

# **Certificate of Compliance**

Certificate: 80184458 Master Contract: 215069

**Project:** 80249345 **Date Issued:** 2025-09-03

Issued to: Endress+Hauser SICK Issued by: Szymon Sech

GmbH+Co. KG Bergener Ring 27

Ottendorf-Okrilla, Saxony

01458 Germany

**Attention:** Sven-Matthias

Scheibe

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.



#### **PRODUCTS**

Class 2258 04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations
Class 2258 84 PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - Certified to US
Standards

Class I, Division 1, Group A, B, C, and D, T4 Ex ia IIC T4 Ga

Display Device, Model CID100, -40 °C  $\leq$  Ta  $\leq$  +70 °C, Rel. humidity up to 95 % non-condensing, altitude up to 2000 m, indoor use (evaluation for outdoor use carried out in end-use installation), Type 4X, IP 66, intrinsically safe when installed per drawing number 9389579.

Szymon Sech, Certifier III



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Model(s)	Rated Voltage (VDC)	Rated Current (Adc)
CID100	3.3	0.01

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 mW

Ci = 200 nF

 $Li = 3 \mu H$ 

Lo = 416  $\mu$ H for IIA;

208 μH for IIB;

52 μH for IIC

Class I, Division 1, Group A, B, C, and D, T4

Class I, Zone 0, AEx ia IIC T4 Ga

Model(s)	Rated Voltage (VDC)	Rated Current (Adc)
CID100	3.3	0.01

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#### APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 60079-0:19 (R2024) - Explosive atmospheres — Part 0: Equipment — General requirements

CAN/CSA-C22.2 No. 60079-11:14 (R2018) - Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety "i"

CAN/CSA C22.2 No. 61010-1-12, UPD1:2015, UPD2:2016, AMD1:2018 - Safety requirements for electrical equipment for measurement, control, and laboratory use — Part 1: General requirements

ANSI/UL 60079-0-2020 (Seventh Edition) - Explosive Atmospheres - Part 0: Equipment - General Requirements

ANSI/UL 60079-11-2018 - Standard for Safety for Explosive Atmospheres - Part 11: Equipment Protection by Intrinsic Safety i

UL 61010-1 3rd ed (Rev. Nov 21, 2018) - UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements - Third Edition; Including Revisions through November 21, 2018

#### **Conditions Of Acceptability**



 The device may only be powered by a power supply unit with a limited energy electric circuit in accordance with CSA/UL/EN/IEC 61010-1:2010 chapter 6.3.1/6.3.2 and 9.4 or class 2 according to CSA 223/UL 1310.

- EUT is not directly connected to supply MAINS.
- Evaluation for reliability, endurance or functional safety was not part of this investigation.
- Apparatus is allowed to be used in Class I groups A or B or C and D depending on the entity parameters of the intrinsically safe circuit connected to M12 plug.
- 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.
- Apparatus is designated for use in ambient temperature range from -40  $^{\circ}$ C to + 70  $^{\circ}$ C
- 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.
- Temperature at the surfaces of contact between CID100 enclosure and host equipment's enclosure shall not exceed ambient temperature range.
- 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 circuits may require a lower inductance limit. The resistance of CID100 enclosure to earth shall not exceed 1 GΩ measured at (500 +/-25) Vdc, when installed onto the host device.
- Enclosure of the apparatus contains aluminum. Precautions shall be taken to avoid ignition hazard by impact or friction.
- The apparatus is Type 4X rated only when attached to and connected with the host device via an M12 connector, where the connection has been evaluated as Type 4X by CSA.

#### **Markings**

Project: 80249345

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The marking contains the following:

- The CSA Mark, as shown on the Certificate of Conformity.
- Manufacturers name: Endress+Hauser SICK GmbH+Co. KG, or CSA Master Contract Number: 215069, adjacent to the CSA Mark in lieu of manufacturer's name
- Model designation: As specified in the PRODUCTS section, above.
- Serial number
- Certificate number: CSA24CA80184458X, where X indicates that specific conditions of safe use are applicable
- Hazardous Location designation: As specified in the PRODUCTS section, above. The word "Class" may be abbreviated "CL", or "Cl" the word "Division" may be abbreviated "DIV" or "Div", and the word "Groups" may be abbreviated "GRP", "Grp", "GP", or "Gr"
- Method of Protection markings (AEx and Ex markings): As specified in the PRODUCTS section, above. The word "Class" may be abbreviated "CL" or "Cl", the word "Zone" may be abbreviated "ZN" or "Zn".

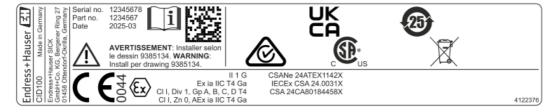
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- Temperature code: As specified in the PRODUCTS section, above.
- The following words:
  - "Install per drawing 9385134."

#### Bottom side of the enclosure:





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Notes:

Products certified under Class(es) C225804, C225884 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). <a href="https://www.scc.ca">www.scc.ca</a>



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## Supplement to Certificate of Compliance

Certificate: 80184458 Master Contract: 215069

The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

### **Product Certification History**

Project	Date	Description
80249345	2025-09-03	Update to Report 80184458 to accomplish the following: - change the applicant/manufacturer name from SICK Engineering GmbH to Endress+Hauser SICK GmbH+Co. KG and to evaluate new version of PCB - conduct editorial corrections to marking section, abbreviations in markings and table of drawings
80184458	2025-02-19	Original cCSAus Certification of Display Device CID100 for type of protection 'ia' in acc with class numbers C2258 04 / 84, based on CSA IECEx evaluation in report number R80184460A.