## **SRA-T, Indoor Temperature Sensor**

### Features

- Indoor temperature measurement
- Variable Thermistors, PT and NI sensing elements to fit your system
   Simple and secure installation Combined with Temperature probe
- according your choice

## **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	Item Code	Probe	Definition	Comments
SRA-Tn3	40-20 0036	NTC 3kΩ at 25°C	B <sub>25/50</sub> 3935	
SRA-Tn10	40-20 0005	NTC 10kΩ at 25°C	B <sub>25/50</sub> 3935	Vector Standard
SRA-Tn11	40-20 0037	NTC 10kΩ at 25°C	B <sub>25/50</sub> 3630	vector Standard
SRA-Tn12	40-20 0090	NTC 10kΩ at 25°C	B <sub>25/50</sub> 3380	
SRA-Tn20	40-20 0038	NTC 20kΩ at 25°C	B <sub>25/50</sub> 4200	
SRA-Tn100	40-20 0039	NTC 100kΩ at 25°C	B <sub>25/50</sub> 4200	
SRA-Tp1	40-20 0040	PT100	EN60751	
SRA-Tp2	40-20 0041	PT1000	EN60751	
SRA-Tk5	40-20 0042	NI1000	5000 ppm/K	
SRA-Tk6	40-20 0198	NI1000	6180 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:

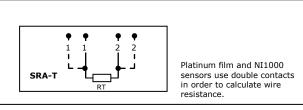
- Disassemble base plate from unit by loosening mounting screw.
- Install the base plate on the interior wall
- Pull the conductors through the central opening of mounting plate
- Connect the wires according to the wiring diagram to the measuring circuit in the cover:
  - The Thermistors require two 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**

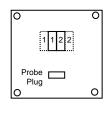
Sensing Probe	Thermistor: Range: (Probe only)	NTC -70150°C (-94302°F)	
	Accuracy: -400°C (-4032°F): 050°C (32122°F): 50100°C (122212°F): > 100°C (> 212°F):	0.5 K 0.2 K 0.5 K 1 K	
	Platinum-Film: Range: (Probe only) Accuracy	PT according EN 60751 -70200°C (-94392) EN 60751, Class B	
	Nickel Thin Layer: Range: (Probe only) Accuracy	1000 Ω at 0°C -60200°C (-76392°F) DIN 43760	
Electrical Connection	Terminal Connectors	For wires 0.342.5 mm2 (AWG 2412)	
Environment	Operation Climatic Conditions Temperature (Housing) Humidity	To IEC 721-3-3 class 3 K5 -50100°C (-58212°F) <95% R.H. non-condensing	
	Transport & Storage Climatic Conditions Temperature Humidity Mechanical Conditions	To IEC 721-3-2 and IEC 721-3-1 class 3 K3 and class 1 K3 -4080°C (-40176°F) <95% R.H. non-condensing class 2M2	
Standards	conformity EMC Directive Low Voltage Directive	2004/108/EC 2006/95/EC	
	Automatic electrical controls for household and similar use Special requirement on temperature dependent controls	EN 60 730 -1 EN 60 730 - 2 - 9	
	Pollution Class	Normal acc. to EN 60 730, RoHS compliant	
	Degree of Protection	IP30 to EN 60 529	
	Safety Class	III (IEC 60536)	
Housing	Material Cover Mounting Plate	Fire proof ABS plastic 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 & Installation

# Wiring Diagram



#### Terminal Connections





- 1: Temperature Probe 1
  2: Temperature Probe 2
- Platinum film and NI1000 sensors are equipped with 4 connectors in order to measure connection resistance

#### Dimensions [mm](in)

