


# CERTIFICATE OF CONFORMITY



1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** FM18US0209X
3. **Equipment:** TraceTek® Diesel Leak Detection System  
**(Type Reference and Name)**
4. **Name of Listing Company:** nVent Thermal LLC
5. **Address of Listing Company:** 899 Broadway St,  
Redwood City, CA 94063  
USA
6. The examination and test results are recorded in confidential report number:  
  
3038815 dated 7<sup>th</sup> June 2010
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 3611:2004, FM Class 7745:2012,  
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.
10. **Equipment Ratings:**  
  
TraceTek® Diesel Leak Detection System. System consists of TTDM-128 or TTDM-128-24V Leak Detection Master Module and TT-FFS-a-b-c and TT-FFS-l-a-b-c (a = 100 or 250; b = MC or L, c = 1, 3 or 10) Series Fast Detection Probe. Optional TTSIM-x-y (x= 1A or 2; y = 12VDC, 24VDC, 24, 120 or 230) Sensor Interface Module for network of up to 128 addressable points. Surge suppression required on detection circuits for installations that may be exposed to surge transients. TTxxxx Series cables for system interconnection only and are not

**Certificate issued by:**

  
\_\_\_\_\_  
J. E. Marquedant  
VP, Manager, Electrical Systems

12 July 2018  
\_\_\_\_\_  
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  
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: [information@fmapprovals.com](mailto:information@fmapprovals.com) [www.fmapprovals.com](http://www.fmapprovals.com)

# SCHEDULE



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Approved for leak detection since they do not meet the 30 second maximum detection time. TTDM-128 and TTSIM suitable for operation in ambient temperatures from 32° to 122°F (0° to 50°C), TT-FFS and TT-FFS-I probes suitable for operation in ambient temperatures from -40° to 185°F (-40° to 85°C), TTxxxx Series cables suitable for operation in ambient temperatures from -4° to 122°F (-20° to 50°C). TTDM-128 rated Type 12, IP54. The TT-FFS probe is suitable for use in Intrinsically safe for Class I, Division 1, Groups A, B, C and D and Class I, Zone 0, Group IIC, temperature Class T4 at an ambient of 60°C, nonincendive for Class I, Division 2, Groups A, B, C and D and Class I, Zone 2, Group IIC, temperature Class T4 at an ambient of 60°C when installed in accordance with the Nonincendive Field Wiring concept and Control Drawing 1027-0050.

11. The marking of the equipment shall include:

Intrinsically Safe for Class I, Division 1, Groups A, B, C and D T4 Ta=+60°C

Intrinsically Safe for Class I, Zone 0, AEx ia IIC T4 Ta=+60°C

Class I, Division 2, Groups A, B, C and D T4 Ta=+60°C; NIFW;1027-5000

Class I, Zone 2, Group IIC T4 Ta=+60°C; NIFW; 1027-5000

12. **Description of Equipment:**

**General** - The TTDM-128 module directly monitors up to 1500 m (5000 ft) of sensor cable and a network of up to 128 remote TraceTek modules. The remote modules may be a combination of sensor interface modules (TTSIM), relay modules (TT-NRM) or additional TTDM-128 modules.

**TraceTek TT-FFS-a-b-c and TT-FFS-I-a-b-c Fast Fuel Sensor**

Nonincendive field wiring parameters

$V_{max} = 15V$   $C_i = 0.28\mu F$   $L_i = 0$

a = measuring length 100 or 250

b = Connector MC or L

c = Sensor Length 1, 3 or 10 Ft.

13. **Specific Conditions of Use:**

1. WARNING: Do not clean with dry cloth

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:

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Member of the FM Global Group

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Date	Description
7 <sup>th</sup> June 2010	Original Issue.
12 <sup>th</sup> July 2018	<u>Supplement 6:</u> Report Reference: RR214027 dated 12 <sup>th</sup> July 2018 Description of the Change: 1) Name change to nVent Thermal LLC. 2) Updated the address from Menlo Park, CA location to Redwood City, CA location. 3) Updated the year on FM Class 3600 standard to 2018 due to nontechnical changes in its latest edition.

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