

MCR-FL-HT-TS-I-EX

Order No.: 2864545




<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2864545>

MCR head-mounted temperature transducers for resistance thermometers, thermocouples, resistance-type sensors and voltage sensors. For Pt 100 resistance thermometers



Commercial data

GTIN (EAN)	 4 017918 893200
sales group	H516
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 463 (IF-2011)

<http://>

www.download.phoenixcontact.com
Please note that the data given here has been taken from the online catalog. For comprehensive information and data, please refer to the user documentation. The General Terms and Conditions of Use apply to Internet downloads.

Technical data

Input data

Configurable/programmable	Yes, programmable
Sensor types (RTD) that can be used	Pt, Ni (100, 500, 1000); min. measurement range 10 K
Sensor types that can be used (TC)	B, C, D, E, J, K, L, N, R, S, T, U; min. measurement range 50 K/500 K
Connection method	2, 3, 4-wire
Input signal range	10 Ω ... 400 Ω (min. measurement range 10 Ω) 10 Ω ... 2000 Ω (min. measurement range 100 Ω) -10 mV ... 75 mV (min. measurement range 5 mV)

Output data

Configurable/programmable	Yes, programmable
Current output signal	4 mA ... 20 mA
	20 mA ... 4 mA
Max. current output signal	≤ 23 mA
Output current with short-circuit	≤ 3.6 mA or ≥ 21 mA (adjustable, not for thermocouples)
Output current with wire break	≤ 3.6 mA or ≥ 21 mA (adjustable)
Output current range with overrange/underrange	3.8 mA ... 20.5 mA (linear increase/decrease)
Load/output load current output	≤ 630 Ω (At UV = 24 V; U _{supply} - 10 V / 0.023 A)

Power supply

Name	Loop-powered
Supply voltage range	12 V DC ... 30 V DC
Max. current consumption	< 3.5 mA

Connection data

Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.75 mm ²
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.75 mm ²
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	15
Stripping length	8 mm
Screw thread	M3
Connection method	Screw connection
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm

General data

Step response (10-90%)	< 2 s
Pickup delay	6 s
Configuration	With HART protocol
Inflammability class acc. to UL 94	V0
Standards/regulations	NAMUR recommendation NE 21
Housing material	Polycarbonate, PC
Degree of protection	IP00, IP66 (integrated in the connecting head)
Color	green

Line monitoring	NE 43
Conformance	CE-compliant
ATEX	Ex II 1 G and II 2 G Ex ia IIC T6/T5/T4
UL, USA / Canada	cULus
Functional safety (SIL)	SIL 2 according to EN 61508

Safety data

Max. voltage U_o	5 V DC
Max. current I_o	5.4 mA
Max. power P_o	6.6 mW
Max. ambient temperature	Category 1: T4 = 60°C, T5 = 50°C, T6 = 40°C
Gas group	II A
Max. external inductivity L_o	100 mH
Max. external capacity C_o	9.9 μ F
Gas group	II B
Max. external inductivity L_o	100 mH
Max. external capacity C_o	9.9 μ F
Gas group	II C
Max. external inductivity L_o	100 mH
Max. external capacity C_o	2 μ F
Safety-related maximum voltage U_m	250 V

Certificates / Approvals



Certification	GOST
Certification Ex:	CUL-EX LIS, PTB, UL-EX LIS

Accessories

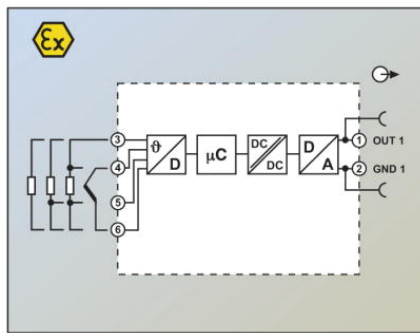
Item	Designation	Description
Cable/conductor		
2881078	CM-KBL-RS232/USB	Connecting cable D-9-SUB to USB, with adapter D-9-SUB to D-25-SUB.
2864590	MCR-PAC-T	Software adapter cable, 2.4 m for programming MCR-...-LP-...- and MCR-...-HT-... modules
General		
2814799	MCR/PI-CONF-WIN	PI/MCR configuration software, for programming the PI/Ex-RTD..., PI/Ex-THC..., MCR-T-..., MCR-PSP-..., MCR-f... and MCR-s...modules

Diagrams/Drawings

Connection diagram

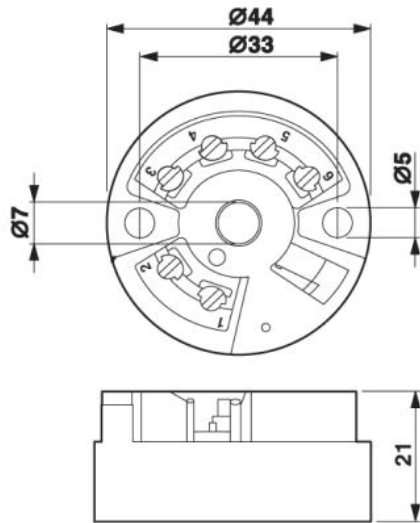


Block diagram



Block diagram MCR-FL-HT-TS-I-EX

Dimensioned drawing



Dimensional drawing

Address

PHOENIX CONTACT Inc., USA
586 Fulling Mill Road
Middletown, PA 17057, USA
Phone (800) 888-7388
Fax (717) 944-1625
<http://www.phoenixcon.com>



© 2011 Phoenix Contact
Technical modifications reserved;