

Head-mounted transducer - MCR-FL-HT-T-I - 2864529

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MCR head-mounted temperature transducers: Programmable loop-powered temperature transducers for resistance thermometers, thermocouples, resistance-type sensors and voltage sensors

Your advantages

- Freely programmable via MCR/PI-CONF-WIN
- For installation in connecting head, form B
- Two-wire transmitter for resistance thermometers, thermocouples, resistance-type sensors, and voltage sensors



Key Commercial Data

Packing unit	1 pc
GTIN	
GTIN	4017918893224
Weight per Piece (excluding packing)	77.200 g
Custom tariff number	85437090
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 85 °C
Degree of protection	IP00
	IP66 (Installed in the connection head)
Noise immunity	EN 61326-1 (IEC 61326) and NAMUR NE 21

Input data

Configurable/programmable	Yes, programmable
Sensor types (RTD) that can be used	Pt, Ni (100, 500, 1000); minimum measurement range 10 K
Sensor types that can be used (TC)	B, C, D, E, J, K, L, N, R, S, T, U; minimum measurement range 50 K/500 K

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Input data

Linear resistance measuring range	Resistance-type sensor from 10 Ω to 400 Ω and from 10 Ω to 2000 Ω; minimum measurement range 10 Ω/100 Ω
Connection technology	2, 3, 4-wire

Output data

Output name	Current output
Number of outputs	1
Configurable/programmable	Yes
Current output signal	4 mA ... 20 mA 20 mA ... 4 mA
Output current with wire break	≤ 3.6 mA or ≥ 21 mA (adjustable)
Output current with short-circuit	≤ 3.6 mA or ≥ 21 mA (adjustable, not for thermocouples)
Output current range with overrange/underrange	≤ 20.5 mA / ≥ 3.8 mA (linear increase/decrease)
Load/output load current output	max (V _{supply} - 8 V) / 0.025 A (current output)

Power supply

Designation	Loop-powered
Supply voltage range	8 V DC ... 35 V DC
Max. current consumption	< 3.5 mA

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section solid	0.2 mm ² ... 1.75 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.75 mm ²
Conductor cross section AWG	24 ... 15

General

Transmission error resistance thermometer	0.2 K (Pt 100, Ni 100), 0.5 K (Pt 500, Ni 500), 0.3 K (Pt 1000, Ni 1000)
Transmission error thermocouples	typ. 0.5 K (K, J, T, E, L, U), 1.0 K (N, C, D), 2.0 K (S, B, R)
Transmission error resistance-type sensor	± 0.1 Ω (10...400 Ω), ± 1.5 Ω (10...2000 Ω)
Transmission error voltage sensor	± 20 μV (-10...100 mV)
Step response (10-90%)	< 2 s
Switch-on delay	6 s
Test voltage input/output	2 kV (50 Hz, 1 min.)
Electromagnetic compatibility	Conformance with EMC directive
Noise emission	EN 61326-1 (IEC 61326) and NAMUR NE 21
Noise immunity	EN 61326-1 (IEC 61326) and NAMUR NE 21
Color	green
Housing material	Polycarbonate, PC
Mounting position	any
Assembly instructions	Connection head according to DIN 43729 form B