

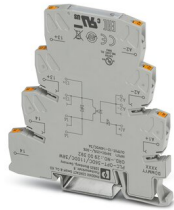
PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>

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 railway applications, consisting of basic terminal block with push-in connection and integrated miniature solid-state relay, range: $0.7 \times U_N$ to $1.25 \times U_N$, temperature range: -25°C to $+70^\circ\text{C}$, 1 N/O contact, input: 36 V DC, output: 12 - 140 V DC/3 A

Your advantages

- Shock resistance in accordance with DIN 50155 (requirements in accordance with EN 61373)
- Temperature range: -25°C ... $+70^\circ\text{C}$
- Input voltage range of $0.7 - 1.25 \times U_N$

Commercial Data

Item number	2900392
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to Order (non-returnable)
Sales Key	CK6
Product Key	CK6233
Catalog Page	Page 417 (C-5-2019)
GTIN	4046356508971
Weight per Piece (including packing)	34.96 g
Weight per Piece (excluding packing)	31.19 g
Customs tariff number	85364190
Country of origin	DE

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>

Technical Data

Product properties

Product type	Solid-state relay module
Product family	PLC-INTERFACE
Application	Railway applications
Operating mode	100% operating factor

Insulation characteristics

Insulation	Basic insulation
------------	------------------

Insulation characteristics: Air clearances and creepage distances, input/output

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Electrical properties

Maximum power dissipation for nominal condition	0.43 W
Test voltage (Input/output)	2.5 kV AC (Input/output)

Air clearances and creepage distances, input/output

Rated insulation voltage	160 V
Rated surge voltage	4 kV

Input data

Nominal input voltage U_N	36 V DC
Input voltage range in reference to U_N	0.7 ... 1.25 ($t < 1$ s = 0.6 ... 1.4 x U_N)
Input voltage range	25.2 V DC ... 45 V DC
Switching threshold "0" signal in reference to U_N	< 0.4
Switching threshold "1" signal in reference to U_N	> 0.6
Typical input current at U_N	12 mA
Typical response time	400 μ s
Typical turn-off time	800 μ s
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Series polarity protection diode Surge protection
Surge voltage protection	> 150 V
Transmission frequency	50 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output nominal voltage	110 V DC
Output voltage range	12 V DC ... 140 V DC ($t < 1$ s = 1.40 x U_N)
Limiting continuous current	3 A (see derating curve)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>

Surge voltage protection	> 150 V
Voltage drop at max. limiting continuous current	< 150 mV
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Parallel polarity protection diode Surge protection

Connection data

Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section rigid	0.14 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 2.5 mm ² 0.2 mm ² ... 2.5 mm ² (Single ferrule) 2x 0.5 mm ² ... 1 mm ² (TWIN ferrule)
Conductor cross section AWG	26 ... 14

Dimensions

Width	6.2 mm
Height	80 mm
Depth	86 mm

Material specifications

Flammability rating according to UL 94	V0 (Housing)
--	--------------

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-25 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Approvals

CE

Certificate	CE-compliant
-------------	--------------

UKCA

Certificate	UKCA-compliant
-------------	----------------

Corrosive gas test

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

Shipbuilding approval

Certificate	TAE0000196
-------------	------------

DNV GL data

Temperature	D
-------------	---

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>

Humidity	A
Vibration	B
EMC	B
Enclosure	Required protection according to the Rules shall be provided upon installation on board

EMC data

Low Voltage Directive	Conformance with Low Voltage Directive
Electromagnetic compatibility	Conformance with EMC directive

Standards and regulations

Air clearances and creepage distances, input/output

Standards/regulations	IEC 60947-5-1
-----------------------	---------------

Railway standard

Standards/regulations	DIN EN 50155 (in relevant parts)
Standards/regulations	DNVGL-CG-0339

Mounting


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

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

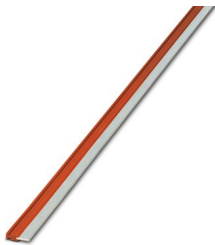
Accessories

 Note: Applying some accessories below might limit this product.


FBST 500-PLC RD - Continuous plug-in bridge

2966786

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



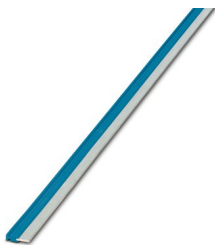
Continuous plug-in bridge, length: 500 mm, color: red

 Max. current carrying capacity: 32 A

FBST 500-PLC BU - Continuous plug-in bridge

2966692

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



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

 Max. current carrying capacity: 32 A

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

FBST 500-PLC GY - Continuous plug-in bridge

2966838

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



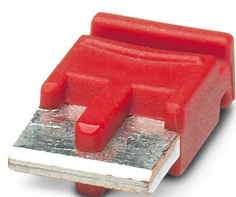
Continuous plug-in bridge, length: 500 mm, color: gray

 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

 Max. current carrying capacity: 6 A

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

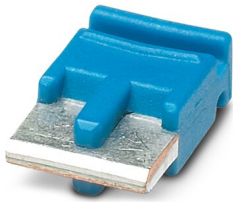
<https://www.phoenixcontact.com/in/products/2900392>


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



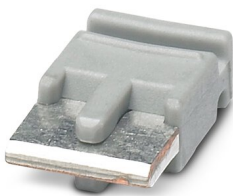
 Max. current carrying capacity: 6 A

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-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>


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

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

NS 35/ 7,5 CAP - End cap

1206560

<https://www.phoenixcontact.com/in/products/1206560>

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



PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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)

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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

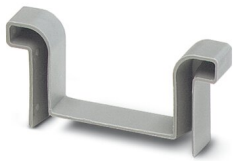
<https://www.phoenixcontact.com/in/products/2900392>

NS 35/15 CAP - End cap

1206573

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

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



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)

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module

2900392

<https://www.phoenixcontact.com/in/products/2900392>

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

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

PLC-OPT- 36DC/110DC/3RW - Solid-state relay module



2900392

<https://www.phoenixcontact.com/in/products/2900392>

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

Phoenix Contact 2023 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

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

+91.1275.71420

info@phoenixcontact.co.in