



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 01 ATEX 2086 X

(4) Equipment: Model 3963-8.. Solenoid Valve

(5) Manufacturer: SAMSON AG Mess- und Regeltechnik

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

(7) The equipment and any acceptable variation thereof are specified in the schedule to this certificate and the documents referred to therein.

(8) The Physikalisch-Technische Bundesanstalt, notified body number 0102 according to Article 9 of the Council Directive 94/9/ of 23 March 1994, certifies that 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 specified in Annex II to the Directive.

The examination and test results are recorded in confidential report: **PTB Ex 01-21204**

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

EN 50021: 1999

(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) In compliance with the Directive 94/9/Ex this Statement of Conformity relates only to the design and construction of the equipment specified. Further requirements of this Directive apply to manufacture and marketing of this equipment.

Statement of Conformity without signature and seal are invalid.
This Statement of Conformity may only be reproduced in its entirety and without any changes, schedule included.
Extracts or changes shall require the prior approval of the Physikalisch-Technische Bundesanstalt.

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



Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 14 November 2001

(Signature)

(Seal)

Dr. Ing. U. Johannsmeyer
Regierungsdirektor

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(13) **S c h e d u l e**

(14) **Statement of Conformity PTB 01 ATEX 2086 X**

(15) **Description of Equipment**

The model 3963-8.. Solenoid Valve converts electrical binary signals in the input circuit into pneumatic output signals. It is intended for attachment to actuators and for constructing control systems.

The correlation between the version, temperature classification and permissible ambient temperature ranges is shown in the table below:

Version (UN)	6V	12V	24V
Temperature class T6 T5 T4	60°C -45°C ≤ T _a ≤ 70°C 80°C		

(16) **Test report PTB Ex 01-21204**

(17) **Special conditions for safe use**

1. The Model 3963-8.. Solenoid valve shall be installed in an enclosure providing at least Degree of Protection IP 54 according to IEC Publication 60529:1989.
2. The wiring shall be connected in such a manner that the connection facilities are free of tensile and torsional load.

(18) **Special health and safety requirements**

In compliance with the standard specified above.

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 14 November 2001

(Signature) (seal)

Dr. Ing. U. Johannsmeyer
Regierungsdirektor

1. SUPPLEMENT
to CONFORMITY STATEMENT PTB 01 ATEX 2086 X
(Translation)

Equipment: Solenoid, type 3963-8..

Marking:  **II 3 G EEx nA II T6**

Manufacturer: SAMSON AG Mess- und Regeltechnik

Address: Weismüllerstr. 3, 60314 Frankfurt, Germany

Description of supplements and modifications

The solenoid of type 3963-8.. converts binary electrical signals into pneumatic output signals. It is intended for installation onto actuators and for the configuration of control systems.

The solenoid of type 3963-8.. is supplemented by type 3963-8.....25. This model is provided with a cubic LED-plug showing the operational state of the equipment.
Further modifications have not been made.

The equipment is installed inside of the hazardous area.

The permissible thermal and electrical maximum values are presented in summary.

For relationship between temperature class and permissible thermal maximum values, reference is made to the following table:

3963-8..	T6	60 °C
	T5	-45 °C ... 70 °C
	T4	80 °C
3963-8.....25	T6	55 °C
	T5	-45 °C ... 70 °C
	T4	80 °C

Electrical data

The solenoid of type 3963-8.. is suitable for nominal voltages of 6 V, 12 V and 24 V when appropriate resistors are connected in series.

1. SUPPLEMENT TO CONFORMITY STATEMENT PTB 01 ATEX 2086 X

For relationship between model, nominal signal and maximum permissible electrical power, reference is made to the following table:

Signal circuittype of protection Ex ic IIC
(terminals 11/12) or Ex nA II

Model		3963-81	3963-82	3963-83
Nominal signal	U_N	6 V	12 V	24 V
Temperature class	T6	60 °C		
	T5	-45 °C ... 70 °C		
	T4	80 °C		
	P_i	No limitation		

or

Signal circuittype of protection Ex ic IIC
(terminals 11/12)

For permissible electrical maximum values, reference is made to the following table:

U_i	25 V	27 V	28 V	30 V	32 V
I_i	150 mA	125 mA	115 mA	100 mA	85 mA

C_i negligibly low

L_i negligibly low


Special conditions

The solenoid of type 3963-8.. shall be mounted into an enclosure that guarantees a minimum degree of protection of IP 54 according to IEC 60529.

The cables shall be connected in such a way that the connecting points are not subjected to tensile or torsional stress.

All further specifications of the conformity statement apply without changes also to this supplement.

The future marking reads:


II 3 G Ex ic IIC T6 Gc or **II 3 G Ex nA II T6 Gc** alternatively
II 3 G Ex ic IIC T6 or **II 3 G Ex nAc II T6**

1. SUPPLEMENT TO CONFORMITY STATEMENT PTB 01 ATEX 2086 X

Applied standards

EN 60079-0:2009

EN 60079-11:2012

EN 60079-15:2010

Test report:

PTB Ex 14-23193

Zertifizierungssektor Explosionsschutz

By order:



Dr.-Ing. T. Horn



Braunschweig, April 17, 2014