Certificate of Compliance

Certificate:	1163609	**Master Contract:**	161241
Project:	80271488	**Date Issued:**	2025-11-21
Issued to:	**Chemelex LLC** **899 Broadway Street** **Redwood City, California** **94063** **United States** **Attention:** Wesley Van Hill	**Issued by:**	*Ethan Poopalasingam* Ethan Poopalasingam

The products listed below are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US or with adjacent indicator 'US' for US only or without either indicator for Canada only.

PRODUCTS

Class 2878 01 HEATERS - Cable and Cable Sets - For Hazardous Locations
Class 2878 81 HEATERS - For Hazardous Locations-Certified to U.S. Standards

Class I, Div. 2, Groups A, B, C, D; Class II, Div. 2, Groups F, G; Class III; Type 4X

Type JBx-100-xx-xx and T-100 Power Connection Kits, JS-100-A Single Entry Power Connection Kit, C75-100- A Heating Cable Gland Kit and CS-100 Core Sealer for use with Raychem BTV-CT, BTV-CR, QTVR-CT, XTV- CT, XTVR-CT, HTV-CT, KTV-CT and VPL-CT heating cables. VPL-Conversion kit is for use with VPL-CT heating cable.

HCS-100- A Core Sealer is for use with BTV-CT, BTV-CR, LBTV2-CT, QTVR-CT, XTV-CT, XTVR-CT, HTV-CT, and KTV-CT heating cables in the C75-100-A and JBx-100-xx-xx.

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SB-100-T Stainless Steel Tank Adapter kit is for use with the JBS-100- A, JBM-100-A and T-100 Power Connection Kits.

Nomenclature

Type JBx-100-xx-xx and T-100 Power Connection Kits

-55°C <T_{amb} < 56°C applied for standard version

-40°C <T_{amb} < 40°C applied for version with pilot lamp

JB	x	-	100	-	xx	-	xx
	1		2		3		4

1	S	JBS – For connection of one heating cable
	M	JBM – For connection up to three heating cables
	U	JBU – Universal
2	100	Above installation
3	A	Version with unthreaded holes
	L	Model with optional Light module (Only to be installed with a light module with a suitable approval)
	E	Version with threaded metric holes
	P	Model with optional off shore plate
	D	Model with optional drain plug
STB	Model with certified Phoenix or Weidmuller screw type terminals	
4	E	Version with threaded metric holes
	A	Version with unthreaded holes
	P	Model with optional off shore plate

Conditions of Acceptability:

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1. Alternative strip heaters must not be used, unless the manufacturer's approval has been obtained.

2. For certified cable gland used for entries into enclosure, clamping (strain relief) by filling compound is not an acceptable method in Canada.

3. The temperature accepted as a maximum for the surface to be heated (tube temperature) shall be determined on the basis of the specific performance category, the maximum admissible operating temperature of the parallel strip heaters, the voltage rating and the maximum admissible current carrying capacity.

4. Applications for which heat-resistant incoming cables include cable glands made from metal must be used, they must be specified by the manufacturer and the installer/user must comply with.

5. Restrictions regarding the use of type JBS-100-L-xx, JBM-100-L-xx, JBU-100-L-xx, JBS-100-L-xx must be Specified by the manufacturer and the installer/user must comply with.

6. The parallel strip heaters, type VPL, must be installed so that their cold ends start outside the Terminal box.

7. The JBU-100-xx-xx with voltage infeed is installed, an adequate heat-resistant feeder and screwed metal glands, including gasket, must be used at 40°C < Ta < 56°C. For the screwed metal glands, including gasket,

8. For heating cables, certified nVent glands of type C25-100-Metal must be used at 40°C < Ta < 56°C.

9. The version of the connection box with a drain plug must be suspended on the pipe to ensure proper function.

10. C75-100-A rated ambient temperature range is -55°C to 56°C. Maximum service temperature for Grommet is 152.4°C and the gland body is 93.8°C. When the C75-100-A connection kit is used, it shall be mounted to an enclosure in accordance with the manufacturer's instructions.

MARKINGS

The manufacturer is required to apply the following markings:

- Products shall be marked with the markings specified by the particular product standard.
- Products certified for Canada shall have all Caution and Warning markings in both English and French.

Additional bilingual markings not covered by the product standard(s) may be required by the Authorities Having Jurisdiction. It is the responsibility of the manufacturer to provide and apply these additional markings, where applicable, in accordance with the requirements of those authorities.

The products listed are eligible to bear the CSA Mark shown with adjacent indicators 'C' and 'US' for Canada and US (indicating that products have been manufactured to the requirements of both Canadian and U.S. Standards) or with adjacent indicator 'US' for US only or without either indicator for Canada only.

The products listed are eligible to bear the cCSAus Mark, without any adjacent indicators, indicating that products have been manufactured to the requirements of Canadian Standards.

The cartons or containers and the instructions of all connection and termination kits shall be clearly marked with the following information:

- Manufacturer's name or CSA Master Contract Number "161241", adjacent to the CSA Mark in lieu of manufacturer's name;
- The catalogue number, reference number, or model: As specified in the PRODUCTS section, above;

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- Month and year of manufacture, date code, applicable serial number or equivalent;
- Intended use (i.e., FOR USE WITH _____(Manufacturer)____ MODEL (type or series or designation – BTV, QTVR, XTV,
  KTV, and VPL Heating Cables only) HEATING CABLE/SURFACE HEATING DEVICE ONLY);;
- WARNING – EXPLOSION HAZARD. DO NOT DISCONNECT WHILE THE CIRCUIT IS LIVE OR UNLESS THE AREA IS FREE OF IGNITIBLE CONCENTRATIONS.
  AVERTISSEMENT – RISQUE D'EXPLOSION. NE PAS DÉBRANCHER PENDANT QUE LE CIRCUIT EST SOUS TENSION OU À MOINS QUE L'EMPLACEMENT NE SOIT EXEMPT DE CONCENTRATIONS INFLAMMABLES.
- The words "SEE INSTALLATION INSTRUCTIONS" and any applicable notices, warnings, or directions to the user;
- The maximum permissible steady-state current;
- The rated voltage;
- The maximum temperature continuous exposure;
- Hazardous Locations ratings:
  a. The Class(es) and, where appropriate, Division(s) and Group(s) of hazardous locations rating (e.g., Class I, Division 2, Groups A,
  B, C, and D); and
  b. The temperature code (e.g., T3A, T4, etc.) or the maximum sheath temperature of the heating device except where engineered systems contain this information on drawings or other documentation.
- The cCSAus Mark.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 60079-30-1 (Second Edition) - Explosive atmospheres - Part 30-1: Electrical resistance trace heating - General and testing requirements

ANSI/UL 121201:2017 - Ninth Edition - Nonincendive Electrical Equipment for Use in Class I and II, Division 2 and Class III, Divisions 1 and 2 Hazardous (Classified) Locations

CSA C22.2 No. 94.2:20 - Third Edition - Enclosures for electrical equipment, environmental considerations

UL 50E:2020 - Third Edition - Enclosures for Electrical Equipment, Environmental Considerations

ANSI/UL 60079-30-1 (First Edition) - UL Standard for Safety Explosive Atmospheres – Part 30-1: Electrical Resistance Trace Heating – General and Testing Requirements

CSA C22.2 NO. 213-17 - Third Edition - Up to and Including Update No. 3: April 2021 - Nonincendive electrical equipment for use in Class I and II, Division 2 and Class III, Divisions 1 and 2 hazardous (classified) locations

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Notes:

Products certified under Class(es) C287801, C287881 have been certified under CSA's ISO/IEC 17065 accreditation with the Standards Council of Canada (SCC). www.scc.ca

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