

Certificate of Compliance

Certificate: 1171517 (208866) **Master Contract:** 208866

Project: 70164957 **Date Issued:** 2017-11-30

Issued to: GP:50 New York Ltd.

2770 Long Rd

Grand Island, New York 14072

USA

Attention: Amy Napieraiski

The products listed below are eligible to bear the CSA Mark shown



Issued by:

Dennis Jeffrey
Dennis Jeffrey

PRODUCTS

CLASS - C225802 - PROCESS CONTROL EQUIPMENT-For Hazardous Locations-

Ex nA IIC:

Class I, Div. 2 Groups A, B, C & D; Class II, Groups E, F & G; Class III:

- Pressure Transmitters, Model Series 311N*abcdef*, 311TN*abcdef*, 311GN*abcdef*, and 311TGN*abcdef* rated 10-28 Vdc, 4-20 mA; Temperature Code T5, Ta = -40 °C to +80 °C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table A for *abcdef* model number breakdown).
- Pressure Transmitters, 370Nabcd and 370GNabcd, rated 10-28 Vdc, 4-20 mA; Temperature Code T5, Ta = -40
 °C to +80 °C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA') are suitable for Class II and III hazardous locations (refer to Table B for abcd model number breakdown).



CLASS 2258 03 PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems -

For Hazardous Locations

Ex nL IIC:

Class I, Div. 2, Groups A, B, C & D:

Pressure Transmitters, Series 311Nabcdef, 311TNabcdef, 311GNabcdef, and 311TGNabcdef rated 10-28 Vdc, 4-20 mA; with non-incendive field wiring when installed per drawing 8C1-65.01-2 (Model 311N/311GN).
 Temperature Code T5, Ta = -40 °C to +80 °C; maximum process temperature: 82°C; Single Seal (refer to Table A for abcdef model number breakdown).

• Pressure Transmitters, Series 370N*abcd* and 370GN*abcd*, rated 10-28 Vdc, 4-20 mA; with non-incendive field wiring when installed per drawing 8C1-65.00-2 (Model 370N/370GN). Temperature Code T5, Ta = -40 °C to +80 °C; maximum process temperature: 82°C; Single Seal (refer to Table B for *abcd* model number breakdown).

CLASS 2258 04 PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations

Ex ia IIC; Class I, Zone 0: Class I, Groups A, B, C & D; Class II, Groups E, F & G; Class III:

- Pressure Transmitters, Model Series 311I*abcdef*, 311TI*abcdef*, 311GI*abcdef*, and 311TGI*abcdef* rated 10-28 Vdc, 4-20 mA. Intrinsically safe with entity parameters when installed per drawing 8C1-117.00 or 8C1-56.01-2 (Model 311I/311GI). Temperature code T5, Ta = -40 °C to +85 °C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by alternate connector suffix code 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table A for *abcdef* model number breakdown).
- Pressure Transmitters, Model Series 370Iabcd and 370Glabcd, rated 10-28 Vdc, 4-20 mA. Intrinsically safe with entity parameters when installed per drawing 8C1-117.00 or 8C1-56.00-2 (Model 370I/370GI).
 Temperature code T5, Ta = -40 °C to +85 °C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by alternate connector suffix code 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table B for abcd model number breakdown).

Class I, Groups A, B, C & D; Class II, Groups E, F & G; Class III:

- Pressure Transmitter, Model Series 311Zabcdef, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80°C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table A for abcdef model number breakdown).
- Pressure Transmitter, Model Series 312Zabcdef, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C; Single Seal. Only



models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table A for *abcdef* model number breakdown).

- Pressure Transmitter, Model Series 314*Zabcde*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 87°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table C for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 315Zabcde, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 87°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table C for abcde model number breakdown).
- Pressure Transmitter, Model Series 317Zabcdef, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table A for abcdef model number breakdown).
- Pressure Transmitter, Model Series 330Z*abcde*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 600°C. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table D for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 331Z*abcde*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 600°C. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table D for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 370Z*abcd*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-78-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table B for *abcd* model number breakdown).
- Pressure Transmitter, Model Series 1171*abcdef*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-79-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C; Single Seal. Only models with NPT entry (designated by connector suffix code = 'AA' or 'CF') are suitable for Class II and III hazardous locations (refer to Table A for *abcdef* model number breakdown).



Class I, Groups A, B, C & D:

- Pressure Transmitter, Model Series 311Zabcdef, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C; Single Seal (refer to Table A for abcdef model number breakdown).
- Pressure Transmitter, Model Series 312**Zabcdef**, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C; Single Seal (refer to Table A for *abcdef* model number breakdown).
- Pressure Transmitter, Model Series 314**Zabcde**, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 87°C; Single Seal (refer to Table C for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 315*Zabcde*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 87°C; Single Seal (refer to Table C for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 317Zabcdef, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C; Single Seal (refer to Table C for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 330Zabcde, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 600°C (refer to Table D for abcde model number breakdown).
- Pressure Transmitter, Model Series 331Z*abcde*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 600°C (refer to Table D for *abcde* model number breakdown).
- Pressure Transmitter, Model Series 370Z*abcd*, rated 9-36Vdc, 4-20mA. Intrinsically Safe when installed per installation drawing 1C1-80-2 with barrier meeting Entity Parameters of Vmax = 36Vdc; Imax = 250mA; Ci = 3.2nF; Li = 0uH. Temperature Code T4, Ta=80 °C; maximum process temperature: 82°C (refer to Table B for *abcd* model number breakdown).



Table A:

Code	Description
а	Accuracy (any alphabetic character not affecting certification and not used with Temp. units)
b Pressure/Temperature ranges* (any 2-letter alphabetic/numeric character within the range	
	below):
	psi: 0–75,000 (15,000 on X17 models)
	in WC: 0 -2000
	bar: 0-5000 (350 on X17 models)
	MPa: 0-140 (40 on X17 models)
	in HG: 0-35 (0-760 mmHG)
с	Pressure type (any alphanumeric character not affecting certification and not used with Temp. units)
d	Electrical connector** (any 2 or 3-digit alphanumeric characters not affecting certification)
e	Pressure port (any 2-letter alphabetic characters not affecting certification; no code unless non-standard
	port)
f	General options (where applicable, any 2-letter alphabetic, or 3-digit alphanumeric, characters not
	affecting certification)
	* Single Seal approvals to 57,000 psi maximum (15,000 psi maximum on X17 models)
	** Only 'AA', 'CF' or Div/Zone 2 rated connector codes are approved for Ex nA rated models

Table B:

Code	Description	
а	Sensors (any alphabetic character not affecting certification)	
b	Pressure ranges (any 2-letter alphabetic character within the ranges listed below):	
	psi: 0–20,000	
c	Electrical connector* (any 2 or 3-digit alphanumeric characters not affecting certification)	
d	General options (where applicable, any 2-letter alphabetic, or 3-digit alphanumeric, characters not	
	affecting certification)	
	* Only AA, CF or Div/Zone 2 approved connector codes for Ex nA rated models	

Table C:

Code	Description
а	Accuracy (any alphabetic character not affecting certification)
b	Pressure ranges (any 2-letter alphabetic character within the ranges listed below):
	psi: 0–15,000 (7500 on 315Z models)
	bar: 0-5000 (500 on 315Z models)
	MPa: 0-100 (40 on 315Z models)
	WC: 0-2000 (315Z models only)
с	Electrical connector (any 2 or 3-digit alphanumeric characters not affecting certification)
d	Pressure port (any 2-letter alphabetic characters not affecting certification; no code unless non-standard
	port)
e	General options (where applicable, any 2-letter alphabetic, or 3-digit alphanumeric, characters not
	affecting certification)



Table D:

Code	Description
а	Pressure ranges (any 2-letter alphabetic character within the ranges listed below):
b	psi: 0–15,000
	in WC: 0 -2000
	bar: 0-1000
	MPa: 0-100
	Pressure type (any alphanumeric character not affecting certification)
c	Electrical connector (any 2 or 3-digit alphanumeric characters not affecting certification)
d	Pressure port (any 2-letter alphabetic characters not affecting certification; no code unless non-standard
	port)
e	General options (where applicable, any 2-letter alphabetic, or 3-digit alphanumeric, characters not
	affecting certification)

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-10	General Requirements - Canadian Electrical Code, Part II
CSA Std. C22.2 No. 25-1966	Enclosures for Use in Class II, Groups E, F and G Hazardous Locations
CAN/CSA-C22.2 No. 142-M1987	Process Control Equipment
CSA Std. C22.2 No. 213-M1987	Non-incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 157-92	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CAN/CSA-C22.2 No. 60079-0-07	Electrical apparatus for explosive gas atmospheres - Part 0: General requirements
CAN/CSA-E60079-11-02(R2006)	Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"
CAN/CSA-E60079-15-02(R2006)	Electrical Apparatus for Explosive Gas Atmospheres - Part 15: Type of Protection "n"
ANSI/ISA-12.27.01-2003	Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids

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.

Markings are etched directly onto housing or are applied to a stainless steel nameplate spot welded to housing. The following markings appeared on the nameplate:

- manufacturer's identification
- model designations
- electrical ratings
- CSA Monogram
- serial number or date code
- hazardous locations designation
- the symbol, "Exia" (excluding models 311N, 311TN, 311GN, 311TGN, 370N and 370GN)
- reference to installation drawing
- maximum ambient temperature
- temperature code rating
- process temperature range
- working pressure range
- the words: "Single seal" (single seal equipment only)
- Ex ia IIC T5 (Models 311I, 311TI, 311GI, 311TGI, 370I and 370GI)
- Ex nA IIC T5 (Models 311N, 311TN, 311GN, 311TGN, 370N and 370GN; with NPT or Turck electrical connection)
- Ex nL IIC T5 (Models 311N, 311TN, 311GN, 311TGN, 370N and 370GN)
- Warning re DO NOT SEPARATE WHEN ENERGISED and NE PAS SÉPARER SOUS TENSION (Models 311N, 311TN, 311TN, 311TGN, 370N and 370GN)
- Certificate Number, CSA 07.1171517 (excluding Model xxxZ series and 1171)



Supplement to Certificate of Compliance

Certificate: 1171517 (208866) **Master Contract:** 208866

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
70164957	2017-11-30	Update to report 1171517 to add models 311TNabcdef, 311TGNabcdef 311TIabcdef, and 311TGIabcdef to indicate temperature output and update associated drawings.
70060232	2016-04-19	Update to report 1171517 to include the latest revision of drawing A8AD-370I.C and new drawing 8N1-10.00.
70006614	2014-07-17	Update to report 1171517 to update drawing 8N1-6.00 and include new IS installation drawing 8C1-117.00 for the non-amplified versions of models 311 and 370.
2708102	2014-04-25	Update to report 1171517 to include two new non-amplified versions of models 311 and 370.
2665069	2013-12-19	Update to Report 1171517 to add a pressure sensor style to model drawings for models 311I/311N and to condense the size of the report.
2623602	2013-05-16	Update to Report 1171517 to document revision changes to seven drawings and to add one drawing for pressure transmitter models 311I, 311GI, 370I, 370GI370N and 370GN.
2489586	2012-05-31	Update of Report 1171517 to document compliance to single seal requirements per ANSI/ISA-12.27.01-2003 for series 311, 312, 314, 315, 317, 330, 331, 370 and 1171 pressure transmitters.
2157650	2009-04-15	Update of Report 1171517 for 311 Series to include alternate 15-5 Material.
2046357	2008-09-30	Update to include minor report revision and include Models 311N, 311GN, 370N and 370GN for Class I, Div 2 and Class I, Zone 2 Listing.
1878094	2007-04-25	Addition of Models 370I, 370GI, 311I, 311GI
1804579	2006-07-06	Update to add new transducer Model 370Z.
1171517	2001-06-15	Pressure Transmitter, Models Series 311Z, 312Z, 314Z, 315Z, 317Z, 330Z, 331Z and 1171 for installation in hazardous locations.