# Brisk-leat®

# XtremeFLEX® Heating Tapes and Cords



# (BOO, BIH, BIH-G, BSO, BSO-G, BWO, BWH, HTC, IFG, ISR Series) Instruction Manual



Read and understand this material before operating or servicing these heating tapes. Failure to understand how to safely operate these heaters could result in an accident causing serious injury or death. These heaters should only be operated by qualified personnel.

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#### INTRODUCTION

XtremeFLEX® Heating Tapes and Cords are designed to provide a long and efficient service life with function, reliability, and safety in mind. For additional information concerning this, or other BriskHeat® products, please contact your local BriskHeat® distributor or contact us toll free (U.S. / Canada only) at 1-800-848-7673 or 614-294-3376.



#### SAFETY ALERT SYMBOL

The symbol above is used to call your attention to instructions concerning your personal safety. It points out important safety precautions. It means "ATTENTION! Become Alert! Your Personal Safety is involved!" Read the message that follows and be alert to the possibility of personal injury or death.



Immediate hazards which WILL result in severe personal injury or death



Hazards or unsafe practices which COULD result in severe personal injury or death



Hazards or unsafe practices which COULD result in minor personal injury or property damage.

#### SAVE THESE INSTRUCTIONS!

Additional copies of this manual are available upon request.

#### IMPORTANT SAFETY INSTRUCTIONS



# **A** DANGER

A person who has not read and understood all operating instructions is not qualified to operate this product.

## A DANGER

- Do not immerse heater in liquid.
- Keep volatile or combustible material away from heater when in use.
- Do not use heater in hazardous locations
- Keep sharp metal objects away from heater.

Failure to observe these warnings may result in electric shock, risk of fire, and personal injury.

# WARNING

# End User Must Comply to the Following:

- Only qualified personnel are allowed to connect the electrical wiring.
- All electrical wiring must follow local electrical codes and highly recommend following NEC Article 427.
- Final installation / wiring is to be inspected by the authority who has jurisdiction in the area that the heating blanket is installed.
- The end-user is responsible for providing a suitable disconnecting device.
- The end-user is responsible for providing suitable electrical protection device. It is highly recommended that a ground fault circuit breaker be used.

## **A** CAUTION

- Never handle the heater while it is in operation; always disconnect the heater from the power source and allow to cool prior to handling.
- Inspect heater before use.
- Do not operate heater without a temperature control device.
- Never connect heating tape to a controller's output without assembling the two separable plug halves (if applicable).
- Never use B00 or BW0 series tape on a conductive surface.
- Do not use heater with torn or worn surfaces.
- If spillage of foreign matter onto heater occurs, disconnect from power source and clean after heater is allowed to cooled.
- Never operate a heater without an appropriate heat sink (device being heated is considered a heat sink)
- Do not operate heater at temperatures above rated temperature value
- Fasten heater to device using approved methods only
- Do not repair damaged or faulty heaters.
- Do not crush or apply severe physical stress on heater or cord assembly.
- Unplug heater when not in use.

Failure to observe these warnings may result in personal injury or damage to the heater.

#### **SPECIFICATIONS**

Type of XtremeFLEX® Heating Tape or Cord	Maximum Exposure Temperature	Nominal Watts per Square Inch (mm)	Outer Sheath Material
B00 Series: Standard Insulated Heating Tape	900°F (482°C)	8.6 (0.013)	Fiberglass
BIH Series: Heavy Insulated Heating Tape	900°F (482°C)	Standard: 8.6 (0.013) Wide: 5.1 (0.008)	Fiberglass
BIH-G Series: Grounded Heavy Insulated Heating Tape	482°F (250°C)	9.6 (0.015)	Fiberglass
BS0 Series: Silicone Rubber Heating Tape	450°F (232°C)	4.3 (0.007)	Silicone Rubber
BS0-G Series: Grounded Silicone Rubber Heating Tape	450°F (232°C)	4.3 (0.007)	Silicone Rubber
BW0 Series: High Temperature Standard Insulated Heating Tape	1400°F (760°C)	13.1 (0.020)	SAMOX®
BWH Series: High Temperature Heavy Insulated Heating Tape	1400°F (760°C)	Standard: 13.1 (0.020) Wide: 7.7 (0.012)	SAMOX <sup>®</sup>
HTC Series: Heating Cord	900°F (482°C)	1.8 (0.003)	Fiberglass
IFG: Kapton® Heavy Insulated Heating Tape	482°F (250°C)	6.0 (0.009)	Fiberglass
ISR: Kapton® Silicone Rubber Heating Tape	450°F (232°C)	3.0 (0.005)	Silicone Rubber

#### **INSTALLATION**

### **A WARNING**

Read and understand this entire manual before operating this electric heater.

#### STEP 1

Remove heater from box. Make visual inspection of heater. Do not use if torn or damaged.

#### STEP 2

**Installing your heating tape:** The flexible heating tape can be installed on both a flat and/or curved surface. For a flat surface, lay the heating tape onto the \surface to be heated. For a curved surface, wrap the heating tape onto the surface to be heated (A). The length of one entire side of the heating tape must be in full contact with the surface.

A.) Proper Installation

Ensure the heating tape is not kinked, twisted, or any portion of the tape hanging free from the surface (B). Do not overlap heating tape on itself (C). Attach the heating tape to the surface by using aluminum tape, fiberglass tape, or a mechanical clamping devices which will not cause damage to the heating tape.



B.) Incorrect Installation: Heating tape hanging free from the surface



C.) Incorrect Installation: Heating tape overlapped on itself

#### STEP 3

#### Connecting your heating tape to a power supply:

1. Your heating tape must be connected to an external control device. The heater must not be operated without some form of temperature control.

A WARNING Your heater is designed to operate at a specific voltage. Refer to the label on the heater for proper operating voltage and wattage information. Failure to operate the heater at the specified rating could result in overheating of the heating blanket, the surface being heated or personal injury. Also note that too low of a supply of voltage will result in under heating.

> All electrical connections must be made by qualified personnel and in accordance with all applicable codes and regulations.

- 2. Ensure the heater is protected by a properly sized circuit breaker or fuse.
- 3. Use of a ground fault circuit interrupter is highly recommended and maybe required.

### 4A. If heating tape came with a plug:

Plug power cord into appropriate controller.

#### 4B. If heating tape did not come with a plug:

Two wires (same color) should be connected to the power source (or temperature control device) directly, through a junction box, or to a connector that is mated to a receptacle connected to the power source. BriskHeat® XtremeFLEX® Heating Tapes are non-polarized, allowing either wire to be connected to the neutral or hot. If BIH-G or BS0-G series, the third wire, designated by the color green (or a green stripe), should be connected to ground.

#### TROUBLESHOOTING GUIDE

Please read this guide prior to contacting BriskHeat<sup>®</sup>. This guide is designed to answer the most commonly asked questions. If you are unable to identify the problem or need additional assistance, please contact your local distributor/ representative or us at **1-800-848-7673**, **614-294-3376**, or **bhtsales1@briskheat.com**.

PROBLEM	SOLUTION(S)
Does not heat	Verify heater is connected to proper voltage.  Check to see if there is a resistance reading (not an open circuit) in heater using an ohm meter.
Circuit breaker is tripping	Validate that the circuit breaker is capable of handling the amp requirement of heater. The identification label located on the power cord displays the heater's amperage requirement.  Examine heater and cord for any damage.

#### WARRANTY INFORMATION

The BH Thermal Corporation (hereinafter referred as ("BH Thermal") warrants to the original purchaser for the **period of eighteen (18) months from date of shipment or twelve (12) months from date of installation**, whichever comes first, that the products manufactured by BH Thermal: (A) conform to the description and specifications as set forth in BH Thermal's current catalogue or in the quotation and drawings submitted by BH Thermal: and (B) are free from defects in materials and workmanship under prescribed use and service.

Remedy. BH Thermal's obligation and the exclusive remedy under this warranty shall be limited to the repair or replacement, at BH Thermal's option, of any parts of the product which may prove defective under prescribed use and service within eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever comes first, and which, following BH Thermal's examination, is determined by BH Thermals to be defective under conditions described herein: provided, BH Thermal has, at its option, a representative of BH Thermal present at start-up. BH Thermal shall not be liable for any incidental, consequential or special damages arising from any breach of warranty, breach of contract, negligence, or any other legal theory, including but not limited to, loss of use of parts or equipment or any associated equipment, cost of capital, cost of any substitute equipment, facilities or services, overhead, downtime costs, or claims of customer of purchaser for such damages. This remedy does not include labor costs for installation or removal of the equipment or parts covered by this warranty, and BH Thermal shall not be responsible for such labor costs.

<u>Limitation.</u> This warranty shall not apply to any product or part thereof which has been subject to accident, negligence, alteration, damage during shipment, improper service, abuse, or misuse, including but not limited to use beyond rated capacity. BH Thermal makes no warranty whatsoever with respect to accessories or parts not supplied or manufactured by BH Thermal. BH Thermal's obligation under this warranty shall be conditioned upon BH Thermal's receiving written notice of any defect within fifteen (15) days after its discovery, and, at BH Thermal's option, return of such equipment or parts prepaid to its factory at 1055 Gibbard Ave., Columbus, Ohio 43201.

Disclaimer. BH THERMAL MAKES NO WARRANTY WHATSOEVER, EXPRESS OR IMPLIED, EXCEPT AS IS EXPRESSLY SET FORTH ABOVE. NO AGENT, EMPLOYEE OR REPRESENTATIVE OF BH THRMAL HAS ANY AUTHORITY TO BIND BH THERMAL TO ANY AFFIRMATION, REPRESENTATION OR WARRANTY COVERING THE SALE OF ANY PRODUCT, AND UNLESS SUCH AFFIRMATION, REPRESENTATION OR WARRANTY MADE BY AN AGENT, EMPLOYEE OR RERESENTATIVE IS SPECIFICALLY ENDORSED IN WRITING BY BH THERMAL, IT SHALL NOT BE ENFORCEABLE BY ANY BUYER. BH THERMAL MAKES NO EXPRESS OR IMPLED WARRANTY OF MERCHANTABILITY AND NO EXPRESS OR IMPLIED WARRANTY OF FITNESS FOR PARTICULAR PURPOSE, EXCEPT AS IS EXPRESSLY SET FORTH ABOVE. BH THERMAL SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTIAL OR SPECIAL DAMAGES.

This warranty allocates risk between the purchaser and BH Thermal as authorized by the Uniform Commercial Code and other applicable law.



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