

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB0000327
Revision No:
3

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED). This Certificate is issued by DNV GL SE based on the notification of the Federal Maritime and Hydrographic Agency of Germany.

This is to certify:

That the Fixed fire detection and fire alarm systems components for control stations, service spaces, accommodation spaces, cabin balconies, machinery spaces and unattended machinery spaces: Control, indicating and power supply equipment

with type designation(s)

Addressable Fire Detection and Alarm System AFMS3000

Issued to

DECKMA GmbH - Decksmaschinen und Automation Vetriebs GmbH
Rosengarten-Klecken, Germany

is found to comply with the requirements in the following Regulations/Standards:

Regulation **(EU) 2019/1397,**

item No. MED/3.51a. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IGF Code 11, IMO MSC.1/Circ.1242, IMO MSC.1/Circ.1487 and MSC.1/Circ.1528

item No. MED/3.51b. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IGF Code 11, IMO MSC.1/Circ.1242 and IMO MSC.1/Circ.1554

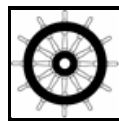
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2024-02-29**.

Issued at **Hamburg** on **2019-11-28**

DNV GL local station:
Hamburg

Approval Engineer:
Heinz Scheffler



Notified Body
No.: **0098**

for **DNV GL SE**

Gerhard Aulbert
Head of Notified Body

The mark of conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-surveillance module (D, E or F) of Annex B of the MED is fully complied with and controlled by a written inspection agreement with a Notified Body. The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate is valid for equipment, which is conform to the approved type. The manufacturer shall inform DNV GL SE of any changes to the approved equipment. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. Should the specified regulations or standards be amended during the validity of this certificate, the product is to be re-approved before being placed on board a vessel to which the amended regulations or standards apply.



Job Id: **344.1-008051-7**
Certificate No: **MEDB00003Z7**
Revision No: **3**

Product description

The AFMS 3000 system is flexible and can contain the following components:

AM01-E: Output Module with 8x relay output, 3x 24 VDC outputs and 1 Input (max. 2 modules)
VM01-E: VDR Module, NMEA 0183 protocol via RS485 or RS232 (max. 1 module)
DM01-E: Printer Module, Centronics interface (max. 1 modules)
TR01-E: Power Supply Module (max. 1 module)
NM01-E: Main Module (max. 1 module)
AFM01-E: Fire Detection Module for 2 addressable loops per module (max. 4 modules)
FM01-E: Fire Detection Module for 8 conventional loops per module (max. 4 modules)
MBM01-E: MODBUS module (max. 38600 baud rate, ASCII or RTU transfer framing)
(max. 2 modules)
AHT01-E: Main Panel/Repeater Panel (max. 2 units). One unit is the Master unit
HT01-E: Repeater Panel only in combination with AHT01-E (max. 3 units)
DT01-E: Data Module (each AHT01-E must have one data module permanent connected)

Approved detectors for operating with the AFMS 3000:

- All MED approved, addressable detectors or addressable units with HOCHIKI ESP communication protocol (and physics) for all addressable fire loop modules.
- All MED approved, conventional detectors with operating voltage of 24V DC +-20% and their alarm resistance from 390 Ohm to up to 560 Ohm for all conventional fire loop modules

Application/Limitation

None

Type Examination documentation

Test report : EMV 07091.210.13 V1.2, Environmental 13-4968; Function Test 20140208FP_AFMS3000;
Function Test 20180315FP_AFMS3000; EMV 056-19
Documents: Operating Manual 20140208BA AFMS3000; Installation Manual 20140208IA AFMS;
Dokumentenliste MED-Zulassung AFMS3000, Rev. D, dated 14.10.2019 ML

Tests carried out

EN 54-2:1997 incl. AC:1999 and A1:2006; EN 54-4:1997 incl. AC:1999, A1:2002 and A2:2006;
IEC 60092-504:2016; IEC 60533:2015

Marking of product

For identification to this type examination certificate the products shall be marked with:

- Manufacturer name
- Type designation with device type
- Serial Number
- Mark of Conformity (see footer on page 1)

END OF CERTIFICATE