

## RS-NTC 10 – Passive room temperature sensor



RS-NTC 10 is a passive room temperature sensor for measuring indoor room temperature. The sensor has a modern plastic housing with a smooth snap-on cover. The sensor is suitable for surface installation and on a flush mounting box.

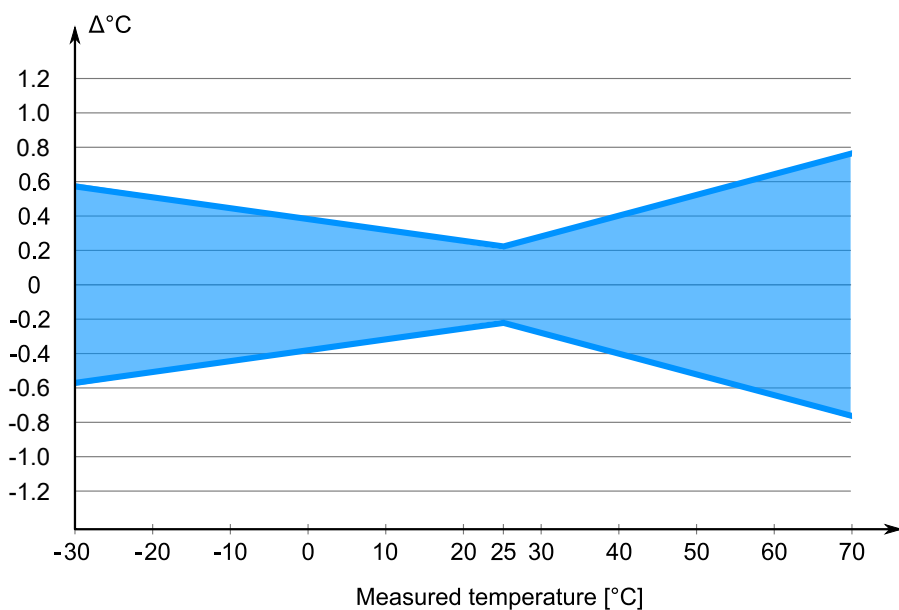
Temperature is detected by an NTC 10 element with a nominal resistance of 10 k $\Omega$  at 25 °C.

You can do the wiring through the back of the housing as flush mounting or from top or bottom of the housing in case of surface mounting.

### Technical specifications

| Property                                                                                                                                                                | Value                                                                                                                                                                                                                    |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Sensor                                                                                                                                                                  | 10 k $\Omega$ NTC element                                                                                                                                                                                                |
| Range                                                                                                                                                                   | -30...70 °C                                                                                                                                                                                                              |
| Accuracy                                                                                                                                                                | $\pm 0.23$ °C (at 25 °C)<br>See the detailed temperature measurement accuracy from the chapter <a href="#">Detailed measurement accuracy</a> on page 2.                                                                  |
| Beta value 25/85                                                                                                                                                        | 3970 K $\pm 1$ %                                                                                                                                                                                                         |
| Wiring terminals                                                                                                                                                        | Screw terminals, 1.5 mm <sup>2</sup>                                                                                                                                                                                     |
| Appliance class (IEC 60664-1)                                                                                                                                           | III                                                                                                                                                                                                                      |
| Operating conditions                                                                                                                                                    |                                                                                                                                                                                                                          |
| Temperature                                                                                                                                                             | -30...70 °C                                                                                                                                                                                                              |
| Humidity                                                                                                                                                                | 0...95 %rH (non-condensing)                                                                                                                                                                                              |
| Storage temperature                                                                                                                                                     | -30...70 °C                                                                                                                                                                                                              |
| Housing                                                                                                                                                                 |                                                                                                                                                                                                                          |
| Protection class                                                                                                                                                        | IP30                                                                                                                                                                                                                     |
| Materials                                                                                                                                                               | PC plastic                                                                                                                                                                                                               |
| Mounting                                                                                                                                                                | on the wall surface or on a flush mounting box (60 mm hole distance)                                                                                                                                                     |
| Dimensions (w x h x d)                                                                                                                                                  | 97 x 97 x 26 mm                                                                                                                                                                                                          |
|   | Refer to the EU Declaration of Conformity or the UK Declaration of Conformity for compliance information. You can find the declarations on this product's page at <a href="http://www.produal.com">www.produal.com</a> . |

## Detailed measurement accuracy

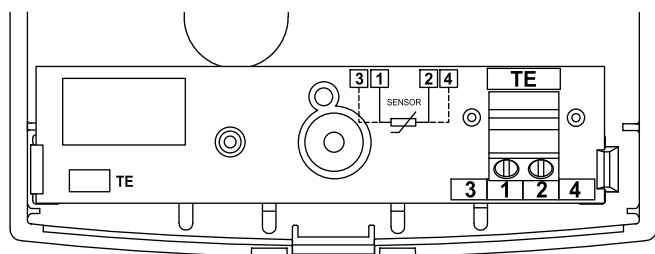


## Resistance at different temperatures

| °C  | Ω      |
|-----|--------|
| -30 | 180900 |
| -25 | 132600 |
| -20 | 98330  |
| -15 | 73660  |
| -10 | 55730  |
| -5  | 42550  |
| 0   | 32780  |
| 5   | 25460  |
| 10  | 19940  |
| 15  | 15730  |
| 20  | 12500  |

| °C | Ω     |
|----|-------|
| 25 | 10000 |
| 30 | 8054  |
| 35 | 6528  |
| 40 | 5323  |
| 45 | 4365  |
| 50 | 3600  |
| 55 | 2986  |
| 60 | 2488  |
| 65 | 2084  |
| 70 | 1754  |

## Wiring



|   |    |                                                                             |
|---|----|-----------------------------------------------------------------------------|
| 1 | TE | The temperature is measured as a resistance value between these connectors. |
| 2 |    |                                                                             |

## Ordering information

|                                                                                   | Type       | Product number | Description                                 |
|-----------------------------------------------------------------------------------|------------|----------------|---------------------------------------------|
|  | RS-NTC 10  | 5501W10000     | NTC 10 room temperature sensor, white       |
|  | RSB-NTC 10 | 5501B10000     | NTC 10 room temperature sensor, black       |
|  | VP-PROX    | 9000460        | Protective casing for Proxima room products |

## Dimensions

