INSTALLATION INSTRUCTIONS



BKT1A, BK1BW, BKT2A, BKT2BW



READ ALL WIRE SIZING, VOLTAGE REQUIREMENTS AND SAFETY DATA TO AVOID PROPERTY DAMAGE AND PERSONAL INJURY

Inbuilt Thermostat for K and CB Baseboard heaters.

Resistive Load	
22AMP	@ 3000W
22 AMP	@ 5200W
22 AMP	@ 5500W
22 AMP	@ 6000W
18 AMP	@ 4985W
40°-90°F	4°-32°C
50-60 Hz	
7°F	± 3.5°C
1/2 horse Power	
Open on Temp. Rise	Bi-Metal Sensor
	22AMP 22 AMP 22 AMP 22 AMP 22 AMP 40°-90°F 50-60 Hz 7°F 1/2 horse Power



Approved for US & Canada

MARNING

READ CAREFULLY - These instructions were written to help prevent difficulties that might arise during thermostat installation. Studying the instructions first may save considerable time and money later. Observing the following procedures will keep installation time to a minimum. Save these instructions for future use.

Instructions

The King BKT may be installed on either the right or left junction box of the heater

WARNING: disconnect the power at the Circuit Breaker before installing.

Caution do not cut both factory splice caps on left side you need only two wires for installation

Cut Factory Splice as shown. This leaves two wires for power connections: one wire for an inline switch connection to power supply and the other wire for a second power line or common.

WIRING DIAGRAMS



BKT1A/BKT1BW

- 1. Red thermostat wire to black supply wire
- 2. Black Thermostat wire to heater
- 3. White Supply wire to heater
- $\label{eq:action} \textbf{4.} \ \textbf{Bare Ground wire to green ground wire}$

BKT2A/BKT2BW

- 1. Two red thermostat wires to black and white supply wires
- 2. Two black thermostat wires to the two heater wires.
- 3. Bare Ground wire to green ground wire

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Factory wire splice cutting diagram





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Inbuilt Thermostat for K and CB Baseboard heaters.

Specifications	Resistive Load	
120 VAC	22 AMP	@ 3000W
208 VAC	22 AMP	@ 5200W
220 VAC 240 VAC 277 VAC	22 AMP 22 AMP 18 AMP	@ 5500W @ 6000W @ 4985W
Temperature Range	40°-90°F	@ 4985W 4°-32°C
Frequency Accuracy	50-60 Hz 7°F	± 3.5°C
Inductive Load	1/2 horse Power	± 0.0 0
Contact: Snap Action	Open on Temp. Rise	Bi-Metal Se



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TROUBLESHOOTING

Commonly asked questions

Q: Will the room heat up faster if I turn the thermostat up to 90?

A: No, the heater is always on at full watts when the temperature is below the preset temperature. The thermostat shuts off when the preset temperature is reached, therefore set the thermostat to the desired level.

Q: Will the electric bill be lower using 120 VAC heaters?

A: No, electric bills are by Kilowatt Hours, voltage makes no difference. Typically, baseboard heaters are 240 VAC because of wiring capacity, I.e. 240 VAC heaters draw less amps then 120 VAC heaters.

Q: What is the difference from a two pole and a single pole thermostat?

A: A single pole has no positive off position. That means when the knob

is turned all the way to the left (counterclockwise), it has a low temp setting. A two pole breaks an additional line when the knob is turned to the off position. The thermostat will turn off the heater in the off position regardless of temperature drop.

Q: Which power lead do I attach to the thermostat on a 240 VAC heater?

A: It does not matter. On a 240 VAC

system, both leads are Hot, so either one can be connected through the thermostat.

Sensor

Q: I have a black hot lead, a red hot lead, and a white neutral wire in my wall. Where do I hook up the neutral wire on my 240VAC heater?

A: In 240VAC systems, the energy is used in the heater, so neutral wire is not required. Isolate the neutral wire by capping it.

SYMPTOM	PROBLEM	SOLUTION
Breaker Trips	Short Circuit	Trace heater line, circuit, wiring for source of the short.
	Overloaded Circuit	Reduce the load on the circuit.
	Improper Voltage	Verify heater voltage matches supply voltage
Heater Not Working	No power	Check Breaker and Thermostat
	Loose Connection	Tighten Wire Connections
	Defective Limit	Bypass Limit. If heater works, replace limit.

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