

Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

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

Your advantages

- ✓ Input for resistance thermometers, thermocouples, and linear mV signals, Ex ia IIC
- ✓ Configuration via software
- ✓ Can be installed in zone 0
- ✓ 2-way electrical isolation
- ✓ Loop-powered
- ✓ 1-channel
- ✓

RoHS



Key Commercial Data

Packing unit	1 pc
GTIN	 4 017918 893231
GTIN	4017918893231
Weight per Piece (excluding packing)	82.300 g
Custom tariff number	85437090
Country of origin	Germany
Note	Made to Order (non-returnable)

Technical data

Ambient conditions

Ambient temperature (operation)	-40 °C ... 55 °C
Degree of protection	IP00
	IP66 (Installed in the connection head)

Input data

Configurable/programmable	Yes, programmable
---------------------------	-------------------

Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

Technical data

Input data

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 technology	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 ... 100 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	≤ 25 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	≤ 720 Ω (For $U_V = 24$ V; $U_{\text{supply}} = 8$ V / 0.025 A)
Configurable/programmable	no

Power supply

Designation	Loop-powered
Supply voltage range	8 V DC ... 30 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
Torque	0.5 Nm ... 0.6 Nm
pluggable	no

General

Step response (10-90%)	< 2 s
Switch-on delay	6 s
Configuration	Using MCR-PI-CONF-WIN configuration software package
Standards/regulations	NAMUR recommendation NE 21
Housing material	Polycarbonate, PC
Color	green
Line monitoring	NE 43
Conformance	CE-compliant
ATEX	# II 1 G Ex ia IIC T6/T5/T4

Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

Technical data

General

UL, USA/Canada	cULus
----------------	-------

Safety data

Max. output voltage U_o	8.2 V DC
Max. output current I_o	4.6 mA
Max. output power P_o	9.35 mW
Max. ambient temperature	Category 1: T4 = 60°C, T5 = 50°C, T6 = 40°C
Group	IIB
Max. external inductivity L_o	8.5 mH
Max. external capacitance C_o	1.9 μ F
Group	IIC
Max. external inductivity L_o	4.5 mH
Max. external capacitance C_o	974 nF
Safety-related maximum voltage U_m	250 V

Standards and Regulations

Standards/regulations	NAMUR recommendation NE 21
Conformance	CE-compliant
ATEX	# II 1 G Ex ia IIC T6/T5/T4
UL, USA/Canada	cULus
Group	IIB
	IIC

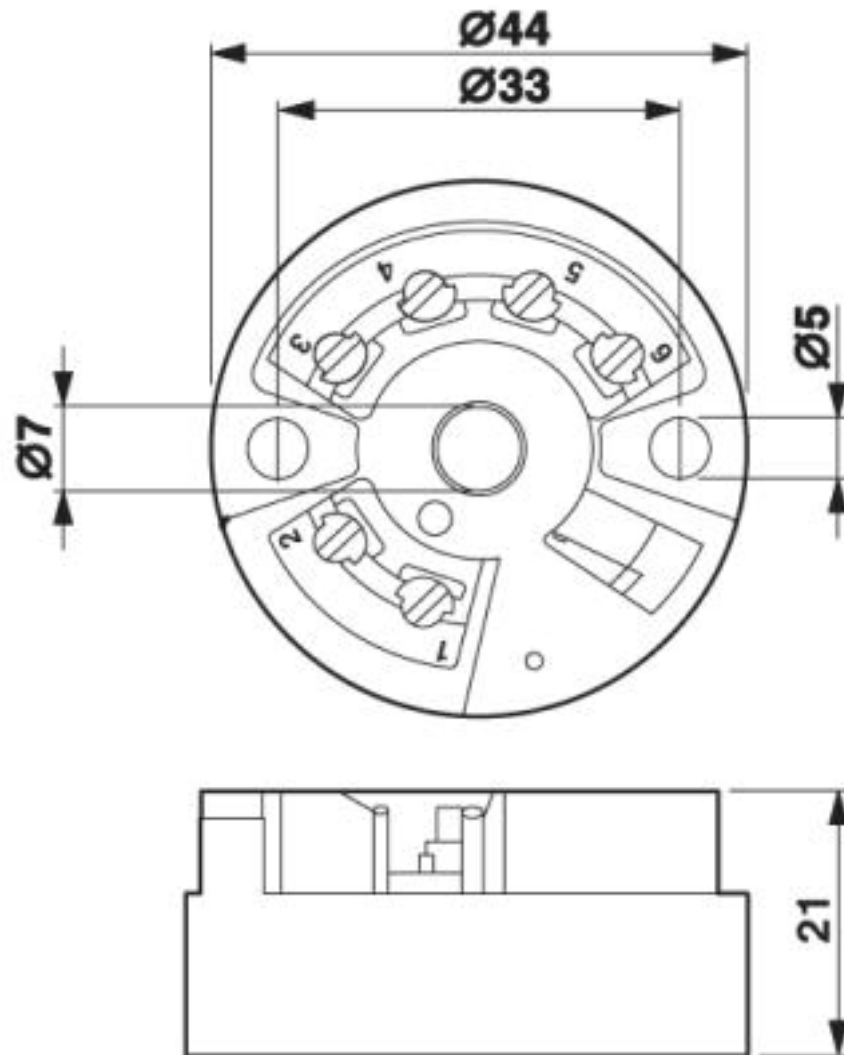
Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

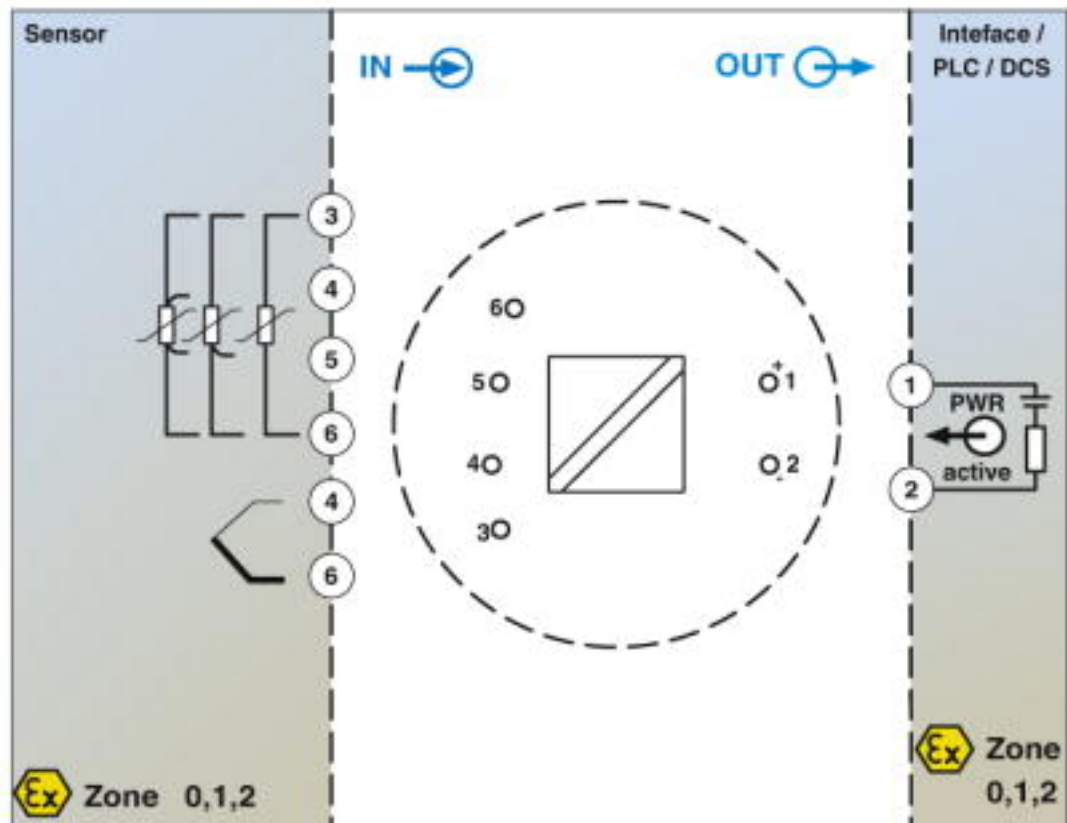
Dimensional drawing



Dimensional drawing

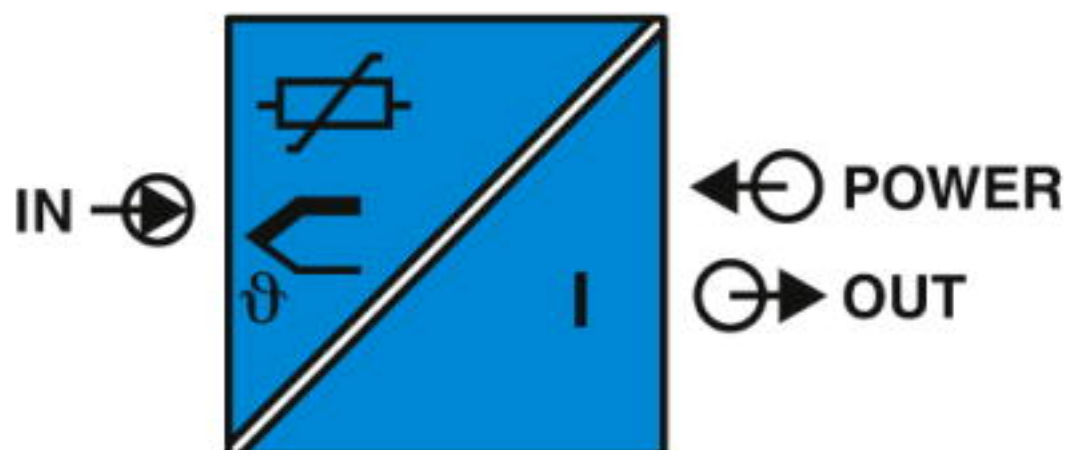
Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

Block diagram



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

Pictogram



Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

Classifications

eCl@ss

eCl@ss 4.0	27200200
eCl@ss 4.1	27200200
eCl@ss 5.0	27200200
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
ETIM 7.0	EC002919

UNSPSC

UNSPSC 6.01	30211506
UNSPSC 7.0901	39121008
UNSPSC 11	39121008
UNSPSC 12.01	39121008
UNSPSC 13.2	41112105
UNSPSC 18.0	41112105
UNSPSC 19.0	41112105
UNSPSC 20.0	41112105
UNSPSC 21.0	41112105

Accessories

Accessories

Mounting rail adapter

Adapter - MCR-DIN-RAIL-ADAPTER HT - 2864671



DIN rail adapter for head-mounted transducers. Suitable for 35 mm DIN rails in accordance with EN 60715.

Programming adapter

Head-mounted transducer - MCR-FL-HT-T-I-EX - 2864532

Accessories

Programming adapter - MCR-PAC-T-USB - 2309000



Programming adapter with USB and T port interface, 2.4 m for programming FA MCR-..., MCR-...-LP-..., and MCR-...-HT-... modules

Phoenix Contact 2020 © - all rights reserved
<http://www.phoenixcontact.com>