



CERTIFICATE NUMBER 23-2461223-PDA
EFFECTIVE DATE 29-September-2023
EXPIRATION DATE 28-September-2028
ABS TECHNICAL OFFICE Yokohama Engineering Services

CERTIFICATE OF

Product Design Assessment

This is to certify that a representative of this Bureau did, at the request of

ZENITEL NORWAY AS

located at

P.O. BOX 4498 NYDALEN, Sandakerveien 24C., OSLO, Norway, N-0403

assess design plans and data for the below listed product. This assessment is a representation by the Bureau as to the degree of compliance the design exhibits with applicable sections of the Rules. This assessment does not waive unit certification or classification procedures required by ABS Rules for products to be installed in ABS classed vessels or facilities. This certificate, by itself, does not reflect that the product is Type Approved. The scope and limitations of this assessment are detailed on the pages attached to this certificate.

Product Public Address and General Alarm

Model Vingtor SPA-V2 Public Address and General Alarm System

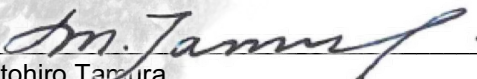
Endorsement Other

This Product Design Assessment (PDA) Certificate remains valid until 28/September/2028 or until the Rules and/or Standards used in the assessment are revised or until there is a design modification warranting design reassessment (whichever occurs first).

Acceptance of product is limited to the "Intended Service" details prescribed in the certificate and as per applicable Rules and Standards.

This Certificate is valid for installation of the listed product on ABS units which exist or are under contract for construction on or previous to the effective date of the ABS Rules and standards applied at the time of PDA issuance. Use of the Product for non-ABS units is subject to agreement between the manufacturer and intended client.

American Bureau of Shipping


Motohiro Tamura
Engineer/Consultant

NOTE: This certificate evidences compliance with one or more of the Rules, Guides, standards or other criteria of ABS or a statutory, industrial or manufacturer's standards. It is issued solely for the use of ABS, its committees, its clients or other authorized entities. Any significant changes to the aforementioned product without approval from ABS will result in this certificate becoming null and void. This certificate is governed by ABS Rules 1-1-A3/5.9 Terms and Conditions of the Request for Product Type Approval and Agreement (2010)

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Tier: 2 - PDA Issued

Product: Public Address and General Alarm
Model: Vingtor SPA-V2 Public Address and General Alarm System
Endorsements:

Intended Service:

Public Address and General Alarm functions for installation on-board ABS Class Vessels, Passenger Vessels and Mobile Offshore Drilling Units

Description:

Modular rack based Public Address system with General Alarm and interfaces to PABX and Fire Alarm systems. Refer to supplementary information for full equipment details.

Rating:

115/230V AC 50/60Hz with emergency 24V DC

Service Restriction:

Unit Certification is required for this product.

Fault simulation and factory acceptance tests, as detailed in 4-9-3/Table 2, 3.6 and 3.7 of the ABS Rules for Building and Classing Marine Vessels are to be witnessed by an ABS Surveyor.

On-board complete system and integration testing as detailed in 4-9-3/Table 2, 4.1 and 4.2 of the ABS Rules for Building and Classing Marine Vessels are to be witnessed by an ABS Surveyor.

Comments:

The Manufacturer has provided a declaration about the control of, or the lack of Asbestos in this product.

i) Each vessel installation is to be specifically approved in accordance with the applicable Rules. Where a single system serves for both public address and general alarm emergency functions, the major system components are to be duplicated as required by 4-8-2/11.5.4. of the ABS Rules for Building and Classing Marine Vessel Rules. The system may be used on passenger vessels provided that the requirements under 5C-7-5/13.13 and 5C-7-5/13.15 of the ABS Rules for Building and Classing Marine Vessel Rules are met.

ii) Where the installation forms a combined PAGA System it is a Computer Based Category II System as detailed in 4-9-3/7.1 and 4-9-3/Table 1 of the Marine Vessel Rules and IACS Unified Requirement E22 Rev3: June 2023. The documentation detailed in 4-9-3/Table 2 of the Marine Vessel Rules for System Category II is to be maintained and made available to ABS upon request.

iii) Electrical equipment intended for installation in hazardous areas is to be of a certified safe type based on the class of the hazardous area at its location of installation as detailed in 4-8-3/13.1 of the ABS Rules for Building and Classing Marine Vessels. Certificates in this regard are to be presented to the ABS Surveyor for verification on a case-by-case basis.

Notes/Drawing/Documentation:

Drawing No. REP012967B, Test Report Electromagnetic Compatibility, Revision: -, Pages: -

Drawing No. A100K10371, User Manual Public Address & General Alarm System SPA-V2, Revision: -, Pages: -

Drawing No. DANAK-198453, DELTA Test Report, Revision: -, Pages: -

Drawing No. A100K10370, Configuration & Installation Manual, Revision: -, Pages: -

Drawing No. DANAK-197395, Test Report, Revision: -, Pages: -

Drawing No. DANAK-1911533, DELTA Test Report, Revision: -, Pages: -

Drawing No. A100K10369, System Manual Public Address & General Alarm System SPA-V2, Revision: -, Pages: -

Drawing No. REP012967, Test Report Electromagnetic Compatibility, Revision: -, Pages: -

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Terms of Validity:

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STANDARDS

ABS Rules:

Marine Vessel Rules (2023): 1-1-4/7.7, 1-1-A3 & A4, 4-8-2/11.5.1, 4-8-2/11.7.1, 4-9-3/11.9, 4-9-8/13, 4-9-8/13 Table 1 & Table 2, 5C-7-5/13.13, 5C-7-5/13.15

Facilities on Offshore Installations (2023): 1-1-4/9.7, 1-1-A2 & A3, 1-1, 3-8/7.11;

Mobile Offshore Drilling Units Rules (2023): 1-1-4/9.7, 1-1-A2 & A3, 4-3-2/15.9, 4-3-2/17.1, 6-1-1/9, 6-1-1/13;

Steel Vessels for Service on Rivers and Intracoastal Waterways (2023): 1-1-4/7.7, 1-1-A3 & A4;

Bulk Carriers for Service on the Great Lakes (2022): 1-1-4/7.7, 1-1-A3 & A4;

High-Speed Craft (2023): 1-1-4/11.9, 1-1-A2 & A3;

Steel Barge Rules (2023): 1-1-4/7.7, 1-1-A3 & A4;

National:

NA

International:

IMO A.1021(26) Code on alerts and indicators (2009),

Life Saving Appliances (LSA) Code (2010) VII 7.2,

IMO MSC Circ. 808:1997,

IMO Res. A.813(19):1995

Government:

NA

EUMED:

NA

OTHERS:

IACS UR E10, Rev.8:2021

- Company Name, ZENITEL NORWAY AS
- Model Number, Vingtor SPA-V2 Public Address and General Alarm System
- PDA Number, 23-2461223-PDA
- Issuance date, 29 September 2023
- Expiration date, 28 September 2028
- Revision number. 2

Equipment List VINGTOR SPA-V2 Solution

System Racks

ID	Description
SPA-120-V2	12HU rack with 1x SPA-TERM-V2 & 1x VPA-120
SPA-240-V2	12HU rack with 1x SPA-TERM-V2 & 1x VPA-240
SPA-400-V2	12HU rack with 1x SPA-TERM-V2 & 1x VPA-400
SPA-BASIC-12-V2	12 HU rack for one amplfier with SPA-TERM-V2, SPA-EE3-V2, SPA-AL-REL-V2 SPA-CHIME-V2, SPA-UPS
SPA-BASIC-16-V2	16 HU rack for two amplfier with SPA-TERM-V2, SPA-MUL-V2, SPA-EE3D-V2, SPA-AL-REL-V2 SPA-CHIME-V2, SPA-UPS

Amplifiers

ID	Description
VPA-120	Pastrong 120W @ 100V audio
VPA-240	Pastrong 240W @ 100V audio
VPA-400	Pastrong 400W @ 100V audio

Panels and accesories

ID	Description
SPA-M1H-V2	All-call microphone panel with hand mic flush
SPA-M1S-V2	All-call microphone panel with goose mic flush
SPA-M1H-D	All-call microphone panel with hand mic flush dual
SPA-M1S-D	All-call microphone panel with goose mic flush dual
SPA-M6H-V2	6 zone microphone panel with hand mic flush
SPA-M6S-V2	6 zone microphone panel with goose mic flush
SPA-M6H-D	6 zone microphone panel with hand mic flush dual
SPA-M6S-D	6 zone microphone panel with goose mic flush dual
SPA-M6HM-V2	SPA-M6H-V2 with zone selection memory
SPA-M6SM-V2	SPA-M6S-V2 with zone selection memory
SPA-M6HDM-V2	SPA-M6H-D with zone selection memory
SPA-M6SDM-V2	SPA-M6S-D with zone selection memory
SPA-AC6	6 button alarm panel
SPA-AC6-D	6 button alarm panel dual
SPA-W1-V2	All-call microphone panel with hand mic IP-66
SPA-W1-D	All-call microphone panel with hand mic IP-66 dual
SPA-W1AR-V2	All-call microphone panel with hand mic & two alarm buttons IP-66
SPA-W1AR-D	All-call microphone panel with hand mic & two alarm buttons IP-66 dual
SPA-W2-D	2 zone microphone panel with hand mic IP-66
SPA-W6A4	6 zone microphone panel with hand mic & 4 alarm buttons IP-66
SPA-W6A4-D	6 zone microphone panel with hand mic & 4 alarm buttons IP-66 dual
MB-30G	Electret goose microphone
ETC-1	Dynamic hand microphone
P-66	Hand microphone IP-47
P-66/10	P-66 with 10 meter cable
SPA-REM7	Remote panel for SPA-DARP16
SPA-MON1	Monitor panel

Volume control and program selectors

ID	Description
VM-15R	Volume control 15W
VM-50R	Volume control 50W
VM-15RD	Volume control 15W dual
VM-50RD	Volume control 50W dual
VM15-RDF	Volume control 15W fail-safe dual
VM-50RDF	Volume control 50W fail-safe dual
SPA-PROG4-RDF	Entertainment selector for 4 external 100V sources with 100V PA and override input fail-safe dual
SPA-PROG2	Control panel for SPA-ENTP2X2I dual
ENT-4F	Entertainment panel for 4 external 100V sources override and 100V PA audio
ENT-2D	Entertainment panel for 2 programs 100V with override and sepearte speaker for B loop

Speakers

ID	Description
CL-200T	Ceiling10W IP-44
CAU-4T	Wall 4W IP-55
CW-4T	Wall 4W
CW-4T/VOF	Wall 4W w/ volume control override fused
CAR-4TF	Wall double face 4 fused
BF-560STT	Ceiling tropicalized 6W fused
VES-360TF	Ceiling 6W fused
213000101	Dual flush 6W
SAFE-10PTF	Wall 10W IP-44

VML-15T	Horn 15W IP-66
HP-15TF	Horn 15W fused IP-65
HP-30T	Horn 30W IP-67
DST-100 & DH-30/ DH-50	Driver and horn 100W IP-67
CAREEX-6T	Double face 6W Atex
DSP-15EEeNT	Horn 15W Atex IP-67
2340020001	Driver and horn 40W Atex
HP-20ST	Horn 20W Ex Z2 IP-67