

EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:
MEDB0000AX1
Revision no.:
0

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

This is to certify:

that the **Public Address and General Alarm Systems (PAGA): - speakers**

with type designation(s)

CS-104 MED, CS-104 MED-10, IG-104

issued to

Fohhn Audio AG
Nürtingen, Germany

is found to comply with the Implementing Regulation (EU) 2025/1533 for

Item no. **MED/1.44b** (Row 1 of 1)

according to the following requirements:

SOLAS 74 Reg. II-2/12, SOLAS 74 Reg. II-2/21, SOLAS 74 Reg. II-2/22, SOLAS 74 Reg. III/6, IMO Res. A.1021(26) 5, IMO Res. MSC.48(66)-(LSA Code) VII, IMO MSC.1/Circ.808, IMO MSC.1/Circ.1369/Add.1, SOLAS 74 Reg. III/4, SOLAS 74 Reg. X/3, IMO Res.MSC.36(63)-(1994 HSC Code) 4, IMO Res.MSC.36(63)-(1994 HSC Code) 8, IMO Res.MSC.97(73)-(2000 HSC Code) 4, IMO Res.MSC.97(73)-(2000 HSC Code) 8

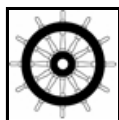
Further details of the equipment and conditions for certification are given overleaf.

Date of issue: **2025-12-01**

Expiry date: **2030-11-30**

DNV local unit:
Augsburg

Approval Engineer:
Kai Möller



Notified Body
no.: **0098**

for **DNV SE**

Christine Mydlak-Röder
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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 USD 300 000.

Product description

The "CS-104 MED", "CS-104 MED-10" and "IG-104" low profile passive ceiling speakers are intended for sounding of Public Address or General Emergency Alarm.

Technical details:

1.) "CS-104 MED" speaker has following specification:

a) Description: Low profile passive ceiling loudspeaker, 2-way

b) Rated voltage [V]: 100

c) Maximum Power [W]:

100V-100%-30W

100V-50%-15W

100V-25%-7,5W

LOW Z -16Ohm -200W(peak)

d) Degree of protection: IP2X

"CS-104 MED" has environmental category "Protected" according to IEC 60945, Clause 4.4.

2.) "CS-104 MED-10" speaker has following specification:

a) Description: Low profile passive ceiling loudspeaker, 2-way

b) Rated voltage [V]: 100

c) Maximum Power [W]:

100V-100%-10W

100V-50%-5W

100V-25%-2,5W

LOW Z -16Ohm -200W(peak)

d) Degree of protection: IP2X

"CS-104 MED-10" has environmental category "Protected" according to IEC 60945, Clause 4.4.

3.) "IG-104" speaker has following specification:

a) Description: Low profile passive ceiling loudspeaker, 2-way

b) Rated voltage [V]: 100

c) Maximum Power [W]:

100V-100%-30W

100V-50%-15W

100V-25%-7,5W

LOW Z -16Ohm -200W(peak)

d) Degree of protection: IP2X

"IG-104" has environmental category "Protected" according to IEC 60945, Clause 4.4.

Application/Limitation

The speakers are to be installed according to instructions in technical documentation.

Compass Safe distances

1. CS-104 MED:

a) Standard compass: 1,65 m

b) Steering compass: 1,15 cm

2. CS-104 MED-10:

a) Standard compass: 1,65 m

b) Steering compass: 1,10 cm

3. IG-104:

a) Standard compass: 1,70 m

b) Steering compass: 1,10 cm

Type Examination documentation

Tests carried out

- Environmental and EMC testing: IEC 60945 (2002) incl. Corrigendum 1 (2008)
- Performance testing: EN 50695 (2021)

Marking of product

According to IEC 60945, Sect.4.9:

The product to be marked with following information, where practicable:

- Identification of the manufacturer,
- Equipment type number or model identification under which it was type tested,
- Serial number of the unit,
- Compass safe distance.

Alternatively, the marking may be presented on a display at equipment start-up, and in case of fixed equipment compass safe distance may be given in the equipment manual.