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 Høyttalerfabrikk 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

NORWEGIAN ACCREDITATION PROD 019

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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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)
24	200112102/C5/05	2001-07-13	Report: Nemko, Corrosion test report for MusicHorn-MH (MH-30) loudspeaker

DNV No	Document ID	Rev	Description
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.