Signal isolator - PI-EX-NAM/TO

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
Note	Made to Order (non-returnable)
Sales Key	C03
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

Order information:	The electronics module is plugged into a basic terminal block.

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)

Electrical isolation Input/power supply

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

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 ±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	$U_A = U_B - 2$ V

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

Connection data

Connection method	Screw connection

Ex data

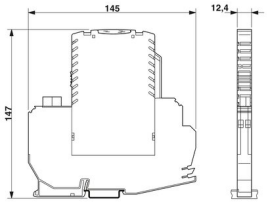
Safety data

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 µF
IIB: Max. external inductivity L_o / Max. external capacitance C_o	110 mH / 16.2 µF
IIC: Max. external inductivity L_o / Max. external capacitance C_o	30 mH / 2.3 µF

LED 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

Approval data

CE

Certificate	CE-compliant

ATEX

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

UL, USA / Canada

Identification	applied for

EAC Ex

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

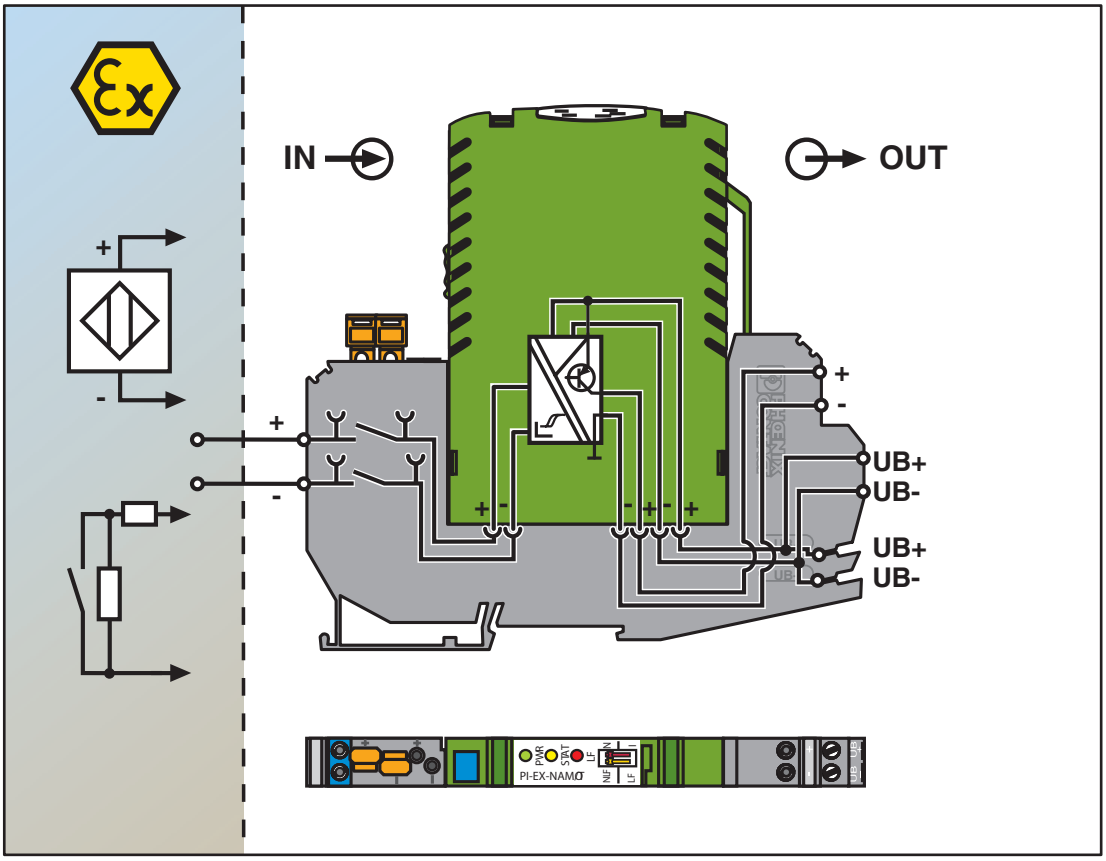
Standards and regulations

Standards

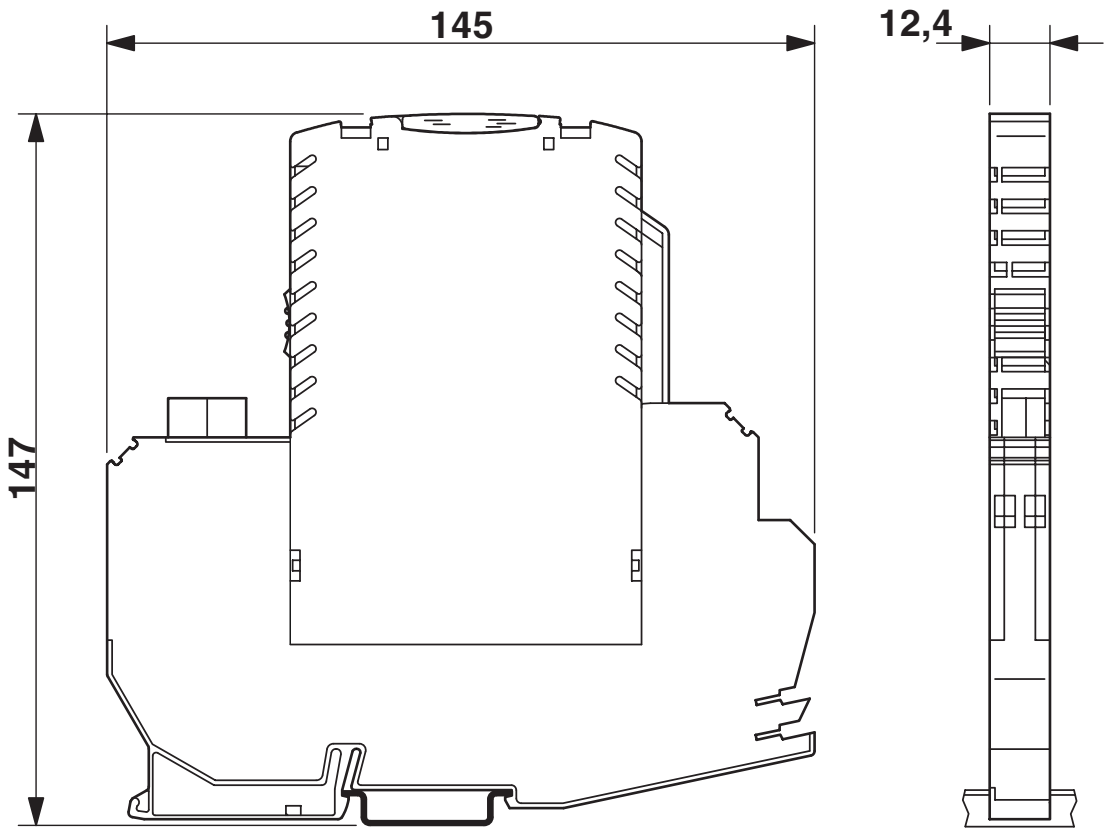
Standards/regulations	NAMUR recommendation NE 21

Drawings

Block diagram



Dimensional drawing



Approvals

ATEX
Approval ID: KEMA 00ATEX1126

	Nominal Voltage U_N	Nominal Current I_N	Cross Section AWG	Cross Section mm^2
EC-type examination certificate			-	-

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

ATEX
Approval ID: 2835431_Ex-n_01

Classifications

ECLASS

ECLASS-9.0	27210121
ECLASS-10.0.1	27210121
ECLASS-11.0	27210121

ETIM

ETIM 8.0	EC001485

UNSPSC

UNSPSC 21.0	39121000

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”

Accessories

Basic terminal block

Basic terminal block - PI-EX-TB - 2835901

https://www.phoenixcontact.com/us/products/2835901

Ex base terminal block for intrinsically safe signals with knife disconnection and test connections

Surge protection device

Surge protection device - TT-PI-EX-TB - 2858386

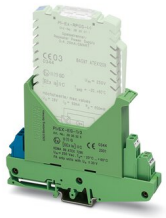
https://www.phoenixcontact.com/us/products/2858386

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

Basic terminal block

Basic terminal block - PI-EX-ES-1/3 - 2835325

https://www.phoenixcontact.com/us/products/2835325



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

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