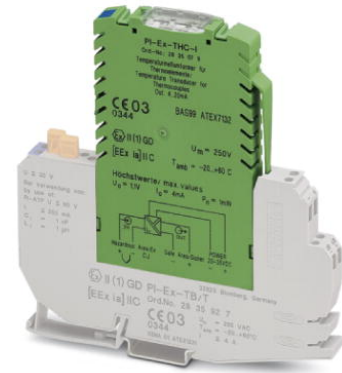


PI-EX-THC-I-NC


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.



Commercial data	
GTIN (EAN)	4  017918 890056
Note	Made-to-order
sales group	H711
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 384 (IF-2007)

<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	
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

Output data

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
Behavior in the event of a sensor error	upscale, downscale or off, LED flashes

Power supply

Supply voltage range	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
Maximum transmission error	< 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
Height	145 mm
Depth	147 mm
Inflammability class acc. to UL 94	V0
Housing material	PBT and polyamide PA non-reinforced
Degree of protection	IP20
Color	green
Electrical isolation input / output	250 V

Electrical isolation input / supply	250 V
Electrical isolation output / supply	1.5 kV AC (50 Hz, 1 min., test voltage)
Conformance	CE-compliant
ATEX	Ex II (1) GD [EEx ia] IIC
UL, USA / Canada	"Intrinsically safe 'Entity'" Connection [AEx ia] IIC, [Ex ia] IIC

Safety data

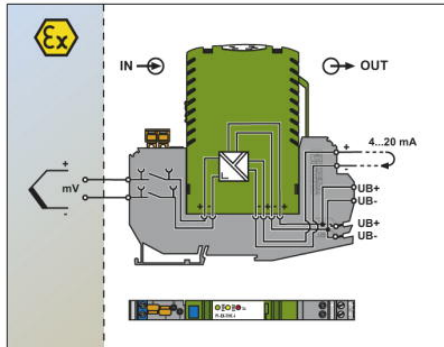
Max. voltage U_o	1.1 V
Max. current I_o	4 mA
Max. power P_o	1 mW
Gas group	II B
Max. external inductivity L_o	178.4 mH
Max. external capacity C_o	500 μ F
Gas group	II C
Max. external inductivity L_o	48.7 mH
Max. external capacity C_o	22 μ F
Safety-related maximum voltage U_m	250 V AC

Additional products

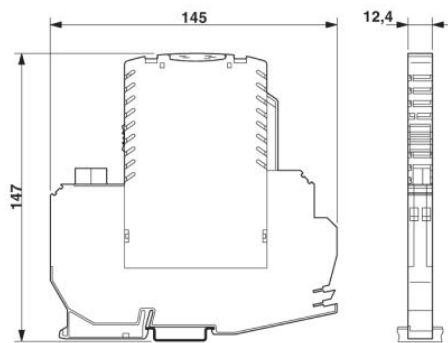
Item	Designation	Description
General		
2835901	PI-EX-TB	Ex base terminal block for intrinsically safe signals with knife disconnection and test connections
2858344	TT-PI-EX-TB/T	Intrinsically safe basic terminal block with isolating connector, test connections and surge protection, with additional temperature 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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