

# CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM16US0183X
3. **Equipment:** HHT Series Humidity Temperature Transmitter  
**(Type Reference and Name)**
4. **Name of Listing Company:** Dwyer Instruments Inc.
5. **Address of Listing Company:** 102 Indiana Hwy 212  
Michigan City, IN 02062  
USA
6. The examination and test results are recorded in confidential report number:  
  
3032085 dated September 4<sup>th</sup>, 2008
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 3610:2010, FM Class 3615:2006, FM Class 3810:2005,  
ANSI/NEMA 250:2003, ANSI/IEC 60529:2004
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.

## Certificate issued by:

J. E. Marquedant  
Manager, Electrical Systems

17<sup>th</sup> September 2019  
Date

To verify the availability of the Approved product, please refer to [www.approvalguide.com](http://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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10. Equipment Ratings:

Intrinsically Safe (Entity) for use in Class I, II and III, Division 1, Groups A, B, C, D, E, F and G; Temperature Class T4 Ta = 60°C in accordance with Control Drawing No. 03-001467-00; Explosionproof for use in Class I, Division 1, Groups B, C and D; Temperature Class T5 Ta = 60°C; Dust-ignitionproof for Class II / III, Division 1, Groups E, F and G; Temperature Class T5 Ta = 60°C; indoors and outdoors (Type 4X, IP66) Hazardous (Classified) Locations.

11. The marking of the equipment shall include:

Intrinsically Safe for Class I, II, III, Division 1, Groups A, B, C, D, E, F and G; T4 Ta = 60°C; 01-001467-00  
Class I, Division 1, Groups B, C, D; T5 Ta = 60°C  
Class II/III, Division 1, Groups E, F, G T5 Ta = 60°C  
Type 4X, IP66

12. **Description of Equipment:**

**General** - The Series HTT Transmitter is designed for monitoring and controlling humidity, or both, humidity and temperature in building energy management systems, and other space monitoring applications.

**Construction** - The transmitter circuitry contains three printed circuit boards which are housed within a Type 4X, IP66 housing. The housing is tool secured thereby prohibiting access to the operator. Terminals are supplied, and appropriately marked, for power connections and other wiring connections.

**Ratings** - The transmitter's electronics operate on a supply of 9.5 VDC to 28 VDC, with an output range of 4–20 mA. The ambient operating temperature range is -40°C to + 60°C.

***HHT-ab-c-d-e. Humidity Temperature Transmitter.***

Entity Parameters:

Vmax = 28V, I<sub>max</sub> = 100 mA, P<sub>i</sub> = 0.651 W, C<sub>i</sub> = 62 nF, L<sub>i</sub> = 7.7 μH

a = E or I

b = B, E, U, or T

B = ½" male BSPT, RH;

E = ½" male BSPT RH & Temperature;

U = ½" male NPT, RH;

T = ½" male NPT, RH & Temperature;

c = LCD (display) or blank.

d = M2 (M20 female electrical connection) or blank.

e = C5 (C5-M housing paint) or blank.

13. **Specific Conditions of Use:**

WARNING: The apparatus enclosure contains aluminum and is considered to constitute a potential risk of ignition by impact or friction. Care must be taken into account during installation and use to prevent impact or friction.

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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
4 <sup>th</sup> September 2008	Original issue.
5 <sup>th</sup> July 2016	<u>Supplement 3:</u> Report Reference: RR205611, dated 5 <sup>th</sup> July 2016 Description of the Change: Editorial changes to the listing.
17 <sup>th</sup> September 2019	<u>Supplement 4:</u> Report Reference: RR220513, dated 17 <sup>th</sup> September 2019 Description of the Change: Correction to Control Drawing number reference.

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