





# IECEX Certificate of Conformity

Certificate No.: **IECEX UL 22.0016**

Page 2 of 4

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](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX UL 22.0016**

Page 3 of 4

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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 through 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**



# IECEX Certificate of Conformity

Certificate No.: **IECEX UL 22.0016**

Page 4 of 4

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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](#)



# IECEX Certificate of Conformity

Certificate No.:

IECEX UL 22.0016

Issue No.: 1

Page 1 of 2

## 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:

$U_i = 9.6 \text{ V}$   
 $I_i = 360 \text{ mA}$   
 $P_i = 1.25 \text{ W}$   
 $L_i/R_i = 43.2 \mu\text{H}/\Omega$   
 $C_i = 36 \text{ nF}$

## MARKING


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





MODEL: V4-11222-S  
SERIAL No.: Job Number  
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 804495

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



 0530

G I II  


Ex ia IIC T4 Ga  
UL 22 ATEX 2711  
-30°C<Ta<+75°C  
Ex ia IIC T4 Ga  
IECEX UL 22.0016  
 $U_i$  or  $V_{max} = 9.6 \text{ V}$   
 $I_i$  or  $I_{max} = 360 \text{ mA}$   
 $P_i$  or  $P_{max} = 1.25 \text{ W}$   
 $L_i/R_i = 43.2 \mu\text{H}/\Omega$   
 $C_i = 36 \text{ nF}$



# IECEx Certificate of Conformity

Certificate No.:

IECEx UL 22.0016

Issue No.: 1

Page 2 of 2

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



CE UK CA 0536 0843  
2777  
EN352

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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