



[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 **IBExU05ATEX1097 X** | Issue 1

[4] Product: **Process Transmitter**
Type: AX13-CIT400

[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-21-3-0078.

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

II (1)G [Ex ia Ga] IIC

II (1)D [Ex ia Da] IIIC

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By order


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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, 2021-06-28

[13] **Schedule**

[14] **Certificate number IBExU05ATEX1097 X | Issue 1**

[15] **Description of product**

The Process Transmitter type AX13-CIT400 is an associated apparatus and is to install outside of hazard areas. It serves to the galvanic isolated supply and the signal transmission for 2- respectively 3-line sensors in potentially explosive atmospheres, which requires Category 1 Apparatus. The electronic components are on a circuit board inside of an enclosure. The electrical connections are carried out with terminals in the front for the top-head rail version and on the backside for the built-in enclosure. The equipment is fitted out with LED-Display and foil keyboard.

Technical data

Ambient temperature range: -20 °C to +40 °C

Electrical data

Supply input (Terminals 1, 2 and 3)

Voltage	U_N	24 V DC res. 230 V AC
max. Voltage	U_m	250 V
Nominal power	P_v	app. 4 VA

Current-loop output (Terminals 25 and 26)

Voltage	U_N	10 V DC
max. Voltage	U_m	250 V

Relay output (Terminals 5 up to 13)

Switching voltage	U_N	250 V AC
Switching current	I	6 A
max. Voltage	U_m	250 V

Sensor circuit (Terminals 14, 15 and 16) type of protection Intrinsic Safety Ex ia IIC, IIB res. IIA

	U_o	25.2 V
	I_o	84.8 mA
	P_o	535 mW
Characteristic linear	R_i	297 Ω

maximum values without lumped capacitance / inductance

Ex ia	IIC	IIB	IIA
C_o	107 nF	820 nF	2900 nF
L_o	5.7 mH	20 mH	42 mH

Variations compared to the previous editions of this certificate:

Variation 1

The device complies with the current standard EN IEC 60079-0.

[16] **Test report**

The test results are recorded in the confidential test report IB-21-3-0078 of 2021-06-24. The test documents are part of the test report and they are listed there.

Summary of the test results

The Process Transmitter type AX13-CIT400 fulfills the requirements of type of protection intrinsic safety 'ia' to associated apparatus of equipment group II, category 1G and 1D, explosion group IIC and IIIC.

[17] Specific conditions of use

The minimum distance of 50 mm between intrinsically safe terminals and other terminals must be fulfilled by the assembly. It is reachable with use of a partition or insulations and fixations of wires (res. shrinkdown plastic tubing).

[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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