EIK1-SVN-24P - Solid-state relay module

2940799

https://www.phoenixcontact.com/us/products/2940799

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.

Switching amplifier electronic terminal block, for inductive proximity sensors acc. to NAMUR, with light indicators for sensor signal and faults

Your advantages

- Bridging and labeling with standard terminal block accessories
- Error indication via LED
- Monitoring of initiator side for short circuits or wire breaks
- Status indication (high signal) via green LED
- Suitable resistance circuit to enable monitoring of mechanical switches
- 24 V/50 mA digital output

Commercial data

Item number	2940799
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	C460
Product key	DK61A3
GTIN	4017918080242
Weight per piece (including packing)	22.17 g
Weight per piece (excluding packing)	21.1 g
Customs tariff number	85365019
Country of origin	CN

Technical data

Notes

Note on application	Use of EB 80-DIK... bridges in the DEK terminal blocks: Absorption of humidity from the ambient air as well as an unfavorable tolerance between a larger number of DEK terminal blocks and the EB 80-DIK... bridge may cause (minor) expansion of the DEK housing. When the EB 80-DIK... bridges are used, therefore, it is recommended that these be disconnected after about 10 to 12 DEK terminal blocks and a wire bridge to the next DEK terminal block be inserted in their place.

Product properties

Product type	Solid-state relay module
Product family	DEK
Application	NAMUR proximity sensors

Insulation characteristics: Air clearances and creepage distances

Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	15.09.2025

Input data

Control circuit

Nominal input voltage U_N	8.2 V DC ±10 %
Error indication	visual short-circuit and wire break control with LED (red)
Protective circuit	12 V Zener diode; 12 V Zener diode
Transmission frequency	1 kHz
Switching point	≥ 2.1 mA (In conductive state)
	≤ 1.2 mA (In blocking state)
	6.3 mA ... 10 mA (in the event of a short-circuit)
	0 mA ... 0.35 mA (In the event of a wire break)
Switching hysteresis	approx. 0.2 mA
Internal resistance	approx. 1 kΩ

Output data

Designation	Signal output
Contact switching type	1 N/O contact
Design of digital output	electronic
Output nominal voltage	≤ 100 mV (In conductive state)
	U_{VN} - U_R; in blocking state
Limiting continuous current	50 mA
Voltage drop at max. limiting continuous current	≤ 1.5 V (U_R)
Protective circuit	36 V Zener diode as free-wheeling diode; 36 V Zener diode as

	free-wheeling diode

Connection data

Input side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm² ... 4 mm²
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 12
Tightening torque	0.5 Nm

Output side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm² ... 4 mm²
Conductor cross-section flexible	0.2 mm² ... 2.5 mm²
Conductor cross-section AWG	24 ... 12
Tightening torque	0.5 Nm

Dimensions

Width	6.2 mm
Height	80 mm
Depth	56 mm

Environmental and real-life conditions

Ambient conditions

Ambient temperature (operation)	-25 °C ... 50 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C

Standards and regulations

Air clearances and creepage distances

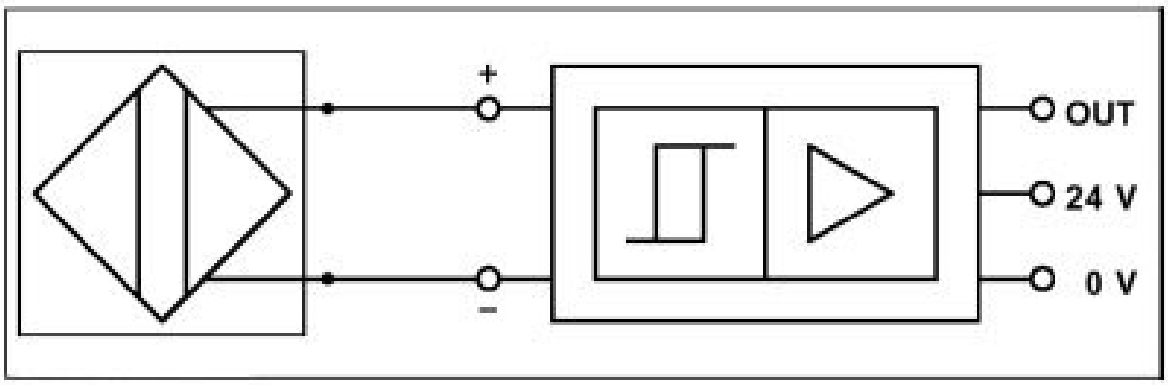
Standards/regulations	IEC 60664
	EN 61000-6-2
	EN 61000-6-4

Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

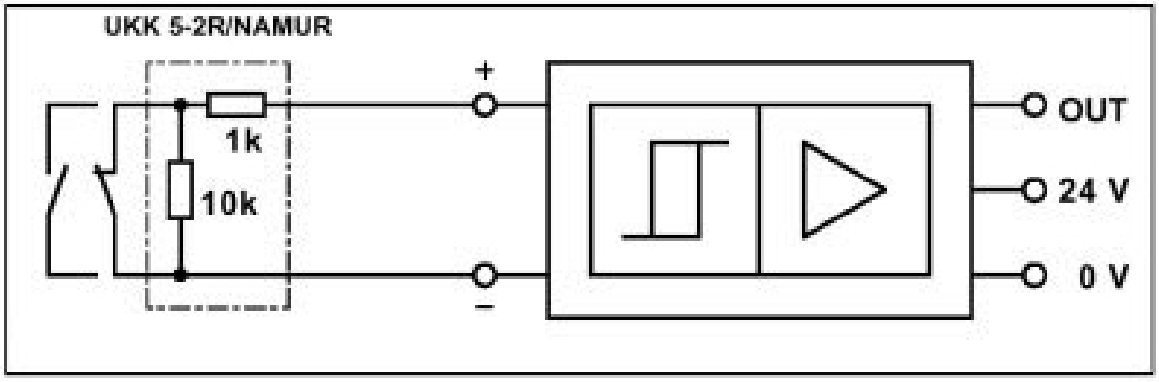
Drawings

Application drawing



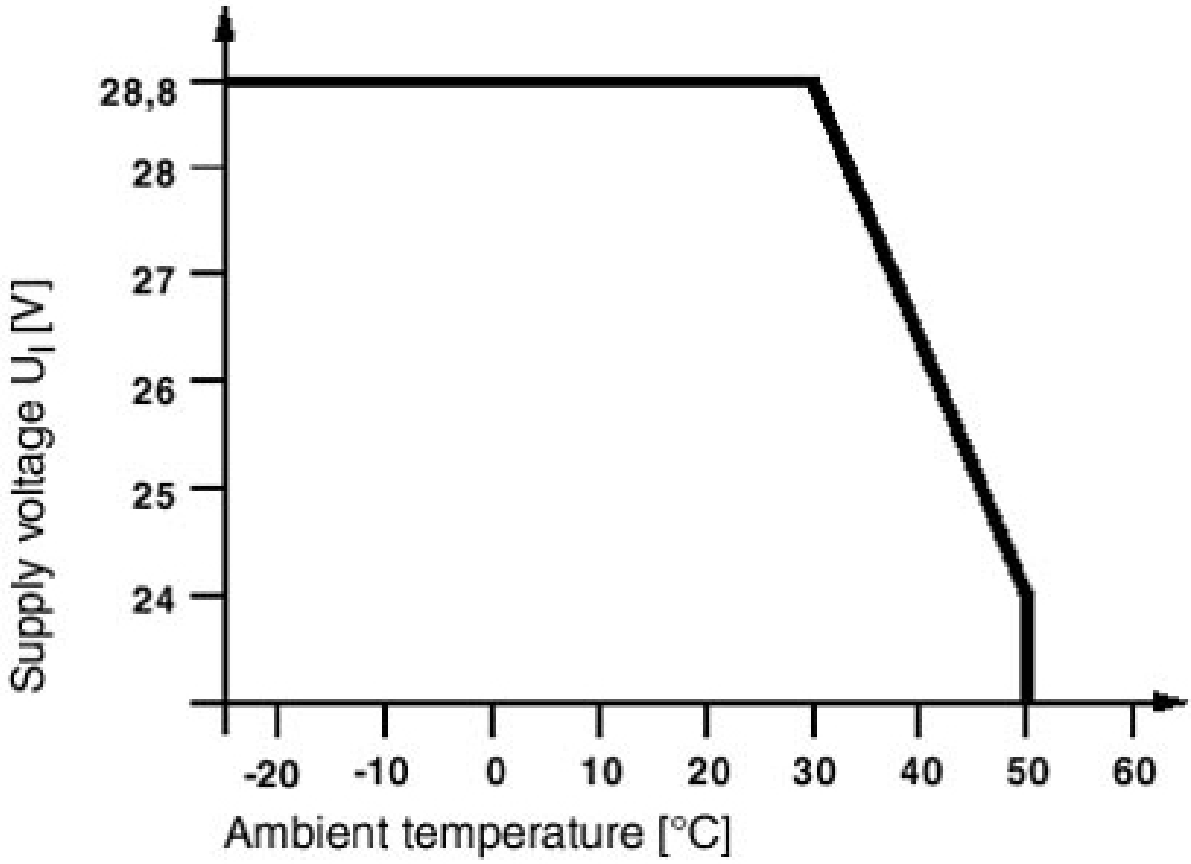
NAMUR initiator

Application drawing

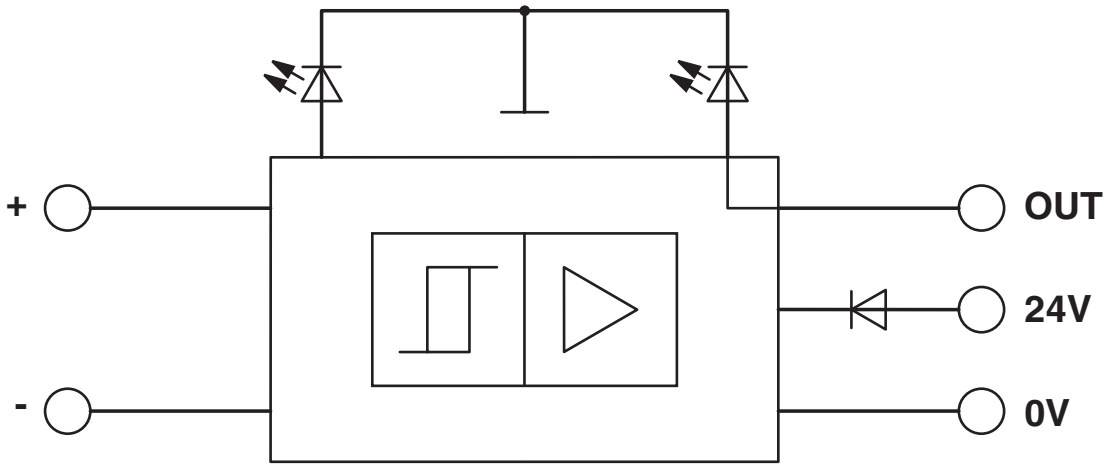


Limit switch

Diagram


28,8
28
27
26
25
24
Supply voltage U_I [V]
-20
-10
0
10
20
30
40
50
60
Ambient temperature [°C]

Circuit diagram



Classifications

ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

ETIM

ETIM 9.0	EC001504

UNSPSC

UNSPSC 21.0	39122300

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	7(a), 7(c)-I

China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

EU REACH SVHC

REACH candidate substance (CAS No.)	Hexahydromethylphthalic anhydride(CAS: n/a)
	Lead(CAS: 7439-92-1)
SCIP	7292917c-6a09-4aa5-afdc-545bf23216fa

Phoenix Contact USA
586 Fulling Mill Road
Middletown, PA 17057, United States
(+717) 944-1300
info@phoenixcon.com