

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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, consisting of PLC-BSP.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on NS 35/7,5, 1 N/O contact, input: 125 V DC, output: 3 - 33 V DC/3 A

Your advantages

- Slim design
- Efficient connection to system cabling using V8 adapter
- RT III sealed solid-state relay
- Integrated input circuit
- Functional plug-in bridges
- High switching power
- Zero voltage switch at AC output

Commercial data

Item number	2980050
Packing unit	10 pc
Minimum order quantity	1 pc
Sales key	CK6
Product key	DK6223
Catalog page	Page 373 (C-5-2019)
GTIN	4017918619053
Weight per piece (including packing)	38.75 g
Weight per piece (excluding packing)	32 g
Customs tariff number	85364900
Country of origin	DE

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

Technical data

Product properties

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

Insulation characteristics: Standards/regulations

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	13.11.2024
------------------------------	------------

Electrical properties

Maximum power dissipation for nominal condition	0.38 W
Test voltage (Input/output)	2.5 kV (50 Hz, 1 min., input/output)

Input data

Nominal input voltage U_N	125 V DC
Nominal voltage (plugged-in solid-state relay)	60 V DC
Input voltage range in reference to U_N	0.8 ... 1.1
Input voltage range	100 V DC ... 137.5 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.3
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	3 mA
Typical response time	40 μ s (at U_N)
Typical turn-off time	600 μ s (at U_N)
Operating voltage display	Yellow LED
Protective circuit	Reverse polarity protection; Polarity protection diode
Transmission frequency	100 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	3 A (see derating curve)
Maximum inrush current	15 A (10 ms)
Voltage drop at max. limiting continuous current	≤ 200 mV
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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	94 mm

Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94	V0 (Housing)

Environmental and real-life conditions

Ambient conditions

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

Approvals

CE

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

UKCA

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

Shipbuilding approval

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

Corrosive gas test

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

Shipbuilding data

Temperature	D
Humidity	A
Vibration	B/C
EMC	B

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

Enclosure

Required protection according to the Rules shall be provided upon installation on board

EMC data

Electromagnetic compatibility

Conformance with EMC directive

Low Voltage Directive

Conformance with Low Voltage Directive

Standards and regulations

Standards/regulations

Standards/regulations

IEC 60947-5-1

Mounting

Mounting type

DIN rail mounting

Assembly note

in rows with zero spacing

Mounting position

any

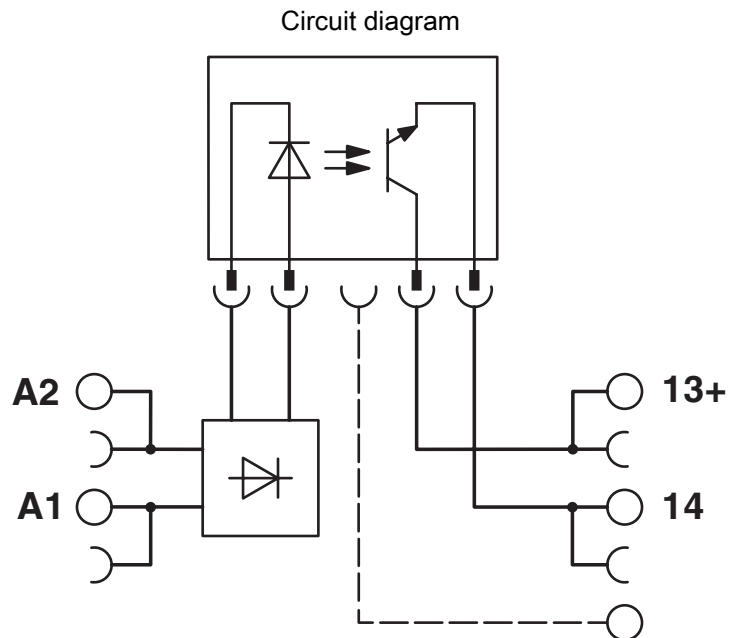
PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module

2980050

<https://www.phoenixcontact.com/in/products/2980050>



Drawings



PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

Approvals

 To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/2980050>



EAC

Approval ID: RU*C-DE.*08.B.00010



DNV GL

Approval ID: TAE0000196



cULus Listed

Approval ID: E140324

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

Classifications

ECLASS

ECLASS-11.0	27371604
ECLASS-12.0	27371604
ECLASS-13.0	27371604

ETIM

ETIM 9.0	EC001504
----------	----------

UNSPSC

UNSPSC 21.0	39122300
-------------	----------

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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	15cabe07-c630-4130-b035-c5bcb88185da

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

Accessories

i 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>



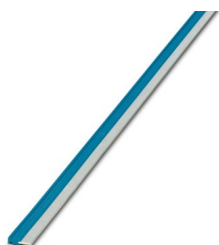
Continuous plug-in bridge, length: 500 mm, color: red

i 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

i Max. current carrying capacity: 32 A

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

FBST 500-PLC GY - Continuous plug-in bridge

2966838

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



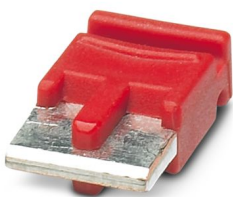
Continuous plug-in bridge, length: 500 mm, color: gray

 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-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

FBST 6-PLC BU - Single plug-in bridge

2966812

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



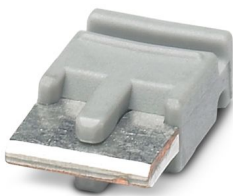
Single plug-in bridge, number of positions: 2, length: 6 mm, color: blue

 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-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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-FA-5X20 - Fuse adapter

1186510

<https://www.phoenixcontact.com/in/products/1186510>



Safety plug adapter for use on a 6.2 mm PLC basic terminal block. For 5 x 20 mm fuses. Operating voltage: Universal. Without fuse failure indication.

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

PLC-FA-I-5X20-12-24UC - Fuse adapter

1186499

<https://www.phoenixcontact.com/in/products/1186499>



Safety plug adapter for use on a 6.2 mm PLC basic terminal block. For 5 x 20 mm fuses. Operating voltage: 12 ... 24 V AC/DC. With LED for fuse failure indication.

ZB 6:UNBEDRUCKT - Zack marker strip

1051003

<https://www.phoenixcontact.com/in/products/1051003>



Zack marker strip, Strip, white, unlabeled, can be labeled with: PLOTMARK, CMS-P1-PLOTTER, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

ZB 6 CUS - Zack marker strip

0824992

<https://www.phoenixcontact.com/in/products/0824992>



Zack marker strip, can be ordered: Strip, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

ZB 6,LGS:FORTL.ZAHLEN - Zack marker strip

1051016

<https://www.phoenixcontact.com/in/products/1051016>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

ZB 6,QR:FORTL.ZAHLEN - Zack marker strip

1051029

<https://www.phoenixcontact.com/in/products/1051029>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, Printed vertically: consecutive numbers 1 ... 10, 11 ... 20, etc. up to 491 ... 500, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

ZB 6,LGS:GLEICHE ZAHLEN - Zack marker strip

1051032

<https://www.phoenixcontact.com/in/products/1051032>



Zack marker strip, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: Identical numbers 1 or 2, etc. up to 100, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

ZB 6,LGS:L1-N,PE - Marker for terminal blocks

1051414

<https://www.phoenixcontact.com/in/products/1051414>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, horizontal: L1, L2, L3, N, PE, L1, L2, L3, N, PE, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

ZB 6,LGS:U-N - Marker for terminal blocks

1051430

<https://www.phoenixcontact.com/in/products/1051430>



Marker for terminal blocks, Strip, white, labeled, can be labeled with: CMS-P1-PLOTTER, printed horizontally: U, V, W, N, GND, U, V, W, N, GND, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 10, text field height: 10.5 mm, text field width: 6.15 mm

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

UC-TM 6 - Marker for terminal blocks

0818085

<https://www.phoenixcontact.com/in/products/0818085>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, PLOTMARK, CMS-P1-PLOTTER, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 80, text field height: 10.5 mm, text field width: 5.6 mm

UC-TM 6 CUS - Marker for terminal blocks

0824589

<https://www.phoenixcontact.com/in/products/0824589>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, Number of individual labels: 80, text field height: 10.5 mm, text field width: 5.6 mm

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

UCT-TM 6 - Marker for terminal blocks

0828736

<https://www.phoenixcontact.com/in/products/0828736>



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: TOPMARK NEO, TOPMARK LASER, BLUEMARK ID COLOR, BLUEMARK ID, BLUEMARK CLED, THERMOMARK PRIME, THERMOMARK CARD 2.0, THERMOMARK CARD, mounting type: latching, for terminal block width: 6.2 mm, Number of individual labels: 60, text field height: 10.5 mm, text field width: 5.6 mm

UCT-TM 6 CUS - Marker for terminal blocks

0829602

<https://www.phoenixcontact.com/in/products/0829602>



Marker for terminal blocks, can be ordered: by sheet, white, labeled according to customer specifications, mounting type: snap into tall marker groove, for terminal block width: 6.2 mm, Number of individual labels: 60, text field height: 10.5 mm, text field width: 5.6 mm

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

0801733

<https://www.phoenixcontact.com/in/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 UNPERF 2000MM - DIN rail, unperforated

0801681

<https://www.phoenixcontact.com/in/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-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1204119

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



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

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

1204122

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



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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

0801704

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



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

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

1206421

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



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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1206434

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



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

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

0801762

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



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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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



NS 35/15 PERF 2000MM - DIN rail perforated

1201730

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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1201714

<https://www.phoenixcontact.com/in/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 WH PERF 2000MM - DIN rail perforated

0806602

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



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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1204135

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



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

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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1206599

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



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

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

1206586

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



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

PLC-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1201895

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



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

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-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

1201798

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

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-OSC-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

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

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-125DC/ 24DC/ 2 - Solid-state relay module



2980050

<https://www.phoenixcontact.com/in/products/2980050>

OPT-60DC/ 24DC/ 2 - Miniature solid-state relay

2966605

<https://www.phoenixcontact.com/in/products/2966605>



Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 60 V DC, output: 3 ... 33 V DC/3 A

Phoenix Contact 2025 © - 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