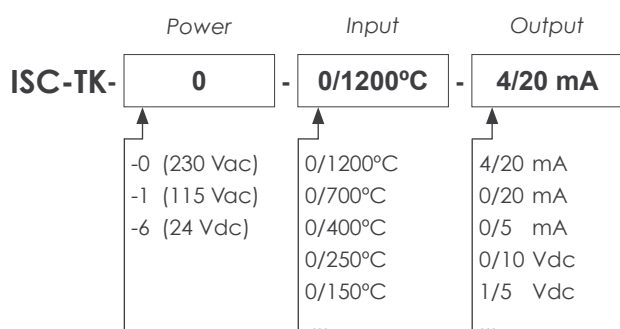


ISC-TK Signal converter for Thermocouple K

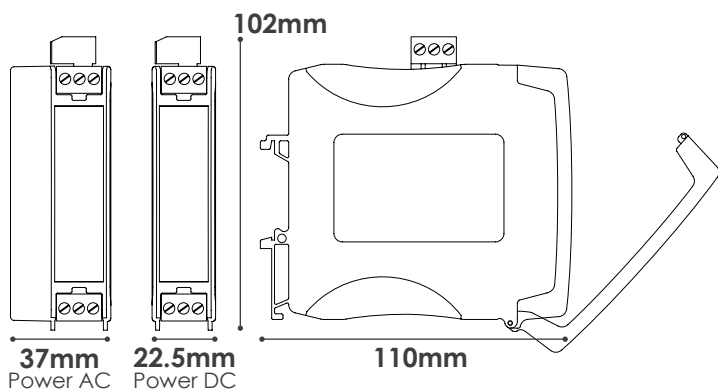
Signal converter for thermocouple type K, DIN rail mounting. Signal ranges selectable up to 1200°C, with output ranges in 4/20mA or 0/10Vdc. Automatic cold junction compensation. Power options in AC and DC. High isolation between input, output and power circuits.



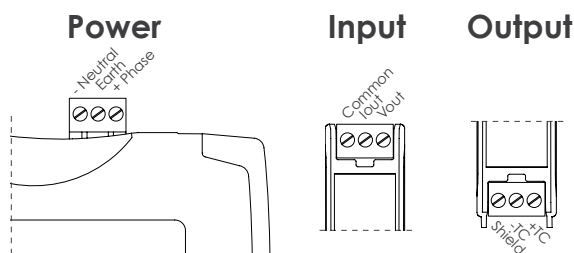
Order reference



Dimensions



Connections



Technical specifications

| Signal | Input ranges* |
|----------------|---------------|
| Thermocouple K | 0/1200 °C |
| Thermocouple K | 0/700 °C |
| Thermocouple K | 0/400 °C |
| Thermocouple K | 0/250 °C |
| Thermocouple K | 0/150 °C |

| Output ranges* | Type | Load |
|----------------|--------|----------|
| 4/20 mA | active | <400 Ohm |
| 0/20 mA | active | <400 Ohm |
| 0/10 Vdc | active | >1 K Ohm |
| 0/1 Vdc | active | >1 K Ohm |

* Intermediate input and output ranges are available, operating the Span and Offset potentiometers.

General

| | |
|---------------------|--|
| Signal | Thermocouple K |
| Cold junction | automatic compensation |
| Sensor break | output to high |
| Input impedance | 1 MOhm |
| Maximum overvoltage | 10 Vdc |
| Accuracy | 0.3% F.S. + 0.05°C/°C at the cold junction |
| Linearity | 0.2% F.S. |
| Thermal drift | 250 ppm/°C + 0.1°C/°C at the cold junction |
| Response time | <250mSec. (0% to 90% signal) |
| Bandwidth | 20Hz (-3dB) |

Power

| | |
|-------------|--------------------------|
| Power | 230Vac, 115Vac and 24Vdc |
| Consumption | <3.8VA |

Isolation*

| | |
|--------------|--|
| Input-output | 3500Veff, optical |
| Power-input | 3500Veff, galvanic |
| Power-output | 3500Veff, galvanic (with AC power) 1000Veff, galvanic (with DC power) |

* instrument isolated 3 ways, isolation tested during 60 sec.

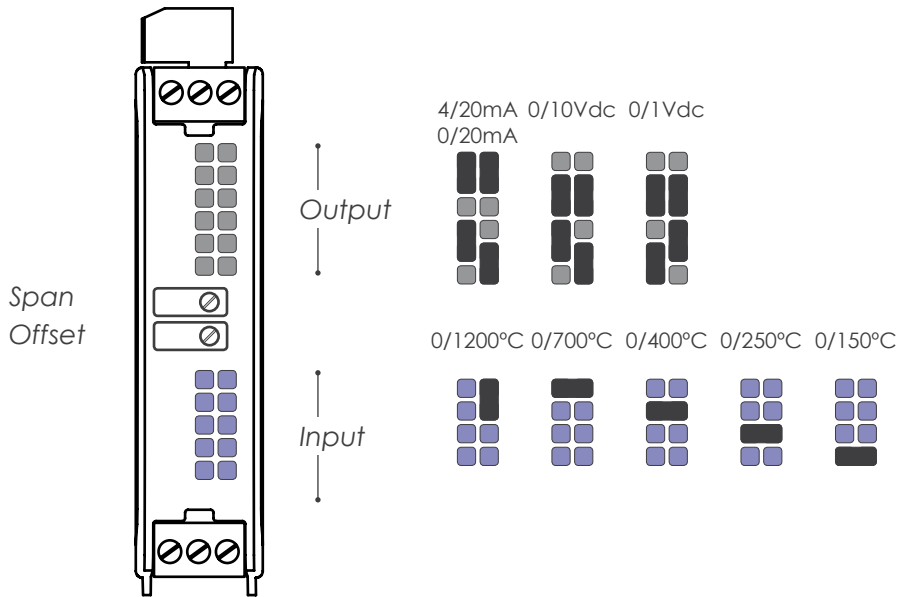
Mechanical

| | |
|------------------|--|
| Mounting | DIN rail standard (35x7.5mm) |
| Connections | pug-in screw terminal |
| Weight | 120 grams (with DC power) 200 grams (with AC power) |
| Housing material | polyamide PA6 UL94 V2 |
| Protection | IP30 |

Information on web

User's Manual www.fema.es/1196_ISC-TX_i.pdf

Jumpers for range selection



Isolated signal converters Series ISC

| | Model | | | | | | | | | | | | | | | |
|-------------------------|--------|---------|--------|---------|---------|---------|---------|---------|--------|--------|--------|--------|--------|--------|-----------|-------|
| | ISC-LC | ISC-RES | ISC-HZ | ISC-POT | ISC-IDC | ISC-VDC | ISC-IAC | ISC-VAC | ISC-TS | ISC-TR | ISC-TE | ISC-IT | ISC-TK | ISC-TJ | ISC-PT100 | ISC-P |
| Signals accepted | | | | | | | | | | | | | | | | |
| Process | | | | | | | | | | | | | | | | • |
| Pt100 / RTD | | | | | | | | | | | | | | | • | |
| Thermocouple J | | | | | | | | | | | | | | • | | |
| Thermocouple K | | | | | | | | | | | | | • | | | |
| Thermocouple T | | | | | | | | | | | • | | | | | |
| Thermocouple E | | | | | | | | | | • | | | | | | |
| Thermocouple R | | | | | | | | | | • | | | | | | |
| Thermocouple S | | | | | | | | | | • | | | | | | |
| Voltages AC | | | | | | | | • | | | | | | | | |
| Currents AC | | | | | | | | | • | | | | | | | |
| Voltages DC | | | | | | • | | | | | | | | | | |
| Currents DC | | | | | • | | | | | | | | | | | |
| Potentiometers | | | | • | | | | | | | | | | | | |
| Frequency | | | • | | | | | | | | | | | | | |
| Resistances | | • | | | | | | | | | | | | | | |
| Load cells | • | | | | | | | | | | | | | | | |

Meters for 4/20mA



Process panel meter
48x24mm - L35/A



Process panel meter
72x36mm - S40-P



Process panel meter
96x48mm - M40-P



Process meter
60mm digit - BDF-24



Process panel meter
100mm digit - BDF-44