



Certificate No. 03-001769/031469

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:

Remote Monitoring, Control and Alarm System for MTU Diesel Engines - BlueVision NG -

MANUFACTURER:

MTU Friedrichshafen GmbH
Maybachplatz 1
88045 Friedrichshafen
GERMANY



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: **2024-02-10**

Place and date: Split, 2020-09-29

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:

System is for use with one to four MTU engine propulsion plants with fixed pitch propeller. System may have extensions for up to six control stands. System is comprising of the following modules:

Local Operating Panel	LOP-14	Systembus Processing Unit - SPU1 & Local Operation Station - LOS4
Systembus Coupling Unit	SCU	CAN & Ethernet Interfaces to MCS/RCS
Systembus (Ethernet)	Switch	Ethernet Systembus
Color Graphic Display	MFD	Monitoring Control System MCS
Functional Panel	PAN MCS & RCS	Control functions - Start, Stop, Override, Emergency Stop, Reset, Control Station Transfer, Indications...
Control Lever	ROS	ROS 13, ROS 15 & ROS 16
Analogue Instruments	Advanced	RPM, Pressure, Temperature, Buzzer, Key switch

APPLICATION / LIMITATIONS:

MTU Engine Series 2000 & 4000 installed on board yachts, patrol boats and workboats.
Final module and sensors arrangement is subject of the Croatian Register of Shipping Plan Approval.

TYPE APPROVAL DOCUMENTATION:

LOP14, SCU1, ROS13A & PAN9 – MTU Performance Test, Registration No. Type Test 11/13, dated 01/07/2013,
LOP14 – MTU Type Approval Test, Registration No. 07/13, dated 15/07/2013,
SCU1 – MTU Type Approval Test, Registration No. 08/13, dated 18/07/2013,
PAN9 – MTU Type Approval Test, Registration No. 09/13, dated 18/07/2013,
MFD1 – MTU Type Approval Test, Registration No. 02/10, dated 14/06/2010,
ROS13 – MTU Type Approval Test, Registration No. 10/13, dated 18/07/2013,
MFD – MTU Multi Function Display FMEA analyses, dated 28/05/2010.

Drawings:

BlueVision_Advanced/New Generation, System documentation, E532397/01E dated 2013-04,
MTU – Introduction Bluevision New Generation, Version 1_05, JH dated 20.07.2015,
MTU – Umfang ADVANCED_Kabel und Gerate_2W-3FV1_Ovsd dated 22.01.2013.

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, software version...).

CONDITIONS FOR CERTIFICATION:

For each application on board CRS classed vessels, technical documentation and drawings shall be submitted for examination and approval prior installation on board. Major changes in the software are to be approved before on board application.