



FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT

This certificate is issued for the following equipment:

R82-5abA-0cd. Radar Transmitter.

IS/I /1/ABCD/T4 Ta = 80°C; 99-5070 Entity; Type 4X; IP66

NI//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 = Agency Approval 1 = NI; 2= IS/NI

b = Housing/ Conduit Connection – 0 or 1 Cast Aluminum

c = Antenna Type – 1 or 2 Polypropylene; 3 or 4 Tefzel

d = Process Connection – 1, 2, A, B, D, 2" NPT, 2" BSP, Triclover, Tuchenhagen connections

Special Conditions of Use:

1. Process temperature must not increase the temperature of the electronics above 80°C.

R82-5abA-0cd. Radar Transmitter.

IS/I /1/ABCD/T4 Ta = 80°C; 99-5070; Entity; IP67

NI//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 = Agency Approval 1 = NI; 2= IS/NI

b = Housing/ Conduit Connection –6 or 7 Lexan Plastic

c = Antenna Type – 1 or 2 Polypropylene; 3 or 4 Tefzel

d = Process Connection – 1, 2, A, B, D, 2" NPT, 2" BSP, Triclover, Tuchenhagen connections

Special Conditions of Use:

1. Process temperature must not increase the temperature of the electronics above 80°C.
2. Cable glands, if employed, must be non-metallic.
3. Enclosure is end of line only and not for feed through wiring.



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Equipment Ratings:

Intrinsically safe apparatus for use in Class I, Division 1 Groups A, B, C & D hazardous (classified) locations when connected per drawing 099-5070 with entity parameters: $V_{max} = 28.6$ V, $I_{max} = 140$ mA, $P_{max} = 1.0$ W, $C_i = 5.5$ nF, $L_i = 9.4$ μ H; 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 enclosures have an environmental rating of IP66 and Type 4X. The plastic enclosures have an environmental rating of IP67.

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: 3034019

Approval Granted: *October 28, 2009*

Subsequent Revision Reports / Date Approval Amended

Report Number	Date	Report Number	Date
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FM Approvals LLC

J. E. Marquedant
Group Manager, Electrical

28 October 2009
Date