

# **Certificate of Compliance**

Certificate: 2438730 Master Contract: 247499

**Project:** 80186981 **Date Issued:** 2023-11-17

Issued To: Endress+Hauser Optical Analysis, Inc.

371 Parkland Plaza

Ann Arbor, Michigan, 48103

**United States** 

**Attention: Nicholas Taylor** 

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:** Andy Jiang Andy Jiang

#### **PRODUCTS**

CLASS - C225884 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - Certified to US Standards

CLASS - C225804 - PROCESS CONTROL EQUIPMENT Intrinsically Safe, Entity - For Hazardous Locations

#### Class I, Division 2; Groups B, C, D; T4

Model Rxn5, rated 90-264 Vac, 47-63 Hz, 7A max, -20 to 50 °C, Type Z pressurization with intrinsically safe outputs for Class I, Division 1, Groups B, C, D for various probes when installed per drawing 4002396 and with intrinsically safe outputs for Class I, Division 1, Groups A, B, C, D for a temperature sensor and a pressure sensor when installed per drawing 2012682. Rxn5 contains up to four Nd:YAG lasers with Class 3B output beams.

Note 1: The commissioning set-up is to be followed in the User's Manual to verify that the regulator pressure does not drop below 1.5"  $H_2O$  with the purge valve in the ON position.



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Note 2: For safe operation of the lasers, users should follow the recommendations described in the most current revision of ANSI Z136.1.

### **APPLICABLE REQUIREMENTS**

CAN/CSA C22.2 No 60079-0:19	Explosive atmospheres — Part 0: Equipment — General requirements - Fourth Edition
CAN/CSA-C22.2 No. 60079-11:14	Explosive atmospheres - Part 11: Equipment protection by intrinsic safety "i" - Second Edition
CSA LTR E-010-2005	Purged and Pressurized Enclosures for Use in Class I, Division 1 or 2 Hazardous Locations
CAN/CSA-C22.2 No. 61010-1-12 (Third Edition)	Safety requirements for electrical equipment for measurement, control, and laboratory use – Part 1: General requirements
NFPA 496:2008	Standard for Purged and Pressurized Enclosures for Electrical Equipment
ANSI/UL Standard 913 (Sixth Edition)	Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, and III, Division 1, Hazardous (Classified) Locations
ANSI/UL Std. No.60079-0-2020	Explosive atmospheres — Part 0: Equipment — General requirements
ANSI/UL Std. No. 60079-11, 6th	Explosive atmospheres – Part 11: Equipment Protection by Intrinsic
Edition	Safety "i"
ANSI/UL 61010-1, May 11, 2012	Electrical Equipment For Measurement, Control, and Laboratory Use;
(Third Edition)	Part 1: General Requirements

## **MARKINGS**

Refer to CSA Report 2438730 - MARKINGS section for details.



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Notes:

Products certified under Class C225803, C225883 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
80186981	2023-11-17	Update CSA report 2438730 to change the Rxn5 minimum overpressure rating from 0.4" to 0.2" water column and update related label drawings.
80163964	2023-06-27	Update to CSA report 2438730 to add an alternate battery and an alternate Stainless Steel enclosure. The standard CAN/CSA C22.2 No.157-92 is also being updated to its latest edition as per the Notice, Hazardous Locations Products No. 23
70172947	2018-03-12	Update report 2438730 to replace drawing number 2011881, Rev. X1 with drawing number 2011811, Rev. X2 and add drawing number 2017541. Quote assumes no testing required.
70073043	2016-06-21	Update Report 2438730 Standards: C22.2 No. 142-M1987 to C22.2 No. 61010-1-12. Includes updating the Circuit Breaker from Eaton model WMZT1C10 to FAZ-C10-1-NA-SP.
70012302	2014-11-20	Update to Report 2438730 to include correction to revision level on some drawings and include updated label drawing with bi-lingual warnings.
70007326	2014-07-03	Update to Report 2438730 to include changing touch screen window to Zytronic Display Limited; per only a paperwork review.
2693837	2014-02-20	Update to Report 2438730 to include an alternative / replacement power supply, thermal cutout, and revised descriptive documents.
2611042	2013-04-23	Update to Report for OptoGraf to include replacement and alternate Intrinsic Safety Barriers (4-20 mA temperature/pressure sensor loop) and revised drawings.
2539202	2012-07-03	Update to Report for OptoGraf to include revised and new drawings.
2438730	2011-12-22	Original certification of OptoGraf as suitable for Cl I, Div 2, Grps B, C, D using Z Pressurizing with I.S. Outputs to probes and sensors in Cl I, Div 1.