

CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**

2. **Certificate No:** FM19US0115X
3. **Equipment:** A-B-C. Connection Head.
(Type Reference and Name)

4. **Name of Listing Company:** Pyromation, Inc.

5. **Address of Listing Company:** 5211 Industrial Road
Fort Wayne, IN 46825
USA

6. The examination and test results are recorded in confidential report number:
3043144 dated 19th July 2011

7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2018, FM Class 3611:2018, FM Class 3810:2018,
ANSI/UL 121201: 2018, ANSI/NEMA 250: 2003,
ANSI/IEC 60529:2004, ANSI/ISA 61010:2012

8. If the sign 'X' is placed after the certificate number, it indicates that the equipment is subject to specific conditions of use specified in the schedule to this certificate.

9. This certificate relates to the design, examination and testing of the products specified herein. The FM Approvals surveillance audit program has further determined that the manufacturing processes and quality control procedures in place are satisfactory to manufacture the product as examined, tested and Approved.

10. Equipment Ratings:

Non-incendive for Class I, Division 2, Groups A, B, C and D; Class II, Division 2, Groups F and G; Class III; T6; Type 4X, IP66

Certificate issued by:



J.E. Marquedant
VP, Manager - Electrical Systems

8 January 2021

Date

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

THIS CERTIFICATE MAY ONLY BE REPRODUCED IN ITS ENTIRETY AND WITHOUT CHANGE

FM Approvals LLC. 1151 Boston-Providence Turnpike, Norwood, MA 02062 USA
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SCHEDULE

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11. The marking of the equipment shall include:

Class I Division 2, Groups A, B, C, D; T6, NIFW
Class II, Division 2, Groups F, G; Class III; T6, NIFW
Ta = -40°C to +50°C; Type 4X, IP66

12. **Description of Equipment:**

General - The Pyromation Models 31 (Aluminum), 34 (Cast Iron), and 91 (Stainless Steel) general purpose connection heads are used for indoor or outdoor installation in Class I, II, III, Division 2, Group A, B, C, D, F and G hazardous locations or nonhazardous locations only. The units are assembled with either graphite impregnated gasket or an optional o-ring. Each connection head is machined with a NPT process entry and a 3/4 inch NPT conduit entry. The units are assembled either with Pyromation 440, 441, 442 or T82 series transmitters or the 264-120, 342, 343-x, 210304, 21033x or 210412 series terminal blocks.

Ratings - The connection head Models 31, 34 and 91 are rated for:

Transmitter Series 440
Non-incendive Field wiring

Terminals	Vmax (V)	I _{max} (mA)	Pi (mW)	Ci (μF)	Li (mH)
1 and 2	30	100	750	144	0

Transmitter Series 441
Non-incendive Field wiring Parameters:

Terminals	Vmax (V)	I _{max} (mA)	Pi (mW)	Ci (μF)	Li (mH)
1 and 2	30	100	750	0	0
Terminals	Voc (V)	Isc (mA)	Po (mW)	Ca (nF)	La (mH)
3, 4, 5 and 6	8.2	4.5	9.36	974	4.5

Transmitter Series 442
Non-incendive Field wiring Parameters:

Terminals	Vmax (V)	I _{max} (mA)	Pi (mW)	Ci (μF)	Li (mH)
1 and 2	30	100	750	0	0
Terminals	Voc (V)	Isc (mA)	Po (mW)	Ca (μF)	La (mH)
3, 4, 5 and 6	6.0	2.5	3.75	40	100

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Transmitter Series T82

Nonincendive Field Wiring Parameters:

	Vmax (V)	Ci (nF)	Li (μ H)		
Terminals 1-2	30	0	0		
	Voc (V)	Isc (mA)	Po (mW)	Ca (μ F)	La (mH)
Terminals 3,4, 5, 6 & 7	7.6	13	24.7	10.4	236

A-B-C Connection Head (Enclosure Supplied with Transmitter)

A = one of: 31A, 31B, 31C, 31D, 31E, 31Q, 34C, 34D, 34E, 91C and 91D

B = D2 and none, one or more of: W (Only available on model 31); PS; GS; OR; HS; SB; I

C = one of: 440, 441, 442, T82

Example: 91D-D2-GS-OR-I-442 (description – 91D enclosure with D2 (blueprint drawing nameplate), GS (internal ground screw), OR (Buna-N O-ring), I (additional customer tag), and 442 = Series 442 transmitter)

A-B-C Connection Head (Enclosure Supplied with just a Terminal block)

A = one of: 31A, 31B, 31C, 31D, 31E, 31Q, 34C, 34D, 34E, 91C and 91D

B = D2 and none, one or more of: W (Only available on model 31); PS; GS; OR; HS; SB; I

C = one of: 264-120; 342; 343-2; 343-3; 343-4; 343-6; 210304; 210332; 210333; 210334; 210336; 210338; 210412

Example: 34C-D2-OR-343-3 (description – 34C enclosure, with D2 (blueprint drawing nameplate), OR (Buna-N O-ring), and 343-3 terminal block)

13. Specific Conditions of Use:

A-B-C Connection Head (Enclosure Supplied with Transmitter)

None

A-B-C Connection Head (Enclosure Supplied with just a Terminal block)

1. The maximum Surface Temperature of the component enclosure is -25°C to 80°C
2. The input power to the enclosure is limited by Vmax = 30V, Imax = 24mA and Pmax = 720mW.

14. Test and Assessment Procedure and Conditions:

This Certificate has been issued in accordance with FM Approvals US Certification Requirements.

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15. Schedule Drawings

A copy of the technical documentation has been kept by FM Approvals.

16. Certificate History

Details of the supplements to this certificate are described below:

Date	Description
19 th July 2011	Original Issue.
8 th July 2019	<u>Supplement 2:</u> Report Reference: – RR219227 dated 8 th July 2019. Description of the Change: Removed Option C = 341 Single Terminal Block from Model Code.
8 th January 2021	<u>Supplement 3:</u> Report Reference: – RR223767 dated 8 th January 2021. Description of the Change: Clarified the model code versions. Updated Specific Conditions of use. Added model code B = D2(Blueprint drawing nameplate) is required for all versions. Clarified the B = D2 and none, one or more of the other additional options. Updated ambient temperature range to Ta = -40°C to +50°C. Moved Empty Enclosure Model to Certificate FM20US0133U.

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