

EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

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.



Input solid-state relay, with LED and protective circuit in input and output circuits, input: 220 V DC, output: 4 - 48 V DC/max. 100 mA

Commercial data

Item number	2948937
Packing unit	10 pc
Minimum order quantity	1 pc
Note	Made to order (non-returnable)
Sales key	C460
Product key	DK61C1
GTIN	4017918083601
Weight per piece (including packing)	37.5 g
Weight per piece (excluding packing)	37.5 g
Customs tariff number	85364900
Country of origin	DE

EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

Technical data

Product properties

Product type	Solid-state relay module
Application	Output function
Operating mode	100% operating factor

Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

Data management status

Date of last data management	01.04.2026
------------------------------	------------

Electrical properties

Test voltage (Input/output)	3.5 kV AC (Input/output)
-----------------------------	--------------------------

Input data

Nominal input voltage U_N	220 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	176 V DC ... 264 V DC
Switching threshold "0" signal in reference to U_N	≤ 0.4
Switching threshold "1" signal in reference to U_N	≥ 0.8
Typical input current at U_N	4 mA
Typical response time	20 μ s
Typical turn-off time	100 μ s
Status display	LED (yellow)
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection
Transmission frequency	500 Hz

Output data

Contact switching type	1 N/O contact
Design of digital output	electronic
Output nominal voltage	48 V DC
Output voltage range	4 V DC ... 48 V DC
Limiting continuous current	100 mA
Voltage drop at max. limiting continuous current	0.9 V
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection; Polarity protection diode Surge protection

Connection data

EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

Input side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm ² ... 4 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12

Output side

Connection method	Screw connection
Stripping length	8 mm
Screw thread	M3
Conductor cross-section rigid	0.2 mm ² ... 4 mm ²
Conductor cross-section flexible	0.2 mm ² ... 2.5 mm ²
Conductor cross-section AWG	24 ... 12

Dimensions

Width	10 mm
Height	75 mm
Depth	102 mm

Material specifications

Color	green (RAL 6021)
Flammability rating according to UL 94	V0

Environmental and real-life conditions

Ambient conditions

Degree of protection	IP20
Ambient temperature (operation)	-20 °C ... 60 °C
Ambient temperature (storage/transport)	-20 °C ... 70 °C

Standards and regulations

Standards/regulations	IEC 60664
	EN 50178

Mounting

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

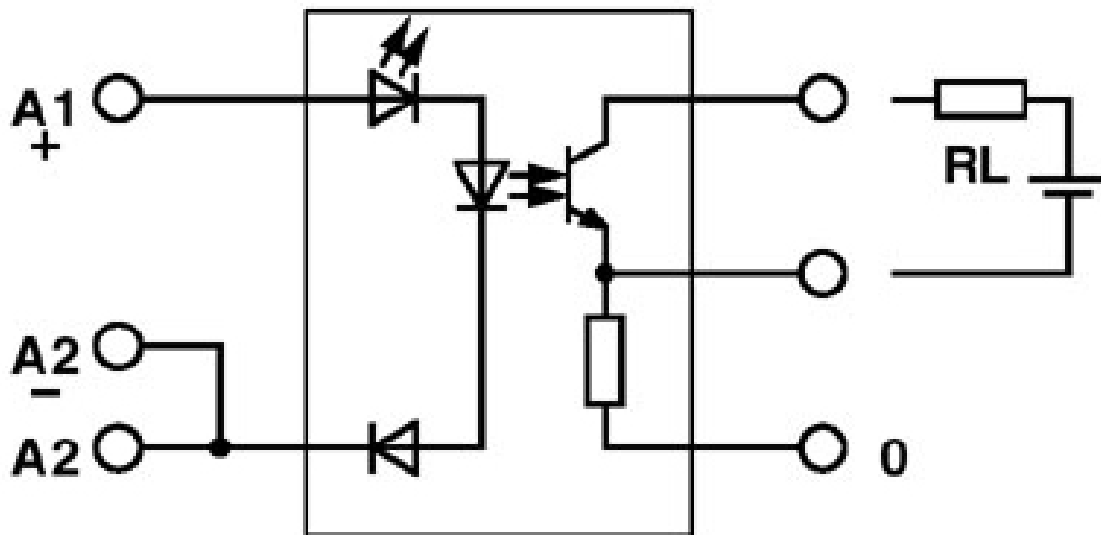
EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module

2948937

<https://www.phoenixcontact.com/us/products/2948937>

Drawings

Circuit diagram



Output: 2-conductor, floating, negative switching

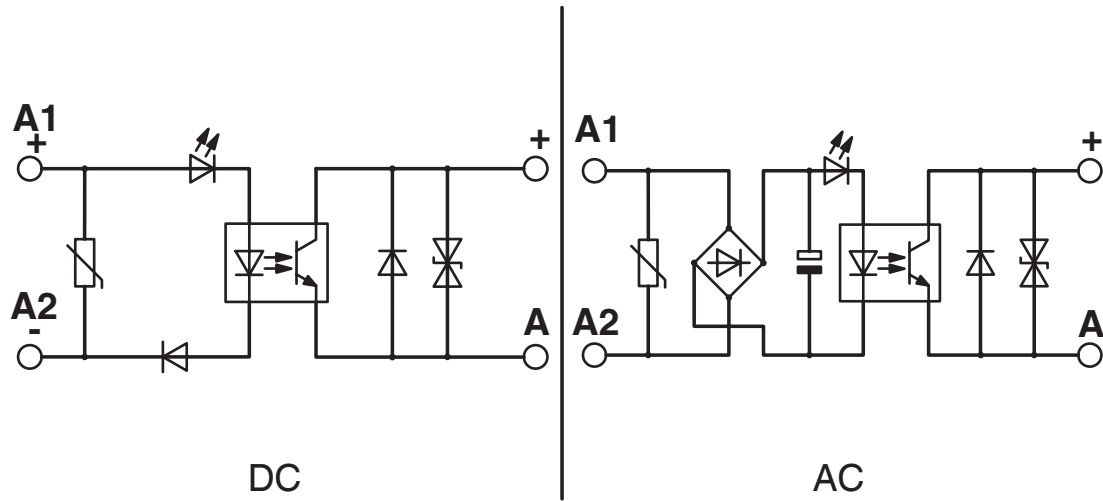
EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

Circuit diagram



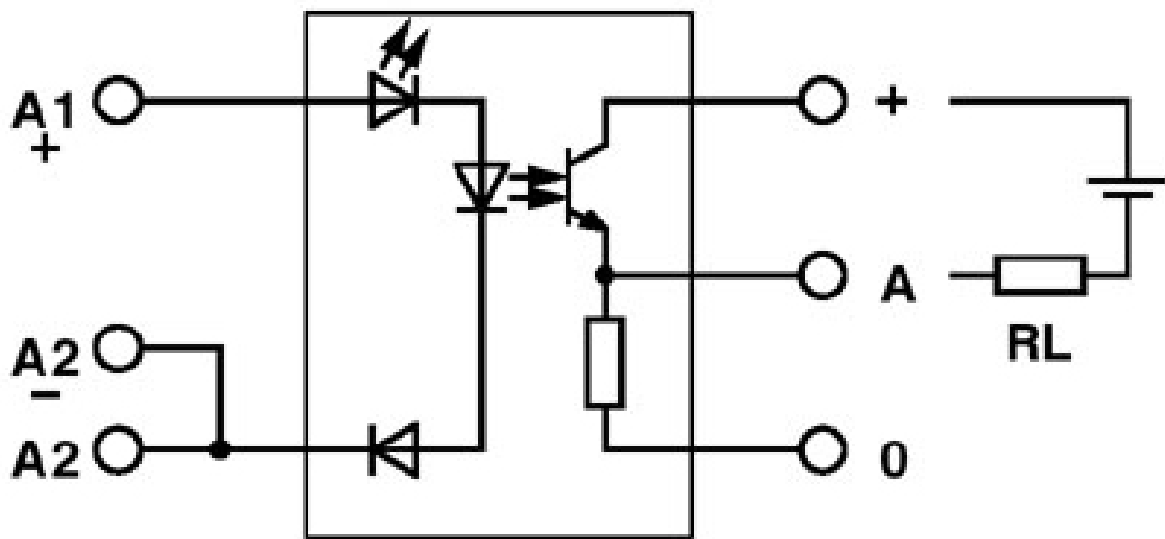
EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

Circuit diagram



Output: 2-conductor, floating, positive switching

EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

Classifications

ECLASS

ECLASS-13.0

27371604

ETIM

ETIM 9.0

EC001504

UNSPSC

UNSPSC 21.0

39122300

EMG 10-OE-220DC/ 48DC/100 - Solid-state relay module



2948937

<https://www.phoenixcontact.com/us/products/2948937>

Environmental product compliance

EU RoHS

Fulfills EU RoHS substance requirements	Yes
Exemption	6(c), 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	fc277202-f92a-4775-8299-81bd8a913fbb

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