



Germanischer Lloyd

Type Approval Certificate

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

Certificate No. **42 848 - 02 HH**

Company **Rheintacho Messtechnik GmbH
Waltershofener Straße 1
79111 Freiburg, GERMANY**

Product Description **Programmable Speed Monitor**

Type **CR 5813.1x; CRR 5813.2x; CRA 5823.1x; CRR 5823.2x**

Environmental Category **C, EMC 1**

Technical Data / Range of Application **For measuring rpm and machine speed on ships
Range: 0.01 Hz ... 20 000 Hz
Accuracy: < +/- 0.03 % of final value +/- 1 digit
Power supply voltage: 18 ... 36 V DC, with DC/DC-converter 10 ... 36 V DC
Current consumption: < 160 mA; with DC/DC-converter < 120 mA
Signal input: NPN, PNP or Sinus signal
Rin: NPN/PNP: 10 kOhm, Sinus: 100 kOhm
Frequency range: 0 ... 20 000 Hz
Maximal input voltage: 36 V DC
Minimal pulse width: 20 microsec.
Minimal interpulse period: 20 microsec.
1 or optional 2 Relay outputs:
Change over contacts: up to 250 V AC at 5 A, up to 42 V DC at 2 A
Analogue output (optional): 0 ... 20 mA or 4 ... 20 mA, maximal burden 400 Ohm
Sensor supply output: Voltage: 12 V DC, maximal output current: 60 mA
Degree of protection: IP 20; Software-Version: 1.60**

Test Standard **Guidelines for the Performance of Type Approvals, Chapter 2, Edition 2003;
Guidelines for the Use of Computer and Computer Systems, Requirement Class 3**

Documents **Test report : RMS No. 01-10/2001 of 2001-10-20; Mectronic No. P010298
of 2001-09-26; Test plan: PN1079 - DZW Type: 58xx.xxx of Nov 2002 Schu;
Operating instructions: BA: N0000.225/02.2002**

Remarks **None**

Valid until **2012-05-24**

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Type Approval Symbol



File No. **I.D.07**

Hamburg, **2007-05-25**

Jürgen Wittburg

Dariusz Lesniewski

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