

Type Approval Certificate Extension

This is to certify that Certificate No. 07/20036 for the undernoted products is extended and renumbered as shown.

This certificate is issued to:

PRODUCER Heinzmann GmbH & Co. KG

PLACE OF PRODUCTION Am Haselbach 1
79677 Schönau (Schwarzwald)
Germany

DESCRIPTION Digital Generator Management for island and mains parallel operation

TYPE DGM-02 "THESEUS"

Comprising of the following "Sub-Types":

Sub-Type	Article No.
Digital Generator Management Units:	
THESEUS Basic DeviceNet: 0000.00.26 DeviceNet + Speed governor: 0000.01.26 CANopen: 0000.04.26 CANopen + Speed governor: 0000.05.26	620-00-150-00 320-00-160-03d (Printed Circuit Board)
THESEUS Medium DeviceNet: 0000.10.26 DeviceNet + Speed governor: 0000.11.26 Modbus + HZM-CAN-CM: 0000.12.26 Modbus + HZM-CAN-CM + Speed governor: 0000.13.26 CANopen: 0000.14.26 CANopen + Speed governor: 0000.15.26	620-00-151-00 320-00-160-03d (PCB)
THESEUS Extended DeviceNet: 0000.20.26 DeviceNet + Speed governor: 0000.21.26 Modbus + HZM-CAN-CM: 0000.22.26 Modbus + HZM-CAN-CM + Speed governor: 0000.23.26 CANopen: 0000.24.26 CANopen + Speed governor: 0000.25.26	620-00-152-00 320-00-160-03d (PCB)

Certificate No. 07/20036 (E1)

Issue Date 23 October 2013

Expiry Date 26 August 2017

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Martin Lange
Hamburg Design Support Office
Lloyd's Register EMEA

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TYPE (continued)

<i>Digital Bus Tie Management Unit:</i>	
THESEUS Group	620-00-153-00
DeviceNet: 0000.30.26	320-00-160-03d (PCB)
Modbus + HZM-CAN-CM: 0000.32.26	
Modbus: 0000.33.26	
CANopen: 0000.34.26	

Nomenclature of Software: kkkk.vv.xx
 kkkk - client;
 vv - version;
 xx - revision state

APPLICATION Marine and offshore 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.

ADDITIONAL TESTS Low Temperature Test at 5° C for 2 hrs.

OTHER CONDITIONS Final arrangement of the DGM-02 modules onboard of LR classed vessels is to be subject of the Lloyd's Register Plan Approval Process. Type Approval of Products according to Test Specification No. 1 is essentially Type Approval of hardware. Examination of software aspect is restricted to functional operation as demonstrated in the Performance Test.

"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."

The attached Design Appraisal Document No. HDS/ETS 28887-13 and its supplementary Type Approval Terms and Conditions form part of this Certificate.

All other details remain as the previous Certificate No. 07/20036 to which this extension should be attached.

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 Sheet 2 of 2


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