

Type Approval Certificate

This is to certify that the undernoted product(s) has/have been tested with satisfactory results in accordance with the relevant requirements of the Lloyd's Register Type Approval System.

This certificate is issued to:

PRODUCER DEIF A/S

Frisenborgvej 33 7800 Skive Denmark

DESCRIPTION Alarm panel

TYPE AL8-2

APPLICATION Marine, offshore and industrial applications for use in environmental

categories ENV1, ENV2 and ENV3 in power distribution zone as defined in Lloyd's Register's Type Approval System, Test Specification Number 1-

2002.

ADDITIONAL TESTS Low temperature (-25°C/16 hrs)

STANDARD Manufacturer's specification

RATINGS Power supply: 24 Vdc

Inputs: 8 n/o or n/c contacts

Outputs: 3 relay outputs (250V/2A/400W ac; 250V/1A/50W dc)

OTHER CONDITIONS

The complete installation is subject to a separate plan appraisal according

to applicable Rules and Regulations when installed on Lloyd's Register

classed vessels.

Certificate No. 07/20039 (E2)

Issue Date 09 December 2015

Expiry Date 22 August 2020

Sheet 1 of 2

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The Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

If the specified standards are amended during the validity of this certificate, the product is to be re-approved prior to it being supplied to vessels to which the amended standards apply.

The Design Appraisal Document No. HTS/ETS 32827-15 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

Certificate No. 07/20039 (E2)

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Sheet 2 of 2

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Marine Design Appraisal Document

Lloyd's Register EMEA **Hamburg Technical Support Office** Am Sandtorkai 41 20457 Hamburg Telephone +49 (0)40 328107 - 0 Fax +49 (0)40 328107 - 480 E-mail: hamburg-type-approval@lr.org

Date

09 December 2015

Please quote this reference number on all future communications

HPC1562223/32827-15/TW/FS

THE LLOYD'S REGISTER'S TYPE APPROVAL SYSTEM, 2014 ISSUED TO: DEIF A/S, SKIVE, DENMARK **FOR: ALARM PANEL AL8-2** TYPE APPROVAL CERTIFICATE NO. 07/20039 (E2)

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register's Type Approval System, 2014 and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Unnumbered	Applicaton Checklist	undated
CPN0002422	ISO 9001:2008 Certificate	26.06.2015
HPC1420091	Production Quality Assessment Form	06.05.2015
ETS 17775-07	Design Appraisal Document for Certificate No. 07/20039	25.09.2007
ETS 23547-10	Design Appraisal Document for Certificate No. 07/20039 (E1)	23.08.2010

FINAL ACCEPTANCE OF ACTUAL ITEM(S) DEPEND(S) ON SATISFACTORY SURVEY AND TESTING

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Supplementary Type Approval Terms and Conditions

Type Approval certifies that a representative sample of the product(s) referred to herein has/have been found to meet the applicable design criteria for the use specified herein. It does not mean or imply approval for any other use, nor approval of any product(s) designed or manufactured otherwise than in strict conformity with the said representative sample.

Type Approval is based on the understanding that the manufacturer's recommendations and instructions and any relevant requirements of the Rules and Regulations are complied with.

Type Approval does not eliminate the need for normal inspection and survey procedures required by the Rules and Regulations.

Lloyd's Register EMEA reserves the right to cancel or withdraw this Type Approval Certificate in accordance with the LR Type Approval System Procedure.



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Power Distribution Systems / Protective Devices

Part 2

Producer/Licence No.	Туре	Standard	Rating	Category/ Additional Tests	Remarks	Cert. No.
Deif A/S Frisenborgvej 33 7800 Skive Denmark	Alarm panel Type AL8-2	Manufacturer's specification		ENV1, ENV2, ENV3 (2002)	Expires: 22 August 2020	07/20039 (E2)
			Power supply (Vdc): 24 Inputs: 8 n/o or n/c contacts	Low temperature (-25C°/16 hours)		
			Outputs: 3 relay outputs (250V/2A/400W ac; 250V/1A/50W dc)			