



# (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 07 ATEX 1038 X**

**Issue: 3**

(4) Product: Actuator type D\*iM\*\*-\*-\* Ex

(5) Manufacturer: Drehmo GmbH

(6) Address: Zum Eichstruck 10, 57482 Wenden, Germany

(7) This 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 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 25-12074.

(9) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:  
**EN IEC 60079-0:2018/A11:2024, EN 60079-1:2014+AC:2018, EN IEC 60079-7:2015+A1:2018, EN 60079-31:2014, EN ISO 80079-36:2016, EN ISO 80079-37:2016**

(10) If the sign "X" is placed after the certificate number, it indicates that the 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 in accordance to the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of . These are not covered by this certificate.

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



**II 2 G Ex db eb h IIC T3...T4 Gb or Ex db eb h IIB T3...T4 Gb**

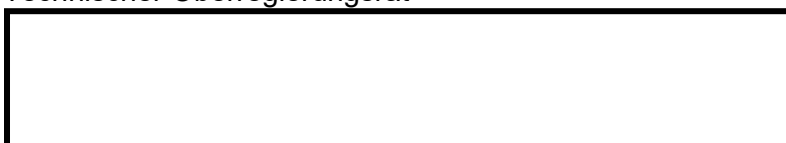


**II 2 D Ex tb h IIIC T130°C Db**

Konformitätsbewertungsstelle, Sektor Explosionsschutz  
On behalf of PTB:

Braunschweig, January 20, 2025

Dr.-Ing. S. Essmann  
Technischer Oberregierungsrat



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## SCHEDULE

(13)

(14) **EU-Type Examination Certificate Number PTB 07 ATEX 1038, Issue: 3**

(15) Description of Product

The actuator, type D\*\*\*\*-\*-\* Ex, consists of the following components:

- Enclosure accommodating a planetary gear. For part-turn actuators an additional planetary gear "SQ". Optionally mounted valve attachment.
- Flange-mounted motor of Flameproof Enclosure "db" type of protection.
- Optionally flange-mounted – separately certified – motor of Flameproof Enclosure "db" type of protection or Increased Safety "eb" type of protection.
- Motor terminal compartment of Increased Safety "eb" type of protection cast to the enclosure, with – separately certified – terminals. It is connected to the motor and the electronics compartment by means of – separately certified – wire bushings.
- An electronics compartment of Flameproof Enclosure "db" type of protection cast to the enclosure, provided with an inspection window.
- A terminal box of Increased Safety "e" type of protection, with – separately certified – terminals.
- Optionally a – separately certified - plug connector type KP, KPH and KES (DEKRA 11 ATEX 0008X) of Increased Safety "e" type of protection.
- Optionally a - separately certified - terminal compartment type KES-Exd in the type of protection flameproof enclosure "d" (DEKRA 11 ATEX 0008X).
- Optionally a - separately certified - plug connector type K.Exe and K.Exd (DEKRA 17 ATEX 0033U) in the types of protection Increased Safety "eb" and Flameproof Enclosure "db".
- Optionally an external control system. The control system may be outside the potentially explosive area (no ex-protection) or in an explosion protected design, inside the potentially explosive area. The electronics compartment of the actuator in the type of protection Flameproof Enclosure will in this case be filled with packing material.

## SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 07 ATEX 1038, Issue: 3

### Technical data

Rated voltage	up to 690 V
Rated current	max. 27 A *)
Rated cross section	max. 16 mm <sup>2</sup>
Ambient temperatures	-25 °C to +40 °C (standard) -30 °C to +40 °C (IIC, T4) -30 °C to +60 °C (IIC, T4) -30 °C to +65 °C (IIB, T3)
Ingress protection	IP66 in accordance with EN 60529

\*) may be higher for separately certified motors

The electrical data are based on the connected motor as well as the electric components accommodated in the electronics compartment.

### Nomenclature

D	*	iM*	*	*	-	*	-	*		Ex
1	2	3	4	5	6	7	8	9	10	11

Position	Range of values	Significance
1	D	DREHMO actuator
2		Multi-turn actuator
	P	Part-turn actuator
3	iM	Actuator with i-matic or i-matic C controls
4		Actuator for open-close operation, type of duty S2
	R	Actuator for modulating operation, type of duty S4
5	30 to 2000	Tripping torque in Nm for multi-turn actuator
	75 to 1800	Tripping torque in Nm for part-turn actuator
6	-	Dash
7		Without valve attachment (output drive)
	A, AF, B, B1, B2, B3, B3DO, B4, C, D, DO, DOU, DSTO, DSTU, E, EDO, ...	Valve attachment for multi-turn actuators according to EN ISO 5210
	B, V, W, L/D, H, FH, FW, ...	Valve attachment for part-turn actuators according to EN ISO 5211
8	-	Dash
9	5 to 200 (50Hz)	Output speed in rpm (Multi-turn)
	6 to 192 (60Hz)	
	7 to 75 (50HZ)	Operating time for 90° in seconds (Part-turn)
	6 to 63 (60Hz)	
10		Blank
11	Ex	Explosion-proof actuator

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## **SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 07 ATEX 1038, Issue: 3**

If components are attached to the drive, all necessary information for the operation and monitoring of these components must also be provided. The operation of a standstill heater requires a separate back-up fuse to intercept faulty operating states.

### Changes with respect to previous edition

The mechanical explosion protection is supplemented  
The maximum output speed is up to 200 rpm.  
The name Markrolon is changed to Exolon

#### (16) Test Report PTB Ex25-12074

#### (17) Specific conditions of use

Repair and overhaul of the flameproof gaps are only allowed according constructive information given from the original manufacturer. A repair according the values given in Table 1 or Table 2 of IEC 60079-1 is not permitted.

Danger due to electrostatic discharge. The actuator must be cleaned with a damp cloth only. Please refer to operation manual.

#### (18) Essential health and safety requirements

Met by compliance with the aforementioned standards.