



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 13 ATEX 0193 X

(4) Equipment: **Electrical Actuator, type MOKPED 600 Ex 52322.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 are 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°

13/0193 dated 17.12.2014

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

EN 60079-0:2012 EN 60079-1:2007 EN 60079-31:2014

(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:

	II 2GD	Ex d IIC T6 Gb	$-25^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
		Ex d IIB T6 Gb	$-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$
		Ex tb IIIC T80°C Db	$-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$

This EC-Type Examination Certificate is valid till: 22.01.2020

Responsible person:

Dipl. Ing. Lukáš Martinák
Head of certification body



Date of issue: 22.01.2015

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Physical Technical Testing Institute Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 13 ATEX 0193 X**

(15) Description of Equipment:

The electrical actuators MOKPED 600 Ex 52322.xxxxED are electronically controlled, single speed electric actuators with constant velocity of output shaft displacement.

The power devices of electrical actuator contain electric motor and gears and control electrical and electronic devices of actuator are installed in one common flameproof enclosure ("d").

Alternatively the actuator can contain another separate local control flameproof enclosure. Connection of enclosures forms a cylindrical flameproof gap. Both enclosures are of aluminium alloy and can contain plastic sight glasses. The construction and fastening of sight glasses are identical for both enclosures. The sight glass is cemented into metallic frame and then screwed into enclosure wall. An electric connection between equipment in separate enclosures provides single purpose multi-wires bush.

The local control enclosure can contain magnetic switches and sight glass or mechanical switches without sight glass. The control parts of actuator are produced in various modifications and contain among others magnetic position sensors and torque sensor, electrical and electronic control and regulating systems. A thermal protection sensor is installed inside of actuator flameproof enclosure. Cable entry of external circuits into flameproof enclosure provide Ex cable glands certified as equipment. Unused holes in enclosure are closed by threaded blanking elements delivered with equipment.

The electric actuators designed for ambient temperature $-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$ has in marking additional letter F.

Basic technical data:

Type:	MOKPED600 Ex 52322.xxxxED								
	xx1x	xx2x	xx3x	xx4x	xx5x	xx6x	xx7x	xx8x	xx9x
Supply voltage:	3 AC 400 V $\pm 10\%$, 50 Hz					3 AC 230 V $\pm 10\%$, 50 Hz			
Maximum of tripping torque M_v [Nm]	510	600				450	550	600	
Adjusting time [s] / 90°	10	20	40	80	160	20	40	80	160
Electric motor output [W]	180	120	60	20	20	180	90	40	40
Duty type:	S2 (M = 0,6 $M_{v\max}$), or S4 25%, max 1200 cycles/hour (M = 0,4 $M_{v\max}$)								
Ambient temperature range:	for group IIC:				$-25^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$				
	for groups IIIC and IIB:				$-50^{\circ}\text{C} \leq T_a \leq 55^{\circ}\text{C}$				
Degree of protection	IP67								

Parameters of control and auxiliary circuits:

Supply voltage:

AC 230 V, 50Hz

Power input:

max. 15 W

Output signals, analogue:

0-20mA, 4-20mA

Relays contacts:

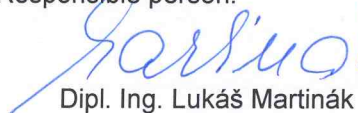
250 V AC 3A

Input signals:

max. 20mA, max. 60 V AC/DC

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Physical Technical Testing Institute
Ostrava-Radvanice

(13)

Schedule

(14) **EC-Type Examination Certificate N° FTZÚ 13 ATEX 0193 X**

(16) Report No.: 13/0193

(17) Special conditions for safe use:

Verified values of design flameproof gaps of this equipment differ from relevant minimum or maximum values for flameproof joints of flameproof enclosure mentioned in standard. For information about dimension of flameproof joints it is necessary to contact manufacturer of equipment

(18) Essential Health and Safety Requirements:

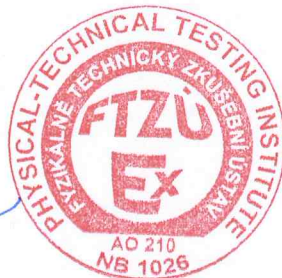
Essential health and safety requirement of Directive 94/9/EC are covered by the standard mentioned in (9), according which the product was verified.

(19) List of documentation:

Technical description MOKPED Ex type no. 52322	05.02.2013
Assembly for approval No. 29050326	05.01.2010
Drawings No.:	
26050320	30.03.2008
21152012, change a), dated 31.03.2011	23.06.2008
21465687	30.04.2010
22465689	30.04.2010
22465686	30.04.2010
22465688	30.04.2010
22465411	26.05.2008
21465336	21.08.2008
22465337	21.08.2008
21464503a	27.02.2007
22465684	20.04.2010
22465683	20.04.2010
Schematics No.:	
E-0010	11/2009
E-0011	11/2009
E-0012	11/2009
E-0013	11/2009
E-0014	11/2009
E-0015	11/2009
E-0016	11/2009
E-0017	11/2009
Technical conditions TP 32-01/00, supplement No. 2	11/2009
Instructions for use MOKPED Ex, Type No. 52320 - 52322	11/2011

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