



Marine & Offshore  
Division

Certificate number: 41217/A1 BV

File number: AP 4597

Product code: 3927H

*This certificate is not valid when presented without the full attached schedule composed of 7 sections*

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## TYPE APPROVAL CERTIFICATE

*This certificate is issued to*

**GAC, Governors America Corporation**  
Agawam - UNITED STATES OF AMERICA

*for the type of product*

**ELECTRONIC SPEED GOVERNORS**  
Electronic Speed Governor ESD5100, ESD5500 and ESD5300 Series

**Requirements:**

Bureau Veritas Rules for the Classification of Steel Ships.

EC Code: 43

*This certificate is issued to attest that BUREAU VERITAS did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.*

**This certificate will expire on: 27 Apr 2020**

**For BUREAU VERITAS,**

At BV PORT EVERGLADES CENTRE, on 27 Feb 2017,  
Flavio Rosas



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with BUREAU VERITAS. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

The electronic version is available at: <http://www.veristarnb.com/veristarnb/jsp/viewPublicPdfTypepec.jsp?id=tvhjfnjbbf>

BV Mod. Ad.E 530 October 2014

This certificate consists of 3 page(s)

## THE SCHEDULE OF APPROVAL

### 1. PRODUCT DESCRIPTION :

Product model or type designation	Product description:
<b>ESD 5100 , 5300 &amp; 5500E series</b>	Electronic speed governor
<b>Axx 120 series</b> <b>Axx 175 series</b> <b>Axx 176 series</b> <b>Axx 180 series</b> <b>Axx 200x series</b> <b>Axx 225 series</b> <b>Axx 275 series</b>	Actuators
<b>MSP 67xx series</b>	Magnetic Speed Sensors

### 2. DOCUMENTS AND DRAWINGS :

#### **Documents filed in AP 4597 issued by GAC:**

- Technical Information ESD5100 Series No. PTI1000 D, dated 08/13
- Technical Information ESD5300 Series No. PTI1041 D, dated 09/13
- Technical Information ESD5500E Series No. PTI1002E B, dated 08/13
- Technical Information 120 Series No. PTI2010, dated 10/00
- Technical Information 175 Series No. PTI4161 A dated 03/13
- Technical Information 176 Series No. PTI2053 A, dated 03/13
- Technical Information 2001 Series No. PTI2020 B, dated 05/13
- Technical Information 225 Series No. PTI2000 B, dated 09/13
- Technical Information 275 Series No. PTI2030 B, dated 03/13
- Technical Information MSP Series No. PTI3000 C, dated 08/14

#### **Documents filed in AP 3434 issued by GAC:**

- Quality Manual QA 10101 Rev. M 12/17/14.

#### **For modification A1 version:**

##### **GAC:**

- Technical Information 180 Series No. PIB 2070C, dated 02/2016

### 3. TEST REPORTS :

#### **Documents filed in AP 3434:**

- EMI Test Report 0453.96, dated May 30, 1996.
- RMS Test Report N° 03-10/2000.

#### **Documents filed in AP 3433:**

- BGT Test Report N° TB052/1996, dated 30.01.96 for ESD 5111
- BGT Test Report N° TB053/1996, dated 30.01.96 for ESD 5500
- EMIT Test Report N° RP3576F1B95, dated 12.95
- CHOMERICS Test Report N° EMI0453.96, dated 30.05.96
- RMS Test Report N° 03-10/2000, dated 03.11.2000.

#### **For modification A1 version:**

##### **Curtis-Straus LLC:**

- Climatic & Vibrations Test Report for 180 Series No. NQ3515-1 Issue No.01, dated Jan 9, 2017

**4. APPLICATION / LIMITATION :**

- 4.1 - BV Rules for the Classification of Steel Ships.
- 4.2 - Approval also valid for ships to be granted with the notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**
- 4.3 - BUREAU VERITAS Environmental Category, **EC Code: 43.**
- 4.4 - The equipment fulfils the EMC requirements for installation in General Power Distribution Zones.
- 4.5 - The fitting on board shall be the same that one used during the tests and as referred to in the above test reports.

**5. PRODUCTION SURVEY REQUIREMENTS:**

- 5.1 - The above products are to be supplied by **GAC, Governors America Corporation** in compliance with the type described in this certificate.
- 5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.
- 5.3 - **GAC, Governors America Corporation** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.
- 5.4 - **GAC, Governors America Corporation** has declared to Bureau Veritas the following production site(s):

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

**6. MARKING OF PRODUCT:**

- Maker's name or trade mark.
- Serial number of the units.
- Equipment type number or model identification under which it was type-tested.
- The title and version of each Software element included in the installed software system shall be either marked or displayed on command on the equipment.

**7. OTHERS:**

- 7.1 - It is **GAC, Governors America Corporation - USA's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.
- 7.2 - This certificate supersedes the Type Approval Certificate No. 41217/A0 BV issued on 27 Apr 2015 by the Society.

\*\*\* END OF CERTIFICATE \*\*\*