CERTIFICATE OF CONFORMITY

FM Approvals

1. **HAZARDOUS (CLASSIFIED) LOCATION ELECTRICAL EQUIPMENT PER US REQUIREMENTS**
2. **Certificate No:** **FM18US0314X**
3. **Equipment: (Type Reference and Name)** **BTV Self-Regulating Electrical Heat Trace Cable Systems**
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:

   PR451067 dated 8th March 2019

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

   FM 3600:2022, FM 3611:2004, FM 3810:2018, ANSI/IEEE 515:2011

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:

    Suitable for Class I, Division 2, Groups A, B, C, D; Suitable for Class II, Division 2, Groups F, G; Suitable for Class III, Division 1; hazardous (classified) locations with a maximum sheath temperature (operating temperature code) rating of T6 (85°C). The maximum maintain temperature is 150°F (65°C) and the maximum intermittent exposure temperature (power on or off) is 185°F (85°C). The minimum installation temperature is -40°F (-40°C).

11. The marking of the equipment shall include:

    CL I DIV 2 GRPS ABCD CL II DIV 2 GRPS FG CIII T6

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

12. **Description of Equipment:**

General – The BTV family of self-regulating heating cables provides for a solution to freeze-protection and process-temperature maintenance applications. BTV heating cables maintain process temperatures up to 150°F (65°C) and can withstand intermittent exposure to temperatures up to 185°F (85°C). The heating cables are configured for use in non-hazardous and hazardous locations, including areas where corrosives may be present.
Construction – The BTV heat trace cables are constructed with a modified polyolefin inner jacket and fluoropolymer outer jacket, tinned-copper braid, conductive core and nickel-plated 16 AWG copper bus wires.
Ratings – The BTV Self-Regulating Electrical Trace Cable Systems supply voltage is 120 Vac (100-130 Vac) or 240 Vac (200-277 Vac). The maximum maintain or continuous exposure temperature (power on) is 150°F (65°C).The maximum intermittent exposure temperature, 1000 hours (power on or off), is 185°F (85°C). The minimum installation temperature is -40°F (-40°C).

aBTVb-c-Cd. Self-Regulating Electrical Heat Trace Cable Systems.
a = Output, W/ft @ 50°F (W/m @ 10°C): 3 (10), 5 (16), 8 (26) or 10 (33).
b = Voltage: 1 (120Vac) or 2 (240Vac).
c = Monitor wire option: M or blank.
d = Outerjacket material option: R, T or blank

13. **Specific Conditions of Use:**

1. The maximum maintain temperature rating is 65°C (150°F), and the maximum intermittent exposure temperature (Power On or Off) rating is 85°C (185°F).
2. The BTV electrical heat trace cable systems are designed for use with the manufacturer's suitably rated FM Approved AutoMatrix, PolyMatrix, JBM-100-L-A, JBS-100-L-A, JBS-100-A, JBM-100-A, E-100-A, E-100-L, S-150, E-150, JBS-100-A6 and T-100 connection kits. The Type or IP rating for the BTV electrical heat trace cable systems is depended on the rating of the FM Approved connection kits.
3. Ambient temperature range for the JBM-100-A, JBS-100-A, JBS-100-A6, and E-100-A is -75°F (-60°C) to 132°F (56°C).
4. Ambient temperature range for the E-100-L-A, JBM-100-L-A, JBS-100-L-A is -40°F (-40°C) to 104°F (40°C).

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 March 2019	Original Issue.

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SCHEDULE

US Certificate of Conformity No: FM18US0314X

Date	Description
27 March 2019	Supplement 1: Report Reference: RR218086 dated 27 March 2019 Description of the Change: Editorial changes to the description.
24 June 2024	Supplement 2: Report Reference: RR241705 dated 24 June 2024. Description of the Change(s): Removal of Zone ratings and standards from certificate and listings per customer request. Equipment markings corrected to match controlled documentation.
17 December 2025	Supplement 3: Report Reference: PR474165 dated 17 December 2025. Description of the Change(s): Reduce braid coverage from 80% to 70%. Standards FM3600:2018 was updated to the latest revision (2022) because there were no technical changes between the revisions.
23 March 2026	Supplement 4: Report Reference: RR249882 dated 23 March 2026. Description of the Change(s): Name change to Chemelex LLC.