



(1) EC-TYPE-EXAMINATION CERTIFICATE (Translation)

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

(3) EC-type-examination Certificate Number:

PTB 04 ATEX 2106



(4) Equipment: Explosion protected, electric actuator, type RedMax-..

(5) Manufacturer: Schischek Explosionsschutz GmbH

(6) Address: Mühlsteig 45, 90579 Langenzenn, Germany

(7) This equipment and any acceptable variation thereto are 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 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, given in Annex II to the Directive.

The examination and test results are recorded in the confidential report PTB Ex 04-24268 .

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50014:1997 + A1 + A2 EN 50020:2002 EN 50021:1999 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 specified in the schedule to this certificate.

(11) This EC-type-examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate.

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

II 3 G EEx nC II T6
II 3 (1) G EEx [ia] IIC
II 3 D IP66 T80°C

Zertifizierungsstelle Explosionsschutz

By order:

Dr.-Ing. U. Gerlach
Regierungsrat



Braunschweig, October 20, 2004

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(13)

SCHEDULE

(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 04 ATEX 2106

(15) Description of equipment

The explosion protected, electric actuator, type RedMax-.. is used for the control of valves, flaps or other lifting and rotary processes. The equipment will be installed in hazardous areas of zone 2 and zone 22.

For relationship between temperature class and the permissible range of the ambient temperature, reference is made to the following table.

temperature class	permissible range of the ambient temperature
T6	-40 °C ... 40 °C
T5	-40 °C ... 50 °C
T4	-40 °C ... 60 °C

Electrical data

Supply voltage $U = 250 \text{ V AC/DC, 50...60 Hz}$
 $U_m = 253 \text{ V}$

Flame detector circuit type of protection Intrinsic Safety EEx ia IIC

Maximum values:

$U_o = 10.6 \text{ V}$
 $I_o = 11 \text{ mA}$
 $P_o = 30 \text{ mW}$
 linear characteristic

L_i negligibly low
 C_i negligibly low

Interconnection with the existence of lumped external capacitances and inductances:

	EEx ia		
	IIC	IIB	IIA
L_o	2 mH	5 mH	10 mH
C_o	830 nF	3.7 μF	4.5 μF

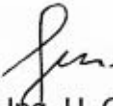
- (16) Test report PTB Ex 04-24268

- (17) Special conditions for safe use
none

- (18) Essential health and safety requirements
met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionsschutz
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