



Certificate of Compliance

Certificate: 70122067

Master Contract: 225996

Project: 80094609

Date Issued: 2022-05-31

Issued To: Endress+Hauser Optical Analysis Inc.
11027 Arrow Route
Rancho Cucamonga, California, 91730
United States

Attention: Paulo Silva

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: Peter Do
Peter Do

PRODUCTS

CLASS 2258 02 PROCESS CONTROL EQUIPMENT – For Hazardous Locations

CLASS 2258 82 PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to US Standards

Class I, Division 2, Groups B, C and D T3

Type 4X, IP66

Tamb: -20°C to +60°C

- Model 2PACK Trace Gas Monitor for Process and Natural Gas Industry assembly which consists of:
 - Trace Gas Monitor for Process Streams Analyzer, Model “A” SS2100 (ARM 9 Hardware).
 - Rated: 100-240Vac, 50/60Hz, 60W Max., or 18-24Vdc, 1.6A max..
 - Relay contact ratings for external connection:
 - Inductive load ratings: AC15; 250V, 3A N.O. Contact; 1.5A N.C. Contact
 - DC13; 24V, 1A N.O. Contact; 1A N.C. Contact



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Plus

-Carbon Dioxide and /or Moisture monitor for Natural Gas Analyzer model “B” SS2000e (Single Head).
 Rated: 100-240Vac, 50/60Hz, 60W max; 18-24VDC, 20W max.

Plus

-Sample Conditioning System (SCS). Rated 240Vac max., 50/60Hz, 400W

- Model 3PACK Trace Gas Monitor for Process and Natural Gas Industry assembly which consists of:
 -Trace Gas Monitor for Process Streams Analyzer, Model “A” SS2100 (ARM 9 Hardware).
 Rated: 100-240Vac, 50/60Hz, 60W Max., or 18-24Vdc, 1.6A max.

Plus

-Carbon Dioxide and /or Moisture monitor for Natural Gas Analyzer Model “B” SS3000e (Dual Head).
 Rated: 100-240Vac, 50/60Hz, 60W max; 18-24VDC, 20W max.

Plus

-Sample Conditioning System (SCS). Rated: 240Vac max., 50/60Hz, 400W.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 94.2-15	Enclosures for Electrical Equipment, Environmental Considerations
CAN/CSA 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition
CAN/CSA C22.2 No. 213-17+UPD 1 (2018) +UPD 2 (2019) +UPD 3 (2021)	Non-Incendive Electrical Equipment for Use in Class I and II, Division 2, Class III Divisions 1 and 2 Hazardous (Classified) Locations
ANSI/UL 50E-2015 Second Edition	Enclosures for Electrical Equipment, Environmental Considerations
ANSI/UL 61010-1-2012 Third Edition	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory Use - Part 1: General Requirements - Third Edition
ANSI/UL 121201-2021 Ninth Edition	Non-Incendive Electrical Equipment for Use in Class I and II, Division 2, Class III Divisions 1 and 2 Hazardous (Classified) Locations



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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 following markings are provided on a CSA Accepted (Class 7921.xx) or UL Recognized to Canadian requirements (PGDQ8) and UL Recognized (PGDQ2) or CSA Accepted to US Standards (Class 7921.8x) adhesive nameplate, which is suitable for indoor and outdoor use on stainless steel, at a maximum service temperature of 60°C or higher. Nameplate is affixed to exterior of the analyzer enclosure.

- Submitter's Name "Endress+Hauser Optical Analysis Inc.", or Master Contract Number "225996", adjacent to the CSA mark in lieu of name.
- Model designation; as specified in the PRODUCTS section, above.
- Complete electrical ratings; as specified in the PRODUCTS section, above.
- ISO 60417, Symbol 5031 $\overline{\text{---}}$ adjacent to the DC input terminal rating.
- ISO 60417, Symbol 5032 \sim adjacent to the AC input terminal rating.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Enclosure Ratings: Type 4X (Analyzer Enclosures only) and IP66
- Manufacturing date, or serial number, traceable to year and month of manufacture.
- Hazardous Locations area marking. Class I, Division 2 Groups B, C and 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".
- Temperature Code "T3"
- The following optional additional markings may be used: "Class I, Zone 2 IIB+H2 T3"
- The CSA Mark, with or without the "C" and "US" indicators, as shown on the Certificate of Conformity.
- The manufacturing location shall be identified if the equipment can be produced in more than one facility.
- The following words, or suitable equivalent, in both English and French language:
 - "WARNING - EXPLOSION HAZARD – DO NOT DISCONNECT WHILE CIRCUIT IS LIVE OR UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS." and "AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS DÉBRANCHER PENDANT QUE LE CIRCUIT EST SOUS TENSION OU À MOINS QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES."
 - "WARNING - EXPLOSION HAZARD – DO NOT REMOVE OR REPLACE FUSE WHEN ENERGIZED." and "AVERTISSEMENT - RISQUE D'EXPLOSION - NE PAS RETIRER NI REMPLACER UN FUSIBLE SI L'APPAREILLAGE EST SOUS TENSION."



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- “CLASS 1 LASER PRODUCT. REFER SERVICING TO MANUFACTURER QUALIFIED PERSONNEL” and “PRODUIT LASER DE CLASSE 1. RÉFÉRER L'ENTRETIEN AU PERSONNEL QUALIFIÉ DU FABRICANT”
 - “CAUTION – INVISIBLE LASER RADIATION WHEN OPEN” (*on optical head assembly*) and “ATTENTION - RAYONNEMENT LASER INVISIBLE LORS DE L'OUVERTURE” (*sur la tête optique*).
 - The type and rating of each replaceable fuse shall be permanently marked adjacent to the fuse holder.
 - Terminal Designations shall be permanently marked adjacent to each field wiring terminal.
 - ISO 60417, Symbol 5019  shall be permanently marked adjacent to the equipment ground (protective conductor) terminal.

Notes:

Products certified under Class 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
80094609	2022-05-31	Update of cCSAus report 70122067 for Class I, Division 2 non-incendive Model 2PACK Trace Gas Monitor for updates to drawings. This project addresses FIR from inspection on January 29th, 2020. Scope includes update to CSA No. 94.2-15/UL 50E-15 and CSA No. 213-17/UL 121201 Ninth Edition.
70219777	2019-06-24	Project Scope: Update report 70122067 to include three new power supplies tested before and replace some electronic boards with RoHS compliant boards and display (no design change).
70217650	2019-03-27	Update of CSA report 70122067 to include Class I, Zone 2 IIC on the nameplate markings as per the CEC and NEC allowances.
70122067	2017-03-24	Original certification of Model 2PACK and 3PACK trace gas monitor assemblies.