

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



2980050

<https://www.phoenixcontact.com/us/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	10 pc
Sales key	C461
Product key	DK6223
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

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	01.04.2026
------------------------------	------------

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/us/products/2980050>

Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
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 ... 1.5 mm ² (TWIN ferrule)
Conductor cross-section AWG	26 ... 14
Tightening torque	0.6 Nm ... 0.8 Nm

Dimensions

Item dimensions

Width	6.2 mm
Height	80 mm
Depth	94 mm

Material specifications

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

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



2980050

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

EMC	B
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/us/products/2980050>

Drawings



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



2980050

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

Approvals

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



EAC

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



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324



cULus Listed

Approval ID: E140324

DNV

Approval ID: TAE0000196

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



2980050

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

Classifications

ECLASS

ECLASS-13.0	27371604
ECLASS-15.0	27371604

ETIM

ETIM 10.0	EC001504
-----------	----------

UNSPSC

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

2980050

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

Phoenix Contact 2026 © - 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