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 CSA 24.0031X**

Certificate history:
Issue 0 (2025-01-30)

Status: **Current**

Issue No: 1

Date of Issue: 2025-09-12

Applicant: **Endress+Hauser SICK GmbH+Co. KG**
Bergener Ring 27
01458 Ottendorf-Okrilla
Germany

Equipment: **Display Device, Model CID100**

Optional accessory:

Type of Protection: **Intrinsic Safety 'ia'**

Marking: Ex ia IIC T4 Ga
Ta = -40 °C to +70 °C

Approved for issue on behalf of the IECEx Certification Body: **Dave Magee**

Position: **Senior Director of Operations**

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:

CSA Group
178 Rexdale Boulevard
Toronto, Ontario M9W IR3
Canada

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Manufacturer: **Endress+Hauser SICK GmbH+Co. KG**
Bergener Ring 27
01458 Ottendorf-Okrilla
Germany

Manufacturing locations: **Endress+Hauser SICK GmbH+Co. KG**
Bergener Ring 27
01458 Ottendorf-Okrilla
Germany

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:

CA/CSA/ExTR24.0064/00 CA/CSA/ExTR24.0064/01

Quality Assessment Report:

DE/TUN/QAR09.0005/13

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

The CID100 is a display device which provides data (live measurement values, parameters etc.) via an LCD. It consists of an electroplated aluminium housing with a glass front protected display, secured by screws, with encapsulated electronics. The display includes a capacitance coupled user-interface push buttons on the front and a 4-pole, mechanically coded M12 connector on the back side.

Ambient Temperature Range: -40 °C to +70 °C

Entity Parameters

Apparatus is for connection to intrinsically safe circuit at the M12 backside connector, in type of protection Ex ia IIC, maximum values:

Ui = 10 V
Ii = 140 mA
Pi =1.1 W
Ci = 200 nF
Li = 3 µH
Lo = 416 µH for IIA; 208 µH for IIB; 52 µH for IIC

SPECIFIC CONDITIONS OF USE: YES as shown below:

1. Apparatus is designated for use in ambient temperature range from -40 °C to +70 °C
2. Ambient temperature of the place where CID100 is installed shall take into account heating from host equipment on which it is installed and shall not exceed the allowed range.
3. Apparatus is allowed to be used in gas group IIA or IIB or IIC depending on the entity parameters in the intrinsically safe circuit connected to M12 plug.
4. The maximum inductance in the circuit connected to CID100 shall not exceed Lo values as defined in the entity parameter set for the specific gas group. These limits are valid only for non-combined LC circuits. Combined LC circuit may require a lower inductance limit.
5. The resistance of CID100 enclosure to earth shall not exceed 1 GΩ measured at (500 +/-25) Vdc, when installed onto the host device.
6. Enclosure of the apparatus contains aluminium. Precautions shall be taken to avoid ignition hazard by impact or friction.

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DETAILS OF CERTIFICATE CHANGES (for issues 1 and above)
This issue, **Issue 1**, introduced the following changes:

1. To change the applicant/manufacturer name from SICK Engineering GmbH to Endress+Hauser SICK GmbH+Co. KG
2. Addition of a new version of PCB