



Translation


EC-Type Examination Certificate

- Directive 94/9/EC -

Equipment and protective systems intended for use
in potentially explosive atmospheres

BVS 07 ATEX E 160

- (4) **Equipment:** Audio Accessories PMLN5151*, PMLN5152*, PMLN5153*, PMLN5154*,
PMMN4055* and PMMN4056*
- (5) **Manufacturer:** Motorola GmbH
- (6) **Address:** 13507 Berlin, Germany
- (7) The design and construction of this equipment and any acceptable variation thereto are specified in the appendix to this type examination certificate.
- (8) The certification body of DEKRA EXAM GmbH, notified body no. 0158 in accordance with Article 9 of the Directive 94/9/EC of the European Parliament and the Council of 23 March 1994, certifies that this equipment has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres, given in Annex II to the Directive.
The examination and test results are recorded in the test and assessment report BVS PP 08.2046 EG.
- (9) The Essential Health and Safety Requirements are assured by compliance with:
- | | |
|------------------|----------------------|
| EN 60079-0:2006 | General requirements |
| EN 60079-11:2007 | Intrinsic safety 'i' |
| EN 61241-0:2006 | General requirements |
| EN 61241-11:2006 | Protection 'iD' |
- (10) If the sign "X" is placed after the certificate number, it indicates that the equipment is subject to special conditions for safe use specified in the appendix to this certificate.
- (11) This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment in accordance to Directive 94/9/EC.
Further requirements of the Directive apply to the manufacturing process and supply of this equipment. These are not covered by this certificate
- (12) The marking of the equipment shall include the following:

II 2GEx ib IIC T4
 **II 2DEx ibD 21 T100°C**
I M2 Ex ib I

DEKRA EXAM GmbH

Bochum, dated 17. April 2008

Signed: Simanski

Signed: Schumann

Certification body

Special services unit

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This certificate may only be reproduced in its entirety and without change

(13) Appendix to

(14) **EC-Type Examination Certificate**

BVS 07 ATEX E 160

(15) 15.1 Subject and type

Audio accessories for use in gas atmosphere:

Name	Model number
ATEX over the Head Heavy Duty Head set	PMLN5151A
ATEX behind the Head Heavy Duty Head set	PMLN5152A
ATEX over the Head Lightweight Head set	PMLN5153A
ATEX Hurricane Head set	PMLN5154A
ATEX Throat Mikrophone with 80mm PTT	PMMN4055A
ATEX Skull Mikrophone with 80mm PTT	PMMN4056A

Audio accessories for use in gas or dust atmosphere

Name	Model number
ATEX over the Head Heavy Duty Head set	PMLN5151B
ATEX behind the Head Heavy Duty Head set	PMLN5152B
ATEX over the Head Lightweight Head set	PMLN5153B
ATEX Hurricane Head set	PMLN5154B
ATEX Throat Microphone with 80mm PTT	PMMN4055B
ATEX Skull Microphone with 80mm PTT	PMMN4056B

15.2 Description

The Audio Accessories PMLN5151*, PMLN5152*, PMLN5153*, PMLN5154*, PMMN4055* and PMMN4056* are intended for use with portable radios. The audio accessories are supplied by the connected radio. The design is optimized for use in areas with potentially explosive atmospheres (gas or dust) with a high level of environmental noise.

The Audio Accessories can only be connected outside the potentially explosive atmosphere and can only be brought connected into the potentially explosive atmosphere.

The approved temperature range for the Audio Accessories is $-20\text{ °C} \leq T_a \leq +60\text{ °C}$.

The accessories are approved for use with the Motorola Radiotelephone WARIS type GP***, PTX*** und ATS*** that have the EC type examinations BVS 07 ATEX E 095 X and future equipment with identical specification for connected accessories.

15.3 Parameters

15.3.1 ATEX over the Head Heavy Duty Head set

PMLN5151A and PMLN5151B (PIN 1, 2, 4, 7, PTT)

Max. Input voltage	U_i	8.4 V DC
Max. Input current	I_i	43 mA DC
Max. Input power	P_i	362 mW
Max. effective internal capacitance	C_i	negligible
Max. effective internal inductance	L_i	2.2 mH

15.3.2 ATEX Behind the Head Heavy Duty Head set

PMLN5152A and PMLN5152B (PIN1, 2, 4, 7, PTT)

Max. Input voltage	U_i	8.4V DC
Max. Input current	I_i	43 mA DC
Max. Input power	P_i	362 mW
Max. effective internal capacitance	C_i	negligible
Max. effective internal inductance	L_i	2.2 mH

15.3.3 ATEX over the head Lightweight Head set

PMLN5153A and PMLN5153B (PIN 1, 2, 4, 7, PTT)

Max. Input voltage	U_i	8.4 V DC
Max. Input current	I_i	10 mA DC
Max. Input power	P_i	84 mW

	Max. effective internal capacitance	C_i	1.2 μ F
	Max. effective internal inductance	L_i	2.4 mH
15.3.4	ATEX behind the Head Lightweight (Hurricane Head set) PMLN5154A and PMLN5154B		
	Max. Input voltage	U_i	84 V DC
	Max. Input current	I_i	8 mA DC
	Max. Input power	P_i	67.2 mW
	Max. effective internal capacitance	C_i	negligible
	Max. effective internal inductance	L_i	14.4 mH
15.3.5	ATEX Throat Microphone with 80mm PTT PMMN4055A und PMMN4055B		
	Max. Input voltage	U_i	8.4 V DC
	Max. Input current	I_i	15 mA DC
	Max. Input power	P_i	126 mW
	Max. effective internal capacitance	C_i	2.2 μ F
	Max. effective internal inductance	L_i	1.2 mH
15.3.6	ATEX Skull Microphone with 80mm PTT PMMN4056A und PMMN4056B		
	Max. Input voltage	U_i	8.4 V DC
	Max. Input current	I_i	22 mA DC
	Max. Input power	P_i	186 mW
	Max. effective internal capacitance	C_i	2.2 μ F
	Max. effective internal inductance	L_i	0.84 mH

(16) Test and assessment report
BVS PP 08.2046 EG as of 17.04.08

(17) Special conditions for safe use

None

We confirm the correctness of the translation from the German original.
In the case of arbitration only the German wording shall be valid and binding.

44809 Bochum, 21.May 2008
BVS-Ha/Sz A 20070488

DEKRA EXAM GmbH



Certification body



Special services unit