TYPE APPROVAL CERTIFICATE

N. **ELE225816CS/002**

This is to certify that the product below is found to be in compliance with the applicable requirements of the RINA type approval system.

Description	**Public Address and Talk Back Systems, Automatic Telephones**
Type	**ACM Series**
Applicant	**ELCA ACS Srl** **Via Fabio Filzi 5, Cormano (MI)** **ITALY**
Manufacturer	**ZENITEL NORWAY AS** **Bromsveien 17 , P.O. Box 1068,** **Horten N-3194** **NORWAY**
Testing Standards	**Rules for the Classification of Ships, Part C, Machinery Systems and Fire protection Ch.3, Sect. 6, Table 1**

Issued in **Genova** on **October 10, 2016**   This certificate is valid until **October 10, 2021**

RINA Services S.p.A.

Valerio Bonanni

Vingtor ACM family comprises the following models:

ACM-M-A-V2; ACM-M-D-V2; ACM-48-V10; ACM-144-V10; AACM-144-V10

Software Version: 11.2

Field equipment :

Model	Ref. Code	Description
CRM-V	1008031000	IP Flush Master Station
CRM-V-HS	1008097100	Handset module for IP Flush Master
CRM-V-GN	1008097500	Noise cancelling Gooseneck Microphone for Flush Master Station
CRM-V-DAK48	1008010100	DAK Key Expansion Module for CRM-V, 48 programmable DAK keys
VMP-503	1020600315	Main Station with Loudspeaker, wall mounting, for use with ACM exchanges
VMP-530	1020600305	Main Station Waterproof, wall mounting, for use with ACM exchanges
VMP-211	3006202024	Wall Mounted Handset for use with main station VMP-503 / VMP-530
VMP-250	1020600700	Wall Mounted Handset Waterproof, Heavy Duty Industrial Handset
VMP-36-PEL	1020600750	Headset with Boom Microphone and 10 Meter Cable , for connect. to VMP Station
VMP-36-PELP	3006202029	Headset with Boom Microphone, 10 Meter Cable, for connect. to plugbox CD-7-VMP
MT9	3006090486	Throat Microphone for VSP and VMP headset
VMP-503PA	3006202031	Portable Main Station with loudspeaker for use with ACM exchanges, 5m cable
VMP-503PA/15	3006202037	Portable Master Station Main Station with loudspeaker for use with ACM exchange, 15 m cable
--------------------	1007095000	Explosion-Proof Master Station
--------------------	1008001000	IP desk master station w/display & handset
VMP-D619	1007034310	Desk / Wall Master Station Display and Handset, for use with ACM exchange
VMP-619	1007034210	Desk / Wall master Station with Handset, for use with ACM exchange
DT-800M	2212000100	Desktop Analog Telephone, for use with ACM system
VAF-1	2213000300	Analog Bridge and ECR console telephone, PA call station
HSB-03	3005000025	Analog Multipurpose , wall mount Telephone, waterproof, for use with Headset P-MT7
HAS-3	3005000022	Handset for HSB-03, with cradle and push button switch
HAS-3WT	3005000023	Handset for HSB-03, with cradle and push button switch
P-MT7	3005020050	Headset for Analog Telephone and Talk-Back System
KNSP-09	2213000100	Heavy Duty Analog Telephone , wall mounting
KNSP-01	2213000200	Heavy Duty Analog Telephone , wall mounting, with door
P-290	3005000030	Portable analogue intercom
DA24	2213001002	Analog Industrial Ex Telephone , 16 push button keypad
DA24ID	3005000016	Ex Proof telephone, 16 push button keypad with illuminated keypad
DA24H	2213001003	Ex Proof telephone with headset
DSP-15EEExeN	2340010001	Loudspeaker 15 W, EX proof, with stainless steel bracket
VML-1520	3006100088	Horn Loudspeaker 15W, for use with ACM or talk – back stations
TCAS - x	1008114010/20/30	Analog Intercom turbine Series IP 66
TCIS - x	1008111010/15/20/30/40/50/60	IP and SIP Intercom IP66
TFIE - x	1008122010/15/20/30/36	IP and SIP Intercom IP66 for industrial environments
TFIX - x	1008123010/20/30/40	Ex IP Intercom Station
TA-10	1008140100	Relay module, Dual DPDT high-power relays for TFIE-x
TA-22B	1008140225	10 m cable with plug box with PTT for industrial headset
TA-23	1008140230	Industrial Handset for Turbine with PTT
EMMAI - 2H	1023533312	Handheld Microphone, IP66
EMMAX-1H	1023533511	Handheld Industrial Ex Microphone for Exigo / Turbine
AK5850xx	AK5850HS	Ex Headset IP 66

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Model	Ref. Code	Description
TAX-2B	1008150025	Ex-Approved Plugbox & Cable for Headset with PT
TAX-3	1008150030	Ex Handset
CL-200T	2131000100	Ceiling Loudspeaker Steel Firedome
EHS-24	3006102038/39/40/41/42	Rotary Light 24V dc
EHS-220	3006102033/34/35/36/37	Rotary Light 220Vac
EHS-110	2340200001/02/03/04 3006102032	Rotary Light 110 Vac
BLK5-24	3006102022/ 2340200005/ 2340200014/ 3006102023/ 3006102084	BLK5 Flash Beacon IP65 24VDC
BLK5-230	3006102019/ 3006102020/ 3006102081/ 3006102021	BLK5 Flash Beacon IP65 230VAC
BLK5-115O	3006102018	BLK5 Flash Beacon IP65 115VAC, orange globe
PD2100AC	3006102059	Indication light with lifeboat symbol, 240Vac ; bulb E14b/15Wn
A-100	3006102002	Electronic Alarm 24Vdc
A-100AC	3006102003	Electronic Alarm 220Vac
HB-105	3006102047	Telephone tone Caller, 60 to 100Vac power line
HB-90	3006102048	Indoors telephone Tone Caller, 60 to 100Vac power line
SON -16	3006102067/68/69/70/71	Combined Audio and Visual 24Vdc
AL-100O	3006102006	Combined Audio and Visual 230Vac
AL-105N-WR	3006102005/ 9011410001/ 9011301001/ 2340200009/ 2340200016/ 3006102007/ 3006102009	Combined audio and visual, 106dB
CRB-7	3006102026	Relaybox for Telephone Signal Units Waterproof
IRR-3	1020600992	General Purpose Relay box
PLM-32	3006202009/10	Cabinets for Outdoors Installations
PLM-43	3006202011/12 2810010010	Cabinets for Outdoors Installations
PLM-54	3006202013/14	Cabinets for Outdoors Installations
CD-4	1020159000	Plugbox Waterproof
CD-7-VMP	3006202007	Watertight plugbox
SB01	3005020052	Socket Box
PT-625A	3005000034	RJ11 Jack Surface
--------------------	1009800100	Desk station accessory kit
ECPIR-P	1023200030	Exigo Call Panel, PTT Button, Pluggable Microphone, Ethernet
ECPIR-3P	1023200033	Exigo Call Panel, PTT + 3 Buttons, Pluggable Microphone, Ethernet
EAPIR-8	1023201008	Exigo Alarm Panel, 8 Buttons, Ethernet
EBMDR	1023253008	Exigo Button Module, 8 Buttons
EAPII-1	1023201201	Exigo Access Panel Industrial, 1 Button, Ethernet
EAPII-6	1023201206	Exigo Access Panel Industrial, 6 Buttons, Ethernet
EAPFX-1	1023221511	Exigo Industrial Ex Alarm Panel, 1 Button, Flowire
EAPFX-6	1023221516	Exigo Industrial Ex Alarm Panel, 6 Buttons, Flowire
76R1005	3006090378	Stainless steel cabinet A2 indoor
76R1007	3006090380	Stainless steel cabinet A2 indoor

Genova, October 10, 2016

Test reports:

Documents in RINA File "Test reports ELE214916CS/002"

Technical description:

Documents in RINA File "Test reports ELE214916CS/002"

Remarks:

Acceptance on board on each ship of Voice communication and / Public address systems is subject to previous examination of the actual system configuration for approval. FMEA document may be required.

Installation of Public Address system to be in compliance with IMO MSC 808, IMO LSA Code VII para 7.2.2

Where an individual loudspeaker has a device for local silencing, an override arrangement from the control station(S), including the navigating bridge is to be in place

It is intended that additional ordering key (product codes) mainly describing minor changes and aesthetic variations are accepted.

Modifications in the electronic circuits, and variations related to new functionalities and performances are not allowed.

Equipment to be installed in hazardous area to be provided with the relevant Safety Certificates issued by Notified Body.