



Certificate of Compliance

Certificate:	80212930	Master Contract:	215069
Project:	80212930	Date Issued:	2025-09-02
Issued to:	Endress+Hauser SICK GmbH+Co. KG Bergener Ring 27 Ottendorf-Okrilla, Saxony 01458 Germany	Issued by:	<i>Szymon Sech</i> Szymon Sech

Attention: Stefan Paul

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 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations

Model(s)
Connection device for commissioning and service, Model CDUSB100

Class I, Division 1, Group A, B, C, D
[Ex ia Ga] IIC



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Connection device for commissioning and service, Model CDUSB100, rated 3.3 V, max 5 mA at Host device side and 5 Vdc, max 20 mA on Service device side, $-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$, providing intrinsically safe output when installed per drawing 9400696

Entity Parameters:

M12 Plug, for connected with intrinsically safe host device, entity parameters in type of protection Ex ia IIC:

$U_i = 12\text{ V}$

$I_i = 3.33\text{ A}$

$P_i = 1.1\text{ W}$

$C_i = 1.41\text{ }\mu\text{F}$

$L_i = 0\text{ }\mu\text{H}$

M12 Plug, when connected to a non-intrinsically safe host device: $U_m = 60\text{ V}$

Maximum voltage across galvanic isolation between USB-C connector and M12 connector: $U_m = 60\text{ V}$

Maximum voltage allowed to be applied to USB-C connector: 5.5 V

Other ratings	
Ambient pressure	80 kPa to 110 kPa (0.8 bar to 1.1 bar) Altitude up to 2000m
Ambient humidity	95 % relative humidity; non-condensing
Overvoltage Category	OVC I

Conditions of Acceptability (specific conditions of use):

1. The CDUSB100 is designated for use in ambient temperature range from $-40\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$.
2. Nominal supply voltage on USB side is $U_{nom} = 5\text{ Vdc} \pm 10\%$.
3. The personal computing device, which is connected via USB, must be supplied by SELV/PELV/ES1 equipment with $U_m = 60\text{ V}$ (USB interface side).
4. The temperature at the connection point of the M12 plug shall not exceed the allowed ambient temperature range
5. The enclosure of the CUSB100 is not Type Rated. While plugged to the host equipment, the host equipment loses its type rating until the CDUSB100 is unplugged again.
6. The CDUSB100 is intended to be DC supplied and can be powered by a host device (e.g. flow meter) 3.3 Vdc and/or a service device (e.g. Notebook with USB-C) 5.0 Vdc. and ES1 / PS1.
7. The CDUSB100 has been evaluated for use in a Pollution Degree 2 environment.
8. The CDUSB100 is considered Class III compliant.
9. CDUSB100 is tested for indoor use only.

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For Hazardous Locations - CERTIFIED TO U.S. STANDARDS

Model(s)
Connection device for commissioning and service, Model CDUSB100

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



Certificate: 80212930

Master Contract: 215069

Project: 80212930

Date Issued: 2025-09-02

Class I, Zone 0, [AEx ia Ga] IIC

Connection device for commissioning and service, Model CDUSB100, rated 3.3 V, max 5 mA at Host device side and 5 Vdc, max 20 mA on Service device side, $-40\text{ }^{\circ}\text{C} \leq T_a \leq +70\text{ }^{\circ}\text{C}$, providing intrinsically safe output when installed per drawing 9400696

Entity Parameters:

M12 Plug, for connected with intrinsically safe host device, entity parameters in type of protection Ex ia IIC:

$U_i = 12\text{ V}$

$I_i = 3.33\text{ A}$

$P_i = 1.1\text{ W}$

$C_i = 1.41\text{ }\mu\text{F}$

$L_i = 0\text{ }\mu\text{H}$

M12 Plug, when connected to a non-intrinsically safe host device: $U_m = 60\text{ V}$

Maximum voltage across galvanic isolation between USB-C connector and M12 connector: $U_m = 60\text{ V}$

Maximum voltage allowed to be applied to USB-C connector: 5.5 V

Other ratings	
Ambient pressure	80 kPa to 110 kPa (0.8 bar to 1.1 bar) Altitude up to 2000m
Ambient humidity	95 % relative humidity; non-condensing
Overvoltage Category	OVC I

Conditions of Acceptability (specific conditions of use):

1. The CDUSB100 is designated for use in ambient temperature range from $-40\text{ }^{\circ}\text{C}$ to $+70\text{ }^{\circ}\text{C}$.
2. Nominal supply voltage on USB side is $U_{nom} = 5\text{ Vdc} \pm 10\%$.
3. The personal computing device, which is connected via USB, must be supplied by SELV/PELV/ES1 equipment with $U_m = 60\text{ V}$ (USB interface side).
4. The temperature at the connection point of the M12 plug shall not exceed the allowed ambient temperature range
5. The enclosure of the CUSB100 is not Type Rated. While plugged to the host equipment, the host equipment loses its type rating until the CDUSB100 is unplugged again.
6. The CDUSB100 is intended to be DC supplied and can be powered by a host device (e.g. flow meter) 3.3 Vdc and/or a service device (e.g. Notebook with USB-C) 5.0 Vdc. and ES1 / PS1.
7. The CDUSB100 has been evaluated for use in a Pollution Degree 2 environment.
8. The CDUSB100 is considered Class III compliant.
9. CDUSB100 is tested for indoor use only.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 60079-0:19 - Fourth Edition - Explosive atmospheres — Part 0: Equipment — General requirements

CSA C22.2 No. 60079-11:14 - Second Edition - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "I"

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



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ANSI/UL 60079-11-2018 Sixth Edition - Explosive atmospheres - Part 11: Equipment protection by intrinsic safety “i”

CSA C22.2 No. 62368-1:19 - Third Edition - Audio/video, information and communication technology equipment - Part 1: Safety requirements - Including Update No 1 - October 2021

UL 62368-1:2019 - Third Edition - Safety Audio/video, information and communication technology equipment – Part 1: Safety requirements

Markings

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 following marking is ink printed directly on the housing:

- Manufacturer’s name: “Endress+Hauser SICK GmbH+Co. KG”, or trademark “Endress+Hauser EH”, 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.
- Electrical Ratings: As specified in the PRODUCTS section, above.
- Manufacturing date, or serial number, traceable to year and month of manufacture.
- The CSA Mark, as shown on the Certificate of Conformity.
- The designation “CSA 24CA80212930X”.
- 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.”, the word “Zone” may be abbreviated with “ZN” or “Zn”, and the word “Groups” may be abbreviated “GRP”, “GP” or “Gp”.
- Method of Protection markings (Ex – markings): As specified in the PRODUCTS section, above.
- Symbol to read instruction manual – “Read the manual” or similar.
- The following words, or suitable equivalent, in English and French:
“WARNING: INSTALL PER DRAWING 9400696” And “AVERTISSEMENT: INSTALLER SELON LE DESSIN 9400696.”

For marking labels, refer to drawing 9400788. Example of marking label is shown below.

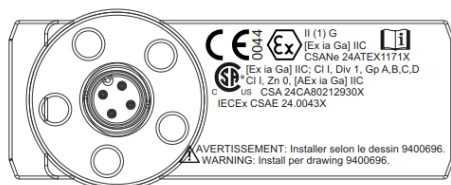
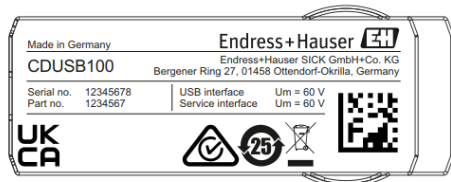


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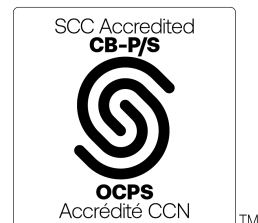
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Notes:

Products certified under Class(es) C225804, C225884 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca





Supplement to Certificate of Compliance

Certificate: 80212930

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*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
80212930	2025-09-02	Original cCSAus certification of Connection device for commissioning and service, Model CDUSB100, providing Ex i interface in accordance with Class Number C2258 04 and C2258 84, based on CSA IECEx evaluation in project number 80212934.