

[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 **IBExU15ATEX1109 X** | Issue 1
- [4] Product: **Intelligent positioner**
Type: SRD998-H*
- [5] Manufacturer: Eckardt S.A.S.
- [6] Address: 20, Rue de la Marne
68360 Soultz
FRANCE
- [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-17-3-0038.
- [9] Compliance with the essential health and safety requirements has been assured by compliance with: 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.
- [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/T6 Gb, ⊕ Ex II 1D Ex ia IIIC T100 °C Da
⊕ Ex II 2G Ex ib IIC T4/T6 Gb, ⊕ Ex II 2D Ex ib IIIC T100 °C Db
⊕ Ex II 3G Ex ic IIC T4/T6 Gc, ⊕ Ex II 3D Ex ic IIIC T100 °C Dc
-40 °C ≤ T_a ≤ +44...+80 °C

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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, 2017-03-24

[13] **Schedule**

[14] **Certificate number IBExU15ATEX1109 X | Issue 1**

[15] **Description of product**

The intelligent positioner, type SRD 998-H*, uses electric controllers or control stations for direct control of pneumatic actuators. The electric signal used is either the standardised signal 4...20 mA, optionally with a superimposed HART signal. The devices are designed for use in hazardous areas requiring Category 2G or 3G and 1D...3D resources. They are supplied by an intrinsically safe power supply.

Technical data

Ambient temperature range: -40 °C to +80 °C (T4)
Degree of protection: IP66 according to EN 60529

Electrical data

Supply and signal circuit in type of protection intrinsic safety

	U _i	30 V DC (T4)
	I _i	130 mA
	P _i	900 mW (T4)
effective internal capacitance	C _i	<2.5 nF
effective internal inductance	L _i	<10 µH

For the temperature class T6, reduced electrical supply values and defined ambient temperature ranges apply:

P _i in mW	U _i in V	T _a
660	28.1	-40 °C to +44 °C
630	25.7	-40 °C to +46 °C
590	25.3	-40 °C to +48 °C
510	26	-40 °C to +52 °C

Variations compared to the initial certificate:

The circuit board used has been structurally modified in layout and assembly. These changes do not affect the intrinsic safety type of protection.

[16] **Test report**

The test results are recorded in the confidential test report IB-17-3-0038 of 2017-03-24.

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

Summary of the test results

The equipment mentioned in [2] fulfils the requirements for type of protection intrinsic safety 'ia' on a device of the Equipment Group II and Category 2G or 1D, Explosion Group IIC and IIIC and Temperature Class T4 and T6.

[17] **Specific conditions of use**

1. When used in dust-explosion hazardous areas the device shall only be exposed to low mechanical hazard.
2. Programming via suitable galvanically separated program adapter can only be performed in non-hazardous atmospheres by the manufacturer during production, test, repair or overhaul.
3. The device may be operated in explosive atmospheres, which requires apparatus of category 1, only if there are atmospheric conditions (temperature of -20 °C to +40 °C, pressure of 0.8 bar to 1.1 bar).
4. At ambient temperatures above +75 °C suitable temperature resistant cables must 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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