

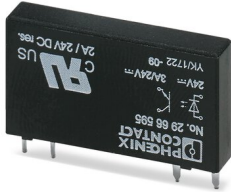
Miniature solid-state relay - OPT-24DC/ 24DC/ 2



2966595

<https://www.phoenixcontact.com/pc/products/2966595>

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 3 ... 33 V DC/3 A

Your advantages

- Vibration and shock resistant
- RT III-proof (wash-proof)
- Wear-free and durable
- Can be soldered on PCB
- Switching capacity of up to 24 V DC/3 A

Commercial Data

Item number	2966595
Packing unit	10 pc
Minimum order quantity	10 pc
Sales Key	08
Product Key	CK61F2
Catalog Page	Page 286 (C-5-2019)
GTIN	4017918130947
Weight per Piece (including packing)	5.26 g
Weight per Piece (excluding packing)	5.2 g
Customs tariff number	85364190
Country of origin	HU

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Technical Data

Product properties

Product type	Single solid-state relay
Set comprises	2905293 RIF-0-OPT-24DC/24DC/2
	2905657 RIF-0-OSC-24DC/24DC/2
Operating mode	100% operating factor

Insulation characteristics

Overvoltage category	III
Pollution degree	2
Insulation	Basic insulation

Electrical properties

Maximum power dissipation for nominal condition	0.17 W
Test voltage Input/output	2.5 kV (50 Hz, 1 min., input/output)

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	19.2 V DC ... 28.8 V DC
Switching threshold "0" signal, voltage	≤ 10 V
Switching threshold "1" signal voltage	≥ 16 V
Typical input current at U_N	7 mA
Typical response time	20 μ s (at U_N)
Typical turn-off time	300 μ s (at U_N)
Transmission frequency	300 Hz

Output data

Contact 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	≤ 150 mV
Output circuit	2-conductor, floating
Protective circuit	Reverse polarity protection
	Surge protection

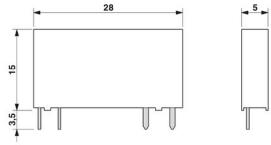
Dimensions

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Dimensional drawing	
Width	5 mm
Height	28 mm
Depth	15 mm

Environmental and real-life conditions

Ambient conditions

Degree of protection	RT III
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C

Approval data

Corrosive gas test

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

Standards/regulations

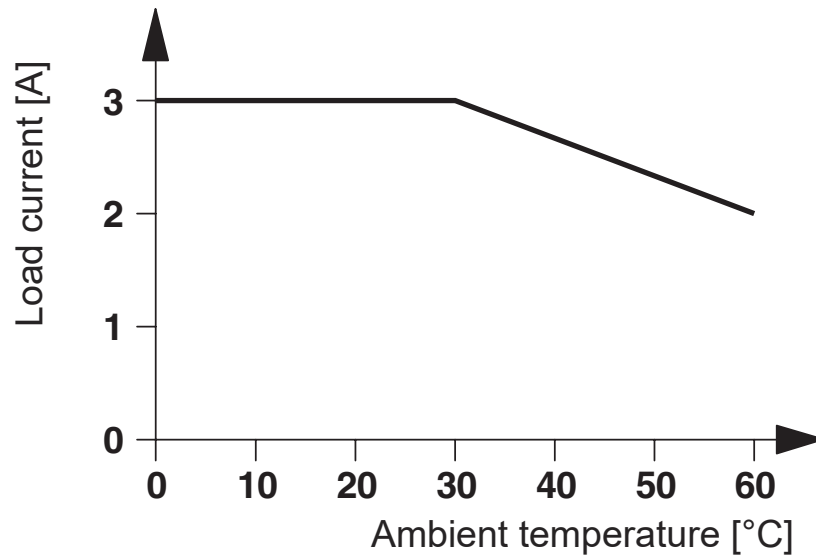
Standards/regulations	IEC 60664 EN 50178
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Mounting

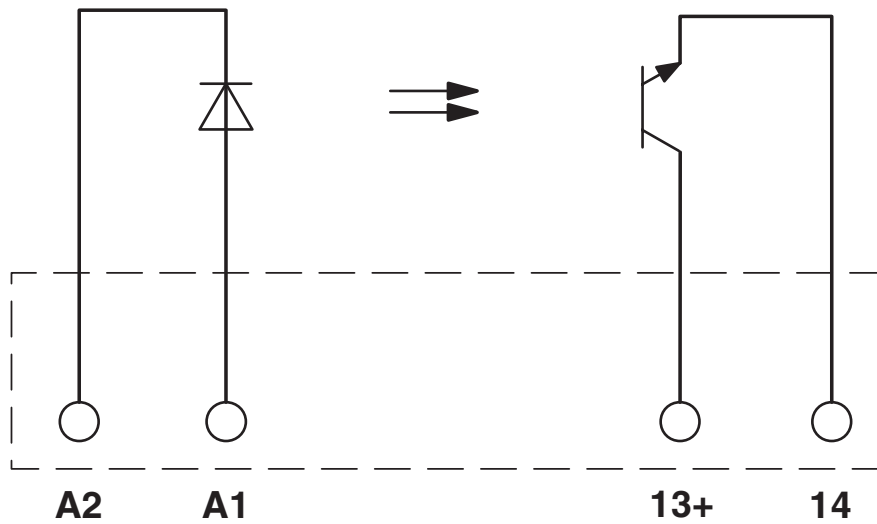
Assembly instructions	in rows with zero spacing
Mounting position	any

Drawings

Diagram



Circuit diagram

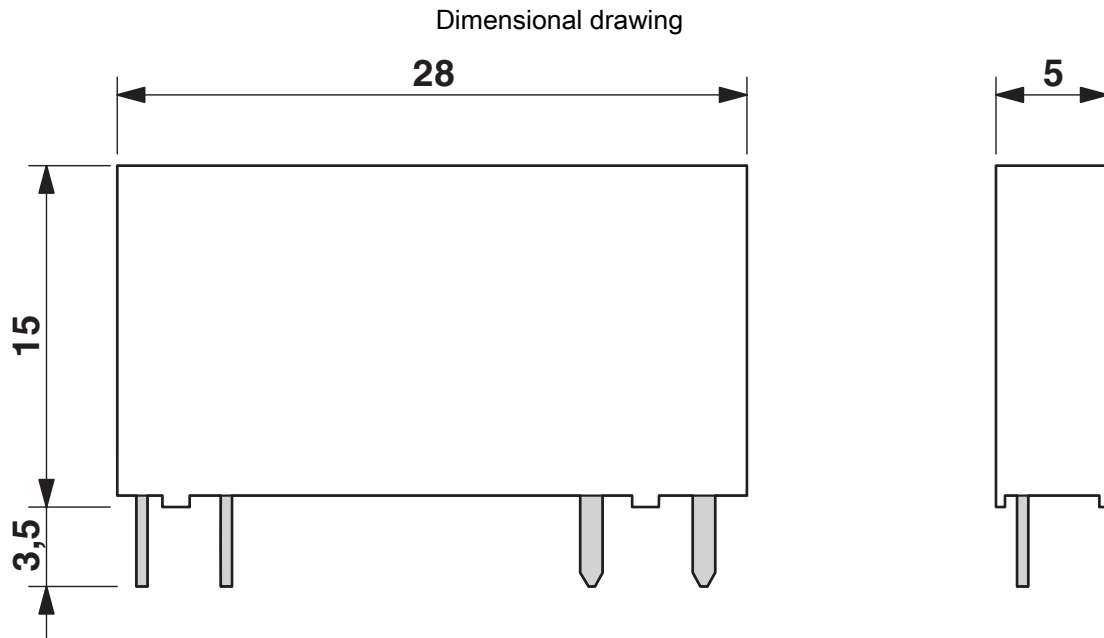


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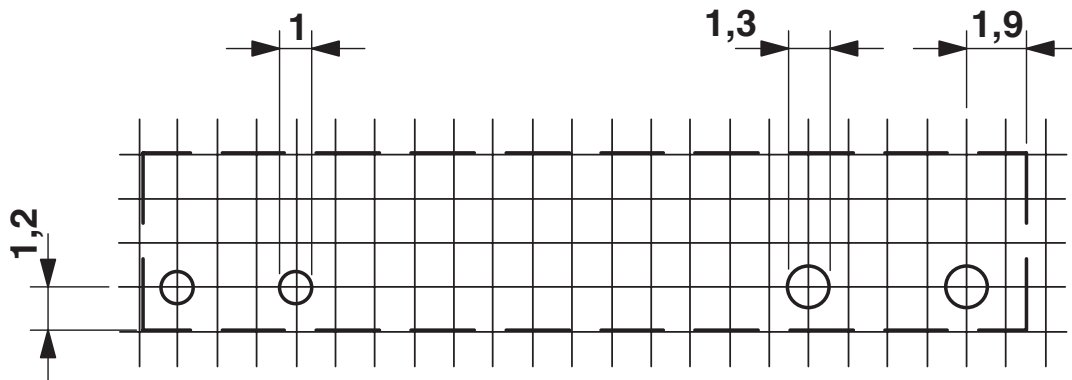


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Drilling plan/solder pad geometry



a = pitch division 1.25 mm and 1.27 mm

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Approvals



cUL Recognized
Approval ID: FILE E 195083



UL Recognized
Approval ID: FILE E 195083



EAC
Approval ID: TR_TS_D_00573_c



UL Recognized
Approval ID: FILE E 195083



PRS
Approval ID: TE/2109/880590/16



cUL Recognized
Approval ID: FILE E 195083



GL
Approval ID: 46016-03 HH

Nominal Voltage U_N

Nominal Current I_N

Cross Section AWG

Cross Section mm^2

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Classifications

ECLASS

ECLASS-9.0	27371604
ECLASS-10.0.1	27371604
ECLASS-11.0	27371604

ETIM

ETIM 8.0	EC001504
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UNSPSC

UNSPSC 21.0	39122300
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Environmental Product Compliance

China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

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Accessories

Relay base

Relay base - PLC-BPT- 24DC/21 - 2900445

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6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC

Relay base

Relay base - PLC-BSC- 24DC/21 - 2966016

<https://www.phoenixcontact.com/pc/products/2966016>



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 24 V DC

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Relay base

Relay base - PLC-BPT- 48DC/21 - 2900447

<https://www.phoenixcontact.com/pc/products/2900447>



6.2 mm PLC basic terminal block with Push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 48 V DC

Relay base

Relay base - PLC-BSC- 48DC/21 - 2966090

<https://www.phoenixcontact.com/pc/products/2966090>



6.2 mm PLC basic terminal block with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, 1 changeover contact, input voltage 48 V DC

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

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Relay base

Relay base - PLC-BPT- 24DC/ 1/SEN - 2900262

<https://www.phoenixcontact.com/pc/products/2900262>



6.2 mm PLC basic terminal block for input functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

Relay base

Relay base - PLC-BSC- 24DC/ 1/SEN - 2966061

<https://www.phoenixcontact.com/pc/products/2966061>



6.2 mm PLC basic terminal block for input functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with sensor supply voltage distribution (BB), 1 N/O contact, input voltage 24 V DC

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

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Relay base

Relay base - PLC-BPT- 24DC/ 1/ACT - 2900449

<https://www.phoenixcontact.com/pc/products/2900449>



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V DC

Relay base

Relay base - PLC-BSC- 24DC/ 1/ACT - 2966058

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6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V DC

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

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Relay base

Relay base - PLC-BPT- 24UC/ 1/ACT - 2900450

<https://www.phoenixcontact.com/pc/products/2900450>



6.2 mm PLC basic terminal block for output functions with push-in connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

Relay base

Relay base - PLC-BSC- 24UC/ 1/ACT - 2982799

<https://www.phoenixcontact.com/pc/products/2982799>



6.2 mm PLC basic terminal block for output functions with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with load return line connection (BB), 1 N/O contact, input voltage 24 V AC/DC

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

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Relay base

Relay base - PLC-BSC- 24DC/21/SO46 - 2980458

<https://www.phoenixcontact.com/pc/products/2980458>

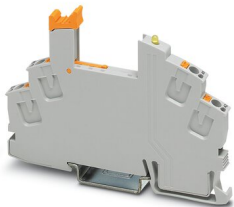


6.2 mm PLC basic terminal block with protection against interference currents/voltages on the control side, with screw connection, without relay or solid-state relay, for mounting on DIN rail NS 35/7,5, with increased input current consumption, 1 changeover contact, input voltage 24 V DC

Relay base

Relay base - RIF-0-BPT/1 - 2901873

<https://www.phoenixcontact.com/pc/products/2901873>



RIF-0... relay base, for miniature power relay with 1 N/O contact or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

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



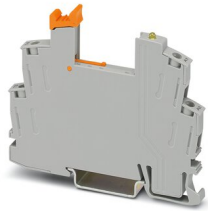
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Relay base

Relay base - RIF-0-BSC/ 1 - 2901872

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RIF-0... relay base, for miniature power relay with 1 N/O contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

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