

Translation

TÜV NORD



(1) **EC-Type Examination Certificate**

(2) Equipment and protective systems intended for use in potentially explosive atmospheres, **Directive 94/9/EC**

- (3) **Certificate Number** TÜV 06 ATEX 553413 X
- (4) for the equipment: Valve actuator electro-magnet
Type 8186...8195
- (5) of the manufacturer: IMI Norgren Buschjost GmbH & Co KG
- (6) Address: Detmolder Straße 256
32545 Bad Oeynhausen
Germany

Order number: 8000553413

Date of issue: 2006-11-08

- (7) This equipment or protective system and any acceptable variation thereto are specified in the schedule to this certificate and the documents therein referred to.
- (8) The TÜV NORD CERT GmbH, notified body No. 0044 in accordance with Article 9 of the Council Directive of the EC of March 23, 1994 (94/9/EC), certifies that this equipment or protective system 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 No. 06 YEX 553413.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 50 014:1997 +A1+A2 EN 50019:2000 EN 50 028:1987
EN 50 281-1-1:1998+A1
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 or protective system must include the following:



II 2 G EEx me II T3 bzw. T4 bzw. II 2 G EEx m II T3 bzw. T4
II 2 D T140°C

TÜV NORD CERT GmbH, Langemarckstraße 20, 45141 Essen, accredited by the central office of the countries for safety engineering (ZLS), Ident. Nr. 0044, legal successor of the TÜV NORD CERT GmbH & Co. KG Ident. Nr. 0032

The head of the certification body


Schwedt

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(13) **SCHEDULE**

(14) **EC-Type Examination Certificate No. TÜV 06 ATEX 553413 X**

(15) Description of equipment

Valve actuators electro-magnet for single mounting to be used for pushing and pulling action with a mounted valve type 8186..8195.

The different types are differ in the rated power, the cable entries and / or the type of connection (terminals or cable).

Ambient temperature -20°C ... +40°C.

Electrical data

Rated voltage: depending on the type
12...440V DC resp. 24...400V AC

Rated cross section of connecting cable: 2,5mm² single- or multi-strand, max. 4mm² single-strand
(for types with connecting terminals without permanently connected cable)

Type 8186..8190

Rated current: 0,02...0,83A
Rated power: 9W
Temperature class T4

Type 8191...8195

Rated current: 0,027...1,11A
Rated power: 12W
Temperature class T3

(16) Test documents are listed in the test report No. 06 YEX 553413.

(17) Special conditions for safe use

Every valve actuator electro-magnet must be protected against short circuits by a fuse with a rating in accordance with the rated current (max. 3xI_B acc. to IEC 60127-2-1). The rated voltage of the fuse must have a minimal value of the nominal voltage of the valve actuator electro-magnet. The breaking capacity of the fuse must have a minimal value in accordance of the prospective short current at the place of installation.

The valve actuator electro-magnet with connecting terminals without permanently connected cable must mounted with a cable entry which meet the requirements of the directive 94/9/EC and of the type of explosive protection "Increased safety e" at least. The cable entries must be suitable for the conditions of use and correctly installed.

A heat resistant cable with a continuous operating temperature of at least 85°C must be use.

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The valve actuator electro-magnet with permanently connected cable were tested about the resistance to impact according to EN50014, sec.23.4.3.1. with the low risk of mechanical danger. The installation must made in such a way that only a low risk of mechanical danger exist.

The cable of the valve actuator electro-magnet with permanently connected cable must be connected in a junction box with meet the requirements of at least one of the type of protection named in EN 50014. For use in the presence of combustible dust the junction box must have an IP 6X rating according to EN 60529.

The cable of the valve actuator electro-magnet with permanently connected cable must be installed fixed. The cable entry must be mechanical protected.

For mounting and installation of the valve actuator electro-magnet the requirements of EN 60079-14 shall meet.

(18) Essential Health and Safety Requirements

no additional ones