



Marine & Offshore



Attestation number: 79582/A0 BV

File number: TCE12_214

Product code: RA-CYBER

This attestation is not valid when presented without the full attached schedule composed of 7 sections

REVIEW ATTESTATION

This attestation is issued to

Kongsberg Maritime AS
Kongsberg - NORWAY

for

CYBERSECURITY REVIEW
Kongsberg Mcon Propulsion system

Requirements:

NR659 Bureau Veritas Rules on Cyber Security for the Classification of Marine Units
IACS UR E27 Rev.1(Sep 2023) Cyber resilience of on-board systems and equipment

This document is issued to attest that BUREAU VERITAS Marine & Offshore reviewed the technical documentation submitted for the equipment identified above. Details of this review are to be found in the "Schedule of Review" in the subsequent pages of this attestation.

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 22 Jul 2025,

Rune Marstein

This attestation was created electronically and is valid without signature



This attestation will not be valid if the applicant makes any changes or modifications to the product which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. This attestation is issued within the scope of the General Conditions of BUREAU VERITAS Marine & Offshore Division available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against BUREAU VERITAS for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgment, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

SCHEDULE OF REVIEW

1. PRODUCT DESCRIPTION :

The Kongsberg Mcon propulsion, thruster and steering gear control system is a processor-based system for controlling the thrust units of the vessel. I.e. controlling thrusters (tunnel thrusters or azimuth thrusters), main propellers and rudders.

The product consists of hardware and software components listed in document 110-0053458 rev. D.

- Operator Station version 8" Panel Computer, 10.4" Panel Computer & 12" Panel Computer with KM –Embedded Operating System version 1.5.x, HMI Application version 4.7.x and Control System Application version 1.9.x.
- Controller version H1151.6059 Marine Controller & H1170 Marine Controller with KM – Embedded Operating System version 1.5.x and Control System Application version 1.9.x.
- Managed Ethernet switch version Lynx with Westermo Operating System version 4.3x.x.

2. DOCUMENTS AND DRAWINGS :

| Filename | Reference |
|--|------------------|
| Cyber security Usermanual Mcon | V1.0 |
| 110-0053460(D) Mcon & Advanced Maneuvering - Security Capabilities | Rev. D |
| 110-0053459D Mcon System Topology | Rev. D |
| 110-0053458D Mcon Asset Inventory | Rev. D |
| 110-0053461(F) - Cyber Secuity Test Procedure AdvMan Mcon | Rev. F |
| KM-PRO-0120 Configuration Management Procedure_en | V1.0 |
| KM-GUI-0118 Guideline for Secure Development Lifecycle _SDLC_en | Rev. B |
| 110-0098175(B) Mcon & AdvMan Cyber Security Configuration Check list | Rev. B |
| 110-0100279 Mcon and Advanced Maneuvering Restore procedure | Rev. A |
| KM-PROC-0080 Change management_en | Rev. B |
| TCE12_214&215_test_report signed | Rev. 01 |

No departure from the above documents shall be made without the prior consent of the Society. The manufacturer must inform the Society of any modification or changes to these documents and drawings.

3. TEST REPORTS :

Test report 'TCE12_214&215_test_report signed' was witnessed by a qualified BV Surveyor on the 14/02/2025:

The following subjects were investigated :

- SR1.1 - Human User identification and authentication
- SR1.2 - Identifier Management
- SR1.7 - Strength of password-based authentication
- SR2.3 - Use control for portable and mobile devices
- SR2.5 - Session lock
- SR2.8 - Auditable events
- SR2.11 - Timestamps
- SR3.1 - Communication Integrity
- SR3.3 - Security Functionality Verification
- SR4.1 - Information Confidentiality
- SR7.1 - Denial of Service Protection
- SR7.5 - Emergency Power
- SR7.7 - Least Functionality

4. APPLICATION / LIMITATION :

4.1 This attestation is an intermediate document and does not constitute by itself a BV Type Approval Certificate. This attestation is limited to cyber resilience of product described in 1. as per UR E27 Rev. 1 dated Sept.2023.

4.2 This attestation is only valid when attached to the valid Type Approval Certificate 81625.

4.3 This attestation has been issued based on the review of documentation provided for the Type Approval Certificate 81625/A0 BV. It is manufacturer's responsibility to inform the Society of any modification or changes which could impact the validity of this attestation.

4.4 Only Hardware and Firmware / Software successfully tested together in compliance with the Rules as referred to in page one, according to the declaration of the manufacturer are covered by this attestation.

4.5 The installation shall comply with the Manufacturer's recommendation described in the above-referenced documentation

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - For information, Kongsberg Maritime AS, has declared to Bureau Veritas the following production sites:

**Longvafjordvegen 379
Postboks 1522
N-6293 LONGVA
NORWAY**

6. MARKING OF PRODUCT :

N/A - Software.

7. OTHERS :

It is Kongsberg Maritie AS responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

***** END OF ATTESTATION *****