



TYPE APPROVAL CERTIFICATE
N. ELE440010CS

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

<i>Description</i>	Power Management Systems
<i>Type</i>	GC 500 R / HT-GC 500 R Main switchboard Gen-Set control module GC 350 R / HT-GC 350 R Emergency Gen-Set control module PWMR - Analog to PWM converter
<i>Applicant</i>	S.I.C.E.S. Società Italiana Costruzioni Elettriche Sumirago S.R.L. Via Molinello , 8 / B 21040 Jerago (VA) ITALY
<i>Manufacturer</i>	S.I.C.E.S. Società Italiana Costruzioni Elettriche Sumirago S.R.L. Via Molinello , 8 / B 21040 Jerago (VA) ITALY
<i>Reference Standards</i>	Rules for the Classification of Ships. Part C – Machinery, Systems and Fire protection – Ch.3, Sect. 6, Table 1.

Issued in Genova on **December 24, 2010**. This certificate is valid until **December 24, 2015**

Valerio Bonanni

RINA

Valerio Bonanni

Genova, December 24, 2010

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Power Management Systems

Products:

GC500R / HT-GC500 R microprocessor based module for control and monitoring of Engines and Generators used in Power Plants

GC350R / HT-GC350 R microprocessor based module for control and monitoring of Engines and Generators used in Emergency Power Plant

PWMR module PWM to Analog signal converter_ current loop (DIN EN 50022 guide mounting)

Product Information

Data sheet GC 500R doc. n. EAAD038400IT

Data sheet GC 350R doc. n. EAAD038300IT

Data sheet PWMR doc. n. EAAM038200XA

Data sheet doc. n. HT-GC500_DS_EN_12.2010

Data sheet doc. n. HT-GC350_DS_EN_12.2010

User's Manual GC310, GC350, GC500; doc. n. EAAM0310 Rev. 04

User's Manual HT-GC310, HT-GC350, HT-GC500; doc. n. EABM0310 Rev. 04

Handbook, Parallel Functions; doc. n. EAAM0199I rev. 07

Handbook GC310, GC350 and GC500 ; doc. EAAM0304EN Rev. 04

Test reports

NEMKO Report n. 159003-1R1TRFEMC (2010/ 11/ 23)

NEMKO Report n. 159003-2R1TRFEMC (2010/ 11/ 23)

General remarks:

For each installation on board a description of functionality and operation provided on the Gen-Set control modules is to be sent for our review and approval; additional information might be requested in this connection.

A failure occurring on the Gen-Set control modules shall always activate an alarm in the manned control stations.

Genova, December 24, 2010

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