

EU-TYPE EXAMINATION CERTIFICATE



Equipment or Protective System intended for use in Potentially Explosive Atmospheres Directive 2014/34/EU

- [1] EU-Type Examination Certificate Number: **UL 24 ATEX 3271X Rev. 3**
- [2] Product: **Multi-Gas Detector – Model Altair io4 Performance**
- [3] Manufacturer: **MSA - The Safety Company**
- [4] Address: **1000 Cranberry Woods Dr., Cranberry Township, PA 16066 USA**
- [5] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- [6] UL International Demko A/S, notified body number 0539 in accordance with Article 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
- The examination and test results are recorded in the confidential report no. **US/UL/ExTR24.0088/03.**
- [7] Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
- | | | |
|------------------------------|-----------------------------------|------------------------------------|
| EN IEC 60079-0:2018 | EN 60079-1:2014 | EN 60079-11:2012 |
| EN 60079-29-1:2016 | EN 60079-29-1:2016/A1:2022 | EN 60079-29-1:2016/A11:2022 |
| EN 50271:2018 | EN 50303:2000 | EN 50104:2019 |
| EN 50104:2019/A1:2023 | | |
- Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.
- [8] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.
- [9] This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by the certificate.
- [10] The marking of the product shall include the following (marking is provided in the Schedule as a part of item 15, if applicable):

I M1 Ex ia I Ma

II 1 G Ex da ia IIC T4 Ga

Certification Manager
Thomas Wilson

Date of issue: 2024-09-30

Re-issued: 2025-07-29

Notified Body

UL International Demko A/S, Borupvang 5A, 2750 Ballerup, Denmark
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Accredited by DANAK under registration number 7011 to certification of products.

Form-ULID-000217 (DCS:00-IC-F0056-1) – Issue 29.0

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[14]

Schedule
EU-TYPE EXAMINATION CERTIFICATE No.
UL 24 ATEX 3271X Rev. 3

[15]

Description of Product

The Model Altair io4 Performance is a portable battery-operated gas detector designed to detect up to four gases; combustible (catalytic bead measuring principle), oxygen (electrochemical measuring principle), and a variety of toxic gases (electrochemical measuring principle). The model Altair io4 Performance has been evaluated for Oxygen with a range of 0-30% v/v, Methane gas with a range of 0-100% LFL, and Propane gas with a range 0-100% LFL. The device provides visual and audible alarms when predetermined levels are reached. The apparatus can communicate wirelessly. These other wireless devices are not covered as part of this investigation.

Accessories associated with the Model Altair io4 Performance field calibration kit includes a calibration cap, MSA part number 10220388, used to calibrate the detector in the field.

Performance testing

The measuring function of the product for explosion protection, according to Annex II clause 1.5.5, 1.5.6 and 1.5.7 of the Directive 2014/34/EU is covered in this certificate.

The optical radiation output of the product with respect to explosion protection, according to Annex II clause 1.3.1 of the Directive 2014/34/EU is covered in this certificate based on Exception 1) to the scope of EN 60079-28:2015.

Temperature range

The ambient temperature range is -20°C to +55°C.

Electrical data

Intrinsically safe specifications:

U_m : 5.25 V

Routine tests

N/A

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Descriptive Documents

The scheduled drawings are listed in the report no. provided under item no. [8] on page 1 of this EU-Type Examination Certificate.

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Specific conditions of use:

- The Altair io4 Performance shall be used in accordance with the product safety manual supplied by MSA Innovation, LLC. This manual should be used along with the Altair io4 main operational manual. The software version 1.3.31 is evaluated under this certification.
- The Altair io4 Performance is a safety related device, random hardware safety integrity level (SIL) is not covered in EN 50271:2018.

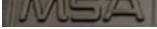
[18]

Essential Health and Safety Requirements

The Essential Health and Safety Requirements (EHSRs) covered by the standards listed at item 9.

Additional information

The Altair io4 Performance has in addition passed the tests for Ingress Protection to IP68 in accordance with EN60529:1991+A1:2000+A2:2013.

The trademark  will be used as the company identifier on the marking label.

The manufacturer shall inform the notified body concerning all modifications to the technical documentation as described in Annex III to Directive 2014/34/EU of the European Parliament and the Council of 26 February 2014.