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## 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:

**PTB 06 ATEX 2027**

**Issue: 2**

(4) Product: Magnetventil Typ 3967-110...

(5) Manufacturer: SAMSON AG Mess- und Regeltechnik

(6) Address: Weismüllerstraße 3, 60314 Frankfurt, Deutschland

(7) This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.

(8) The Physikalisch-Technische Bundesanstalt, notified body No. 0102 in accordance with Article 17 of the 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 PTB Ex 19-29076.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

**EN 60079-0:2012+A11:2013    EN 60079-11:2012**

(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 in accordance to the Directive 2014/34/EU. 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 2 G Ex ia IIC T6...T4 Gb    and    II 2 D Ex ia IIIC T80 °C Db**

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
 On behalf of PTB:

Braunschweig, July 3, 2019

*D. Markus*

Dr.-Ing. D. Markus  
 Direktor und Professor



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EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

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## SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 06 ATEX 2027 , Issue: 2**

(15) Description of Product

The solenoid valve, type 3967-110..., transforms binary electric signals into pneumatic output signals; it is used for controlling pneumatic actuators.

The solenoid valve is electrically controlled with the e/p binary converter coil, type 1079-40..., which is a modified version of the type 1079-27.. binary converter coil certified with the PTB 00 ATEX 2157 U certificate. It is a passive two-terminal element that can be integrated into certified intrinsically safe circuits, provided the maximum values for  $U_i$ ,  $I_i$  and  $P_i$  are not exceeded.

It is used in potentially explosive atmospheres.

For the relationship between temperature class and the permissible ambient temperatures, reference is made to the following table:

| Temperature class | Ambient temperatures |
|-------------------|----------------------|
| T6                | -45 °C to +60 °C     |
| T5                | -45 °C to +70 °C     |
| T4                | -45 °C to +80 °C     |

The range of the permissible ambient temperatures for dust group IIIC is -45 °C to +60 °C

### Electrical data

Unlike the other versions, the version with a 6 V nominal signal has a defined maximum intrinsically safe input power  $P_i$ .

Signal circuit ..... In type of protection Intrinsic Safety Ex ia IIC/IIIC  
(terminals +, -)

Only for connection to a certified intrinsically safe circuit

Maximum values:

for variant of nominal signal 6 V

$U_i = 32 \text{ V}$

$I_i = 150 \text{ mA}$

$P_i = 250 \text{ mW}$

$L_i$  negligibly low

$C_i$  negligibly low



**SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 06 ATEX 2027 , Issue: 2**

for all other versions (nominal signal 12 V and 24 V)

$U_i = 32 \text{ V}$

$I_i = 150 \text{ mA}$

$L_i$  negligibly low

$C_i$  negligibly low

Modifications from earlier versions

The modifications concern the marking and the supplementation of the permissible ambient temperature range for Group IIIC.

(16) Test Report PTB Ex19-29076

(17) Specific conditions of use

None.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, July 3, 2019

  
Dr.-Ing. D. Markus  
Direktor und Professor

