

Temperature measuring transducer - MCR-T-UI-NC - 2814100

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


The figure shows version MCR-T-UI

Your advantages

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



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 139421
GTIN	4017918139421

Technical data

Dimensions

Width	17.5 mm
Height	99 mm
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)

Temperature measuring transducer - MCR-T-UI-NC - 2814100

Technical data

Input data

Sensor input current	250 μ A (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 ... 10 V
	0 V ... 5 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	\pm 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
Load/output load voltage output	\geq 10 k Ω
Load/output load current output	\leq 500 Ω
Ripple	< 20 mV _{PP}
Protective circuit	Transient protection
D/A converter resolution	\pm 12 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

Temperature measuring transducer - MCR-T-UI-NC - 2814100

Technical data

Power supply

Supply voltage range	18 V DC ... 30 V DC
Max. current consumption	≤ 60 mA
Typical current consumption	40 mA

General

Maximum transmission error	≤ 0.1 % (of maximum range, ±6 mV or ±12 µA at output)
Maximum temperature coefficient	≤ 0.01 %/K
Temperature coefficient, typical	0.005 %/K
Cold point error, max.	≤ 3 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

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

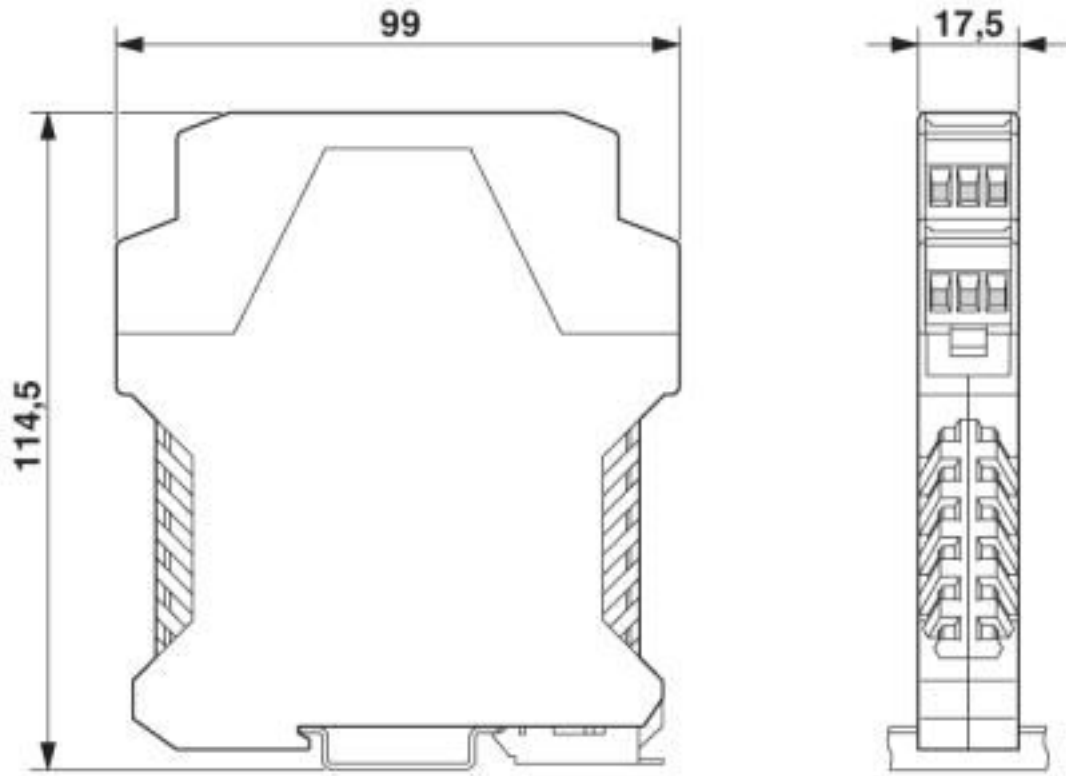
Environmental Product Compliance

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

Drawings

Temperature measuring transducer - MCR-T-UI-NC - 2814100

Dimensional drawing



Classifications

eCl@ss

eCl@ss 10.0.1	27210129
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
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

Temperature measuring transducer - MCR-T-UI-NC - 2814100

Classifications

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	41112105
UNSPSC 19.0	41112105

Accessories

Accessories

Arrester test system

Cable - CM-KBL-RS232/USB - 2881078



Connecting cable D-9-SUB to USB, with adapter D-9-SUB to D-25-SUB.

Programming adapter

Adapter cable - MCR-TTL-RS232-E - 2814388



Software adapter cable (Stereo jack connector/D-SUB 25-pos.), 1.2 m length, for programming MCR-T-..., MCR-S-... and MCR-f-... modules

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [Terminal Block Interface Modules](#) category:

Click to view products by [Phoenix Contact](#) manufacturer:

Other Similar products are found below :

[73-551-6002I](#) [GCN1MX25B](#) [DIN-50P-01](#) [DIN-68H-01](#) [DIN-96DI-01](#) [2291901](#) [2295185](#) [2907794](#) [2M10FCL](#) [FLKM-2I/O](#) [FLKM-4I/O](#)
[2281759](#) [2906251](#) [2907808](#) [5601749](#) [5541962](#) [1776613-1](#) [GCN1-004A](#) [ADAM-3920R-AE](#) [060-6827-06](#) [2311030](#) [2287708](#) [XW2C-20G6-](#)
[IO16](#) [GCN1-T](#) [MACX](#) [MCR-VAC](#) [5775235](#) [ADAM-3956-BE](#) [XW6T-COM2.5X20YL](#) [XW6T-COM1.5X8BL](#) [XW6T-COM1.5X16BL](#)
[XW6T-COM1.5X20YL](#) [XW6T-COM1.5X16YL](#) [XW6T-COM1.5X20RD](#) [XW6T-COM1.5X20BL](#) [XW6T-COM2.5X8BL](#) [1976610000](#) [UM](#)
[45-D50SUB/B/ZFKDS](#) [5541234](#) [410-261](#) [902056](#) [2906243](#) [2906915](#) [2907706](#) [ADAM-3909-AE](#) [ADAM-3920-AE](#) [ADAM-3925-AE](#)
[ADAM-3937-BE](#) [ADAM-3950-AE](#) [ADAM-3951-BE](#) [ADAM-3968-AE](#)