

Electronic Room Thermostat

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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.

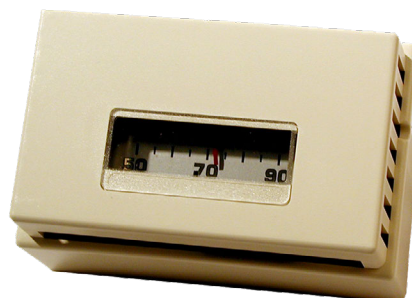
Features

- ◆ 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

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-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

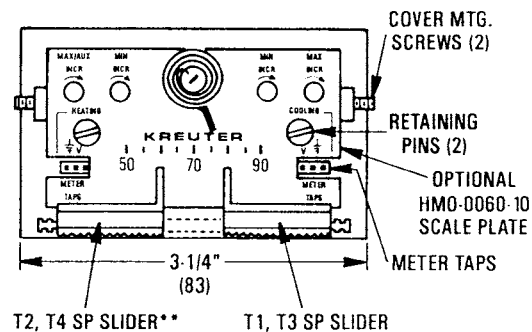
Value Packages

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

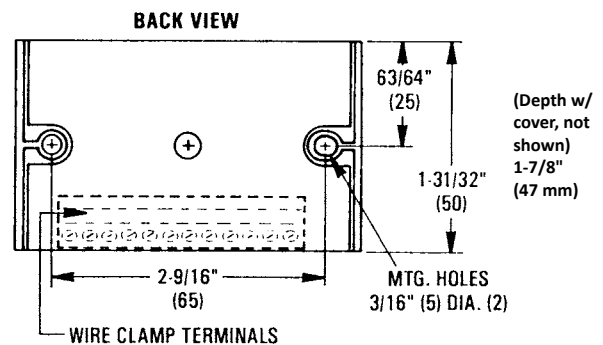
Dimensions and Details

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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