

## CTE-5100 Series

## **Electronic Room Thermostat**

## **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  $2^{\circ}$  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
Paga Matarial	Plack flame retardant plactic

**Base Material** Black flame-retardant plastic (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
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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
111 0-1501	Ligitt annond Abo

HPO-1502 White ABS

HPO-1503 Brushed aluminum

### Thermostat covers, full window:

HPO-1511	Light almond ABS
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HPO-1512 White ABS

HPO-1513 Brushed aluminum

#### **Miscellaneous** accessories:

HFO-0027 S	Setpoint stop stri	p, 4 "stops" per
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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

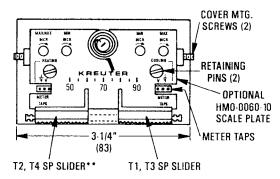
## Value Packages

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:

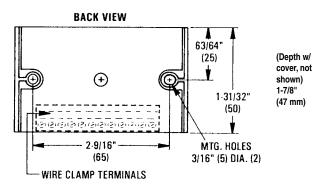
- ◆ CTE-5100 series thermostat base
- ◆ HPO-0060-10 horizontal scale plate, degrees F
- ◆ HPO-1511 light almond full window ABS thermostat cover
- ◆ HMO-5030 light almond backplate kit w/ matching decorative plate
- ♦ HPO-1320 label strip

### **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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