

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.	11 511 - 14 HH
Company	MWB Maritime Technology GmbH Rudloffstraße 68 27568 Bremerhaven, GERMANY
Product Description	Alarm and Monitoring System
Type	AMS 4000 Version 1.xx
Environmental Category	None
Technical Data / Range of Application	Machinery Alarm and Monitoring System with Duty Alarm System Hardware according Certificate GL 61756-14HH CPU 1516-3 PN/DP Digital Input DI 32x24VDC HF, DI16x24VDC M, DI 16x24VDC HF Digital Output DQ 32x24VDC/0.5A ST, DQ 16x24VDC/0.5A ST Analog Input AI 8xU/I/RTD/TC ST Communication Processor CP 1543-1, Ethernet Security Communication Module CM PtP, RS422/485, High IM 155-5 PN ST Software Version 1.xx dated 08-10-2014 Tests and Evidence according Requirement Class 2.
Test Standard	Legacy GL Guidelines for the Use of Computer Systems according to legacy GL Rules Part 4 Chapter 10
Documents	Test report : 020826571 dated 08-10-2014; MWB MT-AMS 4000 Function Test Report dated 24-09-2014; Release Note Software Version 1.20 dated 08-10-2014; Alarm- und Monitoring System AMS 4000 System Description Version 1.20 dated 08-10-2014; User Manual Version 1.20 dated 09-2014; MWB MT-AMS Test Specification V 1.20 dated 08-10-2014; AMS 4000 Data Sheet Version 1.20 dated 08-10-2014 Software Process Description Version 1.00 dated 09-10-2014
Remarks	This certificate is issued on the basis of GL Guidelines for the Performance of Type Approvals, Chapter 1 - Procedure (VI-7-1), Edition 2007.

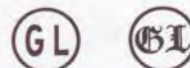
Valid until **2019-10-13**

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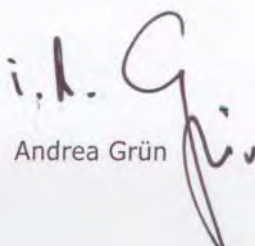
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Hamburg, 2014-10-13

Type Approval Symbol



i.A. 
Arne Schaarman

i.A. 
Andrea Grün

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Hardware according Certificate GL 12065-98HH

IM 151-3 PN High Feature for ET200S PROFINET

Modules: PM-E DC 24V; 2AI, TC, High Feature; Counter 24V/100kHz;

8DI, DC 24V; 8DO, DC 24V/0,5A; 2AI, U; 2AI, I, 2-Wire; 2AI, I, 4-Wire;

2/4AI, RTD; 2AI, RTD High Feature

IM 151-8 CPU PN/DP with PROFINET-Controller, DP optional

Hardware according Certificate GL47292-03HH

TP1200 Comfort , 12"

TP700 Comfort , 7"

KTP400 Comfort, 4"

Hardware according Certificate GL40141-01HH

SCALANCE X204-2, 4x100Mbits RJ45, 2x100Mbit, BFOC Optical Multimode

Valid until **2019-10-13**

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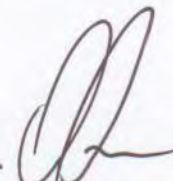
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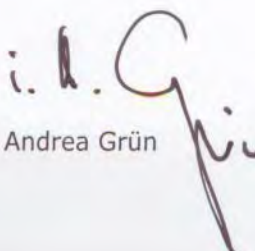
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