



# 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](http://www.iecex.com)

Certificate No.:  issue No.:

Status:

Date of Issue: **2011-04-20** Page 1 of 3

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

Electrical Apparatus: **OPEN PATH COMBUSTIBLE IR GAS DETECTOR consisting of ULTIMA OPIR-5 SOURCE and ULTIMA OPIR-5 RECEIVER**  
Optional accessory:

Type of Protection: **Flameproof Ex d and Dust Ignition Protection by Enclosure Ex t**

Marking: **Ex d IIB+H2 T4 Gb Ta = -55°C to 65°C**  
**Ex tb IIIC T135°C Db Ta = -55°C to 65°C**

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](http://www.iecex.com).

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 11.0006

Date of Issue: 2011-04-20

Issue No.: 0

Page 2 of 3

Manufacturer: **Mine Safety Appliances Company**  
26776 Simpatica Circle  
Lake Forest, California 92630  
**United States of America**

Manufacturing location(s):  
**Mine Safety Appliances  
Company**  
Ballybrit Business Park  
Galway  
Ireland

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** 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:

[US/FMG/ExTR10.0013/00](#)

#### Quality Assessment Report:

[FR/INE/QAR08.0011/00](#)  
[FR/INE/QAR08.0011/01](#)  
[GB/SIR/QAR07.0014/01](#)  
[GB/SIR/QAR07.0014/02](#)  
[US/UL/QAR10.0004/00](#)



# IECEX Certificate of Conformity

Certificate No.: IECEx FMG 11.0006

Date of Issue: 2011-04-20

Issue No.: 0

Page 3 of 3

## Schedule

### EQUIPMENT:

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

**OPEN PATH COMBUSTIBLE IR GAS DETECTOR consisting of ULTIMA OPIR-5 SOURCE  
and ULTIMA OPIR-5 RECEIVER**

**CONDITIONS OF CERTIFICATION: NO**