



Certificate No. 03-001971/031678

TYPE APPROVAL CERTIFICATE

This is to certify that this product complies with the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products.

TYPE AND DESCRIPTION OF PRODUCT:

AUTOMATIC TELEPHONE, PUBLIC ADDRESS, GENERAL ALARM SYSTEM

SPA-V2

MANUFACTURER:

ZENITEL NORWAY AS

Bromsveien 17, P.O.Box 1068 Bekkajordet
NO-3194 HORTEN
NORWAY

THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:

CRS RULES FOR THE CLASSIFICATION OF SHIPS

FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.

APPROVAL IS VALID UNTIL: **2026-06-09**

Place and date: Split, 2023-09-07 Seal

Marinko Popović, dipl.ing.

NOTE: This certificate is not valid for equipment, the design or manufacture of which has been varied or modified from the specimen tested. The manufacturer should notify Croatian Register of Shipping of any modification or changes to the product in order to obtain a valid certificate.

DETAILED PRODUCT DESCRIPTION:

The system can be used in a few different configurations: as a PA system only (SPA2-xx-P) or like a PA/GA integrated system on standard vessels (SPA2-xx-GD) and passenger vessels (SPA2-xx-GP) where are minimum of two approved amplifiers in one and two separate racks.

TECHNICAL DOCUMENTATION / DRAWINGS:

Amplifiers:	VPA-120 (120W), VPA-240 (240W), VPA-400 (400W);
Alarm panels:	SPA-AC6, SPA-AC6-D;
Microphone panels:	SPA-M1-V2, SPA-M1-D, SPA-M6-V2, SPA-M6-D;
Combined alarm and mic. panels:	SPA-W1-V2, SPA-W1-D, SPA-W1AR-V2, SPA-W1AR-D, SPA-W6A4-V2, PA-W6A4-D;
Microphones:	ETC-1-TB, MB-30G, P-66;
Volume Controls:	VM15-RD, VM15-RDF, VM50-RD, VM50-RDF, VCOR-15, VCOR-15F, VCOR-60, VCOR-60F;
Function boards:	SPA-TERM-V2, SPA-CHIME-V2, SPA-EMS-V2, SPA-FAIL, SPA-MUL-V2, SPA-EE3-V2, SPA-EE3D-V2, SPA-AL-REL-V2, SPA-VDR-V2, SPA-AL-REL6-V2, SPA-DUALAL-V2;
Power Supply Unit:	DR-4524;
Racks:	Paso 58xx-D.

APPLICATION / LIMITATIONS:

Equipment is to be installed in protected environment. The maximum height of units shall be 24 HU.

TYPE APPROVAL DOCUMENTATION:

ZENITEL – SPA-V2, Installation & Configuration Manual, A100K10370;
ZENITEL – SPA-V2, System Manual, A100K10369;
ZENITEL – SPA- V2, User Manual, A100K10371;
ZENITEL – Performance Test DNV PA/GA Type Approval of SPA-V2 system;
DANAK Test Report, Type approval testing of Talk-Back and PA/GA System, 197395;
DANAK Test Report, Test for Marine Type Approval of SPA-V2 system, 1911533;
DANAK Test Report, Type approval testing of VPA-120, VPA-240 and VPA-400 Power amplifiers, 198453;
NEMKO Test Report, Type approval testing of VPA400 & VPA240 / VPA240 & VPA120, REP012967B.

MARKING OF PRODUCT:

In accordance with IEC60945 – Marking and identification (The Manufacturer and Type Designation of the product, serial number, date of manufacture, supply voltage, other particulars...).

CONDITIONS FOR CERTIFICATION:

On the CRS classed vessels, documentation for the actual application is to be submitted for approval in each case.