



Certificate No. 03-001859/031562

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

**Engine Control and Monitoring System for multiple propulsion
and diesel generator applications**

EMS-S6

MANUFACTURER:

Scania CV AB
SE – 151 87 Södertälje
SWEDEN

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

**Croatian Register of Shipping: Rules for the classification of ships,
Part 9. – Machinery, Part 13. – Automation**

IACS UR E10

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2025-11-17**

Place and date: Split, 2021-11-17 Seal

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

DETAILED PRODUCT DESCRIPTION:

SCANIA EMS-S6 is an engine control system for electronic control of diesel engine fuel injection which ensure optimum combustion and fuel economy, speed governing and enable connection to external modules for engine management. Various programmes for governor settings produce various engine power take off. Alarm and safety systems are not included.

APPLICATION / LIMITATIONS:

System is applicable on the following engines – DI12 M / DI13 M / DI16 M

TYPE APPROVAL DOCUMENTATION:

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|------------------------------------|---|
| Technical documentation: | - System description / Control unit – 1532751 / 1726099 |
| Technical documentation: | - EMS Function / Work description – 1 588 802 / 1 588 807 |
| Technical documentation: | - Scania, Technical Regulation TB1700, dated 2000-01-28 |
| Type Testing – Environmental test: | - SP, P302202:B, dated 2003-09-03 |
| | - DELTA, 620-20075-30-R0, dated 2020-12-18 |
| Type Testing – EMC test: | - DELTA, REC-E700880, dated 2004-03-05 |
| | - DELTA, 620-20075-10-R1, dated 2020-12-21 |
| EMS – FMEA test: | - Scania, 1 501 424 (I&M) |

MARKING OF PRODUCT:

In accordance with IEC60945 – Marking and identification (The Manufacturer and Type Designation of the product, serial number, date of manufacture, supply voltage, software version).

CONDITIONS FOR CERTIFICATION:

Major changes in the hardware and software are to be approved before being installed on the vessel.
All changes in hardware or software are to be recorded as long as the system is in use on board.
The records of all changes are to be forwarded to CRS for evaluation and approval.