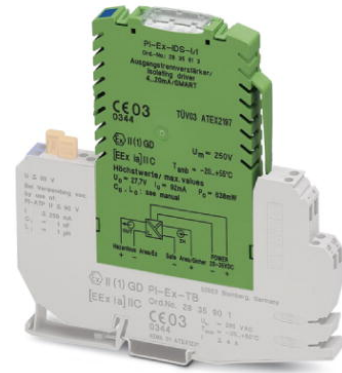


# PI-EX-IDS-I/I


Order No.: 2835613



<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2835613>

Ex-i output isolating amplifier, HART-capable. Isolates and sends intrinsically safe 0/4-20 mA signals to a load (I/P converters, control valves, displays) in Ex areas. Galvanic 3-way isolation (input / output / supply). Line fault detection.



Commercial data	
GTIN (EAN)	4 017918 934149 
Note	Made-to-order
sales group	H701
Pack	1 pcs.
Customs tariff	85437090
Catalog page information	Page 456 (IF-2009)

<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	
<b>Input data</b>	
Signal input	Current input
Current input signal	4 mA ... 20 mA
	0 mA ... 20 mA
Input resistance current input	5.4 V (at 20 mA)
Input current range	0 mA ... 22 mA

**Output data**

Signal output	Intrinsically safe
Current output signal	4 mA ... 20 mA
	0 mA ... 20 mA
Load/output load current output	$\leq 800 \Omega$
Output ripple (current)	$< 50 \mu A_{pp}$ (For $800 \Omega$ )

**Power supply**

Supply voltage range	20 V DC ... 35 V DC
Max. current consumption	$< 15 \text{ mA}$ (At 24 V DC / 0 mA)
Power consumption	max. 1.2 W (At 24 V DC / 20 mA)

**General data**

No. of channels	1
Maximum transmission error	$\leq 0.1 \%$ (Of end value (at 20°C))
Maximum temperature coefficient	$< 0.01 \%/K$
Ambient temperature (operation)	-20 °C ... 55 °C (See data sheet)
Ambient temperature (storage/transport)	-40 °C ... 80 °C
Permissible humidity (operation)	5 % ... 95 % (no condensation)
Step response (10-90%)	$< 140 \mu s$
Status display	Green LED (supply voltage, PWR)
Width	12.4 mm
Height	145 mm
Depth	147 mm
Inflammability class acc. to UL 94	V0
Standards/regulations	NAMUR recommendation NE 21
Housing material	PBT and polyamide PA non-reinforced
Degree of protection	IP20
Color	green
Electrical isolation input / output	375 V (Peak value in accordance with EN 60079-11)
Electrical isolation input / supply	1.5 kV (50 Hz, 1 min., test voltage)
Electrical isolation output / supply	375 V (Peak value in accordance with EN 60079-11)
Conformance	CE-compliant
ATEX	Ex II (1) GD [EEx ia] IIC
	Ex II 3 G Ex nA II T4 X
UL, USA / Canada	UL applied for

**Data communication (bypass)**

HART function	Yes
Protocols supported	HART

**Safety data**

Max. inductance $L_i$	0.1 mH
Max. capacitance $C_i$	5 nF
Max. voltage $U_o$	27.7 V
Max. current $I_o$	92 mA
Max. power $P_o$	638 mW
Gas group	Refer to the data sheet or certifications at <a href="http://www.phoenixcontact.net/catalog">www.phoenixcontact.net/catalog</a>
Safety-related maximum voltage $U_m$	250 V AC

**Certificates / Approvals**

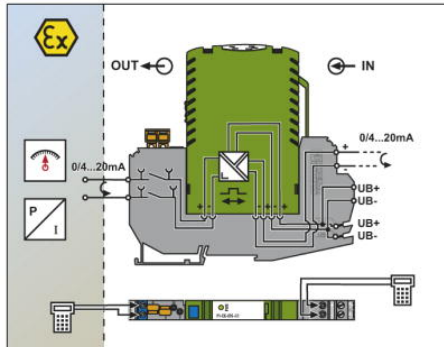
Certification Ex: TUEV-N-EX

**Additional products**

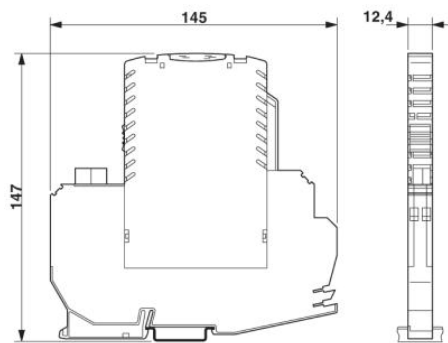
Item	Designation	Description
<b>General</b>		
2835325	PI-EX-ES-1/3	Ex basic terminal block, with three terminal points to the field level (Ex area)
2835901	PI-EX-TB	Ex base terminal block for intrinsically safe signals with knife disconnection and test connections
2858386	TT-PI-EX-TB	Intrinsically safe basic terminal block with isolating connector, test connections and surge protection, for mounting on NS 35/7.5

## Diagrams/Drawings

### Block diagram



### Dimensioned drawing



**Address**

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