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# CERTIFICATE OF COMPLIANCE

## HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

### **355-5a0b-1cR Echotel Ultrasonic Thru-Air Transmitter**

IS/I /1/ABCD/T4 Ta = 80°C; 99-5067; Entity; Type 4X; IP66

NI/I/2/ABCD/T4 Ta = 80°C; Type 4X; IP66

Entity Parameters: Vmax 28.6V, Imax = 140 mA, Pmax = 1.0W, Ci = 5.5nF, Li = 9.4uH.

a = Signal 0 = 4-20 mA without HART or 1 = 4-20 mA with HART

b = Accessories A = display and keypad or 0= none

c = Housing and conduit connection 0, 1, 2, 3

### **355-5a0b-1cd Echotel Ultrasonic Thru-Air Transmitter**

IS/I /1/ABCD/T4 Ta = 80°C; 99-5067; Entity; IP67

NI/I/2/ABCD/T4 Ta = 80°C; IP67

Entity Parameters: Vmax 28.6V, Imax = 140 mA, Pmax = 1.0W, Ci = 5.5nF, Li = 9.4uH..

a = Signal 0 = 4-20 mA without HART or 1 = 4-20 mA with HART

b = Accessories A = display and keypad or 0= none

c = Housing and conduit connection 0, 1, 2, 3, 6 or 7

d = Transducer B = Polypropylene or R = Kynar

#### Specific Conditions of Use:

1. Cable Glands if employed must be non-metallic.
2. Enclosure is end of line only and not for feed thru wiring.

### Equipment Ratings:

Intrinsically safe apparatus for use in Class I, Division 1 Groups A, B, C & D hazardous (classified) locations when connected per drawing 099-5067 with entity parameters: Vmax = 28.6 V, Imax = 140 mA, Pmax = 1.0 W, Ci = 5.5 nF, Li = 9.4 μH; T-class = T4 at 80°C ; Nonincendive Equipment for Class I, Division 2, Groups A, B, C & D hazardous (classified) locations T-class = T4 at 80°C ; The aluminum and stainless steel enclosures have an environmental rating of IP66 and Type 4X. The plastic enclosures have an environmental rating of IP67.



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**FM Approved for:**

**Magnetrol International, Inc.**  
5300 Belmont Road  
Downers Grove, IL 60515



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

Class 3600	1998
Class 3610	2007
Class 3611	2004
Class 3810	2005
ANSI/IEC 60529	2002
NEMA Pub. 250	2003

Original Project ID: 3033617

Approval Granted: *March 23, 2009*

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
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FM Approvals LLC

*J. E. Marquardt*  
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J. E. Marquardt  
Group Manager, Electrical

*23 March 2009*  
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Date