



EC TYPE-EXAMINATION CERTIFICATE

- (1) (TRANSLATION)
- (2) Equipment and Protective Systems Intended for Use in Potentially Explosive Atmospheres –
Directive 94/9/EC
- (3) EC type-examination certificate number:

SIQ 10 ATEX 183X



- (4) Equipment: Solenoid, type TM Ex ...
- (5) Manufacturer: JAKŠA d.o.o.
- (6) Address: Šlandrova ulica 8, SI-1231 Ljubljana Črnuče, Slovenia
- (7) This equipment and any acceptable variations thereto are specified in the schedule to this certificate and in the documents listed therein referred to.
- (8) SIQ, Notified body number 1304 in accordance with Article 9 of the Council Directive 94/9/ES 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 test report TEx183/10.
- (9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with the following standards:

EN 60079-0 : 2009

EN 60079-7 : 2007

EN 60079-18 : 2009

- (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 with 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 Ex e mb II T4/T5 Gb

Certification body

Igor Likar



Ljubljana, 27 September 2010

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The EC type-examination certificate is valid only if signed and stamped.
The certificate may be reproduced only in full and without changes. Any extracts and changes shall be approved by SIQ.
In the case of dispute, Slovenian text shall prevail.

SIQ
Tržaška cesta 2
SI-1000 Ljubljana



(13)

SCHEDULE

(14)

EC TYPE-EXAMINATION CERTIFICATE SIQ 10 ATEX 183X

(15) Description of the equipment

The solenoid, type TM Ex ..., is designed in the type of explosion protection encapsulation "mb" with a terminal box designed in the type of explosion protection increased safety "e". The solenoid is protected against overheating by means of a thermal fuse in the winding.

Technical data

Supply:

Type	U_n
TM Ex35/A, TM Ex40/A	AC/DC 24 V \pm 10%
TM Ex35/B, TM Ex40/B	AC/DC 48 V \pm 10%
TM Ex35/C, TM Ex40/C	AC/DC 110 V \pm 10%
TM Ex35/D, TM Ex40/D	AC 230 V/DC 200 V \pm 10%

Rated power: TM Ex35... : 10 W, TM Ex40... : 15 W

The following maximum ambient and media temperatures T_{max} shall be considered for temperature class T5:

Type	T_{max}
TM Ex35/A	+45°C
TM Ex35/B	+55°C
TM Ex35/C	+45°C
TM Ex35/D	+45°C

Type	T_{max}
TM Ex40/A	+50°C
TM Ex40/B	+50°C
TM Ex40/C	+45°C
TM Ex40/D	+40°C

(16) Test report

TEx183/10 dated 27 September 2010.

(17) Special conditions for safe use

- The electrical protection of solenoid shall prevent the prospective short circuit current to exceed 1500 A.
- The solenoid shall not be exposed to mechanical damage. If its installation presents the risk of mechanical damage, it shall be additionally mechanically protected.
- The maximum ambient temperature is defined by the maximum allowed temperature of the cable gland and the thermal stability of the cable. The selection of the cable shall be based on the notion that the temperature of the cable gland and the cable may exceed the ambient temperature by up to 25 K.
- If the solenoid is installed in explosive gas atmospheres of group IIC it is necessary to prevent electrostatic charges of the enclosure. The enclosure may be rubbed only with a damp cloth.

(18) Essential Health and Safety Requirements

Compliance with the Essential Health and Safety Requirements has been assured by compliance with the requirements of the standards listed under item (9).

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