

PI-EX-THC-I-NC

Order No.: 2835600



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2835600>

Ex-i thermocouple and mV input: Converts signals from thermocouples installed in Ex areas and mV sources and transmits a 4-20 mA signal to a load in a safe area. Freely programmable. Galvanic 3-way isolation. Standard configuration.



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Commercial data

GTIN (EAN)	4017918890056
Note	Made-to-order
sales group	H711
Pack	1 pcs.
Customs tariff	85437090
Weight/Piece	0.098 KG
Catalog page information	Page 384 (IF-2007)

Technical data

Measurement input

Input	Intrinsically safe
Configurable/programmable	Freely programmable, unconfigured
Sensor types that can be used (TC)	J, K, T, E, R, S, B, N
Input signal range	-75 mV ... 75 mV (minimum measuring range span 3 mV)
Input accuracy	±15 µV or ± 0.05% of the input value, if this result is greater, at 20°C

Measurement output

Signal output	Current output
Current output signal	4 mA ... 20 mA (output accuracy: $\pm 11 \mu\text{A}$)
Load/output load current output	< 600 Ω

Power supply

Range of supply voltages	20 V DC ... 35 V DC
Max. current consumption	64 mA (24 V DC/ 20 mA)
Power consumption	1.5 W (24 V DC/ 20 mA)

Connection data

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
Tightening torque, min	0.5 Nm
Tightening torque max	0.6 Nm

General data

No. of channels	1
Transmission error, max.	< 0.12 % (of end value 20 mA, at 20°C, -75...75 mV input range)
Temperature coefficient, typical	± 0.003 % (of input value /°C)
Typical cold point errors	1.5 °C
Ambient temperature (operation)	-20 °C ... 55 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Status display	Green LED, for power supply, flashes in the case of sensor defect
Width	12.4 mm
Depth	147 mm
Height with coupling plug NS 35/7,5	145 mm
Inflammability class acc. to UL 94	V0
Housing material	PBT and polyamide PA non-reinforced
Color	green
Conformity	CE compliant
ATEX	Ex II (1) GD [Ex ia] IIC
UL, USA / Canada	"Intrinsically safe 'Entity'" Connection [AEx ia] IIC, [Ex ia] IIC

Additional products

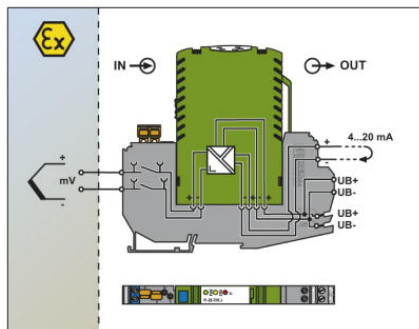
Item	Designation	Description
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General

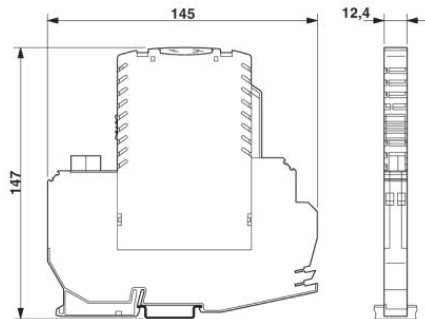
2835901	PI-EX-TB	Ex base terminal block for intrinsically safe signals with knife disconnection and test connections
2858344	TT-PI-EX-TB/T	Intrinsically safe basic terminal block with isolating connector, test connections and surge protection, with additional temperature measurement of the input terminal block for cold junction compensation, for mounting on NS 35/7,5

Diagrams/Drawings

Block diagram



Dimensioned drawing



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