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 QPS 23.0021X**

Certificate history:

Status: **Current**

Issue No: 0

Date of Issue: 2023-06-23

Applicant: **Special Electronics & Designs Inc.**
214 Bruce Avenue
Kincardine, Ont. N2Z 2P3
Canada

Equipment: **Halo Pro Intrinsically Safe Headsets**

Optional accessory:

Type of Protection: **ia - "intrinsic safety"**

Marking: Ex ia IIC T4 Ga

Ex ia IIIC T135°C Da

Ex ia I Ma

Ui=3.6 VDC, Ii=24mA, Pi=86.4mW

Approved for issue on behalf of the IECEx Certification Body: **D, Adams P.Eng.**

Position: **Manager, Hazardous Locations Department [Ex Equipment]**

Signature:
(for printed version)

Date:
(for printed version)

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:

QPS
Evaluation Services Inc.
81 Kelfield St
Unit 8
Toronto, Ontario M9W 5A3
Canada

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Manufacturing locations: **Special Electronics & Designs Inc.**
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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 60079-11:2023 Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i"
Edition:7.0

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:

CA/QPS/ExTR23.0017/00

Quality Assessment Report:

CA/QPS/QAR22.0001/00

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EQUIPMENT:
Equipment and systems covered by this Certificate are as follows:

HALO PRO INTRINSICALLY SAFE HEADSETS provide a continuous, effective and reliable duplex communication and with regards to intrinsic safety they are designed to be safe when connected per entity parameters as stated on table below:

Entity parameters						
Headset Part number	Ui (V)	Ii (mA)	Pi (mW)	Ci	Li (mH)	L/R (µH/Ω)
HX-920R0	3.6	24	86.4	15µF	16.4	434
HX-921R0	3.6	24	86.4	12.2nF	16.4	434
HX-922R0	3.6	24	86.4	12.2nF	16.4	434
HX-933R0	3.6	24	86.4	15nF	16.4	434
HX-935R0	3.6	24	86.4	12.2nF	16.4	434
HX-*** (helmet)	3.6	24	86.4	15µF	1.1	9
HX-206R0	3.6	24	86.4	4µF	32.8	434
HX-206R3	3.6	24	86.4	4µF	32.8	434
HX-208R0	3.6	24	86.4	12.2nF	32.8	434
HX-208R3	3.6	24	86.4	12.2nF	32.8	434
HX-923R0	3.6	24	86.4	12.2nF	32.8	434
HX-934R0	3.6	24	86.4	15µF	32.8	434
HX-936R0	3.6	24	86.4	12.2nF	32.8	434

SPECIFIC CONDITIONS OF USE: YES as shown below:
1. The devices must be protected from impacts.

2. The devices are intended to be worn and left in place during use in the hazardous area.

3. The Headset may be used within explosion hazardous areas only if are connected using entity parameters to IS equipment as per connection diagrams on application notes Halo Pro Headset Manual.

4. DO NOT connect or disconnect unit in hazardous environments.