

Marine Equipment UK Assessment Module B Type Examination Certificate

This is to certify that TUV SUD BAPT UNLIMITED did undertake the relevant type approval procedures for the equipment identified below, which was found to be in compliance with the requirements of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended, under Annex 1 of the listed Amendment of MSN 1874 for the types of equipment identified.

MSN 1874 Amendment	Amendment 6
Certificate Holder and Manufacturer	Motorola Solutions Systems Polska Sp. z o.o. ul. Czerwone Maki 82 Krakow 30-392 Poland
Product(s)	DP4401 Ex, PBE502BEEEx DP4801 Ex, PBE502HEGEx
Product Sector	Radiocommunications Equipment
Product Type	UK/5.20 Fire-fighter's two-way radiotelephone apparatus

and on the basis of the Technical Data and information detailed in the Annex to this certificate.

Valid from: 25 July 2022

T. J. Twynam
(Tom Twynam)

Expiry Date: 24 July 2027

This certificate has been issued in accordance with the TÜV SÜD Testing and Certification Regulations and constitutes page 1 of the combined Certificate and Annex.
The Conditions for the validity of this certificate are listed in the Annex.
For further details, related to this certification please contact BAPT@tuvsud.com


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Annex to Marine Equipment UK Conformity Assessment Module B Type Examination Certificate

1 Equipment Description

Portable DP4000Ex series ATEX radio

1.1 Models

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

1.1.1 System Components

1.1.2 Batteries

Model	Description
NNTN8359A	MOTOTRBO IECEEx/ATEX IMPRES Li-Ion Battery
NNTN8359C	MOTOTRBO IECEEx/ATEX IMPRES Li-Ion Battery
NNTN8359CR	MOTOTRBO IECEEx/ATEX IMPRES Li-Ion Battery

1.1.3 Dust Cover

Model	Description
15012157001 <small>Note 3</small>	Dust Cover Assembly

1.1.4 Antennas (use one of the following)

Model	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

1.1.5 Optional Components

Model	Description
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

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Model	Description
Audio Accessories	
PMMN4067B	ATEX CSA Remote Speaker Microphone
PMLN6047A	Audio Adapter with Molex jac
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

2 Assessed Requirements

2.1 MSN 1874 Amendment 6 Annex 1

2.2 Compliance Requirements for UK/5.20

IMO Resolutions	International Testing Standards	
Resolution A694(17) IMO MSC.1Circ 1616, ITU-R M.489-2 (10/95), ITU-R M.489-2 (10/95) ITU-R M.1174-4 (10/2019)	IEC 60945:2002 inc. Corr.1:2008	General Requirements for Marine Navigation Equipment
	ATEX Directive 2014/34/EU ^{Note 3}	Relating to equipment and protective systems intended for use in potentially explosive atmospheres
	ETSI EN 300 720 V2.1.1:2017-01	Ultra-High Frequency (UHF) on-board vessels communications systems and equipment

3 Technical Documentation

3.1 Declaration of Conformity

DoC-16041400281-J

Modified

2022-06-03

3.2 User Guide

68012007050-DA, November 2014

68012008006-BH Service Manual, April 2021

68012007083-DF Hazardous Location Safety Instruction, May 2021

3.3 Test Reports

3.3.1 IEC 60945:2002 inc. Corr.1:2008

F180661E1	Issued	2018-06-06
F191619E1	Issued	2019-12-03
F200025E1	Issued	2022-04-20
U180661E2	Issued	2018-05-28
QAV0512 – 472	Issued	2012-05-18
RP-58563-01, Rev A	Issued	2018-05-02
Functional Test for DP4801	Modified	2022-06-07
1002	Issued	2018-05-23
1004	Issued	2018-05-23

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IEC 60945:2002 inc. Corr.1:2008 - continued

1005	Issued	2018-05-23
1040	Issued	2019-12-10
1093	Issued	2021-06-03
1095	Issued	2021-06-03

3.3.2 ETSI EN 300 720 V2.1.1:2017-01

8987-RF-00037 Rev. B	Issued	2020-02-13
8987-RF-00073 Rev A	Issued	2022-07-04

3.3.3 ATEX Directive 2014/34/EU

ATEX EU-Type Examination Certificate Supplement 5, Certificate No. BVS 12 ATEX E 117 X	Issued	2020-05-29
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3.4 Build Status

3.4.1 Hardware

84012363002_B_Radio ATEX UHF Main Board Schematic	Dated	2020-03-18
PMUE3755AAAEAA_NKP GPS_RevC BOM	Issued	2020-11-26

3.4.2 Software

DP4801 & DP4401 Firmware R02.21.01.0000	Dated	2022-04-08
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3.5 Notes

- Note 1 This approval remains valid for equipment including subsequent minor software amendments which have been formally accepted in accordance with the TÜV SÜD Testing and Certification Regulations.
- Note 2 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 analogue FM modulation and 12.5/25 kHz channel spacing in accordance with ITU-R M1174-4
- Note 3 The radio telephones can only be used with battery type NNTN8359A or type NNTN8359C or type NNTN8359CR and with all 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.

4 Additional Information

Declared ATEX Apparatus Group/Temperature Class/hazardous type

II 2G Ex ib IIC T4 Gb (Approved for Category 2G/Zone 1, 2, Equipment group II, Gasgroup C, Temperature class T4)

II 2D Ex ib IIIC T130 °C Db (Approved for Category 2D/Zone 21, 22, Equipment group III, Dustgroup C)

I M2 Ex ib I Mb (Approved Category/Zone M2, Equipment group I)


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5 Conditions of Validity

This certificate ceases to be valid if the manufacturer makes any changes or modifications to the approved equipment, which have not been notified to, and agreed with TUV SUD BABT or a person appointed by TUV SUD BABT to perform that role.

Should the specified regulations (international conventions and the relevant resolutions and circulars of the IMO) or standards be amended and enforced through MSN 1874 during the validity of this certificate, the product(s) is/are to be reapproved prior to it/them being placed on the market or onboard vessels to which the amended regulations or standards apply.

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 Schedule 2 of the Merchant Shipping (Marine Equipment) Regulations 2016, as amended is fully complied with and controlled by a written inspection agreement with an approved body.

Signature: 
(Thomas J. Twynam)

Date: 2022-07-25

On behalf of TUV SUD BABT UNLIMITED