

RTS Room Temperature Sensor

Descriptions

The sensor provides precision room temperature sensing for Energy Management Control Systems, compatible with all the leading control systems.

Two low cost room temperature sensors to choose from.

High precision thermistor or RTD, accurate to 0.2C (+/- 0.36F) over the range of 0C to 70C.

The platinum RTD is accurate to 0.5C.

The enclosure design allows for use in areas where appearance is important. The sensors save I/O space on the DDC controller by connecting to a single input. User button activity is captured in the DDC system application programs as high and low going pulse, providing full software control of the button actions.



Installation

The unit is located on an interior wall, away from windows, supply ducts and heat sources. The enclosure can be mounted flush on the wall, or on an electrical box. The backplate has holes for North American and European style electrical boxes.

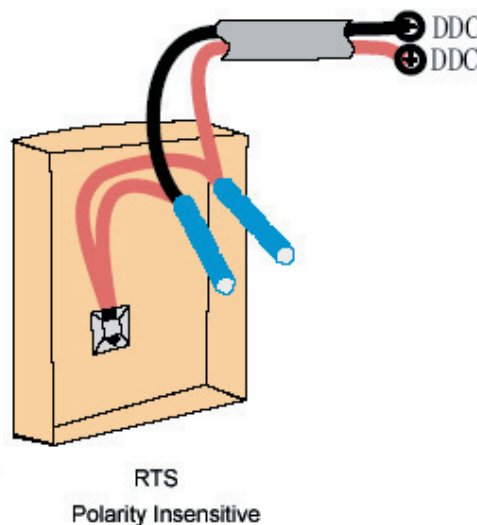
The RTS require two conductors. The removable terminal block on the back of the RTS can accept wires up to 18 gauge, while the RTS requires butt connectors.

Two allen key screws on the bottom of the enclosure backplate are screwed inwards to allow the cover to be removed and outwards to hold the cover in place.

Calibration

The RTS sensor uses precision thermistors, so calibration is optional. The sensor routes the thermistor signal directly to the DDC controller, and also to an on board 8 bit A/D converter for local display of the temperature. This A/D converter and associated circuitry can be calibrated by adjusting a potentiometer on the sensor. The potentiometer affects only the local display, not the thermistor signal at the DDC controller.

Wiring Diagram



The back view of each sensor showing the cable connection at the sensor and termination at the DDC panel. The RTS is connected using button splices or marrettes while the RTS2 has removable terminal blocks.

RTS3 Flush Mount Room Temperature Sensor

Descriptions

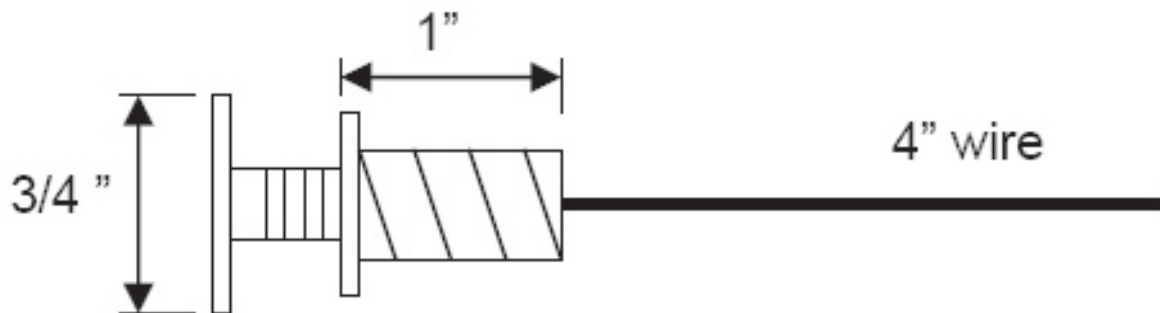
This sensor provides precision room temperature sensing for Energy Management Control Systems, compatible with all the leading controls systems. It is a 10K Thermistor and can be used with many popular brands of DDC manufacturers.

The sensor saves I/O space on the DDC controller by connecting to a single input. User button activity is captured in the DDC system application programs as high and low going pulses, providing full software control of the button actions.

- Low cost
- High precision thermistor or RTD, accurate to 0.2 °C ($\pm 0.36^\circ\text{F}$) over the range of 0~70°C.
- The platinum RTD is accurate to 0.5°C.



Dimensions



Installation

The enclosure design allows for use in areas where appearance is important. This Flush Mount temperature sensor can be screwed directly into the drywall and painted over to become almost invisible to the occupant.