



CSA INTERNATIONAL

# Certificate of Compliance

**Certificate:** 1714037 (105173)

**Master Contract:** 185562

**Project:** 1875359

**Date Issued:** 2007/06/18

**Issued to:** Emerson Process Management

GmbH & Co. OHG

Industriestrasse 1

Hasselroth, 63594

Germany

Attention: Mr. Uwe Schmidt

*The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US'*



**Issued by:** Kurt McClain

**Authorized by:** Peter Schimmoeller, Manager  
of Certification Services

## **PRODUCTS**

**CLASS 8721 05** - LABORATORY EQUIPMENT - Electrical

**CLASS 8721 85** - ELECTRICAL EQUIPMENT FOR LABORATORY USE - Certified to US Standards

**CLASS 2258 02** - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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

**CLASS 8721 05 - LABORATORY ELECTRICAL EQUIPMENT**

**CLASS 8721 85 - ELECTRICAL EQUIPMENT FOR LABORATORY USE (Certified to U.S. Standards)**

The 'C' and 'US' indicators adjacent to the CSA Mark signify that the product has been evaluated to the applicable CSA and ANSI/UL Standards, for use in Canada and the U.S., respectively. This 'US' indicator includes products eligible to bear the 'NRTL' indicator. NRTL, i.e. National Recognized Testing Laboratory, is a designation granted by the U.S. Occupational Safety and Health Administration (OSHA) to laboratories which have been recognized to perform certification to U.S. Standards.



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Gas analyser, Model: X-Stream, rated 100-240Vac, 50/60 Hz, 2 – 1 A. Class I, Pollution Degree II.

**X-Stream F (XF):** Wall mounting with field wiring terminals, for outdoor use NEMA 4X;

**X-Stream GP (XGP):** Table Top or Rack Mount with field wiring terminals for indoor use;

**X-Stream GPS (XGPS):** Table Top or Rack Mount with appliance inlet for indoor use;

Conditions of Acceptability

For the X-Stream Models XGP & XGPS, the equipment is supplied with an approved power supply cord set or power supply cord with plug that is acceptable to the authorities in the country where the equipment is to be used.

**CLASS 2258-02 PROCESS CONTROL EQUIPMENT – For Hazardous Locations**

**CLASS 2258-82 PROCESS CONTROL EQUIPMENT – For Hazardous Locations – Certified to U.S. Standards.**

**X-Stream FD (XFD):** Flameproof for Hazardous Locations

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

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

Gas analyser, Model: X-Stream, rated 100-240Vac, 50/60 Hz, 2–1 A. Class I, Pollution Degree II; Type 4 & IP66

Ambient Temperature Range: -30oC to +50oC

XFD-abcdefghijklmnop

a = Language: A, B, C, D or E

b = Ambient Conditions: 1, 2, 3, 4, 5 or 6

c = Instrument: 1, 2, 3, 4, 5, 6 or 7

d = Bench 1: any combination of 2 or 3 alpha-numeric characters

e = Bench 1 – Special Linearization or Calibration: 0, 1, 2, 3, 4 or 5

f = Bench 2: any combination of 2 or 3 alpha-numeric characters

g = Bench 2 – Special Linearization or Calibration: 0, 1, 2, 3, 4 or 5

h = Enclosure: 1, 2, 3, 4, 5 or 6



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i = Hazardous Area Options and Special Approvals: B or D

j = Input/Output Options: 1, 2, 5 or 6

k = Communication Interface: A, B, C or D

l = Sample Handling: 0, 1, 3, 5 or 7

m = Gas Path Sensors: 0, 1, 2, 3, 4 or 5

n = Gas Path Tubing: A, B, C, D or E

o = Gas Path Fittings: 3, 4, 5 or 6

p = Flame Arrestors: 2, 3, 4, 5, 6, 7 or 8

#### **APPLICABLE REQUIREMENTS**

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

UL Std No. 61010-1, 2nd Edition. - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

CAN/CSA-E60079-0:02 (R2006) - Electric Apparatus for Explosive Gas Atmospheres, Part 0: General Requirements

CAN/CSA-E60079-1:02 (R2006) - Electric Apparatus for Explosive Gas Atmospheres, Part 1: Construction and Verification Test of Flameproof Enclosures of Electrical Apparatus "d"

CAN/CSA-C22.2 No. 94-M91 (R2001) - Special Purpose Enclosures

CAN/CSA C22.2 No. 60529:05 - Degrees of protection provided by enclosure (IP Code)

ANSI/ISA-12.00.01-2002 (IEC 60079-0 Mod) - Electric Apparatus for Use in Class I, Zones 0, 1 & 2 Hazardous (Classified) Locations: General Requirements

ANSI/ISA-12.22.01-2002 (IEC 60079-1 Mod) - Electric Apparatus for Use in Class I, Zones 1 Hazardous (Classified) Locations Type of Protection – Flameproof "d"

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

UL 50 - Enclosures for Electrical Equipment

#### **MARKINGS**



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- Submitter's identification (company name and/or file number and/or registered tradename);
- Factory identifier; [if required]
- Model designation;
- Electrical rating;
- Date of manufacture (or traceable serial number);
- The CSA Monogram with C/US subscript;
- Replacement fuse markings;
- The IEC 417, No. 5019 earthing symbol ;
- The IEC 417, No. 5017 earth symbol for accessible earthing connectors ;
- Neutral conductor identification. [PERMANENTLY CONNECTED equipment]
- The warning "DISCONNECT SUPPLY BEFORE SERVICING"; [for units with Neutral fusing]

#### **X-Stream FD: Additional Hazardous Locations Specific**

- Canada, Class I, Zone 1, Ex d IIB+H2, T3 ;
- U.S.A., Class I, Zone 1, AEx d IIB+H2, T3;
- The CSA Monogram with C/US subscript with certificate number;
- "X" following the certificate number indicating special conditions for safe use
- Ambient Temperature Range;
- The warning "WARNING: DO NOT OPEN WHILE ENERGIZED"; (Casted on Enclosure Cover)
- The warning "WARNING: Explosionproof seal at enclosure or within 2" of enclosure";

Note 1: Bilingual Markings for products with CSA Mark or CSA Mark and the C US indicator.

Note 2: Jurisdictions in Canada may require these markings to be also in French. It is the responsibility of the Customer to provide bilingual marking, where applicable, in accordance with the requirements of the Provincial Regulatory Authorities. It is the responsibility of the Customer to determine this requirement and have bilingual wording added to the "Markings".

#### **ACCOMPANYING DOCUMENTS:**

An operating manual is provided that specifies proper operating procedures for the equipment, recommended accessories, proper cleaning and operator maintenance procedures, maintenance information and particular technical characteristics which includes the following.

- Pollution degree 2;
- Altitude 2000m;
- Humidity <90% r.h. at +20°C; <70% r.h. at +40°C
- Electrical supply 100 – 240Vac, 50-60Hz, 1 - 2A;
- Indoor use statement for model X-Stream GP/GPS;
- Temperature: 0°C to 50°C for XGP/XGPS; -20°C to 50°C XF; -30°C to 50°C, XFD
- Statement advising that mains supply voltage fluctuations are not to exceed +/- 10 percent of the nominal supply voltage
- Specific when Hazardous Locations, All Markings, Warnings and Conditions of Safe Use