



CERTIFICATE NUMBER
16-HG1497800-1-PDA

DATE
29 Mar 2016

ABS TECHNICAL OFFICE
Hamburg Engineering Department

CERTIFICATE OF DESIGN ASSESSMENT

This is to certify that a representative of this Bureau did, at the request of
HEINZMANN GMBH & CO. KG.

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: **Diesel Engine, Control System**

Model: **DARDANOS I, MVC 01**

This Product Design Assessment (PDA) Certificate 16-HG1497800-1-PDA, dated 29/Mar/2016 remains valid until 28/Mar/2021 or until the Rules or specifications used in the assessment are revised (whichever occurs first).

This PDA is intended for a product to be installed on an ABS classed vessel, MODU or facility which is in existence or under contract for construction on the date of the ABS Rules or specifications used to evaluate the Product.

Use of the Product on an ABS classed vessel, MODU or facility which is contracted after the validity date of the ABS Rules and specifications used to evaluate the Product, will require re-evaluation of the PDA.

Use of the Product for non ABS classed vessels, MODUs or facilities is to be to an agreement between the manufacturer and intended client.

AMERICAN BUREAU OF SHIPPING

Ulf Numirski
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 the terms and conditions as contained in ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010).

HEINZMANN GMBH & CO. KG.

AM HASELBACH 1

D-79677 SCHOENAU

Germany

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Email: info@heinzmann.de

Web: www.heinzmann.com

Tier: 5 - Unit Certification Required

Product: Diesel Engine, Control System

Model: DARDANOS I, MVC 01

Intended Service:

Injection and speed control system for four (4) stroke diesel engines in Multiple Engine Installations.

Description:

System consisting of fuel injection valve control units MVC 01, Hall sensors HIA 3X-..., Temperature sensor TS 01-28-PT1000, solenoid valves SM 01/ 02.

Rating:

Rated power supply: 24V DC.

Output voltage for solenoid valves: 24V, 48V, 90V DC.

Degree of protection: IP65.

Max. working temperature: 80°C.

Service Restriction:

Unit Certification is required for this product.

Only for use in multiple engine installations. Independent engine overspeed protection and over temperature protection for the control units is required.

Comments:

- Each particular application is to be specifically approved in conjunction with the relevant engine type and with the engine installation arrangements.

- System Category III. Manufacturer is to keep evidence of quality plan for software, inspection of hardware components from sub-suppliers and quality control in production. Performance integration, fault simulation, final system factory acceptance tests, on-board system and integration tests to be witnessed by the Surveyor.

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

Notes/Drawing/Documentation:

Drawing No. 2_MV-09-001-e-06-11-V5740, Manual, Revision: -, Pages: 1

Drawing No. 5_110446_01_G_TR, Test Report, EMC, Revision: -, Pages: 1

Drawing No. 620-00-147-10, Dimension Drawing, Revision: -, Pages: 1

Drawing No. 620-00-147-11, Dimension Drawing, Revision: -, Pages: 1

Drawing No. 620-00-147-20, Dimension Drawing, Revision: -, Pages: 1

Drawing No. 6_110446_02_G_TR, Test Report, EMC, Revision: -, Pages: 1

Drawing No. MVC-01_620-00-147-00, Dimension Drawing, Revision: -, Pages: 1

Drawing No. MVC01_01_en, Technical Report, Modifications, Revision: -, Pages: 1

Terms of Validity:

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STANDARDS

ABS Rules:

2016 Steel Vessel Rules, 1-1-4/7.7, 1-1-Appendix 3 and 4, 4-2-1/7.3, 4-9-3/5.1.1/5.1.2/5.1.3/5.1.4/5.1.5/5.1.6/5.1.7/5.1.9/11.1/7.1, 4-9-3/Table 1 and 2, as applicable for inherent system software, 4-9-8/7/13

National:

NA

International:

NA

Government:

NA

EUMED:

NA

OTHERS:

NA