

# Solid-state relay module - PLC-OPT- 24DC/ 48DC/100/ SEN - 2900358

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PLC-INTERFACE for input functions, consisting of PLC-BPT.../SEN basic terminal block with push-in connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 - 48 V DC/100 mA

## Your advantages

- Time savings of up to 60 %
- Efficient connection to system cabling using V8 adapter
- No need for additional modular terminal blocks
- Relay modules with safe isolation according to DIN EN 50178 between coil and contact
- Space savings of up to 80 %
- Functional plug-in bridges
- Sensor connected directly to relay module



## Key commercial data

package_quantity	10
GTIN	4046356506847

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C

### Input data

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	0.8 ... 1.2

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## Technical data

### Input data

<b>Input voltage range</b>	19.2 V DC ... 28.8 V DC
<b>Switching threshold "0" signal in reference to U<sub>N</sub></b>	≤ 0.4
<b>Switching threshold "1" signal in reference to U<sub>N</sub></b>	≥ 0.8
<b>Typical input current at U<sub>N</sub></b>	8.5 mA
<b>Typical response time</b>	20 μs (at U <sub>N</sub> )
<b>Typical turn-off time</b>	300 μs (at U <sub>N</sub> )
<b>Operating voltage display</b>	Yellow LED
<b>Type of protection</b>	Reverse polarity protection
<b>Type of protection</b>	Free-wheeling diode
<b>Protective circuit/component</b>	Polarity protection diode
<b>Protective circuit/component</b>	Damping diode
<b>Transmission frequency</b>	300 Hz
<b>Power dissipation for nominal condition</b>	0.2 W

### Output data

<b>Output voltage range</b>	3 V DC ... 48 V DC
<b>Limiting continuous current</b>	100 mA
<b>Voltage drop at max. limiting continuous current</b>	≤ 1 V
<b>Output circuit</b>	2-wire, floating
<b>Type of protection</b>	Reverse polarity protection
<b>Type of protection</b>	Surge protection
<b>Protective circuit/component</b>	Polarity protection diode

### Connection data, input side

<b>Connection name</b>	Input side
<b>Connection method</b>	Push-in connection
<b>Stripping length</b>	8 mm
<b>Conductor cross section solid</b>	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
<b>Conductor cross section flexible</b>	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
<b>Conductor cross section AWG</b>	26 ... 14

### Connection data, output side

<b>Connection name</b>	Output side
<b>Connection method</b>	Push-in connection
<b>Stripping length</b>	8 mm
<b>Conductor cross section solid</b>	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
<b>Conductor cross section flexible</b>	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
<b>Conductor cross section AWG</b>	26 ... 14

### General

<b>Test voltage input/output</b>	2.5 kV (50 Hz, 1 min.)
<b>Mounting position</b>	any

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## Technical data

### General

<b>Assembly instructions</b>	In rows with zero spacing
<b>Operating mode</b>	100% operating factor
<b>Flammability rating according to UL 94</b>	V0
<b>Designation</b>	Standards/regulations
<b>Standards/regulations</b>	IEC 60664
<b>Standards/regulations</b>	EN 50178
<b>Degree of pollution</b>	2
<b>Overvoltage category</b>	III

### Standards and Regulations

<b>Connection in acc. with standard</b>	CUL
<b>Designation</b>	Standards/regulations
<b>Standards/regulations</b>	IEC 60664
<b>Standards/regulations</b>	EN 50178
<b>Insulation</b>	Basic insulation
<b>Degree of pollution</b>	2
<b>Overvoltage category</b>	III
<b>Flammability rating according to UL 94</b>	V0

### Environmental Product Compliance

<b>China RoHS</b>	Environmentally Friendly Use Period = 50
<b>China RoHS</b>	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Classifications

### eCl@ss

<b>eCl@ss 5.0</b>	27371001
<b>eCl@ss 5.1</b>	27371001
<b>eCl@ss 6.0</b>	27371604
<b>eCl@ss 7.0</b>	27371604
<b>eCl@ss 8.0</b>	27371604
<b>eCl@ss 9.0</b>	27371604

### ETIM

<b>ETIM 2.0</b>	EC001504
<b>ETIM 3.0</b>	EC001504
<b>ETIM 4.0</b>	EC001504
<b>ETIM 5.0</b>	EC001504
<b>ETIM 6.0</b>	EC001504

### UNSPSC

<b>UNSPSC 6.01</b>	30211916
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## Classifications

### UNSPSC

UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39122326

## Approvals

UL Recognized / UL Listed / cUL Recognized / cUL Listed / EAC / EAC / DNV GL / cULus Recognized / cULus Listed /

### Approval details

UL Recognized

UL Listed

cUL Recognized

cUL Listed

EAC

EAC

DNV GL

cULus Recognized

cULus Listed

## Accessories

### DIN rail

NS 35/ 7,5 V2A UNPERF 2000MM - 0801377

## Solid-state relay module - PLC-OPT- 24DC/ 48DC/100/ SEN - 2900358

### Accessories

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NS 35/ 7,5 PERF 2000MM - 0801733

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NS 35/ 7,5 CU UNPERF 2000MM - 0801762



NS 35/15 UNPERF 2000MM - 1201714



NS 35/15 CU UNPERF 2000MM - 1201895



NS 35/15-2,3 UNPERF 2000MM - 1201798



## Solid-state relay module - PLC-OPT- 24DC/ 48DC/100/ SEN - 2900358

### Accessories

NS 35/15 AL UNPERF 2000MM - 1201756



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NS 35/15 PERF 2000MM - 1201730



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NS 35/ 7,5 UNPERF 2000MM - 0801681

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### Terminal marking

ZB 6/WH-100:UNBEDRUCKT - 5060935



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ZB 6:UNBEDRUCKT - 1051003



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### Labeled terminal marker

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## Accessories

ZB 6,LGS:FORTL.ZAHLEN - 1051016



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### Partition plate

PLC-ATP BK - 2966841



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### Power module

PLC-ESK GY - 2966508



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### Screwdriver tools

SZF 1-0,6X3,5 - 1204517



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### Controller board

## Solid-state relay module - PLC-OPT- 24DC/ 48DC/100/ SEN - 2900358

### Accessories

PLC-V8/FLK14/IN - 2296553



PLC-V8/FLK14/IN/M - 2304115



PLC-V8/D15S/IN - 2296074



PLC-V8/D15B/IN - 2296087



### Relay socket

PLC-BPT- 24DC/ 1/SEN - 2900262



### Single solid-state relay



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## Accessories

OPT-24DC/ 48DC/100 - 2966618



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## Bridge

FBST 500-PLC RD - 2966786



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FBST 500-PLC BU - 2966692



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FBST 500-PLC GY - 2966838



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FBST 6-PLC RD - 2966236



# Solid-state relay module - PLC-OPT- 24DC/ 48DC/100/ SEN - 2900358

## Accessories

FBST 6-PLC BU - 2966812



FBST 6-PLC GY - 2966825

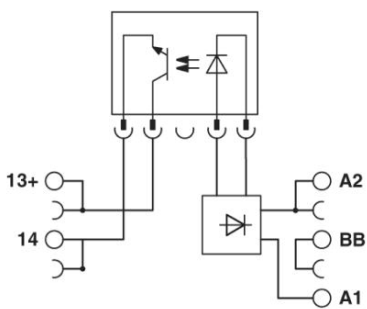


FBST 8-PLC GY - 2967688



## Drawings

### Circuit diagram



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