

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MEDB00002R7**  
Revision No:  
**2**

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: Flame detectors – Point detectors**

with type designation(s)

**FL 80/1AM, FL 80/1AM, FL 80/1AM-1, FL 80/1AM-EW, FL 80/1AM-EW-1A, FL 80/1AM-EW-VG1**

Issued to

**Egon Harig GmbH  
Oststeinbek, Schleswig-Holstein, Germany**

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

Regulation **(EU) 2022/1157,**

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

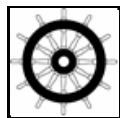
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2027-11-16**.

Issued at **Hamburg** on **2022-11-17**

DNV local station:  
**Hamburg – CMC North/East**

Approval Engineer:  
**Heinz Scheffler**



Notified Body  
No.: **0098**

for **DNV SE**

**Christine Mydlak-Roeder  
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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



## Product description

### Optical UV-Flame Detector types:

- FL80/1Ax
  - FL80/1Ay
- x = N: Relays K1 and K2 with potential-free contacts  
y = M, M-1, M-EW, M-EW-1A, M-EW-VG1: Relays K1 and K2 with signal lines adaptation for the relevant fire alarm control panel

### Technical data:

- Alarm sensibility: according to EN54 part 10, class 1
- Optical Location Angle: 180°
- Response time: typical < 2s
- Power supply: 24 V DC
- Current consumption: quiescent 35mA, alarm condition 55mA
- Outputs: One potential-free close contact for voltage failure, 1 A, 250 V AC  
One potential-free close contact for fire alarm, 1 A, 250 V AC

## Application/Limitation

The equipment are found to comply with requirements for equipment install in the bridge and deck zone. Function of the potential free contact is part of the relevant project.

## Type Examination documentation

**Test Reports:** 17-9045 Rev.1; 071694.140.17 V1.2; BMA 10046, 12-L-00139-01, 12-4065

**Documents:** Datasheet 4.0248; Operating Instruction 4.0249; Description 4.0250; Pamphlet sheet S-PB-4.9194-1; Overview Drawing List 4.03244, Rev. 14

## Tests carried out

- EN 54-10:2002 incl. A1:2005
- IEC 60092-504:2016
- IEC 60533:2015

## Marking of product

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

- Manufacturer's name
- Type designation with device type
- Serial Number
- Mark of Conformity

END OF CERTIFICATE