

Data sheet

# Temperature sensor NTC 10 Kohm EKS 221



NTC temperature sensor for temperature measurements in the following areas:

- Refrigeration
- Air conditioning
- Heating

The sensor characteristic matches to:

- OPTYMA room controllers
- MCX unit controllers

The sensor is available in two versions:

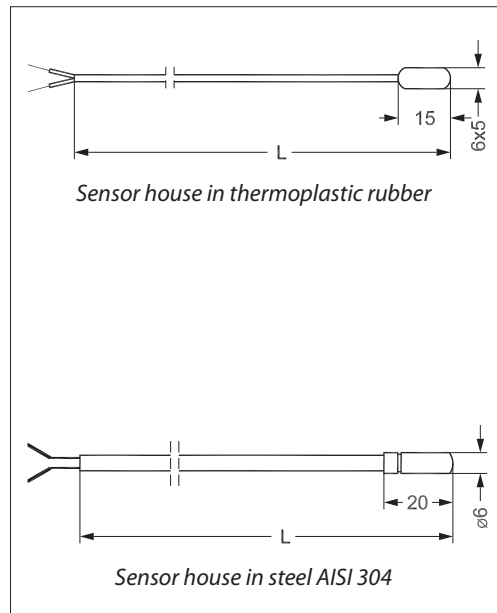
- Sensor house in thermo plastic rubber and flat cable
- Sensor house in steel and with round cable

## Features

- Nominal resistance of 10000 ohm at 25 °C
- Available with cable lengths up to 8.5 m
- Two main versions are available:
  - Version with sensor housing in thermoplastic rubber and flat cable (2 x 0.25 mm<sup>2</sup>) for measuring range -50 – 120 °C and IPclass IP67.
  - Version with sensor housing in AISI 304 stainless steel and round cable (2 x 0.25 mm<sup>2</sup>) for measuring range -50 – 110 °C and IPclass IP68.

**Technical data**

Sensor house	Thermoplastic rubber	Steel AISI 304
Temperature range	-50 – 120 °C	-50 – 110 °C
Cable material	Thermoplastic rubber, flat, 2 × 0.25 mm <sup>2</sup>	Thermoplastic rubber, round, 2 × 0.25 mm <sup>2</sup>
Wire ends	Tin plated	Nipples
Time constant, water 2 m/s	10 seconds	10 seconds
IP Class	IP67	IP68
Nominal resistance	10000 ohm at 25 °C	
Tolerance	± 1%	
Beta value	3435 at 25/85 °C	
Tolerance at beta value	± 1%	



R_nom [Ohm]	Temp. [°C]	Temp. [°F]
595	120	248
757	110	230
972	100	212
1265	90	194
1667	80	176
2228	70	158
3020	60	140
4160	50	122
5827	40	104
8313	30	86
10000	25	77
12091	20	68
17958	10	50
27278	0	32
42450	-10	14
67801	-20	-4
111364	-30	-22
188500	-40	-40

**Ordering**

Type	Sensor element		Sensor house	Cable, L=	Number	Code no.
EKS 221	NTC	10000 ohm / 25 °C	Thermo plastic rubber	3.5 m	150	<b>084N3206</b>
					1	<b>084N3210</b>
			Steel AISI 304	1.5 m	50	<b>084N3208</b>
					1	<b>084N3209</b>

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