



# 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](http://www.iecex.com)

### Ex COMPONENT CERTIFICATE

Certificate No.: **IECEX UL 22.0046U** Page 1 of 3 [Certificate history:](#)  
Status: **Current** Issue No: 0  
Date of Issue: 2022-05-31  
Applicant: **NVE Corp.**  
11409 Valley View Rd.  
Eden Prairie, MN 55344  
**United States of America**  
Ex Component: Intrinsically Safe Isolators  
*This component is NOT intended to be used alone and requires additional consideration when incorporated into other equipment or systems for use in explosive atmospheres (refer to IEC 60079-0).*  
Type of Protection: **Intrinsic Safety "ia"**  
Marking: Ex ia IIC Ga

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)

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](http://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**





# IECEX Certificate of Conformity

Certificate No.: **IECEX UL 22.0046U**

Page 2 of 3

Date of issue: 2022-05-31

Issue No: 0

Manufacturer: **NVE Corp.**  
11409 Valley View Rd.  
Eden Prairie, MN 55344  
**United States of America**

Manufacturing locations: **NVE Corp.**  
11409 Valley View Rd.  
Eden Prairie, MN 55344  
**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 component 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 component listed has successfully met the examination and test requirements as recorded in:

Test Report:

[US/UL/ExTR22.0050/00](#)

Quality Assessment Report:

[US/UL/QAR21.0024/00](#)



# IECEX Certificate of Conformity

Certificate No.: **IECEX UL 22.0046U**

Page 3 of 3

Date of issue: 2022-05-31

Issue No: 0

**Ex Component(s) covered by this certificate is described below:**

The devices are an Intrinsically Safe digital isolator when installed per the control drawings. There are 11 models with two different package options; a SOIC8 and 16-Pin with the same die set and transformers for each.

**Please see Annex for additional information.**

**SCHEDULE OF LIMITATIONS:**

- The component is to be fitted on a PCB inside a suitable enclosure and re-certified as equipment.
- The Maximum Temperature Coefficients at 85C:
  - SOIC8: 143 C/W
  - 16-Pin: 88.5 C/W

**Annex:**

[Annex to IECEx UL 22.0046U Issue 0.pdf](#)



# IECEX Certificate of Conformity

Certificate No.: IECEX UL 22.0046U

Issue No.: 0

Page 1 of 1

## PARAMETERS RELATING TO THE SAFETY

Entity Parameters:

SOIC-8:

Ui = 60V

Ii = 300mA

Pi = 0.675W Total

Li = 0  $\mu$ H

Ci = 4pF

0.3" SOIC-16

Ui = 60 V

Ii = 300 mA

Pi = 1.3 W

Li = 0  $\mu$ H

Ci = 4 pF

Service Temperature:

-40°C to +85°C

## MARKING

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

