



Physical-Technical Testing Institute  
Ostrava - Radvanice



(1) **Supplementary EU - Type Examination Certificate No.23**

(2) **Equipment or Protective Systems Intended for Use  
in Potentially Explosive Atmospheres  
(Directive 2014/34/EU)**

(3) EU - Type Examination Certificate number:

**FTZÚ 09 ATEX 0006X**

(4) Product: **ALTAIR 5XiR Multigas Detector**

(5) Manufacturer: **MSA – The Safety Company**

(6) Address: **1000 Cranberry Woods Drive, Cranberry Twp, PA 16066, USA**

(7) This supplementary certificate extends EC - Type Examination Certificate No. FTZÚ 09 ATEX 0006X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.

(8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, 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.

(9) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.

(10) 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 50303:2000  
EN 60079-29-1:2016**

**EN 50104:2019  
EN 50271:2018**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to Specific Conditions of Use specified in the schedule to this certificate.

(11) The marking of the product shall include the following:



**I M1 Ex ia I Ma  
II 1G Ex da ia IIC T3 Ga**

(12) This certificate is valid till: **30.09.2026**

Responsible person:

*U z. 9807*

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 30.09.2021

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This certificate may only be reproduced in its entirety and without any change, schedule included.

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(13)

**Schedule**

(14) **Supplementary EU - Type Examination Certificate No. 23  
to FTZÚ 09 ATEX 0006X**

(15) Description of the variation to the product:

The subject of this supplementary certificate is:

- Modification of the certified product.
- Evaluation according to the newest standards.
- Prolongation of certificate validity.

This supplementary certificate describes the change of the software. The product has been evaluated according to the new standards as mentioned in clause (10). The validity of the certificate has been prolonged for next five years. The documentation has been updated.

The current model of the product named ALTAIR 5iR Multigas Detector is not already produced by manufacturer and the evaluation of this model has been discontinued.

Applied Ex components:

Catalytic sensor MSA XCell Ex, Ex da ia IIC Ga, Ex ia Ma certified by FTZÚ 09 ATEX 0123U  
El.chem. sensor MSA XCell eChem, Ex ia IIC Ga, Ex ia Ma certified by FTZÚ 09 ATEX 0223U

Parameters:

Charging contacts entity parameters:  $U_m \leq 6.7 \text{ V}$  (for rechargeable battery)  
Ambient temperature range:  $-40^\circ\text{C}$  to  $+50^\circ\text{C}$  for explosion safety  
Degree of protection provided by enclosure: IP65

Used battery: Panasonic CGR18650DA or Panasonic/Sanyo UR18650A

Performance approvals for temperature range:  $-20^\circ\text{C}$  to  $+50^\circ\text{C}$

Gas  $\text{CH}_4$  in range 0-100% LFL for Group I by catalytic sensor.

Gases  $\text{CH}_4$ ,  $\text{C}_3\text{H}_8$ ,  $\text{H}_2$ ,  $\text{C}_4\text{H}_{10}$ ,  $\text{C}_5\text{H}_{12}$  in range 0-100% LFL for Group II by catalytic sensor.

Gases  $\text{C}_4\text{H}_{10}$  in range 0-25% v/v,  $\text{CH}_4$  in range 0-100% v/v for Group II by infrared sensor.

Gas  $\text{O}_2$  in range 0-25% (v/v) for inertization purposes only for Group I and II by electrochemical sensor.

Firmware version: v2.20.1

(16) Report Number: 09/0006/23

Responsible person:

*V. z. Jgan*

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



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(17) Specific Conditions of Use: not changed, only recapitulated

1. The equipment shall only be charged by manufacturer's chargers in an ambient temperature from 0°C to +45°C and opened in a non-hazardous area.
2. The warm-up time for oxygen is up to 180 seconds.
3. In event of combustible sensor overrange the apparatus shall be exposed to fresh air for 20 minutes minimum and then the fresh air setup procedure shall be done.
4. The pressure range is 90kPa to 120kPa for gas CH<sub>4</sub> in range 0-100% (v/v) for IR sensor.
5. The alarm set points are not applied for measuring oxygen inertization and it shall be taken into account.
6. The equipment enclosure includes accessible metal parts. The end user shall determine suitability in the specific application. The measured capacitance of the equipment on the item: D-ring is 33pF and on the item: Pin for charging is 24pF.
7. The antenna used for activation of the internal RFID tag with the RF radiation power shall not exceed 6W for Group I and 2W for Group IIC.
8. The EMC evaluation according to standard EN 50270:2015 is on manufacturer's responsibility.

(18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (10) of this supplementary certificate.

(19) Drawings and Documents: only updated or new for this supplement

Number:	Revision:	Description:
10223097	1	ADDENDUM Standards Compliance Certifications
SK3098-1184	11	FTZU Approvals
SK3098-1196	1	Label, ATEX Approvals, Altair 5XiR
10114801	6	Operating Manual

Responsible person:

*v z. Jgon*

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



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