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# Thermocouple measuring transducer - MCR-TE-JK-U-E - 2810515


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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, input electrically isolated, output signal 0..10 V



## Key commercial data

Packing unit	1 pc
GTIN	 4 017918 126711
Weight per Piece (excluding packing)	139.0 GRM
Custom tariff number	85437090
Country of origin	Germany

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	17.5 mm
Height	99 mm
Depth	114.5 mm

### Ambient conditions

Ambient temperature (operation)	-20 °C ... 65 °C
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### Input data

Configurable/programmable	Yes
Sensor types that can be used (TC)	J, K

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## Technical data

### Input data

Temperature measuring range	0 °C ... 400 °C
	0 °C ... 800 °C
	0 °C ... 1000 °C
	0 °C ... 1200 °C

### Output data

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

### Power supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	20 mA

### Connection data

Connection method	Pluggable screw connection
Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max.	14
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Stripping length	8 mm
Screw thread	M3

### General

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)
Maximum temperature coefficient	< 0.02 %/K
Cold point error, max.	± 4 K
Typical cold point errors	± 2.5 K
Limit frequency (3 dB)	30 Hz
Alignment zero	± 60 K
Alignment span	± 5 % (of final value)
Step response (10-90%)	approx. 11 ms

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## Technical data

### General

Test voltage input/output	1.5 kV (50 Hz, 1 min.)
Test voltage input/power supply	1.5 kV (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	any
Conformance	CE-compliant
UL, USA / Canada	cULus

## Classifications

### eCl@ss

eCl@ss 4.0	27200206
eCl@ss 4.1	27200206
eCl@ss 5.0	27200206
eCl@ss 5.1	27200206
eCl@ss 6.0	27200206
eCl@ss 7.0	27200206

### ETIM

ETIM 2.0	EC001446
ETIM 3.0	EC001446
ETIM 4.0	EC001446
ETIM 5.0	EC001446

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	39121008

## Approvals

### Approvals

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Approvals

UL Recognized / cUL Recognized / GOST / cULus Recognized

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# Thermocouple measuring transducer - MCR-TE-JK-U-E - 2810515

## Approvals

Ex Approvals

Approvals submitted

## Approval details

UL Recognized

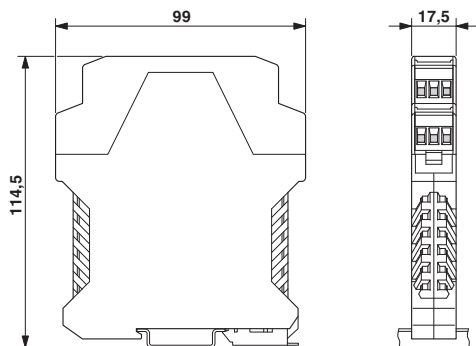
cUL Recognized

GOST

cULus Recognized

## Drawings

Dimensioned drawing



Circuit diagram

