



CERTIFICATE NUMBER	25-0172412-PDA
EFFECTIVE DATE	19-Feb-2025
EXPIRY DATE	18-Feb-2030
ABS TECHNICAL OFFICE	Yokohama Engineering Services

CERTIFICATE OF Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

KONGSBERG MARITIME AS

located at

POSTBOKS 483, , KONGSBERG, Norway, NO-3601

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product: Remote Control System
Model: K-Thrust 720
Thruster, Propulsion and Steering Remote Control System
Endorsements:
Tier: 5 - Unit Certification Required

This Product Design Assessment (PDA) Certificate remains valid until 18/Feb/2030 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau Of Shipping

Motohiro Tamura,Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

Electronically published by ABS London.

Reference WO0172412, dated 28-Feb-2025

KONGSBERG MARITIME AS

POSTBOKS 483

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Tier: 5 - Unit Certification Required

Product: Remote Control System
Model: K-Thrust 720
Thruster, Propulsion and Steering Remote Control System

Endorsements:

Intended Service:

ABS Classed Vessels and Offshore Facilities in accordance with the listed ABS Rules and International standards.

Description:

K-Thrust 720 offers manual remote control of main propulsion, thrusters and steering gears. When combined with the capabilities of K-Pos dynamic positioning, K-Thrust 720 becomes a maneuvering system with a complete range of ship-handling functions:

- Manual control from levers
- Autopiloting
- Joystick control with automatic heading possibility
- Automatic station keeping

The K-Thrust 720 concept includes a range of levers, indicators, panels and controllers that can be arranged in virtually any combination on the bridge, in Engine Control Room (ECR) and in other locations, for remote control of the propulsion, steering gear and thrusters.

The hardware and software platform of K-Thrust 720 is particularly adapted for integration with (K-Pos), Navigation (K-Bridge) and vessel control (K-Chief) systems.

This can be done without compromising the independence of the manual control system.

Rating:

24V DC or 120-250V AC Single Phase, 220-690V AC

Service Restriction:

Unit Certification is required for this product as indicated on Marine Vessels Rules 4-1-1/table 3 item 35 (Computer based systems cat. III).

Control systems for propulsion machinery or steering gear are considered as Computer based systems Category III as indicated on ABS Marine Vessels Rules 4-9-3/table 1.

Software documentation and testing must be provided according to ABS Marine Vessels Rules 4-9-3/table 2.

Documentation according to Marine Vessels Rules 4-9-1/7.3.1, 4-9-1/7.3.9 & 4-9-1/7.7 must be submitted.

MVR 4-9-13 (IACS UR E27 Rev.1 Sep 2023) is out of this PDA scope.

Comments:

Tests and approval are for hardware and software versions only.

Each configuration and external connection are to be specifically approved.

The Manufacturer has provided a declaration about the control of, or the lack of, Asbestos in this product.

Notes/Drawing/Documentation:

Drawing No. 409587C, K-Thrust 720 Product Description, Revision: 0, Pages: 44

Drawing No. RRM000027927, Aquapilot control head ND, Revision: -, Pages: 1

Drawing No. RRM000027928, Aquapilot control head ND, Revision: -, Pages: 1

Drawing No. RRM000027929, Aquapilot control head ND, Revision: -, Pages: 1

Drawing No. 3334102/F, Direct Wiring Panel and IO Controller, Revision: -, Pages: 34

Drawing No. 412460/C, Thruster Command panel Hardware Module Description, Revision: -, Pages: 44

Drawing No. E21088.03, Test Report, Revision: -, Pages: 122, dated 28 October 2021, issued by Nemko,

Drawing No. 12275110, Test for Marine Type Approval of STG Panel and STG Panel Controller, Revision: -, Pages: 83, dated 2 June 2010, issued by DELTA,

Drawing No. E16203.00, Test Report, Revision: -, Pages: 141, dated 29 March 2017, issued by Nemko,

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Tier: 5 - Unit Certification Required

Terms of Validity:

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STANDARDS

ABS Rules:

The Rules applicable to this assessment are:

2025 Marine Vessels Rules 1A-1-4/7.7, 1A-1-A3 & A4, 4-9-3 (Cat III) and 4-9-9/13

2025 Offshore Units Rules 1B-1-4/9.7, 1B-1-A2 & A3 and 4-3-4/5

2025 High-Speed Craft 1C-1-4/11.9, 1C-1-A2 & A3, 4-7-8 (Cat III) and 4-7-9/15

National:

N/A

International:

NA

Government:

N/A

EUMED:

NA

OTHERS:

IACS UR E10 Rev8:2021