

TEMPERATURE

ROOM THERMISTOR AND RTD TEMPERATURE SENSOR KTES* SERIES



DESCRIPTION

The **Kele KTES* Series Room Thermistor and RTD Temperature Sensor** is a cost-effective room temperature thermistor with an accuracy of $\pm 0.5^{\circ}\text{F}$ ($\pm 0.28^{\circ}\text{C}$). The thermistor is made of a very stable, pre-aged material that offers the reliability needed in most HVAC systems, and it comes with a three-year warranty.

FEATURES

- **Economical**
- **Attractive design**
- **Three-year warranty**
- **$\pm 0.5^{\circ}\text{F}$ ($\pm 0.28^{\circ}\text{C}$) accuracy**
- **Durable housing**
- **White color**



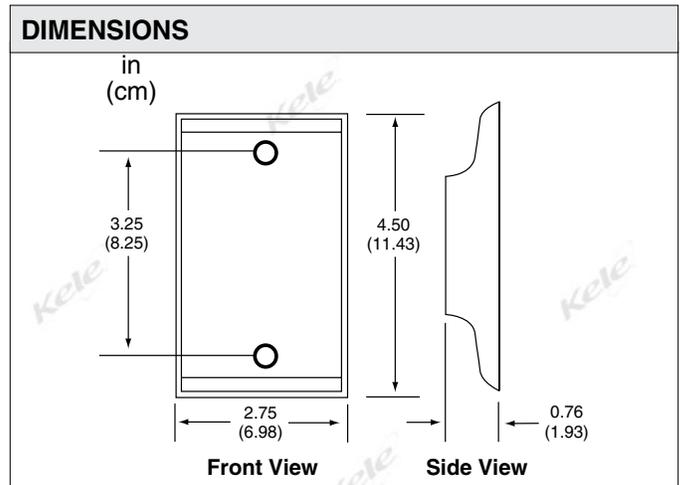
KTES*

OPTIONS

- **Setpoint slide adjust**
- **Momentary override switch**

APPLICATION

The **KTES* Series** is designed to be wall mounted indoors where appearance is important. The sensor may be mounted directly to the drywall or on a standard US electrical outlet box without adapters.



SPECIFICATIONS

Accuracy		Temperature Coefficient	
Thermistor	$\pm 0.50^{\circ}\text{F}$ (0.28°C)	Thermistor	Negative temperature coefficient
RTD	$\pm 0.60^{\circ}\text{F}$ (0.33°C)	RTD	Positive temperature coefficient
Sensor Type		Temperature Stability	
Thermistor	2.252 k Ω , 3 k Ω , 10 k Ω Type II, III & III w/11k shunt, 20 k Ω , 100 k Ω	Thermistor	Negative temperature coefficient
RTD		RTD	Max 0.04% after 1k hours @ 500 $^{\circ}\text{C}$
Type 71, 81	100 Ω Pt 385 Curve	Heat Dissipation	2.7 mW/ $^{\circ}\text{C}$ (power needed to raise the temperature 1 $^{\circ}\text{C}$)
Type 85	1000 Ω Pt 385 Curve	Enclosure Rating	NEMA 1, White plastic
Type 91	1000 Ω Pt 375 Curve	Mounting	Directly to wall or single gang box
Temperature Range		Wiring Terminations	Terminals
Thermistor/RTD	-40 $^{\circ}$ to 221 $^{\circ}\text{F}$ (-40 $^{\circ}$ to 105 $^{\circ}\text{C}$)	Weight	0.12 lb (0.05 Kg)
		Approvals	CE
		Warranty	3 years



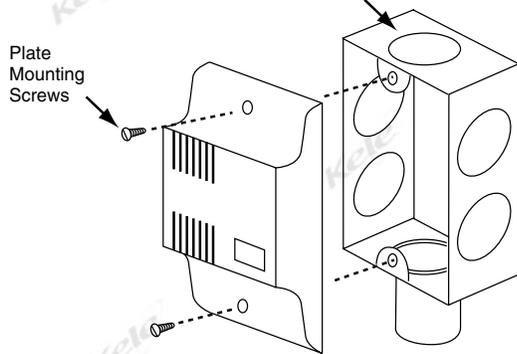
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MOUNTING

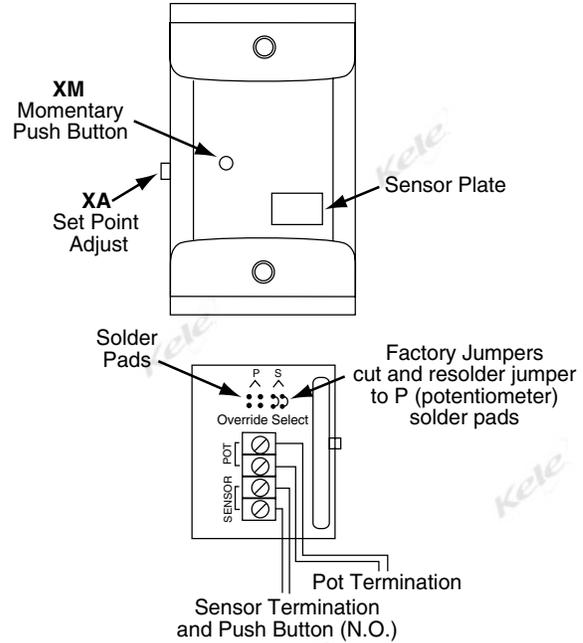
Toggle bolts or other direct wall-mount screws can be used where conduit is not required. Adapters are not required when mounting directly to electrical outlet boxes.

Basic model comes with screw terminal block, two #6-32 screws for handbox mounting or direct wall mounting.
Optional wall mounting.
Supplied Handbox



The sensor should be mounted approximately 5' (1.5m) above the floor, on an interior wall, away from any heating or cooling generating devices.

DIMENSIONS



ORDERING INFORMATION

MODEL	DESCRIPTION
KTES3	10,000Ω Room Thermistor @ 77°F (25°C), Type III Material (gray leads)
KTES21	2252Ω Room Thermistor @ 77°F (25°C), Type II Material (green leads)
KTES22	3000Ω Room Thermistor @ 77°F (25°C), Type II Material (blue leads)
KTES24	10,000Ω Room Thermistor @ 77°F (25°C), Type II Material (yellow leads)
KTES27	100,000Ω Room Thermistor @ 77°F (25°C), Type II Material (gray leads)
KTES42	20,000Ω Room Thermistor @ 77°F (25°C), Type IV Material (green leads)
KTES81	100Ω Room RTD @ 32°F (0°C), 385 platinum curve, (yellow leads)
KTES85	1000Ω Room RTD @ 32°F (0°C), 385 platinum curve, (blue leads)
KTES91	1000Ω Room RTD @ 32°F (0°C), 375 platinum curve, (green leads)
OPTIONS	
XA	Setpoint adjustment (10,000 to 30,000, resistance input)
XA2K	Setpoint adjustment (1,000 to 1,400, resistance input)
XA10K	Setpoint adjustment (1,000 to 3,000Ω, resistance input)
XD	Dual sensors
XM	Momentary switch (jumpered across sensor)
XN	NIST certificate of conformance
XN1	NIST certificate, one reference point 32°F(0°C)
XN2	NIST certificate, two reference points 32°F/158°F(0°C/70°C)
XN3	NIST certificate, three reference points 32°F/77°F/158°F(0°C/25°C/70°C)
XP	Matched sensor pair, matched to ±0.1°F, 0.05°C (must order two sensors)
XZ	Three wire RTD connections

KTES27 - XA Example: KTES27-XA 100,000Ω Type II room sensor thermistor with set point adjust option

RELATED PRODUCTS

T85U-XR	1000 ohm, Type 85 4-20 mA temperature transmitter, custom rangeable
T81U-XR	100 ohm, Type 81 4-20 mA temperature transmitter, custom rangeable
T91U-XR	1000 ohm, Type 91 4-20 mA temperature transmitter, custom rangeable
UR	Moisture-resistant three-wire butt splice