



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 16.0096

Issue No: 3

Certificate history:

Issue No. 3 (2018-03-21)

Issue No. 2 (2017-05-23)

Issue No. 1 (2016-12-23)

Issue No. 0 (2016-10-25)

Status: **Current**

Page 1 of 4

Date of Issue: **2018-03-21**

Applicant: **MSA - The Safety Company**
1000 Cranberry Woods Dr
Cranberry Township
PA 16066-5296
United States of America

Equipment: **ALTAIR 4XR Multi Gas Detector**

Optional accessory:

Type of Protection: **Flameproof and Intrinsically Safe**

Marking:

With XCell Ex Sensor

Ex da ia IIC T4 Ga

EN 60079-29-1

Ta = -40°C to +60°C

Ex ia I Ma

Ta = -40°C to +60°C

Without XCell Ex Sensor

Ex da ia IIC T4 Ga

EN 60079-29-1

Ta = -40°C to +60°C

Ex ia I Ma

Ta = -40°C to +60°C

Approved for issue on behalf of the IECEx
Certification Body:

C Ellaby

Position:

Deputy Certification Manager

Signature:

(for printed version)



Date:

2018-03-21

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
CSA Group
Unit 6, Hawarden Industrial Park
Hawarden, Deeside, CH5 3US
United Kingdom

sira
CERTIFICATION





IECEX Certificate of Conformity

Certificate No: IECEX SIR 16.0096 Issue No: 3

Date of Issue: **2018-03-21** Page 2 of 4

Manufacturer: **MSA - The Safety Company**
1000 Cranberry Woods Dr
Cranberry Township
PA 16066-5296
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 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-1 : 2014-06 Edition:7.0	Explosive atmospheres - Part 1: Equipment protection by flameproof enclosures "d"
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
IEC 60079-29-1 : 2007 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:

GB/SIR/ExTR16.0248/00 GB/SIR/ExTR16.0329/00 GB/SIR/ExTR17.0073/00
GB/SIR/ExTR18.0050/00

Quality Assessment Report:

FR/INE/QAR08.0011/06



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Certificate No: IECEx SIR 16.0096

Issue No: 3

Date of Issue: 2018-03-21

Page 3 of 4

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The MSA ALTAIR® 4XR is a handheld, battery operated, Multi-gas Detector with Bluetooth capabilities that can measure between 1 and 4 gases using a combination of the following MSA XCell® Sensors: one catalytic-bead combustible cell, one oxygen electrochemical cell and one dual toxic electrochemical cell. The enclosure is rectangular in shape, includes an LCD display window, and is manufactured from a non-metallic material with an overmold. There is an external connection that is only used for charging the battery and shall only be connected when located in a non-hazardous location.

Powered by a rechargeable Lithium Ion Polymer Battery Cell, Sony model US503759A8H, rated 3.8 V (nominal), 1400 mAh (nominal). MSA assembly number 10083913.

Conditions of manufacture

The Manufacturer shall comply with the following:

1. The ALTAIR 4XR incorporates previously certified sensors. It is therefore the responsibility of the manufacturer to continually monitor the status of the certification associated with this device. The manufacturer shall inform Sira of any modifications to the device that may impinge upon the explosion safety design of the ALTAIR 4XR.

SPECIFIC CONDITIONS OF USE: NO



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Certificate No: IECEX SIR 16.0096

Issue No: 3

Date of Issue: 2018-03-21

Page 4 of 4

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

This issue, issue 3, recognises the following change; refer to the certificate annex to view a comprehensive history:

1. The detector was allowed to be used for mining applications; as a consequence, the following marking was recognised:

With XCell Ex Sensor

Ex ia I Ma

Ta = -40°C to +60°C

Without XCell Ex Sensor

Ex ia I Ma

Ta = -40°C to +60°C

Annex:

[IECEX SIR 16.0096 Iss 3 Annexe.pdf](#)

Annexe to: IECEx SIR 16.0096 Issue 3
Applicant: MSA - THE SAFETY COMPANY
Apparatus: ALTAIR 4XR multi gas detector



Full certificate change history

Issue 1 – this Issue introduced the following change:

1. Update the method of protection marking to reflect the change from “d” to “da” on the latest XCell Ex sensor certificates.

Issue 2 – this Issue introduced the following change:

1. It was recognised that these gas detectors have been subjected to the performance test requirements of IEC 60079-29-1:2007 Edition 1.

Issue 3 – this Issue introduced the following change:

1. The detector was allowed to be used for mining applications; as a consequence, the following marking was recognised:

With XCell Ex Sensor

Ex ia I Ma

Ta = -40°C to +60°C

Without XCell Ex Sensor

Ex ia I Ma

Ta = -40°C to +60°C