

TYPE APPROVAL CERTIFICATE

This is to certify that the undernoted product(s) has/have been tested in accordance with the relevant requirements of the DNV GL Type Approval System.

Certificate No.	59 803 - 13 HH
Company	MARIDIS Maritime Diagnostic & Service GmbH Friedrich-Barnewitz-Str. 4c 18119 Rostock, GERMANY
Product Description	Cylinder Pressure Measuring Device Condition Monitoring System
Type	MarPrime® MarPrime® Ultra
Environmental Category	C, EMC 2
Technical Data / Range of Application	Handheld cylinder pressure measuring device for 2 and 4 stroke engines with indicator cook with dynamical TDC correction. - Pressure Range: 0...300 bar, accuracy 1% to fullscale output - Speed Range: 25...2400 rpm - Max. Numbers of Cylinders: 24 Measurements: - Pmax./ Pcomp. /Power (ind.) /Speed - MarPrime® Ultra additionally injection timing, valves timing, valves leakage Interfaces: USB, RJ45 network Software Version: V1.10 PC based Condition Monitoring System - Cylinder Pressure Analysis - Leakage Detection Software Version 3.2.0.4
Test Standard	Guidelines for the Performance of Type Approvals Chapter 2, Edition 2012
Documents	Test report : Treo 205-12, dated 21.11.2012 (EMC), 234-12, dated 19.12.2012 (ENV) Dokumentation.odt, dated 19.04.2012 (Technical documentation) Software Specification/Documentation MarPrime Version 1.0.2
Remarks	GL Guidelines for Machinery Condition Monitoring, Edition 2008 (GL Chapter I- 1-17, Section 2, D.) to be observed for Survey Arrangements CM.

Valid until **2018-01-21**

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File No. **I.D.15**

Hamburg, 2014-12-09

Type Approval Symbol



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Circuit board MAR01:

- Connection for pressure sensor
- Connection for Ultrasonic sensor (MarPrime® Ultra)
- 3 x Indication LED
- 1 x operating button
- 1 x USB port
- 1 x LAN (10 Mbit)

Pressure Sensor HTT04

- Measuring Range: 0...300 bar
- Signal output: 4...20 mA
- Max. temperature at measuring cell: 300 °C

Ultrasonic Sensor: VS 900M

- Measuring Range: 100...900Hz
- Temperature Range: -50...100 °C

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