

SRA-T Indoor Temperature Sensor



Features

- Thermistor, NI and PT sensing elements to fit your system
- Simple and secure installation
- Wide range of temperature probes

Applications

- Indoor temperature measurement

Temperature Sensor

The sensor measures the temperature by use of a NTC, PT, or NI-sensing element. The sensing element is either a glass packed thermistor with a negative temperature coefficient, a platinum film or a nickel thin layer based probe. Its resistance changes according to the temperature. The change follows a specified curve. Contact our sales department for curves not yet listed below.

Ordering

Item name	Article #	Probe Type	Definition	Comments
SRA-Tn3	40-20 0036	NTC 3k Ω at 25 $^{\circ}$ C	B _{25/50} 3935	
SRA-Tn10	40-20 0005	NTC 10k Ω at 25 $^{\circ}$ C	B _{25/50} 3935	Vector standard
SRA-Tn11	40-20 0037	NTC 10k Ω at 25 $^{\circ}$ C	B _{25/50} 3630	
SRA-Tn20	40-20 0038	NTC 20k Ω at 25 $^{\circ}$ C	B _{25/50} 4200	
SRA-Tn100	40-20 0039	NTC 100k Ω at 25 $^{\circ}$ C	B _{25/50} 4200	
SRA-Tp1	40-20 0040	PT100	EN60751	
SRA-Tp2	40-20 0041	PT1000	EN60751	
SRA-Tk5	40-20 0042	NI1000	5000 ppm/K	

Installation

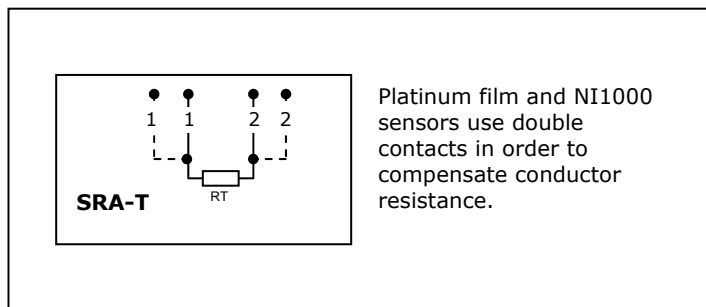
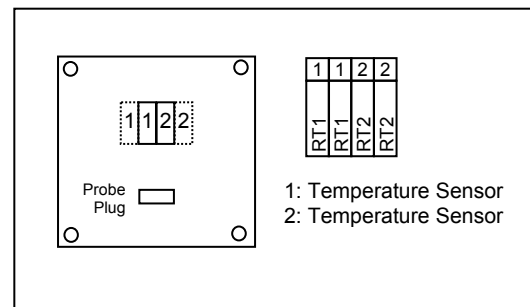
Mount the unit on a flat interior wall of the room to be controlled. Avoid obstructions such as shelves, curtains and recesses. Do not place near heat sources, draft channels. Do not expose to direct sunlight. The end of the conduit at the sensor must be sealed to prevent false measurements due to draughts through the conduit.

Installation procedure:

- Disassemble base plate from unit by loosening mounting screw.
- Install the base plate on the interior wall
- Pull the conductors through the central opening of mounting plate
- Connect the wires according to the wiring diagram to the measuring circuit in the cover:
 - The Thermistors require two conductors; normally 18ga unshielded twisted pair.
 - The PT100, PT1000 and NI1000 sensors come with each two terminal connectors in order to connect up to four conductors for compensating conductor resistance.
- Assemble the cover with the base plate and tighten mounting screw.

Technical Specification

Sensing Probe	Thermistor:	NTC
	Range: (Probe only)	-70...150°C (-94...302°F)
	Accuracy: -40...0°C (-40...32°F):	0.5 K
	0...50°C (32...122°F):	0.2 K
	50...100°C (122...212°F):	0.5 K
	> 100°C (> 212°F):	1 K
	Platinum-Film:	PT according EN 60751
	Range: (Probe only)	-70...200°C (-94...392)
	Accuracy	EN 60751, Class B
	Nickel Thin Layer:	1000 Ω at 0°C, 5000 ppm/K
	Range: (Probe only)	-60...200°C (-76...392°F)
	Accuracy	DIN 43760
Connection	Terminal Connectors	For wire 0.34...2.5 mm ² (AWG 24...12)
Environment	Operation	To IEC 721-3-3 class 3 K5
	Climatic Conditions Temperature Humidity	-50...100°C (-58...212°F) <95% R.H. non-condensing
	Transport & Storage	To IEC 721-3-2 and IEC 721-3-1
	Climatic Conditions Temperature Humidity Mechanical Conditions	class 3 K3 and class 1 K3 -40...80°C (-40...176°F) <95% R.H. non-condensing class 2M2
Standards	conform according to EMC Standard 89/336/EEC EMEI Standard 73/23/EEC	EN 61 000-6-1/ EN 61 000-6-3
	Product standards	
	Automatic electrical controls for household and similar use	EN 60 730 -1
	Special requirement on temperature dependent controls	EN 60 730 - 2 - 9
	Degree of Protection	IP30 to EN 60 529
	Safety Class	III (IEC 60536)
Housing	Material Cover	Fire proof ABS plastic
	Mounting Plate	Galvanized Steel
	Dimensions (H x W x D)	21 x 88 x 88 mm (0.8 x 3.5 x 3.5 in)
	Weight (including package)	150 g (5.3 oz)

Wiring Diagram

Terminal Connections

Dimension [mm]
