



CERTIFICATE NUMBER

11-HG796396-PDA

DATE

20 September 2011

ABS TECHNICAL OFFICE

Hamburg Engineering Services

CERTIFICATE OF DESIGN ASSESSMENT

This is to Certify that a representative of this Bureau did, at the request of
**BOENING AUTOMATIONSTECHNOLOGIE GMBH & CO. KG -
GANDERKESEE**

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: **Alarm and Monitoring System**

MODEL: **DZA 11 (Ship alarm and Monitoring System)**

This Product Design Assessment (PDA) Certificate 11-HG796396-PDA, dated 20/Sep/2011 remains valid until 19/Sep/2016 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

Michael R. V. Zech
Engineer

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).

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PRODUCT:
Alarm and Monitoring System

MODEL:
DZA 11 (Ship alarm and Monitoring System)

Intended Service:
Ship Alarm and Monitoring System for ABS classed vessels with +ACCU or +ABCU class notation.

Description:
The Alarm Monitoring and Control System DZA 11 comprises: AHD 882 Central Unit, AHD 650/ 651 Control and Indication Unit, AHD-DPS02 Navigation and Signal Lights Control and Monitoring System, AHD-PS 15/ 30/ 47 Binary Data Station, AHD-SAS 15 Data Station for analogue and binary sensors.

Ratings:
Power Supply: 24 VDC

Service Restriction:
Unit Certification is required for this product in accordance with section 4-1-1/Table 3 of the Steel Vessel Rules.

Comments:
Tests and approval are for hardware and software only. Each particular application or configuration and external connection is to be specifically approved.

Notes / Drawings / Documentation:
This Product Design Assessment (PDA) is valid only for products intended for use on ABS classed vessels, MODUs or facilities which are in existence or under contract for construction tests to be witnessed by the Surveyor.
Test Reports: Electromagnetic Compatibility SJ-QP/EMV 053/2006, 06/6135-2, 07/7100-8-1, 07/7100-9-3, 09/8175-6, Environmental 03-12/2006, 07-1692, 08-1893, 08-1930, 08-1935, 09-2344

Term of Validity:
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STANDARDS

ABS Rules:

National:

NA

International:

NA

Government Authority:

NA

EUMED:

NA

Others:

NA