

Physical-Technical Testing Institute Ostrava - Radvanice



(1) Supplementary EU - Type Examination Certificate No.7

(2)

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

(3) EU - Type Examination Examination Certificate number:

FTZÚ 02 ATEX 0108X

(4) Product: Electrical Actuator type MO EEx 52125.xxxx (F,FF)

(5) Manufacturer: ZPA Pečky a.s.

(6) Address: tř. 5. května 166, 289 11 Pečky, Czech Republic

- (7) This supplementary certificate extends EC Type Examination Certificate No. FTZÚ 02 ATEX 0108X to apply to products designed and constructed in accordance with the specification set out in the Schedule of the said certificate but having any variations specified in the Schedule attached to this certificate and the documents therein referred to.
- (8) The Physical-Technical Testing Institute, Notified Body number 1026, in accordance with Articles 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26.02.2014, certifies that this product, as modified by this supplementary certificate, 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.
- (9) In accordance with Article 41 of Directive 2014/34/EU, EC-Type Examination Certificates referring to 94/9/EC that were in existence prior to the date of application of 2014/34/EU (20.04.2016) may be referenced as if they were issued in accordance with Directive 2014/34/EU. Supplementary Certificates to such EC-Type Examination Certificates, and new issues of such certificates, may continue to bear the original certificate number issued prior to 20.04.2016.
- (10) Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN 60079-0:2012+A11:2013; EN 60079-1:2014; EN 60079-7:2015; EN 60079-11:2012

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

 $\langle \epsilon_x \rangle$

II 2G Ex db eb IIB T4 Gb

M2 Ex db eb I Mb

IM2 Ex db ib I Mb

(12) The certificate is valid till: 31.10.2022

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body



-25°C \leq Ta \leq +55°C or -50°C \leq Ta \leq +55°C or -60°C \leq Ta \leq +55°C

Date of issue: 31.10.2017

Page: 1/2

This certificate is granted subject to the general conditions of the FTZÚ, s.p. This certificate may only be reproduced in its entirety and without any change, schedule included.



Physical-Technical Testing Institute Ostrava - Radvanice

(13)

Schedule

Supplementary EU - Type Examination Certificate No. 7 (14)to FTZÚ 02 ATEX 0108X

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- Evaluation according to the new edition of the standards: EN 60079-0:2012+A11:2013, EN 60079-1:2014, EN 60079-7:2015 and EN 60079-11:2012.
- Prolongation of certificate validity.

Technical parameters and construction of the product remain unchanged.

(16) Report Number.: 02/0108/7

dated: 31.10.2017

- (17) Specific Conditions of Use:
 - 1. Verified values of the maximum gaps and minimum constructional length of flameproof joints of the enclosure are different from relevant minimum and maximum values mentioned in standard. To obtain information about joints dimension it is necessary to contact the manufacturer.
- (18) Essential Health and Safety Requirements:

Compliance with the Essential Health and Safety Requirements is covered by standards mentioned in clause (10) of this supplementary certificate. Non-electric part of the equipment - mechanical gearbox is not covered by this certificate.

(19) Drawings and Documents:

| Number | Issue | Sheets | Date | Description |
|------------------------------|-------|--------|------------|-------------|
| MOED EEx t.No. 52120 - 52125 | | 47 | 2017 | Manual |
| 29050279 | С | 1 | 24.08.2017 | Drawing |

Responsible person:

Dipl. Ing. Lukáš Martinák Head of Certification Body

Date of issue: 31.10.2017

Page: 2/2



Physical Technical Testing Institute Ostrava-Radvanice



(1) EC-Type Examination Certificate

(2)

Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres
Directive 94/9/EC

(3) EC-Type Examination Certificate Number:

FTZÚ 02 ATEX 0108X

(4) Equipment:

Electric actuator, type MO EEx 52125.xxxx

(5) Manufacturer:

ZPA Pečky a.s.

(6) Address:

Tř. 5. května 166, 289 11 Pečky, Czech Republic

- (7) This equipment or protective system and any of acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- (8) The Physical Technical Testing Institute, notified body number 1026 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system 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 confidential Report N°

02/0108 dated 12 September 2002

(9) Compliance with Essential Health and safety requirements has been assured by compliance with:

EN 50014:1997 +A1, A2

EN 50018:2000

EN 50019:2000

- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system 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 testing of the specified equipment or protective system in accordance to the directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.
- (12) The marking of the equipment or protective system shall include following:

⟨Ex⟩ II 2G EEx de IIC T4

This EC-Type Examination Certificate is valid till:

30. 09. 2007

Responsible person:

Dipl. Ing. Sindler Jaroslav Head of certification body OLINE TANDERS OF A STATE OF A STA

Date of issue: 13, 09, 2002

Number of pages: 1/3

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Physical Technical Testing Institute Ostrava-Radvanice

(13) Schedule

(14) EC-Type Examination Certificate N° FTZÚ 02 ATEX 0108X

(15) Description of Equipment: The electric actuator MO EEx 52125 is a device intended for remote control of fittings (valves, slide valves etc.) by reverse rotating movement. The electric actuator consists of electric and mechanical parts. The electric part consists of control box protected by flameproof enclosure (d), terminal box protected by increased safety (e) and an electric motor protected by flameproof enclosure (d). The enclosures are interconnected with multi-cable bushings certified as Ex component with type of protection EEx d IIC. Inside of control box are: torque, signalling and position unit, position transmitter and heating unit (if needed). Upper shaft end of electric actuator, which pass through control box, forms a cylindrical flameproof joint with the box wall. The control box is made of grey cast iron. The terminal box is made of aluminium alloy (Mg < 1%). Inside of this box are situated terminal blocks with type of protection EEx e II. Entry of external control and auxiliary circuits is provided by two installed cable glands, which forms inseparable part of terminal box. The mechanical part of actuator consists of countershaft box and power transmission (gearbox). The gearing are centrally embedded on output shaft and form a separate assembly. The shaft of actuating flange-mounted motor enters to countershaft box. The electric motor, including its terminal compartment, is a separately certified apparatus of assembly protected by EEx d IIC T4. The electric motors used in all actuator variants MO EEx 52125 are provided with temperature sensors (PTC) intended to be connected to the thermal protection system of electric motor.

Essential technical data:

| Type / variant: MO EEx 52 125 | | xx1x | xx2x | xx3x | xx4x | |
|-------------------------------|----------------------|---|------------|------------|-----------|--|
| Degree of protection | | IP 65 | | | | |
| Rated values: | | Control circuit: max. AC 250 V 2 A, DC 250 V 0,2 A Position transmitter: -resistive: 100 Ω, 48 V, -capacitive: 4 ÷ 20 mA, 10 ÷ 28 V | | | | |
| Switch off torque: | [Nm] | 630 - 960 | 630 - 1100 | 630 - 1100 | 630 - 920 | |
| Output speed: | [min ⁻¹] | 32 | 45 | 63 | 100 | |
| Type of electric motor: | AVM | 132 M08 | 132 MK06 | 132 MK06 | 132 M04 | |
| Electric motor output: | [kW] | 3,0 | 4,0 | 5,5 | 7,5 | |
| Electric motor supply: | | 3 AC 400 V 50 Hz | | | | |

(16) Report No.: 02/0108 (43 pages, 8 annexes)

(17) Special conditions for safe use: The electric actuator is designed for use in special range of ambient temperature: -25°C < Ta < + 55°C

(18) Essential Health and Safety Requirements: They are included in standards, which are mentioned in clause (9) of this certificate. The product was approved in accordance with above-mentioned standards and instruction for use.

Responsible person:

Dipl. Ing. Šindler Jaroslav

Head of certification body

Date of issue: 13. 09. 2002

Number of pages: 2/3

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Physical Technical Testing Institute Ostrava-Radvanice

(13)

Schedule

(14) EC-Type Examination Certificate N° FTZÚ 02 ATEX 0108X

(19) <u>LIST OF DOCUMENTATION</u>

| • | Approval assembly drawing No. 29050279 | 11. 02. 2002 |
|---|--|--------------|
| • | Annex to assembly drawing No.52120 | 14. 05. 2002 |
| • | Instruction for use and assembly | 04. 06. 2002 |
| • | Technical specification No. TP 12 $-$ 02 / 97, with amendment No. 9 (15. 08. 2002) | 22. 11. 1996 |
| • | Technical description of actuator No. 52 125 | 11. 02. 2002 |