

CT298 AC HeaterStat

The CT298 AC HeaterStat simplifies heating applications by eliminating the need for a sensor. Combined with a high TCR (Thermal Coefficient of Resistance) heater, the CT298 uses the heater's resistance to determine its temperature. USB connectivity and a Windows application makes configuration easy, and integrated fault detection helps to prevent damage.

For DC power applications, Minco offers the CT198 and CT398. CT198 is an analog HeaterStat that is calibrated with an adjustment screw, and CT398 is adjusted using a computer interface and Windows Software. Contact your Minco sales representative for more information on these products.

Overview

- Simple sensorless control of heater: only two wire connections are needed.
- Heater is periodically powered just long enough to check resistance. If heater temperature is above setpoint, power shuts off. If heater temperature is below setpoint, power is applied to heater until setpoint is reached.
- Internal Solid State Relay for reliable AC switching.
- All controller features are configurable through the standard USB interface.
- USB interface is electrically isolated for user safety.
- Included Windows application allows multiple methods to characterize temperature vs. resistance curve of attached heater.
- High speed data sampling ensures accurate heater measurement even with noisy AC power.
- Zero-cross detection used to reduce switching noise.
- Bi-color LED status indicator provides a quick confirmation of correct operation.
- Diecast aluminum enclosure with durable mounting flanges.
- Robust terminal blocks accept wide range of wire gauges.



Specifications

Input Power: 100 to 240 VAC, 50-60Hz

Heater Resistance Range: 10Ω to 500Ω

Accuracy: 3% full-range accuracy across entire temperature range

Connections: 0.375" (9.52mm) spacing terminal block, 10 to 24 AWG

Output Ratings:

Ambient	Output Rating
25°C	10A
35°C	9A
45°C	8A
55°C	7A

Ambient Temperature Range: -25°C to 55°C, 95% humidity, non-condensing

Mechanical:

Dimensions: 5.49"L x 3.24"W x 1.80"D (13.94cm L x 8.23cm W x 4.57cm D)

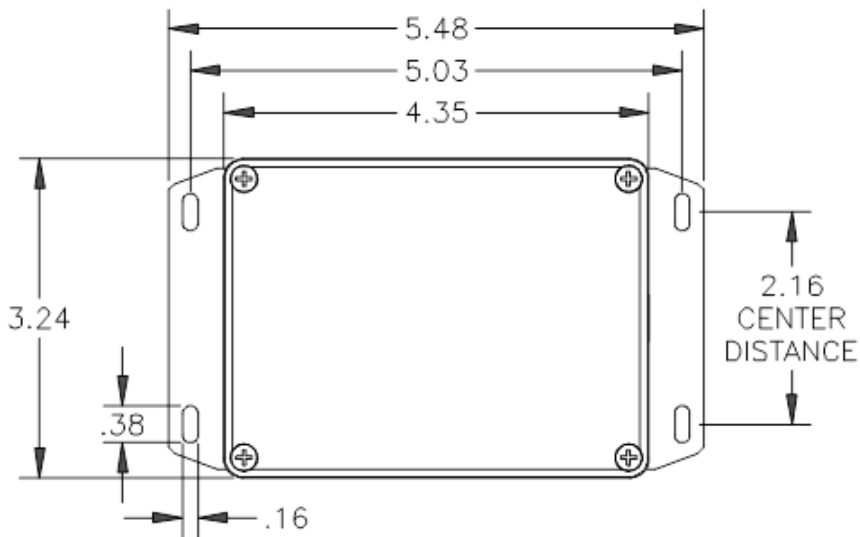
Weight: Approximately 12.1 ounces (0.34 kg)

Enclosure: Diecast aluminum with flanges

How to Order

CT298	Model Number: CT298
CT298 → Sample Part Number	

Dimensional Drawings



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ISO 9001:2008 / AS9100: 2009
CT298 v.1
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