



# TYPE APPROVAL CERTIFICATE

Certificate No:  
**TAA0000083**  
Revision No:  
**2**

## This is to certify:

**That the Electric Actuator**

with type designation(s)  
**120 series, 175 series, 176 series, 180 series, 225 series, 275 series, ACB2001 series**

Issued to

**Governors America Corp.**  
**Agawam, MA, USA**

is found to comply with

**DNV rules for classification – Ships, offshore units, and high speed and light craft**

## Application :

**Products approved by this certificate are accepted for installation on all vessels classed by DNV.**

## Location classes:

<b>Temperature</b>	<b>B</b>
<b>Humidity</b>	<b>B</b>
<b>Vibration</b>	<b>B</b>
<b>EMC</b>	<b>A</b>
<b>Enclosure</b>	<b>Required IP-protection according to DNV rules shall be provided upon installation onboard.</b>

Issued at **Hamburg** on **2022-09-01**

for **DNV**

This Certificate is valid until **2027-08-31**.

DNV local station: **New York**

Approval Engineer: **Dariusz Lesniewski**

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**Joannis Papanuskas**  
**Head of Section**

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid. The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

### Electric Actuators:

120 series (different wiring/harness/connectors variants):

- ADC120S
- ADD120S
- ACB120
- ADB120

Power supply 12 or 24VDC

Torque: 1,4Nm

Angular Travel: 25°

175 series (different power supply, shut-off and connectors):

- ACD175A
- ACD175
- ADD175
- ADD175A
- ADE175
- ADE175A

Power supply 12 or 24VDC

Force: 27.5N

Operating stroke 21mm

176 series (different power supply, start / stop options, connector variants and feedback sensors):

- ADD176A
- ADD176AF
- ADE176A
- ADE176AA
- ADE176AF

Power supply 12 or 24VDC

Force: 27.5N

Operating stroke 21mm

180 series (different power supply)

- ADD180G-12
- ADD180G-24
- ADE180G-12
- ADE180G-24

Power supply 12 or 24VDC

Operating stroke 20mm

225 series (different power supply, connector, housing, return spring, position feedback):

- ACB225
- ADB225
- ADB225F
- ADB225G
- ADC225S
- ADC225GS
- ADC225JS
- ADC225KS
- ADD225S
- ADD225GSC

Power supply 12 or 24VDC

Torque: 2.7Nm

Max. operating shaft travel: 25°

275 series (different power supply and harness/connector variants):

- ACB275C
- ACB275H
- ACE275H
- ACE275HD
- ACE275J
- ACE275K

Power supply 12 or 24VDC

Force: 58.7N

Operating stroke: 20mm

ACB2001:  
Power supply 24VDC  
Torque: 16.3Nm  
Max. angular shaft travel: 35°

### Approval conditions

The Type Approval covers hardware listed under Product description. When the hardware is used in applications to be classed by DNV, documentation for the actual application is to be submitted for approval by the manufacturer of the application system in each case. Reference is made to DNV rules for classification of ships Pt.4 Ch.9 Control and monitoring systems.

The following documentation of the actual application is to be submitted for approval in each case:

- Reference to this Type Approval Certificate
- System block diagram
- Power supply arrangement (may be part of the System block diagram)

### Application/Limitation

Cabling/Harness: Used cables shall be free of PVC and shall comply with flame retardant requirements stated in IEC 60332-1 and for bunches IEC 60332-3.

### Type Approval documentation

#### Data sheets:

120 Series Actuator (5-2020-B1 PIB 2010)  
175 Series Actuator (1-2021-J7 PIB 2050)  
176 Series Actuator (4-2020-D1 PIB 2053)  
180 Series Actuator (PIB 2070 C)  
225 Series Actuator (4-2020-D1 PIB 2000)  
275 Series Actuator (4-2020-G1 PIB 2030)  
ACB2001 Series (1-2021-C2 PIB2020)  
Test report: RMS 03-10/2000  
Test report: Emit Las RP 3576 F1B 95  
Test report: No. 03 /92 concluded 21.10.92 (275 series)  
Test report: Curtis-Straus LLC NQ3515-1, issue date Jan. 01, 2017  
Test report: Curtis-Straus LLC EQ3515-1, issue date Sept. 20, 2017  
Type approval assessment report issued by Certification & Inspection Services on 2021-03-26

### Tests carried out

Applicable tests according to Class Guideline DNVGL-CG-0339, edition December 2019

### Marking of product

The products to be marked with:

- manufacturer name
- model name
- serial number
- power supply ratings

### Periodical assessment

The scope of the periodical assessment is to verify that the conditions stipulated for the type are complied with, and that no alterations are made to the product design or choice of systems, software versions, components and/or materials.

The main elements of the assessment are:

- Ensure that type approved documentation is available
- Inspection of factory samples, selected at random from the production line (where practicable)
- Review of production and inspection routines, including test records from product sample tests and control routines
- Ensuring that systems, software versions, components and/or materials used comply with type approved documents and/or referenced system, software, component and material specifications
- Review of possible changes in design of systems, software versions, components, materials and/or performance, and make sure that such changes do not affect the type approval given
- Ensuring traceability between manufacturer's product type marking and the type approval certificate

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

END OF CERTIFICATE