Physikalisch-Technische Bundesanstalt
Braunschweig und Berlin
Nationales Metrologieinstitut

(1) EU-TYPE-EXAMINATION CERTIFICATE
(Translation)

(2) Equipment or Protective Systems Intended for Use in Potentially Explosive Atmospheres - **Directive 2014/34/EU**

(3) EU-Type Examination Certificate Number:

PTB 16 ATEX 2010 X **Issue: 0**

(4) Product: Single-stroke control solenoid, type 41 42E07K10
DC-solenoids, types 41 01E06K00, 41 01E07K00 and 41 01E09K00

(5) Manufacturer: Kendrion (Donaueschingen/Engelswies) GmbH

(6) Address: August-Fischbach-Straße 1, 78166 Donaueschingen, Germany

(7) This product and any acceptable variation thereto is 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 17 of the Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products 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 PTB Ex 16-26141.

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

EN 60079-0:2012 + A11:2013 **EN 60079-7:2007**

(10) If the sign "X" is placed after the certificate number, it indicates that the product is subject to the Specific Conditions of Use specified in the schedule to this certificate.

(11) This EU-Type Examination Certificate relates only to the design and construction of the specified product in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

(12) The marking of the product shall include the following:

Ex II 2 G Ex eb IIC T4 Gb

Konformitätsbewertungsstelle, Sektor Explosionsschutz Braunschweig, January 18, 2017
On behalf of PTB:

Dr.-Ing. F. Lienesch
Regierungsdirektor

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(13) # SCHEDULE

(14) **EU-Type Examination Certificate Number PTB 16 ATEX 2010 X, Issue: 0**

(15) Description of Product

The DC-solenoids / single-stroke control solenoids are mainly used as actuating magnets. This magnet system is suitable for application in areas where the occurrence of explosive gas-air mixtures has to be assumed.

Electrical data:

Type	**41 01E06K00**	**41 01E07K00**	**41 01E07K10**	**41 01E09K00**
Type of current	Direct current	Direct current	Direct current	Direct current
Nominal voltage	24 V ±10 %	24 V ±10 %	24 V ±10 %	24 V ±10 %
Rated voltage	26.4 V	26.4 V	26.4 V	26.4 V
Rated current	0.9 A	1.09 A	1.09 A	1.39 A
Limit power	19 W	23.2 W	23.2	28 W
Fuse	2.5 A	3.15 A	3.15 A	4 A

The DC-solenoids / single-stroke control solenoids are exclusively operated as single mounted devices and they are suitable for a permissible ambient temperature range from -20 °C up to +40 °C with the application in temperature class T4.

(16) Test Report PTB Ex16-26141

(17) Specific conditions of use

A fuse corresponding to IEC 60127 and to the fuse values specified in the electrical data or a motor protecting switch with short-circuit- or thermal instantaneous tripping (adjusted to rated current) shall be connected in series to each DC-solenoid or single-stroke control solenoid as a short-circuit protection.

This fuse may be located inside the associated supply unit or shall be connected in series separately. The rated voltage of the fuse shall be equal to or higher than the rated voltage of the magnet. The breaking capacity of the fuse-link shall be equal to or higher than the prospective maximum short-circuit current at the place of installation (usually 1500 A).

A maximum DC-ripple of 48 % applies to all DC-solenoids / single-stroke control solenoids.

It shall be ensured by appropriate measures that the maximum breaking overvoltage of 400 V is not exceeded.

SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 16 ATEX 2010 X, Issue: 0

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

Konformitätsbewertungsstelle, Sektor Explosionsschutz
On behalf of PTB:

Braunschweig, January 18, 2017

Dr.-Ing. F. Lienesch
Regierungsdirektor