



Member of the FM Global Group

FM Approvals
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CERTIFICATE OF COMPLIANCE

HAZARDOUS LOCATION ELECTRICAL EQUIPMENT PER CANADIAN REQUIREMENTS

This certificate is issued for the following equipment:

Pulsar dB a Series of Ultrasonic Transducers.

IS / I,II, III / 1/ A, B, C, D, E, F, G / T4 Tamb = -40°C to +75°C; D-804-0532-D- Entity; Type 4X

Entity parameters

Ui = 30 V, li = 600 mA, Pi = 1.5 W, Ci = 0, Li = 0.

a = 6, 10, 15, 25, 40[nominal measuring distance in metres].

Pulsar dB a Series of Ultrasonic Transducers.

IPA/ I,II, III /1/ A, B, C, D, E, F, G / T4 Tamb = -40°C to +75°C; D-804-0532-D, Type 4X

a = 6, 10, 15, 25, 40 [nominal measuring distance in metres].

Special Conditions of Use:

1. The dB series Transducers are not suitable for use in the presence of Aliphatic Hydrocarbons Esters or Ketones.
2. The dB Series transducers shall be connected to a source that provides protection against a prospective short circuit current of at 1500A

Pulsar dB 3 Series of Ultrasonic Transducers.

IS / I,II,III / A, B, C, D, E, F, G / T4 Tamb = -40°C to +75°C; Entity; Type 4X

Entity parameters

Ui = 30 V, li = 600 mA, Pi = 1.5 W, Ci = 0, Li = 0.

Pulsar dB 3 Series of Ultrasonic Transducers.

IPA / I,II,III / A, B, C, D, E, F, G / T4 Tamb = -40°C to +75°C; Type 4X

Special Conditions of Use:

1. The dB series Transducers are not suitable for use in the presence Aliphatic Hydrocarbons Esters or Ketones.
2. The dB Series transducers shall be connected to a source that provides protection against a prospective short circuit current of at least 1500A.

Equipment Ratings:

Intrinsically Safe (Entity) for use in Class I, II and III, Divisions 1 and 2 Groups A, B, C, D, E, F and G indoor and outdoor Hazardous (Classified) Locations when connected in accordance with Control Drawing D-804-0532. Temperature Class T4 at an ambient of 75°C. Type 4X.

FM Approved for use in Class I, II and III, Division 1 and 2 Groups A, B, C, D, E, F and G indoor and outdoor Hazardous (Classified) Locations. Temperature Class T4 at an ambient of 75°C. Type 4X.

FM Approved for:

Pulsar Process Measurements Ltd.
Malvern, Worcestershire, United Kingdom

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

C22.2 No.142	1987
C22.2 No. 157-92	1992
C22.2 No.25	1966
ISA-S12.00.01	2002
ISA-S12.12.01	2003
C22.2 N0.94	1991

Original Project ID: 3028563

Approval Granted:

MAY 4, 2007

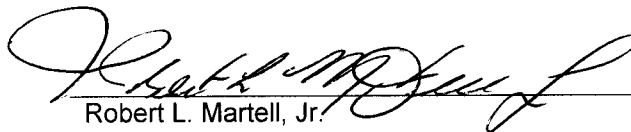
Subsequent Revision Reports / Date Approval Amended

Report Number Date

Report Number

Date

FM Approvals LLC



Robert L. Martell, Jr.
Assistant Vice President

MAY 4, 2007
Date