



IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION IEC Certification System for Explosive Atmospheres

for rules and details of the IECEx Scheme visit www.iecex.com

Certificate No.:	IECEx BVS 19.0047	Page 1 of 4	<u>Certificate history:</u>
Status:	Current	Issue No: 2	Issue 1 (2020-01-22) Issue 0 (2019-09-02)
Date of Issue:	2020-12-22		
Applicant:	MSA EUROPE GmbH Schlüsselstraße 12 8645 Rapperswil-Jona Switzerland		
Equipment:	Headset type C1 Headset 10194312, 10194313 and 10194314		
Optional accessory:			
Type of Protection:	Intrinsic Safety "i"		
Marking:	Ex ib IIC T4 Gb		

Approved for issue on behalf of the IECEx
Certification Body:

Ralf Leiendecker

Position:

Deputy Head of Certification Body

Signature:
(for printed version)

Date:

26.11.2020

1. This certificate and schedule may only be reproduced in full.
2. This certificate is not transferable and remains the property of the issuing body.
3. The Status and authenticity of this certificate may be verified by visiting www.iecex.com or use of this QR Code.



Certificate issued by:

DEKRA Testing and Certification GmbH
Certification Body
Dinnendahlstrasse 9
44809 Bochum
Germany

 **DEKRA**
On the safe side.



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 19.0047**

Page 2 of 4

Date of issue: 2020-12-22

Issue No: 2

Manufacturer: **MSA Produktion Deutschland GmbH**
Thiemannstrasse 1
12059 Berlin
Germany

Additional
manufacturing
locations:

This certificate is issued as verification that a sample(s), representative of production, was assessed and tested and found to comply with the IEC Standard list below and that the manufacturer's quality system, relating to the Ex products covered by this certificate, was assessed and found to comply with the IECEx Quality system requirements. This certificate is granted subject to the conditions as set out in IECEx Scheme Rules, IECEx 02 and Operational Documents as amended

STANDARDS :

The equipment and any acceptable variations to it specified in the schedule of this certificate and the identified documents, was found to comply with the following standards

IEC 60079-0:2017 Explosive atmospheres - Part 0: Equipment - General requirements
Edition:7.0

IEC 60079-11:2011 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:6.0

This Certificate **does not** indicate compliance with safety and performance requirements other than those expressly included in the Standards listed above.

TEST & ASSESSMENT REPORTS:

A sample(s) of the equipment listed has successfully met the examination and test requirements as recorded in:

Test Report:

[DE/BVS/ExTR19.0052/02](#)

Quality Assessment Report:

[DE/BVS/QAR06.0018/15](#)



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 19.0047**

Page 3 of 4

Date of issue: 2020-12-22

Issue No: 2

EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

General product information:

The C1 Headset is a mask mounted headset. The headset is intended for communicating while wearing a MSA full face mask. The device consists of a microphone and a speaker in a shock-resistant, conductive, and waterproof plastic housing. The device is connected to the full-face mask with an adapter. The device operates in Simplex mode (Listen OR Talk).

The device only functions as part of a communication system in combination with an intrinsically safe PTT (Push-to-Talk) module and an intrinsically safe certified radio.

Parameters:

C1 Headset 10194312 and 10194313

Plug Nexus (Loudspeaker / Microphone circuit)

Maximum input voltage	U_i	DC	9.5	V
Maximum input current	I_i		170	mA
Maximum input power	P_i		600	mW
Maximum internal capacitance	C_i		461	pF
Maximum internal inductance	L_i		508	μ H
Load	R_{load}		110	Ω

Maximum ambient temperature range $-30\text{ }^{\circ}\text{C} \leq T_{amb} \leq +60\text{ }^{\circ}\text{C}$

C1 Headset 10194314

The headset is permitted to be used with Motorola MTP...Ex with the remote speaker microphone type PMMN4***A and Nexus Jack (IECEx BVS 15.0047X)

Maximum input voltage	U_i	DC	9.5	V
Maximum input current	I_i		170	mA
Maximum input power	P_i		600	mW
Maximum internal capacitance	C_i		370	nF
Maximum internal inductance	L_i		508	μ H
Load	R_{load}		110	Ω

Maximum ambient temperature range $-30\text{ }^{\circ}\text{C} \leq T_{amb} \leq +60\text{ }^{\circ}\text{C}$

SPECIFIC CONDITIONS OF USE: NO



IECEx Certificate of Conformity

Certificate No.: **IECEx BVS 19.0047**

Page 4 of 4

Date of issue: 2020-12-22

Issue No: 2

DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)

A new type was added. The types are distinguished by the material number.