PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

2982702

https://www.phoenixcontact.com/in/products/2982702

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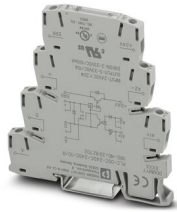
PLC-INTERFACE with checkback contact, consisting of basic terminal block with screw connection and integrated miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/10 A

Your advantages

- Resistant to vibrations and shocks
- Wear-free switching with no contact bounce
- Protective circuit in input and output
- Status indicator
- DC voltage outputs up to 24 V DC/10 A
- Option of bridging adjacent modules

Commercial Data

Item number	2982702
Packing unit	10 pc
Minimum order quantity	1 pc
Sales Key	CK6
Product Key	CK6213
Catalog Page	Page 409 (C-5-2019)
GTIN	4046356155748
Weight per Piece (including packing)	37.57 g
Weight per Piece (excluding packing)	37.64 g
Customs tariff number	85364190
Country of origin	DE

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Technical Data

Notes

Notes on operation	The PLC-ATP partition plate must be installed for voltages greater than 250 V (L1, L2, L3) between identical terminal blocks on adjacent modules.
Notes on operation	The PLC-ATP separating plate should be installed for safe isolation between adjacent modules
Notes on operation	Do not connect adjacent channels to SELV/ PELV and voltages dangerous to the touch.
Notes on operation	The system installer must ensure the touch protection of the product (at voltages > 25 V AC/60 V DC). The product is a built-in device without protection against direct contact.
Notes on operation	At least one functional insulation against adjacent modules is complied with in the support rail direction. If the application has higher requirements on the insulation (basic or reinforced insulation), then these must be realized through suitable measures (e. g., partition plates).
Notes on operation	Do not use to separate SELV / PELV circuits from other circuits, because safe isolation is not guaranteed.

Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	With integrated solid-state relay
Operating mode	100% operating factor

Insulation characteristics

Insulation	Basic insulation

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

Insulation	Basic insulation
Overvoltage category	II
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.07 W

Air clearances and creepage distances between the power circuits

Rated insulation voltage	50 V DC
Rated surge voltage	0.5 kV

Input data

Rated actuating voltage U_C	24 V DC
Rated actuating current I_C	3.5 mA
Switching threshold "0" signal in reference to U_N	< 0.4
Switching threshold "1" signal in reference to U_N	> 0.8
Typical response time	100 µs

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Typical turn-off time	500 µs
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode
	Surge protection
Surge voltage protection	> 33 V
Transmission frequency	100 Hz

Output data

Designation	DC voltage output
Contact type	1 N/O contact
Design of digital output	electronic
Type of contact	Power contact
Output voltage range	8 V DC ... 33 V DC
Limiting continuous current	10 A (see derating curve)
Quiescent current	5.2 mA
Voltage drop at max. limiting continuous current	< 50 mV
Output circuit	3-conductor, ground-referenced
Protective circuit	Inverse diode
	Surge protection
Designation	Alarm output
Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	100 mA
Surge voltage protection	> 33 V
Voltage drop at max. limiting continuous current	< 1.2 V
Output circuit	2-conductor, floating
Error indication	Red LED
Protective circuit	Reverse polarity protection; Polarity protection diode
	Surge protection; Suppressor diode

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross section rigid	0.14 mm² ... 2.5 mm²
Conductor cross section flexible	0.14 mm² ... 2.5 mm²
	0.2 mm² ... 2.5 mm² (Single ferrule)
	2x 0.5 mm² ... 1.5 mm² (TWIN ferrule)
Conductor cross section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

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Material specifications

Flammability rating according to UL 94	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Degree of protection (Installation location)	IP54 (Installation location)
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C
Altitude	≤ 2000 m

Approvals

Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Standards and regulations

Air clearances and creepage distances between the power circuits

Standards/regulations	IEC 60947-5-1

Mounting

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

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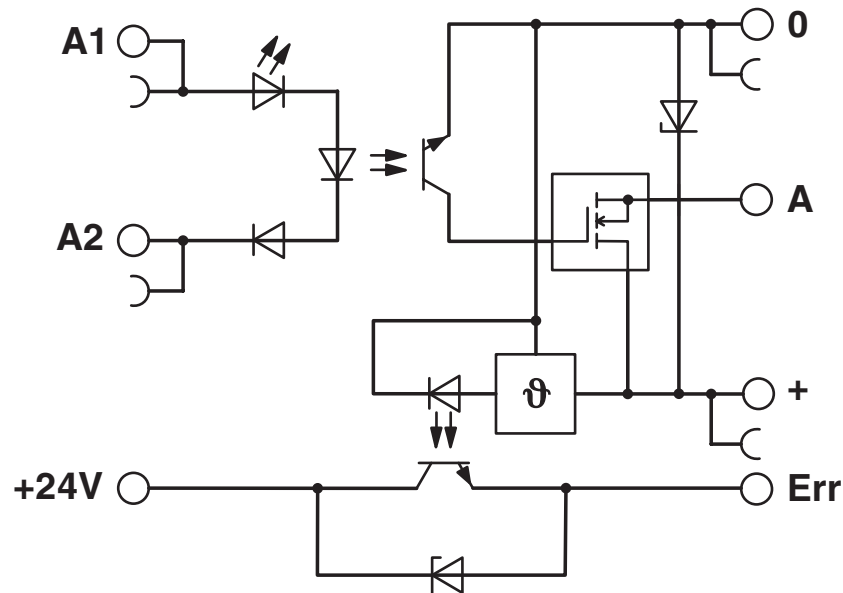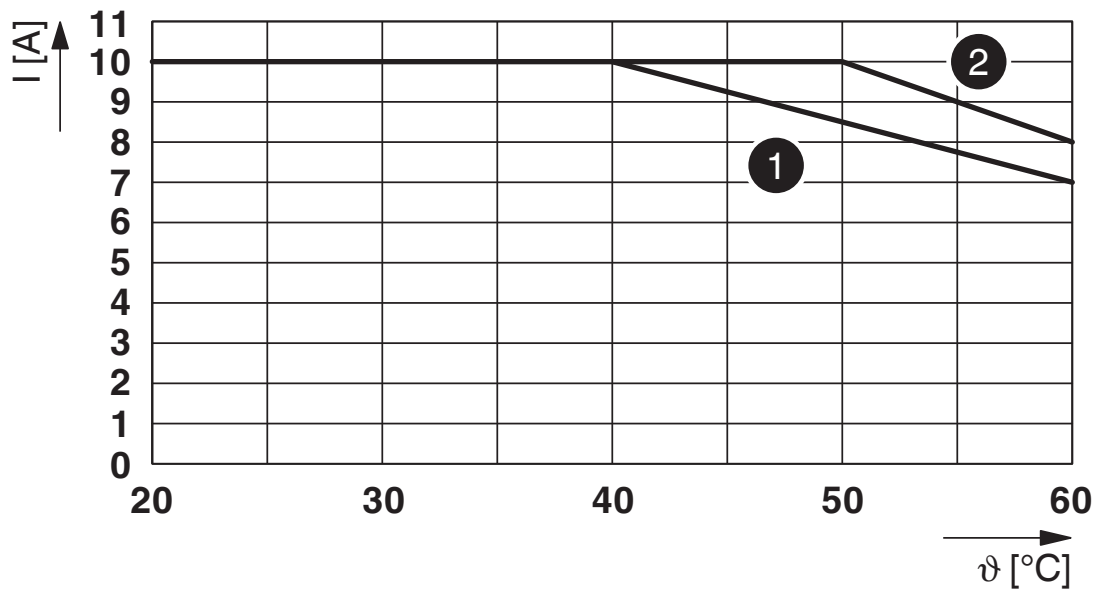https://www.phoenixcontact.com/in/products/2982702

Drawings

Circuit diagram

Diagram

Limiting continuous current
1) Aligned without spacing
2) Aligned with >6 mm spacing

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Approvals

cUL Recognized
Approval ID: FILE E 238705

UL Recognized
Approval ID: FILE E 238705

EAC
Approval ID: TR_TS_D_00573_c

DNV GL
Approval ID: TAE0000196

PRS
Approval ID: TE/2109/880590/16

UL Listed
Approval ID: FILE E 172140

cUL Listed
Approval ID: FILE E 172140

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Classifications

ECLASS

ECLASS-11.0	27371604

ETIM

ETIM 8.0	EC001504

UNSPSC

UNSPSC 21.0	39122300

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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

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

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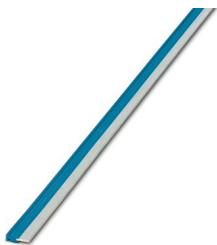
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Continuous plug-in bridge, length: 500 mm, color: red

ⓘ Max. current carrying capacity: 32 A

FBST 500-PLC BU - Continuous plug-in bridge

2966692

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

ⓘ Max. current carrying capacity: 32 A

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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FBST 500-PLC GY - Continuous plug-in bridge

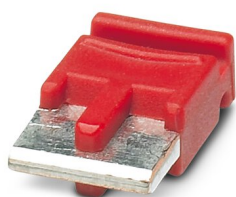2966838

https://www.phoenixcontact.com/in/products/2966838

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

ℹ️ Max. current carrying capacity: 32 A

FBST   6-PLC RD - Single plug-in bridge

2966236

https://www.phoenixcontact.com/in/products/2966236

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

ℹ️ Max. current carrying capacity: 6 A

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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FBST 6-PLC BU - Single plug-in bridge

2966812

https://www.phoenixcontact.com/in/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/in/products/2966825

Single plug-in bridge, number of positions: 2, length: 6 mm, color: gray
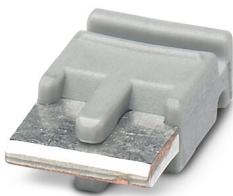
ⓘ Max. current carrying capacity: 6 A

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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FBST 8-PLC GY - Single plug-in bridge

2967688

https://www.phoenixcontact.com/in/products/2967688

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

ⓘ Max. current carrying capacity: 6 A

PLC-ESK GY - Power terminal block

2966508

https://www.phoenixcontact.com/in/products/2966508

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

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PLC-ATP BK - Separating plate

2966841

https://www.phoenixcontact.com/in/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

SZF 1-0,6X3,5 - Screwdriver

1204517

https://www.phoenixcontact.com/in/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

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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PLC-V8/FLK14/OUT - System connection

2295554

https://www.phoenixcontact.com/in/products/2295554

V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

PLC-V8/FLK14/OUT/M - System connection

2304102

https://www.phoenixcontact.com/in/products/2304102

V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: IDC/FLK pin strip 1x 14-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: minusschaltend

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

2982702

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PLC-V8/D15S/OUT - System connection

2296058

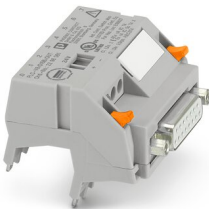https://www.phoenixcontact.com/in/products/2296058

V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: D-SUB pin strip 1x 15-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

PLC-V8/D15B/OUT - System connection

2296061

https://www.phoenixcontact.com/in/products/2296061

V8 adapter for 8 x PLC-INTERFACE (6.2 mm), controller: PLC system cabling of output cards, connection 1: Screw connection 1x, connection 2: D-SUB socket strip 1x 15-position, connection 3: Plug-in connection (Can be snapped onto 8x PLC-INTERFACE terminals), number of channels: 8, control logic: plusschaltend

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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

0801733

https://www.phoenixcontact.com/in/products/0801733

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

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

0801681

https://www.phoenixcontact.com/in/products/0801681

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

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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

1204119

https://www.phoenixcontact.com/in/products/1204119

DIN rail perforated, acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 25 (50 m)

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

1204122

https://www.phoenixcontact.com/in/products/1204122

DIN rail, unperforated, acc. to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 10 (20 m)

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

2982702

https://www.phoenixcontact.com/in/products/2982702

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

0801704

https://www.phoenixcontact.com/in/products/0801704

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

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

1206421

https://www.phoenixcontact.com/in/products/1206421

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

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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https://www.phoenixcontact.com/in/products/2982702

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

1206434

https://www.phoenixcontact.com/in/products/1206434

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

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

0801762

https://www.phoenixcontact.com/in/products/0801762

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

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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NS 35/ 7,5 CAP - End cap

1206560

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DIN rail end piece, for DIN rail NS 35/7.5

NS 35/15 PERF 2000MM - DIN rail perforated

1201730

https://www.phoenixcontact.com/in/products/1201730

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

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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

1201714

https://www.phoenixcontact.com/in/products/1201714

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

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

0806602

https://www.phoenixcontact.com/in/products/0806602

DIN rail perforated, similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: white, Pack of 25 (50 m)

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

1204135

https://www.phoenixcontact.com/in/products/1204135

DIN rail, unperforated, similar to EN 60715, material: Steel, Galvanized, white passivated, Standard profile, color: silver, Pack of 10 (20 m)

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

1201756

https://www.phoenixcontact.com/in/products/1201756

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

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

1206599

https://www.phoenixcontact.com/in/products/1206599

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

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

1206586

https://www.phoenixcontact.com/in/products/1206586

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

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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

1201895

https://www.phoenixcontact.com/in/products/1201895

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

NS 35/15 CAP - End cap

1206573

https://www.phoenixcontact.com/in/products/1206573

DIN rail end piece, for DIN rail NS 35/15

PLC-OSC- 24DC/ 24DC/ 10/R - Solid-state relay module

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

1201798

https://www.phoenixcontact.com/in/products/1201798

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

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

info@phoenixcontact.co.in