



Certificate of Compliance

Certificate: 70068210

Master Contract: 264933

Project: 70068210


Date Issued: 2017-05-25

Issued to: Cascade Technologies Ltd
Glendevon House,
Castle Business Park,
Stirling, Scotland.
UNITED KINGDOM
FK9 4TZ

Attention: Mr M Douglas.

The products listed below 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 US Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only



Issued by: 
B Spencer

PRODUCTS

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT for Hazardous Locations

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT for Hazardous Locations - Certified to US Standards

Marking (Class 2258-02)

Class I Division 2 Groups B, C, D T4

Ex db IIB + H₂ T4 Gb

Tamb = -20°C to +55°C

Type 3RX, IP66



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Marking (Class 2258-82)

Class I Division 2 Groups B, C, D T4

Class I Zone 1 AEx db IIB + H₂ T4 Gb

Tamb = -20°C to +55°C

Type 3RX IP66

Continuous Gas Analyzer, Model CT5800

110 V to 120 V, 60 Hz

220 V to 240 V, 50 Hz

1100 W max.

Class 1 permanently connected fixed equipment

OVC II

PD3 External

Maximum operating pressure of process gas: 1 bar(g)

Temperature of process gas: +4⁰C to +60⁰C

Conditions of Acceptability

1. The equipment has flameproof joints with dimensions which are other than those specified in Table 2 of ANSI/UL 60079-1: 6th Edition and Table 3 of CSA C22.2 60079-1:16. These flameproof joints are not intended to be repaired but where necessary the original manufacturer shall be contacted for guidance and information on the dimensions of the flameproof joints.
2. The fasteners which secure the cover are non-standard and shall therefore only be replaced by fasteners supplied by the manufacturer for this purpose. The fasteners must always be fitted with the washer supplied by the manufacturer.
3. The equipment has non-conductive surfaces which are a potential electrostatic charging hazard – see the instructions for guidance.
4. The user shall ensure that the flow of process gas is limited to a maximum flow rate of 6 litres per minute.
5. The equipment shall only be used with process gases which are in gas groups B, C or D (Divisions) or IIB + H₂ (Zones) and must not contain oxygen or any other oxidizer in concentrations greater than that found in normal air.
6. This assessment does not cover reliable function, performance, or other properties of the equipment not related to safety.
7. The equipment is to be installed using wire no larger than 1mm² (18 AWG).
8. The equipment is only to be installed by manufacturer trained personnel.
9. If at any time there is a conflict between the system safety provisions and any relevant local (national or regional) requirements, the local requirements always take precedence.
10. The equipment is not to be used with flammable liquids.



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APPLICABLE REQUIREMENTS

CAN/CSA-C22.2 No. 61010-1-12	-	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements
UL Std. No. 61010-1 (3rd Edition)	-	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements
CAN/CSA-C22.2 No. 0-10 (R2015)	-	Canadian Electrical Code, Part II - General requirements
CAN/CSA-C22.2 No. 60079-0:15	-	Electrical apparatus for explosive gas atmospheres- Part 0: General requirements
CAN/CSA-C22.2 No. 60079-1:16	-	Explosive Atmospheres – Part 1: Equipment Protection by Flameproof Enclosures “d”
ANSI/UL 60079-0: 6 th Edition	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: Equipment - General Requirements
ANSI/UL 60079-1: 6 th Edition	-	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures “d”
CSA C22.2 No. 94.1-15 / UL50	-	Enclosures for electrical equipment, non-environmental considerations
CSA C22.2 No. 94.2-15 / UL50E	-	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.

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- CSA Monogram for Canada and US
- Manufacturer's name: Cascade Technologies Ltd
- Model number in accordance with the product section of this report
- Certificate number: CSA 17.70068210X
- Marking in accordance with the product section of this report



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- Electrical Rating
- Date of manufacture: Month and year of manufacture or date code. If a serial number is used instead of date of manufacture, a record of serial numbers shall be kept traceable to date of manufacture. (Not related to date of sale)
- The protective earthing TERMINAL is identified by the IEC 60417 No 5019 symbol “⊕” adjacent to the TERMINAL
- Units provided with Laser shall comply with the marking and other requirements of IEC 60825 and of Canadian and U.S. federal regulations
- The warning “WARNING – DO NOT OPEN WHEN ENERGISED” (cast into the enclosure cover)
- The warning “WARNING - DO NOT OPEN WHEN AN EXPLOSIVE ATMOSPHERE IS PRESENT”
- The warning “WARNING – POTENTIAL ELECTROSTATIC CHARGING HAZARD – SEE INSTRUCTIONS”
- The warning “WARNING - A SEAL SHALL BE INSTALLED WITHIN 50 mm OF THE ENCLOSURE”



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
70068210	2017-05-25	Original Certification.