

TYPE EXAMINATION CERTIFICATE – EC MODULE B

Certificate no.:
MEDB000096V

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)

HWS-131X, HWS-153X, HWS-150XXX, HWS-155XXX, HWS-181XXX, HFS-182XXX, HOS-177X, HBS-172X, HFS-173X, HFS-174X, HHS-175X, HCS-176X

issued to

HANSHIN ELECTRONICS CO.,LTD.
Busan, Korea, Republic of

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

Regulation (EU) 2025/1533,

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

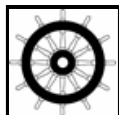
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2031-02-10**.

Issued at **Høvik** on **2026-02-11**

DNV local unit:
Gimhae Station

Approval Engineer:
Tommi Juhani Rifaat



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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 USD 300 000.

Product description

The units listed below are loudspeakers for sounding of Public Address or General Emergency Alarm.

Model	Location
HWS-131X	Exposed
HWS-153X	Exposed
HWS-150XXX	Exposed
HWS-155XXX	Exposed
HWS-181XXX	Protected
HFS-182XXX	Protected
HOS-177X	Protected
HBS-172X	Protected
HFS-173X	Protected
HFS-174X	Protected
HHS-175X	Protected
HCS-176X	Protected

Application/Limitation

The speakers are to be installed according to manufacturer's operation and installation manuals.
The system shall be positioned more than 5 meters away from the magnetic compass.

Type Examination documentation

DNV No	Drw No	Rev	Title
22	KOMERI-0306-11T450	2011-07-20	Report: Komeri, HFS-182AV IP56 Test Report
21	KOMERI-0306-11T435	2011-07-20	Report: Komeri, HWS-181AV IP56 Test Report
20	KOMERI-0306-11T434	2011-07-20	Report: Komeri, HWS-155AV IP56 Test Report
19	KOMERI-0306-11T436	2011-06-01	Report: Komeri, HWS-150PBA IP56 Test Report
18	KOMERI-0306-13T958	2013-12-31	Report: Komeri, HWS-150PAA IP67 Test Report
17	DRCKREL2004-0128	2020-04-07	Report: Dt&C, HWS-153D IP56 Test Report
16	KOMERI-I-09T165	2009-05-22	Report: Komeri, HWS-131A IP56 Test Report
14	6002357	1.0a	Doc: Hanshin, IEC 60945 Salt mist Declaration
13	HS-PMP970-TP-A1545164	1.0e	Report: Hanshin, HPA-97xx Series Type Approval Test Report
12	HS-PMP970-250908	1.2 c	Manual: Hanshin, HPA-97xx Operation & Installation Manual
11	R101R-024	2010-01-29	Report: Onetech, HPA-97xx IEC 60945 Environmental Test Report
10	E101R-001	2010-01-06	Report: Onetech, HPA-97xx EMC Test Report
4	HS-PMP970-090622-1	1.2 e	Drawing: Hanshin, HPA-97xx Circuit Drawing

Tests carried out

- Environmental testing: IEC 60945 (2002) incl. IEC 60945 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/batch number and safe distance to magnetic compass.