



## (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 09 ATEX 2009**

(4) Equipment: Explosion protected electrical valve drive, type RedRun

(5) Manufacturer: Schischek 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 assessment and test report PTB Ex 09-28348 .

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

**EN 60079-0:2006 EN 60079-11:2007 EN 60079-15:2005  
EN 61241-0:2006 EN 61241-1:2004**

(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 (1) G	Ex nC [ia] IIC T6	or
	II 3 G	Ex nC II T6	or
	II 3 D	Ex tD A22 IP66 T80 °C	or
	II 3 (1) D	Ex tD [iaD] A22 IP66 T80 °C	

Zertifizierungssektor Explosionsschutz

Braunschweig, April 3, 2009

By order:

Dr.-Ing. U. Gerlach  
Oberregierungsrat



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EC-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.

(13)

## SCHEDULE

(14)

### EC-TYPE-EXAMINATION CERTIFICATE PTB 09 ATEX 2009

(15) Description of equipment

The explosion protected electrical valve drive, type RedRun is used for the actuation of positioning and control valves or other lifting processes. The equipment is installed inside hazardous areas of zones 2 and 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

Voltage supply ..... U = 250 V AC/DC, 50...60 Hz  
(terminals 1/4) U<sub>m</sub> = 253 V

Sensor circuit.....type of protection Intrinsic Safety Ex ia IIC

Maximum values:

U<sub>o</sub> = 10.6 V  
I<sub>o</sub> = 11 mA  
P<sub>o</sub> = 30 mW  
linear characteristic

L<sub>i</sub> negligibly low  
C<sub>i</sub> negligibly low


For maximum permissible external reactances, reference is made to the following table.:

	Ex ia		
	IIC	IIB	IIA
L <sub>o</sub>	2 mH	5 mH	10 mH
C <sub>o</sub>	830 nF	3.6 μF	4.5 μF

- (16) Assessment and test report PTB Ex 09-28348
- (17) Special conditions for safe use  
none
- (18) Essential health and safety requirements  
met by compliance with the standards mentioned above

Zertifizierungssektor Explosionsschutz  
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