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CERTIFICATE OF COMPLIANCE

HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

DR2000 C/F Measuring Instrument
Models: DR20004abcdefghijklmnopqrs or DR20009abcdefghijklmnopqrs

IS / I, II, III / 1 / A, B, C, D, E, F, G / T* - APPR F0821010241, Entity, -40°C < Ta < +80°C;
 I / 0, 1 / Ex ia / IIC / T* - APPR F0821010241, Entity, -40°C < Ta < +80°C;
 DIP / II, III / 1 / E, F, G / T* - APPR F0821010241, -40°C < Ta < +80°C;
 XP-AIS / I / 1 / B, C, D / T* - APPR F0821010241, -40°C < Ta < +80°C;
 I / 0, 1 / Ex d [ia] / IIC / T* - APPR F0821010241, -40°C < Ta < +80°C;
 NI / I / 2 / A, B, C, D / T* - APPR F0821010241, -40°C < Ta < +80°C;
 I / 2 / Ex nA / IIC / T* - APPR F0821010241, -40°C < Ta < +80°C;
 Type 4X (enclosure) and 6P (probe); IP66/67; Dual Seal or Single Seal as applicable.

4-20mA/HART version:
 IS: Ui ≤ 30Vdc; li ≤ 300mA; Pi ≤ 1W; Ci = 30nF; Li = 30µH
 XP & NI: Ui ≤ 36Vdc; Um = 250Vac
 Outputs for the remote: Uo ≤ 6.6Vdc; Io ≤ 1.36A; Po ≤ 1.02W; Co = 2.7µF; Lo = 65µH

- a= Converter/Version (housing material) 0, 1, 2, 3, 4 or 5.
- b= Approval A, B or C.
- c= Other approval (one digit, not safety relevant).
- d= Pressure/Temperature/Sealing 0, 1, 2, 3, 6, 7, 8, C, D, E, H, K or L.
- e= Material/Probe 0, 1, 2, 3, 4, 6, 7, A, B, D, E, G, K or L.
- f= Material/Probe end type (one digit, not safety relevant).
- g= Process connection size 0, C, D, E, F, G, H, K, L, M, N, P or R.
- h= Process connection pressure class 0, 1, 2, A, B, D, E, F, G, H, K, P, U, V or W.
- i= Process connection sealing face/sanitary 0, 1, 3, 4, 5, 6, A, B or P.
- j= Output 0 or 1.
- k= Cable entry/Cable gland 0, 1, 2, 3, 4, A or B.
- l= Housing option/Display 0, 1, 2, 3, 4, A, B, C, D, E or F.
- m= Display language/Instruction manual (one digit, not safety relevant).
- n= Version 1.
- o= Option 0.
- p= Module option 0, 6, 7, 8, A or B.

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q= Adaptors 0, 1, 2 or 3.
r= Calibration certificate (one digit, not safety relevant).
s= Drawing/TAG Number (one digit, not safety relevant).

DR5200 C/F Measuring Instrument
DR52004abcdefghijklmnpqrst or DR52009abcdefghijklmnpqrst

IS / I, II, III / 1 / A, B, C, D, E, F, G / T* - APPR F0821010251, Entity, -40°C < Ta < +80°C;
I / 0, 1 / Ex ia / IIC / T* - APPR F0821010251, Entity, -40°C < Ta < +80°C;
DIP / II, III / 1 / E, F, G / T* - APPR F0821010251, -40°C < Ta < +80°C;
XP-AIS / I / 1 / B, C, D / T* - APPR F0821010251, -40°C < Ta < +80°C;
I / 0, 1 / Ex d [ia] / IIC / T* - APPR F0821010251, -40°C < Ta < +80°C;
NI / I / 2 / A, B, C, D / T* - APPR F0821010251, -40°C < Ta < +80°C;
I / 2 / Ex nA / IIC / T* - APPR F0821010251, -40°C < Ta < +80°C;
Type 4X (enclosure) and 6P (antenna); IP66/67; Dual Seal or Single Seal as applicable.

4-20mA/HART version:

IS: $U_i \leq 30\text{Vdc}$; $I_i \leq 300\text{mA}$; $P_i \leq 1\text{W}$; $C_i = 30\text{nF}$; $L_i = 30\mu\text{H}$

XP & NI: $U_i \leq 36\text{Vdc}$; $U_m = 250\text{Vac}$

Outputs for the remote: $U_o \leq 6.6\text{Vdc}$; $I_o \leq 1.36\text{A}$; $P_o \leq 1.02\text{W}$; $C_o = 2.7\mu\text{F}$; $L_o = 65\mu\text{H}$

a= Converter/Version (housing material) 0, 1, 2, 3, 4 or 5.
b= Approval A, B or C.
c= Other approval (one digit, not safety relevant).
d= Pressure/Temperature/Sealing 0, 1, 5, 6, A, D, K, R or T.
e= Material/Antenna 0, 1, 2, 3, 4, G, H, L, M, N, P, R, S, T, U, V, W or X.
f= Material/Antenna extension 0, 5, 6, 7, E, F, G, H, K, R, W or X.
g= Process connection size 0, G, H, K, L, M, N, P or R.
h= Process connection pressure class 0, 1, 2, A, D, E, F, G, H, K, P or U.
i= Process connection sealing face/sanitary 0, 1, 2, 3, 4, 5, 6, A, B or P.
j= Output 0 or 1.
k= Cable entry/Cable gland 0, 1, 2, 3, 4, A or B.
l= Housing option/Display 0, 1, 2, 3, 4, A, B, C, D, E or F.
m= Display language/Instruction manual (one digit, not safety relevant).
n= Version 1.
o= Module option 0.
p= Remote option 0, 6, 7, 8, A or B.
q= Adaptors 0 or 1.
r= Calibration certificate (one digit, not safety relevant).
s= Drawing/TAG Number (one digit, not safety relevant).
t= Special option 0, 3 or 5.

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Equipment Ratings:

Intrinsically safe for Class I, II & III, Division 1, Group A, B, C, D, E, F & G, T* $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$; alternatively intrinsically safe for Class I, Zone 0, 1, Group IIC T* $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$ in accordance with entity requirements when installed per Installation Drawing APPR F0821010241 (DR2000) or APPR F0821010251 (DR5200)

Nonincendive for Class I, Division 2, Group A, B, C & D, T* $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$; alternatively for Class I, Zone 2, Group IIC T* $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$; per installation Drawing APPR F0821010241 (DR2000) or APPR F0821010251 (DR5200)

Explosionproof with intrinsically safe outputs for Class I, Division 1, Groups B, C and D, T*, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$ alternatively Class I, Zone 1, Group IIC T* $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$ per installation Drawing APPR F0821010241 (DR2000) or APPR F0821010251 (DR5200); and

Dust-ignitionproof for use in Class II/III, Division 1, Groups E, F and G, for hazardous (classified) locations, indoors and outdoors (Type 4X/6P/IP66/IP67), with T* rating for an ambient temperature range of -40°C to $+80^{\circ}\text{C}$ with Dual Seal or Single Seal as applicable, hazardous outdoor locations.

FM Approved for:

Ametek Derexlbrook
Horsham, PA 19044, USA

To verify the availability of the Approved product, please refer to www.approvalguide.com



This certifies that the equipment described has been found to comply with the following Approval Standards and other documents:

CAN/CSA C22.2 No. 0-M91	2006
CSA-C22.2 No. 0.4-04	2004
CSA-C22.2 No. 0.4-05	1982(R2008)
CSA-C22.2 No. 25	1966(R2009)
CSA-C22.2 No. 30	1987(R2009)
CSA-C22.2 No. 94-M91	1991(R2006)
CSA-C22.2 No. 1010.1	July 2004
CAN/CSA C22.2 No. 142-M1987	1987(R2009)
CAN/CSA C22.2 No. 213-M1987	1987(2012)
CAN/CSA C22.2 No. 157-92	1992(R2012)
CAN/CSA C22.2 No. 60079-0	2002(R2011)
CAN/CSA C22.2 No. 60079-1	2011
CAN/CSA C22.2 No. 60079-11	2002(R2011)
CAN/CSA C22.2 No. 60079-15	2012
CAN/CSA C22.2 No. 60529	2005
ANSI/ISA 12.27-01	2003

Original Project ID: 3050707

Approval Granted: *October 25, 2013*

Subsequent Revision Reports / Date Approval Amended

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FM Approvals LLC

J. E. Marquedant

 J. E. Marquedant
 Group Manager, Electrical

25 October 2013

 Date

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