Temperature sensor EKS 111

Introduction and application

The sensor is based on a PTC element with a resistance of 1000 ohm at 25°C.

The sensor can be used for measuring temperatures in the following areas:
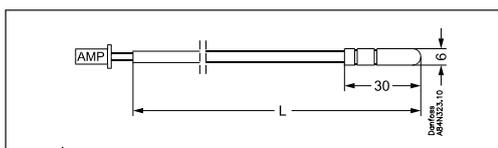• Refrigeration
• Air conditioning
• Heating

- Primarily in combination with controllers types EKC 101, EKC 201 and EKC 301.

The sensor has a relatively big tolerance on the resistance. This means that the sensor cannot be employed for measuring values used for food safety logs or regulation of superheat.

Technical data

Nominal resistance	1000 ohm at 25°C
Degree of accuracy	Class B (+/-1%)
Temperature range	-55 to 100°C
Temperature range for cable	-30 to 80°C
Cable material	PVC
Sensor tube	Stainless steel AISI 304
Time constant	30 seconds
Insulation resistance	DIN EN60751
Density	IP 67
AMP Plug	AMP ital mod 2, housing 280 358, Crimp contact 280 708-2

R (Typ.) Ohm	Temp. °C	Error K	Temp. °F
1679	100	+/-3.5	212
1575	90		194
1475	80		176
1378	70		158
1286	60		140
1196	50		122
1111	40		104
1029	30		86
990	25	+/-1.3	77
951	20		68
877	10		50
807	0		32
740	-10		14
677	-20		-4
617	-30		-22
562	-40		-40
510	-50		-58
485	-55	+/-3.0	-67

Ordering

Type	Sensor		Cable length (L)	Number	Code no.
EKS 111	PTC	1000 ohm / 25°C	1.5 m	1	084N1178
				150	084N1161
			3.5 m	1	084N1179
				150	084N1163
			6 m	1	084N1180
				80	084N1173
			8.5 m	60	084N1168
			1.5 m with AMP-plug	1	084N1181
				150	084N1174
			3.5 m with AMP-plug	1	084N1182
				150	084N1170
			6 m with AMP-plug	1	084N1177
				80	084N1171

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