

<b>420-0004-331</b>		Sht. of	1 3	APP'D BY SGA
ISSUE	EDO NO.	APP'D	DATE	
1	2-06-212	<i>SGA</i>	2-6-06	



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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

**Model USR-ab1c-0def-0ghi. USonic R Series Receiver**

AIS / I,II,III / 1 / ABCDEFG / T4 Ta = 70 °C; - 420-0004-309-CD Entity; Type 4, 4X, IP65  
 I / 0 / Ex [ja] IIC / T4 Ta = 70 °C; - 420-0004-309-CD Entity; Type 4, 4X, IP65  
 NE / 1 / 2 / ABCD;DIP / II,III / 2 / EFG / T4 Ta = 70 °C; Type 4, 4X, IP65  
 I / 2 / IIC / T4 Ta = 70 °C; - 420-0004-309-CD Entity; Type 4, 4X, IP65

Entity Parameters:

Output Entity Parameters:

Uo (Voc) = 25.9 V, Io (Isc) = 69.5 mA, Po = 0.45 W, Co (Ca) = 100 nF, Lo (La) = 7.4 mH  
 Vt = 25.9 V, It = 139 mA, Po = 0.9 W, Ca = 100 nF, La = 1.8 mH

- a = Power: 1, 2.
- b = Output: 1, 2.
- c = Sensor: 0, 1, 2, 3, 4.
- d = Cable Length: 0, 1, 2, 3.
- e = Cable Length: 0, 2, 5.
- f = Cable Length: 0, 5.
- g = Cable Length: 0, 1, 2, 3.
- h = Cable Length: 0, 2, 5.
- i = Cable Length: 0, 5.

**Model USS-1a-0cde. USonic USS Series Sensor**

IS / I,II,III / 1 / ABCDEFG / T4 Ta = 70 °C; - 420-0004-309-CD Entity; Type 4, 4X, IP68  
 I / 0 / Ex ia IIC / T4 Ta = 70 °C; - 420-0004-309-CD Entity; Type 4, 4X, IP68  
 NE / 1 / 2 / ABCD;DIP / II,III / 2 / EFG / T4 Ta = 70 °C; Type 4, 4X, IP68  
 I / 2 / IIC / T4 Ta = 70 °C; - 420-0004-309-CD Entity; Type 4, 4X, IP68

Entity Parameters:

Ui (Vmax) = 30 V, Ii (Imax) = 150 mA, Pi = 1 W, Ci = 0, Li = 0

where

- a = Mounting: 1, 2.
- c = Cable Length: 0, 1, 2, 3.
- d = Cable Length: 0, 2, 5.
- e = Cable Length: 0, 5.

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**Equipment Ratings:**

Intrinsically Safe for Class I, II, and III, Division 1, Groups A-G; intrinsically safe for Class I, Zone 0, Group IIC hazardous (classified) locations; suitable for Class I, II, and III, Division 2, Groups A - G; and suitable for Class I, Zone 2, Group IIC.

**FM Approved for:**

Ametek Drexelbrook  
Horsham, PA 19044



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

C22.2 No. 213	1987
C22.2 No. 142	1987
C22.2 No. 94	1991
C22.2 No. 157	1992
CAN/CSA-E79-0-02	
CAN/CSA-E79-11-02	
ANSI/NEMA 250	1991
IEC 60529	1999-11

Original Project ID: 3024155


Approval Granted: October 26, 2005

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
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FM Approvals LLC

  
 \_\_\_\_\_  
 Robert L. Martell  
 Assistant Vice President

  
 \_\_\_\_\_  
 Date