



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 TSA 05.0056X

Issue No: 8

Certificate history:

Status: **Current**

Issue No. 8 (2017-06-16)

Issue No. 7 (2016-09-22)

Date of Issue: **2017-06-16**

Page 1 of 5

Issue No. 6 (2014-11-11)

Issue No. 5 (2012-08-03)

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

Issue No. 4 (2011-08-09)

Issue No. 3 (2009-04-16)

Issue No. 2 (2008-07-08)

Issue No. 1 (2007-06-15)

Issue No. 0 (2005-12-22)

Equipment: **Altair Portable Single Gas Detector**

Optional accessory:

Type of Protection: **Intrinsic safety "ia"**

Marking:

Ex ia IIC T4 (-40 °C < Ta < +50 °C)

IECEX TSA 05.0056X

Serial No: _____

Approved for issue on behalf of the IECEx
Certification Body:

Debbie Wouters

Position:

Acting Quality & Certification Manager

Signature:
(for printed version)

Date:

16 JUNE 2017

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:

TestSafe Australia
919 Londonderry Road
Londonderry NSW 2753
Australia





IECEX Certificate of Conformity

Certificate No: IECEx TSA 05.0056X Issue No: 8
Date of Issue: **2017-06-16** Page 2 of 5
Manufacturer: **Mine Safety Appliances Company, LLC**
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:

IEC 60079-0 : 2011 Explosive atmospheres - Part 0: General requirements
Edition:6.0
IEC 60079-11 : 2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"
Edition:6.0

*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:

AU/TSA/ExTR16.0020/00 AU/TSA/ExTR16.0020/01

Quality Assessment Report:

FR/INE/QAR08.0011/06



IECEx Certificate of Conformity

Certificate No: IECEx TSA 05.0056X

Issue No: 8

Date of Issue: **2017-06-16**

Page 3 of 5

Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The "Altair" portable single gas detector is initially available in three gas models e.g. O₂, CO and H₂S. The O₂ model is called "Altair O₂". The gas sensing cells are of the electro-chemical type. The instrument is powered by a non-replaceable lithium cell. The LCD display panel on the front displays the months of battery life remaining or the alarm range when in alarm mode. A push button allows users to select the information viewed on the LCD display. Audible and visual alarm indicators are located on the front of the apparatus, and an imbalanced motor produces an optional vibration alert when in alarm mode.

Altair Single Gas Detector Operation Manual 10068081 Rev.4 was provided.

SPECIFIC CONDITIONS OF USE: YES as shown below:

It is a condition of safe use that the lithium batteries of XENO XL-055F, Saft LST 17330 and EEMB ER 17335 shall be used in the apparatus.



IECEx Certificate of Conformity

Certificate No: IECEx TSA 05.0056X

Issue No: 8

Date of Issue: **2017-06-16**

Page 4 of 5

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

Variations Permitted by Issue 8:

Some changes on the PCB artworks.



IECEx Certificate of Conformity

Certificate No: IECEx TSA 05.0056X

Issue No: 8

Date of Issue: 2017-06-16

Page 5 of 5

Additional information:

Drawing list pertaining to Issue 8 of this Certificate:

Drawing/Document Number:	Page/s:	Title:	Revision Level:	Date: (yyyy-mm-dd)
SK3098-1013	27	Altair / Altair O2, TestSafe	8	2017-05-15