

Translation

# EU-Type Examination Certificate Supplement 10

Equipment intended for use in potentially explosive atmospheres  
Directive 2014/34/EU

Device with a measuring function for explosion protection  
Directive 2014/34/EU

EU-Type Examination Certificate Number: **BVS 10 ATEX E 009 X**

Product: **Gas Detector type PrimaX I and PrimaX P**

Manufacturer: **MSA Europe GmbH**

Address: **Schlüsselstr. 12, 8645 Rapperswil-Jona, Switzerland**

This supplementary certificate extends EU-Type Examination Certificate No. BVS 10 ATEX E 009 X to apply to products designed and constructed in accordance with the specification set out in the Annex of the said certificate but having any variations specified in the Annex attached to this certificate and the documents therein referred to.

DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of 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 test reports PFG-no. 41300112P NV and PFG-no. 41300112P NVI.

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are assured in consideration of:

**EN 60079-29-1:2016**

**EN 50104:2010**

**EN 50271:2018**

If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Special Conditions for Use specified in the appendix to this certificate.

This EU-Type Examination Certificate relates only to the design and construction of the specified product. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

The marking of the product shall include the following:

**see BVS 10 ATEX E 009 X supplement 9**

DEKRA Testing and Certification GmbH  
Bochum, 2022-12-21

Signed: Dr. Krökel  
Managing Director



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## 13 Appendix

## 14 EU-Type Examination Certificate

### **BVS 10 ATEX E 009 X Supplement 10**

## 15 Product description

### 15.1 Subject and type

Gas detection transmitters types PrimaX I and PrimaX P

### 15.2 Description

Reason for the supplement:

Retesting according to EN 60079-29-1:2016 (type PrimaX P only) and EN 50271:2018

Description of Product

The gas detection transmitter PrimaX I is a fixed device for the measurement of oxygen or a toxic gas. The measurement is done with an electrochemical sensor. A 2-wire 4-20 mA interface serves as power supply and for transmission of the measured value. The apparatus can be optionally equipped with a HART-interface for maintenance and parameterization.

The gas detection transmitter PrimaX P is a fixed device for the measurement of flammable gases, of oxygen or a toxic gas. The measurement is done with a catalytic combustion sensor or an electrochemical sensor. A 3-wire or a 4-wire 4-20 mA interface serves as power supply and for transmission of the measured value. The apparatus can be optionally equipped with a HART-interface for maintenance and parametrization. Alternatively, a HART/relay-module can be used which provides a fault and an alarm relay in addition to the HART-interface.

### 15.3 Parameters

See BVS 10 ATEX E 009 X and supplements 1, 2, 6 and 9

### 15.4 Measuring function for explosion protection

This EU-type examination certificate covers:

- equipment PrimaX I and PrimaX P with software version V1.18
- the measurement of methane, propane, acetone, FAM-Benzine 65/95, 2-butanone, ethanol, ethyl acetate, 1-Ethoxy-2-propanol, n-nonane, 1-Propanol, 2-Propanol, propene, toluene and hydrogen mixed with air in the measuring range 0 - 100 % LEL (PrimaX P with catalytic combustion sensor part-no. 10109151)
- the measurement of oxygen (measurement of inertisation) in the measuring ranges 0 - 10 %(v/v) and 0 - 25 %(v/v) (PrimaX I and PrimaX P with electrochemical sensor part-no. 10112718 or 10148289)
- use of the following outputs for safety relevant purposes:
  - display
  - 4-20 mA output
  - relays
- use of the following accessories:
  - Sensor Gard (part-no. 10113033)
  - Flow through adapter (part-no. 10113031)
  - Calibration cap (part-no. 10112789)
  - Remote calibration adapter CalGard (part-no. 10150921)

The EU-type examination includes the following deviations from the operating conditions required by EN 60079-29-1 or EN 50104:

- Extended range of temperature at operation:
  - 40 °C to +70 °C (operation with catalytic combustion sensor part-no. 10109151)
  - 30 °C to +55 °C (operation with electrochemical sensor part-no. 10112718)
  - 20 °C to +50 °C (operation with electrochemical sensor part-no. 10148289)
- Extended range of humidity of the measured gas: 15 % RH to 90 % RH

## 16 Test report

PFG-no. 41300112P NV of 2022-12-20  
PFG-no. 41300112P NVI of 2022-12-20

## 17 Special Conditions for Use

- see supplement 9 to the EU-type examination certificate BVS 10 ATEX E 009 X
- If the HART-/relay module is used:
  - The HART-interface is subject of this EU-type examination certificate only for the purpose of maintenance and parametrization.
  - The alarm shall be parametrized latching.
  - The alarm relay delay time shall be set to 0 s.
  - The failure relay shall be parametrized normally energized.
  - The failure relay delay time shall be set to 0 s.
  - Calibration is only signaled on the 4-20 mA output by the service current. Therefore, the 4-20 mA output shall be monitored at automatic calibration, if the sum of the application times parametrized for zero gas and span gas application and the idle time exceeds 15 minutes, and at manual calibration.

## 18 Essential Health and Safety Requirements

The Essential Health and Safety Requirements with respect to the measuring function for explosion protection are covered by the standards listed under item 9.

## 19 Drawings and Documents

Drawings and documents are listed in the confidential test report.

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We confirm the correctness of the translation from the German original.  
In the case of arbitration only the German wording shall be valid and binding.

DEKRA Testing and Certification GmbH  
Bochum, dated 2022-12-21



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Managing Director