

EU-Type Examination Certificate

2 Directive 2014/34/EU of the European Parliament and of the Council of 26 February 2014

3 EU-Type Examination Certificate Number: **BVS 25 ATEX E 001 X** Issue: **02**

4 Equipment: **Radio telephone type R7Ex**

5 Manufacturer: **Motorola Solutions Systems Polska Sp.z.o.o.**

6 Address: **Ul. Czerwone Maki 82, 30-392 Krakow, Poland**

7 This product and any acceptable variations thereto are specified in the appendix to this certificate and the documents referred to therein.

8 DEKRA Testing and Certification GmbH, Notified Body number 0158, in accordance with Article 17 of Directive 2014/34/EU of the European Parliament and of the Council, dated 26 February 2014, certifies that this product has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of products intended for use in potentially explosive atmospheres given in Annex II to the Directive.

The examination and test results are recorded in the confidential Report No. BVS 25.2009 EU.

This issue of the EU-Type Examination Certificate replaces the previous issue of the EU-Type Examination Certificate BVS 25 ATEX E 001 X issue 01.

9 Compliance with the Essential Health and Safety Requirements has been assured by compliance with:

EN IEC 60079-0:2018
IEC 60079-11:2023

General requirements
Intrinsic Safety "i"


Where additional criteria beyond those given here have been used, they are listed at item 18 in the Schedule.

10 If the sign "X" is placed after the certificate number, it indicates that the product is subject to the "Specific Conditions of Use" listed under item 17 of this certificate.

11 This EU-Type Examination Certificate relates only to the technical design of the specified product in accordance with the Directive 2014/34/EU. Further requirements of the Directive apply to the manufacturing process and supply of this product. These are not covered by this certificate.

12 The marking of the product shall include the following:

For IIA radio version:

 **I M2 Ex ib I Mb**
II 2G Ex ib IIA T4 Gb
II 2D Ex ib IIIC T130°C Db

For IIC radio version:

 **I M2 Ex ib I Mb**
II 2G Ex ib IIC T4 Gb
II 2D Ex ib IIIC T130°C Db

DEKRA Testing and Certification GmbH
Bochum, 2025-10-30


Managing Director

13 **Appendix**

14 **EU-Type Examination Certificate**

BVS 25 ATEX E 001 X issue 02

15 **Product description**

15.1 **Subject and type**

Radio telephone type R7Ex

The radio telephone types R7Ex (IIA) & R7Ex (IIC).

IIA Models, UHF Band 1 (350-470 MHz)

Name	Model Number	Description
R7Ex	PMUE5905AACEAA *	Europe, Middle East, Africa Full Keypad Model (EMEA FKP)
R7Ex	PMUE5906AAAEAA *	Europe, Middle East, Africa, Non Keypad Model (EMEA NKP)
R7Ex	PMUE5905AACLAA *	Latin America, Caribbean Region Full Keypad Model (LACR FKP)
R7Ex	PMUE5906AAALAA *	Latin America, Caribbean Region Non Keypad Model (LACR NKP)

* The last five alphabets are not related to Ex protection

IIC Models, UHF Band 1 (400-470 MHz)

Name	Model Number	Description
R7Ex	PMUE5903ABCEAA *	Europe, Middle East, Africa Full Keypad Model GOB (EMEA FKP GOB)
R7Ex	PMUE5903AACEAA *	Europe, Middle East, Africa, Full Keypad Model (EMEA FKP)
R7Ex	PMUE5904AAAEAA *	Europe, Middle East, Africa, Non Keypad Model (EMEA NKP)
R7Ex	PMUE5903ABCLAA *	Latin America, Caribbean Region Full Keypad Model GOB (LACR FKP GOB)
R7Ex	PMUE5903AACLAA *	Latin America, Caribbean Region Full Keypad Model (LACR FKP)
R7Ex	PMUE5904AAALAA *	Latin America, Caribbean Region Non Keypad Model (LACR NKP)
R7Ex	PMUE5903ABCAAA *	Asia Pacific Full Keypad Model GOB (APAC FKP GOB)
R7Ex	PMUE5903AACAAA *	Asia Pacific Full Keypad Model (APAC FKP)
R7Ex	PMUE5903AADAAA *	Asia Pacific Full Keypad Model (APAC FKP)
R7Ex	PMUE5904AAAAAA *	Asia Pacific Non Keypad Model (APAC NKP)

* The last five alphabets are not related to Ex protection

15.2 **Description**

The radio telephone is only used with the battery type PMNN4848A or type PMNN4848AR and the dust cover with the part number 15012157001 or one of the approved accessories listed in this certificate. Only this identification label (PMLN8750A) can be pasted on the outside radio.

The antennas listed below can be connected to the radios.

For 350 MHz – 470 MHz versions

Part No	Description
PMAD4139A	Whip Antenna 160mm (350 - 400 MHz)

For 400 MHz – 470 MHz versions

Part No	Description
PMAE4079A	Whip Antenna 150 mm (400 - 527 MHz)
AN000348A01	Stubby Antenna 90mm (400-527MHz)
AN000350A01	Stubby Antenna 60mm (400-450MHz)
AN000351A01	Stubby Antenna 60mm (440-490MHz)

For 136 MHz -174 MHz

Part No	Description
PMAD4147A	Whip Antenna 205mm (136-174MHz)
PMAD4121B	Stubby Antenna 90mm (160-174 MHz)
PMAD4120A	Stubby Antenna 90mm (146-160 MHz)
PMAD4119A	Stubby Antenna 90mm (136-148 MHz)
PMAD4118A	Helical Antenna 150mm (152-174 MHz)
PMAD4116A	Helical Antenna 150mm (144-165 MHz)

Optionally one of the color rings 32012244001, 32012244002, 32012244003, 32012244004 or 32012244005 can be attached to all the antennas listed above.

The following carry devices can be used with the radio:

Part No	Description
PMLN8636A	Hard Leather Carry Case 2.5 Inch Swivel Belt Loop for Non-Keypad Radio
PMLN8637A	Hard Leather Carry Case 2.5 Inch Swivel Belt Loop for Full-Keypad Radio
PMLN8641A	Hard Leather Carry Case 2.5 Inch Fixed Belt Loop for Non-Keypad Radio
PMLN8642A	Hard Leather Carry Case 2.5 Inch Fixed Belt Loop for Full-Keypad Radio
PMLN6086A	ATEX Belt Clip 2.5 Inch Belt Width
PMLN8722A	EX 2.5 INCH Swivel Belt Loop
NTN5243A	Adjustable Nylon Shoulder Strap
RLN6486A	Adjustable Leather Shoulder Strap
RLN6487A	Adjustable Leather Shoulder Strap Extra Long
RLN6488A	Anti-Sway Strap

The following additional accessories can be used with the radio:

Part No	Description
PMLN8699A	Back Bezel Kit with NFC Tag
PMLN8700A	Back Bezel Kit with US RFID Tag
PMLN8707A	Back Bezel Kit with EU RFID Tag

The following separately certified accessories can be used with the radio telephone:

Type (Motorola reference number)	ATEX Type Examination Certificate
PMLN6047A Audio adapter (Ambient temperature range: $-20\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$)	BVS 12 ATEX E 074 X (For Group II and III applications)
PMMN4163A Remote Speaker Microphone (Ambient temperature range: $-25\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$)	BVS 25 ATEX E 003 X
PMMN4164A Remote Speaker Microphone (Ambient temperature range: $-30\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$)	BVS 25 ATEX E 004 X
PMLN8634A PTT Adapter (Ambient temperature range: $-30\text{ }^{\circ}\text{C} \leq T_a \leq +60\text{ }^{\circ}\text{C}$)	EESF 24 ATEX 029 X
AK6760T (PMLN7310ASP01) PTT Unit (Ambient temperature range: $-20\text{ }^{\circ}\text{C} \leq T_a \leq +55\text{ }^{\circ}\text{C}$)	Presafe 15 ATEX 6928 (For Group II applications)

The accessories kit listed below can be connected to PMMN4163A, PMLN8634A and PMLN7310ASP01:

Type (Motorola reference number)

- MT7H79F-50 (PMLN6087A)
Standard headset, with microphone and speaker
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +50\text{ °C}$)
- MT1H7P3E2-07-51 (PMLN6089A)
Headset series, Tactical XP
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +40\text{ °C}$)
- MT1H7F2-07-51 (PMLN6090A)
Headset series, Tactical XP
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +40\text{ °C}$)
- MT7H79P3E-50 (PMLN6092A)
Standard headset, with microphone and speaker
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +50\text{ °C}$)
- MT72H540P3E-50 (PMLN6333A)
Headset with microphone and speaker, twin cup
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +50\text{ °C}$)
- MT7H79B-50 (PMLN7531A)
PELTOR Basic Headset Neckband
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +50\text{ °C}$)
- MT1H7B2-07-51 (PMLN7535A)
PELTOR Tactical Headset Neckband
(Ambient temperature range: $-20\text{ °C} \leq T_a \leq +40\text{ °C}$)

ATEX Type Examination Certificate

- Nemko 09 ATEX 1114X
(For Group II application)
- Nemko 09 ATEX 1029X
(For Group I and II applications)
- Nemko 09 ATEX 1029X
(For Group I and II applications)
- Nemko 09 ATEX 1114X
(For Group II applications)
- Nemko 09 ATEX 1119X
(For Group II applications)
- Nemko 09 ATEX 1114X
(For Group II applications)
- Nemko 09 ATEX 1029X
(For Group I and II applications)

The accessories kit listed below can be connected to PMMN4163A and PMLN8634A:

Type (Motorola reference number)

- PMLN8628A
HS700Ex Standard Over-the-Head Headset
(Ambient temperature range: $-30\text{ °C} \leq T_a \leq +60\text{ °C}$)
- PMLN8629A
HS700Ex Standard Helmet Attachment Headset
(Ambient temperature range: $-30\text{ °C} \leq T_a \leq +60\text{ °C}$)
- PMLN8631A
HS750Ex Active hearing protectors with speakers and microphone
Motorola Description: Over-the-Head Headset with Ambient Sound Control
(Ambient temperature range: $-30\text{ °C} \leq T_a \leq +40\text{ °C}$)
- PMLN8632A
HS750Ex Active hearing protectors with speakers and microphone
Motorola Description: Helmet Attachment Headset with Ambient Sound Control
(Ambient temperature range: $-30\text{ °C} \leq T_a \leq +40\text{ °C}$)

ATEX Type Examination Certificate

- EESF 24 ATEX 028X (Issue 0)
- EESF 24 ATEX 028X (Issue 0)
- EESF 24 ATEX 027X (Issue 1)
- EESF 24 ATEX 027X (Issue 1)

The accessories kit listed below can be connected to PMMN4163A:

Type (Motorola reference number)

ATEX Type Examination Certificate

PMLN8765A
(SAVOX ATEX HC-10 Headset, helmet communication headset)
Motorola Description: SAVOX ATEX HC-10 Bone Conduction Helmet Headset
(Ambient temperature range: $-30^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$)
PMLN8766A
(SAVOX ATEX HC-20 Helmet Com, helmet communication headset)
Motorola Description: SAVOX ATEX HC-20 Bone Conduction Helmet Headset
(Ambient temperature range: $-30^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$)

EESF 25 ATEX 003X (Issue 2)

EESF 25 ATEX 003X (Issue 2)

The earpiece type PMLN8643A can be connected to the 3.5 mm audio jack of PMMN4163A:
The accessories can only be connected or disconnected to the remote speaker microphone outside the potentially hazardous environment.
The ambient temperature range of the earpiece PMLN8643A is $-30^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$.

The accessories, the antennas and the battery types PMNN4848A or PMNN4848AR can only be connected or disconnected outside the potentially hazardous environment.

The ambient temperature range for the radio telephones and the battery types PMNN4848A, or type PMNN4848AR is $-30^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$.

Only chargers listed in the Motorola safety instruction MN010388A01 (APAC), MN010389A01 (EMEA), & MN010390A01 (LACR) are allowed to be used with the battery PMNN4848A or type PMNN4848AR outside the potentially hazardous environment.

Listing of all components used referring to older standards

No components included.

Reasons for this issue

- Certificate Revision update for SAVOX headset (PMLN8631A & PMLN8632A)
- Add SAVOX headset (PMLN8765A & PMLN8766A) as approved accessories for use with RSM PMMN4163A
- Editorial changes
- otherwise: "unchanged"

15.3 Parameters

15.3.1 Electrical data

15.3.1.1 Frequency range

R7Ex (IIA models)	UHF	350 - 470	MHz
R7Ex (IIC models)	UHF	400 - 470	MHz

15.3.1.2 Radio output power

R7Ex (IIA models)	max.	6	W
R7Ex (IIC models)	max.	2	W

15.3.1.3 Supply Voltage (PMNN4848A and PMNN4848AR)

Nominal:	U_n	7.2	V
Maximum input voltage:	U_i	8.4	V
Maximum input current:	I_i	2.85	A

15.3.1.4 GCAI connector

The following separately certified accessories can be used with the radio telephone: PMLN6047A; PMMN4163A; PMMN4164A; PMLN8634A; AK6760T (PMLN7310ASP01)
Refer to the 15.2 Description for more details.



Programming cable used only in non-hazardous area PMKN4160A.

- 15.3.2 Ambient temperature range: $-30\text{ °C} \leq T_a \leq +60\text{ °C}$
- 15.3.3 Ingress protection IP66/68 (acc. EN IEC 60079-0)

16 Report Number

BVS PP 25.2009 EU, as of 2025-10-30
 BVS PP 25.2011 EU, as of 2025-02-27

17 Specific Conditions of Use

- 17.1 The radio, the battery, and the accessories are only protected against low risk of mechanical danger for Group I applications.
- 17.2 Only accessories and chargers listed in the Safety Instruction MN010388A01 (APAC), MN010389A01 (EMEA) and MN010390A01 (LACR) shall be used.
- 17.3 It is only allowed to disconnect or change accessories outside the hazardous area. When using third party accessories, the conditions for safe use listed in the third-party accessory certificates must be observed.
- 17.4 If the charge indicator lights at the charger consistently indicate a defective battery or is deviating from those listed in the manual of the chargers, the battery is not allowed to be used in the hazardous environment anymore.
- 17.5 In the hazardous environment, use either dust cover 15012157001 or one of the accessories listed in the Safety Instruction MN010388A01 (APAC), MN010389A01 (EMEA) and MN010390A01 (LACR) must be connected.
- 17.6 Inside hazardous areas, the battery must always be connected to a radio. Changing, detaching, or charging of the battery is only allowed outside the hazardous area.
- 17.7 Do not leave radio unattended. Use the radio as intended on the hand or on the body.
- 17.8 Remove or replace the earbud to the 3.5mm audio jack earpiece (PMLN8643A) only outside the potentially hazardous area.
- 17.9 Refer to Safety Instruction MN010388A01 (APAC), MN010389A01 (EMEA) and MN010390A01 (LACR).

18 Essential Health and Safety Requirements

Met by compliance with the requirements mentioned in item 9.

For this product the standard IEC 60079-11:2023 is equivalent to the harmonized standard EN 60079-11:2012 in terms of safety.

19 Remarks and additional information

Drawings and documents are listed in the confidential report.