CERTIFICATE OF CONFORMITY



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

- 2. Certificate No:
- 3. Equipment: (Type Reference and Name)
- 4. Name of Listing Company:
- 5. Address of Listing Company:

FM20US0097

Series D3E, D2, APEX9000E Digital Valve Positioners Valve Positioner

PMV Automation AB

Korta Gatan 9 SE-171 54 Solna Sweden

6. The examination and test results are recorded in confidential report number:

3012363 dated 8th February 2002

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 3615:2018, FM Class 3810:2005, ANSI/UL 61010-1:2004, ANSI/NEMA 250:1991

- 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:

Explosionproof for Class I, Division 1, Groups C and D; Dust-ignitionproof for Class II, Division 1, Groups E, F and G hazardous (classified) locations, indoors and outdoors (Type 4X).

11. The marking of the equipment shall include:

Certificate issued by:

Marguerdio

Jℓ E. Marquedant VP, Manager - Electrical Systems 30 November 2020 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 T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: <u>information@fmapprovals.com</u> <u>www.fmapprovals.com</u>

F 347 (Mar 16)

Page 1 of 3





US Certificate Of Conformity No: FM20US0097

Class I Division 1, Groups C, D; T6 Ta =+65°C, T5 Ta=+80°C; Type 4X Class II, Division 1, Groups E, F, G; T6 Ta =+65°C, T5 Ta=+80°C; Type 4X

12. **Description of Equipment:**

General - The Series D3E, D2, APEX9000E Digital Valve Positioner is a digital positioner primarily used for controlling modulating valves. The D3E Digital Valve Positioner is comprised of an electronic board with microprocessor, Hart modem, display, valve block, a positional feedback with potentiometer and a compartment for electrical

connections. Pushbutton controls are accessible by removing the threaded lid cover from the underside of the unit with the unit not powered.

Construction - The Series D3E, D2, APEX9000E Digital Valve Positioner is being housed in a stainless steel or aluminum explosionproof enclosure with two threaded lids and two threaded ½ inch NPT openings for the conduit connections. The enclosure contains 5 integrated flame arrestors mounted in the enclosure body.

Ratings - The Series D3E, D2, APEX9000E Digital Valve Positioner operate at 28 Vdc, 24 mA, 0.67W. The Series D3E, D2, APEX9000E Digital Valve Positioner are rated for use in an ambient temperature range of -25°C to +65°C and -25°C to +80°C.

APEX 9000E – bcdeFijkl. Electro-pneumatic Positioner.

- b = Model: 90 or 92.
- c = Certification: E or F.
- d = Connections: M or N.
- e = Housing / Surface Treatment: U, R or S.
- i = Temperature / Seals: Z or Q.
- j = Input signal / Protocol: N, H, D, P, or F.
- k = Feedback Options: X or T.
- I = Options (Add-in Electronics): 0 or 1.

D3bcdehij. Digital Positioner

b = Certification: E or F. c = Connections: G, N or M d = Housing / Surface treatment: U or E e = Function: S, L, P, M, D, K, Q or R h = Sensors/ Temperature/ Seals: Z or Y i = Input signal/protocol: 4, 5, D, P or F j = Feedback Options: X or T.

D2aE – bcdEhijk. Digital Positioner.

- a = Model Code: 0 or 2.
- b = Certification: E or EF.
- c = Connections: G, M or N.
- d = Housing / Surface Treatment: U, R, S, or T.
- h = Sensors / Temperature / Seals: Z or Q.
- i = Input Signal / Protocol: 4, 5, D, P or F.
- j = Feedback Option: X or T.
- k = Options (Add-in Electronics): 0 or 1.

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Page 2 of 3

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US Certificate Of Conformity No: FM20US0097

13. Specific Conditions of Use:

None

14. Test and Assessment Procedure and Conditions:

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

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
8 th February 2002	Original Issue.
10 th September 2020	Supplement 7: Report Reference: PR449898 dated 10 th September 2020. Description of the Change: Examination and testing of 367um flame arrestors, de-rate product to Gas Group C. Reviewed and updated FM 3600 and FM 3615 Standards to current editions, added reference to ANSI/UL 61010-1. Updated certificate to new format.
30 th November 2020	Supplement 8: Report Reference: RR225686 dated 30 th November 2020. Description of the Change: Consolidate 3 model codes onto one document, revised model code listings, added model APEX9000E Positioner.

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