



Certificate of Compliance

Certificate: 2552006 **Master Contract:** 151079 (053988_C_000)

Project: 70138481 **Date Issued:** 2017-07-17

Issued to: Endress + Hauser GmbH + Co. KG
Hauptstrasse 1
Maulburg, Baden-Württemberg 79690
GERMANY
Attention: Steve Czaniecki

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: Sorin Tat
Sorin Tat

PRODUCTS

- CLASS 2258 03** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations
- CLASS 2258 83** - PROCESS CONTROL EQUIPMENT - Intrinsically Safe and Non-Incendive Systems - For Hazardous Locations– Certified to U.S. Standards

Ex d [ia Ga] IIC T6/T4 Gb:
Class I, Zone 1; AEx d [ia Ga] IIC T6/T4 Gb:
Class I, Division 1, Groups A, B, C and D:

• Deltabar, Types FMD71-CB... and FMD72-CB..., Differential Pressure Transmitters, rated 45Vdc max, 20mA; CSA Enclosure type 4X/6P; temp code T6 (Ta ≤ 40°C) or T4 (Ta ≤ 70°C); transmitter housing is explosionproof/Ex d and provides intrinsically safe connections for remote sensor modules per installation drawings XA00631P (for FMD71) or XA00627P (for FMD72); MWP 580 psi (40 bars); Single Seal device for process temperature of -40°C to +125°C (FMD71) or +100°C (FMD72); Type designation may be followed by additional suffixes to denote options for Certification, output, housing, pressure range, calibration, cable length, process connection, seal material.

Ex ia IIC T6/T4 Ga:
Class I, Zone 0; AEx ia IIC T6/T4 Ga:



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Class I, Div. 1, Groups A, B, C and D:

• Deltabar, Types FMD71-CA... and FMD72-CA..., Differential Pressure Transmitters, rated 45Vdc max, 20mA; CSA Enclosure type 4X/6P; temp code T6 ($T_a \leq 40^\circ\text{C}$) or T4 ($T_a \leq 70^\circ\text{C}$); intrinsically safe per installation drawings XA00630P (for FMD71) or XA00626P (for FMD72); MWP 580 psi (40 bars); Single Seal device for process temperature of -40°C to $+125^\circ\text{C}$ (FMD71) or $+100^\circ\text{C}$ (FMD72); Type designation may be followed by additional suffixes to denote options for Certification, output, housing, pressure range, calibration, cable length, process connection, seal material.

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

• Deltabar, Types FMD71-CC... and FMD72-CC..., Differential Pressure Transmitters, rated 45Vdc max, 20mA; CSA Enclosure type 4X/6P; temp code T6 ($T_a \leq 50^\circ\text{C}$) or T5 ($T_a \leq 70^\circ\text{C}$); transmitter housing is suitable for installation in Class I, Division 2 hazardous locations and provides non-incendive field wiring connections for remote sensor modules per installation drawings XA00670P (for FMD71) or XA00671P (for FMD72); MWP 580 psi; Single Seal device for process temperature of -40°C to $+125^\circ\text{C}$ (FMD71) or $+100^\circ\text{C}$ (FMD72); Type designation may be followed by additional suffixes to denote options for output, housing, pressure range, calibration, cable length, process connection, seal material.

CLASS 2258 04 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations
CLASS 2258 84 - PROCESS CONTROL EQUIPMENT - Intrinsically Safe Entity - For Hazardous Locations - Certified to U.S. Standards

Ex ia IIC T6/T4 Ga:

Class I, Zone 0; AEx ia IIC T6/T4 Ga:

Class I, Div. 1, Groups A, B, C and D:

• Deltabar, Types FMD71-CA... and FMD72-CA..., Differential Pressure Transmitters, rated 45Vdc max, 20mA; CSA Enclosure type 4X/6P; temp code T6 ($T_a \leq 40^\circ\text{C}$) or T4 ($T_a \leq 70^\circ\text{C}$); intrinsically safe with entity parameters per installation drawings XA00630P (for FMD71) or XA00626P (for FMD72); MWP 580 psi (40 bars); Single Seal device for process temperature of -40°C to $+125^\circ\text{C}$ (FMD71) or $+100^\circ\text{C}$ (FMD72); Type designation may be followed by additional suffixes to denote options for Certification, output, housing, pressure range, calibration, cable length, process connection, seal material.

CLASS 2252 06 - PROCESS CONTROL EQUIPMENT
CLASS 2252 86 - PROCESS CONTROL EQUIPMENT (Certified to U.S. Standards)

• Deltabar, Types FMD71-CD... and FMD72-CD..., Differential Pressure Transmitters, rated 45Vdc max, 20mA; CSA Enclosure type 4X/6P; Type designation may be followed by additional suffixes to denote options for Certification, output, housing, pressure range, calibration, cable length, process connection, seal material.

APPLICABLE REQUIREMENTS

CAN/CSA C22.2 No. 0-10

General Requirements - Canadian Electrical Code, Part II



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C22.2 No. 30-M1986 (R2007)	Explosion-Proof Enclosures for Use in Class I Hazardous Locations
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 (R2008)	Non-Incendive Electrical Equipment for Use in Class I, Division 2 Hazardous Locations
CAN/CSA C22.2 No. 61010-1-12	Safety Requirements for Electrical Equipment for Measurement, Control, and Laboratory Use - Part 1: General Requirements - Second Edition
CAN/CSA C22.2 No. 60079-0:15	Explosive Atmospheres - Part 0: Equipment – General Requirements
CAN/CSA C22.2 No. 60079-1:11	Explosive Atmospheres - Part 11: Equipment protection by flameproof "d"
CAN/CSA C22.2 No. 60079-11:14	Explosive Atmospheres - Part 11: Equipment protection by intrinsic safety "i"
FMRC 3600 – 2011	Electrical Equipment for Use in Hazardous (Classified) Locations, General Requirements
FMRC3610 – 2010	Intrinsically Safe Apparatus for Use in Class I, II & III, Division 1, and Class I, Zone 0 & 1 Hazardous (Classified) Locations
FMRC3611- 2004	Nonincendive Electrical Equipment for Use in Class I and Class II, Division 2, and Class III, Division 1 and 2 Hazardous (Classified) Locations
FMRC 3615 – 2006	Explosionproof Electrical Equipment, General Requirements
FMRC 3810 – 2005	Electrical and Electronic Test, Measuring, and Process Control Equipment
ANSI/ISA 60079-0 (12.00.01) -2013	Explosive atmospheres – Part 0: Equipment - General Requirements
ANSI/ISA 60079-1 (12.22.01) -2009	Explosive Atmospheres - Part 1: Equipment Protection by Flameproof Enclosures "d"
ANSI/ISA 60079-11 (12.02.01) -2014	Explosive Atmospheres - Part 11: Equipment Protection by intrinsic safety "i"
ANSI/NEMA 250 - 1991	Enclosures for Electrical Equipment
ANSI/ISA–12.27.01–2011	Requirements for Process Sealing Between Electrical Systems and Flammable or Combustible Process Fluids



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
70138481	2017-07-17	Update CSA report 2552006 to include; new CARMEN sensor module, new display model, drawing updates to include new order codes ,minor mechanical changes and update of Ordinary location standard to CSA C22.2 No.61010-1-12 (Ed. 3)
70006719	2014-10-02	Update to assess minor changes to the HART circuitry, add alternate terminal blocks and include a new HT hygienic ceramic sensor module.
2552006	2012-09-19	Original certification of Deltabar FMD 71/72 Differential Pressure Transmitters based on successful review of client submitted IECEx report.