



(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 08 ATEX 1020 X

Issue: 1

(4) Product: Electromagnetic drive, type MG...x, MG...-A...x

(5) Manufacturer: UNI-Geräte E. Mangelmann Elektrotechnische Fabrik GmbH

(6) Address: Holtumsweg 13, 47652 Weeze, 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 23-11184.

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

EN IEC 60079-0:2018

EN 60079-1:2014+AC:2018

EN IEC 60079-7:2015/A1:2018

EN 60079-31:2014

(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:

 **II 2 G Ex db eb IIC T5 Gb**

 **II 2 D Ex tb IIIC T 95 °C Db**

Konformitätsbewertungsstelle, Sektor Explosionsschutz

Braunschweig, December 4, 2023

On behalf of PTB:



Dr.-Ing. D. Markus
Direktor und Professor



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EU-Type Examination Certificates without signature and official stamp shall not be valid. The certificates may be circulated only without alteration. Extracts or alterations are subject to approval by the Physikalisch-Technische Bundesanstalt. In case of dispute, the German text shall prevail.

SCHEDULE

(13)

(14) **EU-Type Examination Certificate Number PTB 08 ATEX 1020 X, Issue: 1**

(15) Description of Product

The electromagnetic drive type MG...x, MG...-A...x, consists of a coil unit of Flameproof Enclosure "d" type of protection and a terminal compartment of Increased Safety "e" type of protection. The electromagnetic drive comes in a number of power stages for valve control, optionally with pickup and holding winding.

A - separately certified - cable entry fitting will be used for connection.

Technical data

Rated voltage up to 420 V

Ambient temperature range: -20 °C to +60 °C

Shock protection and protection against

ingress of solid foreign bodies and water: IP65 acc. to EN 60529

(16) Test Report PTB Ex 23-11184

(17) Specific conditions of use

Repairs on flameproof joints may only be performed in accordance with the manufacturer's design specifications. Repairs on the basis of the values in table 3 of EN 60079-1:2014 are not permitted.

Notes for manufacturing, installation and safe operation

Components attached or installed (e.g. terminal compartments, bushings, cable glands, connectors) must be of a technical standard that complies with the specifications on the cover sheet. They must be suited for the operating conditions and be covered by a separate examination certificate. The special conditions specified for the components must be complied with, and the components have to be included in the type test, if necessary.

The connecting lead must be selected with a view to the maximum temperature under rated operating conditions (including max. admissible ambient temperature, max. current load and, if applicable, thermal conduction).

The formation of potentially explosive atmospheres must be prevented in the magnet core and guide tube region.

Regarding the paint film, it must be ensured that the total thickness of the coating does not exceed the limit value of 0.2 mm from EN IEC 60079-0 Table 9.

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SCHEDULE TO EU-TYPE EXAMINATION CERTIFICATE PTB 08 ATEX 1020 X, Issue: 1

During operation, the electromagnetic drive type MG...x, MG...-A...x must not be exposed to any strong charge-generating processes (presence of rapidly moving particles on the surface, e.g. electrons from high-voltage electrodes, flowing powder particles or liquids). A reference to this must be included in the operating, maintenance, and installation instructions.

Depending on the power losses of the components installed inside the housing, the manufacturer decides whether electrical-thermal performance rating tests are necessary and, if necessary, carries out these tests on his own responsibility.

(18) Essential health and safety requirements

Met by compliance with the aforementioned standards.

According to Article 41 of Directive 2014/34/EU, EC-type examination certificates which have been issued according to Directive 94/9/EC prior to the date of coming into force of Directive 2014/34/EU (April 20, 2016) may be considered as if they were issued already in compliance with Directive 2014/34/EU. By permission of the European Commission supplements to such EC-type examination certificates and new issues of such certificates may continue to hold the original certificate number issued before April 20, 2016.

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On behalf of PTB:

Braunschweig, December 4, 2023


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