

# 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

## Product Features

- 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

<b>package_quantity</b>	10
<b>GTIN</b>	4017918937492

## Technical data

### Dimensions

<b>Width</b>	12.7 mm
<b>Height</b>	29 mm
<b>Depth</b>	15.7 mm

### Ambient conditions

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

### Input data

<b>Nominal input voltage <math>U_N</math></b>	24 V DC
<b>Input voltage range in reference to <math>U_N</math></b>	0.8 ... 1.2
<b>Switching threshold "0" signal, voltage</b>	$\leq 10$ V
<b>Switching threshold "1" signal voltage</b>	$\geq 16$ V
<b>Typical input current at <math>U_N</math></b>	7 mA
<b>Typical response time</b>	20 $\mu$ s
<b>Typical turn-off time</b>	400 $\mu$ s

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## Technical data

### Input data

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
Type of protection	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
Standards/regulations	EN 50178
Standards/regulations	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
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
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## classifications

### ETIM

ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504

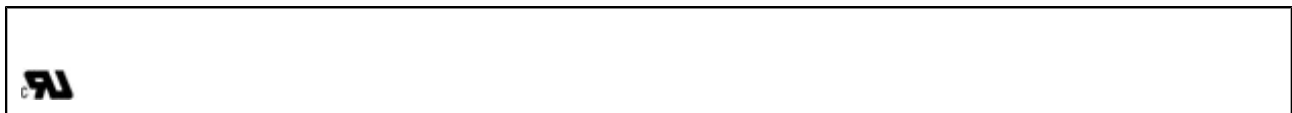
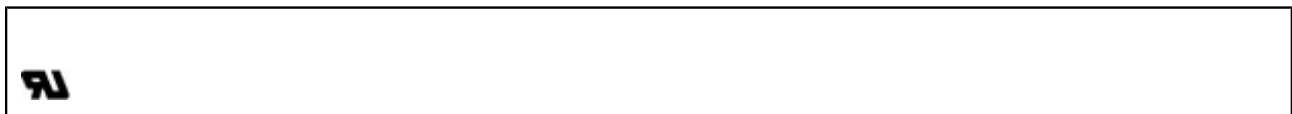
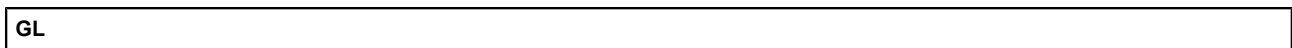
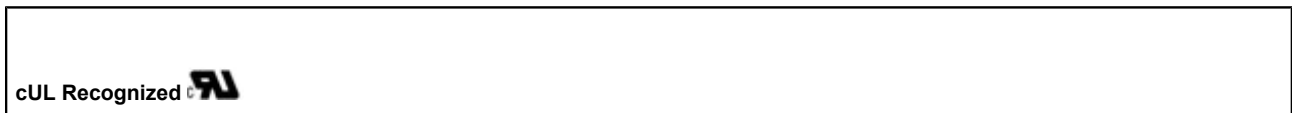
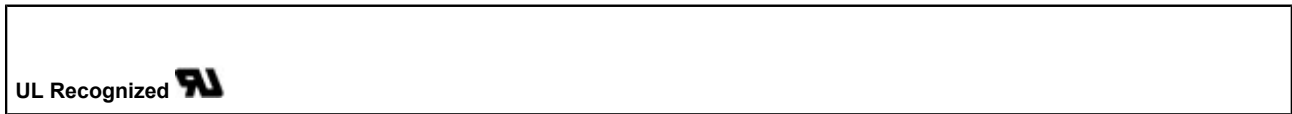
### UNSPSC

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

## approvals

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

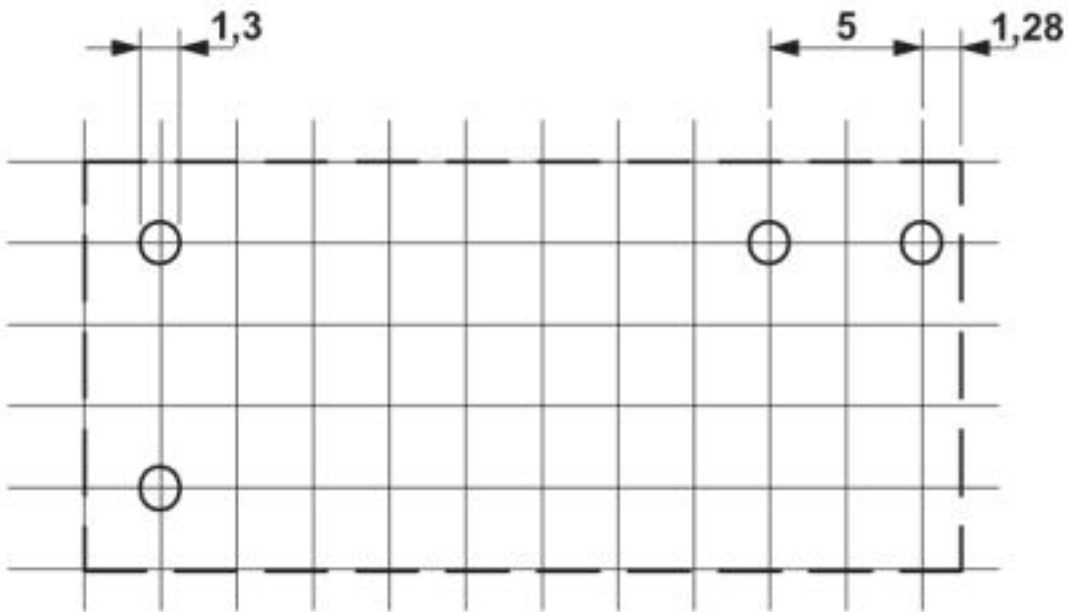
### Approval details



## Drawings

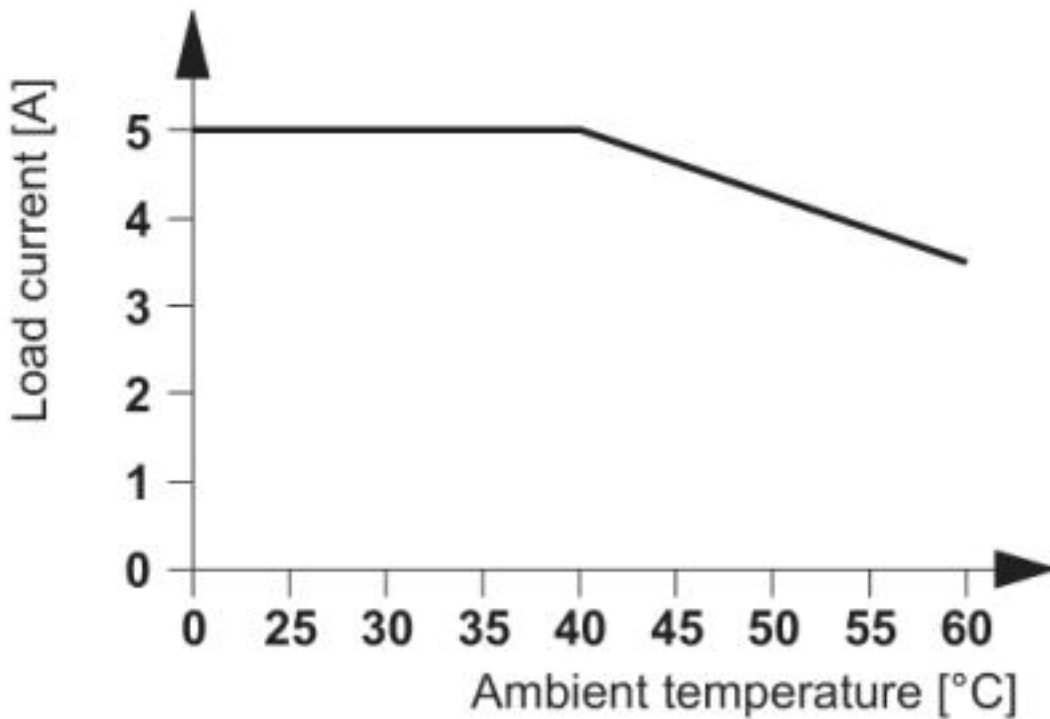
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Drilling diagram



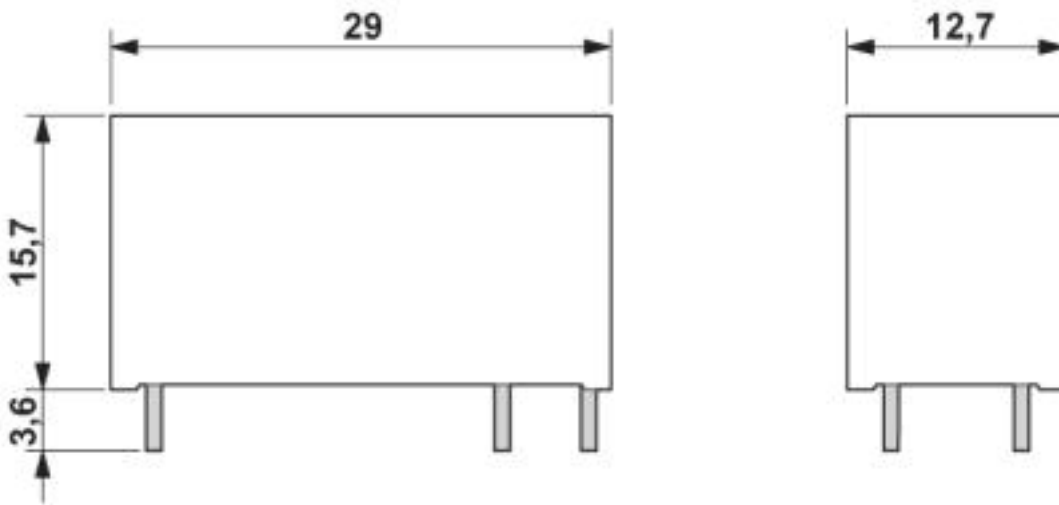
Basic pitch 2.5 mm

Diagram

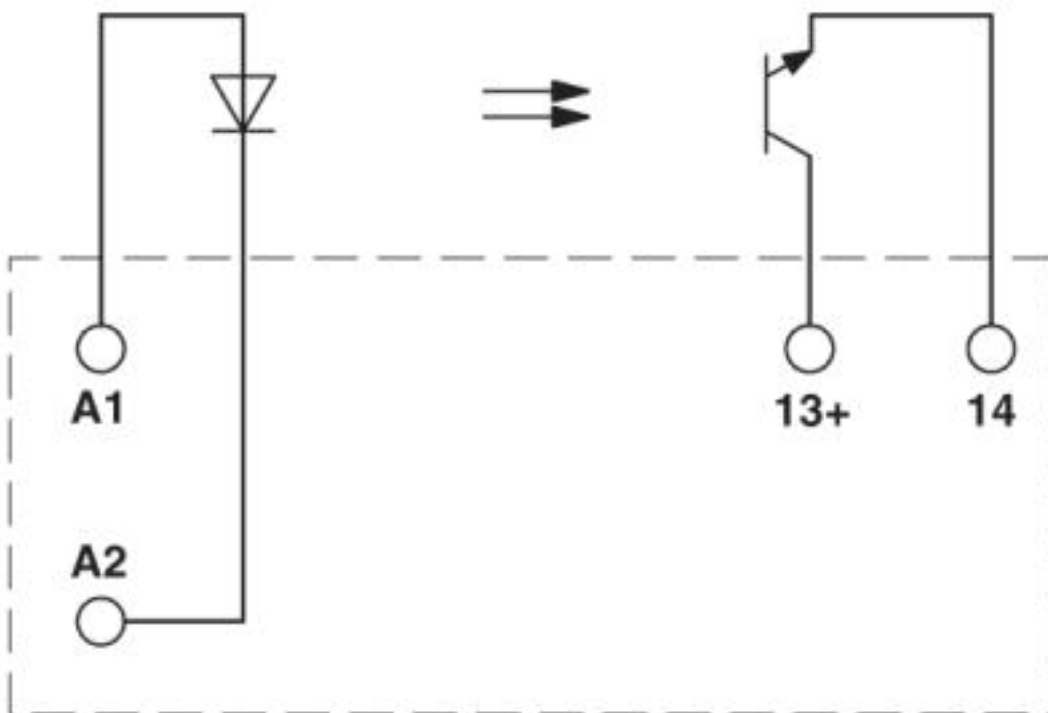


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Dimensioned drawing



Circuit diagram



Pin assignments: View of the connections

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