Certificate of Compliance

Certificate: 2147122 **Master Contract:** 244958

Project: 2594390 **Date Issued:** March 28, 2013

Issued to: **ORB Instruments, Inc.**

4724 S. Christiana
Chicago, IL 60632
USA
Attention: Dave Allen

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.

Donald Theroux

Issued by: Donald Theroux

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 1, Groups B, C and D

Flash Point Analyzer - Model P-500-1400 Flash Point Analyzer, input 100-240 Vac, 50/60 Hz, 2A; -20°C ≤ Tamb ≤ +40°C; Temperature code: T6

Salt in Crude Analyzer – Model P-600-1400, input 120Vac , 5A or 240 Vac, 2.5A; 50/60Hz, -20°C ≤ Tamb ≤ +40°C; Temperature code: T5

Vapor Analyzer - Model P-700-1400 RVP Analyzer, input 100-240 Vac, 50/60 Hz, 2A; -20°C ≤ Tamb ≤ +40°C; Temperature code: T6

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Freeze Point Analyzer - Model P-800LT-1400, input 120 Vac, 5A or 240 Vac, 2.5A, 50/60 Hz; -20°C ≤ Tamb ≤ +40°C; Temperature code: T6

Cloud Point Analyzer - Model P-820LT-1400, input 120 Vac, 5A or 240 Vac, 2.5A, 50/60 Hz; -20°C ≤ Tamb ≤ +40°C; Temperature code: T6

Pour Point Analyzer - Model P-840LT-1400, input 120 Vac, 5A or 240 Vac, 2.5A, 50/60 Hz; 0°C ≤ Tamb ≤ +30°C; Temperature code: T6

Cold Properties Analyzer - Model P-860LT-1400, input 120 Vac, 5A or 240 Vac, 2.5A, 50/60 Hz; 0°C ≤ Tamb ≤ +30°C; Temperature code: T6

Notes:

Salt-in-Crude Analyzer, model P-600-1400, includes internal intrinsically safe circuits from the IS barrier enclosure to the float level switches located within the solvent tanks. Analyzer models P-800LT-1400, P-820LT-1400, P-840LT-1400 and P-860LT-1400 also have internal intrinsically safe circuits located within their measurement enclosures connected to float level switches.

APPLICABLE REQUIREMENTS

CAN/CSA Standard C22.2 No. 0-10 *(Tenth Edition – September 2010)*	General Requirements - Canadian Electrical Code, Part II
CSA Standard C22.2 No. 30-M1986 *(Reaffirmed 2007)*	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
CSA Standard C22.2 No. 142-M1987 *(Reaffirmed 2009)*	Process Control Equipment
ANSI/UL Standard 508 *(Seventeenth Edition, Dated January 28, 1999. With revisions through and including April 4, 2010)*	Industrial Control Equipment
ANSI/UL Standard 1203	Explosion-Proof and Dust-Ignition-Proof Electrical Equipment for Use in Hazardous (Classified) Locations

(Fourth Edition, September 2006. With revisions through and including October 28, 2009)	

The following standards were used in whole or in part as a guideline.

CAN/CSA Standard C22.2 No. 157-92 *(Including update No. 2, June, 2006)*	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations.
ANSI/UL 60079-11 (Second Edition, dated March 9, 2007)	Electrical Apparatus for Explosive Gas Atmospheres – Part 11: Intrinsic safety "i"

MARKINGS

Product markings shall be in accordance with the related standards. In addition, it shall be the responsibility of the manufacturer to provide additional markings on the product to comply with the requirements of the local regulatory authorities. For example, in Canada, any caution and warning markings must be provided in French and English.

Markings appear on a black anodized aluminum plate with approximate dimensions of 7" by 9" and a thickness: of 0.060". The nameplate is located to the lower enclosure with stainless steel screws.

All products:

- Manufacturer's name: "ORB Instruments", "ORB" or suitable equivalent or CSA Master Contract Number "244958", adjacent to the CSA Mark in lieu of manufacturer's name.
- Model number: As specified in the PRODUCTS section, above.
- Electrical ratings: As specified in the PRODUCTS section, above.
- Ambient temperature rating: As specified in the PRODUCTS section, above.
- Manufacturing date in MMYY format, or serial number, traceable to month of manufacture.
- The CSA Mark with or without "C" and "US" indicators, as shown on the Certificate of Compliance.
- Hazardous Location designation: As specified in the PRODUCTS section, above (may be abbreviated).
- Temperature code: As specified in the PRODUCTS section, above.
- The following words: "CAUTION: KEEP COVERS TIGHT WHILE CIRCUITS ARE ALIVE" or equivalent.

Model P-600-1400 only:

- The words: "IS circuits ONLY" *(on junction box covers and IS barrier enclosure)*.