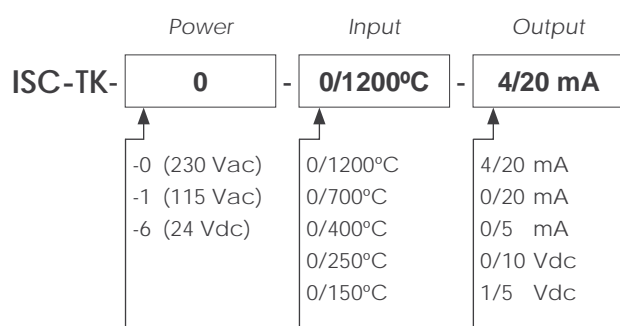


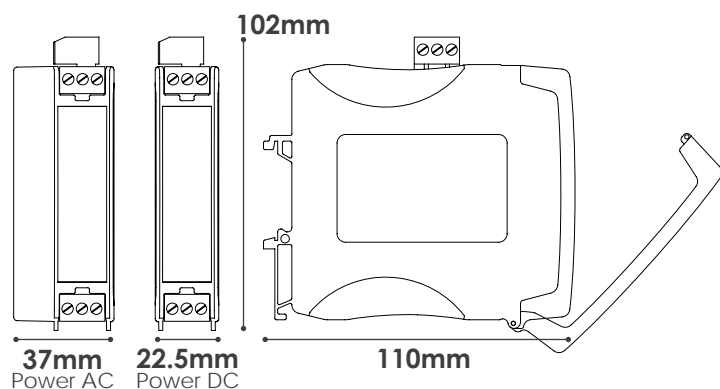
# ISC-TK Signal converter for Thermocouple K

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.

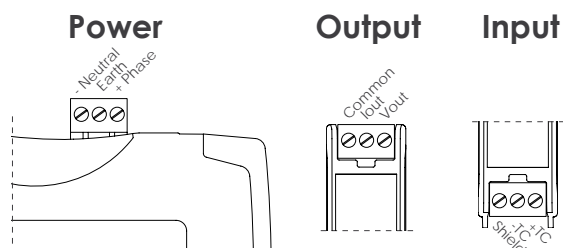
## Order reference



## 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\*

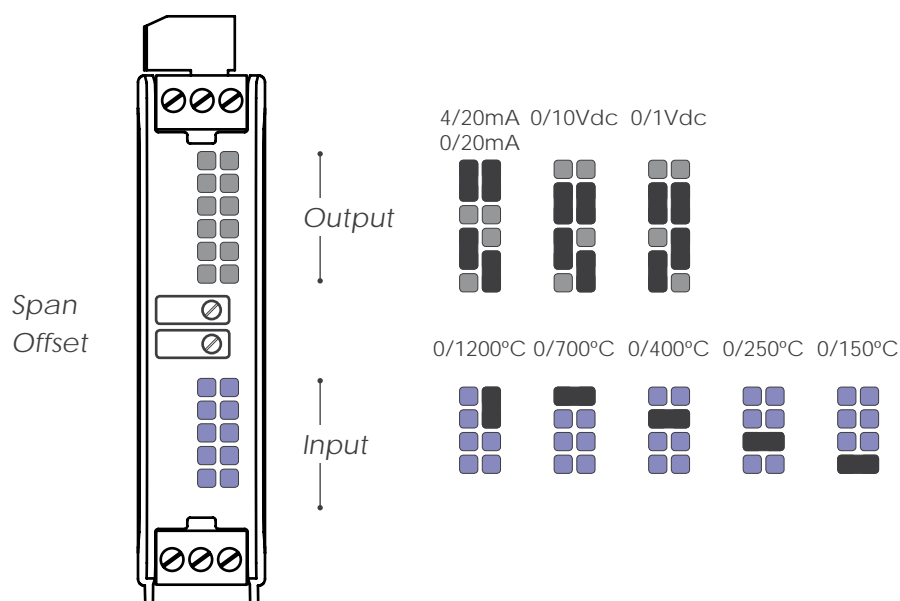
Input-output	3500Veff, optical
Power-input	3500Veff, galvanic
Power-output	3500Veff, galvanic (with AC power) 1000Veff, galvanic (with DC power)

\* 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

## 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-TT	ISC-TK	ISC-TJ	ISC-PT100
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