG 11.0026X

Issue No: 1

Date of Issue: 2013-11-22

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

805501-a UltraSonic EX-5 Acoustic Gas Leak Detector

a = configuration 9, 10, 11, 12, 13, 14, 15, 16 **805701-a Gassonic Observer-i Acoustic Gas Leak Detector**

a = configuration 1, 2, 3, or 4

CONDITIONS OF CERTIFICATION: YES as shown below:

The Class A2-70, M6 x 1 x 20 bolts connecting the bulkhead flanges must be tightened at 9 Nm.
Consult the manufacturer if dimensional information on the flameproof joints is necessary.



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Certificate No: IECEx FMG 11.0026X

Issue No: 1

Date of Issue: 2013-11-22

Page 4 of 4

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

Issue 1: Addition of new model Gassonic Observer-i to certificate. The new model includes some simple electrical and mechanical design changes relative to the current EX-5, which do not impact safety.