

TR 097J AND TR 097R – ELECTROMOTOR WINDING TEMPERATURE SENSORS

K36.02en

DESCRIPTION AND APPLICATION

The TR097J and TR 097R temperature sensors are designed to measure the temperature of gaseous or solid substances. The temperature range is -20 to 180 °C and these limits must not be exceeded even for a brief period. The sensors can be used for any control systems compatible with the types of sensing elements or output signals listed in the table of technical parameters. The sensors meet the ingress protection of IP 30 according to EN 60529, as amended and can therefore be used only in dry areas without the possibility of moisture condensation. The temperature sensor is placed in a protective sleeve ensuring high electric strength – the sensors meet the requirements on electric strength of 5.0 kV DC and can therefore be used also for measuring the temperature of electric motor windings, etc. The sensors are designed to be operated in a chemically non-aggressive environment. The use must be chosen with regard to the temperature, chemical and mechanical resistance of the temperature sensor..

ACCESSORIES

- connectors

DECLARATION, CERTIFICATES, CALIBRATION

Manufacturer provides **EU Declaration of Conformity**.

Calibration – The final metrological inspection – comparison with standards or working instruments – is carried out for all the products. Continuity of the standards and working measuring instruments is ensured within the meaning of the Section 5 of Act no.505/1990 on metrology. The manufacturer offers a possibility to supply the sensors calibrated in SENSIT s.r.o.'s laboratory (according to requirements of the EN ISO/IEC 17025 standard) or in an Accredited laboratory.

SPECIFICATIONS

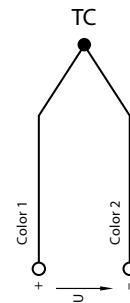
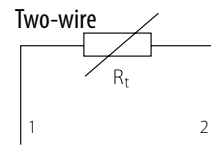
Sensor type	TR 097J	TR 097R
Temperature range	-20 to 180 °C	-20 to 180 °C
	temperature class H	
Type of sensing element	all types (Pt 100, Pt 1000, Ni 1000, Ni 10000, Ni 2226=T1, NTC, PTC, KTY, TSIC, DALLAS, TC K, TC J, TC T and so on)	
Ingress protection	IP 30 in accordance with EN 60529, as amended	
Electric strength	5 kV (higher acc. to requirement)	
Length of case	L 25 to 60 mm	
Lead in wires	0.22 mm ² - teflon FEP or PFA	PTFE unshielded 2 x AWG24 PTFE shielded 4 x AWG30
Wire resistance	0.162 Ω / m at temperature 25 °C	0.178 Ω / m at temperature 25 °C

Note: Certain technical specifications of thermocouple sensors (lead wires, IP rating, etc.) may differ with different types.

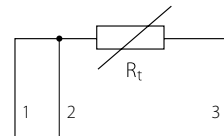


TEMPERATURE SENSORS WITH A CABLE

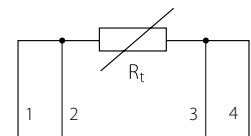
WIRING DIAGRAM



Three-wire

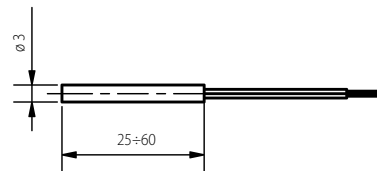


Four-wire



DIMENSIONAL DRAFT

TR 097J



TR 097R

