Certificate of Compliance

Certificate: 2692506 **Master Contract:** 229534

Project: 2692506 **Date Issued:** January 24, 2014

Issued to: **Pyromation Incorporated**
5211 Industrial Rd.,
Fort Wayne, Indiana 46825
USA

Attention: Mr. Chris Moritz

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

Issued by: Rachel Miranda
Rachel Miranda

PRODUCTS

CLASS 2258 02 - Process Control equipment for Hazardous Locations

Class I, Zone 1, Ex d IIC:
Class I, Div. 1, Groups A, B, C & D; Class II, Div. 1 Groups E, F & G; Class III:

- Temperature Transmitter, Series 662, powered by a voltage of 11 … 40 Vdc. The power dissipated is maximum 3 Watt. It converts a measurement input signal of external temperature sensors into a 4-20 mA and digital output signal. Installation per Control Drawing M009301.

Temperature codes T6, Ta = - 40 °C to +55 °C; T5, Ta = - 40 °C to +70 °C; and T4, Ta = - 40 °C to +85 °C. Enclosure Type 4X.

Class I, Div. 1, Groups A, B, C and D; Class II, Div. 1 Groups E, F, G; Class III:

- Temperature Transmitter, Series 662, rated 9… 35 Vdc, 3W. Connect to Profibus PA / Foundation Fieldbus system per Installation Drawing M009301. Temperature codes T6, Ta = - 40 °C to +55 °C ; T5, Ta = - 40 °C to +70 °C; and T4, Ta = - 40 °C to +85 °C. Enclosure Type 4X.

CLASS 2252 05 - Process Control Equipment

- Temperature Transmitter Series 662, SELV or Class 2 supply rated 11 … 40 Vdc, 4-20 mA output signal or rated 9…35Vdc, 12mA for PA/FF option. Ambient temperature = - 40°C to + 85°C (w/o optional LCD) or -40°C to +70°C (w/ optional LCD). Enclosure Type 4X.

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

Ex ia IIC:
Class I, Div. 1, Groups A, B, C & D, Class II, Div. 1, Groups E, F & G, Class III, Div. 1:

- Temperature Transmitter Series 662, input rated 8 - 30V, 4 - 20mA; with entity parameters: Ui = 30V, Ii = 300mA, Pi = 1W, Ci = 5.3nF, Li = 0µH. Intrinsically Safe when connected according to Installation Drawing No. M009201; Temperature code for Transmitter without Display: T6, Ta = -40 °C to +55 °C, T5, Ta = -40 °C to +70 °C and T4, Ta = -40 °C to +85 °C; Temperature code for Transmitter with Display: T4, Ta = -40 °C to +70 °C.

Associated intrinsically safe circuits for connection of a temperature sensor; with entity parameters: Uo = 7.6V, Io = 29.3mA, Po = 55.6mW, Co = 10.4µF (Groups A and B, respectively IIC), 160µF (Group C, respectively IIB), 1000µF (Group D, respectively IIA), Lo = 40mH (Groups A and B, respectively IIC), 150mH (Group C, respectively IIB), 300mH (Group D, respectively IIA).

- Temperature Transmitter Series 662, input rated 9 - 35V, 12mA, suitable for connection to a Profibus PA/ Foundation Fieldbus system according to Entity of Ui/Vmax = 24Vdc, Ii/Imax = 250mA, Pi/Pmax = 1.2W, Ci = 5nF, Li = 10µH or FISCO Concept Ui/Vmax = 17.5Vdc, Ii/Imax = 500mA, Pi/Pmax = 5.5W, Ci = 5nF, Li = 0µH with a sensor output Uo/Voc = 8.6Vdc, Io/Isc = 26.9mA, Po = 57.6mW, Co = 6.2µF, Lo = 48mH (IIC, Groups A & B); Co = 55µF, Lo = 180mH (IIB, Group C); Co = 1000µF, Lo = 380mH (IIA, Group D). Intrinsically Safe when connected according to Installation Drawing No. M009201. Temperature codes T6, Ta = -40°C to + 55°C; T5, Ta = - 40°C to + 70°C; and T4, Ta = - 40°C to + 85°C. Enclosure Type 4X.

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

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

- Temperature Transmitter Series 662, input rated 40Vdc max., 4-20mA, Non-Incendive when installed with certified non-incendive associated apparatus meeting entity Ui/Vmax = 40Vdc, Ci = 5.3nF, Li = 0µH per Dwg M009201. Temperature codes: T6, Ta = - 40°C to + 55°C, T5, Ta = - 40°C to + 70°C and T4, Ta = - 40°C to + 85°C. Enclosure Type 4X.

- Temperature Transmitter Series 662, input rated 35Vdc max., 12mA, Non-Incendive when installed with certified non-incendive associated apparatus meeting entity Ui/Vmax = 35Vdc, Ci = 5nF, Li = 10µH per Dwg

M009201. Temperature codes: T6, Ta = - 40°C to + 55°C, T5, Ta = - 40°C to + 70°C and T4, Ta = - 40°C to + 85°C. Enclosure Type 4X.

APPLICABLE REQUIREMENTS

CAN/CSA-C22-2 No. 0-M91 (R2001)	-	General Requirements - Canadian Electrical Code, Part II
CAN/CSA-C22.2 No. 25-1966 (R2004)	-	Enclosures for use in Class II, Groups E, F, G Hazardous Locations.
CSA Std C22.2 No. 30-M1986 (R1992)	-	Explosion-Proof Enclosure for use in Class I Hazardous Locations
CAN/CSA-C22.2 No. 94-M91 (R2006)	-	Special Purpose Enclosures
CAN/CSA-C22.2 No. 142-M1987 (R2004)	-	Process Control Equipment (Industrial Products)
CAN/CSA-C22.2 No. 157-92 (R2006)	-	Intrinsically Safe and Non-Incendive Equipment for Use in Hazardous Locations
CSA Std. C22.2 No. 213-M1987 (R1999)	-	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA-C22.2 No. 61010-1-04	-	Safety Requirements for Electrical Equipment for Measurement, Control and Laboratory use – Part 1 : General Requirements
CAN/CSA-E60079-0-02	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 0: General Requirements CAN/CSA-E79-0-02 - Electrical apparatus for explosive gas atmospheres – General Requirements
CAN/CSA-E79-1-02	-	Electrical apparatus for explosive gas atmospheres – Construction and Verification test of flameproof enclosures of electrical apparatus
CAN/CSA-E60079-11-02	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 11: Intrinsic Safety "i"
CAN/CSA-E60079-15-02	-	Electrical Apparatus for Explosive Gas Atmospheres - Part 15: Type of Protection "n"
CAN/CSA-C22.2 No. 60529:05	-	Degrees of protection provided by enclosure (IP Code)

MARKINGS

Explosion-proof:

The following information appears on a nameplate:

- Company's name, trademark or the CSA file number adjacent to the CSA mark: Pyromation Incorporated - Catalogue, Model, or series designation;
- Month and year of manufacturer, date code or serial number;
- Permissible ambient temperatures;

- Temperature codes;
- Hazardous Location designations;
- Rated Electrical Parameters;
- The statement, DO NOT REMOVE COVER WHEN CIRCUITS ARE ALIVE, appeared on the display cover;
- The statement, SEAL ALL CONDUITS WITHIN 18 INCH.

Method of Markings:

Nameplate: SS304 0r Almg 1 (Mg < 0.6%) plate, with laser printing. The nameplate is screwed on at the side of the transmitter enclosure.

Intrinsically Safe:

SPECIAL CONDITIONS FOR SAFE USE

The equipment shall installed be in accordance with Control Drawing Nos. M009201 & M009301

MARKINGS

Refer to Descriptive Documents nameplate Drawings No. M008801, M008802, M008803.

METHOD OF MARKING: SS 304 or ALMg1 (Mg < 0,6 %) plate, with laser printing. Label is screwed on at the side of the transmitter enclosure.