



[1] **EU-TYPE EXAMINATION CERTIFICATE - TRANSLATION**

[2] Equipment and protective systems intended for use
in potentially explosive atmospheres, directive 2014/34/EU

[3] EU-Type Examination Certificate Number **IBExU12ATEX1080 X** | Issue 1

[4] Equipment: **Gas Measuring Sensor**
Type: MF420-Ex-2.1

[5] Manufacturer: LogiDataTech systems GmbH & Co. KG

[6] Address: Bahnhofstraße 67
76532 Baden-Baden
GERMANY

[7] This product and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.

[8] IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 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 report IB-17-3-0159.

[9] Compliance with the essential health and safety requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013 EN 60079-1:2014 EN 60079-7:2015

Except in respect of those requirements listed at item [18] of the annex.

[10] If the sign "X" is placed after the certificate number, it indicates that the product is subject to the specific conditions of use specified in the schedule/annex to this certificate.

[11] 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.

[12] The marking of the product shall include the following:

II 2G Ex db eb IIC T6/T4 Gb

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By order

Freiberg, 2018-02-12

Dipl.-Ing. (FH) Henker



(Notified Body number 0637)

Certificates without seal and signature are not valid.
Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

[13] **Schedule**

[14] **Certificate number IBExU12ATEX1080 X | Issue 1**

[15] **Description of product**

The Gas Measuring Sensor type MF420-Ex-2.1 serves as gas sensor with signal amplifier and analog signal output (i. e. 4-20 mA) or signal transmission by means of bus technology to following evaluation systems or actuators. The electric connection is carried out via a 3-pole or 6-pole terminal clamp.

The Gas Measuring Sensor consists of a flameproof enclosure of Aluminium, a cover with sight glass of Polycarbonate and an Ex e terminal compartment. The gas measuring is carried out via a sintered metal (built in a protection cap), which is screwed on the side.

Technical data:

- Rated voltage U_{max} : 31 V DC
- Rated current I_{max} : 250 mA
- IP-Degree of protection according to EN 60529: IP 65
- Ambient temperature range: -40 °C up to +60 °C (T4) or +50 °C (T6)
- Property class fastening screws: 4.8 (A2)

Variations compared to the EC-Type Examination Certificate and its amendment:

- Adaptation to the current standards and corresponding changing of the marking
- Changing the manufacturer's name

[16] **Test report**

The examination and test results are recorded in the confidential test report IB-17-3-0159 of 2018-02-12. The test documents are part of the test report and they are listed there.

Summary of the test results

The Gas Measuring Sensor type MF420-Ex-2.1 fulfils the requirements of explosion protection for equipment of Group II, Category 2G, type of protection flameproof enclosure „db“ in combination with increased safety „eb“.

[17] **Special conditions for use**

- The specified ambient temperature range is -40 °C up to +60 °C for temperature class T4 as well as -40 °C up to +50 °C for temperature class T6.
- The used cable gland and the connecting cable must be suitable for an operating temperature range from -40 °C to at least +80 °C.
- Repairs of the flameproof joints must be made in compliance with the constructive specifications provided by the manufacturer. Repairs must not be made on the basis of values specified in tables 2 and 3 of EN 60079-1.
- The measuring function according to Annex II paragraph 1.5.5 of the directive is not matter of this EU-Type Examination.
- Only fastening screws, specified by the manufacturer, shall be used.

[18] **Essential Health and Safety Requirements**

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report:

- not applicable -

[19] **Drawings and documents**

The documents are listed in the test report.

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