



(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 02 ATEX 2121 X**

(4) Equipment: Magnetic clamp, type EXM-650/1300/2000

(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 report PTB Ex 02-22108.

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

**EN 50014:1997 + A1 + A2**

**EN 50028:1987**

(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 2 G EEx m II T6

Zertifizierungsstelle Explosionsschutz

Braunschweig, 21 August 2002

By order:

Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor



(13)

## SCHEDULE

(14) **EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 2121 X**

(15) Description of equipment

If electric voltage is available, the magnetic clamp generates a holding force by means of electromagnetic fields. The tripping overvoltage is limited by integrated Zener diodes. Since the holding force will be lost once the voltage is interrupted, suitable mechanical devices, such as springs or levers, may be used to realize, inter alia, safe positions.

### Electrical data

Type name	EXM-650
Type of current	D.C.
Rated voltage	24 V
Rated current	0.045 A
Limit rating	1 W
Maximum permissible ambient temperature	40 °C
Temperature class	T6
Individual installation	yes
Butt mounting	no

Type name	EXM-1300
Type of current	D.C.
Rated voltage	24 V
Rated current	0.065 A
Limit rating	1.5 W
Maximum permissible ambient temperature	40 °C
Temperature class	T6
Individual installation	yes
Butt mounting	no

Type name	EXM-2000
Type of current	D.C.
Rated voltage	24 V
Rated current	0.160 A
Limit rating	3.7 W
Maximum permissible ambient temperature	40 °C
Temperature class	T6
Individual installation	yes
Butt mounting	no

(16) Test report PTB Ex 02-22108


(17) Special conditions for safe use

1. A fuse corresponding to the magnet's rated current (max.  $3xI_B$  in accordance with IEC 60127-2-1) or a motor protecting switch with short-circuit and thermal instantaneous tripping (adjusted to rated current) shall be connected in series to each magnet. For very low rated currents the fuse with the lowest voltage rating according to the IEC-standard mentioned above will be sufficient. This fuse may be housed inside the associated power supply unit or has to be connected in series separately. The rated voltage of the fuse shall be equal to or higher than the rated voltage specified for the magnet. The breaking capacity of the fuse link shall be equal to, or higher than, the maximum short-circuit current expected to occur at the respective location (normally 1500 A).
2. For all D.C.-type magnets, the maximum permissible ripple is 20 %.

(18) Essential health and safety requirements

Covered by the standards mentioned above.

Zertifizierungsstelle Explosionsschutz  
By order:

  
Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor



Braunschweig, 21 August 2002

## 1st SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 2121 X

(Translation)

Equipment: Magnetic clamp, type EXM-650/1300/2000

Marking:  II 2 G EEx m II T6

Manufacturer: Schischek GmbH

Address: Mühlsteig 45  
90579 Langenzenn, Germany

### Description of supplements and modifications

The ambient temperature range is changed from von -20 °C .... +40 °C to -20 °C .... +55 °C.

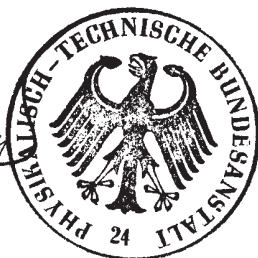
Test report: PTB Ex 03-22373

Zertifizierungsstelle Explosionsschutz

By order:

Braunschweig, 25 February 2003

  
Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor



## 2. SUPPLEMENT

according to Directive 94/9/EC Annex III.6

to EC-TYPE-EXAMINATION CERTIFICATE PTB 02 ATEX 2121 X

(Translation)

Equipment: Magnetic clamp, type EXM-650/1300/2000

Marking:  II 2 G EEx m II T6



Manufacturer: Schischek GmbH

Address: Mühlsteig 45, 90579 Langenzenn, Germany

### Description of supplements and modifications

The magnetic clamp, type EXM-650/1300/2000 may also be applied in areas where an explosive atmosphere consisting of dust/air-mixtures will possibly occur occasionally.

The new marking will then be:

 II 2 G EEx m II T6 and  
 II 2 D IP 65 T 80 °C

### Applied standards

EN 50014:1997 + A1 + A2

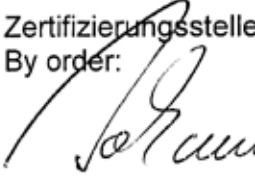
EN 50028:1987

EN 50281-1-1:1999

Test report: PTB Ex 05-25046

Zertifizierungsstelle Explosionschutz

By order:

  
Dr.-Ing. U. Johannsmeyer  
Regierungsdirektor



Braunschweig, April 8, 2005

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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.