

# **Certificate of Compliance**

**Certificate:** 1289782 (28549) **Master Contract:** 152564

Project: 70027781 Date Issued: September 23, 2015

**Issued to:** Moore Industries - International,

Inc.

16650 Schoenborn St

North Hills, CA 91343-6196

**USA** 

**Attention: Christine Whan** 

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.



David Wood

**Issued by:** David Wood

#### **PRODUCTS**

CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - - For

Hazardous Locations - Certified to US Standards

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe, Entity - For

**Hazardous Locations** 

CLASS 2258 82 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations -

Certified to US Standards

CLASS 2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

2258 02 - PROCESS CONTROL EQUIPMENT - For Hazardous Locations

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

Class I, Div 1, Groups A, B, C & D; Class II, Div 1 & 2, Groups E, F, & G; Class III; Div 1 & 2; T5 @ 55°C, T4A @ 70°C and T4 @85°C.

Ex d IIC; T5 @ 55°C, T4 @ 70°C and T4 @85°C.

Zone 1, AEx d IIC; T5 @ 55°C, T4 @ 70°C and T4 @85°C.

Class I, Division 2 Groups A, B, C, & D;



**Certificate:** 1289782 (28549) **Master Contract:** 152564

Project: 70027781 Date Issued: September 23, 2015

Ex nA IIC T4/T5/T6

Zone 2, AEx nA IIC T4/T5/T6

Current to Pressure Transmitter model IPX2 with Instrument Air input. Inputs rated at 4-20 mA, 4-12mA, 12-20mA, 30Vdc(max). Outputs rated at up to 30psig. Enclosure is rated at Type 3X and IP56. Temperature Codes: T6 @ 55°C, T5 @ 70°C and T4 @85°C. Ambient Temperature Range: -40°C to 85°C. Maximum supply pressure 40psig.

Current to Pressure Transmitter model IPX2-NG with Natural Gas input. Input rated at 4-20 mA, 4-12mA, 12-20mA, 30Vdc(max). Outputs rated at up to 30psig. Enclosure is rated at Type 4X and IP66. Temperature Codes: T6 @ 55°C, T5 @ 70°C and T4 @85°C. Ambient Temperature Range: -40°C to 85°C. Maximum supply pressure 40psig.

#### **NOTES:**

- To be supplied by Class 2 or SELV Limited Circuit as defined by CAN/CSA # 1010.1 Annexes F.2.1 and H
- "Model ÎPX2-NĞ is suitable for use in Class I Division 2 or Zone 2 Hazardous 'Classified' Areas only when adhering to the special conditions-of-use stated in Moore Industries' Technical Descriptive Notice (User's Manual); document control number 170-755-00 or 170-775-00.

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

# 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - Certified to US Standards

Class I, Div 1 & 2, Groups A, B, C, & D; Class II, Div 1 & 2, Groups E, F, & G; Class III; Div 1 & 2; Ex ia IIC T4/T5/T6; Zone 0, AEx ia IIC T4/T5/T6

Current to Pressure Transmitter model IPX2-NG with Natural Gas input. Input rated at 4-20 mA, 4-12mA, 12-20mA, 30Vdc(max). Outputs rated at up to 30psig. Enclosure is rated at Type 4X and IP66. Temperature Codes: T6 @ 55°C, T5 @ 70°C and T4 @85°C. Ambient Temperature Range: -40°C to 85°C. Maximum supply pressure 40psig.

Intrinsically Safe with the following Entity parameters when installed as per drawing 100-100-78

Vmax, Ui = 30 Vdc Imax, Ii = 110 mA Pmax, Pi = 0.825 W Ci = 720pF Li = 5.12mH

#### NOTES

• To be supplied by Class 2 or SELV Limited Circuit as defined by CAN/CSA # 1010.1 Annexes F.2.1 and H



**Certificate:** 1289782 (28549) **Master Contract:** 152564

**Project:** 70027781 **Date Issued:** September 23, 2015

• "Model IPX2-NG is suitable for use in Class I Division 2 or Zone 2 Hazardous 'Classified' Areas only when adhering to the special conditions-of-use stated in Moore Industries' Technical Descriptive Notice (User's Manual); document control number 170-755-00 or 170-775-00.

Class I, Div 1 & 2, Groups A, B, C, & D; Class II, Div 1 & 2, Groups E, F, & G; Class III; Div 1 & 2; Ex ia IIC T4/T5/T6

Zone 0, AEx ia IIC T4/T5/T6

Current to Pressure Transmitter model IPX2 with Instrument Air input. Inputs rated at 4-20 mA, 4-12mA, 12-20mA, 30Vdc(max). Outputs rated at up to 30psig. Enclosure is rated at Type 3X and IP66. Temperature Codes: T6 @ 55°C, T5 @ 70°C and T4 @85°C. Ambient Temperature Range: -40°C to 85°C. Maximum supply pressure 40psig.

Intrinsically Safe with the following Entity parameters when installed as per drawing 100-100-78

Vmax, Ui = 30 Vdc Imax, Ii = 110 mA Pmax, Pi = 0.825 W Ci = 720pF Li = 5.12mH

NOTE:

To be supplied by Class 2 / SELV Limited Circuit as defined by CAN/CSA # 1010.1 Annexes F.2.1 and H

#### APPLICABLE REQUIREMENTS

- C22.2 No 0-M10 General Requirements Canadian Electrical Code, Part II
- C22.2 No 0.4-M04 Bonding of Electrical Equipment (Protective Grounding)
- C22.2 No. 0.5-1982 Threaded Conduit Entries
- C22.2 No. 30-M1986 Explosion-Proof Enclosures for use in Class I Hazardous Locations Industrial Products
- C22.2 No. 45-M1981 (R1999) Rigid Metal Conduit
- C22.2 No 94-M91 (R2001) Special Purpose Enclosures
- C22.2 No. 157-92 Intrinsically Safe and Non-Incendive Equipment for use in Hazardous Locations
- C22.2 No. 213-M1987 (R1992) Non-Incendive Electrical Equipment for use in Class I Division 2 Hazardous Locations
- C22.2 No. 60079-0-07 Electrical apparatus for explosive gas atmospheres Part 0: General Requirements
- C22.2 No. 60079-1-07 Electrical apparatus for explosive gas atmospheres Part 1: Flameproof Enclosures "d"
- C22.2 No. 60079-11-02 Electrical apparatus for explosive gas atmospheres Part 11: Intrinsic safety "i"
- C22.2 No. 60079-15-02 Electrical apparatus for explosive gas atmospheres Part 15: Electrical apparatus with type of protection "n"



**Certificate:** 1289782 (28549) **Master Contract:** 152564

**Project:** 70027781 **Date Issued:** September 23, 2015

CAN/CSA-E79-18-95(as a guide) Electrical apparatus for explosive gas atmospheres – Part 18: Encapsulation "m"

C22.2 No. 61010-1-12 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

ANSI/ISA No 61010-1-12 - Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use, Part 1: General Requirements

T.I.L. No I -29 - Additional Requirements For Process Control Equipment Certified to CSA Standard CAN/CSA C22.2 No 1010.1-92

FM 3600:2011 - Electrical Equipment for use in Hazardous (Classified) Locations.

FM 3615:2006 - Explosionproof Electrical Equipment General Requirements

FM 3610:2010 - Intrinsically Safe Apparatus and Associated Apparatus for Use in Class I, II, III, Division 1 and Class I, Zone 0 & 1 Hazardous (Classified) Locations.

FM 3611:2004 - Non Incendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Division 1 and 2, Hazardous (Classified) Locations

ANSI/NEMA 250:1991 - Enclosures for Electrical Equipment (1000 Volts maximum)



# Supplement to Certificate of Compliance

Certificate: 1289782 Master Contract: 152564

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
70027781	Sep 23, 2015	Update of Report 1289782 to include drawing updates and to include introduction of alternate O-ring material. Introduction of alternate Gasket/O-ring material (Buna), update replace Descriptive Documents Table 1 and update "ia" standards.
2613199	May 16, 2013	Update of Report 1289782 to include new flame arresters for IPX2 explosion proof enclosure to Class I, Division 1, Groups A, B, C and D and Ex d IIC, Zone 1 AEx d IIC.
2599105	Feb 15, 2013	Update of Report 1289782 to include Explosion proof IPX2 enclosure to Class I, Div 1, Groups Cand D; Ex d IIB
2515754	Jul 20, 2012	Update of Report 1289782 to include the removal of all explosion-proof/flame proof methods of protection to the models stated in this Report 1289782, pending further investigation.
2445941 1548344	Dec 19, 2011 Apr 28, 2004	Update of Report 1289782 to include CSAus based on FM Reports. Update to 128972 to cover change in T-Code, Entity Parameters and the addition of the solid cover option

# History

1289782 August 30, 2002 Original Certification of models IPX2 and IPX2-NG Current to Pressure Transmitters.

1362232 October 22, 2002 Update to 1289782 to include additional testing on conduit fitting as per CIR # 2002EE13.

1447946 June 06, 2003 Update to 1289782 to include minor changes to illustration and the alteration of condition pertaining to model IPX2-NG within a Class I, Division 2 Locations.