



Certificate No. 03-001951/031657

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:

MAN Intelligent Marine Safeguard System iSea Class

MANUFACTURER:

MAN Truck & Bus SE
Vogelweiherstrasse 33
90441 Nuremberg
GERMANY

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

Croatian Register of Shipping: Rules for the classification of ships:
Part 12. – Electrical Equipment,
Part 13. – Automation

IACS UR E10

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

APPROVAL IS VALID UNTIL: 2027-04-28

Place and date: Split, 2023-04-28

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:

MAN Intelligent Marine Safeguard System iSea^{class} is a safety, control and monitoring system for engines equipped with/without SCR.

The system comprises of following units:

Description	Part Number	Software Version
Electronics box (E-box)	-	-
Monitoring and Control System (MCS) Motherboard	51.25805-0020	V 2.5.0
Monitoring and Control System Safety System Unit (MCS SU) Motherboard	51.25805-0021	V 2.5.0
Monitoring and Control System (MCS) Control Unit	51.25805-7020	V 2.5.0
Monitoring and Control System Safety System Unit (MCS SU) Control Unit	51.25806-7009	V 2.5.0
Connector board (block)	51.25435-0254	-
Alarm unit display	51.27720-7061	V5.11.0
Safety unit display	51.27720-7054	V6.10.3
7" bridge display	51.27720-7059	V4.11.0

Voltage rating: 24 VDC

Protection rating: E-box IP44, 7" bridge display IP67

APPLICATION / LIMITATIONS:

Documentation approval is required for each installation onboard the vessel.

Correct configuration and set up for each delivery to be tested under the supervision of a Society Surveyor.

Approval is also valid for ships to be granted with class notations: AUT 1, AUT 2 and AUT 3.

TYPE APPROVAL DOCUMENTATION:

List of documents and drawings for MAN Monitoring, Alarm and Safety System for High speed 4 stroke Diesel engines, dated 2023-03-01, approved by CRS letter 989/TSE/NP/031657, dated 2023-04-28 and stored in the CRS case file 13.01.01/031657.

MARKING OF PRODUCT:

In accordance with IEC60945 – Marking and identification (The Manufacturer and Type Designation of the product, serial number, date of manufacture, safe distance to magnetic compass, supply voltage).

CONDITIONS FOR CERTIFICATION:

For each application on board CRS classed vessels complete technical documentation and drawings shall be submitted for examination and approval prior installation on board.

All changes in components and 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. Major changes in the software are to be approved before being installed in the computer.