# IBExU Institut für Sicherheitstechnik GmbH

An-Institut der TU Bergakademie Freiberg

# [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 IBExU03ATEX1160 X | Issue 1

[4] Product:

TA-FM System

Type: FM1 and FM2

[5] Manufacturer:

Manufacturer: TA Roloff Technischer Apparatebau GmbH

[6] Address:

Adlerhorst 5

22459 Hamburg

GERMANY

- [7] This product and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] IBExU Institut für Sicherheitstechnik GmbH, notified body number 0637 in accordance with Article 17 of 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 IB-20-3-0137.

[9] Compliance with the essential health and safety requirements has been assured by compliance with:

EN IEC 60079-0:2018 EN 60079-18:2015/1:2017

except in respect of those requirements listed at item [18] of the schedule.

- [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. 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:

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7

09599 Freiberg, GERMANY

By order

Dipl.-Ing. K. Willamowski

Institut für Sic Seal eits- Cambh \*\* Tenn-Nr. 065\*

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Certificates without signature and seal are not valid. Certificates may only be duplicated completely and unchanged. In case of dispute, the German text shall prevail.

Freiberg, 2024-12-18

## IBExU Institut für Sicherheitstechnik GmbH

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[13] Schedule

## [14] Certificate number IBExU03ATEX1160 X | Issue 1

### [15] Description of product

The TA-FM System is an electromagnetic failsafe device and accessories to TA Rotary Drives. It serves for automatically decoupling the valve into the required safety position "open" or "shut" in case of a failure of the electrical supply voltage. At power failure, valve and rotary drive are decoupled and the valve is operated by the pressure spring. The TA-FM System consists of an encapsulated magnet coil, which is adapted to fit in an aluminium enclosure.

Electrical data:

	FIVIT	FIVIZ
Rated voltage:	24 V DC	24 V DC
Nominal current:	0.29 A	0.76 A
Fuse:	0.3 A	0.8 A
Nominal power:	6.96 W	18.24 W
Operating time:	100 % ED	100 % ED
Nominal current: Fuse: Nominal power:	0.29 A 0.3 A 6.96 W	0.76 A 0.8 A 18.24 W

Ambient temperature range: -20 °C up to +40 °C

Variation compared to issue 0 of this certificate:

The TA-FM system also fulfils the requirements of the current standards EN IEC 60079-0:2018 and EN 60079-18:2015/A1:2017.

#### [16] Test report

The test results are recorded in the confidential test report IB-20-3-0137 of 2024-12-18. The test documents are part of the test report and they are listed there.

Summary of the test results

The TA-FM System type FM1 and FM2 fulfils the requirements of explosion protection for equipment group II, equipment category 2 G in type of protection encapsulation "mb" for explosion group II and temperature class T3.

### [17] Specific conditions of use

- The TA-FM System may only be operated in an additional enclosure, that fulfils the requirements of the impact resistance test according to EN IEC 60079-0, Clause 26.4.2. The surface of the compound must not be exposed to the environment.
- The enclosure of the TA-FM system must be connected to the potential bonding system via the TA Rotary Drive in accordance with EN 60079-14, Clause 6.3.

#### [18] Essential health and safety requirements

In addition to the essential health and safety requirements (EHSRs) covered by the standards listed at item [9], the following are considered relevant to this product, and conformity is demonstrated in the test report: None

#### [19] Drawings and Documents

The documents are listed in the test report.

IBExU Institut für Sicherheitstechnik GmbH Fuchsmühlenweg 7 09599 Freiberg, GERMANY

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