

Certificate of Compliance

- **Certificate:** 1913435
- **Project:** 2617104

Issued to: Rosemount Analytical Inc.

Process Analytic Division Solon Research & Development Ctr 6565-P Davis Industrial Pkwy Solon, OH 44139 USA Attention: Stephen J. Miesiak Master Contract: 212516

Date Issued:

July 8, 2013

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: Dimcho Genov

PRODUCTS

CLASS 2252 85 - PROCESS CONTROL EQUIPMENT - Certified to US Standards CLASS 2252 05 - PROCESS CONTROL EQUIPMENT

Oxygen Analyzer, parts and ratings are as follows:

Part A: X-STREAM O2 Analyzer	
XS-O2 Transmitter	100 – 240 Va.c., 50/60 Hz, 776 VA max, Type 4X & IP66
XS-O2 DR Probe:	120 Va.c., 50/60 Hz, 776 VA max, Type 4X & IP66

Part B: Xi Enhanced Remote Interface

Single/Dual Channel	100 – 240 Va.c., 50/60 Hz, 12 VA max, Type 4X
Traditional Architecture (for 120 V Probes)	100 – 240 Va.c., 50/60 Hz, 776 VA max, Type 4X



212510

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Traditional A	rchitecture (for 44 V Probes)	120 Va.c., 50/60 Hz, 450 VA max, Typ	be 4X	
Part C: XPS				
Remote (For 4	44V Probes)	120/240 Va.c., 50/60 Hz, 140 VA max	, Type 4X & IP66	
Remote (For 120V Probes)		120/240 Va.c., 50/60 Hz, 776 VA max	, Type 4X & IP66	
Integral (For 44V Probes)		120/240 Va.c., 50/60 Hz, 140 VA max	, Type 4X & IP66	
Part D: 6888	A O2 Analyzer			
6888A Transr	nitter	120/240 Va.c., 50/60 Hz, 260/1020 VA	max, Type 4X & IP66	
6888A DR Probe		120/240 Va.c., 50/60 Hz, 260/1020 VA max, Type 4X & IP66		
Part E: 6888	Xi Advanced Electronics			
Single/Dual C	Channel	120/240 Va.c., 50/60 Hz, 12 VA max,	Type 4X	
Single Channe	el with Flame Safety	120/240 Va.c., 50/60 Hz, 260/1020 VA	A max, Type 4X	
Traditional Architecture (for 120 V Probes)		120/240 Va.c., 50/60 Hz, 260/1020 VA	a max, Type 4X	

CONDITIONS OF ACCEPTABILITY

- The unit is intended to be connected to supply mains by a qualified personal in accordance with national (e.g. CEC, NEC, etc) and local codes. Suitable APPROVED switch and fuse or a circuit breaker shall be provided to facilitate the disconnection of
- ٠ mains power.
- The maximum operating ambient is considered as follows:
 - 80 °C for XS-O2 Transmitter.
 100 °C for XS-O2 DR Probe.

 - 50 °C for Xi Enhanced Remote Interface, Integral XPS and 6888 Xi Advanced Electronics. ٠
 - 55 °C for Remote XPS. •
 - 70 °C for 6888A Transmitter. ٠
 - 90 °C for 6888A DR Probe.

Mounting Flange temperature shall not exceed 200 °C.

C --- **A**²**C**² - - **A** - -

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2258 02 – PROCESS CONTROL EQUIPMENT – For Hazardous Locations
2258 82 – PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to U.S. Standards.

Class I, Zone 1, Ex d IIB+H2, T3 Class I, Zone 1, AEx d IIB+H2, T3

Oxygen Transmitter with transmitter electronics rated 100 – 240 V, 50/60 Hz, 776 VA. max.; Type 4X & IP66 DR probe with no transmitter electronics, rated 120 V, 50/60 Hz, 776 VA. max. Type 4X & IP66 Ambient Temperature Range: -40°C to +80°C (DR probe to 100°C).

Model: XS-O2XPabccddee

a = 1, 2, 3, 4, 5 or 6

- **1** = Snubber Diffuser, Standard Sensing Cell;
- **2** = Snubber Diffuser, Acid-Resistant Stoichiometer Sensing Cell;
- **3** = Ceramic Diffuser, Standard Sensing Cell;
- **4** = Ceramic Diffuser, Acid-Resistant Stoichiometer Sensing Cell;
- **5** = Hastelloy Diffuser, Standard Sensing Cell;
- 6 = Hastelloy Diffuser, Acid-Resistant Stoichiometer Sensing Cell
- b = 1, 2 or 3
- $\mathbf{1} = 18$ inch Probe;
- $\mathbf{2} = 3$ foot Probe;
- $\mathbf{3} = 6$ foot Probe)
- cc = 00, 02, 03, 04, 05, 08, 09, 10, 11, 12, 13 or 99
- **00** = None;



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02 = New Installation – Square Weld plate with 2-1/2 NPT Tapped Hole;

- **03** = Flange for OXT/WC Hazardous Area Mounting (ANSI/DIN);
- **04** = New Installation Square Weld Plate with 2"-150# Studs & Flange;
- **05** = New Installation Square Weld Plate with DIN Studs & Flange;
- **08** = Adapter to Existing ANSI 3", 150# Flange;
- **09** = Adapter to Existing ANSI 4", 150# Flange;
- **10** = Adapter to Existing ANSI 6", 150# Flange;
- **11** = Adapter to Existing ANSI 3", 300# Flange;
- **12** = Adapter to Existing ANSI 4", 300# Flange;
- **13** = Adapter to Existing ANSI DIN 100 PN25/40 Flange;
- **99** = Special Adapter)
- dd = 11, 12 or 13; option 12 & 13 for DR version
- 11 = Transmitter Electronics HART, CSA Certified, Class I, Zone 1, AEx/Ex d IIB+H2, T3;
- 12 = Direct Replacement, No Electronics, CSA Certified, Class I, Zone 1, AEx/Ex d IIB+H2, T3;
- 13 = Direct Replacement, YEW Electronics, CSA Certified, Class I, Zone 1, AEx/Ex d IIB+H2, T3)

ee = 00, 01 or 02

- **00** = None;
- **01** = Calibration & Reference Gas Flowmeters & Reference Regulator/Filter;
- **02** = Calibration/Reference Panel)



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- Suitable APPROVED switch and fuse or a circuit breaker shall be provided to facilitate the disconnection of mains power.
- The operating ambient is considered max 80°C for XS-O2XP transmitter, max 100°C for XS-O2XP with option codes 12 & 13 (DR probe), and max 50°C for Remote Interface Xi and Xi (Traditional Architecture).
- Mounting Flange temperature shall not exceed 200°C.
- Model XS-O2XP Probe meets the Type 4X & IP66 when the reference air vent is routed to a dry area.
- Process end of the probe must be installed into a process that is a Classified Non-Hazardous Location

APPLICABLE REQUIREMENTS

1. CAN/CSA C22.2 No. 61010-1-04 Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements

2. UL 61010-1:2004 (2nd Edition) Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use – Part 1: General Requirements

3. CAN/CSA-E60079-0:07 Electric Apparatus for Explosive Gas Atmospheres, Part 0: General Requirements

4. CAN/CSA-E60079-1:07 Electric Apparatus for Explosive Gas Atmospheres, Part: Construction and Verification Test of Flameproof Enclosures of Electrical Apparatus "d"

- 5. CAN/CSA-C22.2 No. 94-M91 (R2001) Special Purpose Enclosures
- 6. CAN/CSA C22.2 No. 60529:05 Degrees of protection provided by enclosure (IP Code)
- 7. ANSI/ISA-12.00.01-2005 (IEC 60079-0 Mod) Electric Apparatus for Use in Class I, Zones 0, 1 & 2 Hazardous (Classified) Locations: General Requirements

8. ANSI/ISA-12.22.01-2005 (IEC 60079-1 Mod) Electric Apparatus for Use in Class I, Zones 1 Hazardous (Classified) Locations Type of Protection – Flameproof "d"

9. UL 50 (11th Ed.) Enclosures for Electrical Equipment

10. IEC 60529 (Edition 2.1-2001-02) Degrees of protection provided by enclosure (IP Code)

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

11. NEMA 250-2003 Enclosures for Electrical Equipment (1000 Volts or Less)



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
2617104	Jul 8, 2013	Update report to cover the addition of a 6888A Transmitter with Field bus communication option.
2447109	Feb 28, 2012	Addition of auto-calibration option for model 6888A O2 Transmitter for ordinary locations.
2421761	May 10, 2011	Addition of factory 4546488 to MC: 212516 and class: C225205 and C225285.
2362321	Apr 27, 2011	Addition of model series 6888A O2 Analyzer and 6888 Xi Advanced
		Electronics for ordinary locations.
2315163	Jun 23, 2010	Alternative Construction
2269015	Feb 22, 2010	(CLE561: 1of1: CSA) Evaluation for possible update of report 1913435 to
		include Haz Lo Certification as CL I, Zone 1: Ex/AEx d IIB+H2; per submittal
		of FM Approvals Test Report.
2228498	Feb 19, 2010	Addition of a model and alternative construction.
2140638	Mar 18, 2009	Update to report 1913435 to include XS-O2XP Oxygen Analyzer, Hazardous
		Locations for Class I, Zone 1, AEx d/Ex d IIB+H2, T3.
2075667	Dec 19, 2008	Change of part designation and alternative construction
1913435	Dec 20, 2007	Original Certification.