



CERTIFICATE NUMBER  
EFFECTIVE DATE  
EXPIRY DATE  
ABS TECHNICAL OFFICE

19-RJ1937617-PDA  
31-Dec-2019  
30-Dec-2024  
Rio de Janeiro Engineering -  
Machinery

## CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

### **A-T CONTROLS**

located at

**9955 INTERNATIONAL BOULEVARD, CINCINNATI, OH, United  
States, 45246**

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

#### **Product Actuator, Electric for Valves and Dampers**

**Model Series WE, SE, XE**

This Product Design Assessment (PDA) Certificate remains valid until 30/Dec/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Roberto B Assumpcao, Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

## A-T CONTROLS

9955 INTERNATIONAL BOULEVARD

CINCINNATI OH

United States 45246

Telephone: 513-247-5465

Fax: 513-247-5462

Email: jmurphy@atcontrols.com

Web: a-tcontrols.com

**Tier: 3 - Type Approved, unit certification not required**

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**Product:** Actuator, Electric for Valves and Dampers

**Model:** Series WE, SE, XE

**Intended Service:**

Marine & Offshore Application - On -Off or Modulating Service for quarter-turn or extension up to 270° rotation valves in piping systems or dampers in HVAC systems.

**Description:**

Electrical operated actuator fitted with manual override, and anti-condensation heater for valves & dampers and other quarter-turn devices.

Option Configurations: Electronic Position Indication Unit, Local / Remote Control.

**Rating:**

Output Torque from 56.5 N-m to 2926 N-m (500 lbf-in to 25900 lbf-in)

Temperature: -20°C to 70°C (-4°F to 158°F), optional -40°C (-40°F)

WE : Weatherproof (IP67, NEMA 4, 4X)

SE: Submersible unit (IP68 - 10 m for 72 Hours)

XE: Explosion proof (EEx d IIB T4)

See attached document for detailed information.

**Service Restriction:**

- i) Unit Certification is not required for this product. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.
- ii) The actuators are not to be used for valves on tanks containing flammable liquids, fire mains and fire dampers in high fire risk areas such as machinery spaces unless fitted with approved insulation to ensure effective closure facility in the event of fire (Marine Vessels Rules 4-6-4/13.5.3 b), Mobile Offshore Units Rules 4-2-5/3.9.2).
- iii) All electrical equipment intended for installation in hazardous area are to be certified safe type based on the class of the hazardous area at its location of installation. Certificates in this regard are to be present to ABS Surveyor for verification on a case by case basis.
- iv) ATEX certified equipment is not to be installed in hazardous areas on U.S vessels unless it can be proven to have been tested to the applicable IEC 60079 series standards by an independent laboratory accepted by the U.S coast Guard. USCG notice 01-12 (February 7, 2012).

**Comments:**

- i) The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.
- ii) Setting and calibration of limit switches are to be in accordance with the manufacturer's recommended procedures.
- iii) Cables for power supply and signals are to be suitable for intended service and environmental conditions (Marine Vessels Rules 4-8-3/9, 4-8-4/21, 27.9, Mobile Offshore Units Rules 4-3-3/5 & 4-3-4/7).
- iv) Where actuators are remotely controlled and used in propulsion and safety related systems, the complete control system and its associated electrical system for each application are to be submitted to ABS technical office for suitability review (ABS Marine Vessels Rules 4-9-5/13.13).

**Notes/Drawing/Documentation:**

Declaration of Conformity, no changes.

Supporting documentation from previous reviews:

Declaration of Conformity, No changes.

EC-Type Examination Certificate KEMA 06ATEX2085 Issue No. 1

Brochure WE-0309 Electric Actuators WE Series and XE Series.

HKC Actuator model conversion to A-T Controls model

Report No. 09-1455-205, HQ-006 Ip68 3x72 E

Report No. 09-1455-113, Hq-008-Ktl IP68

Report No. 09-1455-088, Hq-015-Ktl IP68

Report No. 2011-1455-535, HQ-030 050 060 Ip68 1x72

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Report No. 09-1455-683, Hq-080-Ktl IP68

**Terms of Validity:**

This Product Design Assessment (PDA) Certificate remains valid until 30/Dec/2024 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

**STANDARDS**

**ABS Rules:**

The Rules for Conditions of Classification, Part 1 2019, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

Steel Vessels Rules: 4-8-3/1.3, 4-8-3/1.11.1, 4-8-3/13.1

Marine Vessels Rules: 4-8-3/1.3, 4-8-3/1.11.1, 4-8-3/13.1

The Rules for Conditions of Classification, Part 1 2019 – Offshore Units and Structures 1-1-4/9.7, 1-1-A2, 1-1-A3, which covers the following:

Mobile Offshore Drilling Units Rules: 4-3-1/15, 4-3-3/9.1.1

Mobile Offshore Units Rules: 4-3-1/15, 4-3-3/9.1.1

**National:**

N/A

**International:**

N/A

**Government:**

N/A

**EUMED:**

N/A

**OTHERS:**

N/A

A-T CONTROLS  
 Model: Series WE, SE, XE  
 19-RJ1937617-PDA  
 Issuance date: 31-Dec-2019  
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## A-T Controls Model Numbers and Specifications

<u>Class 4 &amp; 4X</u>	<u>EEEx d II B T4</u>	<u>IP 68</u>	<u>Motor Ratings</u>	<u>Output Torque (N-m / lbf-in)</u>
WE-500			24, 110, 220 VAC/ 60-50 1 phase; 24 VDC	56.5 / 500
WE-690	XE-690	SE-690	24, 110, 220 VAC/ 60-50 1 phase; 24 VDC	78.0 / 690
WE-1350	XE-1350	SE-1350	24, 110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase; 24 VDC	152.5/ 1350
WE-1700	XE-1700	SE-1700	24, 110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase; 24 VDC	192.0/ 1700
WE-2640	XE-2640	SE-2640	24, 110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase; 24 VDC	298.0 / 2640
WE-4400	XE-4400	SE-4400	110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase;	497.0 / 4400
WE-5200	XE-5200	SE-5200	110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase;	587.5 / 5200
WE-6900	XE-6900	SE-6900	110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase;	779.5 / 6900
WE-10500	XE-10500	SE-10500	110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase;	1186.0 / 10500
WE-17500	XE-17500	SE-17500	110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase;	1977.0 / 17500
WE-25900	XE-25900	SE-25900	110, 220 VAC/ 60-50 1 phase; 220, 380, 440 /60-50 3 phase;	2926.0 / 25900