

2810515

<https://www.phoenixcontact.com/us/products/2810515>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



MCR temperature measuring transducer, for thermocouples type J, K input: 0 - 400°C, 0 - 800°C, 0 - 1000°C, 0 - 1200°C, input electrically isolated, output signal 0..10 V

Commercial data

Item number	2810515
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	NULL
Product key	CK1821
Catalog page	Page 324 (IF-2007)
Weight per piece (including packing)	140.01 g
Weight per piece (excluding packing)	139 g
Customs tariff number	85437090
Country of origin	DE

MCR-TE-JK-U-E - Thermocouple measuring transducer



2810515

<https://www.phoenixcontact.com/us/products/2810515>

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%)	≈  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	20 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)

MCR-TE-JK-U-E - Thermocouple measuring transducer

2810515

<https://www.phoenixcontact.com/us/products/2810515>

	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

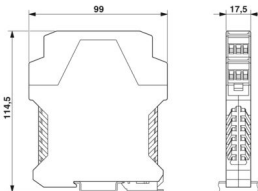
Signal: Voltage output

Configurable/programmable	Yes
Voltage output signal	0 V ... 10 V
Max. voltage output signal	15 V
Output voltage with wire break	> 11 V
Load/output load voltage output	≥ 10 kΩ

Connection data

Connection method	Pluggable screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	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

Color	green (RAL 6021)
Housing material	Polyamide PA non-reinforced

Environmental and real-life conditions

Ambient conditions

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

Approvals

CE

MCR-TE-JK-U-E - Thermocouple measuring transducer



2810515
<https://www.phoenixcontact.com/us/products/2810515>

Certificate	CE-compliant
UL, USA/Canada	
Identification	cULus

Mounting

Mounting position	any
-------------------	-----

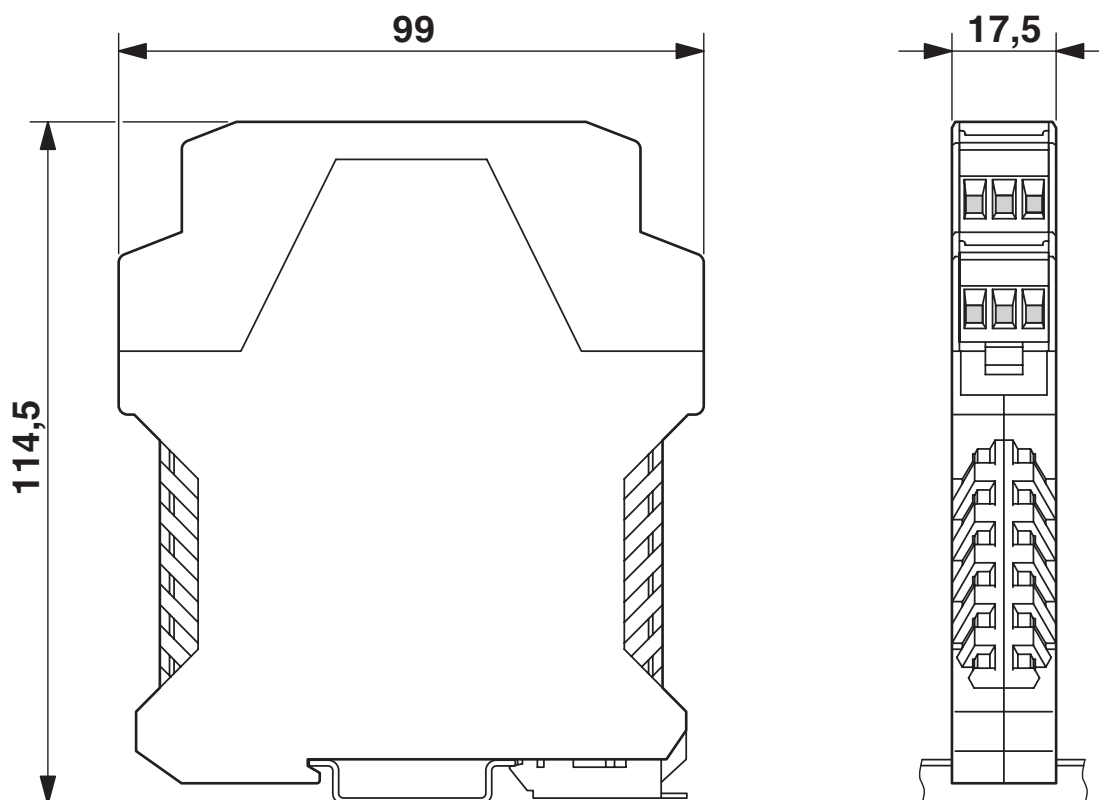
MCR-TE-JK-U-E - Thermocouple measuring transducer

2810515

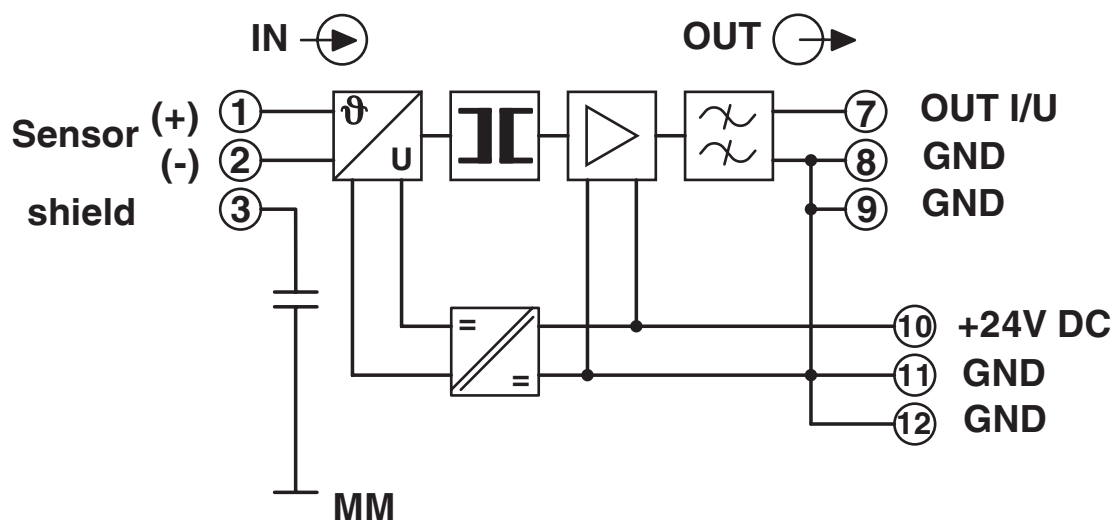
<https://www.phoenixcontact.com/us/products/2810515>

Drawings

Dimensional drawing



Circuit diagram



MCR-TE-JK-U-E - Thermocouple measuring transducer



2810515
<https://www.phoenixcontact.com/us/products/2810515>

Classifications

ECLASS

ECLASS-11.0	27210129
-------------	----------

2810515
<https://www.phoenixcontact.com/us/products/2810515>

Environmental product compliance

China RoHS	
Environment friendly use period (EFUP)	<div>EFUP-50</div> <div>An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.</div>
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

Phoenix Contact 2024 © - all rights reserved
<https://www.phoenixcontact.com>

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com