

**POTVRDA O TIPNOM ODOBRENJU**  
*TYPE APPROVAL CERTIFICATE*Br / No **03-001640/031364**

Potvrđuje se da je ovaj proizvod, u skladu s Pravilima za klasifikaciju brodova, Dio 1. - Opći propisi, Odjeljak 3. - Tipno odobrenje proizvoda, odobren za ugradnju na brodove i postrojenja pod nadzorom Hrvatskog registra brodova.

*This is to certify that this product, on the basis of the Rules for the classification of ships, Part 1 - General requirements, Chapter 3 - Type approval of products, is approved for use on board ships and installations under supervision of the Croatian Register of Shipping.*

**TIP I OPIS PROIZVODA:***TYPE AND DESCRIPTION OF PRODUCT:***AUTOMATSKI TELEFON, JAVNI RAZGLAS, GENERALNI ALARM**  
*AUTOMATIC TELEPHONE, PUBLIC ADDRESS, GENERAL ALARM SYSTEM***SPA-V2****PROIZVOĐAČ:***MANUFACTURER:***ZENITEL NORWAY AS**

Bromsveien 17, P.O.Box 1068 Bekkajordet

**NO-3194 HORTEN***Norway***PROIZVOD UDOVOLJAVA SLIJEDEĆIM PRAVILIMA/PROPISIMA:***THE PRODUCT MEETS FOLLOWING RULES/REGULATIONS:***Hrvatski registar brodova: Pravila za klasifikaciju brodova, Dio 12. – Električna oprema***Croatian Register of Shipping: Rules for the classification of ships, Part 12. – Electrical Equipment***IEC 60945 (2002), IACS UR E10****DETALJI O PROIZVODU I UVJETIMA CERTIFIKACIJE DANI SU NA POLEDINI.***FURTHER DETAILS OF THE PRODUCT AND CONDITIONS FOR CERTIFICATION ARE GIVEN OVERLEAF.***ODOBRENJE VRIJEDI DO:***APPROVAL IS VALID UNTIL:***2022-06-09****Mjesto i datum**  
*Place and date*

Split, 2018-06-11

  
Marinko Popović, dipl.ing.

**Napomena: Ova potvrda nije valjana ako se proizvod ili način njegove proizvodnje promijenio u odnosu na tipno ispitani proizvod. Proizvođač treba obavijestiti Hrvatski registar brodova o bilo kojoj izmjeni na proizvodu kako bi ishodio valjanu potvrdu.**

*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.*

**PODROBNIJI OPIS PROIZVODA:***DETAIL PRODUCT DESCRIPTION:*

Sustav se može koristiti u nekoliko izvedbi: kao samo javni razglas (SPA2-xx-P) ili kao integrirani sustav javnog razglasa i generalnog alarma PA/GA na standardnim brodovima (SPA2-xx-GD) te na putničkim brodovima (SPA2-xx-GP) s dva odobrena pojačala u istom te odvojenim kućištima.

*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.*

**TEHNIČKA DOKUMENTACIJA / NACRTI:***TECHNICAL DOCUMENTATION / DRAWINGS:*

<b>Amplifiers:</b>	VPA-120 (120W), VPA-240 (240W) and VPA-400 (400W);
<b>Alarm panels:</b>	SPA-AC6 and SPA-AC6-D;
<b>Microphone panels:</b>	SPA-M1-V2, SPA-M1-D, SPA-M6-V2, SPA-M6-D;
<b>Combined alarm and mic. panels:</b>	SPA-W1-V2, SPA-W1-D, SPA-W1AR-V2, SPA-W1AR-D, SPA-W6A4-V2 and SPA-W6A4-D;
<b>Microphones:</b>	ETC-1-TB, MB-30G, P-66;
<b>Volume Controls:</b>	VM15-RD, VM15-RDF, VM50-RD, VM50-RDF, VCOR-15, VCOR-15F, VCOR-60, VCOR-60F;
<b>Function boards:</b>	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 and SPA-DUALAL-V2;
<b>Power Supply Unit:</b>	DR-4524;
<b>Racks:</b>	Paso 58xx-D,

**PODRUČJE PRIMJENE / POSEBNI I GRANIČNI UVJETI:***APPLICATIONS / LIMITATIONS:*

Oprema se postavlja u zaštićenom okolišu. Maksimalna visina je od 24 HU jedinice.

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

**DOKUMENTACIJA ZA TIPNO ODOBRENJE:***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.

**OZNAČAVANJE PROIZVODA:***MARKING OF PRODUCT:*

Ime proizvođača, tip proizvoda, serijski broj-identifikacija i sigurna udaljenost od magnetskog kompasa.

*The Manufacturer and Type Designation of the product, serial number and safe distance to magnetic compass.*

**UVJETI ZA CERTIFIKACIJU:***CONDITIONS OF CERTIFICATION:*

Na brodovima HRB klase potrebno je dostaviti tehničku dokumentaciju stvarne izvedbe za svaku pojedinačnu primjenu.

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