



Confirmation of Product Type Approval

Company Name: DEIF A/S

Address: FRISENBORGVEJ 33 DK-7800 Denmark

Product: Alarm and Monitoring System

Model(s): AL8-2

Certificate Type	Certificate Number	Issue Date	Expiry Date
Product Design Assessment (PDA)	20-LD1975958-PDA	22-APR-2020	21-APR-2025
Manufacturing Assessment (MA)	18-EG3574567	25-OCT-2018	27-NOV-2023
Product Quality Assurance (PQA)	NA	NA	NA

Tier

5

Intended Service

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

Description

The AL8-2 is a microprocessor based, panel mounting system based on Q96 design with push button programming on the front faceplate and time delay functions. It monitors up to 8 channels such as temperature, pressure, tank level, switchboard and other parameters in machinery and auxiliary equipment and provides alarm indications when the threshold limits are exceeded. Each input can be individually programmed for N/O or N/C alarm contact output. Up to 5 units can be arranged as master / slave configurations.

Ratings

Supply voltage: 12 to 110 V DC +/- 25%;

Operating temperature: -25 to 70 degree C;

Protection: Front - IP 54, Terminals - IP 20

Service Restrictions

Unit Certification is not required for this product.

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

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

Notes, Drawings and Documentation

Drawing No. Software documentation:EPC0375-A- Long term test, Deif, Date: January 2010, Pages: 1-6,

Drawing No. EPC0375-B-Performance test, Deif, Date: January 2010, Pages: 1-14,

Drawing No. EPC0375-C-Software Release Check List Version 2.0, Pages: 1-2

Drawing No. Data Sheet- 4921230002, Version D, Pages: 1

Drawing No. Programming Manual- 4189320003,Version C,Pages: 1-19

Drawing No. Table of Products- 4921240140 Version ZI,Pages: 6

Drawing No. Type Certificate, 4124020002 Version B,Pages: 1

Term of Validity

This Product Design Assessment (PDA) Certificate remains valid until 21/Apr/2025 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

- Marine Vessel Rules (2020): 1-1-4/7.7, 1-1-A3&A4, 4-8-3/1.7, 4-9-9/7, 4-9-9/13, 4-9-9/Table1;
- Facilities on Offshore Installations (2020): 1-1-4/9.7, 1-1-A2&A3;
- Mobile Offshore Units (2020): 1-1-4/9.7, 1-1-A2&A3, 4-1-1/7.9, 4-3-1/11, 6-1-1/9, 6-1-1/13;
- Steel Vessels for Service on Rivers and Intracoastal Waterways (2020): 1-1-4/7.7, 1-1-A3&A4;
- High Speed Crafts (2020): 1-1-4/11.9, 1-1-A2&A3, 4-6-1/11, 4-7-9/7, 4-7-9/15, 4-7-9/Table 9;
- Steel Barge Rules (2020): 1-1-4/7.9, 1-1-A3&A4;

International Standards

IACS UR E10 Rev 7:2018

EU-MED Standards

NA

National Standards

NA

Government Standards

NA

Other Standards

NA



A handwritten signature in dark ink, appearing to read "Joseph W. H.", is positioned above the corporate information.

Corporate ABS Programs
American Bureau of Shipping
Print Date and Time: 08-Jun-2020 4:41

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.



CERTIFICATE NUMBER
EFFECTIVE DATE
EXPIRY DATE
ABS TECHNICAL OFFICE

20-LD1975958-PDA
22-Apr-2020
21-Apr-2025
London Engineering Department

CERTIFICATE OF Product Design Assessment

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

DEIF A/S

located at

FRISENBORGVEJ 33, SKIVE, Denmark, DK-7800

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 AL8-2

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American Bureau Of Shipping

Theodoros Chatzidakas, 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)

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Web: www.deif.com

Tier: 5 - Unit Certification Required

Product: Alarm and Monitoring System

Model: AL8-2

Intended Service:

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

Description:

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STANDARDS

ABS Rules:

- Marine Vessel Rules (2020): 1-1-4/7.7, 1-1-A3&A4, 4-8-3/1.7, 4-9-9/7, 4-9-9/13, 4-9-9/Table1;
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Tier: 5 - Unit Certification Required

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- High Speed Crafts (2020): 1-1-4/11.9, 1-1-A2&A3, 4-6-1/11, 4-7-9/7, 4-7-9/15, 4-7-9/Table 9;
- Steel Barge Rules (2020): 1-1-4/7.9, 1-1-A3&A4;

National:

NA

International:

IACS UR E10 Rev 7:2018

Government:

NA

EUMED:

NA

OTHERS:

NA