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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

DR2000 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 / AEx 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;
 20, 21, 22 / AEx ia / IIC / T90°C - APPR F0821010241, Entity, -40°C < Ta < +80°C;
 XP-AIS / I / 1 / A, B, C, D / T* - APPR F0821010241, -40°C < Ta < +80°C;
 I / 0, 1 / AEx d [ia] / IIC / T* - APPR F0821010241, -40°C < Ta < +80°C;
 20, 21, 22 / AEx tb [ia] / IIC / T90°C, -40°C < Ta < +80°C (for US only);
 NI / I / 2 / A, B, C, D / T* - APPR F0821010241, -40°C < Ta < +80°C;
 I / 2 / AEx 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.

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



o= Option 0.
 p= Module option 0, 6, 7, 8, A or B.
 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 Measuring Instrument

DR52004abcdefghijklmnopqrst or DR52009abcdefghijklmnopqrst

IS / I, II, III / 1 / A, B, C, D, E, F, G / T* - APPR F0821010251, Entity, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 I / 0, 1 / AEx ia / IIC / T* - APPR F0821010251, Entity, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 DIP / II, III / 1 / E, F, G / T* - APPR F0821010251, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 20, 21, 22 / AEx ia / IIC / T90°C - APPR F0821010251, Entity, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 XP-AIS / I / 1 / A, B, C, D / T* - APPR F0821010251, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 I / 0, 1 / AEx d [ia] / IIC / T* - APPR F0821010251, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 20, 21, 22 / AEx tb [ia] / IIC / T90°C, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$ (for US only);
 NI / I / 2 / A, B, C, D / T* - APPR F0821010251, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 I / 2 / AEx nA / IIC / T* - APPR F0821010251, $-40^{\circ}\text{C} < \text{Ta} < +80^{\circ}\text{C}$;
 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°C < Ta < +80°C; alternatively intrinsically safe for Class I, Zone 0, 1, Group IIC T* -40°C < Ta < +80°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°C < Ta < +80°C; alternatively for Class I, Zone 2, Group IIC T* -40°C < Ta < +80°C; per installation Drawing APPR F0821010241 (DR2000) or APPR F0821010251 (DR5200)

Explosionproof with intrinsically safe outputs for Class I, Division 1, Groups A, B, C and D, T*, -40°C < Ta < +80°C alternatively Class I, Zone 1, Group IIC T* -40°C < Ta < +80°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, alternatively Class II & III, Zone 20, 21, 22, Group IIIC T90C 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°C with Dual Seal or Single Seal as applicable

FM Approved for:

Ametek Drexelbrook
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:

Class 3600	2011
Class 3610	2010
Class 3611	2004
Class 3615	2006
Class 3616	2011
Class 3810	2005
ANSI/ISA 60079-0	2009
ANSI/ISA 60079-1	2009
ANSI/ISA 60079-11	2011
ANSI/ISA 60079-15	2009
ANSI/ISA 60079-31	2009
ANSI/ISA 12.27-01	2003
ANSI/IEC 60529	2004
ANSI/NEMA 250	2008
ANSI/ISA 61010-1(82.02.01)	2004

Original Project ID: 3050707

Approval Granted: *October 25, 2013*

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
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FM Approvals LLC

J. E. Marquardt

 J. E. Marquardt
 Group Manager, Electrical

25 October 2013

 Date

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