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 UL 22.0016**	Page 1 of 4	Certificate history:
Status:	**Current**	Issue No: 1	Issue 0 (2022-03-30)
Date of Issue:	2022-11-30		
Applicant:	**Otto Engineering Inc.** 2 East Main Street Carpentersville, IL 60110 **United States of America**		
Equipment:	**Intrinsically Safe Headset, Type ClearTrak NRX**		
Optional accessory:	Push-to-Talk (PTT) button		
Type of Protection:	**Intrinsic Safety"ia"**		
Marking:	Ex ia IIC T4 Ga -30°C to +75°C		

Approved for issue on behalf of the IECEx Certification Body: **Katy A. Holdredge**

Position: **Senior Staff Engineer**

Signature: (for printed version)

Date: (for printed version) 2022-11-30

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:

UL LLC
333 Pfingsten Road
Northbrook IL 60062-2096
United States of America

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Certificate No.: **IECEx UL 22.0016**

Date of issue: 2022-11-30 Issue No: 1

Manufacturer: **Otto Engineering Inc.**
2 East Main Street
Carpentersville, IL 60110
United States of America

Manufacturing locations: **Otto Engineering Inc.**
2 East Main Street
Carpentersville, IL 60110
United States of America

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 Reports:

US/UL/ExTR22.0018/00 US/UL/ExTR22.0018/01

Quality Assessment Report:

US/UL/QAR06.0010/11

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

The devices covered by this certificate are intrinsically safe headsets with microphones. Power is provided though a permanently connected cable and connector assembly with intrinsic safety entity parameters assigned. The headsets may be provided with an optional push-to-talk (PTT) button.

Please see Annex for additional information.

SPECIFIC CONDITIONS OF USE: NO

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
Issue 1: Helmet-mounted Models V4-11228-S, V4-11229-S, and V4-11236-S were added.

Annex:

Annex to IECEx UL 22.0016 Issue 1.pdf

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TYPE DESIGNATION

Nomenclature for type ClearTrak NRX:

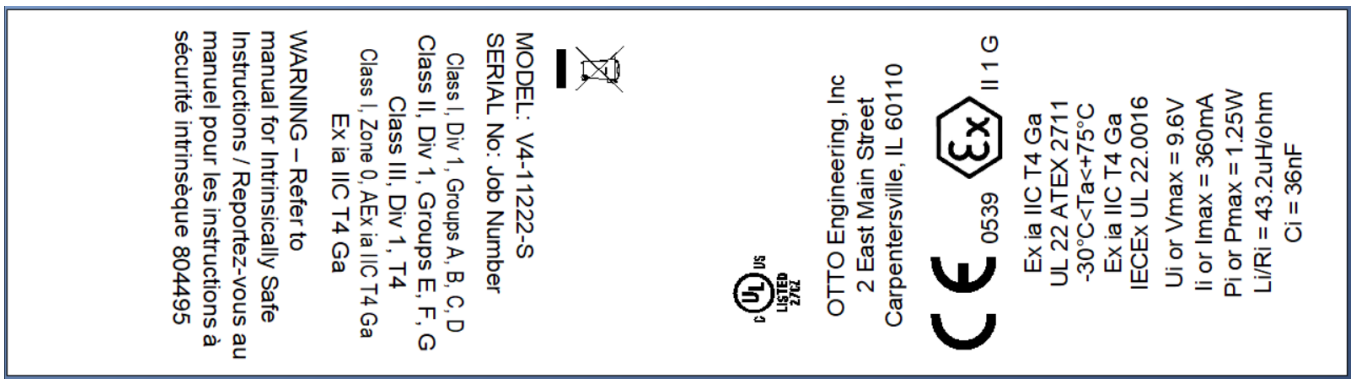
Models differ in features such as housing color, type of cable connector, and presence of PTT button.
The following models of the ClearTrak NRX headsets are covered by this certificate:
Model V4-11222-S
Model V4-11223-S
Model V4-11226-S
Model V4-11227-S
Model V4-11228-S (helmet mount)
Model V4-11229-S (helmet mount)
Model V4-11230-S
Model V4-11231-S
Model V4-11232-S
Model V4-11233-S
Model V4-11234-S
Model V4-11235-S
Model V4-11236-S (helmet mount)

PARAMETERS RELATING TO THE SAFETY

Intrinsic safety entity parameters:
Ui = 9.6 V
Ii = 360 mA
Pi = 1.25W
Li/Ri = 43.2 µH/Ω
Ci = 36 nF

MARKING

Marking has to be readable and indelible; it has to include the following indications:



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Ex ia IIC T4 Ga
UL 22 ATEX 2711
-30°C<Ta<+75°C
Ex ia IIC T4 Ga
IECEx UL 22.0016
Ui or Vmax = 9.6V
Ii or Imax = 360mA
Pi or Pmax = 1.25W
Li/Ri = 43.2uH/ohm
Ci = 36nF

II 1 G

OTTO Engineering, Inc
2 East Main Street
Carpentersville, IL 60110

0539
2777
EN352

0843

E530736

ONLY AS TO INTRINSIC SAFETY
MODEL: V4-11229-S
SERIAL No: Job Number
Radio Device For Use In
Hazardous Locations
Class I, Div 1, Groups A, B, C, D
Class II, Div 1, Groups E, F, G
Class III, Div 1, T4
Class I, Zone 0, AEx ia IIC T4 Ga
Ex ia IIC T4 Ga

WARNING – Refer to manual for Intrinsically Safe Instructions / Reportez-vous au manuel pour les instructions à sécurité intrinsèque 804501