

CT335 PC Board Mount Temperature Controller

Overview

The CT335 is an OEM micro-processor based temperature controller that offers two sensor inputs, and two outputs. This low cost, PCB mount style proportional controller is great for system integration.

The CT335 multiple output options make it more versatile than other temperature controllers. Option 1) one output capable of handling up to 6 Amps. Option 2) Two open drain outputs with 3 Amps each. Option 3) one open drain output that can handle up to 3 Amps and a logic output option to work with an external SSR for higher power.

- Proportional and On/Off control
- Two inputs and two outputs (solid state)
- Small package designed for PCB mounting
- Able to handle up to 6 Amps
- Operates on 7.5-60 volts DC
- Low cost

Specifications

Sensor Inputs:

100Ω at 0°C Pt RTD, 2-leads (0.00385 TCR)

1000 Ω at 0°C Pt RTD, 2-leads (0.00385 TCR)

Output Options:

One output of 6A

Two outputs of 3A each

One 3A output and one logic output (0-5V)

Controlling Parameters:

Dead-band for On/Off Control: 0.1 to 10°C

Proportional band for Proportional Control: 0.1 to 10°C

Ambient:

Operating temperature: -40 to 70°C (-40 to 158°F)

Storage temperature: -55 to 85°C (-67 to 185°F)

Relative humidity: 90%, non-condensing

Accuracy: ±1° C

System stability determined by overall system.

Power supply: 7.5 to 60VDC

Physical: ABS case, epoxy potted for moisture resistance

Case Dimensions: 1.49x1.03x0.36"

Mounting: Pins on 0.1" center for mounting on PCB



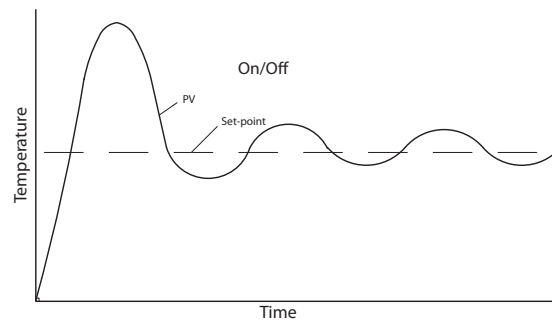
AC207473 USB to SPI Converter Kit:

The AC207473 allows the user to configure the CT335 from a PC. It is ideal for prototyping and early-stage development. It consists of a CT335 USB to SPI converter, power supply, USB cable, and software CD for easy user interface.

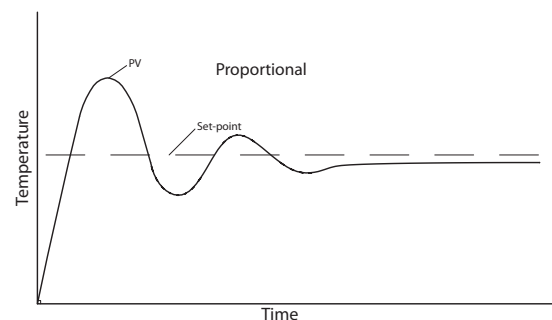
Operation

The CT335 controller can be configured to On/Off or Proportional control. On/Off control offers faster reaction time and better accuracy over thermostats. The CT335 Proportional control minimizes temperature overshoot and gives steadier temperature control by reducing the time the heater/load stays on as the process temperature approaches the set-point. Note that actual outputs depend on the system's configuration and controlling parameters. See below.

On/Off Control



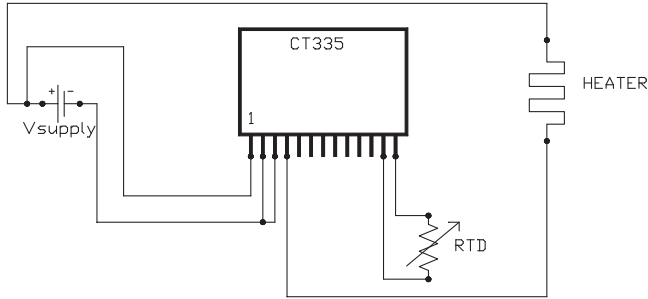
Proportional Control



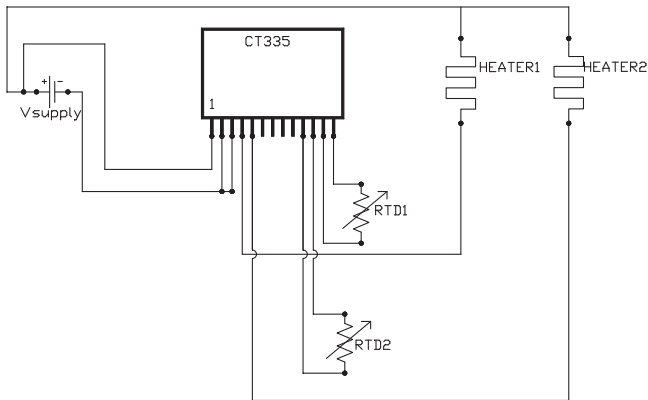
Specifications subject to change

Wiring with Different Output Options:

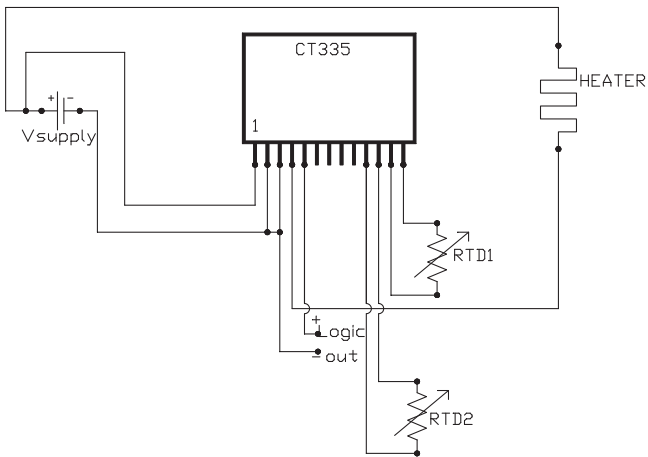
Option 1: One output of 6A



Option 2: Two outputs of 3A each



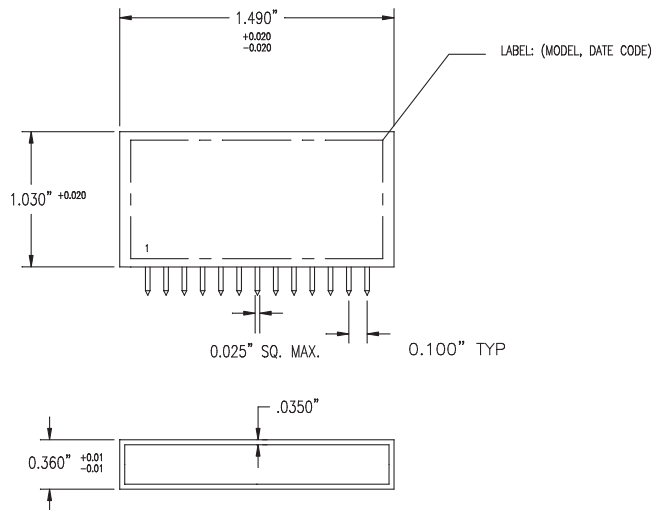
Option 3: One 3A output and one logic output (0-5V)



Specifications and order options

CT335	Model Number: CT335
PD	Sensor Types: PD = 100Ω Platinum RTD (-40 to 200°C) PF = 1000Ω Platinum RTD
1	Output Options: 1. one output of 6A 2. two outputs of 3A 3. one 3A output and 1 logic output
P	Control Method: O = On/Off P = Proportional
10	Dead-band or Proportional Band 1 = 0.1° C 10 = 1.0° C 100 = 10.0° C
T100	Setpoint Temperature (Min = - 40°C, Max = 200°C): XXXX = Setpoint in 0.1°C increments Example: 100 = 10.0°C 103 = 10.3°C -200 = -20.0°C
CT335PD1T100 = Sample part number	

Dimensions



Specifications subject to change