



(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 2010

(4) Equipment: Control magnet for solenoid valves, type 2003

(5) Manufacturer: Norgren GmbH

(6) Address: Stuttgarter Straße 120, 70736 Fellbach, 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 04-23297 .

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

EN 50014:1997 + A1 + A2

EN 50020:2002

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 2 G or II 2 D EEx ia IIC T6 or IP66 T95 °C

Zertifizierungsstelle Explosionsschutz
By order:

Braunschweig, February 09, 2004

Dr.-Ing. U. Johannsmeier
Regierungsdirektor



(13)

SCHEDULE




(14)

EC-TYPE-EXAMINATION CERTIFICATE PTB 04 ATEX 2010

(15) Description of equipment



The control magnet for solenoid valves, type 2003 is used for the actuation of directly controlled packless valves in the hazardous area.

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

| marking | | range of ambient temperature |
|---|----------------------|------------------------------|
|  | II 2 G EEx ia IIC T6 | -40 ... 55 °C |
|  | II 2 G EEx ia IIC T5 | -40 ... 70 °C |
|  | II 2 D IP66 T95 °C | -40 ... 70 °C |

Electrical data

Supply circuit

 II 2 G EEx ia IIC T6/T5 and  II 2 D IP66 T95 °C

type of protection Intrinsic Safety EEx ia IIC

Only for connection to a certified intrinsically safe circuit.

Maximum values: $U_i = 28 \text{ V}$

$I_i = 110 \text{ mA}$

$P_i = 1.5 \text{ W}$

L_i negligibly low

C_i negligibly low

(16) Test report PTB Ex 04-23297

(17) Special conditions for safe use

none

(18) Essential health and safety requirements

met by compliance with the standards mentioned above

Zertifizierungsstelle Explosionschutz
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