### **TEMPERATURE**

### 1000 OHM 375 PLATINUM RTD FIXED TEMPERATURE TRANSMITTERS ST-T90 SERIES



### **DESCRIPTION**

The **Kele Model ST-T90 Series** is a fixed range  $1000\Omega$ , 375 platinum room temperature transmitter that provides stable, accurate room sensing for temperature control of Building Automation Systems. The attractive white vented housing mounts easily and is constructed of durable plenum rated plastic with a white enameled aluminum faceplate. The ST-T910E is the Executive style room transmitter amd the ST-T90K is the Design style room transmitter.

#### **FEATURES**

- · Low cost
- High accuracy
- No drift platinum RTD sensors
- · Panel mounting for duct, immersion, OSA, and room
- · UL 94V-0 plenum rated housing
- Used with Type 91 sensor







ST-T90K

### **SPECIFICATIONS**

**Supply Voltage** 10.5-45 VDC

**Signal Output** 4-20 mA, two-wire, loop-powered

Limit: 25 mA

**Minimum Output** 

675Ω @ 24 VDC **Impedance** 

Accuracy

Sensor ±0.54°F (0.30°C) 0.1°F or 0.2% of span **Transmitter** Rangeability -30° to 250°F (34° to 121°C)

Min span of 40°F (22°C)

Rangeability

Zero -30° to 210°F (-34.4° to 98.9°C)

Minimum Span 40°F (4.4°C)

-30° to 250 °F (-34.4° to 121.1°C) **Usable Range Sensor Type**  $1000\Omega$  thin film platinum TCR

 $0.00375\Omega/\Omega/^{\circ}C$ 

Sensitivity 2.1Ω/°F @ 32°F

**Operating Humidity** 0% to 95% non-condensing Operating Temperature 0° to 140°F (-18° to 60°C) **Approvals** CE (EN50081-1, EN50082-1) Optional CE (EN50081-2,

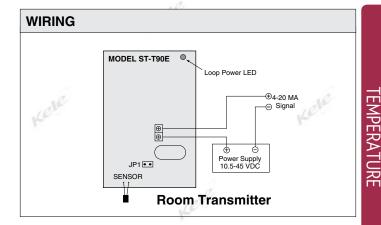
EN50082-2) Industrial RF/EM

hardened

0.3 lb (0.14 kg) either style Weight

"E" or "K"

Warranty 18 months



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### **APPLICATION**

The **Room Temperature** application uses a vented room enclosure designed to minimize self-heating for accurate room measurement

The **Duct Temperature** application is designed for direct mounting on sheet metal duct systems. The sensor is point sensitive and comes standard with a 4-7/8" (12.38 cm) insertion depth. Averaging probes come in 24' (7.3m) lengths and mount in a weather-resistant metal box.

The **Immersion Temperature** application is designed to be threaded directly into a 1/8" NPT well with a 3-1/4" (8.2 cm) insertion. The wells are available in brass or 304 stainless steel and are designed for pipe insertion using a 1/2" threaded saddle (Thredolet®).

The **Outside Air Temperature** application uses a wall bracket with a vented weather shield to minimize the effect of rain or snow and other weather related influences. This rugged enclosure and bracket will ensure long life even in severe weather conditions.

#### **ORDERING INFORMATION**

MODEL	DESCRIPTION	
ST-T90E	Room temperature transmitter	
ST-T90K	Designer room temperature transmitter	
	RANGE	
	0	40° to 90°F (4.4° to 32.2°C) Room transmitter only
	1	20° to 120°F (-6.7° to 48.8°C) All mounting types
	2	-20° to 140°F (-29° to 60°C) OSA, duct, or immersion
	3	0° to 100°F (-18° to 38°C) All mounting types
	4	30° to 240°F (-1° to 116°C) OSA, duct, or immersion
	11	0° to 35°C (32° to 97°F) All mounting types
	12	-30° to 45°C (-22° to 113°F) OSA, duct, or immersion
	13	0° to 100°C (32° to 212°F) OSA, duct, or immersion
	14	0° to 50°C (32° to 122°F) All mounting types

### **RELATED PRODUCTS**

ST-T90E |- | 1 | Example: ST-T90E-1 Room temperature transmitter

DCP-1.5-W	Power supply, 24 VAC IN to 24 VDC OUT
DCPA-1.2	Power supply, 120 VAC IN to 24 VAC/24 VDC OUT
KT1	Mounting screwdriver 1/16" allen key
TCC-111	Thermal conductive compound 111 ml tub
TCC-12	Thermal conductive compound tube, 12 ml

with a range of 20° to 120°F (-6.7° to 48.8°C)