

CERTIFICATE OF CONFORMITY


1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM16US0307X
3. **Equipment:** 500-AaW and 500-AaD. I/P Pressure Transducers.
(Type Reference and Name)
4. **Name of Listing Company:** ControlAir Inc
5. **Address of Listing Company:** 8 Columbia Dr
Amherst
New Hampshire 03031, USA
6. The examination and test results are recorded in confidential report number:

5Y6A8.AX dated 5th December 1995
7. FM Approvals LLC, certifies that the equipment described has been found to comply with the following Approval standards and other documents:

FM Class 3600:2011, FM Class 3610:2015, FM Class 3611:2004, FM Class 3611:2004,
FM Class 3810:2005, 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:**

500-AaW
Intrinsically Safe Apparatus for use in Class I, II, III, Division 1, Groups C, D, E, F, G; in accordance with control drawing 431-990-013 for indoors and outdoors (Type 4X) hazardous (classified) locations with an ambient temperature rating of -30 °C to +60 ° C. Nonincendive for Class I, Division 2, Groups A, B, C and D and is suitable for Class III Division 2, Group F and G, Class III Division 1 and 2 for indoors and outdoors

Certificate issued by:



J. E. Marquedant
Manager, Electrical Systems

24 January 2018

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: information@fmapprovals.com www.fmapprovals.com

SCHEDULE



US Certificate Of Conformity No: FM16US0307X

(Type 4X) hazardous (classified) locations with an ambient temperature rating of -30 °C to +60 ° C

500-AaD

Intrinsically Safe Apparatus for use in Class I, Division 1, Groups C, D; in accordance with control drawing 431-990-013 for indoors and outdoors (Type 4X) hazardous (classified) locations with an ambient temperature rating of -30 °C to +60 ° C. Nonincendive for Class I, Division 2, Groups A, B, C and D for indoors hazardous (classified) locations with an ambient temperature rating of -30 °C to +60 ° C

11. The marking of the equipment shall include:

Class I Division 1, Groups, C, D; T4 Ta = -30°C to +60°C; Type 4X

Class II, Division 1, Groups E, F, G, Class III, Division 1; T4 Ta = -30°C to +60°C; Type 4X

Class I Division 2, Groups, A, B, C, D; T4 Ta = -30°C to +60°C; Type 4X

Class II, Division 2, Groups F, G, Class III, Division 2; T4 Ta = -30°C to +60°C; Type 4X

12. Description of Equipment:

General - The 500-A Series I/P Transducer are process control devices which converts a 4 - 20 mA DC current input to a pressure flow output. The transducer utilizes a coil and magnet to convert the electrical signal to a mechanical pressure output control.

Construction - The trimming resistors and associated components are mounted on a small printed circuit board inside the housing. housing measures 4.5 x 2.2 x 2.2 inches (10.7 x 5.7 x 5.7 cm) with a threaded conduit opening for electrical input and two threaded openings for air in and out.

Ratings - The 500-A Series I/P Transducer operate on 4- 20 mA. The transmitters are rated for use in an ambient temperature range of -30°C to +60°C.

500-AaW. I/P Pressure Transducer.

a = Output range A, B, C, D, E, F, G or H.

13. Specific Conditions of Use:

1. Manufacturer's instructions supplied with the protective assemblies as well as the system installation instructions and the National Electric Code (ANSI/NFPA 70) and ANSI/ISA RP12.6 must be followed when installing this equipment.
2. Control room equipment connected to associated apparatus should not use or generate more than the maximum voltage specified for the barrier.
3. Tampering or replacement with nonfactory components may adversely affect the safe use of the system..
4. The resistance between the shunt diode barrier ground and earth ground must be less than 1.0 ohm.

14. Test and Assessment Procedure and Conditions:

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

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Member of the FM Global Group

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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 |
|-------------------------------|---|
| 5 th December 1995 | Original Issue. |
| 30 th October 1997 | <u>Supplement 1:</u> Report Reference: – 2D1AO.AX Dated 30 th October 1997. Description of the Change: Extended Approval for outdoor locations NEMA 4X |
| 17 th October 2016 | <u>Supplement 2:</u> Report Reference: – RR206316 Dated 17 th October 2016. Description of the Change: Entity parameter changes. |
| 24 th January 2018 | <u>Supplement 3:</u> Report Reference: – RR210347 Dated 24 th January 2018. Description of the Change: Corrected editorial error in the minimum operating temperature. |

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