



T R A N S L A T I O N

(1) **EC TYPE EXAMINATION CERTIFICATE**

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

(3) EC Type Examination Certificate Number

PTB 05 ATEX 2044 X

(4) Equipment: Model 3965-1.. Solenoid-operated Valve Block

(5) Manufacturer: SAMSON AG Mess- und Regeltechnik

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

(7) The equipment and any acceptable variations thereof are specified in the schedule to this certificate.

(8) The Physikalisch-Technische Bundesanstalt, notified body number 0102 according to Article 9 of the Council Directive 94/9/EC 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 05-24269

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

EN 50014:1997 + A1 + A2 EN 50020 :2002 EN 50281-1-1:1988

(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 EC Type Examination Certificate relates only to the design and examination of the specified equipment in compliance with Directive 94/9/EC. Further requirements of this Directive apply to the manufacture and supply of this equipment. These requirements are not covered by this Certificate.



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

 **II 2 G EEx ia IIC T6 and II2 D IP 65 T 80 °C**

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 10. June 2005

(Signature)

(Seal)

Dr.-Ing. Johannsmeyer
Director and Professor

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

(14) **EC Type Examination Certificate No. PTB 05 ATEX 2044 X**

(15) **Description of Equipment**

The Model 3965-1 ..operated Valve Block serves for converting electrical binary signals into pneumatic output signals.

The equipment is intended for use in hazardous areas.

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	12 V	24 V
Temperature class	T6	60		
	T5	-45 °C ... 70 °C		
	T4	80 °C		
Characteristic linear or rectangular	P _i	250 mW	No limitation	

C_i negligible
L_i negligible

Electrical data

Input circuit

Type of protection: Intrinsic safety EEx ia IIC
Only for connection to certified intrinsically safe circuits. The maximum values of U_i and I_i for all versions U_N are shown in the table below:

U _i	25 V	27 V	28 V	30 V	32 V
I _i	150 mA	125 mA	115 mA	100 mA	85 mA
P _i	No limitation				

(16) Test report **PTB Ex 05-24269**

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

If the Model 3965-1.. Solenoid-operated Valve Block is to be used in Zone 21 hazardous locations according to EN 50281-1-1:1998, the equipment shall be mounted in an additional enclosure made of steel or stainless steel resp. or of plastic. The enclosure with its connection facilities and bushes shall be proven to comply with degree of protection IP 65 according to IEC 50529.

If the solenoid-operated valve block is to be mounted in a plastic enclosure, the enclosure made by Messrs. Rittal and certified under PTB 03 ATEX 1011 U shall be used.

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

In compliance with the standards specified above.

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 10. June 2005

(Signature) (seal)

Dr. Ing. U. Johannsmeyer
Director and Professor

T R A N S L A T I O N

A D D E N D U M N o. : 1

**in compliance with Directive 94/9/EC Annex III Clause 6
to the EC Type Examination Certificate PTB 05 ATEX 2044 X**

Equipment: Model 3965-1 .. Solenoid Valve Island

Marking:  II 2 G Ex ia IIC T 6 and II 2 D Ex tD A21 IP 65 T 80 °C

Manufacturer: SAMSON AG, Mess- und Regeltechnik

Address: Weismüllerstrasse 3
60314 Frankfurt am Main, Germany

Description of the additions and modifications

The subject of this Addendum is the assessment of the Model 3965-1 Solenoid Valve Island with respect to the requirements of the standard series EN 60079 and EN 61241.

The interrelationship between execution, temperature classification, permissible ambient temperature ranges and maximum power dissipation, the special conditions, the notes on manufactures and operation and all the other data contained in the EC Type Examination Certificate apply unaltered also to this Addendum No. 1.

The marking of the equipment is permitted in the future to comply with the standards specified below.

Standards applied:

EN 60079-0:2004

EN 60079-11:2007

EN 61241-0:2004

EN 61241-1:2004

Test report: **PTB Ex 07-27125**

Zertifizierungsstelle Explosionsschutz
By order

Braunschweig, 16. August 2007

Dr.-Ing. U. Johannsmeyer

EC Type examination Certificates without signature and seal are invalid.

This EC Type Examination Certificate may only be reproduced in its entirety and without any change, schedule included. Extracts or changes shall require the prior approval of the Physikalisch-Technische Bundesanstalt.