

## SRA-T, Indoor Temperature Sensor

### Features

- Thermistors 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 or PT-sensing element. The sensing element is either a glass packed thermistor with a negative temperature coefficient or a platinum film sensor. Its resistance changes according to the temperature. The change follows a specified curve. Below is a list of available sensor elements, curves and accuracies:

Item name	Sensing element	Curve	Compatible with
SRA-Tn18	Thermistor 1.8k at 25 °C	Curve 5	TAC, CSI
SRA-Tn3	Thermistor 3k at 25 °C	Curve 6	Alerton
<b>SRA-Tn10</b>	<b>Thermistor 10k at 25 °C</b>	<b>Curve 24</b>	<b>Vector, ALC, Trane, CSI, Delta, Alerton</b>
SRA-Tn11	Thermistor 10k at 25 °C	Curve 7	Andover, Invensys, Carrier, KMC
SRA-Tn20	Thermistor 20k at 25 °C	Curve 20	Honeywell
SRA-Tn100	Thermistor 100k at 25 °C	Curve 9	Siemens SBT
SRA-Tp1	PT100		Honeywell
SRA-Tp2	PT1000		Johnson Control

### Ordering

Item Name	Description/Option
SRA-TXX	For example SRA-Tn10
XX indicates sensor element (see table above)	
-A = Averaging sensor = double sensor for averaging measurement	

### 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.

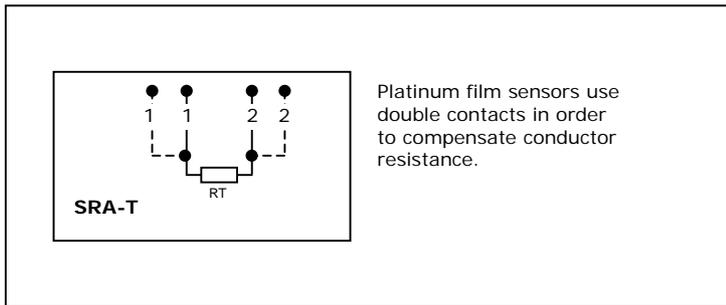
Installation procedure:

- 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 and PT1000 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.

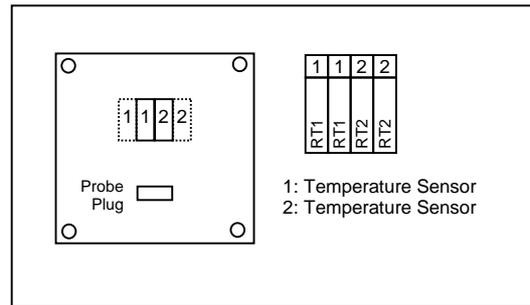
## Technical Specification

Power Supply	Operating Voltage	24 V AC 50/60 Hz $\pm$ 10%, 24VDC $\pm$ 10%
	Power Consumption	Max 2 VA
	Electrical Connection	Terminal Connectors
Sensing Probe	Thermistor: Range Accuracy Platinum-Film: Range Accuracy	-70...150 °C $\pm$ 0.2 K at 25 °C -70...200 °C $\pm$ 0.3 K
Connection	Connection Terminals	2.5 mm <sup>2</sup>
Environment	Operation Climatic Conditions Temperature Humidity	To IEC 721-3-3 class 3 K5 -40...70°C <95% r.h.
	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 -40...80°C <95% r.h. class 2M2
Housing Materials	Cover Mounting Plate	Fire proof ABS plastic Galvanized Steel
Standards	conform according to EMC Standard 89/336/EEC	EN 61 000-6-1/ EN 61 000-6-3
	Product standards Automatic electrical controls for household and similar use Special requirement on temperature dependent controls	EN 60 730 -1 EN 60 730 - 2 - 9
	Degree of Protection	IP30 to EN 60 529
	Safety Class	III (IEC 60536)
General	Dimensions [mm]	21 x 88 x 88 (H x W x D)
	Weight (including package)	105 g

## Wiring Diagram



## Terminal Connections



## Dimension [mm]

