

# PI-EX-NAM/TO - Signal isolator



2835574

<https://www.phoenixcontact.com/us/products/2835574>

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Ex i binary input: NAMUR isolation amplifiers. For operating proximity sensors and switches in Ex areas. The binary signals are transmitted to a safe area. Transistor output (active), line fault detection. Electrical isolation.

## Commercial data

Item number	2835574
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	C430
Product key	CK3831
Catalog page	Page 461 (IF-2009)
GTIN	4017918894863
Weight per piece (including packing)	93.9 g
Weight per piece (excluding packing)	90.8 g
Customs tariff number	85365019
Country of origin	DE

## Technical data

### Notes

General	The electronics module is plugged into a basic terminal block.
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### Product properties

Product type	Isolating switch transf.
Application	Digital IN
No. of channels	1

### Electrical properties

No. of channels	1
Electrical isolation between input and output	yes

#### Electrical isolation Input/output

Electrical isolation	375 V (Peak value as per EN 50020 / EN 60079-11)
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#### Electrical isolation Input/power supply

Electrical isolation	375 V (Peak value as per EN 50020 / EN 60079-11)
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#### Supply

Supply voltage range	20 V DC ... 30 V DC
Max. current consumption	25 mA
Power consumption	max. 0.6 W (24 V)

### Input data

#### Signal: NAMUR

Description of the input	Intrinsically safe
Number of inputs	1
Available input sources	NAMUR proximity sensors (IEC/EN 60947-5-6) Floating switch contacts Switch contacts with resistance circuit
Switching threshold "0" signal current	< 1.2 mA (blocking)
Switching threshold "1" signal, current	> 2.1 mA (conductive)
Line fault detection	can be enabled/disabled via switch
Non-load voltage	8.2 V DC $\pm$ 10 %

### Output data

#### Switching: Transistor

Configurable/programmable	Can be inverted via slide switch
Continuous load current	100 mA (short-circuit-proof)

#### Signal

Number of outputs	1
Max. voltage output signal	$U_A = U_B - 2 \text{ V}$

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Switching behavior	Can be inverted via slide switch
Switching frequency	max. 1.2 kHz (DC)

## Connection data

Connection method	Screw connection
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## Ex data

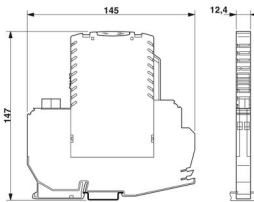
### Safety data

Max. output voltage $U_o$	10.6 V
Max. output current $I_o$	33 mA
Max. output power $P_o$	86 mW
Safety-related maximum voltage $U_m$	250 V AC
IIA: Max. external inductivity $L_o$ / Max. external capacitance $C_o$	230 mH / 72 $\mu$ F
IIB: Max. external inductivity $L_o$ / Max. external capacitance $C_o$	110 mH / 16.2 $\mu$ F
IIC: Max. external inductivity $L_o$ / Max. external capacitance $C_o$	30 mH / 2.3 $\mu$ F

## Signaling

Status display	Green LED (supply voltage)
	Yellow LED (status display)
	Red LED (line errors)

## Dimensions

Dimensional drawing	
Width	12.4 mm
Height	79 mm
Depth	118.4 mm

## Material specifications

Flammability rating according to UL 94	V0
Housing material	PBT and polyamide PA non-reinforced

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 60 °C (see data sheet)
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

# PI-EX-NAM/TO - Signal isolator



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## CE

Certificate	CE-compliant
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## ATEX

Identification	Ex II (1) G [Ex ia Ga] IIC
	Ex II (1) D [Ex ia Da] IIIC
	Ex II 3 G Ex nA IIC T4 Gc
Certificate	PxCIF07ATEX2835341X

## UL, USA/Canada

Identification	applied for
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## EAC Ex

Identification	Ex [Ex ia Ga] IIC
Certificate	RU C-DE.AB72.B.00097/19

## Standards and regulations

### Standards

Standards/regulations	NAMUR recommendation NE 21
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# PI-EX-NAM/TO - Signal isolator

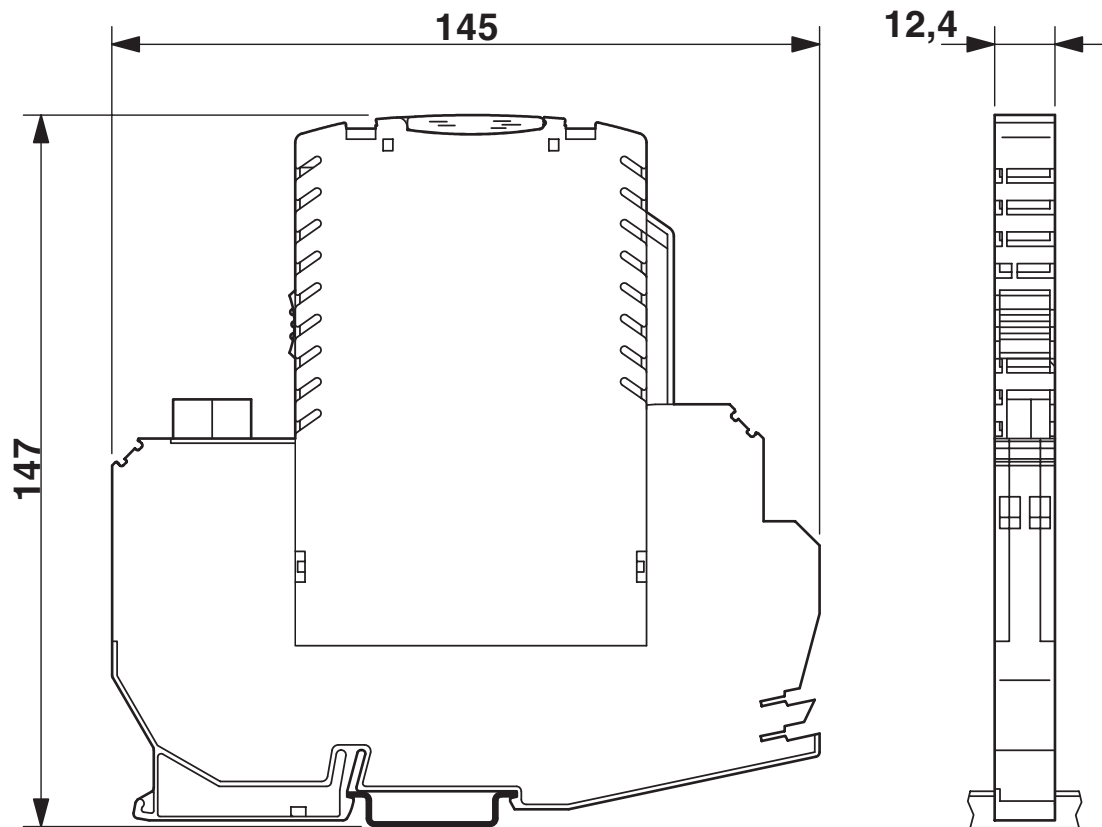
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## Drawings

Dimensional drawing



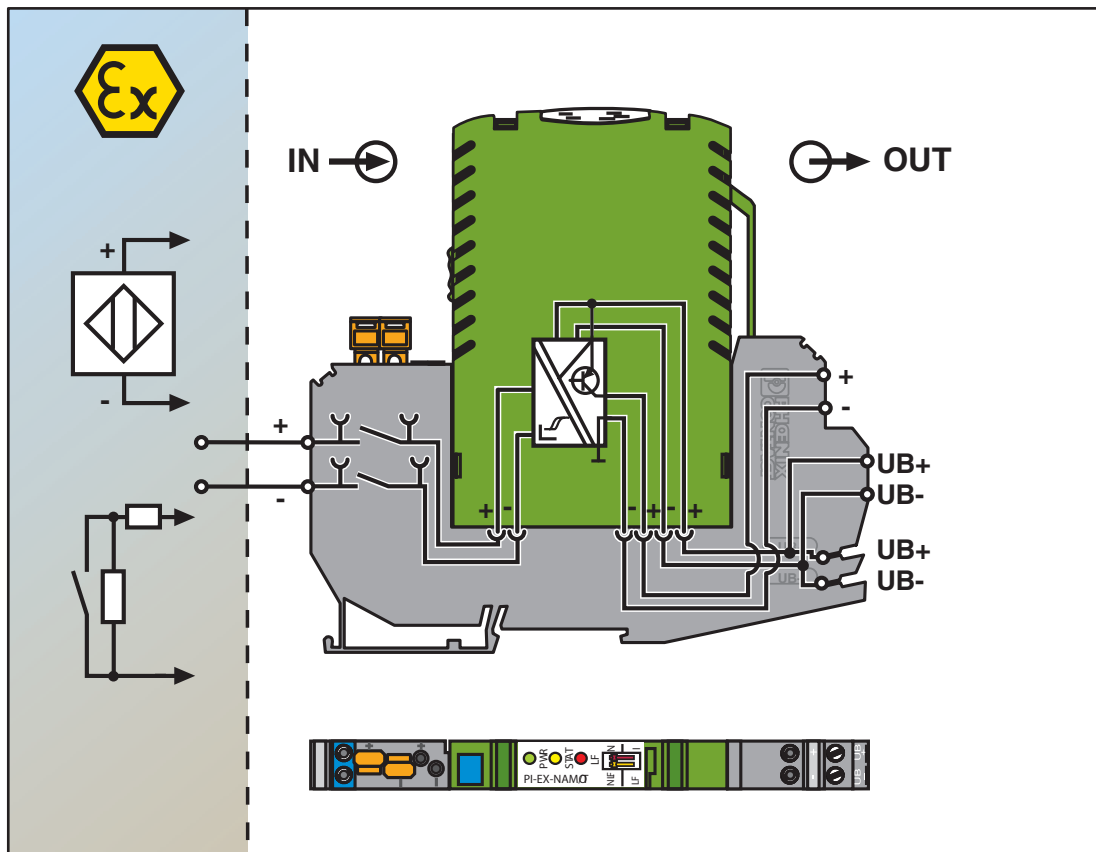
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Block diagram



# PI-EX-NAM/TO - Signal isolator



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## Approvals

🔗 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/us/products/2835574>



**ATEX**

Approval ID: KEMA 00ATEX1126



**EAC Ex**

Approval ID: RU C-DE.\*72.B.\*97/19

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## Classifications

### ECLASS

ECLASS-11.0	27210121
ECLASS-12.0	27210121

### ETIM

ETIM 8.0	EC001485
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### UNSPSC

UNSPSC 21.0	39121000
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## Environmental product compliance

REACH SVHC	Lead 7439-92-1
China RoHS	Environmentally Friendly Use Period = 50 years
	For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"

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## Accessories

### TT-PI-EX-TB - Surge protection device

2858386

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Intrinsically safe basic terminal block with isolating connector, test connections and surge protection, for mounting on NS 35/7.5

### PI-EX-ES-1/3 - Basic terminal block

2835325

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Ex basic terminal block, with three terminal points to the field level (Ex area)

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