



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 LCIE 21.0016X** Page 1 of 3 [Certificate history:](#)
Status: **Current** Issue No: 0
Date of Issue: 2021-12-21
Applicant: **MSA EUROPE GmbH**
Schlüsselstraße 12
8645 Rapperswil-Jona
Switzerland
Equipment: **F1XF Communication Headsets**
Optional accessory:
Type of Protection: **Ex ib**
Marking: **Ex ib IIC T4 Gb**
(Refer to attachment for full marking)

Approved for issue on behalf of the IECEX
Certification Body:

Julien GAUTHIER

Position:

Certification Officer

Signature:
(for printed version)



Date:

2021-12-21

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:

Laboratoire Central des Industries Electriques (LCIE)
33 Avenue du General Leclerc
FR-92260 Fontenay-aux-Roses
France





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Date of issue: 2021-12-21

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Manufacturer: **MSA EUROPE GmbH**
Schlüsselstraße 12
8645 Rapperswil-Jona
Switzerland

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:

[FR/LCIE/ExTR21.0056/00](#)

Quality Assessment Report:

[FR/LCIE/QAR14.0003/07](#)



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EQUIPMENT:

Equipment and systems covered by this Certificate are as follows:

The equipment is a communication headset for integration in helmet.

It consists of one or two loudspeakers in plastic housing with mounting clip, a flexible microphone or bone conductive microphone and a PCB linked by wires to a connector for external connection.

SPECIFIC CONDITIONS OF USE: YES as shown below:

- The intrinsically safe apparatus shall only be connected to intrinsically safe equipment certified for the intended use. This association shall comply with the requirements of the standard IEC 60079-25.
- The electrical input parameters (Voltage, Current and Power) indicated in the certificate are the maximum parameters the complete equipment can be supplied with even if combinations of power supplies are possible.
- Ambient temperature range: -20°C to +65°C
- The equipment shall be installed inside a firefighter helmet

Annex:

[Annex 01 to IECEx LCIE 21.00016 X issue 00 .pdf](#)



Annex 01 to Certificate IECEX LCIE 21.0016X issue 00



MARKING



MSA or *The Safety Company*

Address : ...

Type : GAY 1 ****232*-*6000X ⁽¹⁾

Serial number : ...

Year of construction : ...

Ex II 2 G

Ex ib IIC T4 Gb

IECEX LCIE 21.0016 X

-20 °C ≤ T_{amb} ≤ +65 °C

Models with bone micro

U_i : 9.5V, I_i : 170mA, P_i : 600mW, C_i : 6.5nF, L_i : 200µH

Models with Microphone

U_i : 9.5V, I_i : 170mA, P_i : 600mW, C_i : 1,66nF, L_i : 200µH

The marking can be reduce as follow:



MSA or *The Safety Company*

Address : ...

Type : GAY 1 ****232*-*6000X ⁽¹⁾

Serial number : ...

Year of construction : ...

Ex II 2 G

Ex ib IIC T4 Gb

IECEX LCIE 21.0016 X

⁽¹⁾ See range details.

RANGE DETAILS

		GAY	1	*	*	*	*	2	3	2	*	-	*	6	0	0	0	-	X
Micro type	Bone mic	0	1	0	3														
	Microphone	0	2	1	2														
Wiring	Balanced/Standard											1							
	Unbalanced/Nato UK											3							
Loudspeaker	Single											1							
	Double											2							
Free digits	None														0	0	0		
ATEX	ATEX																		X

RATINGS

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