



NIPPON KAIJI KYOKAI

TYPE APPROVAL CERTIFICATE FOR SYSTEMS AND EQUIPMENT WITH CYBER RESILIENCE

Certificate No. TA26495M

This is to certify that the undernoted product(s) has/have been approved in accordance with the requirements specified in Chapter 10, Part 7 of “Guidance for the Approval of Materials and Equipment for Marine Use”, IACS UR E27 and the relevant Society's Rules.

This certificate is issued to

Applicant:	Kongsberg Maritime AS
Place of Applicant:	Bekkajordet 8A, 3189 Horten, Norway
Manufacturer:	See attached sheet(s)
Product description:	See attached sheet(s)
Model:	K-Chief + K-Safe
Approval No.:	24CY001
Valid until:	30 June 2029

The details are described in the attached sheet(s).

Issued at Tokyo on 14 July 2026.



T. Okamoto
General Manager
Machinery Department

Note: The applicant, if desired, is requested to apply to the Society for renewal prior to the expiration date.
This certificate has been issued due to the additional components.

Systems and Equipment with Improved Cyber Resilience:**1. Rules and standards:**

- The product is satisfied with requirement of Chapter 4, Part X of the Rules for the Survey and Construction of Steel Ships, as amended by IACS UR E27 Rev.1.

2. Limitation:

- The product is not capable of communicating to untrusted networks in accordance with requirement of 4.4.3, Part X of the Rules for the Survey and Construction of Steel Ships, as amended by IACS UR E27 Rev.1.
- Major changes of the type approved system affecting future deliveries are to be informed to the Society. If the changes are considered to affect functionality for which rule requirements apply, a new functional type test may be required, and the certificate may have to be renewed to identify the new version.
- Minor changes of the type approved system not affecting functionality for which rule requirements apply are to be documented and submitted.
- For each vessel, Computer-based system asset inventory, Topology diagrams and Test reports are to be submitted for approval or reference in accordance with Table X2.3, Part X of the Rules for the Survey and Construction of Steel Ships.

3. Components:

Category	Components
Operator Stations	MC340 Range Running Windows10
	MC360 Range Running Windows10
	MC380 Range Running Windows11
Operator Control Panels	COP-05 BU-AUT Panel
	COP05 ALC Stand Alone
	Tracker Ball Panel (TBP)
	Panel ALC
	Panel Input Mk3 COP 05
Earth Failure Indicator	EFI-16
	EFI-16-2
Media Converter	RMC-ST
	B&R X20 Communication Module
Controller	RCU 502i
	RCU 601
	RCU 602

- To be continued -

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Attached sheet -2/4 to the Certificate No. TA26495M

Category	Components
IO Units	RMP420
	RMP420S
	RDIOR420
	RDIO420S
	RMP422i
	RMP422Si
	RMP201-8
	RSER200-4
	RHUB200-5
	B&R X20 IO Module System
PMS IO	LSP 7.x (PPU 300)
Signal Processing Unit	GLK-300
Distributed Processing Units (DPU)	Remote Analog input Module - RAi-16xe
	Remote Digital output Module - RDo-16xe
	Remote Digital input Module - RDi-32xe
	Remote Digital input Module - RDi-32Axe
	Remote Analog output Module - RAo-8xe
	Remote Digital I/O Module - RIO-C2xe
	PSS Module
LAN to CAN module	L2C
	B&R X20 Bus Module
Network component	RTL8153B-USB3.0/3.1/3.2 to 4x Gb Ethernet
	Catalyst 1000 Series
	IKS-6700 Series
	EDS-408A Series
	EDS-518E Series
	EDR-8010-2GSFP
	FGR-60F
	FS-124F
Extension Alarm and Watch Call Units	WCC 600
Alarm buzzer	ALB USB Panel

- To be continued -

4. Software for K-Chief and K-safe:

- Refer to Asset Inventory (Doc. No. 110-0066104 Rev. K, dated 15 June 2026).
- The following AIM Basis Software Releases are covered:
8.3, 8.5, 8.6, 8.7, 8.8, 8.10, 8.12 and 8.13.

5. Documentation and Test Reports:

- Asset Inventory (Doc. No. 110-0066104 Rev. K, dated 15.06.2026)
- Topology (Doc. No. 110-0066093 Rev. B, dated 06.05.2024)
- Security Capabilities (Doc. No. 110-0066099 Rev. F, dated 16.04.2026)
- IACS E27 Test Procedure for K-Chief & K-Safe (Doc. No. 110-0066078 Rev. C, dated 24.05.2024)
- Guideline for Secure Development Lifecycle (Doc. No. KM-GUI-0118 Rev. A, dated 3/21/2024)
- Cyber Security information for K-Chief & K-Safe
- Configuration Management Procedure (Doc. No. KM-PRO-0120 Rev. A, dated 2/13/2024)
- Guidelines for service on AIM systems (Doc. No. KM-GUI-9504 Rev. 3, dated 07.04.2013)
- Change Management (Doc. No. Proc-0080 Rev. A, dated 2024/01/03)
- Guidelines for backup on AIM system (Doc. No. KM-GUI-9505 Rev. D, dated 2019/09/18)
- AIM Revision History (Doc. No. 110-0001444 Rev. C, dated 17.04.2026)
- Backup Procedure (Doc. No. 110-0068347 Rev. A)
- Security Configuration Guideline IACS E27 K-Chief and K-Safe (Doc. No. 110-0078720 Rev. D, dated 15.04.2026)
- Type Approval Renewal MC380 / Windows11 (Doc. No. 110-0165159 Rev. B, dated 12.05.2026)

6. Manufacturer & Place of Manufacturing:

Manufacturer	Place of Manufacturing
Kongsberg Maritime AS	Bekkajordet 8A, 3189 Horten, Norway
Kongsberg Maritime AS	Kirkegårdsveien 45, 3616 Kongsberg, Norway
Kongsberg Maritime Korea Ltd	9-7, Sandan 3-ro, Jeonggwan-eup, Gijang-gun, Busan, Korea
Kongsberg Maritime China Ltd	136 North Fute Road, China (Shanghai) Pilot Free Trade Zone 200131 Shanghai, China

- To be continued -

7. Product description:

- Alarm and Monitoring
- K-Gauge application and GLK SPU
- Power Management System
- Auxiliary generators protection
- Auxiliary machinery control
- Tank management
- Ballast/bunker monitoring and control
- Gas management
- Cargo monitoring and control
- Fully automated climate control
- Watch call system
- Operator fitness alarm system

- The End -