

Data sheet

# Color coded temperature sensor

## AKS 11



Pt 1000 temperature sensor.

The sensor can be used for temperature logging on monitoring in conjunction with Danfoss controllers in the following areas:

- Refrigeration
- Air conditioning
- Heating

The sensor comes adjusted and complies with the requirements to tolerance in EN 60751, class B.

### Features

- Temperature range -40 – 100 °C
- The sensors are adjusted and comply with the requirements to tolerance in EN 60751, class B

**Technical data**

|                                  |   |
|----------------------------------|---|
| Nominal resistance               | 1000 ohm at 0 °C  |
| Measuring accuracy               | Class B   |
| Temperature range                | -40 – 100 °C  |
| Cable material                   | PVC, 2 x 0.22 mm <sup>2</sup>                                 |
| Sensor clips                     | AISI 304 + PA6  |
| Time constant                    | 10 sec. on Cu tube  |
| Enclosure                        | IP67  |
| AMP-Plug (selected sensors only) | AMP ital mod 2,<br>Housing 280358-0<br>Crimp contact 280708-2 |

| R (Typ.) [Ohm] | Temp. [°C] | Temp. [°F] |
|----------------|------------|------------|
| 1117           | 30         | 86         |
| 1078           | 20         | 68         |
| 1039           | 10         | 50         |
| 1000           | 0          | 32         |
| 961            | -10        | 14         |
| 922            | -20        | -4         |
| 882            | -30        | -22        |

Cable resistance @ 20 °C:

PVC 2 x 0.22 mm<sup>2</sup> (Resistance per conductor R1 = 78.2 Ohm/km)

The constant conductor resistance: R = 2 x R1

The total resistance in the sensor circuit is therefore: R + RTD

**Ordering**

| Type   | Cable | Packing Qty. | Code no.        |
|--|-------|--------------|-----------------|
| AKS 11<br>Single type<br>Black cable                 | 3.5 m | 1            | <b>084N0003</b> |
|  | 5.5 m | 1            | <b>084N0005</b> |
|  | 8.5 m | 1            | <b>084N0008</b> |
| AKS 11<br>Industrial Pack<br>Black cable             | 1.5 m | 150          | <b>084N0026</b> |
|  | 3.5 m | 110          | <b>084N0027</b> |
|  | 5.5 m | 70           | <b>084N0028</b> |
|  | 8.5 m | 50           | <b>084N0029</b> |
| AKS 11<br>Single AMP plug<br>Black cable             | 5.5 m | 1            | <b>084N0043</b> |
|  | 8.5 m | 1            | <b>084N0044</b> |
| AKS 11<br>Industrial Pack<br>AMP plug<br>Black cable | 3.5 m | 110          | <b>084N0050</b> |
|  | 5.5 m | 70           | <b>084N0051</b> |
|  | 8.5 m | 50           | <b>084N0052</b> |

|                             |        |                         |       |   |                 |
|-----------------------------|--------|-------------------------|-------|---|-----------------|
| AKS 11<br>Color coded cable | Blue   | S1 - Coil in            | 8.5 m | 1 | <b>097U0063</b> |
|                             | Red    | S2 - Coil out           | 8.5 m | 1 | <b>097U0064</b> |
|                             | Purple | S3 - Return air         | 8.5 m | 1 | <b>097U0065</b> |
|                             | Green  | S4 - Discharge air      | 8.5 m | 1 | <b>097U0066</b> |
|                             | Orange | S5 - Defrost terminator | 8.5 m | 1 | <b>097U0067</b> |