

MCR-PT100-I-DC

Order No.: 2810337



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2810337>

MCR temperature transducer, for Pt 100 2, 3 or 4-wire system, input: 0...100°C, 0...150°C, 0...200°C, 0...300°C -50...+50°C, -50...100°C, -50...150°C, -50...250°C, output signal 0(4)...20 mA, auxiliary power electrically isolated



Commercial data	
Note	Made-to-order
sales group	H511
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 414 (IF-2011)

Product notes

WEEE/RoHS-compliant since: 06/22/2006



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Technical data

Input data	
Configurable/programmable	Yes
Sensor types (RTD) that can be used	Pt 100 (IEC 60751/EN 60751)
Sensor input current	Approx. 1 mA

Temperature measuring range	0 °C ... 300 °C (0 ... 100/150/200/300)
	-50 °C ... 250 °C (-50 ... 50/100/150/250)
Connection method	2, 3, 4-wire
	Pluggable screw connection

Output data

Output name	Current output
Current output signal	4 mA ... 20 mA
	0 mA ... 20 mA
Max. output current	30 mA
Output current with wire break	> 22 mA
Load/output load current output	≤ 500 Ω

Power supply

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	60 mA

Connection data

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

General data

Width	17.5 mm
Height	99 mm
Depth	114.5 mm
Maximum transmission error	≤ 0.4 % (of final value)
Maximum temperature coefficient	≤ 0.02 %/K
Limit frequency (3 dB)	30 Hz
Alignment zero	± 5 %
Alignment span	± 5 %

Step response (10-90%)	11 ms
Ambient temperature (operation)	-20 °C ... 65 °C
Degree of protection	IP20
Test voltage power supply/signal	750 V AC (50 Hz, 1 min.)
Color	green
Housing material	Polyamide PA non-reinforced
Mounting position	Any
Conformance	CE-compliant
UL, USA / Canada	UL 508 Recognized

Certificates / Approvals



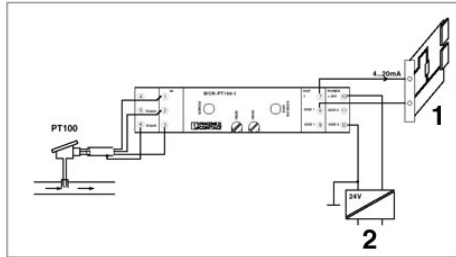
Certification CUL, GOST, UL

Configuration options

Connection systems	2-conductor [2] 3-conductor [3] 4-conductor [4]
Temperature range	-50...+50°C [TR01] -50...+100°C [TR02] -50...+150°C [TR03] -50...+250°C [TR04] 0...100°C [TR05] 0...150°C [TR06] 0...200°C [TR07] 0...300°C [TR08]
Output signal	0...20 mA [OUT01] 4...20 mA [OUT02]
Plant calibration certificate	No plant calibration certific. [NONE] Certificate without test data [YES] Certificate with test data [YESPLUS]

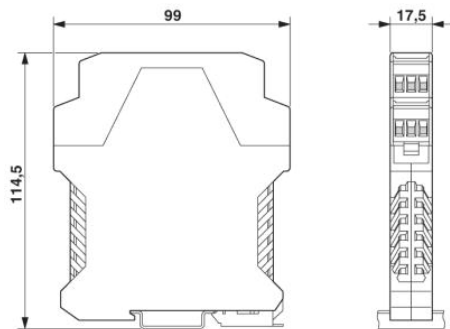
Diagrams/Drawings

Application drawing

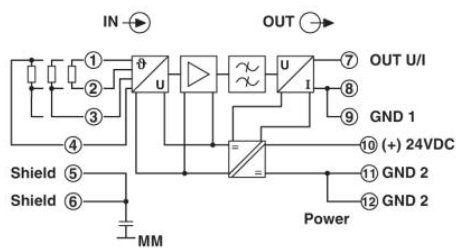


Application example: Temperature measurement with 3-wire system
 1 = control
 2 = mains voltage

Dimensioned drawing



Circuit diagram



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