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Certificate No: LR22100131TA Issue Date: 23/03/2022 Expiry Date: 20/03/2027

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.

Manufacturer I	D	E	IF	A/	S
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Address Frisenborgvej 33, Skive, 7800, Denmark

Type Protective Devices

Description Power management system

Comprising the following modules

Power supply and control module: PCM 4.1, PCM4.5

Input/Output module: IOM 4.1

Synchronising, control and measuring module: SCM 4.1 Synchronising, control and measuring module: SCM 4.2

Display unit: DU-2

Additional operator panel 1: AOP-1 Additional operator panel 2: AOP-2

Trade Name DELOMATIC 4

Application Marine, offshore and industrial applications for use in environmental

categories ENV1, ENV2 and ENV3 as defined in Lloyd's Register's Type Approval

System, Test Specification Number 1 - 2002.

Specified Standard Manufacturer's specification

IACS unified requirements E10 (Rev.8 Feb 2021)

Thorsten Wolff

Senior Specialist to Lloyd's Register EMEA A member of the Lloyd's Register group

71 Fenchurch Street, London, EC3M 4BS, United Kingdom

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Ratings

Power supply: 24 VDC

Additional Tests

Low temperature (-25°C/16h)

Other Conditions

The complete installation is subject to a separate plan appraisal according to applicable Rules and Regulations when installed on LR classed vessels.

This certificate is not valid for equipment, the design, ratings or operating parameters of which have been varied from the specimen tested. The manufacturer should notify Lloyd's Register EMEA of any modification or changes to the equipment in order to obtain a valid Certificate.

Previous Version:

07/20009 (E3)

The Design Appraisal Document HPC1462075-22/TW and its supplementary Type Approval Terms and Conditions form part of this Certificate.

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HPC1462075-22/TW

LLOYD'S REGISTER TYPE APPROVAL - DESIGN APPRAISAL DOCUMENT **ISSUED BY: HAMBURG TECHNICAL SUPPORT OFFICE** ISSUED TO: DEIF A/S, DENMARK FOR: POWER MANAGEMENT SYSTEM **TYPE DELOMATIC 4**

The undernoted documents have been reviewed for compliance with the requirements of the Lloyd's Register Type Approval System Procedure TA14 Version 04 (September 2020) and this Design Appraisal Document forms part of the Certificate.

APPROVAL DOCUMENTATION

Unnumbered	Type Approval Application Checklist	12.01.2022
HTS/ETS 34961-17	Design Appraisal Document for certificate no. 07/20009 (E3)	21.03.2017
07/20009 (E3)	LR Type Approval certificate	21.03.2017
HPC1662083 / HPC1962114	Production Quality Assessment Form	13.01.2020

TEST REPORTS		
4910217502N	Deif type test certificate	29.05.2020
IACS_80MHz-6GHz_Front-to-ant_	Deif EMC test report	28.05.2020
20200528_JHS		
	Deif EMC test report	28.05.2020
20200528_JHS		
4910227502D	Deif performance test report	28.05.2020
4910216501M	Deif type test certificate	29.05.2020
IACS_power zone_150KHz-30MHz	Deif EMC test report	29.05.2020
_loop 0_20200529_JHS		
IACS_power zone_150KHz-30MHz	Deif EMC test report	29.05.2020
_loop 90_20200529_JHS		
IACS_power zone_30MHz-1GHz_	Deif EMC test report	29.05.2020
20200529_JHS		
IACS_power zone_1GHz-6GHz_	Deif EMC test report	29.05.2020

20200529 JHS

Thorsten Wolff Hamburg Technical Suppo



Lloyd's Register EMEA

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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 Lloyd's Register Type Approval System Procedure.

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