



Certificate of Compliance

Certificate: 70061366

Master Contract: 265722

Project: 80087470

Date Issued: 2022-03-14

Issued To: Contrec Ltd.
Riverside
Canal Road
Sowerby Bridge, West Yorkshire, HX6 2AY
United Kingdom

Attention: Tom Casson

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:

Chris Reed



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

Ex ia IIB T4 Gb

Class I, Groups C and D T4

Class I, Zone 1 AEx ia IIB T4 Gb

Rate Totalizer, Models 202Ai and 202Di or Alternate Model Numbers for 202Di as follows: 505.22, 505.24, 505.42, and 505.44. Rate Totalizers, 214Di Batch Controller, 220i Level Monitor and 250i Indicator; Battery (P/N S1200BATL) / Barrier powered; intrinsically safe when connected as per manufacturer's drawing nos. 1884ID, 1885ID, 1886ID and 1887ID; $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$.



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Rate Totalizer, Models 202Ai.xxA, 202Di.xxA. Rate Totalizers, 214Di and 214Di.xxA Batch Controller, 220i and 220i.xxA Level Monitor, 250i and 250i.xxA Indicator; Battery (P/N S1200BATL) / Barrier powered; Intrinsically safe when connected as per manufacturer's drawing nos. 1884ID, 1885ID, 1886ID and 1887ID. Models 202Ai.xxA, 202Di.xxA, 220i.xxA, 250i.xxA, 214Di.xxA – identical with previously certified models accept a new alternate aluminium enclosure; $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$.

Rate Totalizer, Models 202Ai.xxS, 202Di.xxS. Rate Totalizers, 214Di and 214Di.xxS Batch Controller, 220i and 220i.xxS Level Monitor, 250i and 250i.xxS Indicator; Battery (P/N S1200BATL) / Barrier powered; Intrinsically safe when connected as per manufacturer's drawing nos. 1884ID, 1885ID, 1886ID and 1887ID. Models 202Ai.xxS, 202Di.xxS, 220i.xxS, 250i.xxS, 214Di.xxS – identical with previously certified models except a new alternate stainless-steel enclosure; $-20^{\circ}\text{C} \leq T_a \leq +60^{\circ}\text{C}$.

The equipment has the following Entity Parameters:

Models 202Ai, 220i, 250i, 202Ai.xxA, 220i.xxA, 250i.xxA, 202Ai.xxS, 220i.xxS, and 250i.xxS
Terminals 1 & 2, 3 & 4, 5 & 6, 7 & 8, 10 & 11

$V_{\text{max}} = 28\text{Vdc}$
 $I_{\text{max}} = 93\text{mA}$
 $P_{\text{max}} = 0.653\text{W}$
 $C_i = 0.02\mu\text{F}$
 $L_i = 0\text{ uH}$

Models 202Di, 214Di, 202Di.xxA, 214Di.xxA, 202Di.xxS, and 214Di.xxS

Terminals 7 & 8
 $V_{\text{max}} = 24\text{V}$
 $V_{\text{oc}} = 10.0\text{V}$
 $I_{\text{max}} = 20\text{mA}$
 $I_{\text{sc}} = 9\text{mA}$
 $P_{\text{max}} = 320\text{mW}$
 $C_i = 0.002\mu\text{F}$
 $C_a = 60\mu\text{F}$
 $L_i = 0\text{ mH}$
 $L_a = 1.5\text{H}$

Terminals 1 & 2, 3 & 4, 5 & 6

$V_{\text{max}} = 28\text{V}$
 $I_{\text{max}} = 93\text{mA}$
 $P_{\text{max}} = 0.653\text{W}$
 $C_i = 0.1\mu\text{F}$
 $L_i = 0\text{ mH}$



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Conditions of Acceptability:

1. This equipment may only be powered by a power supply unit with a limited energy electric circuit in accordance with CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1, or Class 2 as defined in the Canadian Electrical Code C22.1, Section 16-200 and/or National Electrical Code (NFPA 70), article 725.121.
2. Canadian Electrical Code C22.1, Table 18 and National Electrical Code (NFPA 70), Table 505.9 (C)(2)(4) both declare the EPL takes precedence over the type of protection where “Ex ia Gb” is suitable for Zone 1, not for Zone 0. Selection according to the marked EPL is critical to the safe application of the equipment in this certification report.
3. Conditions of Use – To comply with this product’s North American certification the special conditions for safe use must be followed. The instrument type 202Di shall be mounted in an area where electrostatic charge/discharge will be avoided.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 60079-0:19	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, AMD 1-18	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General Requirements
ANSI/UL 60079-0-2020 <i>Seventh Edition</i>	Explosive atmospheres – Part 0: Equipment – General requirements
ANSI/UL 60079-11-2018 <i>Sixth Edition</i>	Explosive Atmospheres – Part 11: Equipment Protection by Intrinsic Safety “i”
ANSI/UL 61010-1-2018 <i>Third Edition</i>	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use — Part 1: General 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.



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The products listed 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.

1. Manufacturer’s name “Contrec Ltd.”, or CSA Master Contract Number “265722” in lieu of the Manufacturer’s name adjacent to the CSA Mark.
2. Catalogue / Model designation. As specified in the PRODUCTS section, above.
3. Complete electrical rating (Entity parameters as stated in the PRODUCTS section, above)
4. Date code / Serial number traceable to month and year of manufacture.
5. The designation “CSA 22CA70061366X”.
6. Hazardous Location designations: As specified in the PRODUCTS section, above. 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. The symbol "Ex ia".
8. Method of Protection markings (Ex – markings): As specified in the PRODUCTS section, above. The word “Class” may be abbreviated “CL”, the word “Zone” may be abbreviated “ZN”.
9. The words "INTRINSICALLY SAFE, WHEN CONNECTED AS PER INSTALLATION DRAWING" (as specified in the PRODUCTS section, above)
10. Temperature Code: As specified in the Markings section above.
11. Ambient temperature rating : As specified in the Markings section above.
12. The CSA Mark with or without ‘C’ and/or ‘US’ indicators, as shown on the Certificate of Compliance.
13. The following bilingual cautions: WARNING: SUBSTITUTION OF COMPONENTS MAY IMPAIR INTRINSIC SAFETY” and “AVERTISSEMENT : LA SUBSTITUTION DE COMPOSANTS PEUT COMPROMETTRE LA SÉCURITÉ INTRINSÈQUE”.
14. ISO 60417, Symbol 5031 = = = adjacent to the DC input terminal rating.

Alternate marking labels – 0.5-1mm thick aluminium plate and attached via hammer drive screws to the top and side surface of the enclosure. Used with aluminium enclosure only. 0.5-1mm thick stainless-steel plate and attached via hammer drive screws to the top and side surface of the enclosure. Used with stainless-steel enclosure only.

Notes:

Products certified under Class 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

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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
80087470	2022-03-14	The original scope of the project was an FIR follow-up, update to Report 70061366 to address (FC# 270550) FIR dated May 17, 2021. During the investigation of the FIR, a number of changes to descriptive drawings was noted. A findings letter was sent to the customer advising them an update to CAN/CSA C22.2 No. 61010-1-12 and ANSI/UL 61010-1-2018 was necessary. In response, the customer revised the scope to update report 70061366 to the latest Canadian and US editions of 60079-0 and 60079-11, using certificate IECEX BVS 15.0099X and test report DE/BVS/ExTR15.0098/02 as a basis, and to conduct an assessment to 61010-1. In addition, the customer requested to add a 316 stainless-steel enclosure to use in addition to the previously approved plastic and aluminum enclosures.
70217944	2019-03-29	Update to CSA 70061366. Addition of collet for mounting purpose which is attached to the existing Aluminium enclosure. No changes have been made to any other aspect of the design. CSA CAN and US Standards marking: Class I, Division 1, Group C and D T4 Ambient Temperature: -??°C> +60°C>
70121839	2017-05-16	Evaluation to update Report 70061366 to include Models 202Ai.xxA, 202Di.xxA, 220i.xxA, 250i.xxA, 214Di.xxA – identical with previously certified models except a new alternate aluminum enclosure and alternate aluminum marking labels.
70061366	2016-05-18	Per CSA Transfer Report 265722-70054302: The 200 Series, called out under reports 244016-1110114 has been transferred to Contrec Manufacturing (UK) Ltd (Master Contract 265722).