

Temperature measuring transducer - MCR-T-UI - 2814090

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, configured, for thermocouple sensors and resistance thermometers, with 2, 3, or 4-wire system

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
--------------	------

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
Depth	114.5 mm

Ambient conditions

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

Input data

Configurable/programmable	Yes, preconfigured
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 transducer - MCR-T-UI - 2814090

Technical data

Input data

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
Configurable/programmable	Yes, preconfigured
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	± 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	≥ 10 kΩ
Load/output load current output	≤ 500 Ω
Ripple	< 20 mV _{PP}
Protective circuit	Transient protection
D/A resolution	± 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

Power supply

Temperature measuring transducer - MCR-T-UI - 2814090

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
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

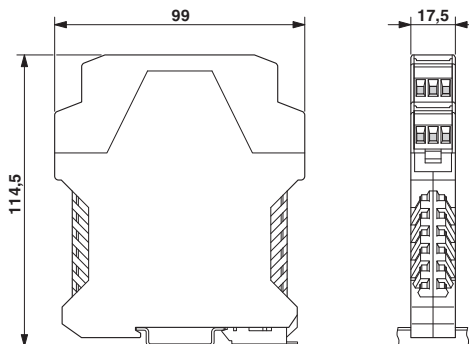
Connection in acc. with standard	CUL
Conformance	CE-compliant
UL, USA/Canada	Class I, Div. 2, Groups A, B, C, D or Non-Hazardous Locations
GL	DNV GL

Environmental Product Compliance

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

Drawings

Dimensional drawing



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

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>