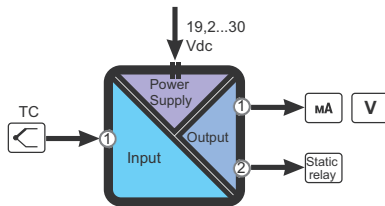




K109TC

TC TO DC CURRENT/VOLTAGE ISOLATOR/CONVERTER (WITH TRIP ALARM)



K109TC is a converter for Thermocouples TCs (J, K, E, N, S, R, B, T) and provides a mA/V standard output signal. Beside available there is a configurable threshold (relay) that may generate an alarm or may be utilized like a thermostat. It's completely configurable through dip switches/trimmer. A 3-way galvanic isolation among Power supply// input// output circuits assures the integrity of your datas.

TECHNICAL SPECIFICATIONS

General Data

Power supply	19,2...30 Vdc
Power consumption	500 mW
Isolation	1.500 Vac (3 way)
Transducer Power Supply	-
Accuracy	0,1%
Response time	40 ms
Status Indicators	Power supply, error
Setting	Dip Switches
Mounting	35 mm DIN rail guide
Protection Degree	IP20
Operating Temperature	-20..+65 °C
Dimension (W x H x D)	6,2 x 93 x 102,5 mm

Input

Channel Numbers	1
Thermocouple	Type: J, K, E, N, S, R, B, T (ITS90) Min span: 100 °C Impedance: 10 MΩ

Output

Channel Numbers	1
Voltage	Range: 0..10 / 10..0 / 0..5 / 1..5 V Min load resistance: 2 kΩ
Current	Range: 4..20 / 20..4 / 0..20 / 20..0 mA Max load resistance: 500 Ω
Relay	Alarm settable as low/high: 24 Vac Nominal Current: 60 mA Max

Standard

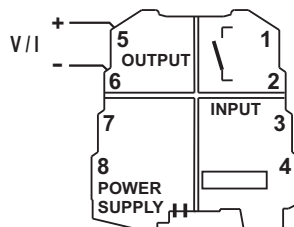
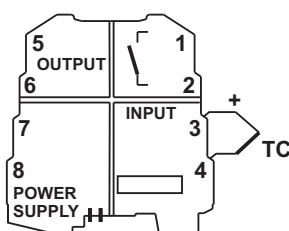
Approval	CE, UL
Norms	EN 50081-2; EN 55011; EN 50082-2; EN 61000-2-2/4; EN 50140/141; EN 61010-1

Input

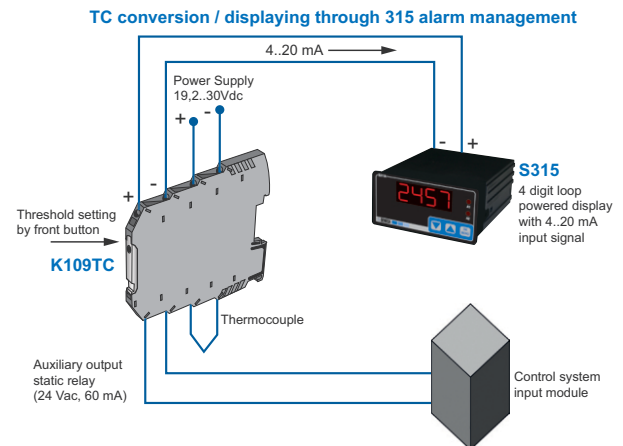
The module accepts input from the following types of thermocouples: J, K, R, N, S, R, B, T. The use of shield cables is recommended for the electronic connections.

Output

Voltage connection - Current connection (applied current)
The use of shield cables is recommended for the electronic connections.

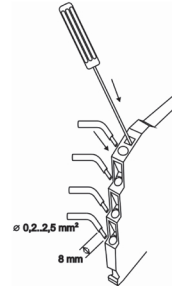


APPLICATION EXAMPLE

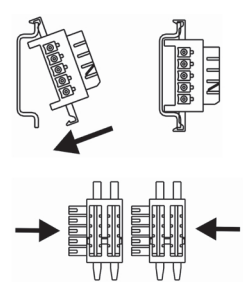


CONNECTION AND INSTALLATION

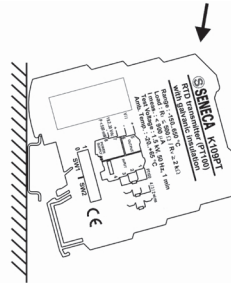
CAGE CLAMP CONNECTION



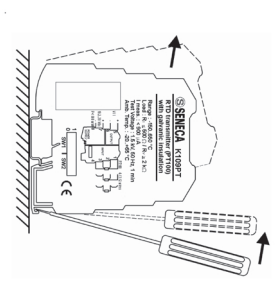
K-BUS CONNECTOR



INSERTING MODULE ON DIN GUIDE



EXTRACTING MODULE FROM DIN GUIDE



Auxiliary Output

The auxiliary output has been designed to pilot an indicator or a relay of greater power or the input of a supervisor control system.

