



TECHNICAL REQUIREMENTS

ELECTRICAL

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ELECTRIC ACTUATORS

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1. SCOPE

The present document is intended to define the technical requirements of the electric actuators for the motor operated valves, dampers and other process automation equipment.

2. REFERENCES

The following standards, acts of law and other documents are referenced in the standards:

Elektros įrenginių įrengimo bendrosios taisyklės, patvirtintos energetikos ministro 2012 m. vasario 3 d. įsakymu Nr. 1-22 (Žin., 2012, Nr. 18-816)

OL-TR-GR-000 *General Requirements*

OL-TR-ER-000 *Electrical. General*

3. TERMS AND DEFINITIONS

For terms, definitions and abbreviations see para. 3 of OL specification:

OL-TR-ER-000 *Electrical. General*

4. GENERAL

- 4.1 The electric actuator type and producer shall be selected from the vendor list and data sheet shall be accepted by OL.
- 4.2 The actuators located in field should be IP67 or higher protection level.
- 4.3 The actuator should have local electric control elements and manual operating handle.
- 4.4 The indicator (digital or mechanical) of valve position should be located in actuator.
- 4.5 The local/remote selector switch shall be in actuator.
- 4.6 The actuator shall meet fireproof and SIL requirements which depend in purpose of actuating equipment.
- 4.7 The actuator should have possibility of adjust valve shut-off/opening torque.
- 4.8 The actuator should have torque and limit switches.
- 4.9 The actuator should have 24 VDC internal power source for powering of actuator remote control circuits.
- 4.10 The voltage free auxiliary contacts of actuator status (open, close, fault) shall be included into actuator.
- 4.11 The actuator internal control unit should include all starters, overload protection and other motor control and protection functions which guarantee safe and reliable operating.

APPENDIX A. DATA SHEET FOR ELECTRIC ACTUATOR

Item No.	Technical Requirement Description	Unit	Meaning
Information about place of installation			
1.	Object		
2.	Quantity	pcs.	
3.	Technological number of valve		
4.	Type of valve		
5.	Valve screw diameter	mm	
6.	Valve screw position		Vertical
7.	Valve diameter (Ds)	mm	
8.	Pressure (Ps)		16
Electric actuator characteristics			
9.	Actuator manufacturer/ type		ROTORK / IQ
10.	Maximum actuator torque	N·m	
11.	Output shaft rotation velocity	rpm	
12.	Opening duration	s	30
13.	Shutoff duration	s	30
14.	Operating environment		Outdoors, explosive environment (atmosphere-G, 1 zone acc. to ATEX)
15.	Classification according to ATEX		II 2G, Ex de IIB T4
16.	CE marking		Required
17.	IP degree		IP68
18.	Operating temperature		-30 ÷ +35°C
19.	UV resistance of housing		Required
20.	Nominal voltage	Un	380 V AC, 3ph-50 Hz
Electric actuator control			
21.	Local		Required
22.	Remote		Required
23.	Remote control from PC (Modbus, RS-485)		Not Required
Additional equipment			
24.	Linkage assembly with fittings available	pcs.	2
25.	Cabel entry seals (ATEX) size, type	pcs.	
Other requirements			
26.	Facility to adjust valve shut-off/opening torque in the actuator		Required
Documentation			
27.	Electric actuator design drawings		Required
28.	Valve and actuator linkage assembly drawings		Required
29.	Operating manual (in Lithuanian)		Required
30.	ATEX certificate of compliance (94/9/EC) for actuator		Required
31.	Actuator compliance with the requirements set in the Regulations of Installation of Electrical Equipment of Special Facilities and Technological Processes		Required
32.	Safe Use Manual in Lithuanian		Required
Additional requirements			
33.	Your offer must contain information reflecting the compliance of actuators offered by you with technical specification presented by us, and must include drawings and basic electric schemes.		
Prepared by:		Agreed with:	