IECEx Certificate of Conformity

INTERNATIONAL ELECTROTECHNICAL COMMISSION
IEC Certification Scheme for Explosive Atmospheres

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

Certificate No.:	IECEx SP 14.0001X	Issue No: 2	Certificate history:
			Issue No. 2 (2015-04-28)
Status:	**Current**	Page 1 of 5	Issue No. 1 (2015-01-08)
			Issue No. 0 (2014-09-25)
Date of Issue:	**2015-04-28**		
Applicant:	**3M Svenska AB** Box 2341 SE-331 02 Värnamo **Sweden**		
Electrical Apparatus:	**Headset series WS ProTac XP**		
Optional accessory:			
Type of Protection:	**Intrinsic safety "ia"**		
Marking:	Ex ia IIC T4 Gb Ex ia I Ma T_{amb} : -20 °C to +40 °C		

Approved for issue on behalf of the IECEx Certification Body: Peter Bremer

Position: Cerification Officer

Signature:
(for printed version)

Date:

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 the Official IECEx Website.

Certificate issued by:

SP Technical Research Institute of Sweden
Box 857
SE-501 15 Boras
Sweden

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Manufacturer: **3M Svenska AB**
Malmstensgatan 19
Box 2341
SE-331 02 Värnamo
Sweden

Additional Manufacturing location(s):

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 electrical apparatus 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 : 2011 Edition:6.0	Explosive atmospheres - Part 0: General requirements
IEC 60079-11 : 2011 Edition:6.0	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"

*This Certificate **does not** indicate compliance with electrical 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:

SE/SP/ExTR14.0002/00 SE/SP/ExTR14.0002/01 SE/SP/ExTR14.0002/02

Quality Assessment Report:

NO/NEM/QAR09.0005/03

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Schedule

EQUIPMENT:

Equipment and systems covered by this certificate are as follows:

The headsets are active hearing protectors and communication devices. They have loud speakers, a speech microphone and surround microphones for attenuation of noise. The headsets are equipped with blue tooth communication and are supplied by alkaline cells. There is an external intrinsically safe contact for connection to an intrinsically safe radio or other intrinsically safe equipment.

The major parts of the enclosure are made of conductive plastic to avoid electrostatic charging. Requirements for level of protection “ia” are fulfilled but due to some non conductive plastic parts in the enclosure with area exceeding requirements for equipment protection level (EPL) Ga the headset fulfils requirements for EPL Gb for use in zone 1.

The cells are intended to be removed or exchanged outside the hazardous area.

The different types of headsets are electrically identical but have mechanical variations.

Type MT15H7FWS5-50 has a headband, type MT15H7BWS5-50 has a neck band and type MT15H7P3EWS5-50 has helmet attachment.

An associated cable with type designation FL6BA that may be connected between the headset and an external device is also included in the equipment.

Data

R efer to Annex 1.
The headset is to be supplied with alkaline LR6 cells of types Panasonic Evolta, Duracell Procell or Energizer Industrial.

CONDITIONS OF CERTIFICATION: YES as shown below:

1. The specifications according to section “Data” above shall be considered.
2. Resistance less than 10^{9} ohm from accessible metal parts (via the user) to earth is not ensured for all metal parts. The metal parts have capacitance to earth up to 20 pF, which shall be considered when the suitability of the product in the specific application is determined.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above):

Variation for CoC issue 2
The variation concerns relocation of polarity protection components on circuit board K347 in the headsets and a slightly different insulation tube on a contact.

ExTR: SE/SP/ExTR14.0002/02

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Additional information:

CoC issue 1
Editorial changes made in Annex 1.

Annex:

Additional information.pdf

Additional information
to Certificate of Conformity IECEx SP 14.0001X

1. Information introduced by issue No. 0 of the certificate

In addition to the information described under the section EQUIPMENT in the certificate, the following applies:

Data

Ambient temperature (T_{amb}): -20 °C to +40 °C

For intrinsically safe contact the following parameters apply:

U_i: 9,0 V	I_i: 450 mA	P_i: 1,3 W	C_i: negligible	L_i: negligible
U_o: 3,8 V	I_o: 30 mA	P_o: 28 mW		

For L_o and C_o the following applies:

	Equipment group II, subdivisions			
	IIC	IIB	IIA	I
C_o:	500 µF	1500µF	4500µF	5000 µF
L_o:	300 µH	900 µH	1800 µH	3 mH

Alternatively the following values can be applied:

	Equipment group II, subdivisions			
	IIC	IIB	IIA	I
C_o:	5 µF	15µF	45µF	50 µF
L_o:	30 mH	90 mH	180 mH	300 mH

The headset is to be supplied with alkaline LR6 cells of types Panasonic Evolta, Duracell Procell or Energizer Industrial.