



TYPE APPROVAL CERTIFICATE



N. ELE377917CS

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA Type Approval system.

Description	Speed Controller
Type	ESD 5500E Series Speed Control Unit 180 Series Actuator Engine Mounted Actuator
Applicant	Governors America Corporation 720 Silver St. 01001-2907 Agawam (Massachusetts) U.S.A.
Manufacturer	Governors America Corporation 720 Silver St. 01001-2907 Agawam (Massachusetts) U.S.A.
Testing Standards	RINA Rules for the Classification of Ships – Part C – Machinery Systems and Fire protection – Chap. 3, Sect.6, Tab. 1

Issued in Genova on **January 25, 2018**

This certificate is valid until **January 24, 2023**

RINA Services S.p.A.



TYPE APPROVAL CERTIFICATE



N. ELE377917CS

Engine Speed Governor including:

- **ESD5500E Series** Electronic Speed Control Unit.
- **ADD180G-12V/ 24V** and **ADE180G-12V/ 24V Series** engine mounted spring return actuators.

Technical description

PIB 1002E_ ESD5500E (2016)
PIB 2070C_180 (2016)

Test report

EMIT-LAS report n. RP3576 F1B95 (12/1995)
BGT No TB053/1996 (Jan. 1996)
Curtis-Straus LLC report n. EQ3515-1 (01/18/2018); NQ3515-1 (01/09/2017), EQ3515-2 (27/12/2017)
Chomerics report n. EMI6597.14 rev. 1 (13/11/2014)
G.A.C. report n. ER1102

Remarks

According to SOLAS requirements (Chap II-1 Part C, Reg. 31.2.6 / 31.2.7 ESD 5500E speed controller with Series 180 electromechanical actuator is not suitable to be installed on the propulsion engine of ships having a single propulsion line.

ESD 5500E speed controller with Series 180 electromechanical actuator is to be used in conjunction with independent engine overspeed protection device.

Emergency generating set is to be provided with a cold back-up speed controller unit;
Back up speed controller unit is to be readily available, in case a failure occurs in the unit in service.

Speed controller power supply failure shall produce an alarm in the manned station (free voltage contact)