IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

EU-TYPE EXAMINATION CERTIFICATE - Translation [1]

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



EU-type examination certificate number IBExU05ATEX1098 X | Issue 1 [3]

[4] Product: **Process Transmitter**

Type: NivuCont S

[5]

Manufacturer: NIVUS GmbH

Address: [6]

Im Täle 2

75031 Eppingen

GERMANY

- This product and any acceptable variation thereto is specified in the schedule to this certificate and the [7] documents therein referred to.
- IBExU Institut für Sicherheitstechnik GmbH, Notified Body number 0637 in accordance with Article 17 [8] 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-21-3-0079.

Compliance with the essential health and safety requirements has been assured by compliance with: [9] EN IEC 60079-0:2018, 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.

Seal -

(Notified Body number 0637) Sicherhe rechnik GmbHKenn-Nr

[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, 2021-08-02

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[13] Schedule

[14] Certificate number IBExU05ATEX1098 X | Issue 1

[15] Description of product

The Process Transmitter type NivuCont S is an associated apparatus and is to install outside of hazardous areas. It serves to the galvanically 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 of 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

Characteristic linear

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 Pv app. 4 VA

Current-loop output (Terminals 25 and 26)

Voltage U_N 10 V DC max. voltage (DC) U_m 250 V

Relay output (Terminals 5 up to 13)

Switching voltage

Switching current

Max. Voltage

UN

250 V AC

6 A

Um

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 R_i 297 Ω

Maximum values without lumped capacitance / inductance

Ex ia	IIC	IIB	IIA
С。	107 nF	820 nF	2900 nF
Lo	5.7 mH	20 mH	42 mH

Variation compared to the previous issues of this certificate:

The device complies with the current standards EN IEC 60079-0 and EN 60079-11.

[16] Test report

The test results are recorded in the confidential test report IB-21-3-0079 of 2021-07-30. The test documents are part of the test report and they are listed there.

Summary of the test results

The Process Transmitter type NivuCont S 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.

Page 2/3 IBExU05ATEX1098 X | 1

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[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.

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

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