SPORTOR SOURCES

AUTO



# TE153 Modulating 0-10 Vdc, LCD Electronic Thermostat with 3 Speed Fan Switch 24 Vac

## **Description**

Modulating proportional plus integral (P+I) 0-10 Vdc electronic room thermostat with digital display and set point adjustment. It is suitable for controlling a 3 speed fan with Low/Medium/High switch as well as controlling a single heating or cooling modulating valve to accurately maintain the room temperature with its P+I control loop. An On/Off/Auto Switch on the thermostat cover will switch the fan On or Off manually. In the Auto position the fan will automatically switch off when reaching the room temperature set point This setting is for maximum energy saving. External summer/winter changeover thermostat or wire jumper can be connected to the room thermostat terminals 3 & 4 to 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 J1 on PCB.

## **Specifications**

**Operating Voltage:** 24Vac, 50/60Hz, +/- 20%

Power Consumption:Maximum 3VaControl Output:0-10VDC, 5mAFan Switch:IA 24VacSensing Element:NTC Thermistor

Connection Terminals: Use solid wire 22 AWG to 14 AWG
Digital Display: Temperature in °C or °F, set point,

heating or cooling output

Set Point Range:

40-95°F in 1°F resolution
5-35°C in 0.5°C resolution

**Operating Temperature:** 32-122 °F or 0-50 °C, < 95% RH

Housing Cover/base Color: Cover white, base grey

Wall Mounting Plate: Color white, mounting holes for

European and North American standards, fits 2 x 4 electric box

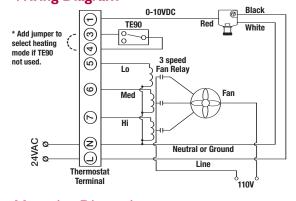
Shipping Weight: 0.5Lbs (0.225 Kg)

Agency Approval: Conforms to CE/ROHS requirements

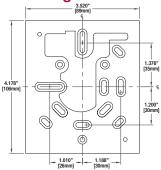
Class 2 as per UL/CSA

Optional Remote Sensor: 10KNTC3 - add 'R' to part number

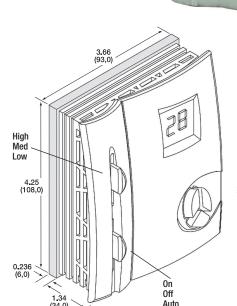
## Wiring Diagram



## **Mounting Dimensions**



Quality, affordable electronic room thermostat with digital display from Spartan



#### **Changing the Set Point**

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

When the thermostat is in heating mode a thermometer will appear in the display. It will flash when there is a demand for heat.

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.

Selectable by jumper on terminal 3 and 4

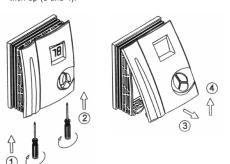
#### On Power Failure

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

#### **Cover Removal**

#### **TE153 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.