

# NIPPON KAIJI KYOKAI

# TYPE APPROVAL CERTIFICATE FOR SYSTEMS AND EQUIPMENT WITH CYBER RESILIENCE

Certificate No. TA24341M

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 and Type Approval of Materials and Equipment for Marine Use" 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:

Monitoring and control system

Model:

AutoChief 600 + K-Steering

Approval No.:

24CY002

Valid until:

30 June 2029

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

Issued at Tokyo on 1 July 2024.

S. Oishi

General Manager

Machinery Department

Note: The applicant, if desired, is requested to apply to the Society for renewal prior to the expiration date.

### NIPPON KAIJI KYOKAI

Attached sheet -1/3 to the Certificate No. TA24341M

# 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.

- To be continued -

3. Components:

Components	
Operator Stations	MC340
	MC360
	OS panel computer 12"
Components for navigation bridge	Lever Telegraph LTU11
	Lever Telegraph LTU11ME
	ABE11 - 3-buttons
	KBE15
Touch Control Panel	CP12 W/KBE15 + ABE11
Pushbutton Telegraph	PBT Flat Version Black
Bridge Wing Control Unit	BWU21 Left version
	BWU21 Right version
Controller unit	Segment Controller unit - SCU
Media Converter	RMC-ST
Distributed Processing Units (DPU)	Remote Analog input Module-RAi-16xe
	Remote Digital output Module-RDo-16xe
	Remote Analog TC input Module RAi-10tc
	Remote Digital input Module-RDi-32xe
	Remote Analog output Module-RAo-8xe
	Remote Digital I/O Module - RIO-C2xe
Digital Governor Unit	DGU
RPM Units	RPME
Main Engine Interface	MEI
Engine Safety Unit	ESU
	ESU12
Electric Shaft System	ESS
Multi Purpose Panel	MPP Flush-Mount Black
Multi Purpose Display	MPD Flush
	CPP Backup Panel - PB4
LAN to CAN module	L2C
Common Thruster Le	Lever K-Thrust Dual
	Lever K-Thrust single
	Lever K-Thrust Display
	Lever K-Thrust Dual w/Display
	Lever K-Thrust single w/Display
	Mini Wheel K-Thrust w/Display
	Mini Wheel K-Thrust
Electrical Fuel Actuator	ELACT 3812

#### NIPPON KAIJI KYOKAI

Attached sheet -3/3 to the Certificate No. TA24341M

## 4. Documentation and Test Reports:

- Asset Inventory (Doc. No. 110-0051790 Rev. F, dated 07.05.2024)
- K-Steering + AC 600 System Topology (Doc. No. 110-0062446 Rev. A, dated 08.01.2024)
- K-Steering + AC 600 System Topology (Doc. No. 110-0056695 Rev. B, dated 07.05.2024)
- Security Capabilities (Doc. No. 110-0056696 Rev. F, dated 19.06.2024)
- AC-600 and K-Steering Test Procedure (Doc. No. 110-0056698 Rev. F, dated 06.06.2024)
- Guideline for Secure Development Lifecycle (Doc. No. KM-GUI-0118 Rev. A, dated 3/21/2024)
- AutoChief and K-Steering Cyber Secure Configuration Guideline (Doc. No. 110-0076351 Rev. B, dated 10.06.2024)
- 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)
- AutoChief & K-Steering User Manual for Cyber security (Doc. No. 110-0076343 Rev. B, dated 10.06.2024)
- Change Management (Doc. No. Proc-0080 Rev. A, dated 2024/01/03)
- AutoChief Configuration Guideline (Doc. No. 110-0056704 Rev. B, dated 07.05.2024)
- AIM Revision History (Doc. No. 110-0001444 Rev. B, dated 13.02.2024)
- Backup Procedure (Doc. No. 110-0068347 Rev. A)

5. 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