



Marine & Offshore

Certificate number: 51006/A0 BV

File number: AP4814

Product code: 4206I

This certificate is not valid when presented without the full attached schedule composed of 7 sections

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TYPE APPROVAL CERTIFICATE

This certificate is issued to

Zenitel Norway A/S

Horten - NORWAY

for the type of product

PUBLIC ADDRESS AND GENERAL ALARM SYSTEMS

Public Address and General Alarm System

Vingtor Exigo

Requirements:

Bureau Veritas Rules for the Classification of Steel Ships

SOLAS 74 as amended Reg. III/6, LSA Code, IMO MSC/Circ. 808, IMO Res. A.1021(26), IEC 60533:2015, IEC 60092-504:2016.

EC Code: 21

This certificate is issued to attest that Bureau Veritas Marine & Offshore did undertake the relevant approval procedures for the product identified above which was found to comply with the relevant requirements mentioned above.

This certificate will expire on: 10 Dec 2023

For Bureau Veritas Marine & Offshore,

At BV OSLO, on 10 Dec 2018,

Rune MARSTEIN

Rune Marstein



This certificate remains valid until the date stated above, unless cancelled or revoked, provided the conditions indicated in the subsequent page(s) are complied with and the product remains satisfactory in service. This certificate will not be valid if the applicant makes any changes or modifications to the approved product, which have not been notified to, and agreed in writing with Bureau Veritas Marine & Offshore. Should the specified regulations or standards be amended during the validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on board vessels to which the amended regulations or standards apply. This certificate is issued within the scope of the General Conditions of Bureau Veritas Marine & Offshore available on the internet site www.veristar.com. Any Person not a party to the contract pursuant to which this document is delivered may not assert a claim against Bureau Veritas Marine & Offshore for any liability arising out of errors or omissions which may be contained in said document, or for errors of judgement, fault or negligence committed by personnel of the Society or of its Agents in establishment or issuance of this document, and in connection with any activities for which it may provide.

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BV Mod. Ad.E 530 June 2017

This certificate consists of 4 page(s)

THE SCHEDULE OF APPROVAL

1. PRODUCT DESCRIPTION :

The Vingtor Exigo Public Address and General Alarm System can be provided as either:

- PA system only
- GA system only
- Integrated PA and GA system

When used for PA on passenger vessel or integrated PA and GA on any vessel, the system shall be duplicated. When used for passenger vessels, the duplicated parts of the system are to be installed in separate main vertical fire zones.

1.1 - Hardware:

Vingtor Exigo Public Address and General Alarm System comprises the following modules:

Equipment type	Description	Type name	Article number	Software version	Environment
Central equipment	Exigo System Controller	ESC1	1023000000	PSC: 13.0.3.x, SSC: 4.10.3.x	Protected
	Exigo Network Amplifier AC, 2x100W	ENA2100-AC	1023102100	4.10.3.x	Protected
	Exigo Network Amplifier, 2x200W	ENA2200	1023102200	4.10.3.x	Protected
	Exigo Network Amplifier AC, 2x400W	ENA2400-AC	1023102410	4.10.3.x	Protected
	Exigo Network Amplifier DC, 2x400W	ENA2400-DC	1023102400	4.10.3.x	Protected
	IP Line Connection Module	IP-LCM	1009950100	4.10.3.x	Protected
Network equipment	Exigo Managed Network Switch, 8 PoE ports	ENSIR-8	1023604008		Protected
	Exigo Managed Network Switch, 8 Ports, din mounting	ENSER-8	1023601008		Protected
	Exigo Port Expansion Module for ENSER-8	ESEER-8	1023607008		Protected
	Exigo Fiber GBIC for ENSIR-8, 1000BaseSX, LC Connector	EFMR-1	1023616001		Protected
	Exigo Fiber GBIC for ENSIR-8, 1000BaseSX+, LC Connector	EFMR-2	1023616002		Protected
	Flowire - Ethernet Converter, DC Voltage	FCDC-1	1008080110		Protected
	Flowire - Ethernet Converter, non-PoE	FCDC-2	1008080210		Protected
	Exigo Power Injector, 6 Ports	EPIPR-6	1023697006		Protected
	Cisco 2960+24PC-L Ethernet switch – IEC60945	2960-24PC-L/DNV	2220012068		Protected
	Cisco SFP transceiver module, 1000Base-SX	GLC-SXMMD	2220012150		Protected
	Cisco 2911 Integrated Service Router – IEC60945	C2911/ DNV	2220012179		Protected
	HP 2620-24 24-port 10/100 PoE+ switch – IEC60945	ProCurve2620-24/DNV	2220050008		Protected
	HP SFP transceiver, 1G SFP LC SX	J4858C	2220011150		Protected
	24V/48V converter	SD-200B-48	2970020001		Protected
	Marine patch panel, 24 ports	BC-24PP	2220040014		Protected
Power supplies	Exigo Power Supply for ENSIR-8, 120W	EPMN-120	1023597000		Protected
	Power supply 100-240VAC/24VDC 2A DNV-GL	-	2990000063		Protected
	Power supply 100-240VAC/24VDC 4A DNV-GL	-	2990000064		Protected
	Power supply 100-240VAC/48VDC 2A DNV-GL	-	2990000065		Protected
	Power supply 100-240VAC/48VDC 5A DNV-GL	-	2990000066		Protected
Access panels	Exigo Call Panel, PTT Button, Pluggable Microphone, Ethernet	ECPIR-P	1023200030	4.10.3.x	Protected
	Exigo Call Panel, PTT + 3 Button, Pluggable Microphone, Ethernet	ECPIR-3P	1023200033	4.10.3.x	Protected
	Exigo Alarm Panel, 8 Buttons, Ethernet	EAPIR-8	1023201008	4.10.3.x	Protected
	Exigo Button Expansion Module, 8 Buttons	EBMDR-8	1023253008	NA	Protected
	Exigo Industrial Access Panel, 1 Button, Ethernet	EAPII-1	1023201201	4.10.3.x	Exposed
	Exigo Industrial Access Panel, 6 Buttons, Ethernet	EAPII-6	1023201206	4.10.3.x	Exposed
	Exigo Industrial EX Access Panel, 1 Button, Flowire	EAPFX-1	1023221511	4.10.3.x	Exposed
	Exigo Industrial EX Access Panel, 6 Buttons, Flowire	EAPFX-6	1023221516	4.10.3.x	Exposed
	IP Flush Master, Display		1008031000	NA	Protected

Microphones	Exigo Handheld Microphone, 1 Button	EMMAR-1H	1023533011	NA	Protected
	GosseNeck Microphone	MB-30G	3005020033	NA	Protected
	Exigo Handheld Industrial Microphone, 1 Button	EMMAI-1H	1023533311	NA	Exposed
	Exigo Handheld Industrial Microphone, Compact	EMMAI-2H	1023533312	NA	Exposed
	Exigo Handheld Industrial EX Microphone, 1 Button	EMMAX-1H	1023533511	NA	Exposed
Accessories	Exigo Industrial Line End Transponder	ELTSI-1	1023540200	NA	Exposed
	Turbine Kit IP Extended	TKIE-1	1008132010	4.10.3.x	Protected
	General Purpose Audio Board	AGA	1009303001	NA	Protected
	IP DAK-48 Unit	DAK-48	1008010100	NA	Protected
Network Interface for Speakers	VoIP Intercom Module for integration with passive speakers	TKIS-2	1008131020	4.10.3.x	Protected

1.2 - Software:

Exigo Configuration Software EMT Version: emt-1.3.2 or later.

Exigo Device Software EXI Version: exi-4.2.3.0 or later.

2. DOCUMENTS AND DRAWINGS :

ZENITEL:

Manuals:

Vingtor Exigo Public Address and General Alarm System, Technical Manual, Doc. No. A100K11460, Rev. 1.3.5, dated 27/11/2017.

Vingtor Exigo Public Address and General Alarm System, User Guide for Access Panels, Doc. No. A100K11471.

Data Sheets:

TKIS-2 - 1008131020, TKIE-2 - 1008132020, ESC-1 - 1023000000, NA2400-DC - 1023102400, ENA2400-AC - 1023102410, ENA2200 - 1023102200, ECPIR-P - 1023200030, ECPIR-3P - 1023200033, EBMDR-8 - 1023253008, EAPIR-8 - 1023201008, EAPII-1 - 1023201201, EAPFX-6 - 1023221516, EAPFX-1 - 1023221511, AMC-IP Version 11 - 1009202100, EAPII-6 - 1023201206.

Others:

Exigo PAGA System Topologi, Doc.No. BV-001, Rev. 01, dated 03/10/2018.

3. TEST REPORTS :

NEMKO:

EMC Test Report IP-based Intercom and PA panels, No. E14083 - Rev. 00 dated 11/06/2014.

EMC and environmental Test Report for TFIX-X intercom and EAPFX-X access panels, No. E14084 - Rev. 00 dated 12/06/2014.

DELTA:

Test of Data Networking Equipment according to Marine specifications, No. DANAK-19/14910 dated 13/01/2015.

APPLICA:

EMC testing of Exigo Industrial Line End TransponderELTSI-1, Test Report No. 20046 - Version 1 dated 09/04/2014.

EMC and Environmental testing of Exigo Maritime PA/GA system, Test Report No. 20146 - Version 1 dated 10/07/2014.

EMC and Environmental testing of ENA2400-DC Network Amplifier, Test Report No. 20583 - Rev. 0 dated 19/06/2015.

EMC and Environmental testing of ENA2400-AC ExigoNetwork Amplifier, Test Report No. 21072 - Rev. 0 dated 02/06/2017.

ZENITEL:

VINGTOR Exigo type approval - performance test, Rev.V.1.0 dated 09/10/2018.

4. APPLICATION / LIMITATION :

4.1 - BUREAU VERITAS Rules for the Classification of Steel Ships.

4.2 - Approval valid for ships intended to be granted with the following additional class notations: **AUT-UMS, AUT-CCS, AUT-PORT and AUT-IMS.**

4.3 - The equipment fulfils the EMC requirements for installation on the Bridge and deck Zone.

4.4 - BUREAU VERITAS Environmental Category, **EC Code: 21.**

4.5 - Each application and configuration is to be submitted to the Society's examination prior to fitting on board.

4.6 - The equipment, once installed on board ship, is to be tested in accordance with the above referred Regulations under the supervision of a Society's Surveyor.

4.7 - Only Hardware and Software successfully tested together in compliance with the regulations as referred to in page one, according to the declaration of the manufacturer are covered by this certificate.

4.8 - Factory Acceptance and On-board Tests are to be performed in accordance with requirements for Category II Equipment.

4.9 - Ex-certification is not covered by this certificate. Applications in hazardous areas are to be approved in each case according to the Rules and Conditions for Safe Use specified in a valid Ex-Certificate issued by a Notified or Recognised Certification Body.

5. PRODUCTION SURVEY REQUIREMENTS :

5.1 - The **Vingtor Exigo Public Address and General Alarm System** is to be supplied by **Zenitel Norway A/S** in compliance with the type and the requirements described in this certificate.

5.2 - This type of product is within the category IBV of Bureau Veritas Rule Note NR320. BV product certificate is required.

5.3 - For information, **Zenitel Norway A/S** has declared to Bureau Veritas the following production site(s):

Zenitel Norway A/S
P.Box 1068
3194 Horten
NORWAY

6. MARKING OF PRODUCT :

6.1 - Trade name

6.2 - Date of manufacture and serial number

6.3 - Equipment type number or model identification under which it was type-tested

7. OTHERS :

It is **Zenitel Norway A/S's** responsibility to inform shipbuilders or their sub-contractors of the proper methods of fitting, use and general maintenance of the approved equipment and the conditions of this approval.

***** END OF CERTIFICATE *****

