

# TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate No:  
**MERB00008VT**  
Revision No:  
**0**

This Certificate is issued by DNV UK Limited based on authorisation of the Maritime & Coast Guard Agency (MCA) as an UK Approved Body to undertake conformity assessments on marine equipment in accordance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016 as amended.

## This is to certify:

**That the Public Address and General Alarm Systems (PAGA):-Control and distribution system**

with type designation(s)  
**SPA-V2**

Issued to  
**Zenitel Norway AS avd Horten**  
**HORTEN, Norway**

is found to comply with the requirements in the following Regulations/Standards:  
Regulation **MSN 1874 Amendment 10**,  
**item No. UK/1.44a. SOLAS 1974 as amended, Regulation II-2/12,21,22, III/4, 6 & X/3, LSA Code VII, HSC Code 4,8, IMO MSC.302(87), 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 **2030-01-14**.

Issued at **London** on **2025-02-14**

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



for **DNV UK Ltd.**

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**Maritime &  
Coastguard  
Agency**

UK Approved Body Authorised  
by the MCA

This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with the approved body named on this certificate.  
During the period of validity of this certificate the applicable regulations (international conventions and the relevant resolutions and circulars of the IMO) and testing standards may change, therefore the product conformity may need to be re-assessed by the Approved 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-control phase module (D, E or F) of Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body. In case limitations of use apply, these should be indicated in the Annex.

**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 SPA-V2 system can be set up in different configurations for the functions of General Alarm (GA) and Public Address (PA) for the below types of installations:

Vessel Type	System Type		
	GA	PA	PA/ GA
Cargo	GA	PA	PA/ GA
Passenger	GA	PA	PA/ GA
Passenger SRtP	N/A	N/A	N/A

The SPA-V2 system PA/GA system consist of the following units <sup>1)</sup>:

Module/Subunit	Type	Description
Amplifiers	VPA-120 (MED) VPA-400 (MED) EA1400 (MED)	Power Amplifier 120W Power Amplifier 400W Power Amplifier 400W
Microphone panels	SPA-M1-V2-MED SPA-M1-D-MED SPA-M6-V2-MED SPA-M6-D-MED	Single <sup>2)</sup> PA panel with All-Call Dual <sup>2)</sup> PA panel with All-Call Single PA panel with 6 zones and All-Call Dual PA panel with 6 Zones, All Call
Alarm panels	SPA-AC6-MED SPA-AC6-D-MED SPA-AC1L-MED SPA-AC1P-MED SPA-AC1LW-MED SPA-AC1PW-MED	Single alarm panel for use with SPA-M6-V2-MED Dual alarm panel for use with SPA-M6-D-MED General Alarm Button (latched) General Alarm Button General Alarm Button (latched), watertight General Alarm Button, watertight
Combined alarm and microphone panels	SPA-W1-V2-MED SPA-W1-D-MED SPA-W1AR-V2-MED SPA-W1AR-D-MED SPA-W6A4-MED SPA-W6A4-D-MED	Single weatherproof PA Panel Dual weatherproof PA Panel Single weatherproof PA and Alarm Panel Dual weatherproof PA and Alarm Panel Single weatherproof PA and Alarm Panel, 6 Zones Dual weatherproof PA and Alarm Panel, 6 Zones
Microphones	PAM2H (MED) MB-30G (MED) P-66 (MED)	Handheld microphone for SPA-V2 indoor panels Gooseneck microphone Handheld microphone, waterproof
Function boards	SPA-TERM-V2 (MED) SPA-CHIME4-V2 (MED) SPA-EMS-V2 (MED) SPA-FAIL (MED) SPA-UPS (MED) SPA-MUL-V2 (MED) SPA-ENT4-V2 (MED) SPA-EE4-V2 (MED) SPA-EE4D (MED) SPA-DUALAL-V2 (MED) SPA-AL-REL-V2 (MED) SPA-AL-REL6-V2 (MED) SPA-VDR-V2 (MED) SPA-REL-V2 (MED)	SPA-V2 Main terminal board Chime generator Emergency PA generator Power failure output relay with potential free contact Auto switch between 230VAC mains, emergency/UPS Zone control board w/4 wire entertainment, 6 zones 4 wire entertainment, 6 zones Single alarm generator w/ 3 alarm tones Alarm generator set for dual system Alarm generator for dual system 3x Potential free relay output 6x Potential free relay output Output for Voice Data Recorder Multipurpose potential free relay contact
Power Supply Unit	HDR-60-24 (MED)	230VAC/24VDC power supply incl. Schurter FMBB-MRYB-0310 filter
Power Surveillance Panel	PSP-1 (MED)	Power Surveillance Panel with indication of power failure
Racks	19" Cabinet xxU.	xx=Units, max is 24

<sup>1)</sup> Actual configuration may vary based on requirements for individual installations.

<sup>2)</sup> Reference to "Single" in table above implies use with single system, "Dual" implies use with dual (redundant) system.

## Application/Limitation

1. Equipment is to be installed in protected environment, i.e. indoor.
2. The maximum height of units shall be 24 HU.
3. Any PA panel which is not used for activation of Emergency PA shall have a lower priority than GA.
4. When used as combined PA/GA system, minimum two independent speaker loops are required.

## Type Approval documentation

DNV No	Document ID	Rev.	Description
71	A100K12294	V1.0	Report: Zenitel, EN 50695 test report for SPA-V2-MED
70	A100K12297	V1.0	Report: Zenitel, IEC 62923-1 2 test report for SPA-V2-MED
69	A100K12296	V1.0	Report: Zenitel, IEC 61162-1 test report for SPA-V2-MED
68	A100K12295	V1.0	Report: Zenitel, IEC 62288 test report for SPA-V2-MED
67	A100K10371	v.2.4	Manual: Zenitel, SPA-V2 PA/GA System, User Manual
66	A100K12252		Manual: Zenitel, SPA-V2 PA/GA System, Technical Manual
65	A100K11939		Manual: Zenitel, EA1400/ EA1600 Analog Class-D Amplifier, Installation and User Manual
64	A100K10875		Manual: Zenitel, VPA Public Address Amplifiers VPS-120/240/400, Installation and User Manual
15	31604	0	Report: Applica, Minimum luminance testing of Dual Mic Panel and Dual Alarm Panel
12	31446-1	0	Report: Applica, EMC test report for SPA-V2 system
11	30048	3	Report: Applica, EMC and environmental test report of EA1600 PA amplifier
10	DANAK-1911533	2011-08-19	Report: Delta, EMC and environmental test report for SPA-V2 system
8	REP040264	A	Report: Nemko, EN 50695 (2021) Audio test report for VPA120, VPA400 and EA1400
6	DANAK-198453	2006-07-28	Report: Delta, EMC and environmental test report for VPA-120, VPS-240 and VPS-400 PA/GA system power amplifiers
5	31446-4	0	Report: Applica, Environmental test report for Power Surveillance Panel PSP-1
4	31446-3	0	Report: Applica, EMC test report for Power Surveillance Panel PSP-1
3	31446-2	0	Report: Applica, Environmental test report for SPA-V2 system

## Tests carried out

- Environmental testing: IEC 60945 (2002)
- Performance testing: EN 50695 (2021)
- Interface testing: IEC 61162-1 (2016) and IEC 61162-1 (2024)
- Presentation of information: IEC 62288 (2021)
- Bridge Alert Management IEC 62923-1 (2018) and IEC 62923-2 (2018)

## Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.