



# 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.:	IECEX FMG 07.0006X	Issue No: 15	<b>Certificate history:</b>
Status:	<b>Current</b>	Page 1 of 5	Issue No. 15 (2014-08-06)
Date of Issue:	<b>2014-08-06</b>		Issue No. 14 (2014-05-09)
Applicant:	<b>Mine Safety Appliances</b> 1000 Cranberry Woods Drive Cranberry Township, PA 16066 <b>United States of America</b>		Issue No. 13 (2013-11-06)
Electrical Apparatus:	<b>Ultima X Series Controller, Ultima XE Sensor, Ultima XI Sensor, Ultima XIR Sensor</b>		Issue No. 12 (2013-01-15)
Optional accessory:	<i>Refer to Equipment section of this certificate.</i>		Issue No. 11 (2012-03-13)
Type of Protection:	<b>Construction, Test and Marking of type of protection "d", "n", "ia" and "[ib]"</b>		Issue No. 10 (2012-02-02)
Marking:	Refer to annex.		Issue No. 9 (2012-01-09)
			Issue No. 8 (2011-07-19)
			Issue No. 7 (2010-09-14)
			Issue No. 6 (2009-09-14)
			Issue No. 5 (2009-02-27)
			Issue No. 4 (2008-11-12)
			Issue No. 3 (2008-07-21)
			Issue No. 2 (2007-10-18)
			Issue No. 1 (2007-10-15)
			Issue No. 0 (2007-10-05)

Approved for issue on behalf of the IECEx  
Certification Body:

J.E.Marquedant

Position:

Manager, Electrical Systems

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

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

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:

<b>IEC 60079-0 : 2007-10</b> Edition:5	Explosive atmospheres - Part 0:Equipment - General requirements
<b>IEC 60079-1 : 2003</b> Edition: 5	Electrical apparatus for explosive gas atmospheres - Part 1: Flameproof enclosure 'd'
<b>IEC 60079-11 : 2006</b> Edition:5	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
<b>IEC 60079-15 : 2005-03</b> Edition:3	Electrical apparatus for explosive gas atmospheres Part 15: Construction, test and Marking of Type of Protection "n" electrical apparatus
<b>IEC 60079-29-1 : 2007</b> Edition:1	Explosive Atmospheres - Part 29-1: Gas Detectors - Performance requirements of detectors for flammable gases

*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:

<a href="#">US/FMG/ExTR07.0004/00</a>	<a href="#">US/FMG/ExTR07.0011/00</a>	<a href="#">US/FMG/ExTR08.0007/00</a>
<a href="#">US/FMG/ExTR08.0007/01</a>	<a href="#">US/FMG/ExTR08.0009/00</a>	<a href="#">US/FMG/ExTR08.0009/06</a>
<a href="#">US/FMG/ExTR08.0009/08</a>	<a href="#">US/FMG/ExTR08.0009/09</a>	<a href="#">US/FMG/ExTR08.0009/10</a>
<a href="#">US/FMG/ExTR08.0009/12</a>	<a href="#">US/FMG/ExTR08.0009/13</a>	<a href="#">US/FMG/ExTR08.0009/14</a>
<a href="#">US/FMG/ExTR08.0009/15</a>		

### Quality Assessment Report:

[FR/INE/QAR08.0011/03](#)



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## Schedule

### EQUIPMENT:

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

Controllers: Ultima XL, Ultima XE Main

Sensors: Ultima XE Sensor, Ultima XI Sensor, Ultima XIR Sensor

Accessories: Ultima Calibrator, Ultima Controller, Ultima XE Sensor Weather/Wind/Sensor Guard P/N 10028904, Ultima XI and Ultima XIR Environmental Guard P/N 10041265, Ultima X Power Supply, HART Module

### CONDITIONS OF CERTIFICATION: YES as shown below:

1) Upon installation of the Ultima XL Control Unit, the label shall be permanently marked to show the type of explosion protection used for the installation. 2) The Ultima X Control Unit complies with IEC 61779-1 and IEC 61779-4 when connected to a Detector Head that also has been evaluated to IEC 61779-1 and IEC 61779-4. 3) The Ultima XE Sensor, Ultima XI Sensor, and Ultima XIR Sensor complies with IEC 61779-1 and IEC 61779-4 when connected to a Control Unit that also has been evaluated to IEC 61779-1 and IEC 61779-4. 4) The Ultima XI Sensor and Ultima XIR Sensor comply with IEC 60079-29-1 when connected to a Control Unit that also has been evaluated to IEC 60079-29-1. 5) The Ultima XI Sensor shall be connected directly to a junction box or instrument suitable for the area of installation to provide protection for the flying leads. 6) The Ultima XE Sensor and the Ultima XIR Sensor shall be connected directly to an Ultima X Series Control Unit or remote junction box.



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

This certificate covers changes to various passive components and documentation updates.



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**Additional information:**

Annex: IECEx FMG 07.0006X provides marking information.

**Annex:**

[IECEX FMG 07.0006X Annex.pdf](#)

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



ANNEX to IECEx FMG 07.0006X Issue No. 4

### **Marking**

#### **Ultima XL with XP Port:**

Ex d [ib] IIC T6 Ta = -40 °C to +60 °C IP66  
Ex nA [ib] IIC T6 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima XL without XP Port:**

Ex d IIC T6 Ta = -40 °C to +60 °C IP66  
Ex nA IIC T6 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima XE Main with XP Port:**

Ex d [ib] IIC T4 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima XE Main without XP Port:**

Ex d IIC T4 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima XE Sensor:**

Ex d IIC T4 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima XI Sensor:**

Ex d IIC T5 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima XIR Sensor:**

Ex d IIC T5 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **HART Module:**

Ex d IIC T5 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima X Power Supply:**

Ex d IIC T4 Ta = -40 °C to +60 °C IP66  
IECEX FMG 07.0006X

#### **Ultima Calibrator**

Ex ia IIC T3  
IECEX FMG 07.0006X

#### **Ultima Controller:**

Ex ia IIC T3  
IECEX FMG 07.0006X