



EC-Type Examination Certificate

(1)

(2)

Equipment or Protective Systems Intended for Use
in Potentially Explosive Atmospheres
(Directive 94/9/EC)

(3) EC-Type Examination Certificate Number:

FTZÚ 15 ATEX 0038X

(4) Equipment or protective system: **Multigas Detector ALTAIR 5X PID/IR**

(5) Manufacturer: **Mine Safety Appliances Co. LLC**

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

(7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in confidential Report N°:

15/0038 dated 24.07.2015

(9) Compliance with Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012, EN 60079-1:2014, EN 60079-11:2012, EN 60079-18:2009, EN 50303:2000

(10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.

(11) This EC-Type Examination Certificate relates only to the design, examination and testing of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

(12) The marking of the equipment or protective system shall include the following:

	I M1 Ex ia I Ma	
	I M1 Ex db ia I Ma	- when MSH2ia sensor is installed
	II 2G Ex db ia mb IIC T4 Gb	
	II 1G Ex ia IIC T4 Ga	- when MSH2ia and XCell Ex sensor in not installed

This EC-Type Examination Certificate is valid till: **24.07.2020**

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of Certification Body



Date of issue: **24.07.2015**

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

FTZÚ, s.p., Pikartská 1337/7, 716 07 Ostrava-Radvanice, Czech Republic,
tel +420 595 223 111, fax +420 596 232 672, ftzu@ftzu.cz, www.ftzu.cz



**Physical Technical Testing Institute
Ostrava – Radvanice**

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 15 ATEX 0038X**

(15) Description of Equipment:

The equipment is the hand held multigas detector type Altair 5X PID/IR. The equipment is designed to monitor gases in an ambient air and in a workplace. It is available with a maximum of five sensors which can display readings for six gases. The sensors have own Ex component certificates. The equipment consists of four PCBs with display, three buttons and two charging pins. All PCBs with display are mounted inside a static dissipative moulded plastic enclosure. If the gas concentration reaches the alarm set points, a visual alarm, an audible alarm and a tactile alarm is given. The equipment is supplied by an encapsulated secondary Li-Ion cell and includes one passive RFID tag. This certificate does not include the performance tests according to EN 60079-29-1 and other relevant standards.

Parameters:

Degree of protection: IP 65, Ambient temperature: -20 to +50°C, Charging: Um = 6.7 V;

List of used Ex components:

Catalytic sensor MSA XCell Ex	certified FTZÚ 09 ATEX 0123U
El.chem. sensor MSA XCell eChem	certified FTZÚ 09 ATEX 0223U
PID sensor Baseline-MoconTech PiD-TECH eVx	certified DEMKO 13 ATEX 1304446U
PID sensor Tech sensor plus ZPP60180	certified DEMKO 06 ATEX 0547796U
IR sensor Dynament MSH2ia	certified FTZÚ 14 ATEX 0213U

(16) Report No.: 15/0038

(17) Special conditions for safe use:

- 17.1 The equipment shall be charged by manufacturer's chargers only in an ambient temperature from 0°C to +45°C and opened when the hazardous area is not present.
- 17.2 When using the equipment in hazardous area, the equipment should be worn or carried on the body. It shall not be stored in a hazardous area. This prevents the possibility of the equipment building up an electrostatic charge. The measured capacitance of accessible metal parts: D-Ring 24pF and Charge contact pins 17pF.
- 17.3 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.

Responsible person:

U. Z. Fojt

Dipl. Ing. Lukáš Martinák
Head of Certification Body



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(18) Essential Health and Safety Requirements:

Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified and in the manufacturer's instruction for use.

(19) List of Documentation:

Document No.:	Revision:	Date:	Pages:	Title:
10165710	00	2015	90	User manual
SK3098-1334	0	13.03.2015	46	Altair 5X PID FTZU

Responsible person:

V. Z. Fej

Dipl. Ing. Lukáš Martinák
Head of Certification Body



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