

This SoliStat

Setpoints:

Switches ON at 45 °F / °C

Switches OFF at 50 °F / °C

Quantity This Order:

1

Part number: KHL-STAT-2

Other notes:

Wiring Information

Red wire connects to V+ on power supply.

Black wire connects to V- on power supply.

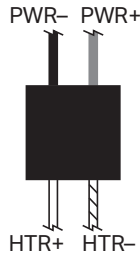
White wires each connect to one heater wire.

This wiring diagram applies to SoliStat 2-10 and 2-20. If you have a different model and require wiring information, please contact us.

⚠ Do not allow the white wires to touch each other when a power supply is connected. Doing so may cause the SoliStat to become inoperational or to function incorrectly.

⚠ SoliStat is not protected against long-term accidental reverse-polarity connection to the power supply. Please consult engenuity or your distributor if you require reverse polarity protection.

All SoliStat units are tested prior to shipment to ensure proper functioning. engenuity cannot be liable for damage caused by inappropriate wiring or wire contact.



SoliStat™ 2

Temperature-controlled switch for DC circuits

U.S. Patent No. 8,500,034

USER'S MANUAL & WIRING GUIDE

RETAIN FOR REFERENCE



engenuity, LLC
(612) 767-9590
www.engenuity.com

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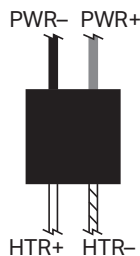
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About the SoliStat

The SoliStat 2 is a family of reliable and easy-to-use temperature-controlled switches for DC-powered heating and cooling applications. It incorporates a calibrated RTD sensor, microcontroller, and solid-state switch. Because it has no moving parts, it is not vulnerable to corrosion from electrical arcing, the most common cause of failure in conventional thermostats applied to DC circuits.

The SoliStat family ranges from the basic SoliStat 2-10 (a self-contained temperature control for loads up to 10 amps) to the SoliStat 2XD (a compact, dual-loop controller for loads up to 10 amps per channel). All SoliStat models share these features:

- Accurate, tamper-proof setpoints (factory-programmable to any point in the operating range)
- Rugged, weather-proof housing
- Operating temperature range from -40°F (-40°C) to 257°F (125°C)
- Accurate trip-points even below 32°F (0°C)
- Optional low-power standby/shutdown mode
- Resistant to electrostatic discharge

SoliStat models are available for operation on any voltage from 6 to 28 volts and any current up to 30 amps. SoliStat can be programmed for either **ON-OFF** or fixed **ON**-time control. Custom SoliStat models can also be tooled for constrained geometries. For a more detailed listing of all models according to voltage and other options, please see our website.

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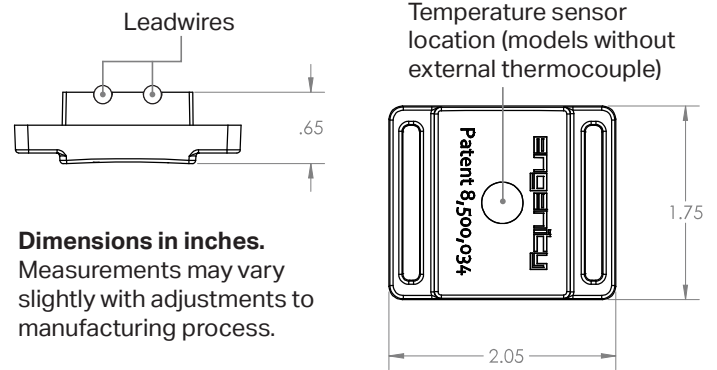
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Schematic



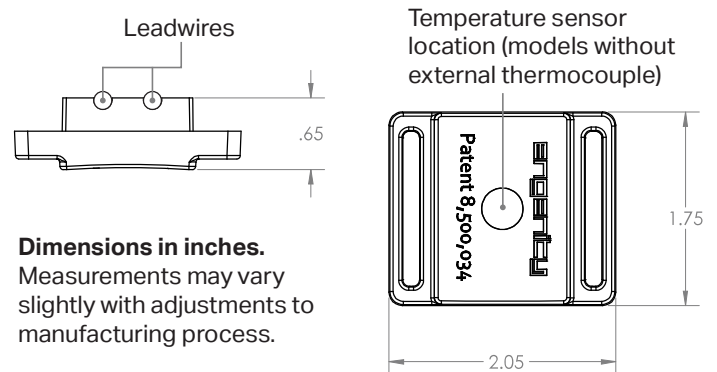
Dimensions in inches.
Measurements may vary slightly with adjustments to manufacturing process.

Standard Features

Operating temperature	-40°F (-40°C) to 257°F (125°C)
Storage temperature	-65°F (-76°C) to 302°F (150°C)
Setpoint tolerance	$\pm 2^{\circ}\text{F}$ (1.1°C)
Housing material	Mineral-filled nylon
Sensor heatsink	Anodized aluminum
Leadwires	12 or 14 AWG power leads 20 AWG sensor input leads Stranded wire, ETFE insulation

Water- and dust-resistant to IP67.
RoHS-compliant.

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