

Miniature solid-state relay - OPT-24DC/ 24DC/ 5 - 2982100

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Plug-in miniature solid-state relay, power solid-state relay, input: 24 V DC, output: 3 - 33 V DC/5 A




The illustration shows the version OPT-24DC/24DC/5

Why buy this product

- Vibration and shock resistant
- RT III wash tight (comparable with IP67)
- Wear-free and durable
- Zero voltage switch at AC output
- Switching power of up to 24 V DC/5 A
- Can be soldered on PCB



Key commercial data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 017918 937492
Weight per Piece (excluding packing)	11.68 g
Custom tariff number	85364190
Country of origin	Hungary

Technical data

Dimensions

Width	12.7 mm
Height	29 mm
Depth	15.7 mm

Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 70 °C
Degree of protection	IP67

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Technical data

Input data

Nominal input voltage U_N	24 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
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
Typical turn-off time	400 μ s
Type of protection	Protection against polarity reversal
Protective circuit/component	Polarity protection diode
Transmission frequency	300 Hz

Output data

Output nominal voltage	24 V DC
Output voltage range	3 V DC ... 33 V DC
Limiting continuous current	5 A (see derating curve)
Maximum inrush current	15 A (10 ms)
Surge voltage protection	> 33 V DC
Voltage drop at max. limiting continuous current	≤ 200 mV
Output circuit	2-wire, floating
Type of protection	Protection against polarity reversal
	Surge protection
Protective circuit/component	Polarity protection diode

General

Test voltage input/output	2.5 kV (50 Hz, 1 min.)
Assembly instructions	In rows with zero spacing
Operating mode	100% operating factor
Inflammability class according to UL 94	V0
Name	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage / insulation	Basic insulation
Rated insulation voltage	100 V DC
Pollution degree	2
Surge voltage category	III

Classifications

eCl@ss

eCl@ss 4.0	27371102
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Classifications

eCl@ss

eCl@ss 4.1	27371102
eCl@ss 5.0	27371001
eCl@ss 5.1	27371001
eCl@ss 6.0	27371604
eCl@ss 7.0	27371604
eCl@ss 8.0	27371604

ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39121542

Approvals

Approvals

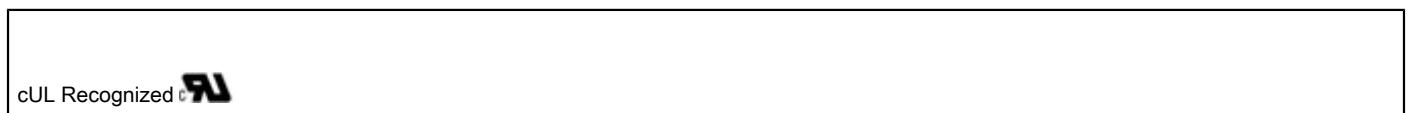
Approvals

UL Recognized / cUL Recognized / GL / UL Recognized / cUL Recognized / cULus Recognized

Ex Approvals

Approvals submitted


Approval details




Miniature solid-state relay - OPT-24DC/ 24DC/ 5 - 2982100

Approvals

GL

UL Recognized 

cUL Recognized 

cULus Recognized 

Accessories

Additional products

Relay socket - PLC-BPT- 24DC/21-21 - 2900283



14 mm PLC basic terminal blocks with Push-in connection, input voltage 24 V DC (without relay or optocoupler)

Relay socket - PLC-BSP- 24DC/21-21 - 2912439



14 mm PLC basic terminal blocks with spring-cage connection, 24 V DC input voltage (without relay or optocoupler)

Relay socket - PLC-BSC- 24DC/21-21 - 2967015



14 mm PLC basic terminal blocks with screw connection, 24 V DC input voltage (without relay or optocoupler)

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Accessories

Relay socket - PLC-BPT- 48DC/21-21 - 2900285



14 mm PLC basic terminal blocks with Push-in connection, input voltage 48 V DC (without relay or optocoupler)

Relay socket - PLC-BSP- 48DC/21-21 - 2912455



14 mm PLC basic terminal blocks with spring-cage connection, 48 V DC input voltage (without relay or optocoupler)

Relay socket - PLC-BSC- 48DC/21-21 - 2967264



14 mm PLC basic terminal blocks with screw connection, 48 V DC input voltage (without relay or optocoupler)

Relay socket - PLC-BPT- 24DC/ 1IC/ACT - 2900260



14 mm PLC actuator basic terminal block with load return line connection (BB), Push-in connection, 24 V DC input voltage, without relay or solid-state relay. Note: if fitted with a PDT relay, only the N/O contact is led out.

Relay socket - PLC-BSP- 24DC/ 1IC/ACT - 2912400



14 mm PLC actuator basic terminal block with load return line connection (BB), spring-cage connection, 24 V DC input voltage, without relay or solid-state relay. Note: if fitted with a PDT relay, only the N/O contact is led out.

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Accessories

Relay socket - PLC-BSC- 24DC/ 1IC/ACT - 2967837



14 mm PLC actuator basic terminal block with load return line connection (BB), screw connection, 24 V DC input voltage, without relay or solid-state relay. Note: if fitted with a PDT relay, only the N/O contact is led out.

Relay socket - PLC-BPT- 24DC/21HC - 2900254



14 mm PLC-HC basic terminal blocks with Push-in connection, input voltage 24 V DC (without relay or optocoupler)

Relay socket - PLC-BSP- 24DC/21HC - 2912345



14 mm PLC basic terminal blocks with spring-cage connection, 24 V DC input voltage (without relay or optocoupler)

Relay socket - PLC-BSC- 24DC/21HC - 2967772



14 mm PLC-HC basic terminal blocks with screw connection, 24 V DC input voltage (without relay or optocoupler)

Relay socket - PLC-BPT- 24DC/ 1IC/ACT - 2900260



14 mm PLC actuator basic terminal block with load return line connection (BB), Push-in connection, 24 V DC input voltage, without relay or solid-state relay. Note: if fitted with a PDT relay, only the N/O contact is led out.

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Accessories

Relay socket - PLC-BSP- 48DC/21HC - 2912361



14 mm PLC basic terminal blocks with spring-cage connection, 48 V DC input voltage (without relay or optocoupler)

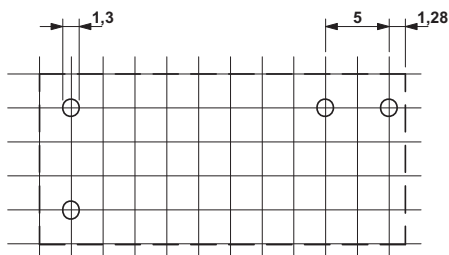
Relay socket - PLC-BSC- 48DC/21HC - 2967798



14 mm PLC-HC basic terminal blocks with screw connection, 48 V DC input voltage (without relay or optocoupler)

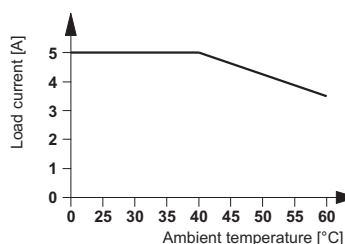
Drawings

Drilling diagram

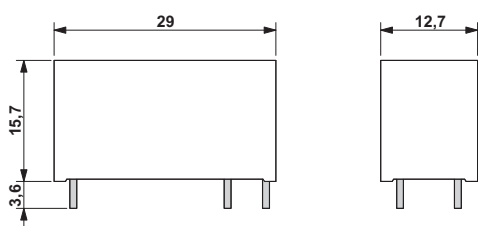


Basic pitch 2.5 mm

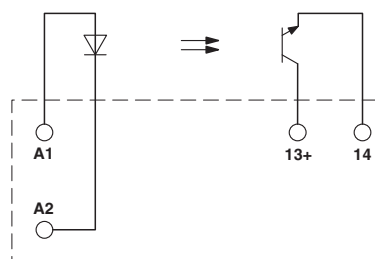
Diagram



Dimensioned drawing



Circuit diagram



Pin assignments: View of the connections