IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

EU-TYPE EXAMINATION CERTIFICATE - Translation [1]

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



EU-type examination certificate number IBExU01ATEX1060 X | Issue 2 [3]

[4] Product: Piezo valve

Type: Piezotronic 630

[5]

Manufacturer: ASCO NUMATICS GmbH

[6] Address: Otto-Hahn-Str. 7-11 75248 Ölbronn-Dürrn

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-17-3-0118.

- Compliance with the essential health and safety requirements has been assured by compliance with: [9] EN 60079-0:2012+A11:2013 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.
- This EU-type examination certificate relates only to the design and construction of the specified [11] 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 1G Ex ia IIC T6...T4 Ga

(x) II 1D Ex ia IIIC T85 °C...T135 °C Da -20 °C ≤ T_a ≤ +50 °C / +60 °C

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

By order

Dipl.-Ing. [FH] Henker

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(notified body number 0637)

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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, 2018-01-31

IBExU Institut für Sicherheitstechnik GmbH

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[13] Schedule

[14] Certificate number IBExU01ATEX1060 X | Issue 2

[15] Description of product

The electrically operated piezo valve is used as pilot valve for opening and closing of a pneumatic circuit. The piezo valves of series 630 have an extremely low power consumption. They are available in 2/2 or 3/2 distribution - function.

Technical data

Supply circuit in type of protection Intrinsic Safety, level of protection ia or ib

Max. values:

U_i < 30 VDC I_i < 200 mA

 $\dot{P}_{i} < 0.9 \text{ W}$

Internal inductance:

 L_i = negligible

Internal capacitance:

 $C_i = negligible$

Ambient temperature range:

-20 °C up to +50 °C (T6)

-20 °C up to +60 °C (T4)

Variations compared to issue 1 of this certificate:

Variation 1

The ambient temperature range has been extended.

Variation 2

The layout of the PCB has been changed.

[16] Test report

The test results are recorded in the confidential test report IB-17-3-0118 of 2018-01-31.

The test documents are part of the test report and they are listed there.

Summary of the test results

The piezo valve mentioned in [4] still fulfils the requirements of explosion protection for electrical equipment of the Equipment Group II and Category 1G and 1D in type of protection intrinsic safety.

[17] Specific conditions of use

- The piezo valve may be used for the control of non-flammable medium only. It may be used with natural gas insofar that there are no explosive gas-air-mixtures in the pressure-system.
- Dust layers above 50 mm are to be prevented.

[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

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[19] Drawings and Documents

The documents are listed in the test report.

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