

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

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.



PLC-INTERFACE for NAMUR applications, consisting of PLC-BSP.../21 basic terminal block with spring-cage connection and integrated circuit, for mounting on DIN rail NS 35/7,5, negative switching, 1 N/O contact, input voltage 24 V DC

## Your advantages

- Connection option for PLC-V8 adapter
- Stabilized supply voltage for the NAMUR proximity switch
- 24 V/50 mA digital output for directly connecting programmable logic controllers

## Commercial data

Item number	2982605
Packing unit	1 pc
Sales key	C461
Product key	CK6225
Catalog page	Page 122 (IF-2011)
GTIN	4046356095365
Weight per piece (including packing)	32.4 g
Weight per piece (excluding packing)	32.4 g
Customs tariff number	85364190
Country of origin	DE

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## Technical data

### Notes

#### Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
----------	---

### Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	NAMUR proximity sensors
Operating mode	100% operating factor

#### Data management status

Date of last data management	13.10.2023
------------------------------	------------

#### Insulation characteristics: Air clearances and creepage distances between the power circuits

Insulation	Basic insulation
Overvoltage category	I
Pollution degree	2

### Electrical properties

#### Air clearances and creepage distances between the power circuits

Rated insulation voltage	50 V DC
Rated surge voltage	0.4 kV

### Input data

#### Control circuit

Nominal input voltage $U_N$	8.2 V DC $\pm 10\%$
Protective circuit	Surge protection; Suppressor diode
Non-load voltage	8.2 V DC $\pm 10\%$
Switching point	$\geq 2.1\text{ mA}$ (In conductive state)
	$\leq 1.2\text{ mA}$ (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. 1000 $\Omega$
Cable length	< 30 m

### Output data

Designation	Signal output
Contact switching type	1 N/O contact
Design of digital output	electronic

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	50 mA
Transmission frequency	approx. 350 Hz
Voltage drop at max. limiting continuous current	< 1.5 V
Status display	LED (green)
Error indication	Red LED
Protective circuit	Surge protection; Suppressor diode
Designation	Alarm output
Output nominal voltage	30 V DC
Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	< 1.5 V
Error indication	Red LED
Protective circuit	Surge protection; Suppressor diode

## Connection data

### Input side

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 14

### Output side

Connection method	Spring-cage connection
Stripping length	8 mm
Conductor cross section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section AWG	26 ... 14

## Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

## Material specifications

Color	green (RAL 6021)
Flammability rating according to UL 94	V0 (Housing)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## Standards and regulations

Air clearances and creepage distances between the power circuits

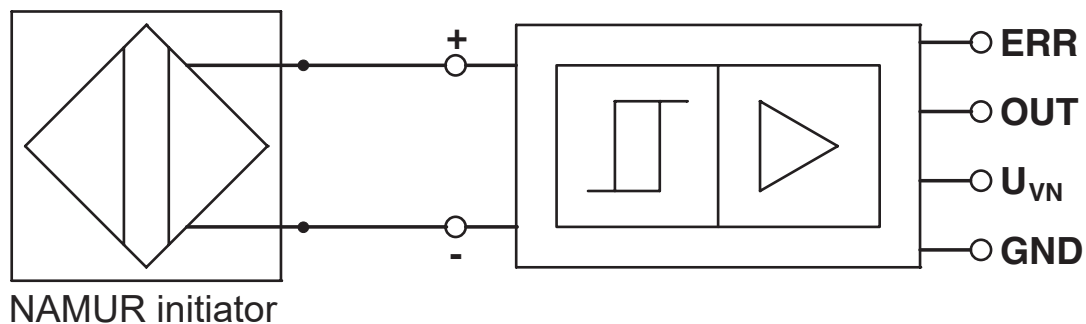
Standards/regulations	IEC 60664
	EN 50178

## Mounting

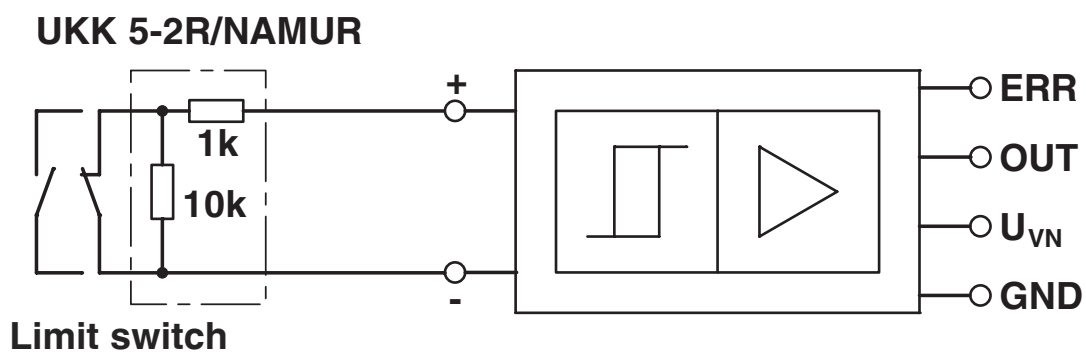
Assembly note	in rows with zero spacing
Mounting position	any

## Drawings

Application drawing



Application drawing

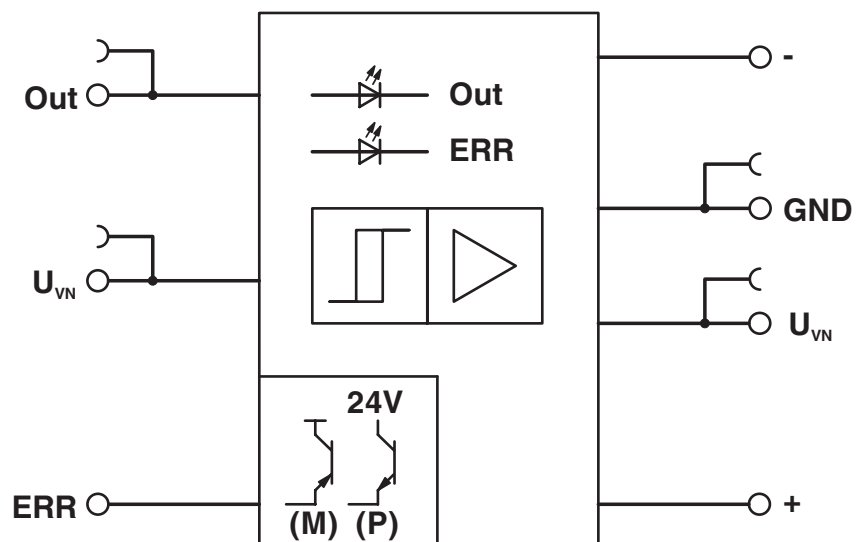


# PLC-SP-EIK 1-SVN 24M - Solid-state relay module

2982605

<https://www.phoenixcontact.com/us/products/2982605>

Circuit diagram



# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## Classifications

### ECLASS

ECLASS-11.0	27371604
-------------	----------

Environmental product compliance

China RoHS	
Environment friendly use period (EFUP)	<div>EFUP-50</div> <div>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.</div>
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%



# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## Accessories

**i** Note: Applying some accessories below might limit this product.

### FBST 500-PLC RD - Continuous plug-in bridge

2966786

<https://www.phoenixcontact.com/us/products/2966786>



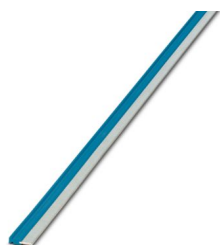
Continuous plug-in bridge, length: 500 mm, color: red

**i** Max. current carrying capacity: 32 A

### FBST 500-PLC BU - Continuous plug-in bridge

2966692

<https://www.phoenixcontact.com/us/products/2966692>



Continuous plug-in bridge, length: 500 mm, color: blue

**i** Max. current carrying capacity: 32 A

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## FBST 500-PLC GY - Continuous plug-in bridge

2966838

<https://www.phoenixcontact.com/us/products/2966838>



Continuous plug-in bridge, length: 500 mm, color: gray

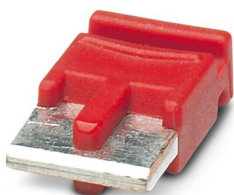
 Max. current carrying capacity: 32 A

---

## FBST 6-PLC RD - Single plug-in bridge

2966236

<https://www.phoenixcontact.com/us/products/2966236>



Single plug-in bridge, number of positions: 2, length: 6 mm, color: red

 Max. current carrying capacity: 6 A

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



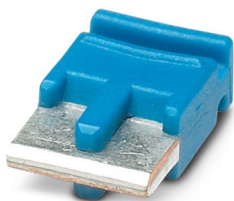
2982605

<https://www.phoenixcontact.com/us/products/2982605>

## FBST 6-PLC BU - Single plug-in bridge

2966812

<https://www.phoenixcontact.com/us/products/2966812>



Single plug-in bridge, number of positions: 2, length: 6 mm, color: blue

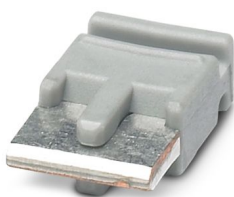
 Max. current carrying capacity: 6 A

---

## FBST 6-PLC GY - Single plug-in bridge

2966825

<https://www.phoenixcontact.com/us/products/2966825>



Single plug-in bridge, number of positions: 2, length: 6 mm, color: gray

 Max. current carrying capacity: 6 A

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## FBST 8-PLC GY - Single plug-in bridge

2967688

<https://www.phoenixcontact.com/us/products/2967688>

Single plug-in bridge, number of positions: 2, length: 8 mm, color: gray



 Max. current carrying capacity: 6 A

---

## NS 35/ 7,5 V2A UNPERF 2000MM - DIN rail, unperforated

0801377

<https://www.phoenixcontact.com/us/products/0801377>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Stainless steel V2A, uncoated, Standard profile, color: silver

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## NS 35/ 7,5 PERF 2000MM - DIN rail perforated

0801733

<https://www.phoenixcontact.com/us/products/0801733>



DIN rail perforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

---

## NS 35/ 7,5 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

0801762

<https://www.phoenixcontact.com/us/products/0801762>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## NS 35/15 UNPERF 2000MM - DIN rail, unperforated

1201714

<https://www.phoenixcontact.com/us/products/1201714>



DIN rail, unperforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

---

## NS 35/15 CU UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201895

<https://www.phoenixcontact.com/us/products/1201895>



DIN rail, unperforated, Pack of 10 (20 m), similar to EN 60715, material: Copper, uncoated, Standard profile, color: copper-colored

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## NS 35/15-2,3 UNPERF 2000MM-VPE 10 - DIN rail, unperforated

1201798

<https://www.phoenixcontact.com/us/products/1201798>



DIN rail, unperforated, Pack of 10 (20 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile 2.3 mm, color: silver

---

## NS 35/15 AL UNPERF 2000MM - DIN rail, unperforated

1201756

<https://www.phoenixcontact.com/us/products/1201756>



DIN rail, unperforated, similar to EN 60715, material: Aluminum, uncoated, Standard profile, color: silver

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## NS 35/15 PERF 2000MM - DIN rail perforated

1201730

<https://www.phoenixcontact.com/us/products/1201730>



DIN rail perforated, Pack of 25 (50 m), similar to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver

---

## NS 35/ 7,5 UNPERF 2000MM - DIN rail, unperforated

0801681

<https://www.phoenixcontact.com/us/products/0801681>



DIN rail, unperforated, Pack of 25 (50 m), acc. to EN 60715, material: Steel, galvanized, passivated with a thick layer, Standard profile, color: silver



# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## PLC-ESK GY - Power terminal block

2966508

<https://www.phoenixcontact.com/us/products/2966508>



Power terminal block, for the input of up to four potentials, for mounting on NS 35/7.5

---

## PLC-ATP BK - Separating plate

2966841

<https://www.phoenixcontact.com/us/products/2966841>



Separating plate, 2 mm thick, required at the start and end of a PLC terminal strip. Furthermore, it is used for: visual separation of groups, safe isolation of different voltages of neighboring PLC relays in acc. with DIN VDE 0106-101, isolation

# PLC-SP-EIK 1-SVN 24M - Solid-state relay module



2982605

<https://www.phoenixcontact.com/us/products/2982605>

## SZF 1-0,6X3,5 - Screwdriver

1204517

<https://www.phoenixcontact.com/us/products/1204517>



Actuation tool, for ST terminal blocks, also suitable for use as a bladed screwdriver, size: 0.6 x 3.5 x 100 mm, 2-component grip, with non-slip grip

---

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

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