

K-LINE

K109TC

Thermocouple Converter

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Temperature converters

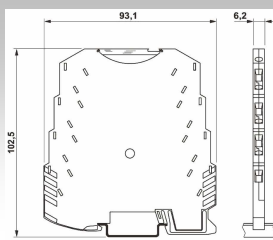


CE

- ▶ INPUT: Thermocouples types: J, K, E, N, S, R, B, T with zero and span configurable by dip-switch
- ▶ OUTPUT: N.1 channel current 0/4..20, 20..4/0 mA or voltage 0..5/10, 10..0, 1..5 Vdc
N.1 solid state relè (SSR) for thermostat / alarm function
- ▶ Galvanic isolation at 3-way
- ▶ Spring-cage terminal block and/or DIN bus connection system
- ▶ Power bridging terminal - DIN rail bus connector
- ▶ Tiny dimensions (102,5 x 93,1 x 6,2 mm)
- ▶ Resolution @ 14 bit
- ▶ Precision class 0.1%

TECHNICAL DATA

K109TC – Thermocouple Converter



ORDER CODES

| | |
|--------------------|---|
| K109TC | Thermocouple converter |
| Accessories | |
| K-BUS | Expandable power supply connector |
| K-SUPPLY | Power Supply module with surge protection |

GENERAL FEATURES

| | |
|----------------------------------|---|
| Power supply | 19,2...30 Vdc |
| Channels | N.1 |
| Accuracy | Class: 0,1% Cold junction error: 1,5°C Max |
| Status indicators | - Fault - State of the auxiliary output |
| Galvanic Isolation | Power supply // input // output at 1500 Vac, digital |
| Hot swapping | Yes |
| Power consumption | 500 mW |
| A/D Converter | 14 bit |
| Current output protection | Approximately 25 mA |
| Security output | - 102.5% of full scale value, in case of over-range - 105% of full scale value in case of improper functioning |
| Humidity | 30..90% a +40°C (not condensing) |

| | |
|------------------------------|--|
| Design | Terminal housing for mounting on 35 mm DIN 46277 |
| Filter rejection | 50-60 Hz (settable) |
| DIP Switch | - Inputs signal setup - Output signal setup |
| Processing | Floating point 32 bit |
| Dimensions | 6,2 x 93,1 x 102,5 mm (w x h x d) |
| Weight | 50 g |
| Operating temperature | -20..+65 °C |
| Connections | Plug-in screw clamp terminal blocks, wires up to 2.5 mm ² |
| IP Protection | IP 20 |
| Standards | EN50081-2 EN50082-2 EN61010-1 EN60742 |
| Approvals | CE |

INPUT

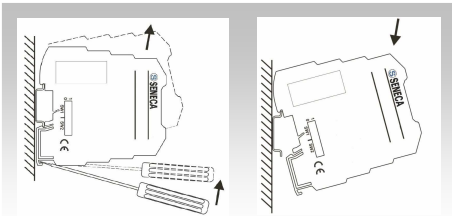
Thermocouples types: J, K, E, N, S, R, B, T
Tables: EN60584-1 (ITS-90)
Lower span: 100 °C
Impedance: 10 MOhm

OUTPUT

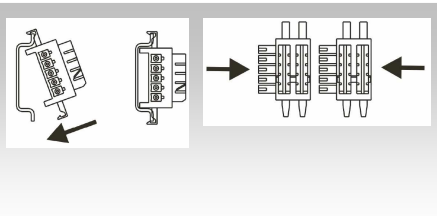
Current: 0..20 mA, 4..20 mA, 20..0 mA e 20..4 mA
Higher load resistance: 500 Ohm
Voltage: 0.5 Vdc, 1.5 Vdc, 0..10 Vdc and 10..0 Vdc
Lower load resistance: 2 KOhm
Static output: Applicable Voltage 24 Vac nominal
Current: 60 mA Max

DIMENSIONS AND INSTALLATION

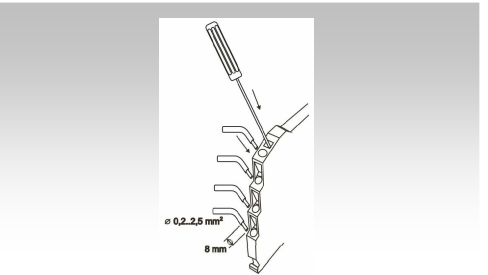
Inserting / Extracting module on DIN guide



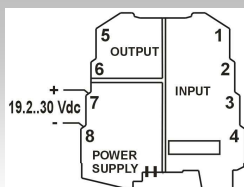
Expandable connector K-BUS



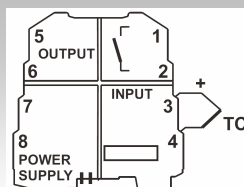
Cage clamp connection



Power supply



Input



Output

