

Model CTE-5201W16 Thermostat:

Model CTE-5201-16 (LCD analog thermostat) (Figure 2) - single output with limits, PI function is designed to be used with the CEE-5201 Fan Coil Unit controller (Figure 1). Model CTE-5201-16 Thermostat comes with the following factory default settings:

Set Point (Default):	70°F
MAX:	100%
MIN:	20%
F/C Mode:	Degrees F
UNOCC Mode:	OFF
PROP:	4°F
INT:	30 Minutes

To change any one of these values, except the F/C Mode, first push the button to display the value to be changed. Use the Up / Down buttons to change the value. Then hold down the corresponding button for approximately 10 seconds until the display begins to flash. The new value has now been written into memory.

To change to degrees C mode simply press and hold the F/C button down for 10 seconds until the display begins to flash. To change back to degrees F repeat the procedure.

Set Point (Normal)

The set point range is 60 – 85°F (15.6 – 29.4°C). To change the set point, push the SET POINT button to display the current value. Use the Up / Down buttons to change the value. The display will time out and revert back to displaying the room temperature and the thermostat will control to the new set point.

Set Point (Default)

If power is lost, when the unit is powered back up, the set point will revert to the default value of 70°F (21.1 C). This default value can be changed to any value in the set point range. This default set point is also used in the dead band unoccupied mode.

MAX

This is the maximum value that the output can attain. It is adjustable up to 100% (10 volts) and down to the MIN setting.

MIN

This is the min. value that the output can attain. It is adjustable down to 0% (0 volts) and up to whatever the MAX is set for.

F/C Mode

The F/C button toggles the display between °F and °C. Room temperature, set point, proportional band, dead band, and offset will be displayed in the desired units.

UNOCC

Momentarily pressing this button will put the unit into the unoccupied mode. It will stay in this mode until either the Set Point or Up / Down buttons are pushed. There are two unoccupied modes, OFF or DEADBAND.

OFF UNOCC Mode

The output voltage is forced to 0 volts (0%). A safety override will bring the output up to 2 volts placing the unit in heating if the room temperature falls below 50°F. The output will return to 0 volts when the room temperature reaches 55°F.

DEADBAND UNOCC Mode

In this mode the set point is set to 70°F, the integral action is disabled, and a dead band of +/- 10°F is set around the set point. As long as the room temperature is within the dead band the fan

will run at MIN conditions.

PROP

The proportional band is the temperature band around the set point over which the output will vary from MIN to MAX due to the proportional action alone. The proportional band is adjustable from 2 – 6°F (1.1 – 3.3°C).

INT

As long as there is a difference between room temperature and set point, the integral action will cause the output to integrate up or down. The integral time is the time it takes the integral action to repeat the effect of the proportional action. The integral time is adjustable from 15 to 30 minutes. Setting the integral time to 0 will disable the integral action.

Temperature Offset

By pressing both MIN and INT together it is possible to offset the internal temperature sensor by +/- 2°F (+/- 1.1°C). After using the Up / Down buttons to change the offset both the MIN and INT buttons must be held down together for 10 seconds until the display begins to flash in order to write the new offset into memory.

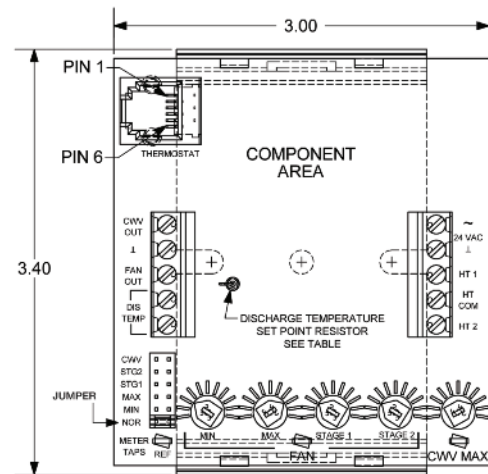


Figure 1. CEE-5201 Analog Controller Card

Supply Voltage: 24 VAC +20/-15% 50/50Hz

Supply Power: 1 VA plus output loads

Discharge Temp Input: 10K OHM@25°C, NTC 4.37% / °C

Fan Output: Min Adjustable 0–10 VDC

Stage 1 Max adjustable from Min to 10 VDC

Stage 2 Max adjustable from stage 1 Max to 10VDC

Cooling Max adjustable from Min to 10 VDC

CWV Output: Max adjustable from 0 to 10 VDC

Heat Stage 1 & 2 Outputs: Triac outputs 10VA Max @ 24VAC

Thermostat connector: PIN 1 NC

PIN 2 DC COM

PIN 3 Supply Output 16 VDC +/-10% 10mA

PIN 4 Tin 1-10 VDC 100 KOHM

PIN 5 DC COM

PIN 6 NC

Connections: Plated screw terminals 14 to 22 AWG Cu
RJ-11 thermostat jack

Ambient Limits: Operating 0 to 120°F (-18 to 49°C)
Shipping -40 to 140°F (-40 to 60°C)

Mounting: Open Board / Snaptrack supplied

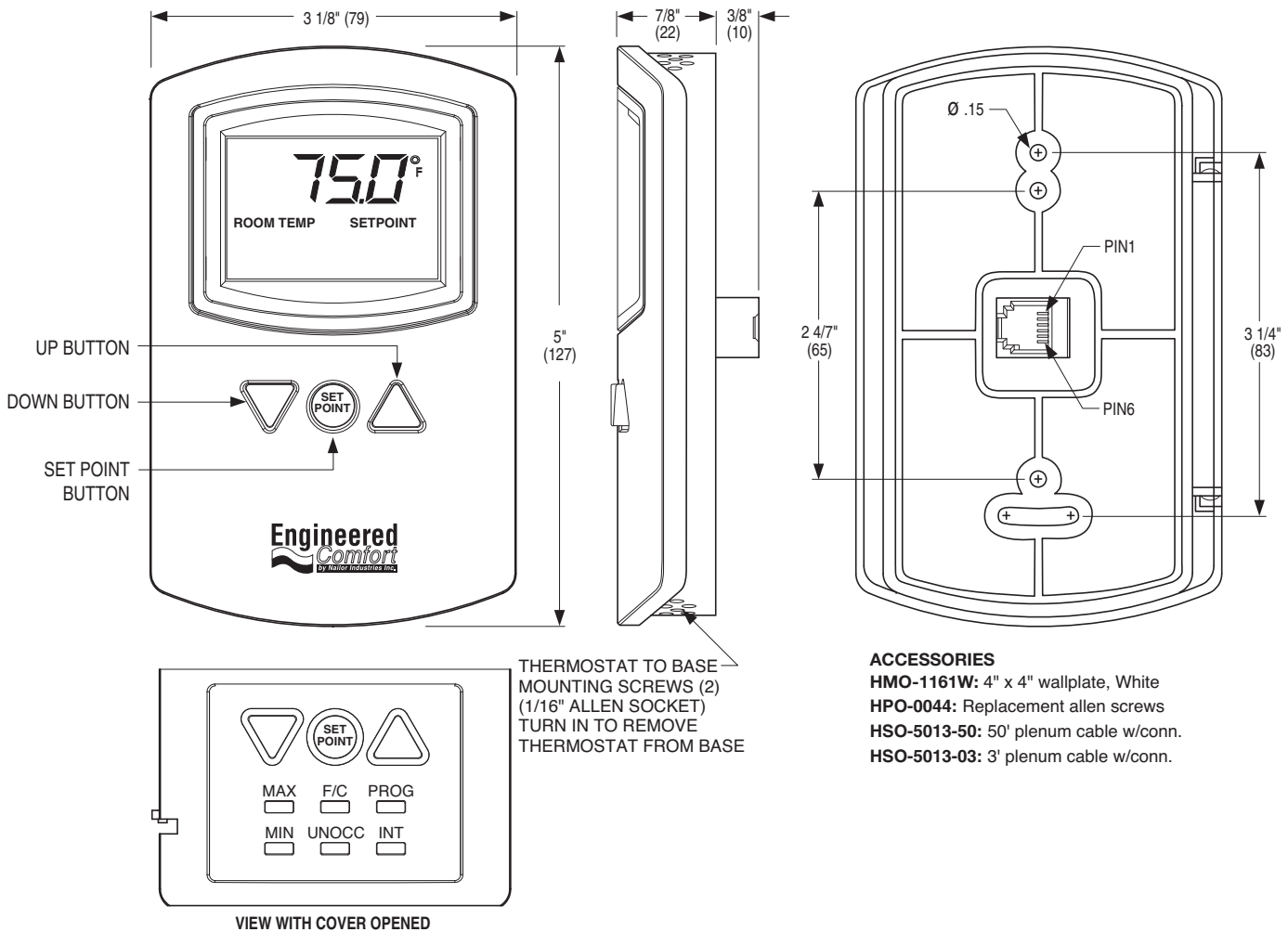


Figure 2. Model CTE-5201W16 (Fan Coil Unit LCD analog thermostat)

Supply Voltage: 14 -19 VDC
Set Point Range: 60 – 85°F (15.6 – 29.4°C)
(Power On Default: 70°F / 21.1°C)
Temperature Sensor Type: Thermistor
Accuracy: +/- 0.36°F (0.2°C)
Display Degrees F or C: Selectable (Factory Setting: Degrees F)
Direct Acting Output: 0 – 10 VDC
MIN / MAX Limits: Adjustable 0 – 100%
(Factory Settings: MIN=20, MAX =100)
Proportional Band: 2 – 6°F (1.1 – 3.3°C) (Factory Setting: 4°F)
Integration Time: 15 – 60 Minutes (0=OFF)
(Factory Setting: 30)
Unoccupied Setpoint Modes: OFF or Deadband
(Factory Setting: OFF)
OFF Mode: Output Voltage = 0.0 Volts
(Safety Override: Output Cycles 0.0 Volts to 2.0 Volts. To Maintain 50°F to 55°F)

Deadband Mode: Integral Action Disabled & Set Point.
Set to Default +/- 10°F Deadband.
Deadband Output Midway between Max & Min.
Temperature Offset: Adjustable +/-2°F (+/- 1.1°C)
(Press MIN & INT together)
Operating Ambient: 34 – 125°F (1.1 – 51.6°C)
Shipping Ambient: -40 – 140°F (-40 – 60°C)
Humidity: 0 – 95% Non Condensing
Case Material: White ABS.
UL Frame Class 94HB.
RJ-11 Female Connector.
PIN1 NC PIN2 COM PIN3 SUPPLY
PIN4 OUT PIN5 COM PIN6 NC