ZERTIFIKAT | CERTIFICATE | CERTIFICAT | CERTIFICADO | СЕРТИФИКАТ | شهادة | 证书 | 인증서

TÜV AUSTRIA

(1) # 1. SUPPLEMENTARY EU - TYPE EXAMINATION CERTIFICATE

acc. Directive 2014/34/EU Annex III figure 6

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

(3)	1. Supplementary EU - Type Examination Certificate Number:	TÜV-A 16ATEX0007X
(4)	Product:	**Rotary actuators**
(5)	Manufacturer:	Emerson Process Management, Valve Automation, Inc.
(6)	Address:	19200 Northwest Freeway, Houston, TX. 77065, USA

(7) This 1st supplementary certificate extends EC – Type Examination Certificate No. 16ATEX0007X 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) TÜV AUSTRIA SERVICES GMBH, Notified Body number 0408, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that the 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. The examination and test results are recorded in confidential Report No. TÜV-A 2016-IN-AT-OS-EE-EX-0-000348

(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 April 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 April 2016

(12) The marking of the product shall include the following new:

II 2G Ex de IIC T4 or T6 Gb

Vienna	March 20th, 2017	Dipl.-Ing. Dr. Kurt Bruckner
Place	*Date*	*approved by*

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(13) # Schedule

(14) ## 1. SUPPLEMENTARY TO EU - TYPE EXAMINATION TÜV-A 16ATEX0007X

(15) **Description of the variation to the Product:**

- New equipment type with failsafe-function – execution of movement from electrical actuator in case of drop out of electrical power – was added.

Type code

Type code was enlarged with equipment type added:

FL: linear actuator failsafe
FQ: 90° actuator failsafe

There was mounted a failsafe-unit on actuator flange .The other type units remain unchanged.

Type variations:
Rotary actuators

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VARTS-aa-bbc-defgh-i

VARTS:	Common identification for actuator		
aa:	Type of drive:	CM	rotary actuator
		CL	push actuator
		FL	linear actuator failsafe
		FQ	90° actuator failsafe
bb:	Size:	CM-32	
		CL-05	
		CL-15	
		FL-05	
		FL-15	
		FL-25	
		FQ-03	
		FQ-06	
c:	Power supply:	A:	90-240VAC/DC
		B:	3x400VAC
		C:	24VDC
d:	Explosion protection	0:	no explosion protection
		1:	explosion protection
e:	Operating mode:	0:	S2-15min (open/close)
		M:	S4/1200c/h 40%DC (control mechanism drive)
f:	Bus connection:	0:	no Bus
		M:	Modbus
		H:	Hart
g:	Handwheel:	0:	no handwheel
		H:	handwheel
h:	Brand:	B:	Bettis
		E:	EIM
i:	Failsafe operating direction:	0:	opening (NC)
		1:	closing (NO)

Temperature class: T4 or T6

General standard temperature class **T4**.
Ambient temperature –20°C to +40°C or -40°C to +60°C
The protection device / temperature limiter S-125 has the response temperature of **130°C**.

Special designs with temperature class **T6** are possible.
Ambient temperature –20°C to +40°C or -40°C to +40°C
The protection device / temperature limiter SF76E has the response temperature of **76°C**.

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TÜV AUSTRIA

Electrical data

Supply voltage U_{AC} / U_{DC}	90 – 240 VAC 50-60Hz/100 – 200 VDC ±10%	
	230V	115V
Nominal power $P_{n30\%}$	235W	238W
Nominal power $P_{n50\%}$	334W	343W
Nominal current $I_{n30\%}$	1,04A	2,11A
Nominal current $I_{n50\%}$	1,47A	3,02A
Supply voltage alternative U_n	20…30VDC	
Nominal voltage U_n	24V	
Nominal current $I_{n30\%}$	4,6A	
Nominal current $I_{n50\%}$	6,8A	
Control operating mode EN60034-1	S2 – 15min	
Control operating mode EN60034-1	S4 – 1200c/h – 40%DC	
Ambient temperature T_{amb} (standard T4/T6):	-20°C to +40°C	
Ambient temperature T_{amb} (extended T4):	-40°C to +60°C	Additional marking XTR
Ambient temperature T_{amb} (standard T4/T6):	-40°C to +40°C	Additional marking T6 XTR
Degree of protection:	IP54 (minimum requirement of standards) IP66/IP67 (manufacturer's specification)	

- Nominal power P_n30%, nominal current I_n30% related to maximal revolutions per minute and 30% of nominal torque, acc. to EN15714-2
- Nominal power P_n50%, nominal current I_n50% related to maximal revolutions per minute and 50% of nominal torque

(16) **Test report**

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(17) Specific Conditions of Use

The sign "X" placed after the certificate number indicates that the product is subject to the Specific Conditions of Use. These special conditions remain unchanged.

(17.1) The yield stress of the screws for the flameproof enclosure must exceed 400 N/mm²

(17.2) For some product versions (depending on built-in components: heating up, electric capacity) is required a following warning marking acc. to EN 60079-0, 29.12 a), subjected to the delay of 5 minutes before opening the enclosure after de-energizing:

WARNING – AFTER DE-ENERGIZING, DELAY 5 MINUTES BEFORE OPENING!

(17.3) On demand can the manufacturer apply any required combination of explosion proof cable glands, cable terminals and bushing according to product documentation. It must be secured that the creepage distances and air clearances comply with the standard requirements and that the terminals are accessible and there is sufficient mounting space inside the terminal compartment.

(17.4) Routine tests (all exemplars)

Test pressure of product tests is 16,7bar (242psi) for main casing with relation pressure of <11,1bar (161psi).
Test pressure of product tests is 15,2bar (220psi) for FS casing with relation pressure of <10,1bar (147psi).
Both product tests can be performed with higher pressure.

(18) Essential Health and Safety Requirements

Covered by application of above mentioned standards.
No further requirements.

(19) Drawings and Documents

Description	Sheet	Date
Declaration product equality	1	27.07.2016
Private Label Supplier Agreement	5	19.05.2016
Housing Nameplate Proposal	8	14.03.2017

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