

Description and Application

The CTE-5100 Electronic Room Thermostat series is designed for use with the CSP-5001/5002 Flow Controller-Actuator and/or the REE-1000/4000 series auxiliary relays. Other high impedance (10K ohms or higher) controls, such as MEP series actuators and VEB series valves requiring a 0 to 10 VDC control circuit, may be controlled via any of the CTE-5100 series thermostats. The CTE-5100 series thermostats have both limited and non-limited outputs. The limited output is used to provide adjustable minimum and maximum limits to a CSP-5001/5002 or impose electronic limits to a proportional actuator or valve.

Models are available for cooling, heating, cooling with reheat, cooling/heating changeover, day/night, or night/day applications. Temperature averaging and/or overrides are also available.

All thermostats require a scale plate assembly and cover, which may be ordered separately or as part of a value package containing the most frequently ordered accessories (see the Accessories and Value Packages sections). Thermostat and accessories styling feature the setpoint indicator and/or thermometer to be visible or concealed, setpoint adjustment locked or restricted, vertical or horizontal mounting, and attractive color finishes in plastic or metal.

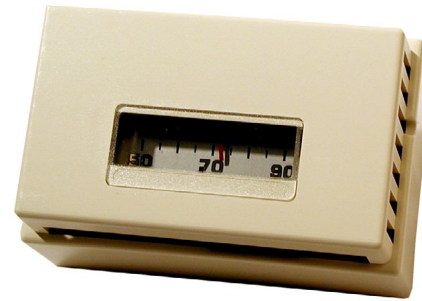
Features

- ◆ Available for cooling, heating, cooling w/reheat, cooling/heating changeover, day/night, or night/day applications
- ◆ Single or dual setpoint models
- ◆ Outputs w/ adjustable min./max. limits or no limits
- ◆ Visible or hidden setpoint indicator

Models

The following models are available (**scale plates and covers are not included** — see **Accessories**):

| | |
|----------|---|
| CTE-5101 | Single setpoint, direct acting |
| CTE-5103 | Dual setpoint, DA and RA |
| CTE-5104 | Dual setpoint, direct and reverse acting (no T4 output) |



(Shown with Horizontal Scale Plate and Light Almond Cover Installed)

Specifications

| | |
|---------------------------|---|
| Supply Voltage | 16 VDC (9 mA) (14 to 20 VDC) |
| Output Range | 0 to 10 VDC |
| Temperature Range | 55 to 85° F (13 to 29° C) |
| Proportional Band | |
| CTE-5101/5103 | 2° F (1.1° C) w/ limits output (T1/T2) 4° F (2.2° C) w/o limits output (T3/T4) |
| CTE-5104 | 2° F (1.1° C) w/ and w/o limits output (T1/T2/T3) |
| Thermostat Action | |
| CTE-5101 | Direct Acting (DA) T1/T3 |
| CTE-5103 | Direct Acting (DA) T1/T3 Reverse Acting (RA) T2/T4 |
| CTE-5104 | Direct Acting (DA) T1/T3 Reverse Acting (RA) T2 |
| Connections | Wire clamp type, 14-22 AWG |
| Base Material | Black flame-retardant plastic |
| Size | (With cover) 2-9/16 x 3-7/16 x 1-7/8" (65 x 87 x 47 mm) |
| Weight | 3.0 oz. (85 grams) |
| Approvals | SASO PCP Registration KSA R-103263 |
| Temperature Limits | |
| Operating | 40 to 120° F (4 to 49° C) |
| Shipping | -40° to 140° F (-40 to 60° C) |

NOTE: For graphs and information on CTE-5100 mounting, wiring, calibration, and sample applications, see the **CTE-5100 Installation Guide** and the **CSP-5001/5002 Applications Guide**.

Accessories

Backplate kit (allows thermostat to be mounted to 2x4 handy box, includes 2 #6-32 screws and decorative matching plate):

| | |
|----------|-------------------------------|
| HMO-5024 | Light almond w/ aluminum trim |
| HMO-5026 | White w/ aluminum trim |
| HMO-5030 | Light almond |
| HMO-5031 | White |

Thermostat **scale plates** (includes 2 each HPO-0046 scale plate pins):

| | |
|-------------|-----------------|
| HPO-0060-10 | ° F, horizontal |
| HPO-0060-11 | ° C, horizontal |
| HPO-0061-10 | ° F, vertical |
| HPO-0061-11 | ° C, vertical |

Thermostat **covers, blank:**

| | |
|----------|------------------|
| HPO-1501 | Light almond ABS |
| HPO-1502 | White ABS |
| HPO-1503 | Brushed aluminum |

Thermostat **covers, full window:**

| | |
|----------|--------------------|
| HPO-1511 | Light almond ABS |
| HPO-1512 | White ABS |
| HPO-1513 | Brushed aluminum |
| HPO-1514 | White metal |
| HPO-1516 | Light almond metal |

Miscellaneous accessories:

| | |
|----------|---|
| HFO-0027 | Setpoint stop strip, 4 "stops" per strip |
| HMO-5023 | Mounting strap for mounting on hollow walls, includes 2 #6-32 x 2" screws and "template" printed on envelope |
| HPO-0044 | Replacement thermostat cover screws |
| HPO-0046 | Replacement scale plate pins |
| HPO-0051 | Replacement cover window for thermostat (1 furnished with each cover) |
| HPO-1320 | Label strip, 3 labels per strip (for day/night, summer/winter or heating/cooling indication), 1 furnished with each cover |
| HSO-5001 | Test leads for connecting CTE-510x to a voltmeter |

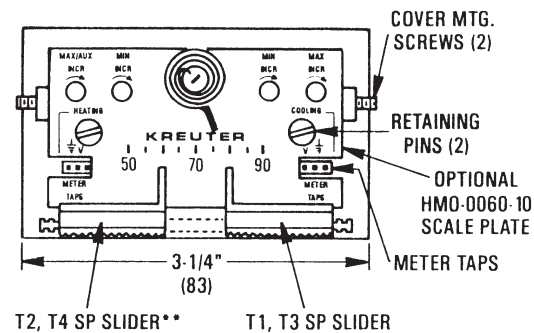
Value Packages

The scale plate assembly and the cover are not included with the thermostat model base and must be ordered separately or as part of a (-10) value package containing the most frequently ordered accessories. Adding -10 to the thermostat model (e.g., CTE-5101-10) orders a "package." Packages contain one of each of the following models and accessories:

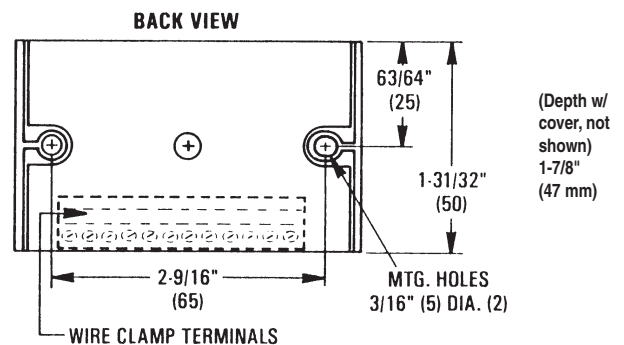
- ◆ CTE-5100 series thermostat base
- ◆ HPO-0060-10 horizontal scale plate, degrees F
- ◆ HPO-1511 light almond full window ABS thermostat cover
- ◆ HMO-5030 light almond backplate kit w/ matching decorative plate
- ◆ HPO-1320 label strip

Dimensions and Details

All dimension are in inches (mm)



* PHOTOGRAPH ON FRONT PAGE SHOWS ITEM WITH AN OPTIONAL COVER
 ** MODEL CTE-5104 DOES NOT INCLUDE T4 OUTPUT



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