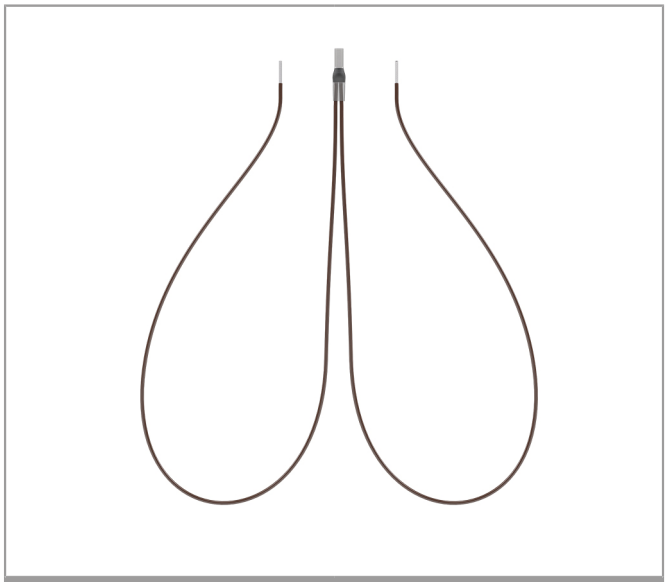
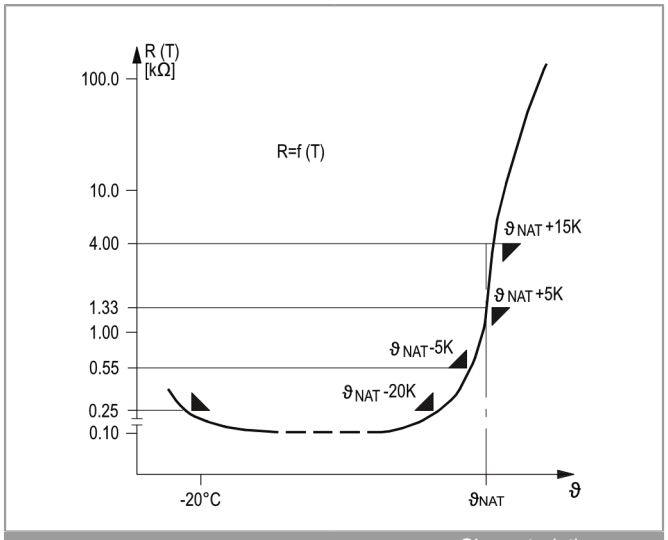
PTC Single sensor

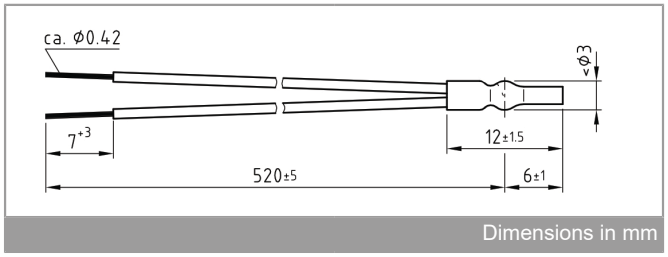


PTC Single sensor

Illustration similar. Scope of delivery may deviate.



Characteristics curve



Dimensions in mm

Application

PTC sensors according to DIN VDE V 0898-1-401 are used to protect electrical machines against thermal overload.

Functional description

KRIWAN PTC sensors feature a particularly steep R/T characteristics curve. PTC sensors with the same or differing nominal response temperatures can also be switched in series.

This makes it possible to monitor machine and coil parts with different limit temperatures at low cost. Various nominal response temperatures are available.

The PTCs provide for a secure switch-off in conjunction with a separate evaluation when the nominal response temperatures are reached.

The structural design makes it possible to achieve short thermal response times and facilitates the installation.

Technical specifications

Max. operation voltage U_{max}	30 V
Nominal response temperature	See PTC identification and item number
Tolerance of ϑ_{NRT}	±5 K
Reproducibility of ϑ_{NRT} (within the tolerance range)	±0.5 K
Initial resistance R_{25}	≤100 Ω
Resistance at a thermistor temperature of	
– ϑ_{NRT} -5 K	≤550 Ω
– ϑ_{NRT} +5 K	≥1330 Ω
– ϑ_{NRT} +15 K	≥4 kΩ
Thermal response time t_a	≤5 s
Insulation test	U_{eff} = 2.5 kV V ~
Permissible ambient temperature T_a	-25°C ≤ Ta ≤ 180°C
Connection	
– Type	Single strands
– Cross-section	2x0,14 mm², AWG 26
– Wire insulation	FEP ETFE (on request)
– Wire color	According to DIN VDE V 0898-1-401
Dimensions	See dimensions in mm Other lengths upon request
Testing basis	DIN VDE V 0898-1-401
Approval	UL file no. E241244 all up to including 150 °C,

PTC identification and part number

Nominal response temperature in °C	Color code external/ external	Miniature sensor single
60	WH/GY	01 D 116
70	WH/BN	01 D 117
80	WH/WH	01 D 118
90	GN/GN	01 D 119
100	RD/RD	01 D 200
110	BN/BN	01 D 210
120	GY/GY	01 D 220
130	BU/BU	01 D 230
140	WH/BU	01 D 240
145	WH/BK	01 D 245
150	BK/BK	01 D 250
155	BU/BK	01 D 255
160	BU/RD	01 D 260
170	WH/GN	01 D 270
180	WH/RD	01 D 280

KRIWAN Industrie-Elektronik GmbH

Allmand 11
74670 Forchtenberg
Deutschland

phone: (+49) 7947 822 0

info@kriwan.com
www.kriwan.com