

CERTIFICATE NUMBER EFFECTIVE DATE EXPIRY DATE ABS TECHNICAL OFFICE 21-1992603-PDA 04-Feb-2021 03-Feb-2026 Rio de Janeiro Engineering -Machinery

# Product Design Assessment

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

## SELCO APS located at

## BETONVEJ 11, DK-4000 ROSKILDE, Denmark

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:	Engine Control System
Model:	M2500 Engine Controller
	M2600 Shut-down Unit
Endorsements:	
Tier:	5 - Unit Certification Require

This Product Design Assessment (PDA) Certificate remains valid until 03/Feb/2026 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

Roberto B. Assumpção Roberto B Assumpcao, 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 T2078187, dated 04-FEB-2021.

> SELCO APS BETONVEJ 11 DK-4000 ROSKILDE Denmark Telephone: +45 7026 11 22 Fax: +45 7026 25 23 Email: selco.dk@selco.com Web: www.selco.com Tier: 5 - Unit Certification Required

Product:	<b>Engine Control System</b>
Model:	M2500 Engine Controller
	M2600 Shut-down Unit

#### **Endorsements:**

#### **Intended Service:**

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

#### **Description:**

-M2500: Integrated Engine Control and Monitoring Unit for Marine engines such as Auxiliary and Emergency Generators and propulsion engines with 9 x Digital Inputs, 8 x 4-20mA Analogue Inputs; 4 x Engine Control, 4 x Alarm, 12 x User Configurable Relay Outputs; Engine Stop and Start/Stop Control Relays -M2600: shut-down device (safety system) for the protection of marine engines with 10 shut-down available inputs, engine speed can be detected from magnetic and inductive pick-ups or digital inputs.

#### **Rating:**

M2500: Power Supply: Redundant 2x24VDC (+/-30%), 500mA with failure alarm; Operating Temperature -15C to 70C; 95% RH, IP 54.

M2600: Power Supply: Redundant 2x24VDC (+/-30%), Operating Temperature -15C to 70C, IP 30.

#### **Service Restriction:**

1. Where the product is used in a Category II or III Computer Based Systems as described in Section 4-9-3/Table 1 of the 2021 Marine Vessel Rules, the complete assembly unit or subassembly unit is to be tested at the manufacturer's shop in the presence of the Surveyor to verify compliance with the tests in 4-9-9/15.7 Table 2. Otherwise, unit certification is not required.

2. If the manufacturer or purchaser request an ABS Certificate for compliance with a specification or standard, the specification or standard, including inspection standards and tolerances, must be clearly defined.

#### **Comments:**

1. Approval is for hardware only. Each configuration and external connection arrangement is to be specifically approved.

2. When incorporated in a system of Category I, II or III in accordance with 4-9-3/7.1 and 4-9-3/Table 1 of the 2021 Marine Vessel Rules, the documentation detailed in 4-9-3/Table 2 is to be submitted to ABS or to be available for review by ABS as applicable.

3. Environmental and EMC tests performed by Delta (test reports DANAK-1910664 and DANAK-19/14491).

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

#### Notes/Drawing/Documentation:

Drawing No. P20-0110-8, M2500 E10 rev7 Supplt test report, dated 04-Dec-2020 Drawing No. P20-0110-8, M2600 E10 rev7 suppl test report, dated 04-Dec-2020

Support documentation from previous review: Drawing No. M2500 Configuration Manual Drawing No. M2500 Datasheet Drawing No. M2500 Installation Manual Drawing No. M2500 Operator Manual Drawing No. M2500 Test Report Drawing No. Danak-19/14491

#### **Terms of Validity:**

This Product Design Assessment (PDA) Certificate remains valid until 03/Feb/2026 or until the Rules and/or

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Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

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#### STANDARDS

#### **ABS Rules:**

2021 Rules for Condition of Classification: 1-1-4/7.7, 1-1-A3 & A4

2021 Marine Vessel Rules: 4-9-9/13, 4-9-9/15.7 Tables 1 & 2

2021 Rules for Conditions of Classifications - Offshore Units and Structures: 1-1-4/9.7, 1-1-A2 & A3

2021 Mobile Offshore Units Rules: 6-1-1/9, 6-1-1/13

#### National:

NA

**International:** IACS UR E10 Rev. 7:2018 IEC 60945 Ed. 4.0 B:2002

**Government:** NA

### EUMED:

NA

#### **OTHERS:**

NA