

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:  
**MEDB00008NT**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

## This is to certify:

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

with type designation(s)

**CAR-6T-MED, CAS-15-54T-MED, CP-6 T-MED, CP-66 T-MED, MC-50T-MED, MH-30T-MED, SAFE-10P-54T-MED, SAFE-10PT-MED, SAFE-15 T-MED, SAFE-561 IPT-MED, SAFE-561-54T-MED**

issued to

**DNH A/S Den Norske Høytalerfabrikk A/S  
KRAGERØ, Norway**

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

Regulation (EU) 2023/1667,

**item No. MED/1.44b. SOLAS 1974 as amended, Regulation II-2/12,21,22, III/4, 6 & X/3, LSA Code VII, HSC Code 4,8, IMO MSC.1/Circ. 808, 1369/Add.1**

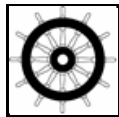
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2029-02-05**.

Issued at **Høvik** on **2024-02-06**

DNV local unit:  
**East & South Norway CMC**

Approval Engineer:  
**Steinar Kristensen**



Notified Body  
No.: **0575**

for **DNV AS**

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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

The CAR-6T-MED, CAS-15-54T-MED, CP-6 T-MED, CP-66 T-MED, MC-50T-MED, MH-30T-MED, SAFE-10P-54T-MED, SAFE-10PT-MED, SAFE-15 T-MED, SAFE-561 IPT-MED and SAFE-561-54T-MED are cabinet speakers with 70V/100V transformers intended for sounding of Public Address or General Emergency Alarm.

| Unit             | Description   | Rated voltage (V) | Max power (W) | Location  |
|------------------|---|-------------------|---------------|-----------|
| CAR-6T-MED       | Bidirectional speaker with aluminium enclosure and foot bracket | 70/100            | 6             | Protected |
| CAS-15-54-MED    | Column speaker with aluminium swivel bracket                    | 70/100            | 15            | Protected |
| CP-6 T-MED       | Plastic office speaker  | 70/100            | 6             | Protected |
| CP-66 T-MED      | Plastic bidirectional corridor speaker                          | 70/100            | 6             | Protected |
| MC-50T-MED       | IP 54 rated speaker with bracket mounting                       | 70/100            | 50            | Exposed   |
| MH-30T-MED       | Music horn speaker with bracket mounting                        | 100               | 30            | Exposed   |
| SAFE-10P-54T-MED | Plastic IP55 rated cabinet speaker                              | 70/100            | 10            | Exposed   |
| SAFE-10PT-MED    | Plastic IP55 rated cabinet speaker                              | 70/100            | 10            | Exposed   |
| SAFE-15 T-MED    | IP67 rated aluminium horn speaker                               | 70/100            | 15            | Exposed   |
| SAFE-561 IPT-MED | IP55 rated metal cabinet speaker                                | 70/100            | 6             | Protected |
| SAFE-561-54T-MED | Cabinet speaker with steel enclosure                            | 70/100            | 6             | Protected |

### Application/Limitation

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

### Type Examination documentation

| DNV No | Document ID      | Rev        | Description  |
|--------|------------------|------------|--|
| 58     | MC-50 T-MED      | 2024-01-11 | Manual: DNH, Manual and specifications for MC-50 T-MED                     |
| 57     | CP-66 T-MED      | 2024-01-11 | Manual: DNH, Manual and specifications for CP-66 T-MED                     |
| 56     | CP-6 T-MED       | 2024-01-11 | Manual: DNH, Manual and specifications for CP-6 T-MED                      |
| 55     | CAS-15-54T-MED   | 2024-01-11 | Manual: DNH, Manual and specifications for CAS-15-54T-MED                  |
| 54     | CAR-6 T-MED      | 2024-01-11 | Manual: DNH, Manual and specifications for CAR-6 T-MED                     |
| 53     | SAFE-561IPT-MED  | 2024-01-26 | Manual: DNH, Manual and specifications for SAFE-561IPT-MED                 |
| 52     | SAFE-561-54T-MED | 2024-01-11 | Manual: DNH, Manual and specifications for SAFE-561-54T-MED                |
| 51     | SAFE-15T-MED     | 2024-01-11 | Manual: DNH, Manual and specifications for SAFE-15T-MED                    |
| 50     | SAFE-10P-54T-MED | 2024-01-11 | Manual: DNH, Manual and specifications for SAFE-10P-54T-MED                |
| 49     | MH-30 T-MED      | 2024-01-11 | Manual: DNH, Manual and specifications for MH-30 T-MED                     |
| 48     | SAFE-10PT-MED    | 2024-01-11 | Manual: DNH, Manual and specifications for SAFE-10PT-MED                   |
| 43     | 4898/BA/10       | 2010-10-29 | Report: CNBOP-PIB, Environmental test report for SAFE-561 T                |
| 39     | 200112102/C3/03  | 2001-07-13 | Report: Nemko, Damp heat cyclic test report for SAFE-10PT loudspeaker      |
| 38     | 853/BA/18        | 2018-07-06 | Report: CNBOP-PIB, Environmental test report for SAFE-10PT                 |
| 37     | 200112102/C2/03  | 2001-07-13 | Report: Nemko, Dry heat test report for SAFE-10PT loudspeaker              |
| 35     | 200112102/C1/03  | 2001-07-13 | Report: Nemko, Low temperature test report for SAFE-10PT loudspeaker       |
| 32     | 200112102/C5/03  | 2001-07-13 | Report: Nemko, Corrosion test report for SAFE-10PT loudspeaker             |
| 31     | 200112102/C2/05  | 2001-07-13 | Report: Nemko, Dry heat test report for MusicHorn-MH (MH-30) loudspeaker   |
| 30     | 200112102/C1/05  | 2001-07-13 | Report: Nemko, Low temperature test report for MH-30 loudspeaker           |
| 29     | 1544/BA/19       | 2019-10-01 | Report: CNBOP-PIB, Environmental test report for MH-30-54T cabinet speaker |
| 27     | 200112105        | 2001-08-21 | Report: Nemko, Vibration test report for MH-30 loudspeaker                 |
| 25     | 200112102/C3/05  | 2001-07-13 | Report: Nemko, Damp heat cyclic test report for MusicHorn-MH (MH-30)       |

| DNV No | Document ID     | Rev        | Description  |
|--------|-----------------|------------|--|
| 24     | 200112102/C5/05 | 2001-07-13 | Report: Nemko, Corrosion test report for MusicHorn-MH (MH-30) loudspeaker                      |
| 23     | 13356-2S        | 0          | Report: Labtest Certification Inc, Environmental test report for MC-50 loudspeaker             |
| 20     | 13356-6S        | 0          | Report: Labtest Certification Inc, Environmental test report for CP-66T and CP-6T loudspeakers |
| 18     | 200112102/C3/08 | 2001-07-13 | Report: Nemko, Damp heat cyclic test report for CP-66T (CP-6T) loudspeaker                     |
| 16     | 200112102/C2/08 | 2001-07-13 | Report: Nemko, Dry heat test report for CP-66T (CP-6T) loudspeaker                             |
| 15     | 200112102/C1/08 | 2001-07-13 | Report: Nemko, Low temperature test report for CP-66T (CP-6T) loudspeaker                      |
| 13     | 200112105       | 2001-07-03 | Report: Nemko, Vibration test report for CAS 6T loudspeaker                                    |
| 12     | 200112102/C5/06 | 2001-07-13 | Report: Nemko, Corrosion test report for Column-CAS (CAS-15T) loudspeaker                      |
| 11     | 200112102/C3/06 | 2001-07-13 | Report: Nemko, Damp heat cyclic test report for Column-CAS (CAS-15T) loudspeaker               |
| 10     | 200112102/C2/06 | 2001-07-13 | Report: Nemko, Dry heat test report for Column-CAS (CAS-15T) loudspeaker                       |
| 9      | 200112102/C1/06 | 2001-07-13 | Report: Nemko, Low temperature test report for Column-CAS (CAS-15(T)) loudspeaker              |
| 8      | 412/BA/13       | 2014-01-31 | Report: CNBOP-PIB, Environmental test report for CAS 15-54(T)                                  |
| 4      | 200112105       | 2001-05-10 | Report: Nemko, Vibration test report for CAR-4T loudspeaker                                    |
| 3      | 200112102/C3/07 | 2001-07-13 | Report: Nemko, Damp heat cyclic test report for CAR-4T loudspeaker                             |
| 2      | 200112102/C2/07 | 2001-07-13 | Report: Nemko, Dry heat test report for CAR-4T loudspeaker                                     |
| 1      | 200112102/C1/07 | 2001-07-13 | Report: Nemko, Low temperature test report for CAR-4T loudspeaker                              |

### Tests carried out

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

### Marking of product

The type designation and name and contact address of the manufacturer shall be affixed visibly, legibly and indelibly to the product. In addition the product shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

# QS - CERTIFICATE OF ASSESSMENT - EC (MODULE D)

Certificate No:  
**MEDD00002FV**

Application of: Directive 2014/90/EU of 23 July 2014 on marine equipment (MED), issued as "Forskrift om Skipsutstyr" by the Norwegian Maritime Authority. This Certificate is issued by DNV AS under the authority of the Government of Norway.

## This is to certify:

**That the Quality System for the products**

with type designation(s) as specified in the Appendix to this Certificate

Issued to

**DNH A/S Den Norske Høytalerfabrikk A/S**  
**KRAGERØ, Norway**

is found to comply with the applicable requirements.

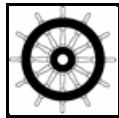
The quality system has been assessed with respect to the procedure of conformity assessment described in Annex II, Module D in the directive 2014/90/EU and regulation (EU) 2023/1667.

This Certificate is valid until **2029-02-08**.

Issued at **Høvik** on **2024-02-09**

DNV local unit:  
**East & South Norway CMC**

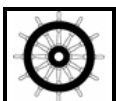
Approval Engineer:  
**Steinar Kristensen**



Notified Body  
No.: **0575**

for **DNV AS**

**Mydlak-Röder, Christine**  
**Head of Notified Body**



0575/yyyy

0575: Notified Body number undertaking quality surveillance  
yyyy: The year in which the mark is affixed



The product liability rests with the manufacturer or his representative in accordance with Directive 2014/90/EU. This certificate authorizes the manufacturer in conjunction with the valid EC Type Examination (Module B) Certificate(s) of the equipment listed before to affix the Mark of Conformity (wheelmark) to the product described herein. This certificate loses its validity if the manufacturer makes any changes to the approved quality system which have not been notified to and agreed with the notified body named on this certificate. This certificate remains valid unless suspended, withdrawn, recalled or cancelled. The Manufacturer has to apply for periodical audits to verify the maintenance and application of the quality system every 12 months.

**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.



## APPENDIX

### Item no. MED/1.44b Public Address and General Alarm Systems (PAGA):- Speakers

| Type designation   | EC Type-Examination Certificate No. | Expiry date | Notified Body No. | USCG approval number |
|--|-------------------------------------|-------------|-------------------|----------------------|
| DSP-15 T-MED, DSP-15-54 T-MED, DST-100-MED, HP-10 T-MED, HP-10-54 T-MED, HP-15 T-MED, HP-20 T-MED, HP30 T-MED, HP-6 CT-MED, HPS-6 CT-MED <sup>1</sup>                        | MEDB00008NW                         | 2029-02-07  | 0575              | N/A                  |
| BA-56 EExeNT-MED, DSP-15 EExmN(M)T(MF)-MED, DSP15 EExmN(M)LT(MF) <sup>1</sup>  | MEDB00008NV                         | 2029-02-05  | 0575              | N/A                  |
| BP-361 ST-MED, BP-361 T-MED, BPF-660 IPT-MED, BPF-660T-MED, BS-560T-MED, VES-561-54T-MED, VES-561T-MED <sup>1</sup>  | MEDB00008NU                         | 2029-02-05  | 0575              | N/A                  |
| CAR-6T-MED, CAS-15-54T-MED, CP-6 T-MED, CP-66 T-MED, MC-50T-MED, MH-30T-MED, SAFE-10P-54T-MED, SAFE-10PT-MED, SAFE-15 T-MED, SAFE-561 IPT-MED, SAFE-561-54T-MED <sup>1</sup> | MEDB00008NT                         | 2029-02-05  | 0575              | N/A                  |

### Places of production

1.DNH A/S Den Norske Høytalerfabrikk A/S, Gruveveien 2-4, KRAGERØ, Norway