



Marine & Offshore

Certificate number: 44856/B0 BV

File number: AP 4680

Product code: 4209H

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Den Norske Hoyttalerfabrikk
Kragero - NORWAY

for the type of product

EMERGENCY LOUDSPEAKER SYSTEMS

Horn , cabinet, projector and ceiling loudspeakers

SAFE-561-54(T), VES-561-54(T), DP(D)-10-54(T), CAS-15-54(T), DSP-15-54(T), HP-10-54(T), CAP-15-54(T), P-3x2P-54(T), SAFE-10P-54(T), MH-30-54(T), BPF-660-54T

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships.
EN 54-24 (2008).

EC Code: 41

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 24 Mar 2026

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 24 Mar 2021,

Rune MARSTEIN

Rune Marstein



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 3 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION:

- Product model or type designation :

**SAFE-561-54(T), VES-561-54(T), DP(D)-10-54(T), CAS-15-54(T), DSP-15-54(T), HP-10-54(T)
CAP-15-54(T), P-3x2P-54(T), SAFE-10P-54(T), MH-30-54(T), BPF-660-54T**

- Product description:

Horn, cabinet, projector and ceiling loudspeakers.

Model	Type	SPL Rated Noise Power / 4m (dB)	IP Rating
DP-10-54(T)	One-directional projector	86	IP 33C
DPD-10-54(T)	Bidirectional projector	83	IP 33C
DSP-15-54 (T)	Horn speaker	97	IP 33C
SAFE 561 T	Ceiling / wall loudspeaker	97	IP 21C
VES-561-54(T)	Ceiling	84	IP 32C
CAS-15-54(T)	Wall speaker	76	IP 33C
HP-10-54 (T)	Horn speaker	96	IP 33C
CAP-15-54(T)	Projector	88	IP 33C
P-3x2P-54(T)	Ceiling / wall loudspeaker	88	IP 21C
SAFE-10P-54(T)	Cabinet	81	IP 21C
MH-30-54(T)	Horn	95	IP 33C
BPF-660-54T	Ceiling / wall loudspeaker	87	IP 21C

2. DOCUMENTS AND DRAWINGS:

CNBOP:

- General technical description test report DP-10-54(T) & DPD-10-54(T) No.: 5115/BA/11, dated May 23, 2011
- General technical description test report DSP-15-54 (T) No.: 1006/BA/14, dated Jan 9, 2015
- General technical description test report HP-10-54 (T) No.: 1005/BA/14, dated Jan 20, 2015
- General technical description test report SAFE 561 T No.: 4898/BA/10, dated Oct 29, 2010
- General technical description test report VES-561-54(T) No.: 5114/BA/11, dated May 19, 2011
- General technical description test report CAS-15-54(T) No.: 412/BA/13, dated Jan 31, 2014

DNH:

- datasheet for CAP-15-54(T) dated 07.09.2020
- datasheet for P-3x2P-54(T) dated 27.10.2016
- datasheet for SAFE-10P-54(T) dated 27.10.2016
- datasheet for MH-30-54T dated 24.01.2020
- datasheet for BPF-660-54T dated 02.03.2021

3. TEST REPORTS:

CNBOP:

- Test report DP-10-54(T) & DPD-10-54(T) No. 5115/BA/11, dated May 23, 2011
- Test report DSP-15-54 (T) No. 1006/BA/14, dated Jan 9, 2015
- Test report HP-10-54 (T) No. 1005/BA/14, dated Jan 20, 2015
- Test report SAFE 561 T No. 4898/BA/10, dated Oct 29, 2010
- Test report VES-561-54(T) No. 5114/BA/11, dated May 19, 2011
- Test report CAS-15-54(T) No. 412/BA/13, dated Jan 31, 2014
- Test report CAP-15-54(T) No. 1993/BA/16, dated Nov 25, 2016
- Test report P-3x2P-54(T) No. 5838/BA/12, dated Jul 26, 2012
- Test report SAFE-10P-54(T) No. 853/BA/18, dated Jul 06, 2018
- Test report MH-30-54T No. 1544/BA/19, dated Oct 01, 2019
- Test report BPF-660-54T No. 33/BA/20, dated Jan 08, 2020

4. APPLICATION / LIMITATION:

4.1 - BUREAU VERITAS Rules and Regulations for the Classification of Steel Ships.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - BUREAU VERITAS Environmental Category, **EC Code: 41**

4.4 - The equipment is not intended for hazardous areas.

4.5 - When used for a public address or general system, loops and loudspeakers lay out are to be submitted for approval.

4.6 - To be installed in compliance with Regulations and Rules stated on front page of the Certificate.

4.7 - When used for an emergency alarm system the cables shall be of a fire-resistant type.

4.8 - Satisfactory performance tests shall be witnessed on each installation by the Society's Surveyor after installation on board.

5. PRODUCTION SURVEY REQUIREMENTS:

5.1 - The above products are to be supplied by **DNH AS (Den Norske Høyttalerfabrikk AS)** in compliance with the type described in this certificate.

5.2 - This type of product is within the category HBV of Bureau Veritas Rule Note NR320 and as such does not require a BV product certificate.

5.3 - **DNH AS (Den Norske Høyttalerfabrikk AS)** has to make the necessary arrangements to have its works recognised by Bureau Veritas in compliance with the requirements of NR320 for HBV products.

5.4 - For information, **DNH AS (Den Norske Høyttalerfabrikk AS)** has declared to Bureau Veritas the following production site :

DNH AS (Den Norske Høyttalerfabrikk AS)
Gruvevn 2-4
3770 Kragerø
NORWAY

6. MARKING OF PRODUCT:

- Maker's name or trade mark.

- Serial number of the units.

- Equipment type number or model identification under which it was type-tested.

7. OTHERS:

7.1 - It is **DNH AS (Den Norske Høyttalerfabrikk AS)** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

7.2 - This certificate supersedes the Type Approval Certificate No.: 44856/A0 BV issued on 22 Apr 2016 by the Society.

*** END OF CERTIFICATE ***