



FGDH & FGPDH
Full-Coverage
Drum Heater
Instruction Manual



Read and understand this material before operating or servicing this drum heater. Failure to understand how to safely operate this heater could result in an accident causing serious injury or death. This heater should only be operated by qualified personnel.

Full-Coverage Drum Heater (FGDH & FGPDH Series)

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INTRODUCTION

Full-Coverage Drum Heaters provide a safe and efficient method of temperature and viscosity control.

For successful operation of these heaters, read and understand these instructions prior to use.



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.

Full-Coverage Drum Heater (FGDH & FGPDH Series)

IMPORTANT SAFETY INSTRUCTIONS



⚠ DANGER

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

Agency Approvals

All FGDH and FGPDH series marked with CE marking



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

⚠ DANGER

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

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

⚠ 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 wrap the heater over itself
- 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 repair damaged or faulty heaters.
- Do not crush or apply severe physical stress on heater or cord assembly.
- Disconnect heater when not in use.
- Use heater for heating drums only.
- Use specified sized heater with same sized drum. Do not use for other applications.

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

⚠ WARNING

End User Must Comply to the Following:

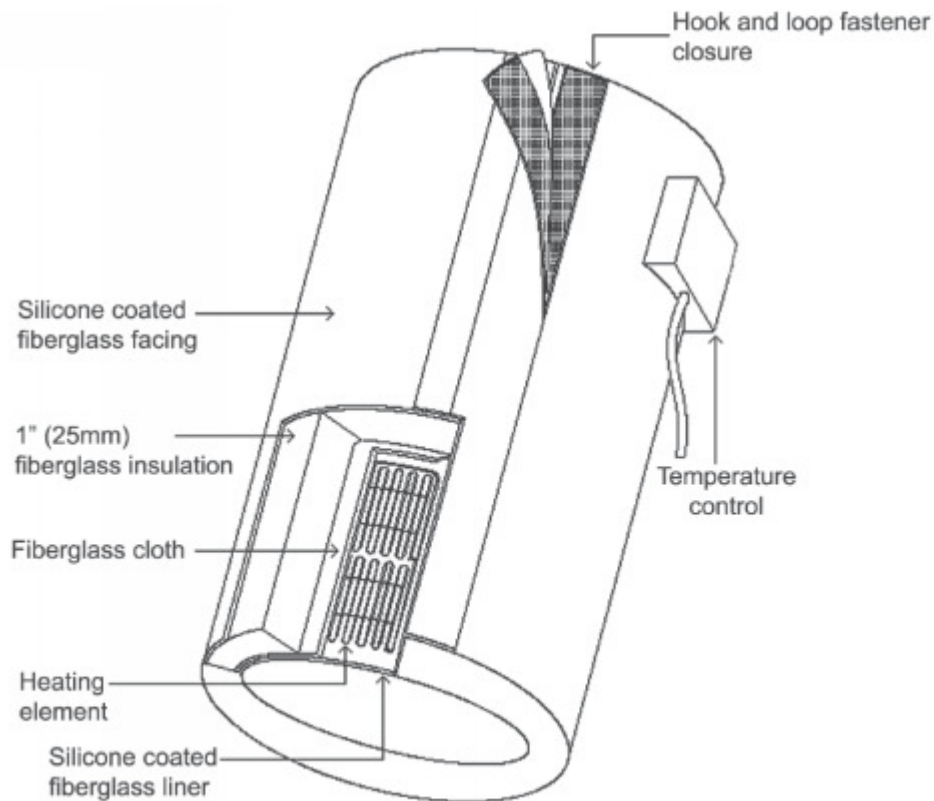
- Only qualified personnel are allowed to connect electrical wiring.
- All electrical wiring must follow local electrical codes and highly recommend following NEC Article 427.
- Final installation / wiring is to be inspected by the authority who has jurisdiction in the area that the heater is installed.
- 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 is used.

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

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SPECIFICATIONS

Adjustable On / Off Digital Controller 50-450°F (10-232°C) for FGDH series 50-160°F (10-71°C) for FGPDH series	120 or 240 Volts Models
Power cord 6' (2m) long	Patented grounded heating element
450°F (232°C) maximum exposure temperature on heating surface	Dielectric strength over 2000 volts
Heated area for FGDH series is the lower third Heated area for FGPDH series is the lower two thirds	Intended for use in dry environments. Do not expose to spray.



Full-Coverage Drum Heater (FGDH & FGPDH Series)

INSTALLATION / OPERATION INSTRUCTIONS

⚠ WARNING

Read and understand this entire manual before operating this drum heater

**VOLTAGE:
120VAC; 240VAC**

STEP 1

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

STEP 2

Drum heater should be placed on a clean, dry surface. Open hook and loop closure like VELCRO® on heater and position around drum with adjustable thermostwitch in the upper third of the heater. Heater should be positioned on drum such that it is covering the drum from the floor to the top of the drum. Fasten hook and loop closure so heater is tight against the drum with no sagging or bundling. Cover top of drum with optional insulation cover (sold separately, PN: FGDC55). For larger diameter drums, up to 24.2" (615mm), optional Insulated expansion strips are available (sold separately, PN: FGDHSTRIP).

STEP 3 (see page 3 for electrical compliance)

For 120VAC model, plug standard 3-prong plug to appropriate electrical power supply. For 240VAC model, terminate power cord to appropriate electrical power supply. The power cable consists of three color-coded conductors, black, white, and green. The black wire should be connected to Line 1. The white wire should be connected to Line 2. The green wire should be connected to earth ground. The power connections must be adequately rated to electrically support the voltage and amperage of the heater. The identification label located on the power cord displays voltage and amperage requirements. Follow all local electrical codes for proper electrical connections.

STEP 4

Adjust controller to desired setting (See page 6 for programming instructions). Drum heaters designed for metal drums (FGDH series) can be adjusted 50-450°F (10-232°C). Drum heaters designed for plastic drums (FGPDH series) can be adjusted 50-160°F (10-71°C).

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PROGRAMMING DIGITAL TEMPERATURE CONTROLLER



PARAMETER PROGRAMMING

Set Point (SP) is the only parameter the user can access without code protection.

- Press SET. SP text will appear on the display.
- Press SET again. The real value is shown on the display.
- The value can be modified with the UP and DOWN arrows.
- Press SET to enter any new values.
- Press SET and DOWN at the same time to quit

programming or wait one minute and the display will automatically exit programming mode.

BUZZER

In the event of alarm or error condition, the internal buzzer is activated. To silence the buzzer, press and hold the SET and Down keys for 2 seconds.

LED INDICATIONS

OUT This indicates that the heater is on.

DISPLAY MESSAGES

In normal operation, the sensor temperature will be shown on the display. In case of alarm or error, the following messages will be shown:

- Er = Memory Error
- -- = Short-Circuit Probe Error (Disconnects output).
- oo = Open Probe Error (Disconnects output).

CONTROLLER OPERATION:

Once the controller reaches set point, the heater will turn off and will not turn on again until the temperature falls 5°F below the set point.

The controller will alarm if the temperature at the sensor exceeds 15°F of the setpoint.

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TROUBLESHOOTING GUIDE

Please read this guide prior to contacting BriskHeat®. 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. The identification label located on the power cord displays the heater's voltage requirement. 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.
Does not fit	Confirm that the heater provided was designed to fit around your specified drum. If the heater was designed for the specified drum, please call 1-800-848-7673 or 614-294-3376 for further assistance.
Something has lightly spilled on exterior or interior	To remove spillage from heater surface use any typical household cleaner, that does not contain any silicone rubber dissolving type ingredients, with a clean cloth.

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.

Limitation. 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 THERMAL 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 REPRESENTATIVE IS SPECIFICALLY ENDORSED IN WRITING BY BH THERMAL, IT SHALL NOT BE ENFORCEABLE BY ANY BUYER. BH THERMAL MAKES NO EXPRESS OR IMPLIED 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, INCIDENTAL 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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