



TÜRK LOYDU

TYPE APPROVAL CERTIFICATE

This Certificate consists of 3 pages.

This is to certify that the

KE Series Electrical Actuator

With type designations

KE440-KE880-KE1700-KE3500

Manufactured by

A-T Controls, Inc.

Is found to comply with

TL Rules, Part B, Chapter 4, Machinery January 2018", "IACS (UR) E10 Revision 6", "EN 15714-2:2009 Industrial Valves Actuators Part 2: Electric actuators for industrial valves Basic requirements

Application	: Used for marine applications
Design	: Zhejiang Theoborn Auto-Control Valves Co., Ltd.
Sizes	: As amended as on approvals
Address of Manufacturer	: No.119, 4th road, 3rd avenue, Binhai industrial zone, economic and technical, Wenzhou, China.
Place and date	: ISTANBUL / 31.10.2018

Subject to the conditions referred to in the following pages, this certificate is valid until 30.10.2023

Emrah SÖĞÜTÇÜ
New Building Division Manager

M. Burak MEZREA
Surveyor



Product description:

Type Designation : KE440-KE880-KE1700-KE3500

Materials used : As amended as on approvals

Application/ Limitation (Approval conditions):

-Approved Manufacturer: Zhejiang Theoborn Auto-Control Valves Co., Ltd.

- The actuators can be installed indoors or outdoors
- The actuators are not of explosion-proof type, do not install in a hazardous place.
- Cover whole the unit, if it is installed at a place where water or materials are splashing.
- Shade the unit from direct sunlight, which may because overheat and defect to the unit.
- Reserve a space for manual maintenance work.
- Ambient Temperature: -30~60 C
- Enclosure Pretention: IP67

MODEL	Voltage	Current	Output Torque	Cycle Time (sec)
KE-440	110VAC	1.2A	50NM	15
	220VAC	0.65A	50NM	15
	24VDC	1.8A	50NM	20
KE-880	110VAC	1.3A	100NM	15
	220VAC	0.9A	100NM	15
	24 VDC	2.8A	100NM	20
KE-1700	110VAC	1.3A	200NM	20
	220VAC	0.6A	200NM	20
	24VDC	7.5A	200NM	20
KE-3500	110VAC	2.5A	400NM	20
	220VAC	1.2A	400NM	20
	24VDC	7.5A	400NM	30

Documentation :

- Document Examination Letter PAE-EPAS/002821/18-073 1/OE (issued by Turk Loydu)
- Verification of Compliance for 2006//95//EC Low Voltage and 2004//108//EC Electromagnetic compatibility
- Certificate of Compliance EN 61000-3-2:2006, EN 60947-1:2007
- ABS type approval certificate [No: 18-HS1716875-PDA]
- IP67 report according to EN 69529
- Calibration List
- ISO 9001:2015 certificates and reports (Theoborn Auto-Control Valves Co., Ltd and A-T Actuators)
- Marking Labels
- Approved Manufacturer Agreement

Test carried out (and results) :

- Test Reports reviewed for [KE-440- KE-880- KE-1700- KE-3500]
- Documents reviewed
- Function test

Place of test carried out : Cincinnati - USA

Marking of product: The product to be marked same as below mentioned. The marking is to be carried out in such a way that it is visible, legible and indelible. The marking of product is to enable traceability to the Turk Loydu Type Approval Certificate.



M. Burak MEZREA
Surveyor

This certificate is subject to terms and conditions described below:

- Any significant change in design or construction may render this Certificate invalid. Type Approval Certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. This certificate is not valid for products without marking above mentioned. The manufacturer should notify TÜRK LOYDU of any modifications or changes to the equipment in order to obtain valid certificate. This certificate shows that tested specimens as representative of the product complies of the TÜRK LOYDU rules, and relevant international instruments that apply to it.