



**TRANSLATION**

(1) **Statement of Conformity**

(2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres – **Directive 94/9/EC**



(3) EC Type Examination Certificate Number

**PTB 06 ATEX 2028 X**

(4) Equipment: Model 3967-8 Solenoid Valve

(5) Manufacturer: SAMSON AG Mess- und Regeltechnik

(6) Address: Weismüllerstr. 3, 60314 Frankfurt am Main, Germany

(7) The design of this equipment and the various approved versions thereof are specified in the schedule to this type examination certificate and the documents referred to therein.

(8) The Physikalisch-Technische Bundesanstalt certifies that according to the Council Directive 94/9/EC of 23 March 1994 this equipment has been found to comply with the essential health and safety requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres as specified in Annex II to the Directive.

The examination and test results are recorded in confidential report **PTB Ex 06-26109**

(9) The essential health and safety requirements are satisfied by compliance with

**EN 60079-15: 2003**

**EN 50281-1-1:1998**

(10) If the sign “X” is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use as specified in the schedule to this certificate.

(11) This Statement of Conformity relates only to the design and construction of the subject equipment according to Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment and to placing it on the market.

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Extracts or changes shall require the prior approval of the Physikalisch-Technische Bundesanstalt.

(12) The marking of the equipment shall include the following:



II 3 G EEx nA II T 6, or II 3 G EEx nL II C T 6, or  
II 3 D IP 54 T 80 °C, or II 3 D IP 65 T 80 °C

Zertifizierungsstelle Explosionsschutz

Braunschweig, 23 October 2006

By order  
(Signature)

(Seal)

Dr. Ing. U. Gerlach  
Oberregierungsrat

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Physikalisch-Technische Bundesanstalt., Bundesallee 100, D-38116 Braunschweig

(13) **Schedule**

(14) **Statement of Conformity PTB 06 ATEX 2028 X**

(15) **Description of Equipment**

The Model 3967-8.. Solenoid Valve converts electrical binary signals into pneumatic output signals and serves for controlling pneumatic actuators.

The solenoid valve is actuated electrically by the Model 1079-40 .. e/p Binary Converter Coil, a modified version of the Model 1079-27 .. e/p Binary Converter Coil certified under PTB 00 ATEX 2157 U. This is a passive two-pole network that is permitted to be connected to certified intrinsically safe circuits unless the admissible maximum values of  $U_i$ ,  $I_i$  and  $P_i$  are exceeded.

The equipment is intended for use in hazardous areas.

The Model 3967-8 ... also complies with the requirements of electrical equipment protected by the enclosure according to EN 50281-1-:1998.

**Electrical data:**

By connection of suitable series resistors the Model 1079-40 .. e/p Binary Converter Coil can be connected to nominal voltages of 6 V, 12 V and 24 V.

The correlation between version, temperature classification, permissible ambient temperature ranges and maximum power dissipation is shown in the table below.

Version	$U_N$	6 V DC	12 V DC	24 V DC
Temperature class	T6			60 °C
	T5	- 45 °C	....	70 °C
	T4			80 °C
Characteristic rectangular	$P_i$	250 mW		(#)
Characteristic linear	$P_i$	(#)		(#)

(#) No limitations

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## Schedule

### Statement of Conformity PTB 06 ATEX 2028X

#### Electrical data

Input circuit .....

Type of protection EEx nA II  
or EEx nL IIC

Maximum values:

$U_i = 32 \text{ V}$   
 $I_i = 132 \text{ mA}$

$C_i$  negligible  
 $L_i$  negligible

(16) Test report      **PTB Ex 06-26109**

(17) Special conditions for safe use

According to the requirements of type of protection EEx nA II the input circuits are permitted to be connected, disconnected or operated while live only during installation, maintenance and repair work.

According to the requirements of type of protection EEx nL IIC the input circuits are permitted to be connected while in operation.

If the Model 3967-8 ... Solenoid Valve is intended in to be used in hazardous areas containing conductive dusts according to EN 50281-1-1:1998 it shall be installed in an enclosure providing at least degree of protection IP 54 in compliance with the IEC publication 60529:1989. The cabling shall be connected in such a manner that the connecting wiring is free from tensile and tensional stress.

(18) Essential health and safety requirements

Satisfied by compliance with the standards specified above.

Zertifizierungsstelle Explosionsschutz

Braunschweig, 23 October 2006

By order

(Signature)


(Seal)

Dr. Ing. U. Gerlach

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**1<sup>st</sup> ADDENDUM  
to Statement of Conformity PTB 06 ATEX 2028 X**

Equipment: Type 3967-8.. Solenoid Valve  
Marking:  **II 3 G EEx nA II T6 / II 3 G EEx nL IIC T6  
II 3 D IP 54 T 80 °C / II 3 D IP 65 T 80 °C**  
Manufacturer: SAMSON AG, Mess- und Regeltechnik  
Address: Weismüllerstraße 3, 60314 Frankfurt, Germany

Description of additions and modifications

The Type 3967-8.. Solenoid Valve converts binary electric signals into pneumatic output signals and serves to control pneumatic actuators.

Amongst others, the modifications refer to the printed circuit board and the marking.  
In the future, the marking will be as follows:

 **II 3 G Ex nA II T6 / II 3 G Ex nL IIC T6  
II 3 D Ex tD A21 IP 65 T 80 °C**

The electrical data, notes on manufacturing and operation and all other specifications also apply to this first addendum.

Applied standards

**EN 60079-0:2006    EN 60079-15:2005    EN 61241-0:2006    EN 61241-1:2004**

Test Report    PTB Ex 07-27233

Certification Body for Explosion Protection  
O/o

Braunschweig, 9 January 2008

[Signature Johannsmeyer, stamp: Physikalisch-Technische Bundesanstalt 56]

Dr.-Ing. U. Johannsmeyer  
Director and Professor