



TYPE APPROVAL CERTIFICATE
No. ELE301218XG

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

<i>Description</i>	Public Address and Talk back Systems, Automatic Telephones
<i>Type</i>	MOTOTRBO series
<i>Applicant</i>	ZENITEL NORMAY AS P.O. Box 1068 Bekkajordet 3194 Horten NORWAY
<i>Manufacturer</i>	ZENITEL NORWAY AS
<i>Place of manufacture</i>	BROMSVEIEN 17 - P.O. BOX 1068 N-3194 HORTEN NORWAY
<i>Reference standards</i>	Rules for the Classification of Ships - Part C - Machinery, Systems and fire protection - Ch.3, Sect.6, Tab.1.

Issued in **HAMBURG** on **November 7, 2018**. This Certificate is valid until **September 12, 2022**



RINA Services S.p.A.
Giuseppe Russo

This certificate consists of this page and 1 enclosure



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MOTOTRBO series

Product description:

MOTOTRBO series are digital two-way radios and portable

Power supply: 12V DC (for DM4xxx series)
integrated battery (DP4xxx series)
100-240V AC or 12V DC (for SLR5500)

Type	Characteristics
Fixed installed components	
DM4400e	UHF1 403-470MHz, 1-25W, 12.5/20.25kHz, numeric display
DM4401e	UHF1 403-470MHz, 1-25W, 12.5/20.25kHz, numeric display, BT/GNSS/Wi-Fi
DM4600e	UHF1 403-470MHz, 1-25W, 12.5/20.25kHz, alphanumeric display
DM4601e	UHF1 403-470MHz, 1-25W, 12.5/20.25kHz, alphanumeric display, BT/GNSS/Wi-Fi
DM4400e	UHF1 403-470MHz, 25-40W, 12.5/20.25kHz, numeric display
DM4401e	UHF1 403-470MHz, 25-40W, 12.5/20.25kHz, numeric display, BT/GNSS/Wi-Fi
DM4600e	UHF1 403-470MHz, 25-40W, 12.5/20.25kHz, alphanumeric display
DM4601e	UHF1 403-470MHz, 25-40W, 12.5/20.25kHz, alphanumeric display, BT/GNSS/Wi-Fi
Portable handheld	
DP4400e	UHF 403-527MHz, 4W, 12.5/20.25kHz, plain
DP4401e	UHF 403-527MHz, 4W, 12.5/20.25kHz, plain, BT/GNSS/Wi-Fi
DP4401 EX	UHF 403-527MHz, 1W, 12.5/20.25kHz, plain, BT/GNSS/Wi-Fi, for hazardous area
DP4600e	UHF 403-527MHz, 4W, 12.5/20.25kHz LKP, display
DP4601e	UHF 403-527MHz, 4W, 12.5/20.25kHz LKP, display, BT/GNSS/Wi-Fi
DP4800e	UHF 403-527MHz, 4W, 12.5/20.25kHz FKP, display
DP4801e	UHF 403-527MHz, 4W, 12.5/20.25kHz FKP, display, BT/GNSS/Wi-Fi
DP4801 EX	UHF 403-527MHz, 1W, 12.5/20.25kHz FKP, display, BT/GNSS/Wi-Fi, for hazardous area
Receiver	
SLR5500	UHF Repeater 400-470MHz, 1-50W, 12.5/20.25kHz,
Accessories	
254-2348	Foot switch
A-COM TRBO	Heavy duty headset for DP4400e, headband
C-C440	ATEX PTT adapter, Molex connector
DM8320	Microphone for DM4xxx
HC-1	ATEX bone microphone
MT53H79A-77	Headset for DP4xxx
PMLN5275C	Heavy duty headset for DP4xxx
PMLN6853A	Heavy duty headset Intrinsically safe
PMNN4489A	Battery pack 2900mAh
NNTN8359A	Battery pack, Lithium ion, 2075mAh
NNTN8560A	Battery pack 2500mAh
WPLN4255B	Single Unit Charger kit of WPLN4226A and PS000037A01 (EURO power supply)
WPLN4254B	Single Unit Charger kit of WPLN4226A and PS000037A01 (UK power supply)
RMN5123A	Savox HC-1 - Helmet communication headset
PMMN4110A	Large omnidirectional remote
PMAE4082A	Folded monopole antenna

Documents:

A-Com - Silenta Ltd; A100K11711 ACM System - Marine UHF rev 1; x
Data sheet: - MOTOTRBO DP4000 SERIES ACCESSORIES EMEA version 1 (05/2012);
- MOTOTRBO™ DM4000e Series EAv1 (05/16); - MOTOTRBO™ DP4000e Series EAv1 (05/16);
- MOTOTRBO™ SLR 5500 REPEATER EAv1 (06/15); DP4000 EX; Savox C-C440;
User guide: - Motorola DP4801EX; DP4401 EX; 6816787H01-G;
EN_MOTOTRBO_DP4000_Ex_ATEX_Brochure;



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MOTOBRO series

Test reports:

BSH: - 716 dated 10. Oktober 2011; 933 dated 2016-02-10; 954 dated 2016-09-12; 999 dated 2018-05-23;
- 1002 dated 2018-05-23; 1004 dated 2018-05-23; 1005 dated 2018-05-23;
CTCS: - 11196 dated 21.04.2011 - EN300720-1+2;
DEKRA EXAM GmbH: - BVS 12 ATEX E 117 X + 1. Suppl. dated 24. June 2013
Motorola: - DoC-15111200192-H dated 19-Jun-2017; DoC-15120100203-D dated 19-Jun-2017;
- DoC-15120100204-E dated 19-Jun-2017; DoC-15120300208-E dated 19-Jun-2017;
- DoC-17052900731-B dated 19-Jun-2017; DoC-17060600747-B dated 19-Jun-2017;
- DoC-15021700073-B dated 04-Mar-2016; DoC-16041400281-D dated 07-AUG-2018;
- RP-58563-01 Rev. A dated 2 May 2018;
Phoenix Testlab: - E113486E1 dated 10 November 2011; F160035E1 dated 26.02.2016; F160035E2 dated 26.02.2016;
- F161176E1 dated 19.08.2016; U113486E1 dated 14 November 2011; U161176E1 2nd Version dated 02.09.2016;
- U160035E1 dated 05.02.2016; F180661E1 dated 06.06.2018; U180661E1 dated 30.05.2018;
- U180661E2 dated 28.05.2018;
UL: - E465428-20160205-Certificate_of_Compliance_Intrinsically_safe_radios
Vingtor Stentofon: - A100K11700 dated 5.01.2017; ZD11641 rev02, Block Diagram, DNV Test of UHF radio system;

Remarks:

- Documents relating to each application are to be submitted to the Society's examination prior fitting on board.
 - The products fulfill EC-Code: EC21.
 - The EMC requirements for installation on the Bridge and Deck Zones will be fulfilled by the equipment..
 - The Receiver SLR5500 is to be provided with Line filter of type FMT05FB03 in power supply line.
 - The products are subject to the compliance with RINA Rules Pt.C, Ch.3, Sec.6, Tab.1.
 - The installation shall comply with the Manufacturer's recommendation and to the satisfaction of Flag state.
 - The minimum safe distance of the equipment to a standard or a steering magnetic compass is to be considered.
- This certificate cancels and replaces the certificate no.: ELE186417XG.

HAMBURG November 07, 2018



A handwritten signature in blue ink, consisting of a series of loops and curves, positioned to the right of the RINA logo.

