



Physical Technical Testing Institute  
Ostrava-Radvanice



## EC-Type Examination Certificate

- (1)  
(2) **Equipment or Protective Systems Intended for use  
in Potentially Explosive Atmospheres  
Directive 94/9/EC**

(3) EC-Type Examination Certificate Number:

**FTZÚ 08 ATEX 0316X**

- (4) Equipment: **Electrical Actuator,  
types: MOED EEx 52123.xxxxED (F), MOED EEx 52124.xxxxED (F)**
- (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°

**08/0316 dated 5 January 2009**

- (9) Compliance with Essential Health and safety requirements has been assured by compliance with:  
**EN 60079-0:2006; EN 60079-1:2007**
- (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 d IIC T4**

- 25°C ≤ Ta ≤ 55°C

**Ex d IIB T4**

- 50°C ≤ Ta ≤ 55°C

This EC-Type Examination Certificate is valid till: 15. 01. 2014

Responsible person:

*Jaroslav Šindler*  
Dipl. Ing. Šindler Jaroslav  
Head of certification body



Date of issue: 15 of January 2009

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Number of pages: 3

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This certificate may only be reproduced in its entirety and without any change, schedule included.  
FYZIKÁLNĚ TECHNICKÝ ZKUŠEBNÍ ÚSTAV, státní podnik, Pikartská 7, 716 07 Ostrava Radvanice,  
tel +420 595 223 111, fax +420 596 232 672, e-mail: ftzu@ftzu.cz



Physical Technical Testing Institute  
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 08 ATEX 0316X**

(15) Description of Equipment:

The electrical actuators, type series MOED EEx 52123 and EEx 52124 are electronic controlled devices intended for automatic adjustment of fixtures with reciprocating rotation movement. The electrical actuator consists of electrical and mechanic parts. The electrical part consists of control and terminal housing with type of protection – flameproof enclosure (d) and electric motor, also with type of protection – flameproof enclosure. The control housing is made of grey cast-iron. The terminal housing is made of aluminium alloy. Inside of control housing are installed control unit with position sensor, torque unit, heating resistors and alternatively other electronic circuits. The terminal housing serves also as instrument housing and there are installed: source unit, switching relay, contactors or contactless switches, electronic brake (for motors with output up to 2,2 kW) and/or other electrical and electronic circuits necessary for control, signalling, communication and protection. Alternatively, the electrical actuator is equipped with local control unit with magnetic switches and plastic sight glass in enclosure wall. The enclosures are connected via one purpose multi-conductor bushing. The cable entry into terminal compartment provides Ex cable glands approved for direct entry into flameproof enclosure. The electric motors and mechanical part of actuator, that consists of countershaft and gear box, are separately assessed devices of the actuator assembly. The following electric motors are installed: motors series AVM, certificates FTZÚ 06 ATEX 0139, FTZÚ 06 ATEX 0140 and FTZÚ 06 ATEX 0215, or alternatively series 4KTC, certificate PTB 99 ATEX 1005. The electrical actuators for ambient temperature  $-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$  has in type marking additional letter F.

**Basic technical parameters:**

Control gear (alternative apparatus):

Power supply: AC 230 V, 3AC 400 V, 50Hz  
Input max.: 30 VA  
Output signals: analog circuitry 0-20mA, 4-20mA  
contacts relay 250 V AC 3A  
max. 20mA, max. 60 V AC/DC

Electric motors:

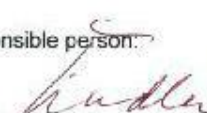
Output: from 0,75 kW to 4 kW  
Duty type: S2 ( $M_{ov}=0,6 M_{dov}$ ),  
S4 25% ( $M_{ov}=0,4 M_{dov}$ ), max. 1200 cycles per hour

Mechanical output:

Speed: from  $16 \text{ min}^{-1}$  to  $100 \text{ min}^{-1}$   
Switch off torque  $M_{dov}$ : from 250 Nm to 630 Nm

(16) Report No. : 08/0316 (22 pages 19 annexes)

Responsible person:

  
Dipl. Ing. Sindler Jaroslav  
Head of certification body



Date of issue: 15 of January 2009

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Number of pages: 3

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Physical Technical Testing Institute  
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 08 ATEX 0316X**

(17) Special conditions for safe use:

Verified values of design joints of flameproof enclosure are given in drawing No. 29050308a. The values differ from relevant minimum or maximum values given in technical standard.

(18) Essential Health and Safety Requirements:

They are included in standards, which are mentioned in clause (9) of this certificate and in manufacturer documentation. The product was approved in accordance with above mentioned standards. Non-electrical part of equipment – mechanical gearbox is not cover by this certificate.

(19) List of documentation:

Technical description No. MOED EEx t.č. 52123,4	30.11.2007
Approval assembly drawing No. 29050308a	03.12.2008
Drawings No.:	
23465232	10.05.2007
23354379	26.11.2007
21465304	02.08.2007
22354361	14.08.2007
26152003	26.11.2007
21253460	04.02.2008
21253421	04.02.2008
21354344a	11.02.2008
Technical specification No. TP 12-02/97 with annexes No. 1 and No. 2	07/2007
Instruction for use MOED EEx t.č.52120 až 52125	09/2008

Responsible person:

Dipl. Ing. Šindler Jaroslav  
Head of certification body



Date of issue: 15 of January 2009

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Number of pages: 3

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Physical Technical Testing Institute  
Ostrava-Radvanice



## Supplement No. 1 to 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 08 ATEX 0316X**

(4) Equipment: **Electrical Actuator**  
Types: **MOED EEx 52123.xxxxED (F) a MOED EEx 52124.xxxxED (F)**

(5) Manufacturer: **ZPA Pečky a.s.**

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

(7) This supplement of certificate is valid for modification of certified equipment, prolongation of certificate validity and for new variants equipment, types: **MOED EEx 52123.xxxxED FF and MOED EEx 52124.xxxxED FF**.

(8) Modification of certified apparatus (protective system) and any of its approved variants are specified in documentation, list of which is mentioned in schedule of this certificate.

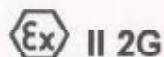
(9) This supplement to type examination certificate is valid only for type examination of design and construction of product sample in accordance with Annex 3 Paragraph 6) of Directive No. 94/9/EC. The Directive contains other requirements, which manufacturer shall fulfil before products are place on market or introduce in service.

(10) Safety requirements of modified parts were fulfilled by satisfying the following standards:

**EN 60079-0:2009**

**EN 60079-1:2007**

(11) Marking of equipment shall contain symbols:



**Ex d IIC T4 Gb**       $-25^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$

**Ex d IIB T4 Gb**       $-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$

**Ex d IIB T4 Gb**       $-60^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$

(12) The type examination certificate is valid till: **26. 03. 2017**

Responsible person:

Ing. Martinák Lukáš

Head of certification body



Date of issue: **26. 03. 2012**

Number of pages: **3**

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Physical Technical Testing Institute  
Ostrava-Radvanice

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Schedule

(14)

Supplement No. 1 to  
EC-Type Examination Certificate N° FTZÚ 08 ATEX 0316X

(15) Description of Equipment:

The supplement verifies following modification of electrical actuators series MOED EEx 52123 and EEx 52124:

- change of materials and technology of flameproof enclosure "d" production,
- the technical parameters were modified and supplemented,
- the specification and design of electrical actuators for extended for ambient temperature range from -60°C to +55°C. The modification of ambient temperature range is valid only for electrical actuators designed for Group IIB. These variants of electrical actuators has attached in type marking supplementary letters FF.

**Basic technical parameters:**

Control device:

Supply voltage:	AC 230 V, 3AC 400 V, 50Hz
Input:	max. 30 VA
Output signals, analogue:	0-20mA, 4-20mA
relay contacts:	250 V AC 3A
Input signals:	max. 20 mA, max. 60 V AC/DC
Heating device (pro Ta -60°C):	230V / 145,6 W

Mechanical output:

Rotation:	from 16 min <sup>-1</sup> to 100 min <sup>-1</sup>
Starting torque:	from 600 Nm to 1000 Nm
Switch off torque:	from 250 Nm to 630 Nm

Electric motors:

Outputs:	from 1,1 kW to 4 kW
Rated current:	from 2,9 A to 8,5 A
Duty type:	S2 ( $M_{av}=0,6 M_{max v}$ ) S4 25% ( $M_{av}=0,4 M_{max v}$ ), max. 1200 cycles/hour

Note: The electric motors are separately certified equipment of electrical actuators assembly.

(16) Report No.: 08/0316-1 on 14. 03. 2012

Responsible person:

  
Ing. Martinák Lukáš

Head of certification body



Date of issue: 26. 03. 2012

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Physical Technical Testing Institute  
Ostrava-Radvanice

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Schedule

(14)

Supplement No. 1 to  
EC-Type Examination Certificate N° FTZÚ 08 ATEX 0316X

(17) Special conditions for safe use: Verified values of design joints of flameproof enclosure are given in drawing No. 29050308b. The values differ from relevant minimum or maximum values given in technical standard.

(18) Essential Health and Safety Requirements:

They are included in standards, which are mentioned in clause (10) of this certificate supplement, and in manufacturer documentation. The product was approved in accordance with above mentioned standards. Non-electrical part of equipment – mechanical gearbox is not cover by this certificate

(19) List of documentation:

Approval assembly No. 29050308b	20.05.2011
Supplement No. 1 to the technical description MOED EEx t.No. 52120...52125	12.07.2011
Supplement No. 3 to the technical conditions No. 12-02/97	11/2011
Drawings No.: 21152003, changes b), c), d), e)	27.05.2011
21354589	11.08.2011
21354595, change a)	10.08.2011
21465687	30.04.2010
22465686	30.04.2010
22465689	30.04.2010
22465688	30.04.2010
Instruction for use MOED EEx t. No. 52120 to 52125	01/2012

Responsible person:

  
Ing. Martinák Lukáš

Head of certification body



Date of issue: 26. 03. 2012

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This supplement to certificate is granted subject to the general conditions of the Physical Technical Testing Institute.  
This supplement to certificate may only be reproduced in its entirety and without any change, schedule included.



(1) **Supplementary EU - Type Examination Certificate No.2**

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

(3) EU - Type Examination Certificate number:

**FTZÚ 08 ATEX 0316X**

(4) Product: **Eleectrical Actuator, type MOED EEx 52123.xxxxED(F) and  
MOED EEx 52124.xxxxED(F)**

(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 08 ATEX 0316X 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, EN 60079-1:2014**

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

	<b>II 2G</b>	<b>Ex db IIC T4 Gb</b>	$-25^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
		<b>Ex db IIB T4 Gb</b>	$-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
		<b>Ex db IIB T4 Gb</b>	$-60^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$

(12) This certificate is valid till: **30.05.2022**

Responsible person:

Dipl. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 30.05.2017

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Physical-Technical Testing Institute  
Ostrava - Radvanice

Schedule

(13)

(14) **Supplementary EU - Type Examination Certificate No. 2  
to FTZÚ 08 ATEX 0316X**

(15) Description of the variation to the Product:

The subject of this supplementary certificate is:

- modification of apparatus marking,
- prolongation of certificate validity,
- verification according to new valid standards.

This supplement extends certificate validity and confirms application of requirements for equipment in accordance with valid technical standards mentioned in clause (9) of this supplement.

The design and technical parameters are not altered.

(16) Report Number.: 08/0316/2

(17) Specific Conditions of Use:

Verified values of design joints of flameproof enclosure are given in drawing no. 29050308b. The values differ from relevant minimum or maximum values given in technical standard.


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.

(18) Drawings and Documents:

See certificate FTZÚ 08 ATEX 0316X.

Responsible person:

  
Dip. Ing. Lukáš Martinák  
Head of Certification Body



Date of issue: 30.05.2017

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