ROOM TEMPERATURE SENSOR

TSPC Series

The TSPC room temperature sensor with resistive setpoint control is available in an attractive wall mount enclosure and can be configured with various options. It is available with various curve-matched thermistors or RTD sensors to measure temperature. A back-lit LCD displays room temperature, setpoint on demand and occupancy. Several operating parameters can be programmed using a keypad and on-board jumpers configure the ˚C/°F display or disable the backlight. Available options include a dry-contact override switch, a five position fan speed switch and a jack for a network connection.

PRODUCT HIGHLIGHTS

* Precision Thermistor/RTD sensing elements
* Compact form factor
* Mountable directly to a single gang electrical box or directly to a wall
* Customer branding available

PRODUCT SPECIFICATIONS

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| DESCRIPTION | ENGINEERING SPEC |
| POWER SUPPLY | 24 Vac / dc ±10% (non-isolated half-wave rectified) |
| CONSUMPTION | 20 mA max |
| OPERATING ENVIRONMENT | 0 to 50°C (32 to 122°F)  0 to 95 %RH non-condensing |
| WIRING CONNECTION | Screw terminal block (14 to 22 AWG) |
| ENCLOSURE | White ABS, IP30 (NEMA 1) |
| TEMPERATURE SENSORS/ELEMENTS | Various Thermistor or RTD – Refer to Sensor table |
| SENSOR ACCURACY | Thermistors: ±0.2°C, 0 to 70°C(±0.36°F, 32 to 158°F)  Platinum RTD’s: ±0.3°C @ 0°C (±0.54°F @ 32°F)  Nickel RTD’s: ±0.4°C @ 0°C (±0.72°F @ 32°F) |
| SETPOINT ADJUSTMENT | Up/Down pushbuttons for ±10 resistive steps  Signal: Several resistive ranges available  Midpoint: Programmable, 20 to 23°C or 68 to 73°F  LCD Increment: Setpoint step size is 0.5°C or 1.0°F  Action: Programmable, direct or reverse acting |
| LCD DISPLAY | Range: 0.0 - 35.0°C or 32.0 - 95.0°F selectable via jumper  Display Resolution: 0.5°C/°F  Display Size: 38.1mm W x 16.5mm H (1.5” x 0.65”)  Digit Height: 11.43mm (0.45”)  Symbols: °C, °F, OCC  Backlight: Enable or disable via jumper |
| OPTIONAL OVERRIDE SWITCH (S) | Momentary Pushbutton .. N.O., SPST, 50 mA @ 12 Vdc |
| OCCUPIED INPUT | Signal Type: Digital input, 0/5 Vdc standard, active low  Action: Causes “OCC” segment to light on LCD |
| OPTIONAL COMMUNICATION JACK (E) | 4 pin header; Requires HHTA - Hand Held Adapter |
| OPTIONAL FAN SPEED SWITCH (F) | Range: 5 Position-Off, Auto, Low, Medium, High  Signal: Resistive - 0, 2, 4, 6, 8 KΩ |
| COUNTRY OF ORIGIN | Canada |

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| DESCRIPTION | ENGINEERING SPEC |
| 2 | 100 Ω Platinum, IEC 751, 385 Alpha, thin film |
| 5 | 1801 Ω NTC Thermistor, ±0.2°C |
| 6 | 3000 Ω NTC Thermistor, ±0.2°C |
| 7 | 10,000 Ω Type 3, NTC Thermistor, ±0.2°C |
| 8 | 2.252K Ω NTC Thermistor, ±0.2°C |
| 12 | 1000 Ω Platinum, IEC 751, 385 Alpha, thin film |
| 13 | 1000 Ω Nickel, Class B, DIN 43760 |
| 14 | 10,000 Ω Type 3, NTC Thermistor, ±0.2°C c/w 11K shunt resistor |
| 20 | 20,000 Ω NTC Thermistor, ±0.2°C |
| 24 | 10,000 Ω Type 2, NTC Thermistor, ±0.2°C |
| 59 | 10,000 Ω @ 25°C, ±1%, B = 3435 ±1% (25/85) |

SENSORS