

Physikalisch-Technische Bundesanstalt

Braunschweig und Berlin



(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 00 ATEX 2202 X

(4) Equipment: Electromagnet, type 7...-.....

(5) Manufacturer: Bürkert Werke GmbH & Co.

(6) Address: Christian- Bürkert- Straße 13-17, D-74653 Ingelfingen, 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 00-20351.

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

EN 50014:1997+A1+A2

EN 50019:1994

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 T4 or T6, or EEx em II T4 or T6

Zertifizierungsstelle Explosionsschutz

Braunschweig, January 31, 2001

By order:

(signature) L.S.

Dr.-Ing. U. Johannsmeyer
Regierungsdirektor

3 pages, correct and complete as regards content.

By order:

Dr.-Ing. Johannsmeyer
Regierungsdirektor

Braunschweig, September 30, 2003

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Braunschweig und Berlin

(13) SCHEDULE

(14) EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 2202 X

(15) Description of equipment

The magnet coil, type 7.-..... , is used to operate valves controlling non-inflammable gaseous or liquid media. The coil is either potted with the assembly's guide sleeve for the valve, or it is mounted on the guide sleeve and secured by means of a nut. The system produced is always a closed system, and the equipment may also be employed as category-2 equipment in petrol pumps for the control of petrol. The valve bodies may optionally be made from metal or polyimide.

Electrical data

Type	71.
Type of current	universal
Rated voltage	12 V ... 380 V /+/-10%
Rated current	0.38 A ... 0.012 A
Limit rating	5 W
Max. permissible ambient temperature	-40 °C ... +60 °C
Temperature class	T6
Frequency	0 Hz ... 60 Hz
Individual installation	yes

Type	72.
Type of current	universal
Rated voltage	12 V ... 380 V /+/-10%
Rated current	1.2 A ... 0.038 A
Limit rating	16 W
Max. permissible ambient temperature	-40 °C ... +40 °C
Temperature class	T4
Frequency	0 Hz ... 60 Hz
Individual installation	yes

Type	73.
Type of current	universal
Rated voltage	12 V ... 380 V /+/-10%
Rated current	0.53 A ... 0.017 A
Limit rating	7 W
Max. permissible ambient temperature	-40 °C ... +60 °C
Temperature class	T6
Frequency	0 Hz ... 60 Hz
Individual installation	yes

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SCHEDULE TO EC-TYPE-EXAMINATION CERTIFICATE PTB 00 ATEX 2202 X

Type	735
Type of current	universal
Rated voltage	12 V ... 380 V /+/-20%
Rated current	0.42 A ... 0.013 A
Limit rating	6 W
Max. permissible ambient temperature	-40 °C ... +40 °C
Temperature class	T6
Frequency	0 Hz ... 60 Hz
Individual installation	yes

(16) Test report PTB Ex 00-20351

(17) Special conditions for safe use

1. A fuse corresponding to magnet's rated current (max. $3xI_B$ in compliance with DIN 41571 or IEC 127) or a motor protecting switch with short-circuit or thermal instantaneous tripping (adjusted to rated current) shall be connected in series to each magnet. The fuse may be accommodated in the corresponding power supply unit or it shall be separately connected in series. The fuse voltage rating shall be the same or higher than the magnet voltage rating specified. The breaking capacity of the fuse link shall be the same or higher than the maximum short-circuit current expected to occur at the place of installation (normally 1500 A).
2. When the magnet coil, type 7.., is used as category-2 equipment in petrol pumps for petrol control, the valve body must be made from metal. The coil is mounted on the assembly's guide sleeve and may only be removed by the manufacturer. The valves always produce a closed system.
3. The operating temperature range shown under "Electrical data" shall be considered for each type.
4. When mounting a terminal box, the type of protection of the type 7 ... magnet coil will change.
5. If connection is in the potentially explosive atmosphere, the non-detachable connecting cable of the magnet shall be connected in an enclosure that meets the requirements of an approved type of protection in compliance with EN 50014, section 1.2.
6. The magnet coil, type 7.., is only suited for individual installation.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Zertifizierungsstelle Explosionsschutz

By order:

(signature) L.S.

Dr.-Ing. U. Johannsmeyer
Regierungsdirektor

Braunschweig, January 31, 2001

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