

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:
MEDB00002BH
Revision No:
5

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 Fire alarm devices - Sounders

with type designation(s)
Fire alarm devices - sounders

Issued to

PfannenberG GmbH
Hamburg, Germany

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

Regulation (EU) 2022/1157,

item No. MED/3.53. SOLAS 74 as amended, Regulation II-2/7 & X/3, 1994 HSC Code 7, 2000 HSC Code 7, FSS Code 9, IMO MSC.1/Circ.1242 and IMO MSC.1/Circ.1487

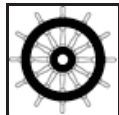
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2028-05-02**.

Issued at **Hamburg** on **2023-05-03**

DNV local unit:
Essen

Approval Engineer:
Didier Girardin



Notified Body
No.: **0098**



for **DNV GL SE**

Digitally Signed By: Mydlak-Röder, Christine
Location: DNV GL SE, Hamburg, Germany

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 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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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.

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

Type B Sounders intended for outdoor application also more suitable for indoor situations where high temperature and/or humidity are present.

Provided degree of enclosure protection: IP 66

The alarm device family „PATROL „consist of acoustical components in different performance classes.

PATROL: Item number **233 aa bb c ddd** / Technical Data:

aa Type

10 PA 1: sounder (100dB)
11 PA X 1-05: sounder beacon combined device (100dB / 5J)
50 PA 5: sounder (105dB)
51 PA X 5-05: sounder beacon combined device (105dB / 5J)
52 PA X 5-10: sounder beacon combined device (105dB / 10J)
60 PA 10: sounder (110dB)
61 PA X 10-10: sounder beacon combined device (110dB / 10J)
62 PA X 10-15: sounder beacon combined device (110dB / 15J)
70 PA 20: sounder (120dB)
71 PA X 20-10: sounder beacon combined device (120dB / 10J)
72 PA X 20-15: sounder beacon combined device (120dB / 15J)

bb rated voltage

10 PA 1 + PA 5 + PA X 1 + PA X 5 + PA X 10 + PA X 20: 230 AC
15 PA X 10 + PA X 20: 115V AC
63 PA 1 + PA 5: 24V – 48V DC, PA 10 + PA 20: 24V DC – 48V DC
64 PA 10 + PA 20: 110V – 240V AC
70 PA X 1 + PA X 5 + PA X 10 + PA X 20: 48V DC
80 Option –SSM ; PA X 1 + PA X 5 + PA X 10 + PA X 20: 24V DC

c signal color

0 none
1 clear
2 White
3 Yellow
4 orange
5 red
6 Green
7 blue

ddd design GL

001 housing RAL3000 (red), standard
038 special tones
056 housing RAL 7035 (grey)
057 option -SSM, housing RAL 7035 (grey)
058 option -SSM
059 option -SSM, housing RAL 9003 (white)
060 Housing RAL 9003 (white)

Limitation

Instruction for maintenance and operation manual to be provided with each delivery

EN 54-3 Type B Sounder Meeting requirements for Type A & B:

Temperature

(-25°C/+70°C) (ref. IEC 60092-504 (2016) table 1 item 6-7)

Vibration

For general applications. (ref. IEC 60092-504 (2016) table 1 item 10)

EMC

General power distribution zone (ref. IEC 60092-504 (2016) table 1 item 19-20)

Bridge and open deck zone (ref. IEC 60092-504 (2016) table 1 item 19-20)

Enclosure

Engine room (IP44), open decks (IP56) (ref. IEC 60092-201 table 5)

Approval Documentation

See ANNEX

Tests carried out

- IEC 60092-504 (2016)
- IEC 60533 (2015)
- EN 54-3:2014 incl. A1:2019,
(Additional tests for lights: EN 54-23)

Marking of product

The products to be marked with:

- EN 54-3 Type B Sounder
- Model name
- Manufacturer name
- Lot number
- Electrical connection detail
- According to Article 10 of the Council Directive (MED)

END OF CERTIFICATE