

## Miniature solid-state relay - OPT-24DC/230AC/ 2 - 2982171

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 24 V DC, output: 24 - 253 V AC/2 A

### Product Features

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



### Key commercial data

Packing unit	1 pc
Minimum order quantity	10 pc
Weight per Piece (excluding packing)	10.33 GRM
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	IP64

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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	< 8.4 V DC
Switching threshold "1" signal voltage	> 18 V DC
Typical input current at $U_N$	7 mA
Typical response time	10 ms
Typical turn-off time	10 ms
Type of protection	Protection against polarity reversal
Protective circuit/component	Polarity protection diode
Transmission frequency	10 Hz

### Output data

Output nominal voltage	230 V AC
Output voltage range	24 V AC ... 253 V AC
Limiting continuous current	2 A (see derating curve)
Maximum inrush current	30 A (10 ms)
Min. load current	25 mA
Leakage current	typ. 1 mA
Surge current	30 A (10 ms)
Max. load value	4 A <sup>2</sup> s (tp = 10 ms, at 25 °C)
Voltage drop at max. limiting continuous current	≤ 1 V
Output circuit	2-conductor floating, zero voltage switch
Type of protection	Surge protection
Protective circuit/component	RC element

### General

Test voltage input/output	2.5 kV (50 Hz, 1 min.)
Mounting position	any
Assembly instructions	See derating curve
Operating mode	100% operating factor
Inflammability class according to UL 94	V0
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Rated surge voltage / insulation	Basic insulation
Rated insulation voltage	250 V AC
Pollution degree	2

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## Technical data

### General

Surge voltage category	III
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## 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
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

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

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#### Ex Approvals

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#### Approvals submitted

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## Approvals

### Approval details

UL Recognized

cUL Recognized

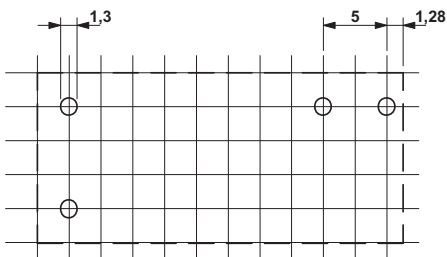
UL Recognized

cUL Recognized

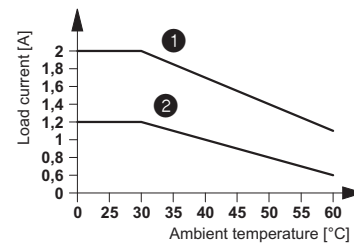
cULus Recognized

## Drawings

Drilling diagram



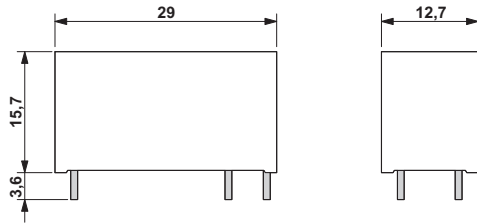
Diagram



- 1 In rows with 10 mm spacing
- 2 In rows with zero spacing

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Dimensioned drawing



Circuit diagram

