

Certificate of Compliance

Certificate: 2835604 Master Contract: 264147

Project: 2835604 **Date Issued:** June 22, 2015

Issued to: BriskHeat Corp

1055 Gibbard Ave Columbus, OH 43201

USA

Attention: Mr. Douglas R. Dietz

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



Issued by:

Lyn Murray Lyn Murray

PRODUCTS

CLASS – 2878 01 – Heaters - Cable and Cable Sets – For Hazardous Locations CLASS – 2878 81 – Heaters - Cable and Cable Sets – For Hazardous Locations - Certified to US Standards

Class I, Div. 2, Groups A, B, C, D; Class II, Div. 2, Groups E, F, G; Class III; T-coded (T5 or T6)

Self regulating Heating Cable Sets, Series SLCBL, pipe and vessel tracing, usages W and S, two conductor construction, with TPE insulation, tinned copper braid shield, and optional EPR or ETFE overall jacket, rated at 65C, at 120V ac and 240V ac, 3W/ft, 5W/ft, 8W/ft, 10W/ft, and 12W/ft, -40C minimum installation temperature, 15Amp maximum circuit size, for use with the following heating cable kits:

High Profile Kits: JB9001 / PTBS-GET (Power Termination Box)

JB9002 / PTBO-GET (Power Termination Box)

Low Profile Kits: JHS-GET (In-line Splice)

JHT-GET (Tee Splice)
JHE-GET (End Seal)



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Notes:

1. Installation in accordance with the Canadian Electrical Code Part I in Canada or the National Electrical Code (NEC).

2. The catalogue numbers may include suffixes to denote construction options.

3. * T5 for heating cable power output 12W/ft; T6 for heating cable power outputs 3, 5, 8, and 10W/ft.

APPLICABLE REQUIREMENTS

CSA C22.2 No. 130-03 - Requirements for Electrical Resistance Heating Cables and Heating

Device Sets

ANSI/IEEE Std. 515-2011 - IEEE Standard for the Testing, Design, Installation, and Maintenance of

Electrical Resistance Heat Tracing for Industrial Applications

ANSI/IEEE Std. 515.1-2012 - IEEE Standard for the Testing, Design, Installation, and Maintenance of

Electrical Resistance Heat Tracing for Commercial Applications

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.

- 1. <u>Packaging (all heating cable sets):</u> The original carton, container, spool, or reel in or on which the heating device or heating device set leaves the factory shall be clearly marked with the following information:
- a) the company's name or trademark or Master Contract No. "264147";
- b) the catalogue number, reference number, or model;
- c) the month and year of manufacture, date code, applicable serial number, or equivalent;
- d) the words "Refer to installation instructions", or equivalent wording, and any applicable notices, warnings, and directions to the installer;
- e) the warning "CAUTION: a ground fault protection device must be used with this heating device" and
- "ATTENTION: ce produit doit être utilisé avec une protection de mise à la terre";
- f) the maximum voltage for which the heating device or heating device set is intended;
- g) the maximum rated current;
- h) the rated output of the device expressed in watts per unit length at a reference temperature;
- i) the words "heating cable", "heating cable set", "surface heating device", or "surface heating device set", and usage marking and usage as shown in Table 1 of CSA Std. 130-03;
- i) the manufacturer's declared minimum installation temperature; and
- k) the CSA Mark*.



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2. Field-Assembled Heating Device Sets (Cat. No. SLCBL):

<u>Heating Devices</u>: Heating devices intended for field assembly shall be clearly and permanently marked with the following information:

- a) the company's name or trademark or Master Contract No. "264147";
- b) the catalogue number, reference number, or model;
- c) the month and year of manufacture, date code, applicable serial number, or equivalent;
- d) the word "parallel" and the usage marking as shown in Table 1 of CSA Std. 130-03;
- e) the rated voltage;
- f) the rated output in watts per unit length and the specified temperature for that output;
- g) the maximum permissible steady-state current; and
- h) the CSA Mark*.

<u>Connections and Termination Components</u>: The cartons or containers and the instructions of all connection and termination kits shall be clearly marked with the following information:

- a) the company's name or trademark or Master Contract No. "264147";
- b) the catalogue number, reference number, or model;
- c) intended use (i.e., FOR USE WITH _____(Manufacturer)____ MODEL (type, series, or designation) HEATING CABLE/SURFACE HEATING DEVICE ONLY);
- d) the words "SEE INSTALLATION INSTRUCTIONS" and any applicable notices, warnings, or directions to the user:
- e) the maximum permissible steady-state current;
- f) the rated voltage;
- g) maximum temperature continuous exposure;
- h) when required by Clause 4.6.1, the words "Temperature at the point of connection to branch circuit conductors may exceed 60 °C"; and
- i) the CSA Mark*.

3. "BULK" Heating Cable:

The marking on "bulk" heating cable shall be in accordance with section 2 above, but shall also include the following marking on a tag attached to the heating cable and on the package/roll/spool that the "bulk" heating cable is shipped in:

"This heating cable has been CSA tested under CSA's Report as a bulk heating cable and for use with XXXXX in their CSA Certified Heating Cable Sets under CSA report YYYYYYYYYYYYYYYYYYYYYYYY is the name of company that has the Heating Cable Sets CSA Certified with CSA, and YYYYYYYYYYYYYYYY is the CSA

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Master Contract and Report number under which the heating cable set is CSA Certified". An equivalent wording may be used.

4. INSTALLATION INSTRUCTIONS (all heating cable sets):

General: The manufacturer shall provide complete instructions for the installation and maintenance of the heating device and a statement that the heating device set must be installed in accordance with the Canadian Electrical Code Part I or the NEC, as applicable. Instructions shall also include caution or warning notices that are specific to the heating device and its intended use. The instructions shall specifically warn the user against the potential risks of fire and of electric shock and injury to persons and shall state that caution should be taken to guard against each such risk.

- a) applicable ground fault protection requirements, when a ground fault protection device is not provided with the heating device;
- b) any restrictions that the heating portion of the heating device set shall not touch, cross over, or overlap itself;
- c) restrictions relating to the minimum spacing between adjacent heating devices, e.g., spiral turns around the pipe;
- d) the recommended location of any temperature control sensor(s);
- e) restrictions regarding clearances from combustible surfaces;
- f) the minimum bending radius of each flexible heating device;
- g) recommended attachment methods;
- h) an explanation of the attribute and application markings for the heating device or heating device set;
- i) recommended inspection and test procedures;
- i) the minimum installation temperature for the heating device or heating device set;
- k) restrictions on permissible thickness and material (or insulation factor) of thermal insulation; and
- 1) explanation of specific applications.
- m) The statement "De-energize all power circuits before installation or servicing";
- n) The statement "Keep ends of heating devices and kit components dry before and during installation";
- o) The statement "The conductive layer of this heating device must be connected to a suitable grounding/earthing terminal";
- p) The statement "Suitable for use with" and a listing of applicable heating devices, or a listing of applicable connection fittings;
- q) the recommended size of the overcurrent protective device;
- r) (For installations in the U.S.A.) The intended use "IEEE 515.1 Installation Type A, Insulated Surfaces (including pipes)", "IEEE 515.1 Installation Type B, Roof and Gutter De-icing", or "IEEE 515.1 Installation Type C, Embedded Snow Melting" as applicable;
- s) (For installations in the U.S.A.) Instructions shall specify the need to mark the appropriate circuit breaker reference label indicating which branch circuit supplies the circuits to the series heating cable sets.
- t) "Installation in accordance with the Canadian Electrical Code Part I (Canada) or the National Electrical Code (U.S.A.) as applicable"; and
- u) the CSA Mark*.
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<u>Additional Instruction Notes:</u>

1. For factory-assembled heating device sets: Instructions shall include any restrictions regarding alteration of sets.



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- 2. Field assembly of heating device sets: Instructions shall include the following:
 - a) a list of the components of the heating device set;
 - b) the maximum length of the heating device;
 - c) the recommended size of the overcurrent protective device;
 - d) the order, preparation, and method of assembling all components; and
 - e) explanation of specific applications.

See ILL. 1 to 8 for manufacturer's installation instruction for Pipe Heating Cable Devices and Snow Melting Equipment, Roof and Gutter De-Icing Heating Cable Sets, provided with each system and/or kit.



Supplement to Certificate of Compliance

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The products listed, including the latest revision described below, are eligible to be marked in accordance with the referenced Certificate.

Product Certification History

Project	Date	Description		
2835604	June 22, 2015	Original Report	Model No	Listee Model No
		257086 - 2650501	Series HTR	Series SLCBL
			High Profile Kits:	High Profile Kits:
			JB9001 / PTBS-GET (Power Termination Box)	JB9001 / PTBS-GET (Power Termination Box)
			JB9002 / PTBO-GET (Power Termination Box)	JB9002 / PTBO-GET (Power Termination Box)
			Low Profile Kits:	Low Profile Kits:
			JHS-GET (In-line Splice)	JHS-GET (In-line Splice)
			JHT-GET (Tee Splice)	JHT-GET (Tee Splice)
			JHE-GET (End Seal)	JHE-GET (End Seal)