

# TE151 Modulating 0-10Vdc, LCD Electronic Thermostat with single speed fan switch 24Vac

## Description

Modulating proportional plus integral (P+I) 0-10Vdc electronic room thermostat with digital display and set point adjustment. It is suitable for controlling a single speed fan as well as controlling a single heating or cooling modulating valve to maintain the room temperature. An On/ Auto Switch on the thermostat cover will switch the fan On. In Auto position, it will cycle the fan from the room temperature if reaching the set point, this cycle is for maximum energy saving. Heating/Off/Cooling switch on the thermostat cover will select heating or cooling mode. Jumper J2 set to U.S. or E.U. setting will reverse the 0-10Vdc signal. Selectable between °C and °F scales by jumper on PCB.

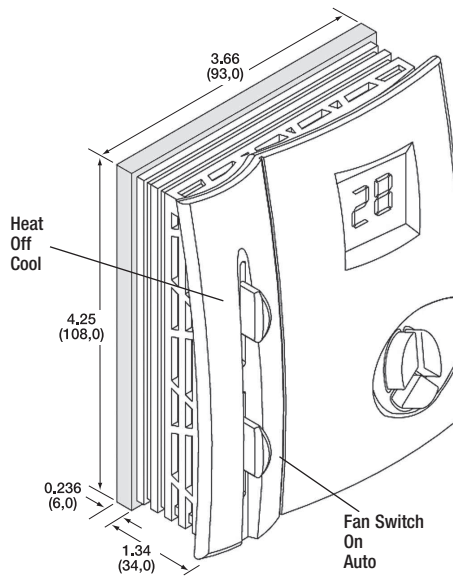
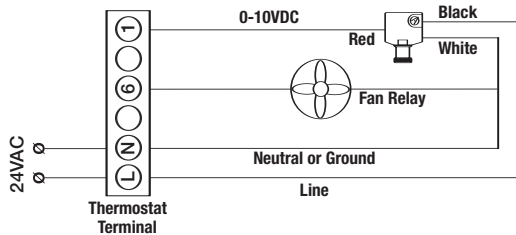
## Specifications

<b>Operating voltage:</b>	24Vac, 50/60Hz, +/- 20%
<b>Power consumption:</b>	Maximum 3Va
<b>Control output:</b>	0-10Vdc, 30mA
<b>Fan Switch:</b>	1A, 24Vac
<b>Sensing Element:</b>	NTC Thermistor
<b>Connection terminals:</b>	Use solid wire 22 AWG to 14 AWG
<b>Digital Display:</b>	Temperature in °C or °F, set point, heating or cooling output
<b>Set point range:</b>	40-95°F in 1°F resolution 5-35°C in 0.5°C resolution
<b>Operating temperature:</b>	32-122 °F or 0-50 °C, < 95% RH
<b>Housing cover/base color:</b>	Cover white, base grey
<b>Wall mounting plate:</b>	Color white, mounting holes for European and North American standards, fits 2 x 4 electric box
<b>Shipping weight:</b>	0.5Lbs (0.225 Kg)
<b>Agency approval:</b>	Conforms to CE requirements Class 2 as per UL/CSA

*Quality, affordable electronic room thermostat with digital display from Spartan*



## Wiring Diagram



### Changing the Set Point

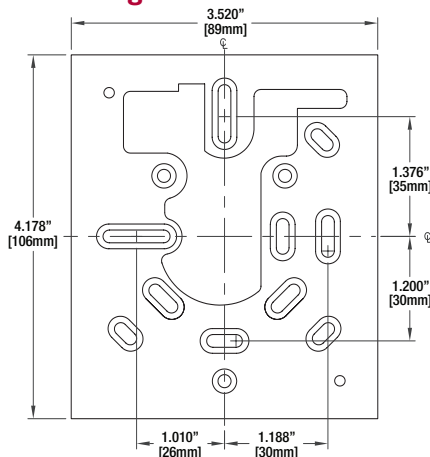
To change set point use the increase or decrease keys. LCD display will illuminate after pressing hand key.

- **HEAT** When the thermostat is in heating mode a thermometer will appear in the display. It will flash when there is a demand for heat.
- ❄ **COOL** When the thermostat is in cooling mode a snow flake will appear in the display. It will flash when there is a demand for cooling.

### On Power Failure

The set-point will return to the factory default setting 75°F/24°C.

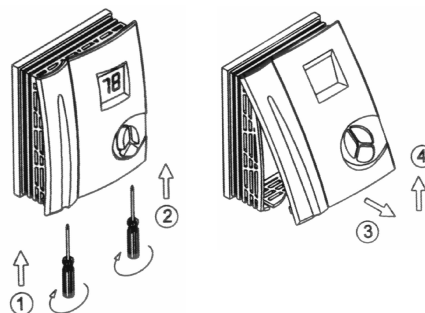
## Mounting Dimensions



## Cover Removal

### TE120 Cover Removal Instructions

To remove the cover simply remove the screws at the bottom of the unit with a screwdriver (1 and 2). The cover then is removed by pulling it out and then up (3 and 4).



### Disclaimer:

The installation and service should be performed by trained personnel. To avoid electric shock ensure the electrical source is switched off.

### Installation:

Thermostats can be installed on a standard 20-20 2X4 electric box, or directly on the flat wall surface, and away from the heat source. **Do not expose to water.**