

# PLC-OSC-125DC/230AC/ 1 - Solid-state relay module



2980063

<https://www.phoenixcontact.com/us/products/2980063>

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-BSC.../21 basic terminal block with screw connection and plug-in miniature solid-state relay, for mounting on DIN rail NS 35/7,5, 1 N/O contact, input voltage: 125 V DC, output: 24 - 253 V AC/0.75 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	2980063
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C461
Product key	DK6214
GTIN	4017918813895
Weight per piece (including packing)	33.97 g
Weight per piece (excluding packing)	32.13 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	15.09.2025
------------------------------	------------

### Electrical properties

Maximum power dissipation for nominal condition	0.44 W
Test voltage (Input/output)	2.5 kV (50 Hz, 1 min., input/output)

### Input data

Nominal input voltage $U_N$	125 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 $U_N$	$\leq 0.3$
Switching threshold "1" signal in reference to $U_N$	$\geq 0.8$
Typical input current at $U_N$	3.5 mA
Typical response time	10 ms (at $U_N$ )
Typical turn-off time	10 ms (at $U_N$ )
Operating voltage display	Yellow LED
Protective circuit	Freewheeling diode; Freewheeling diode
Transmission frequency	10 Hz

### Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output voltage range	24 V AC ... 253 V AC
Limiting continuous current	0.75 A (see derating curve)
Maximum inrush current	30 A (10 ms)
Min. load current	10 mA
Leakage current	$< 1$ mA
Phase angle $\cos \phi$ min	0.5
Max. load value	$4.5 \text{ A}^2\text{s}$
Voltage drop at max. limiting continuous current	$< 1$ V

# PLC-OSC-125DC/230AC/ 1 - Solid-state relay module



2980063

<https://www.phoenixcontact.com/us/products/2980063>

Output circuit	2-conductor, floating
Protective circuit	RCV circuit

## Connection data

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.2 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Single ferrule)
	2x 0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (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 (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

# PLC-OSC-125DC/230AC/ 1 - Solid-state relay module



2980063

<https://www.phoenixcontact.com/us/products/2980063>

Vibration	B/C
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

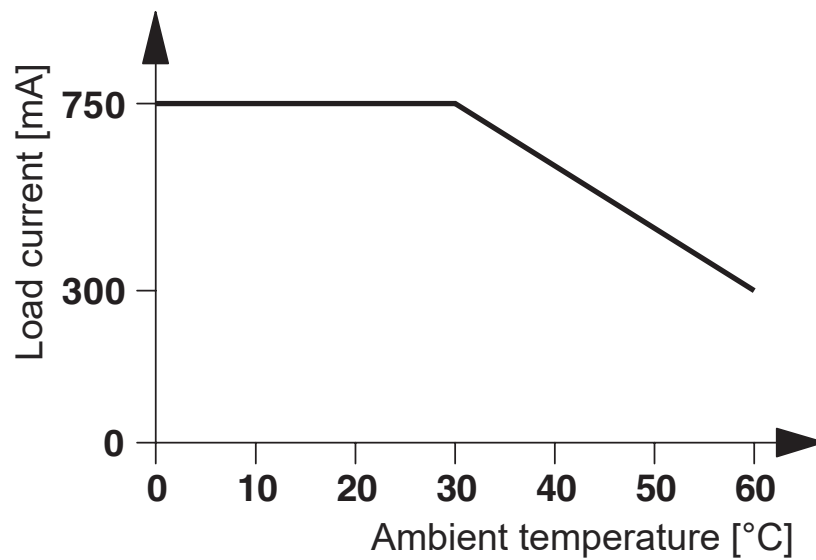
Standards/regulations	IEC 60664
	EN 50178

## Mounting

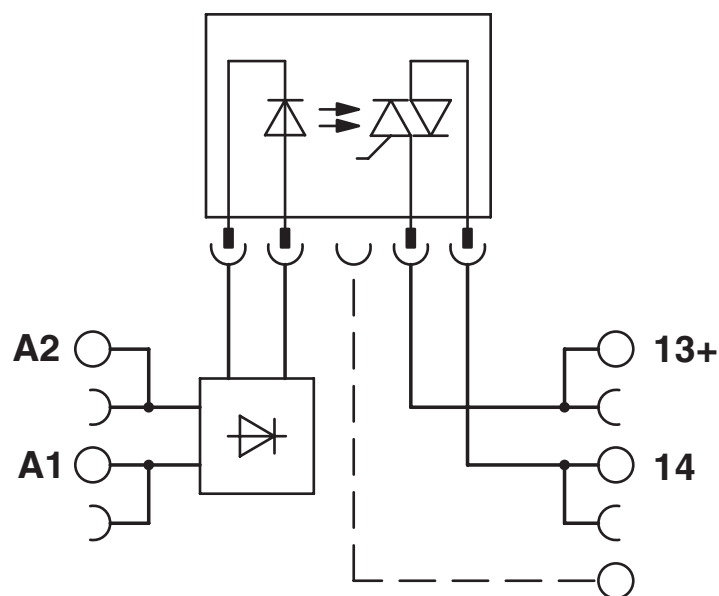
Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

## Drawings

Diagram



Circuit diagram



# PLC-OSC-125DC/230AC/ 1 - Solid-state relay module



2980063

<https://www.phoenixcontact.com/us/products/2980063>

## Classifications

### ETIM

ETIM 8.0	EC001504
----------	----------

### UNSPSC

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

## 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)