Thermocouple measuring transducer - MCR-TE-J-K-I

2810544

https://www.phoenixcontact.com/us/products/2810544

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MCR temperature measuring transducer, for thermocouples type J, K input: 0 - 400°C, 0 - 800°C, 0 - 1000°C, 0 - 1200°C, output signal 0(4)...20 mA

Commercial Data

Item number	2810544
Packing unit	1 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	C01
Product Key	CK1821
Catalog Page	Page 324 (IF-2007)
Weight per Piece (including packing)	133.5 g
Weight per Piece (excluding packing)	130.7 g
Customs tariff number	85437090
Country of origin	DE

Technical Data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area

Product properties

Product type	Temperature transmitter

Electrical properties

Alignment span	± 5 % (of final value)
Alignment zero	± 60 K
Limit frequency (3 dB)	30 Hz
Typical cold point errors	± 2.5 K
Cold point error, max.	± 4 K
Test voltage input/output	1.5 kV AC (50 Hz, 60 s)
Test voltage input/power supply	1.5 kV AC (50 Hz, 60 s)
Step response (10-90%)	☐ 11 ms
Maximum temperature coefficient	< 0.02 %/K
Maximum transmission error	≤ 1.2 % (of end value, for type K)
	< 2 % (of end value, for type J, 0 °C ... 400°C and 0 °C ... 800°C)
	< 2.5 % (of end value, for type J, 0 °C ... 1000°C and 0 °C ... 1200°C)

Supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	50 mA

Input data

Signal:

Input signal	Temperature

Measurement

Configurable/programmable	Yes
Sensor types that can be used (TC)	J, K
Temperature measuring range	0 °C ... 400 °C
	0 °C ... 800 °C
	0 °C ... 1000 °C
	0 °C ... 1200 °C
Sensor type:	0 °C ... 400 °C (fixed setting)
	0 °C ... 800 °C (fixed setting)
	0 °C ... 1000 °C (fixed setting)
	0 °C ... 1200 °C (fixed setting)

	0 °C ... 400 °C (fixed setting)
	0 °C ... 800 °C (fixed setting)
	0 °C ... 1000 °C (fixed setting)
	0 °C ... 1200 °C (fixed setting)

Output data

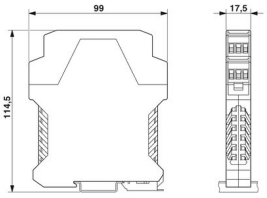
Signal:

Configurable/programmable	Yes
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
Max. current output signal	30 mA
Output current with wire break	> 22 mA
Load/output load current output	≤ 500 Ω

Connection data

Connection method	Pluggable screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm² ... 2.5 mm²
Conductor cross section flexible	0.2 mm² ... 2.5 mm²
Conductor cross section AWG	24 ... 14

Dimensions

Dimensional drawing	
Width	17.5 mm
Height	99 mm
Depth	114.5 mm

Material specifications

Housing material	Polyamide PA non-reinforced

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C

Approval data

CE

Certificate	CE-compliant

UL, USA / Canada

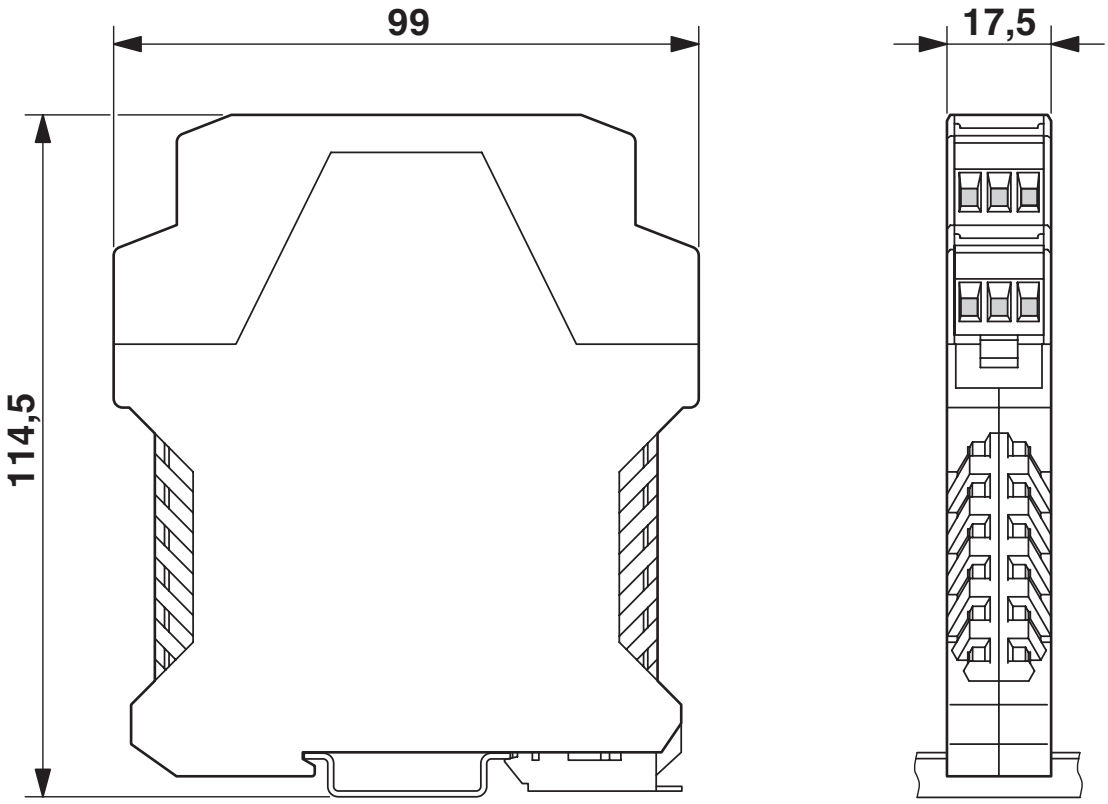
Identification	cULus

Mounting

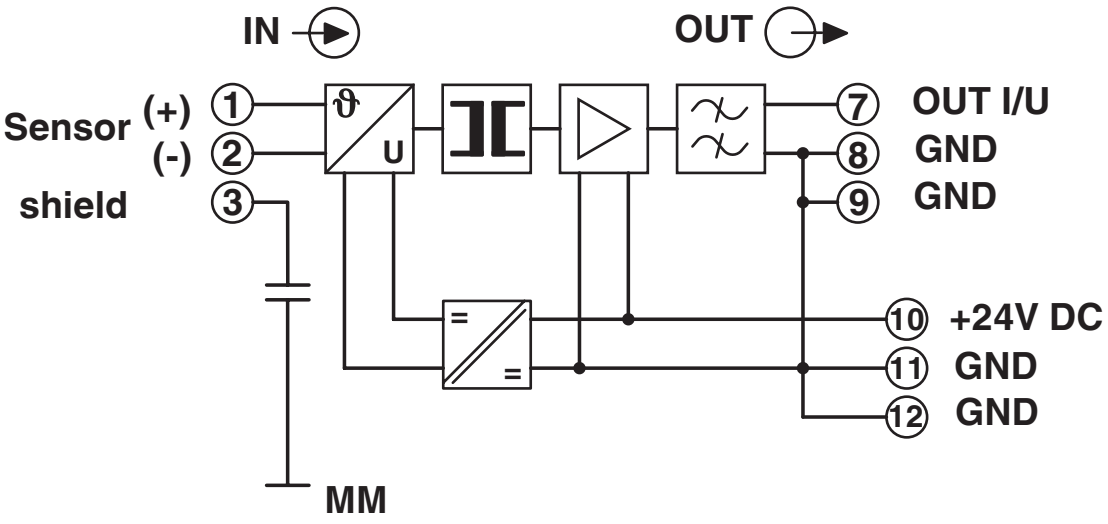
Mounting position	any

Drawings

Dimensional drawing



Circuit diagram



Classifications

ECLASS

ECLASS-9.0	27210129
ECLASS-10.0.1	27210129
ECLASS-11.0	27210129

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer’s declaration available under “Downloads”

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