

# EC-TYPE EXAMINATION CERTIFICATE (MODULE B)

Certificate no.:  
**MEDB00008VT**

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):-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 **(EU) 2024/1975**,

**item No. MED/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**

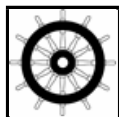
Further details of the equipment and conditions for certification are given overleaf.

This Certificate is valid until **2030-01-14**.

Issued at **Høvik** on **2025-01-15**

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

Approval Engineer:  
**Steinar Kristensen**



for **DNV AS**

Notified Body  
No.: **0575**

**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 This certificate remains valid unless suspended, withdrawn, recalled or cancelled.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 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)        | Power Amplifier 120W                                           |
|                                      | VPA-400 (MED)        | Power Amplifier 400W                                           |
|                                      | EA1400 (MED)         | Power Amplifier 400W                                           |
| Microphone panels                    | SPA-M1-V2-MED        | Single <sup>2)</sup> PA panel with All-Call                    |
|                                      | SPA-M1-D-MED         | Dual <sup>2)</sup> PA panel with All-Call                      |
|                                      | SPA-M6-V2-MED        | Single PA panel with 6 zones and All-Call                      |
|                                      | SPA-M6-D-MED         | Dual PA panel with 6 Zones, All Call                           |
| Alarm panels                         | SPA-AC6-MED          | Single alarm panel for use with SPA-M6-V2-MED                  |
|                                      | SPA-AC6-D-MED        | Dual alarm panel for use with SPA-M6-D-MED                     |
|                                      | SPA-AC1L-MED         | General Alarm Button (latched)                                 |
|                                      | SPA-AC1P-MED         | General Alarm Button                                           |
|                                      | SPA-AC1LW-MED        | General Alarm Button (latched), watertight                     |
|                                      | SPA-AC1PW-MED        | General Alarm Button, watertight                               |
| Combined alarm and microphone panels | SPA-W1-V2-MED        | Single weatherproof PA Panel                                   |
|                                      | SPA-W1-D-MED         | Dual weatherproof PA Panel                                     |
|                                      | SPA-W1AR-V2-MED      | Single weatherproof PA and Alarm Panel                         |
|                                      | SPA-W1AR-D-MED       | Dual weatherproof PA and Alarm Panel                           |
|                                      | SPA-W6A4-MED         | Single weatherproof PA and Alarm Panel, 6 Zones                |
|                                      | SPA-W6A4-D-MED       | Dual weatherproof PA and Alarm Panel, 6 Zones                  |
| Microphones                          | PAM2H (MED)          | Handheld microphone for SPA-V2 indoor panels                   |
|                                      | MB-30G (MED)         | Gooseneck microphone                                           |
|                                      | P-66 (MED)           | Handheld microphone, waterproof                                |
| Function boards                      | SPA-TERM-V2 (MED)    | SPA-V2 Main terminal board                                     |
|                                      | SPA-CHIME4-V2 (MED)  | Chime generator                                                |
|                                      | SPA-EMS-V2 (MED)     | Emergency PA generator                                         |
|                                      | SPA-FAIL (MED)       | Power failure output relay with potential free contact         |
|                                      | SPA-UPS (MED)        | Auto switch between 230VAC mains, emergency/UPS                |
|                                      | SPA-MUL-V2 (MED)     | Zone control board w/4 wire entertainment, 6 zones             |
|                                      | SPA-ENT4-V2 (MED)    | 4 wire entertainment, 6 zones                                  |
|                                      | SPA-EE4-V2 (MED)     | Single alarm generator w/ 3 alarm tones                        |
|                                      | SPA-EE4D (MED)       | Alarm generator set for dual system                            |
|                                      | SPA-DUALAL-V2 (MED)  | Alarm generator for dual system                                |
|                                      | SPA-AL-REL-V2 (MED)  | 3x Potential free relay output                                 |
|                                      | SPA-AL-REL6-V2 (MED) | 6x Potential free relay output                                 |
|                                      | SPA-VDR-V2 (MED)     | Output for Voice Data Recorder                                 |
|                                      | SPA-REL-V2 (MED)     | 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.