

Certificate of Compliance

Certificate: 1428603 Master Contract: 219283

Project: 80161042 **Date Issued:** April 23, 2024

Issued To: Kongsberg Maritime AS

Skonnertvegen 1.

Ranheim, Nord-Trøndelag, 7053

Norway

Attention: Jan Stewart Rambech

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:



Rupesh Kale

PRODUCTS

CLASS - C225802 - PROCESS CONTROL EQUIPMENT For Hazardous Locations

Class I, Division 2, Group A, B, C and D, T5 Ex nA [ia Ga] IIC T5 Gc Type 4X

 $-25 \, {}^{\circ}\text{C} < \text{Ta} < +85 \, {}^{\circ}\text{C}$

 $-40 \, ^{\circ}\text{C} \le \text{Ta} \le +85 \, ^{\circ}\text{C}$ (Only when used with Stahl cabinet item 8510/0-0400-0400-230-3311)

CLASS - C225882 - PROCESS CONTROL EQUIPMENT For Hazardous Locations - Certified to US Standards

Class I, Division 2, Group A, B, C and D, T5 Class I Zone 2 AEx nA [ia Ga] IIC T5 Gc



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Type 4X

-25 °C \leq Ta \leq +85 °C

 $-40 \text{ °C} \le \text{Ta} \le +85 \text{ °C}$ (Only when used with Stahl cabinet item 8510/0-0400-0400-230-3311)

Wireless Temperature Measuring System, Sentry GB-300:

Signal Processing Unit Sentry GBP300, Enclosure Type 4X, Rated 24Vdc (18 - 32 Vdc), 10 W, 85°C ambient.

Temperature Sensors GBW Series and Stationary Antenna GBS1 Series are rated for 130°C ambient.

NOTE: The Signal Processing Unit is intended for installation in a suitable electrical enclosure and provides Non-Incendive connection to the Stationary Antennas.

Conditions of Acceptability:

- 1. The Signal Processing Unit is intended for installation in a suitable electrical enclosure where end use installation provides suitable wiring method.
- 2. The equipment does not fulfil the dielectric strength requirement according to Clause 6.3.13 of ANSI/UL 60079-11 6th Edition. Special consideration must be taken under installation. See Safety Control Drawing no. GB-1233.
- 3. Separate IECEx and ATEX certified IP54 cable gland or plugs shall be used.
- 4. The equipment shall be supplied with Limited Energy Circuit (LEC) as defined in CSA C22.2 No. 61010-1-12, Class 2 as defined in article 725.121 of NFPA70, or Limited Power Source (LPS) as defined in CAN/CSA C22.2 No. 60950-1.
- 5. Unused openings shall be closed with suitable blanking elements and have a minimum IP66 rating and Type ratings of min. 4X.
- 6. The cable and/or conduit entries must be separately approved according to the intended end-product application/installation, which minimum Rated Type 4X.



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APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No 94.2-20 3rd Ed. CAN/CSA C22.2 No. 61010-1-12, UPD:2015, UPD2:2016, AMD1:2018 CAN/CSA C22.2 No. 60079-0:19

CAN/CSA-C22.2 No. 60079-11:14

CAN/CSA C22.2 No. 60079-15:16

ANSI/UL 50E, 3rd Ed. UL 61010-1 3rd Ed (2012), AMD1: 2018 ANSI/UL 60079-0-2020, Seventh Edition April 20, 2020 ANSI/UL 60079-11, Sixth Edition January 25, 2023 ANSI/UL 60079-15, Fourth Edition May 5, 2017 Enclosures for Electrical Equipment, Environmental Considerations Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements. Explosive atmospheres — Part 0: Equipment — General requirements

Explosive atmospheres — Part 11: Equipment protection by intrinsic safety "i"

Explosive atmospheres — Part 15: Equipment protection by type of protection "n"

Enclosures for Electrical Equipment, Environmental Considerations Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements.

Standard for Explosive Atmospheres – Part 0: Equipment – General

Explosive Atmospheres — Part 11: Equipment Protection by Intrinsic Safety "i"

Explosive atmospheres — Part 15: Equipment protection by type of

explosive atmospheres — Part 15: Equipment protection by type of protection "n"



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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 Sensors and Antennas are marked with the Submittor's name, Cat. no., CSA mark and hazardous location designations.

The following markings are provided with laser engraving on a stainless-steel nameplate. Markings appear on the Signal Processing Unit (SPU):

- (1) Manufacturer's name: "Kongsberg Maritime AS", or CSA Master Contract Number "219283", adjacent to the CSA Mark in lieu of manufacturer's name.
- (2) Model number: As specified in the PRODUCTS section, above.
- (3) Electrical ratings, as specified in the PRODUCTS section, above.
- (4) Designation: CSA 03CA1428603X
- (5) Manufacturing date in MMYY format, or serial number traceable to month and year of manufacture.
- (6) Hazardous Location designations: "Class I, Division 2, Groups A, B, C, D;. The word "Class" may be abbreviated "CL", the word "Division" may be abbreviated "DIV", and the word "Groups" may be abbreviated "GRP" or "GP".
- (7) Zone Markings: As specified in the PRODUCTS section, above
- (8) Temperature code: As specified in the PRODUCTS section, above.
- (9) Ambient Temperature: As specified in the PRODUCTS section, above.
- (10) The CSA Mark with or without the "C" and "US" indicators, as shown on the Certificate of Conformity.
- (11) The following bilingual cautions:

"WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR SUITABILITY FOR CLASS I, DIVISION 2": and "AVERTISSEMENT RISQUE D'EXPLOSION: LA SUBSTITUTION COMPOSANTS PEUT RENDRE CE MATERIEL INACCEPTABLE FOR LES EMPLACEMENTS DE CLASSE I, DIVISION 2 ".

"WARNING: EXPLOSION HAZARD – DO NOT DISCONNECT EQUIPMENT UNLESS POWER HAS BEEN SWITCHED OFF OR THE AREA IS KNOWN TO BE NON-HAZARDOUS" and, "AVERTISSEMENT RISQUE D'EXPLOSION, NE PAS DEBRANCHER TANT QUE LE CIRCUIT EST SOUS TENSION, A MOINS QUI'IL NE S'AGISSE D'UN EMPLACEMENT NON DANGEREUX"



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"WARNING – DO NOT OPEN WHEN EXPLOSIVE ATMOSPHERE IS PRESENT" and "ATTENTION – NE PAS OUVRIR EN PRÉSENCE D'UNE ATMOSPHÈRE EXPLOSIVE".

Notes:

Products certified under Class(es) C225802, C225882 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

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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
80161042	2024-04-23	Update to CSA Report 1428603 to apply the following:
		i. To remove model GB200 and associated descriptive documents from the report.
		ii. To remove the reference of CSA C22.2 No. 25, CSA C22.2 No.
		213, and UL 1604 from the list of applicable standards.
		iii. To add model GB-300 with two variants, one with 16
		antennas/sensors and the other with 10 antennas/sensors based on the
		IECEx certificate IECEx PRE 18.0087X.
80140469	2022-11-24	Update to Report 1428603 (80078620) to address (FC# 220076) FIR dated May 5, 2022
80078620	2021-06-16	Update to Report 1428603 to:
		- Address the non-conformance issues noted in (FC# 220076) Factory
		Inspection Report (FIR) dated February 2, 2021, updating the report to
		reflect current revision of documents.
		- Delisting of model GB-100.
70018643	2014-12-24	Variation to CSA certificate 1428603 (To permit changes as described on
		the application form).
2521531	2012-06-27	Wireless Temperature Measuring System Sentry GB-200: update report 1428603
2137733	2009-02-18	update report 1428603: include revised documents
1469119	2003-08-20	CSA C_US - Addition of US & Report Correction
1428603	2003-06-26	Original Certification of Model Sentry GB100, with GBP 100 Signal
		Processing Unit, GBS1 series Antennas and GBW Series Sensors