# Briskheat<sup>®</sup>



# BriskHeat

SRL-ADJ & SRP-ADJ Silicone Rubber Heating Blankets

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#### INTRODUCTION

Thank you for purchasing a BriskHeat<sup>®</sup> Silicone Rubber Heating Blanket with Control. Your heater is designed to provide a long and efficient service life with function, reliability, and safety in mind. For additional information concerning this, or other BriskHeat<sup>®</sup> products, please contact your local BriskHeat<sup>®</sup> distributor or contact us toll free (U.S. / Canada only) at 1-800-848-7673 or 614-294-3376.

## Silicone Rubber Heating Blanket with Control SRL-ADJ & SRP-ADJ Series

# **Instruction Manual**



Read and understand this manual before operating or servicing this heater. Failure to understand how to safely operate these heaters could result in an accident causing serious injury or death. Only qualified personnel should operate or service heater.



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 that **COULD** result in severe personal injury or death



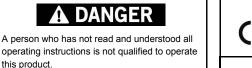
Hazards or unsafe practices that **COULD** result in minor personal injury or property damage

**SAVE THESE INSTRUCTIONS!** Additional copies of this manual are available upon request.

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#### IMPORTANT SAFETY INSTRUCTIONS





- Do not immerse or spray any component of the control system with liquid.
- Keep volatile or combustible material away from control and heating system when in use.
- Keep sharp metal objects away from control and heating system.
- Use control and heating system only in approved locations.

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

### **A** WARNING

#### End User Must Comply to the Following:

- Only qualified personnel are allowed to connect electrical wiring
- . All electrical wiring must follow local electrical codes and NEC Article 427
- . Final installation/wiring is to be inspected by the authority who has jurisdiction in the area where the heater and temperature control system are installed
- . The end-user is responsible for providing a suitable disconnect device
- The end-user is responsible for providing a suitable over-current protection device. It is highly recommended that a groundfault circuit breaker be used

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



CSA Approval only available with certain options.

Approvals valid only when installed in accordance with all applicable instructions, codes, and regulations.

# **A** CAUTION

- Inspect all components before use.
- Never handle the heater while it is in operation; always disconnect the heater from the power source and allow cooling prior to handling.
- Designed for use of metal surfaces. Do not use on plastic surfaces.
- Do not wrap the heater over itself.

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- If spillage of foreign matter onto heater occurs, disconnect from power source and clean after heater is allowed to cool.
- Never operate a heater without an appropriate heat sink (device being heated is considered a heat sink).
- Do not operate heater above rated temperature value.
- Fasten heater to device using approved methods only.
- Do not use control and heating system if any component is damaged.
- Do not repair damaged or faulty control and heating systems.
- Do not crush or apply severe physical stress on any component of system, including cord assembly.
- Unplug control and heating system when not in use.

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



SRL-ADJ & SRP-ADJ Silicone Rubber Heating Blankets

### **A WARNING**

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

#### PRIOR TO INSTALLATION

- 1. Check for suspected damage to the heating blanket like rips, punctures, etc.
- 2. Verify surface to be heated is free from all sharp edges, weld splatter, rust, oil, etc. Surface must be clean prior to installing heater.
- 3. Check that the desired placement of the blanket will not cause damage to the blanket through impact shock, vibration, ambient temperature, or by neighboring moving parts.
- 4. Confirm voltage / wattage rating of heater. The heater is designed to work at a specific voltage to heat properly. For additional information, contact your local distributor or BriskHeat<sup>®</sup>.
- 5. Confirm blanket maximum exposure temperature rating is suitable for environment. The temperature of the internal heating element may run up to 25% higher than the external surface of the blanket. Use extreme caution for applications that require a process temperature near the maximum exposure temperature ratings of the blanket.
  - Silicone rubber heating blanket exposure temperature range:
  - -60°F to 450°F (-51°C to 232°C)
- 6. Confirm all necessary installation hardware and tools are readily available. Depending on the application, this may include specific Tools:
  - Cleaning / prep supplies (varies based on what is being cleaned)
  - Medium to hard roller .

Your silicone rubber heating blanket can be mounted on both flat and curved surfaces. However, do not allow your heater to exceed the maximum "bend radius". The typical bend radius is approximately 2" (51mm). To determine the bend radius, slowly bend the heater until it begins to crease or fold. The point prior to creasing is the bend radius. Your heater may be more flexible in one direction than the other, however, the heater should be installed with the wires exiting the bottom if in an outdoor application.

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#### MOUNTING YOUR HEATING BLANKET

Your heater can be attached to the surface using:

- Factory applied PSA (pressure sensitive adhesive)
- Factory supplied mechanical fasteners
- High-temperature adhesive tape that will not damage the heater
- Thin layer of RTV

#### For all installations, regardless of adhesion method:

- 1. Ensure heater is in contact with the surface to be heated. If air gaps are present, heat transfer will decrease and there is a potential to overheat the heating blanket. Use a medium to hard roller to eliminate trapped pockets of air.
- 2. Do not crease the heater, wrap over itself or allow contact with a second heater.

# Installation of heater using factory supplied Pressure Sensitive Adhesive (PSA):

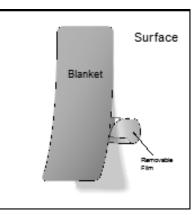
Peel off the release film [*Figure A on next page*] and then press the heater onto the surface of the item being heated using a medium to hard rubber roller [*Figure B* on next page]. Ensure blanket is making intimate contact with the surface to be heated.

- The pressure sensitive adhesive will cure when the blanket is energized and heat is generated. PSA generally cures in twenty minutes at 200°F (93°C) in a 68°F (20°C) ambient environment. The cure time will vary with temperature of the blanket and surrounding ambient conditions. The higher the ambient temperature and set-point of the blanket, the faster the cure time.
- The blanket may require a temporary method of attachment to secure the heater until the PSA cures. Use a high-temperature adhesive tape (BriskHeat<sup>®</sup> Part # AAT2180) to secure the heater.
- For larger heaters, press the heater onto the surface as the film is removed.

NOTE: BriskHeat<sup>®</sup> does not recommend allowing pressure sensitive adhesive to cure at temperatures below 40°F (4°C).



#### SRL-ADJ & SRP-ADJ Silicone Rubber Heating Blankets



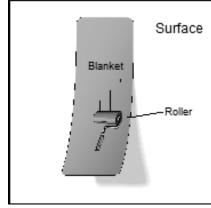


Figure A: Removing Film

Figure B: Rolling the Blanket

# Connecting Heater to AC Power

- The heater is designed to operate at a specific voltage: Refer to the lead wire label or stamp located on the heater for rated voltage and wattage. Failure to operate the heater at its rated voltage could cause damage to the heater, surface being heated, or contents.

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

- **Properly sized circuit breakers must be used.** The end-user is responsible for providing suitable electrical protection device. It is highly recommended that a ground fault circuit breaker be used.

- If heater is equipped with a plug:

Plug power cord into appropriate receptacle.

#### - If heater is not equipped with a plug:

Two wires (same color) should be connected to the power source directly, through a junction box, or to a connector that is mated to a receptacle connected to the power source. BriskHeat<sup>®</sup> SRL-ADJ/SRP-ADJ Silicone Rubber Heating Blankets with Control are non-polarized, allowing either wire to be connected to the neutral or hot. The third wire, designated by the color green (or a green stripe), should be connected to ground.

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#### ADJUSTMENT OF TEMPERATURE SET-POINT

Turn dial to desired setting. Heaters designed for metal surfaces (SRL-ADJ series) can be adjusted 50-425°F (10-218°C). Heaters designed for poly surfaces (SRP-ADJ) can be adjusted 50-160°F (10-71°C).

NOTE: If precise temperature control is required for your application, please contact BriskHeat or your local distributor for application assistance and product solutions.



#### **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 us at **1-800-848-7673 (U.S. / Canada), 1-614-294-3376 (worldwide)**, or **bhtsales1@briskheat.com**.

PROBLEM	SOLUTION(S)
Heater does not warm up	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.
Pressure sensitive adhesive is not adhering	Verify date of manufacture. PSA has a shelf life of 6 months.
	Ensure there are no air gaps and heater is making
	intimate contact with surface being heated.
	Confirm:
	• Medium to hard rubber roller used for install.
	Surface properly cleaned and clear from oil, dirt and residue.
	Installation occurred above 40°F (4°C)
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.
	Check to see if there is a resistance reading between power leads and the ground lead.

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#### WARRANTY INFORMATION

BriskHeat<sup>®</sup> warrants to the original purchaser of this product for the period of eighteen (18) months from date of shipment or twelve (12) months from date of installation, whichever comes first. BriskHeat<sup>®</sup>'s obligation and the exclusive remedy under this warranty shall be limited to the repair or replacement, at BriskHeat<sup>®</sup>'s option, of any parts of the product which may prove defective under prescribed use and service following BriskHeat<sup>®</sup>'s examination, is determined by BriskHeat<sup>®</sup> to be defective. The complete details of the warranty can be found online at www.briskheat.com/t-warranty.aspx or by contacting us at 1-800-848-7673 (toll free, U.S. / Canada) or 1-614-294-3376 (Worldwide).



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