

## Temperature measuring transducer - MCR-T-UI-E-NC - 2814126

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



MCR-T module, programmable temperature measuring transducer, unconfigured, for thermocouple sensors and resistance thermometers, with 2, 3, or 4-wire system, with electrical isolation between input/output and input/auxiliary power

### Your advantages

- Freely programmable via MCR/PI-CONF-WIN
- With transistor switching output
- Measure differential temperatures
- Inverse output signal ranges as an option
- For resistance thermometers and thermocouples



### Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 139445
GTIN	4017918139445
Weight per Piece (excluding packing)	146.700 g
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
-------------------------	---

#### Dimensions

Width	17.5 mm
Height	99 mm

# Temperature measuring transducer - MCR-T-UI-E-NC - 2814126

## Technical data

### Dimensions

Depth	114.5 mm
-------	----------

### Ambient conditions

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

### Input data

Configurable/programmable	Yes, unconfigured
Sensor types (RTD) that can be used	Pt, Ni, Cu sensors
Sensor types that can be used (TC)	U, T, L, J, E, K, N, S, R, B, C, W, HK
Linear resistance measuring range	0 Ω ... 8000 Ω (freely adjustable, min. measuring range 100 Ω)
Sensor input current	250 μA (resistance thermometer)
Temperature measuring range	Depending on sensor type used
Connection technology	2, 3, 4-wire
Protective circuit	Transient protection
	Surge protection 30 V DC
Connection method	Pluggable screw connection

### Output data

Output name	Voltage output / current output
Configurable/programmable	Yes, unconfigured
Voltage output signal	0 V ... 5 V
	0 V ... 10 V
	-5 V ... 5 V
	-10 V ... 10 V
	10 V ... 0 V
	5 V ... 0 V
	10 V ... -10 V
	5 V ... -5 V
	1 V ... 5 V
Current output signal	0 mA ... 20 mA
	4 mA ... 20 mA
	20 mA ... 0 mA
	20 mA ... 4 mA
Max. output voltage	± 12 V
Max. output current	24 mA
Output voltage range with wire break	-12 V ... 12 V
Output current range with wire break	0 A ... 24 mA
Output voltage range with overrange/underrange	-12 V ... 12 V
Output current range with overrange/underrange	0 A ... 24 mA

## Temperature measuring transducer - MCR-T-UI-E-NC - 2814126

### Technical data

#### Output data

Load/output load voltage output	$\geq 10 \text{ k}\Omega$
Load/output load current output	$\leq 500 \Omega$
Ripple	$< 20 \text{ mV}_{PP}$
Protective circuit	Transient protection
D/A converter resolution	$\pm 12 \text{ bit}$

#### Switching output

Output name	Transistor output, pnp
Output description	Can carry a load of 100 mA, switches supply voltage (not protected against short-circuit); locked in case of order-specific configuration, otherwise freely programmable through MCR/PI-CONF-WIN
Output voltage range	18 V DC ... 30 V DC (switches supply voltage, not short-circuit resistant)
Continuous load current	100 mA

#### Power supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	$\leq 60 \text{ mA}$
Typical current consumption	40 mA

#### General

Maximum transmission error	$\leq 0.1 \%$ (of maximum range, $\pm 6 \text{ mV}$ or $\pm 12 \mu\text{A}$ at output)
Maximum temperature coefficient	$\leq 0.01 \%/K$
Temperature coefficient, typical	0.005 %/K
Cold point error, max.	$\leq 3 \text{ K}$
Typical cold point errors	1.5 K
Test voltage input/output	1 kV (50 Hz, 1 min.)
Test voltage input/power supply	1 kV (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	any
Conformance	CE-compliant
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D or Non-Hazardous Locations
GL	DNV GL

#### Standards and Regulations

Connection in acc. with standard	CUL
Conformance	CE-compliant
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D or Non-Hazardous Locations
GL	DNV GL

#### Environmental Product Compliance

# Temperature measuring transducer - MCR-T-UI-E-NC - 2814126

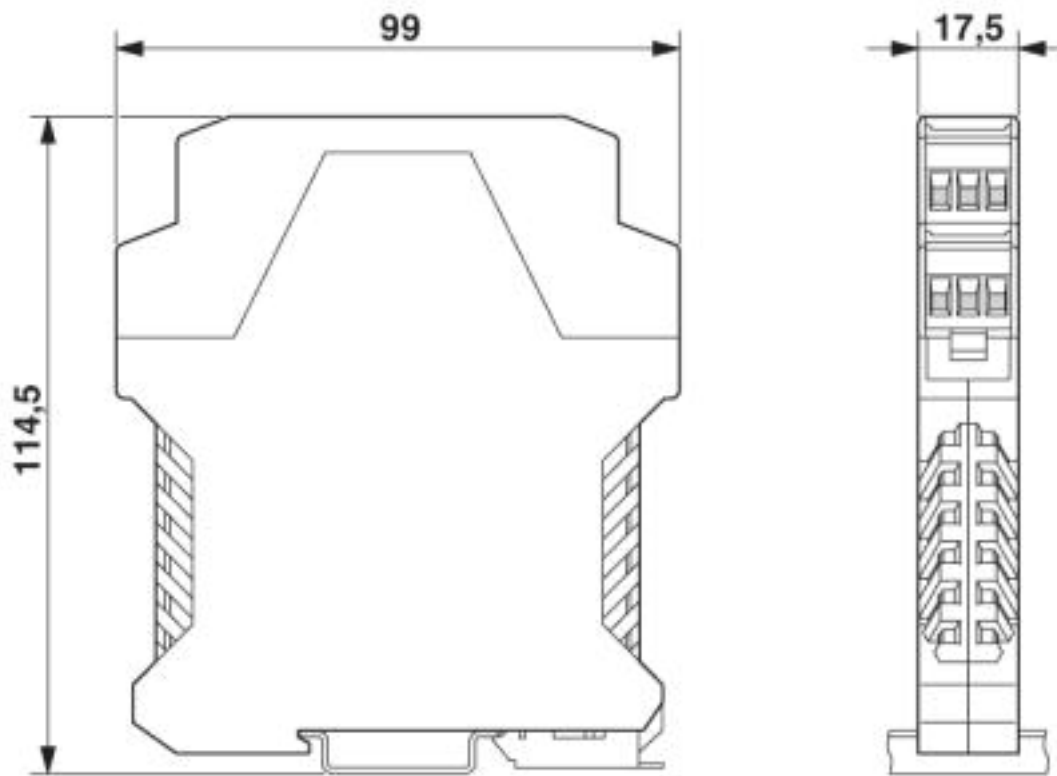
## Technical data

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Dimensional drawing



## Classifications

eCl@ss

eCl@ss 4.0	27200206
eCl@ss 4.1	27200206
eCl@ss 5.0	27200206
eCl@ss 5.1	27200200
eCl@ss 6.0	27200200
eCl@ss 7.0	27200206
eCl@ss 8.0	27200206

<https://www.phoenixcontact.com/us/products/2814126>

## Temperature measuring transducer - MCR-T-UI-E-NC - 2814126

### Classifications

eCl@ss

eCl@ss 9.0	27210129
------------	----------

### ETIM

ETIM 2.0	EC001446
ETIM 3.0	EC001446
ETIM 4.0	EC001446
ETIM 5.0	EC001446
ETIM 6.0	EC002919

### UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	41112105

Phoenix Contact 2019 © - all rights reserved  
<http://www.phoenixcontact.com>



# SCATTERGOOD & JOHNSON LTD

ELECTRICAL ENGINEERING & FLUID CONTROL DISTRIBUTORS

Est.1899

At Scattergood & Johnson Ltd, we pride ourselves on being a technical distributor to specialist industries.

Working with a range of quality product suppliers across a number of specialist markets, we are not your average 'box shifter' - we are your technical and supply chain partner.

We fully support every product we sell - for free! Our internal team and external sales engineers can answer any product or application question, no matter the complexity.

Backing up this technical ability is a range of 50,000+ products available from stock for nationwide next day delivery (same day if required!), or you can collect what you need from any of our trade counters around the UK.

Select your specialist interest below to learn more about how we can help.



Online, In Branch and On the Road - Scattergood & Johnson Ltd, there when you need us.

# [www.scatts.co.uk](http://www.scatts.co.uk)