



Confirmation of Product Type Approval

Company Name: KOBELT MANUFACTURING CO. LTD.

Address: 8238 129TH STREET SURREY V3W 0A6 Canada

Product: Electronic Engine Control System

Model(s): Mighty Mariner 6501S, 6505S, 6506, 6505-2000, 6503, 6527S, 6500-SK and 6570

Endorsements:

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	24-2450544-PDA	18-JAN-2024	17-JAN-2029
Manufacturing Assessment (MA)	23-5867853	06-JUN-2023	05-JUN-2028
Product Quality Assurance (PQA)	NA	NA	NA

Tier

5 - Unit Certification Required

Intended Service

Marine & Offshore Application - Controls the Clutch and Throttle of Single or Multiple Marine Engines either mechanically with Actuators or electronically with Output Signals. It is intended for Systems with Communication Cable runs less than 40 meters.

Description

"Mighty Mariner" Electronic Engine Control System consists of the following components:

Control heads (6501S, 6505S, 6506)

Remote Control Interface Unit (6505-2000)

Electronic Control Interface Unit (6503)

Electronic Actuator (6527-S)

Synchronizer Proximity Sensor (6500-SK)

Twin Station Twin Engine System (6570)

Ratings

24VDC Power Supply

Operating Temperature Range: -10 °C to +55 °C

Service Restrictions

Unit Certification is required for this product, in case of Main Propulsion Control System. Due to

communication cable length (40m max.) limitation on these electronic products, the system is not recommended, in general, for vessel greater than 30m in length or as far as the cable the cable length allows.

Actuators (6527-S) & Electronic Engine Interface (6503): These units, while traditionally mounted in or around the engine room, should not be mounted where excessive heat or moisture is present. Nor should it be mounted next to high power devices such as motors, heaters, or transmitters.

Automatic power supply transfer is to be verified for each specific installation.

Comments

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

Notes, Drawings and Documentation

Document No. Test Report - ACME 2004076_RevA - MM EMC, Models 6503, 6506-B, 6505-2000-B, 6505S-TC-6500-SK dated November 10, 2004, Revision: 1, Pages: 83;

Document No. Test Report - QAI E10996-2110_Kobelt_Mighty Mariner Propulsion System Rev 1.0 dated February 17, 2022, Revision: 1, Pages: 41;

Document No. Test Report - QAI E10996-2202_Kobelt_Mighty Mariner Propulsion System _Rev 1.0 dated October 19, 2022 Revision: 1, Pages: 20;

Document No. Test Report - Goshu 680012_Rev1.0 dated December 27, 2022, Revision: 1, Pages: 88;

Document No. Test Report - Goshu 680040_Rev1.0 dated December 30, 2004, Revision: 1, Pages: 128;

Document No. Test Report - LabTest - 30.00.21114-1_Rev.0 - Vibration Test Report dated September 29, 2022, Revision: 0, Pages: 42;

Document No. Test Report - LabTest - 30.00.21599-1_Rev.0_Kobelt LR-IEC- 6300-0100, 6300-0200, 6300-0300, 7175, 6506, 6605, 6500-SK dated March 22, 2022, Revision: 0, Pages: 21;

Document No. Test Report - LabTest 8422-1.0_Rev1.0 - MM 6503 - LRS Test Spec 1 (2002) dated June 30, 2006, Revision: 1.0, Pages: 54;

Document No. 6570, Electronic Propulsion Control Head, Revision: -, Pages: 104;

Document No. 6605, Electronic Propulsion Control Head, Revision: -, Pages: 83;

Document No. Test Report - LabTest 8426-1-EMC_Rev1.0 - MM EMC, dated June 01, 2006, Revision: 1.0, Pages: 46;

Document No. Test Report - LabTest 9669-1S_Rev0, Environmental Control, dated August 23, 2010, Revision: 0, Pages: 71;

Document No. Test Report - QAI - E10996-2105 IP56 Report - Rev1, dated November 29, 2021, Revision: -, Pages: 26;

Document No. Test Report - E10996-2302_Kobelt_Mighty Mariner_ Rev 1.0. dated August 22, 2023, Revision: 1.0, Pages: 22;

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 17/Jan/2029 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.

ABS Rules

2024 Rules for Conditions of Classification, 1-1-4/7.7, 1-1-A3, 1-1-A4, which covers the following:

2024 Rules for Building and Classing Marine Vessels: 4-9-3/11.9, 4-9-9/13, 4-9-9/ Table 1

2024 Rules for Conditions of Classification, Offshore Units and Structures 1-1-A2, 1-1-A3, which covers the following:

2024 Rules for Building and Classing Mobile Offshore Unites: 4-3-5/3.11.2.

International Standards

NA

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

None



A handwritten signature in blue ink, appearing to read 'James W. ...', is positioned above the printed name.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 29-Aug-2024 11:07

ABS has used due diligence in the preparation of this certificate, and it represents the information on the product in the ABS Records as of the date and time the certificate is printed.

If the Rules and/or standards used in the PDA evaluation are revised or if there is a design modification (whichever occurs first), a PDA revalidation may be necessary.

The continued validity of the MA is dependent on completion of satisfactory audits as required by the ABS Rules. The validity of both PDA and MA entitles the product to receive a **Confirmation of Product Type Approval**.

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 prior to the effective date of the ABS Rules and standards applied at the time of PDA issuance. ABS makes no representations regarding Type Approval of the Product for use on vessels, MODUs or facilities built after the date of the ABS Rules used for this evaluation.

Type Approval requires Drawing Assessment, Prototype Testing and assessment of the manufacturer's quality assurance and quality control arrangements. The manufacturer is responsible to maintain compliance with all specifications applicable to the product design assessment. Unless specifically indicated in the description of the product, certification under type approval does

not waive requirements for witnessed inspection or additional survey for product use on a vessel, MODU or facility intended to be ABS classed or that is presently in class with ABS.

Due to wide variety of specifications used in the products ABS has evaluated for Type Approval, it is part of our contract that; whether the standard is an ABS Rule or a non-ABS Rule, the Client has full responsibility for continued compliance with the standard.

Questions regarding the validity of ABS Rules or the need for supplemental testing or inspection of such products should, in all cases, be addressed to ABS.