

IBExU Institut für Sicherheitstechnik GmbH
An-Institut der TU Bergakademie Freiberg



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

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

[3] EU-type examination certificate number **IBExU08ATEX1126 X** | Issue 1

[4] Product: **Digital field display**
Type: AX15-PA 440

[5] Manufacturer: **BD SENSORS GmbH**

[6] Address: **BD-Sensors-Str. 1**
95199 Thierstein
GERMANY

[7] This product and any acceptable variation thereto is 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-21-3-0095.

[9] Compliance with the essential health and safety requirements has been assured by compliance with: EN IEC 60079-0:2018 and EN 60079-11:2012 except in respect of those requirements listed at item [18] of the schedule.

[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 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:

Ex II 2G Ex ia IIC T4 Gb

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By order


Dipl.-Ing. Willamowski



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

Freiberg, 2021-09-24

[13] **Schedule**

[14] **Certificate number IBExU08ATEX1126 X | Issue 1**

[15] **Description of product**

The Digital Field Display AX15 serves in intrinsically safely electrical plants for indication of a 4...20 mA two-wire sensor signal, and produces up to 2 PNP-Open collector switching outputs for a limiting value control. The power supply and evaluation of the switching exits are carried out by associated apparatus certified separately.

Technical data:

Ambient temperature range from -20 °C to +70 °C

Supply and signal electric circuit in type of protection Intrinsic Safety EEx ia IIC

Supply (VS+ and VS-, SP1 and SP2)	U _i , U _o	28 V DC
	I _i , I _o	93 mA
	P _i	660 mW
effective inner capacity	C _i	negligible
effective inner inductivity	L _i	negligible

Variations compared to EC-Type Examination Certificate IBExU08ATEX1126 X and its additions:

- The Digital Field Display complies with the requirements of EN IEC 60079-0:2018.

[16] **Test report**

The test results are recorded in the confidential test report IB-21-3-0095 of 2021-09-22.
The test documents are part of the test report and they are listed there.

Summary of the test results

The Digital Field Display AX15 fulfil the requirements of type of protection Intrinsic Safety 'ia' on an electrical explosion protected Equipment for Group II, Category 2G, Explosion Group IIB and temperature class T4.

[17] **Specific conditions of use**

- No energy may be supply from the outside into the active switching exits.
- The safety and assembly notes contained in the operating instructions and the ambient temperature range $-20\text{ °C} \leq T_a \leq +70\text{ °C}$ have to be observed.

[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:

None

[19] **Drawings and Documents**

The documents are listed in the test report.

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