

6655 Series

On-Surface Temperature Sensors



DESCRIPTION

The 6655 Series On-Surface Temperature Sensors are lower-cost, thermistor-based temperature sensors that use Honeywell's compact, low-profile, 12,70 mm [0.5 in] thermostat package.

This series is designed to offer temperature measurements with enhanced response and accuracy on most flat surfaces and pipes in non-condensing applications.

Unlike thermostats, which are generally limited to one fixed temperature, these thermistor-based NTC (Negative Temperature Coefficient) devices allow the customer greater flexibility in temperature monitoring and controlling.

Tight interchangeability eliminates or reduces customer need for calibration. Enhanced accuracy and response time are designed to meet your needs. A wide operating temperature range of -20 °C to 110 °C [-4 °F to 230 °F] allows application flexibility.

The 6655 Series products have gained widespread acceptance standard due to their robust design and ease of installation. A variety of mounting brackets provides mounting flexibility.

FEATURES

- Air/surface temperature sensing
- NTC thermistor output
- Low cost
- Low, compact profile
- Tight interchangeability
- Enhanced accuracy
- Enhanced response time
- Wide operating temperature range
- Variety of mounting brackets
- Widely used sensor package footprint
- Enhanced stability/low drift

POTENTIAL APPLICATIONS

- Water heaters and boilers
- Industrial ovens and ranges
- Copier diffuser rollers
- HVAC compressor or duct temperature sensing

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Table 1. General Specifications

Parameter	Characteristic
Temperature sensing type	air/surface
Thermistor type	NTC
Nominal resistance at 25 °C [77 °F]	10,000 Ohm, 12,000 Ohm
Operating temperature range	-20 °C to 110 °C [-4 °F to 230 °F]
Tolerance	±2.5%, ±7.6%, ±10.0%
BETA (25/85)	3694, 3976
R-T curve	12, 16
Time constant on metal surface	1.5 s
Dissipation constant on metal surface	6.5 m/W°C
Housing material	phenolic
Mounting method/mechanical interface	(see Figure 1)
Electrical interface/connector type	(see Figure 1)

Figure 1. Mounting Dimensions (For reference only: mm/[in]).



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Figure 1. Mounting Dimensions (For reference only: mm/[in.]) (Continued)

6655---97100901

Bracket (pipe clip), quick connect terminals, 90°, 0.25 in)
(Shipped separately for customer assembly.)



6655---99580003

Bracket (fixed surface), quick connect terminal (90°, 0.1875 in)



6655---99600003, 6655---79600002

Bracket (movable surface), quick connect terminal (90°, 0.1875 in)

