CERTIFICATE OF CONFORMITY

FM Approvals

1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** **FM18US0134X**
3. **Equipment:**
   (Type Reference and Name) **E-100-L-A and E-100-L-E**
   Lighted End Seal Kit
4. **Name of Listing Company:** **Chemelex LLC**
5. **Address of Listing Company:** **899 Broadway St, Redwood City, California 94063-3104, United States of America**
6. The examination and test results are recorded in confidential report number:

   3053061 dated 13th April 2015

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

   FM 3600:2018, FM 3611:2004, FM 3616:2011, FM 3810:2018, NEMA 250:2003, ANSI/IEEE 515:2011, ANSI/ISA 60079-0:2013, ANSI/UL 60079-7:2008, ANSI/UL 60079-18:2012, ANSI/ISA 60079-31:2009

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:

    See ANNEX

11. The marking of the equipment shall include:

    See ANNEX

12. **Description of Equipment:**

    General -

Certificate issued by:

J.E. Marquedant
VP, Manager - Electrical Systems

03/23/2026
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. One Technology Way, Norwood, MA 02062 USA
T: +1 (1) 781 762 4300 F: +1 (1) 781 762 9375 E-mail: information@fmapprovals.com www.fmapprovals.com

The E-100-L-A and E-100-L-E are Type 4X-rated end seal kits with a light (red and green) that indicates voltage at the end of the circuit. They are designed for use with BTV-CR, BTV-CT, QTVR-CT, XTV-CT, KTV-CT, and VPL-CT industrial parallel heating cables. Once installed, the end seal is easily re-entered for maintenance and the heating cable can be accessed without removing the end seal. The LED indicator light provides excellent visibility.

Model Code:
See ANNEX

13. **Specific Conditions of Use:**

    See ANNEX

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
13 April 2015	Original Issue.
20 May 2018	Supplement 1: Report Reference: RR214020 dated 20th May 2018 Description of the Change: 1) Name change to nVent Thermal LLC. 2) Updated the year on FM Class 3600 and FM Class 3810 standards to 2018 due to nontechnical changes in its latest editions of those standards.
23 March 2026	Supplement 2: Report Reference: RR249672 dated 23 March 2026. Description of the Change(s): Rebrand from nVent to Chemelex LLC.

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ANNEX

E-100-L-A

Equipment Ratings:

Equipment Protection by Increased Safety and Encapsulation, AEx e mb IIC Gb for use in Class I, Zone 1, Group IIC; Equipment Dust Ignition Protection by Enclosure AEx tb for use in Zone 21, Group IIIC; hazardous (classified) locations. Nonincendive for use in Class I, Division 2, Groups A, B, C & D; Dust Ignitionproof for use in Class II, Division 1, Groups E, F & G, Class III, Division 1; hazardous (classified) locations, indoors and outdoors (Type 4X)

Markings:

Class I, Zone 1 AEx e mb IIC T*
Zone 21 AEx tb IIIC T* Ta=-40°C≤Ta≤+40°C
Class I, Zone 2, Groups A, B, C and D T* Ta=-40°C≤Ta≤+40°C
Class II/III, Division 1, Groups E, F and G T* Ta=-40°C≤Ta≤+40°C
Type 4X
(*) refer to specific conditions of use

Description of Equipment:

Model Code:
E-100-L-A

Specific Conditions of Use:

1. For use with BTV, QTVR, XTV, KTV and VPL Electrical Heat Tracing Cables.
2. Not for use in Class I, Zone 1 locations when used with VPL cables.
3. *Temperature code is based on the rating of the electrical heat tracing cables for which the connection kits are intended to be used.
4. Some external parts of the system are non-conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done with a damp cloth.
5. The maximum process temperature of the Lighted End Seal kits are limited to 150°C; this may be further limited by the type of heating cable that is being used, therefore when fitting the Lighted End Seal kits, the user/installer shall take into account any restrictions that are applicable to the cable.
6. The supply circuit shall be protected by a fuse capable of withstanding a prospective short current of 1500 Amperes.
7. The Lighted End Seal kits must be pipe mounted in a single orientation with the gland entry adjacent to the process pipe as per the manufacturer's installation instructions.

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E-100-L-E

Equipment Ratings:

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Class II/III, Division 1, Groups E, F and G T* Ta=-40°C≤Ta≤+40°C
Type 4X
(*) refer to specific conditions of use

Description of Equipment:

Model Code:
E-100-L-E

Specific Conditions of Use:

1. For use with BTV, QTVR, XTV, KTV and VPL Electrical Heat Tracing Cables.
2. Not for use in Class I, Zone 1 locations when used with VPL cables.
3. *Temperature code is based on the rating of the electrical heat tracing cables for which the connection kits are intended to be used.
4. Some external parts of the system are non-conducting and may generate an ignition-capable level of electrostatic charges under certain extreme conditions. The user should ensure that the equipment is not installed in a location where it may be subjected to external conditions (such as high-pressure steam) which might cause a build-up of electrostatic charges on non-conducting surfaces. Additionally, cleaning of the equipment should be done with a damp cloth.
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