

# TYPE APPROVAL CERTIFICATE

Certificate no.:  
**TAA000002N**  
Revision No:  
**8**

## This is to certify:

that the **Automatic Telephone System and Hands Free Voice Talk Back System**

with type designation(s)  
**VINGTOR ACM**

issued to

**Zenitel Norway AS avd Horten**  
**HORTEN, Norway**

is found to comply with

**DNV rules for classification – Ships**

**IMO Res. A.694(17) General requirements for shipborne radio equipment forming part of the global maritime distress and safety system (GMDSS) and for electronic navigational aids**

## Application:

See page 2

Issued at **Høvik** on **2025-11-13**

This Certificate is valid until **2028-10-26**.

DNV local unit: **Sandefjord**

Approval Engineer: **Steinar Kristensen**



for **DNV**

This document has been digitally signed and will  
therefore not have handwritten signature

This Certificate is subject to terms and conditions overleaf. Any significant change in design or construction may render this Certificate invalid.  
The validity date relates to the Type Approval Certificate and not to the approval of equipment/systems installed.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV AS, its parent companies and their subsidiaries as well as their officers, directors and employees ("DNV") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to USD 300 000.



## Product description

Vingtor ACM Automatic Telephone and Handsfree Two-Way Voice Communication system comprise the below equipment <sup>1)</sup>:

The VINGTOR ACM family includes the following main system racks, to be installed in a protected environment:

Intercom exchange	Order number	Software version	Notes
AlphaCom XE7	ACM-M-D-V2	Version 13.1.3.x	
AlphaCom XE7	ACM-M-A-V2	Version 13.1.3.x	Same as ACM-M-D, but only equipped with line cards for analogue telephones and PA call stations
AlphaCom XE20	ACM-48-V10	Version 13.1.3.x	
AlphaCom XE26	ACM-144-V10	Version 13.1.3.x	
AlphaCom XE26	AACM-144-V10	Version 13.1.3.x	Same as ACM-144-V10 and with extra power supply and terminal board
ICX-500 Intelligent Communication Gateway	1002000100	Version 1.2.3.x	24VDC input power
ICX-510 Intelligent Communication Gateway	1002000200	Version 1.2.3.x	24VDC input power

## ACM Field Equipment

Equipment type	Model	Environment
Flush (console) mount intercom, PA Call Station/Talk Back Station	CRM-V CRM-V-2	Protected <sup>2)</sup>
Handset units for flush mount intercom	CRM-V-HS	Protected <sup>2)</sup>
Gooseneck unit for flush mount intercom	CRM-V-GN	Protected <sup>2)</sup>
Direct access key panel for flush mount intercom	CRM-V-DAK48	Protected
Headset solution for flush intercom	CRM-VH	Protected <sup>2)</sup>
Handheld microphone	EMMAR-1H	Protected <sup>2)</sup>
Wall mount intercom, Talk Back Stations	VMP-503 VMP-530	Exposed Exposed
Handset units for wall mount intercom	VMP-211 VMP-250	Exposed Exposed
Headset units for wall mount intercom	VMP-36-PEL-Ad VMP-36-PELP-Ad	Exposed Exposed
Throat microphone for headset	AK6070T	Exposed
Portable intercom units	VMP-503PA VMP-503PA/15	Exposed Exposed
Handheld microphones	P-66-VMP P-66-VMP/10 P-66-VMP/25	Exposed Exposed Exposed
Desktop intercom	1008001000 1008001100 VMP-D619 VMP-619 IPDMH-V2 IPDMHB-V2	Protected <sup>2)</sup> Protected <sup>2)</sup> Protected Protected Protected <sup>2)</sup> Protected <sup>2)</sup>
Desktop analogue telephone	DT-800M	Protected
VAF-1 Flush (console) mount analogue telephone, PA Call Station	VAF-1	Protected
VAF-2 Flush (console) mount analogue telephone, PA Call Station	VAF-2	Protected

<sup>1)</sup> Actual configuration may vary based on requirements for individual installations. Only modules listed in certificate are approved for installation.

<sup>2)</sup> Main station and station accessories supporting IC-Edge mode without Alphacom exchange.

Equipment type	Model	Environment
Wall mount analogue telephone	HSB-03	Exposed
Wall mount analogue telephone	HSB-04	Exposed
Handset for wall mount analogue telephone	HAS-3 HAS-3WT	Exposed Exposed
Headset for wall mount analogue telephone	P-MT7-A	Exposed
Heavy duty analogue telephone	KNSP-09 KNSP-01	Exposed Exposed
EX analogue telephone	DA24 DA24ID DA24H	Exposed Exposed Exposed
Speakers (20 Ohm)	DSP-15EExmN VML-1520	Exposed <sup>3)</sup> Exposed <sup>3)</sup>
Turbine series intercom stations <ul style="list-style-type: none"> <li>- TCAS =Analogue interface</li> <li>- TCIS = IP interface</li> <li>- TFIE = Industrial, IP interface</li> <li>- TFIX = Ex version, analogue interface</li> </ul> <p>Note : The use of “x” in Model identifies variants of the products, where x is in the range 1-6</p>	TCAS-x TCIS-x TFIE-x TFIX-x-V2	Exposed Exposed <sup>3)</sup> Exposed <sup>3)</sup> Exposed <sup>3)</sup>
Turbine intercom station, Industrial, IP interface	TFIE-TD	Exposed
Emergency Call Point	ECP-TD6	Protected
Turbine IP station/ amplifier/ interface kit	TKIS-x TKIE-x	Protected <sup>3)</sup> Protected <sup>3)</sup>
Note: Where x relates to encapsulation type		
Connection board with relays for Turbine/Exigo Industrial	TA-10	Protected <sup>3) 4)</sup>
10m cable and pluggbox with PTT for industrial headset	TA-22b	Exposed <sup>3)</sup>
Flowire - Ethernet converters	FCDC1 FCDC2 FCDC3	Protected <sup>3)</sup> Protected <sup>3)</sup> Protected <sup>3)</sup>
Power supplies for Flowire	Flowire 120 Flowire 250 Flowire Ex 120 Flowire Ex 250	Protected <sup>3) 4)</sup> Protected <sup>3) 4)</sup> Protected <sup>3) 4)</sup> Protected <sup>3) 4)</sup>
Industrial handset for Turbine with PTT	TA-23	Exposed <sup>3)</sup>
Exigo Handheld Industrial Microphone, Compact	EMMAI-2H	Exposed <sup>3)</sup>
Exigo Handheld Industrial Ex Microphone, 1 Button	EMMAX-1H	Exposed <sup>3)</sup>
Ex Approved Headset, Pluggable	AK5850xx	Exposed <sup>3)</sup>
Ex Approved Cable for Headset with PTT	TAX-2b	Exposed <sup>3)</sup>
Ex Approved Handset with PTT, Unterminated	TAX-3	Exposed <sup>3)</sup>
Speakers with transformer	CL-200T VLS-15T/F VLS-30T/F DSP-15EExmNT	Protected Exposed Exposed Exposed
Network loudspeakers	ELSII-10H ELSIR-10C	Protected <sup>3)</sup> Exposed <sup>3)</sup>

<sup>3)</sup> Main station and station accessories supporting IC-Edge mode without Alphacom exchange

<sup>4)</sup> May be used in an exposed environment when mounted in TFIE intercom stations or EAPII access panels.

Equipment type	Model	Environment
Volume Controller, 15W with 24VDC Override, Flush Mount	VCOR-15	Protected
Volume Controller, 15W with 24VDC Failsafe Override Relay, Flush Mount	VCOR-15F	Protected
Volume Controller, 60W with 24VDC Override, Flush Mount	VCOR-60	Protected
Volume Controller, 60W with 24VDC Failsafe Override Relay, Flush Mount	VCOR-60F	Protected
Signal unit/lamp  Note: The use of "x" in Model identifies color variants of the products.	EHS-24x EHS-220x EHS-110x BLK5-24x BLK5-230x BLK5-115x PD2100AC	Exposed Exposed Exposed Exposed Exposed Exposed Exposed
Signal unit/buzzer	A-100 A-100AC HB-105 HB-90	Exposed Exposed Exposed Exposed
Signal unit/lamp and buzzer Note: The use of "X" in Model identifies variants of the products, e.g. different colours and supply voltages. X can be more than one digit/character.	SON-16X-X AL-100X AL-105X	Exposed Exposed Exposed
Watertight relay box	CRB-7 IRR-3	Exposed Exposed
Watertight connection box	CD-4 CD-7-VMP SB01	Exposed Exposed Exposed
Indoor connection boxes	PT-625A 1009800100	Protected Protected

Equipment type	Model	Environment
Access Panels	Exigo Call Panel, PTT Button, Pluggable Microphone, Ethernet	Protected
	Exigo Call Panel, PTT + 3 Buttons, Pluggable Microphone, Ethernet	Protected
	Exigo Alarm Panel, 8 Buttons, Ethernet	Protected
	Exigo Button Expansion Module, 8 Buttons	Protected
	Exigo Industrial Access Panel, 1 Button, Ethernet	Exposed
	Exigo Industrial Access Panel, 6 Buttons, Ethernet	Exposed
	Exigo Industrial Ex Access Panel, 1 Button, Flowire	Exposed
	Exigo Industrial Ex Access Panel, 6 Buttons, Flowire	Exposed

Equipment type		Model	Environment
Mounting cabinet		PLM-32	Exposed
		PLM-43	Exposed
		PLM-54	Exposed
		76R1005	Exposed
		76R1007	Exposed
		WCAB-1005	Exposed
		WCAB-1010	Exposed
Network Equipment	Data switch kit with power line filter	C1000-24FP-4G-L/IEC60945	Protected
		C1000-48P-4G-L/IEC60945	Protected
	Data switch	DNV6250-P24-EU DNV6250-P48-EU	Protected Protected
	Data switch for DIN rail mounting	eCON2050BA	Protected
		eCON3080BTA	Protected
		EDS-405A	Protected
		EDS-P510	Protected
		IE-2000 series	Protected
		IE-4000 series	Protected
	IP over two-wire switch	NV-PL-08-F	Protected
		NV-PL-024-F <sup>5)</sup>	Protected
		NV-PL-048-F <sup>5)</sup>	Protected
		NV-PLLK	Protected
	Firewall	FPR1010-NGFW-K9/IEC60945	Protected
	Fibre interface	GLC-SX-MMD	Protected
		J4858C	Protected
	Injector sets	INJKIT-NOP	Protected
		INJKIT-PSU	Protected
	FXS gateway	FXS-GW-24P	Protected
UHF	Portable two-way radios MotoTrbo DP4XXXe for UHF on-board	DP4400e	Portable
		DP4401e	Portable
		DP4401 Ex	Portable
		DP4600e	Portable
		DP4601e	Portable
		DP4800e	Portable
		DP4801e	Portable
		DP4801 Ex	Portable
	Mobile two-way radios MotoTrbo DM4XXXe for UHF on-board	DM4400e	Protected
		DM4401e	Protected
		DM4600e	Protected
	Portable two-way radios MotoTrbo R7 series for UHF on-board	DM4601e	Protected
		MotoTrbo R7 FKP Premium	Portable
		MotoTrbo R7 FKP Capable	Portable
		MotoTrbo R7 NKP Premium	Portable
		MotoTrbo R7 NKP Capable	Portable
		MotoTrbo R7a	Portable
		MotoTrbo R7Ex FKP	Portable
		MotoTrbo R7Ex NKP	Portable

<sup>5)</sup> Low temperature limited to +5°C as per DNV-CG-0339

Equipment type		Model	Environment
UHF	MotoTrbo SLR5500 Repeater for UHF on-board	SLR5500	Protected
	Active antenna combiners:		
	2-channel combiner	ZEN-COMB-2CH	Protected
	3-channel combiner	ZEN-COMB-3CH	Protected
	3-channel combiner	ZEN-COMB-4CH	Protected
Accessories	Heavy Duty Headset for DP4xxxe	PMLN5275C	Protected
	Heavy Duty Headset for DP4xxxe	PMLN6853A	Protected
	Headset for DP4xxxe	MT53H79A-77	Protected
	Heavy Duty Headset for DP4xxxe	A-COM TRBO	Protected
	Body Switch for Handsfree Operation of DP4xxxe	C-C440	Protected
	Headset with Bone Microphone for DP4xxxe	HC-1	Protected
	Foot Switch	254-2348	Protected
	Microphone for DM4xxxe	DM8320	Protected
	Noise Cancelling Heavy Duty Headset for DP4xxxe	PMLN6852A	Protected
	Behind-the-Head Headset, GCAI Mini	PMLN8085A	Protected
	Over-the-Head Headset, GCAI Mini	PMLN8086A	Protected
	Over-the-Head Headset, NEXUS	PMLN8265A	Protected
	Behind-the-Head Headset, NEXUS	PMLN8266A	Protected
	Hardhat Mount Headset, NEXUS	PMLN8267A	Protected
	PTT NEXUS Adapter, GCAI-MINI	PMLN8297A	Protected

## Application/Limitation

### Application:

The system may be used as:

1. Automatic telephone system and Talk Back system as handsfree two-way voice communication system as required by DNV Nautical safety rules.
2. ACM IC-Edge automatic telephone, IP intercom for independent installation without external call server.
3. Fixed and handheld UHF communication system; interfaced to UHF on-board Base Station SLR5500 and ACM System for interface of PA.
4. Fixed and handheld UHF communication may be applied to comply with requirements for Safe Return to Port (SRtP), subject to configuration and installation. Compliance with SRtP is subject separate vessel specific approval (plan approval).

### Limitations:

1. Network / network equipment/VLAN solution shall be in accordance with Zentel's specifications in "Data Network Guideline for Ships – VINGTOR ACM Solution, Doc. No. A100K10649". When such subsystems/components are not included in Zenitel's delivery, Zenitel shall evaluate these subsystems/components towards above mentioned specification and include the relevant documents in the system document package delivered for each installation.
2. Local muting of the loudspeakers near call stations shall be available.
3. Any Ex-equipment (equipment to be used in areas with explosive atmosphere) listed in this certificate are subject to separate Ex- approvals.
4. ACM IC-Edge components as indicated in above product description may be configured and installed to comply with DNV rules for Automatic Telephone systems. Installation to be in accordance to installation documentation.
5. UHF listed may be fitted with headsets and microphones for handsfree communication. Installation to be in accordance to installation documentation. UHF repeater SLR5500 may provide dual LAN communication link between units, and be interfaced to ACM for PA announcement on dedicated channels.

## Tests carried out

- Performance testing: DNV-RU-SHIP Part 6 Chapter 3 - for Two-way voice communication and handsfree two-way voice communication.
- Environmental testing: IEC 60945 (2002) incl. Corr.1 (2008)

## Marking of product

The Manufacturer and Type Designation to be applied to the equipment in a clearly visible location. In addition the equipment shall be marked with serial number, safe distance to magnetic compass, power consumption and/or supply voltage.

## Periodical assessment

Periodical assessment is to be performed after 2 years and after 3.5 years. A renewal assessment will be performed at renewal of the certificate.

The scope of the periodical/renewal assessment is to verify that the production quality conditions stipulated for the type approval are complied with and that no alterations are made to the product design or its components and/or materials without appraisal by the Society.

This certificate is only valid if required periodical assessments are carried out with satisfactory results. To check the validity of this certificate, please look it up in <https://approvalfinder.dnv.com>

## Manufactured by:

Zenitel Norway A/S avd Horten, Bromsveien 17, HORTEN, 3183, Norway

## Type Approval documentation

DNV No	Document ID	Rev.	Description
329	U241088E1	2025-02-24	Report: Phoenix Testlab, EN 60945 Solar radiation and oil resistance test report for R7Ex UHF1 IIC UHF radio
328	RP-71373-01	A	Report: Motorola, Corrosion test report for R7Ex UHF-B1 IIC UHF radio
327	RP-70714-01	A	Report: Motorola, Environmental test report for R7Ex UHF-B1 IIC UHF radio
326	1161	2025-02-14	Certificate: BSH, Compass safe distance for R7Ex UHF radio
324	0717N01-MARITIME-00003	A	Report: Motorola, EMC test report for R7Ex radio
323	0717N01-MARITIME-00002	A	Report: Motorola, EMC test report for R7Ex radio
322	0717N01-MARITIME-00001	A	Report: Motorola, EMC test report for R7Ex radio
317	REP10010	A	Report: Nemko, Compass safe distance test report for HSB-4 and VAF-2 analogue telephones
316	DPL/003/431/24	June 2025	Report: CTM, EMC test report for VAF-2 Analog Telephone
315	DPL/003/430/24	June 2025	Report: CTM, Low temperature test report for VAF-2 Analog Telephone
314	DPL/003/432/24	2	Report: CTM, Low temperature test report for HSB-4 Analog Telephone
313	31521-2	0	Report: Applicia, Radiated emissions and immunity testing of Alphacom intercom system
311	DPL/003/014/24	2024-02-13	Report: CTM, EMC test report for VAF-2 Analog Telephone
310	DPL/003/018/24	2024-02-13	Report: CTM, EMC test report for HSB-4 Analog Telephone
308	6/BT/2024	2024-02-02	Report: KOMAG, IP2X and acoustic noise and signals test report for VAF-2 Analog Telephone
307	5/BT/2024	2024-02-02	Report: KOMAG, IPX6 test report for HSB-4 Analog Telephone
305	DPL/003/013/24	2024-02-13	Report: CTM, Temperature tests report for VAF-2 Analog Telephone
304	DPL/003/017/24	2024-02-13	Report: CTM, Temperature tests report for HSB-4 Analog Telephone
303	DPL/003/008/24	2024-02-20	Report: CTM, Vibration test report for VAF-2 Analog Telephone
302	DPL/003/009/24	2024-02-20	Report: CTM, Vibration test report for HSB-4 Analog Telephone
297	REP038399	2024-04-23	Report: Nemko, Corrosion test report for HSB-4 Analog FXS telephone
293	RP-66055-01	2021-09-27	Report: Motorola, Environmental test report for MOTOTRBO R7

DNV No	Document ID	Rev.	Description
292	F211357E1	2021-11-02	Motorola: Phoenix Testlab, EMC test report for Motorola MOTOTRBO R7 UHF
290	22639-MARITIME-00155	A	Report: Motorola, EMC test report for Motorola MOTOTRBO R7 UHF
288	PR142054	2021-08-31	Report: NTS, Vibration, corrosion and solar radiation tests for MOTOTRBO R7 UHF
287	1100	2021-11-09	Certificate: BSH, Compass safe distance testing for Motorola MOTOTRBO R7 UHF
280	F211357E1	2021-11-02	Report: Phoenix Testlab, EMC test report for R7 UHF radio with charger
276	P22-0154	2023-06-28	Report: EKTOS, EMC and environmental test report for FXS-GW-xxP gateway and NV-PL-0xx IP over two-wire switch
275	P21-0145	2022-01-31	Report: EKTOS, EMC and environmental test report for Zenitel Network Equipment C1000 + FPR1010-NGFW-K9 Firewall system
228	A100K11523	2018-12-05	Manual, Zenitel, Exigo Ex Access Panels and Turbine Ex Intercoms-Mounting Manual
221	E21182.00	00	Report: Nemko, EMC test report of Ex Intercoms and Access Panels-V2, TFIK-1-V2, TFIK-2-V2, TFIK-3-V2, EAPFX-1-V2, EAPFX-6-V2
220	30811	0	Report: Applicia, EMC and environmental testing of ICX-510
213	E20116.00	2020-11-03	Report: Nemko, EMC and environmental test report for IP Intercom stations IP Desk Master station with Handset-V2 and IP Desk Master-V2
212	E20115.00	2020-11-04	Report: Nemko, EMC and environmental test report for IP Intercom stations CMR-V-2 and IP-CROR
209	21456	0	Report: Applicia, EMC and environmental testing of ICX500 VS Server
207	TAA00000NE	2016-08-22	Certificate: DNVGL, TA certificate for IE 4000 series Industrial Ethernet switches
206	TAA000025B	2019-01-04	Certificate: DNVGL, TA certificate for IE-2000 Ethernet Switches
196	U180661E2	2018-05-28	Report: Phoenix Testlab, Oil resistance test report for DP4801 Ex (MDH56QCN9PA3AN)
195	U180661E1	2018-05-30	Report: Phoenix Testlab, Solar radiation test report for DP4801 Ex (MDH56QCN9PA3AN)
194	RP-58563-01	A	Report: Motorola, Environmental test report for DP4801 Ex
193	F180661E1	2018-06-06	Report: Phoenix Testlab, EMC test report for DP4801 Ex incl ancillary equipment
192	118-30784-2	2019-06-14	Report: Force Technology, Marine type testing of 2 channel and 4 channel UHF Maritime Combiners
191			Manual: Motorola, DP4801 Ex User Guide
189			Manual: Motorola, DP4401 Ex Non-Display User Manual
182	E19125.01	2019-12-09	Report: Nemko, Environmental test report for Flowire - FCDC3
181	E19084.00	2019-06-12	Report: Nemko, EMC test report for Flowire - FCDC3
179	A100K11960	2019-10-11	Manual: Zenitel, Replacing Flowire FCDC3 Converter
178	A100K11959		Manual: Zenitel, Flowire FCDC3 Guidelines for Exigo
177	A100K11958		Manual, Zenitel, Flowire FCDC3 Configuration Manual
176	A100K11957	2019-10-11	Manual: Zenitel, Flowire FCDC3 Getting Started Guide
172	TAA00001D2	Latest rev.	Certificate: DNVGL, Type Approval certificate for SPA-V2 PA/GA system
171	TAA000003W	Latest rev.	Certificate: DNVGL, Type Approval certificate for Vingtor Exigo PA/GA system
163	A100K11711	Revision 1.0	Manual: ACM System - Marine UHF
162	A100K11720	Version 1.0 (signed)	Report: ACM Pulse Test Specification Performance Test DNV
161	A100K11700	Rev -01 (signed)	Report: Performance Test procedure DNV GL Approval of Upgrading ACM System Including UHF On-board Radio Capabilities
149	T208091-1 - DANAK 1914910	2015-01-13	Report: Delta IEC60945 Test of Data Networking Equipment according to Marine specifications - Zenitel Norway AS
147	A100K11065		Manual: VINGTOR Pulse Getting Started
145	30-12-2016	rev1.0	Procedure: ACM Pulse Test Specification Performance Test DNV
144	A100K11700	rev03	Procedure: MotoTurbo DNV-GL Performance Test Procedure



DNV No	Document ID	Rev.	Description
142	U161176E1	Ver. 2	Report Phoenix TestLab: Test report IEC60945 Environmental testing DP4XXX (DP4801)
141	U160035		Report Phoenix TestLab: Test report IEC60945 environmental tests for UHF SLR 5500
140	U113486E1		Report Phoenix TestLab: Test report safety and environmental (IEC 60945) testing of DM4XXX (DM4601)
136	F161176E1 Annex A		Report Phoenix TestLab: Photos from IEC 60945 and ETSI 300 720-1 testing of DP4XXX
135	F161176E1		Report Phoenix TestLab: IEC 60945 Report from EMC testing acc - DP4801e
134	F160035E2 Annex A	2nd edition	Report Phoenix TestLab: Annex A Photos from IEC60945 testing of SLR5500
133	F160035E2	2nd edition	Report Phoenix TestLab: Test report IEC60945 for SLR5500
129	E113486E1[1]		Report Phoenix TestLab: Test report IEC 60945 for DM4XXX (DM4601) Fixed mobile UHF radio
126	2011-10-10		Report BSH: IEC60945 Compass Safe Distance - DM4601-UHF LP
125	2016-02-10		Report BSH: IEC60945 Compass Safe Distance - Motorola SLR 5500 R
124	FF113486E1		Report Phoenix TestLab: Annex A Photos from safety and environmental (IEC 60945) testing of DM4XXX (Fixe type)
123	2016-09-12		Report BSH: IEC60945 Compass Safe Distance - UHF DP4801e
89			SLR5500_BSIM_EN
71	TAA000003W	Rev 1	TAA000003W Rev 1- Vingtor Exigo
57	U160035E1		Report: EN 60068 -, EN 60945 , Phoenix Testlab, Motorola SLR 5500 Filter FMT05B03
55			Report: EN 60945 Phoenix Testlab, UHF on-board vessels repeater SLR5500 with line filter FMT05FB03 Annex A
54	F160035E2	2nd edition	Report: EN 60945 Phoenix Testlab, UHF on-board vessels repeater SLR5500 with line filter FMT05FB03
53			Report: IEC 60945 Phoenix Testlab, UHF on-board vessels repeater SLR5500 with line filter FMT05FB03 Annex B
50	933	2nd version	Certificate: BSH, Compass safe distance test IEC60945 11.2 - Motorola SLR 5500
49	U161176E1		Report: EN 60068 -, EN 60945 , Phoenix Testlab, Motorola DP4801e
48			Report: EN 60945, Phoenix Testlab, Motorola DP4801e, Annex
47	F161176E1		Report: EN 60945, Phoenix Testlab, Motorola DP4801e
46	954		Certificate: BSH, Compass safe distance test IEC60945 11.2 - Motorola DP4801e
42			Datasheet: Procom PRO-COM450-HDAR-2/... 2-Channel 19
41			Datasheet: Procom PRO-AR..G, 19" Rack-Mountable Receiver Multicoupler series for the VHF through low UHF bands 50 MHz - 960 MHz.
38	69 280-90 HH	2009-07-24	Certificate: GL, Rittal KL, AE, AK, AS, AP and EB cabinets
35	ACM 11.2.3.10	2014-06-12	Description: Zenitel, ACM 11.2 Release notes
33	E14084.00	2014-06-12	Report: Nemko, EMC and environmental test report for Turbine Ex intercom
32	E14083.00	2014-06-11	Report: Nemko, EMC and environmental test report for Turbine Industrial intercom
31		2014-06-01	Report: Zenitel, VINGTOR Exigo performance test incl ACM integration and Turbine intercom stations
29	GR 14-001	2014-05-28	Report: Zenitel, Turbine TCAS-x - EN60945 Compliance
28	20047	0	Report: Applica, Environmental test report for Turbine Compact

DNV No	Document ID	Rev.	Description
27	2013-3236	0	Report: DNV, EMC test report for Turbine Compact
26	2010-3593	1	Report: DNV, Environmental Testing of Vingtor ACM Intercom System
23		2010-20-12 V 1.1	Report: Zenitel, Performance Test DNV Type Approval of upgraded ACM System including IP capabilities
22	A100K10792	V2.0	Manual: Stentofon, ACM Emergency Functions
21	139500	2010-06-07	Report: Nemko, EMC test report for Power Supply unit
18	97-1341	1	Report: DNV, EMC and environmental tests for Vingtor ACM-48 intercom system
17	A100K 10369	1.11, 20. April 2008	Manual: Steenhans, SPA-V2 Public Address and General Alarm System
16	A100K10649	1.0, 03 Feb. 2010	Manual: Vingtor, Data Network Guidelines for Ships - VINGTOR ACM Solution
14	A100K10647	V2.0	Manual: Stentofon, ACM family, System overview and installation
13	A100K10430	V .1.0	Manual: Vingtor, Technical manual ACM Telephone System ACM-M-A-V2
12	96-1197	1997-01-29	Report: DNV, EMC testing of Vingtor VMP/ACM Intercom System for Marine Use
11	GR-YYYYxx	4th, 15.11.2009	Report: Zenitel, Technical Report ACM-system– IEC 60945 Compliance
10	E06067.00	1	Report: Nemko, EMC test report for AlphaCom E series exchanges
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