Certificate of Compliance

Certificate: 80046403 **Master Contract:** 215069

Project: 80046403 **Date Issued:** 2020-08-25

Issued To: **SICK Engineering GmbH**
Bergener Ring 27
Ottendorf-Okrilla, Sachsen, 01458
Germany

Attention: Andreas Heilmann

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.

Issued by: Jignesh Dabhi
Jignesh Dabhi

C US

PRODUCTS

CLASS - C225883 - PROCESS CONTROL EQUIPMENT-Intrinsically Safe and Non-Incendive Systems-For Hazardous Locations-Certified to U.S. Standards
CLASS - C225803 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non Incendive Systems - For Hazardous Locations

Ex ec ia IIC T4 Gc
Class I Zone 2, AEx ec ia IIC T4 Gc
Class I Division 2, Group A, B, C and D, T4

Process data acquisition and processing unit, Model Interface Unit Model Faa-bccdefghijklmnopqrsssss. Rated 115-230VAC, 50/60Hz, 0.33A max. (AC Version); 12-24VDC, 1A max (DC Version); Foundation Fieldbus (optional): 9-32VDC, 18mA; Type 4X/IP 66 Enclosure.

Faa
The designations for aa-bccdefghijklmnopqrsssss are as outlined below.

aa = special using
b = Ex approval
cc = Ex classification
d = Material Electronic housing
e = Painting housing
f = cable entries
g = Display
h = Variants of Terminal block
i = Tropicalization
j = Ambient temperature range
k = Power supply
l = Mainboard
m = Analog Module Type 1
n = Analog Module Type 2
o = Digital Module Type 1
p = Interface Module
q = Extension Module 1
r = Extension Module 2
sssss= Type key extention (Not-safety related - in maximum 5 alphanumeric characters or Blank)

Notes:

i. The ambient temperature range -40°C to 60°C or -40°C to 65°C. It depends on the various modules used in interface units and the manufacturer shall therefore assemble their products in accordance with the details below.

a. The modules must be inserted starting from the left or slot 1 and filling up accordingly to the right.
b. If a Foundation Fieldbus module is installed, it is plugged into the rightmost slot. The adjacent left slot of a Foundation Fieldbus module must be kept free.
c. According to the following ranking levels, different module types are installed together, therefore the modules with the highest ranking level are inserted first and then according to the ranking level.

Ranking Level	Module
1	Analog Module Type 1
2	Analog Module Type 2
3	Digital Module Type 1
4	Foundation Fieldbus

d. For 60°C variant: The sum of the plugged modules "Analog Type 1" plus "Analog Type 2" plus "Digital Type 1" must not exceed 4.
e. For 65°C variant: The devices variant with an ambient temperature range of up to 65°C are limited to a sum of 3 I/O-modules with only one Analog Type 1 or Analog Type 2 module at a time.

Module	Maximum number of modules allowed for temperature range -	
	-40°C to +60°C	-40°C to +65°C
Analog Module Type 1	3	1

Module	Maximum number of modules allowed for temperature range -	
	-40°C to +60°C	-40°C to +65°C
Analog Module Type 2	2	1
Digital Module Type 1	3	1
Foundation Fieldbus	1	1

ii. The above model is permanently connected, Equipment Class I, Pollution Degree 2, Overvoltage Category II.
iii. Mode of operation: Continuous
iv. Environmental Conditions: Normal: -40°C to 60°C ambient (-40°C to 65°C ambient with limited I/O), 2000 m max, 95% rH.

Conditions of Acceptability:

i. Under certain extreme circumstances, the non-metallic parts incorporated in the enclosure of this equipment may generate an ignition-capable level of electrostatic charge. Therefore the equipment shall not be installed in a location where the external conditions are conducive to the build-up of electrostatic charge on such surfaces. In addition, the equipment shall only be cleaned with a damp cloth.
ii. All cable entries shall be plugged by cable glands or plugs certified for minimum Ex ec IIC with ambient temperature range of -40°C to 65°C (or -40°C to 60°C for 60°C variant).

APPLICABLE REQUIREMENTS

Standard	Description
C22.2 No. 60079-0:2019	Explosive atmospheres – Part 0: Equipment – General requirements
C22.2 No. 60079-11:2014	Explosive atmospheres — Part 11: Equipment protection by intrinsic safety "i"
C22.2 No. 61010-1-12	Safety Requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
C22.2 No. 60079-7:2016	Explosive atmospheres — Part 7: Equipment protection by increased safety "e"
CSA C22.2 No 94.2-15	Enclosures for Electrical Equipment, Environmental Considerations
UL 61010-1:2012	UL Standard for Safety Electrical Equipment For Measurement, Control, and Laboratory Use; Part 1: General Requirements, 3rd. Ed.
UL 60079-0: 2019	Standard for Safety – Explosive Atmospheres – Part 0: Equipment – General Requirements, Ed. 7
UL 60079-11:2014	Standard for Safety – Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety "I", Ed. 6
UL 60079-7:2017	Explosive atmospheres — Part 7: Equipment protection by increased safety "e"
UL 50E, 2ND Ed	Enclosures for Electrical Equipment, Environmental Considerations

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 appears on adhesive in addition to CSA mark.

Certificate number:	CSA20CA80046403X
Certification code:	Ex ec ia IIC T4 Gc Class I Zone 2, Ex ec ia IIC T4 Gc Class I Division 2, Group A, B, C and D, T4
Model number:	Interface Unit Model Faa-bccdefghijklmnopqrsssss
Manufacturer's name:	SICK Engineering GmbH
Manufacturer's address:	Bergener Ring 27, 01458 Ottendorf-Okrilla, Germany
Ambient range:	Ta: -40°C to 60°C or -40°C to 65°C (as per the notes in Product Section)
Enclosure Rating:	Type 4X/ IP 66
Serial number:	As determined by the manufacturer.
Rating	AC Version: 115-230VAC, 50/60Hz, 0.33A max.; Foundation Fieldbus (optional): 9-32VDC, 18mA DC Version: 12-24VDC, 1A max.; Foundation Fieldbus (optional): 9-32VDC, 18mA
Year of manufacture:	As determined by the manufacturer.
Warnings:	External to the enclosure: "WARNING – DO NOT OPEN WHEN ENERGIZED." Or equivalent wording and French Equivalent "WARNING- Potential Electrostatic Charging Hazard! See operating Instructions" Or equivalent wording; and French Equivalent On the internal PCB cover: "WARNING: Internal batteries to be replaced with Panasonic BR2032 only" or Equivalent wording; and French Equivalent

Additional marking:	1. Replacement fuse markings; Fuse type(s) and rating(s) (in volts and amperes), marked on terminal label inside equipment enclosure. 2. Protective earthing TERMINAL is identified by the IEC 60417 No 5019 symbol ⏚ , adjacent to the TERMINAL.; 3. Neutral is identified by the letter "N"; 4. The following additional markings are also provided: a. TERMINAL markings; b. Symbol 14 of Table 1 ⚠ is provided on terminal label inside equipment enclosure.

Supplement to Certificate of Compliance

Certificate: 80046403 **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
80046403	2020-08-25	Original Certification of INTERFACE UNIT or the following marking: Ex ec ia IIC T4 Gc Class I, Zone 2, AEx ec ia IIC T4 Gc Class I Div. 2, Groups A, B, C, D T4