

# EC TYPE-EXAMINATION (MODULE B) CERTIFICATE

## Marine Equipment Directive (MED) 2014/90/EU

**PHOENIX TESTLAB**  
Notified Body Number **0700**

Recognised by



**0800S11/4822/007**

BUNDESAMT FÜR  
SEESCHIFFFAHRT  
UND  
HYDROGRAPHIE

This is to certify that:

PHOENIX TESTLAB did undertake the relevant type approval procedures for the type of equipment identified below which was found to be in compliance with the requirements of Marine Equipment Directive (MED) 2014/90/EU, subject to any conditions in the schedule attached hereto.

<b>Certificate No.</b>	PTL-MED-B-21-111122
<b>Manufacturer</b>	Motorola Solutions Systems Polska Sp. z o.o.
<b>Address</b>	Ul. Czerwone Maki 82 30-392 Krakow Poland
<b>Directive Reference (No &amp; Item designation)</b>	Directive 2014/90/EU, Regulation (EU) 2020/1170 MED/5.20 Fire-fighter's two-way radiotelephone apparatus
<b>Product Description</b>	Portable DP4000Ex series ATEX radio
<b>Product Name</b>	DP4401 Ex, PBE502BEEEx DP4801 Ex, PBE502HEGEx
<b>Trade Name</b>	Motorola

### Specified Standards

IMO Resolution A.694(17)	IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)
IMO MSC.1 Circ. 1616	ATEX Directive 2014/34/EU
ITU-R M1174-3 (03/15)	EN 300 720 V2.1.1 (2017-01)

Date of issue: **2021-06-28**      Expiry date: **2026-06-27**

**This certificate remains valid unless suspended, expired or withdrawn, provided the conditions in the attached schedule are complied with.**

The attached Schedule of Approval forms part of this certificate. This certificate consists of 5 pages.



Signed by  
Notified Body

## Schedule of Approval

### Technical description

Frequency Range	457.525 MHz - 467.575 MHz
Transmit Power	1 W (30 dBm) max. ERP
Channel Spacing	12.5 kHz / 25kHz
Modulation Type	Analog FM
Firmware Version	R02.21.01.0000

### Model Variants

	Sales Model	Regional S/Tanapa	Type Designator	Model and Description
1	MDH56QCN9PA3AN	PMUE3750ACCEAA	PBE502HEGEx	<b>DP4801 Ex</b> UHF 1W FKP GPS NOB fully featured model with display and keypad, FKP=Full KeyPad
2	MDH56QCN9PA3AN	PMUE3750ABCEAA	PBE502HEGEx	<b>DP4801 Ex</b> 403-470 1W FKP GPS GOB fully featured model with display and keypad, FKP=Full KeyPad
3	MDH56QCN9PA3AN	PMUE3750APCEAA	PBE502HEGEx	<b>DP4801 Ex</b> 403-470 1W FKP GPS MPT fully featured model with display and keypad, FKP=Full KeyPad
4	MDH56QCC9LA3AN	PMUE3755AAAEAA	PBE502BEEEx	<b>DP4401 Ex</b> 403-470 1W NKP GPS plain model, NKP=No KeyPad

## Components necessary for operation

### Batteries

The radiotelephones can be used with one of the following battery types:

Part No	Description
NNTN8359A	MOTOTRBO IECEx/ATEX IMPRES Li-Ion Battery
NNTN8359C	MOTOTRBO IECEx/ATEX IMPRES Li-Ion Battery
NNTN8359CR	MOTOTRBO IECEx/ATEX IMPRES Li-Ion Battery

### Dust Cover

Part No	Description
15012157001	Dust Cover Assembly

### Antennas

The radiotelephones can be used with one of the following antenna types:

Part No	Description
PMAE4082A	DMR folded monopole (430-470 MHz) Ex
PMAE4084A	DMR stubby antenna (430-470 MHz) Ex
PMAE4085A	DMR whip antenna (403-470 MHz) Ex

## Optional Components

### Carry Accessories

PMLN60086A	ATEX Belt Clip 2.5-Inch Belt Width
PMLN6096A	Hard Leather Carry Case 2.5-Inch Swivel Belt Loop for Non-Keypad Radio
PMLN6097A	Hard Leather Carry Case 2.5-Inch Swivel Belt Loop for Full-Keypad Radio
PMLN6098A	Soft Leather Carry Case 2.5-Inch Swivel Belt Loop for Non-Keypad Radio
PMLN6099A	Soft Leather Carry Case 2.5-Inch Swivel Belt Loop for Full-Keypad Radio
PMLN5610A	2.5-Inch Replacement Swivel Belt Loop

### Audio Accessories

PMMN4067B	ATEX CSA Remote Speaker Microphone
PMLN6047A	Audio Adapter with Molex jack

### Audio Accessories with secondary audio interface to allow the connection of headsets

PMMN4094A	ANC RSM ATEX 20 Ohm Standard Cable
PMNN4100A	ANC RSM ATEX 20 Ohm Long Cable
PMMN4110A	OMNI RSM 20 Ohm Standard
Cable PMMN4111A	OMNI RSM 20 OHM Long Cable
FL5263-34	PTT Adapter for use with Headset

### Approval documentation

Manuals	User Guide DP4801 Ex, document 68012007049-C, Nov. 2014 User Guide DP4401 Ex, document 68012007050-DA, Nov. 2014 Hazardous Location Safety Instruction and Approved Accessories Listing, document 68012007083-DF, 2020
Technical Documentation	PCB Layout Overlay, document no. 84012363002_B Radio ATEX UHF Main Board Schematic, document no. 84012363002_B Bill of Materials, document no. PMUE3755AAAEAA_NKP GPS_RevC, 2020-11-26 ATEX Electrical Protection Design Block diagram, document no. 68012005021_02_02 Rev. R, 2020-05-06 Detailed Service Manual, document 68012008006-BH, April 2021
ATEX Certificate	ATEX EU-Type Examination Certificate Supplement 5, Certificate No. BVS 12 ATEX E 117 X, 2020-05-29

### Applied Standards and Test Reports

Specification	Laboratory	Test Report Number / Version
EN 300 720 V2.1.1 (2017-01)	MOTOROLA PENANG	08987-RF-00037 Rev. B, 2020-02-13
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	PHOENIX TESTLAB	F180661E1, 2018-06-06
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	PHOENIX TESTLAB	F191619E1, 2019-12-03
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	PHOENIX TESTLAB	F200025E1, 2020-04-20
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	PHOENIX TESTLAB	U180661E2, 2018-05-28

Specification	Laboratory	Test Report Number / Version
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	QAV Technologies	QAV0512 – 472, 2012-05-18
IEC 60945 Ed. 4.0 (2002) incl. Corr. 1 (2008)	MOTOROLA PENANG	RP-58563-01, Rev A, 2018-05-02
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008 11.2 Compass safe distance	BSH	Certificate No. 1002, 2018-05-23
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008 11.2 Compass safe distance	BSH	Certificate No. 1004, 2018-05-23
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008 11.2 Compass safe distance	BSH	Certificate No. 1005, 2018-05-23
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008 11.2 Compass safe distance	BSH	Certificate No. 1040, 2019-12-10
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008 11.2 Compass safe distance	BSH	Certificate No. 1093, 2021-06-03
IEC 60945:2002 incl. IEC 60945 Corr. 1:2008 11.2 Compass safe distance	BSH	Certificate No. 1095, 2021-06-03

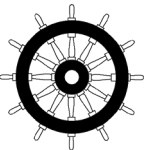
### Application/Limitation

The radiotelephones type DP4401Ex and DP4801Ex are two-way portable radios for fire-fighter's communication in the UHF band. The radiotelephones may only be used in the frequency band 457.525 to 467.575 MHz with analog FM modulation and 12.5/25 kHz channel spacing in accordance with ITU-R M1174-3.

The radio telephones can only be used with battery type NNTN8359A or type NNTN8359C or type NNTN8359CR and with all approved accessories listed in this certificate. When the radios are used in a hazardous area, it is mandatory that the protective cover 15012157001 is fitted at the accessory connector.

### Notes

1. This certificate will not be valid if the manufacturer makes any changes or modifications to the approved type of equipment, which have not been notified to, and agreed with PHOENIX TESTLAB.
2. Should the specified regulations or standards be amended during the period of validity of this certificate, the product(s) is/are to be re-approved prior to it/they being placed on the market and on board vessels to which the amended regulations or standards apply.

3.  The Mark of Conformity may only be affixed to the above type approved equipment and a Manufacturer's Declaration of Conformity issued when the production-control phase module (D, E, or F) of ANNEX II of the Directive is fully complied with and controlled by a written inspection agreement with a notified body.