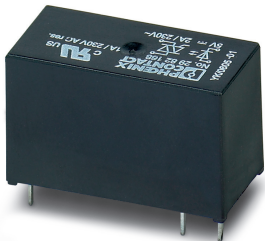


Miniature solid-state relay - OPT- 5DC/230AC/ 2 - 2982168

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 5 V DC, output: 24 - 253 V AC/2 A

The figure shows the 24 V design

Your advantages

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



Key Commercial Data

Packing unit	1 pc
Minimum order quantity	10 pc
GTIN	 4 017918 996963
GTIN	4017918996963
Weight per Piece (excluding packing)	10.930 g
Custom tariff number	85364190
Country of origin	Hungary

Technical data

Dimensions

Width	12.7 mm
Height	29 mm

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Technical data

Dimensions

Depth	15.7 mm
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Ambient conditions

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

Input data

Nominal input voltage U_N	5 V DC
Input voltage range in reference to U_N	0.8 ... 1.2
Input voltage range	4 V DC ... 6 V DC
Switching threshold "0" signal, voltage	< 1 V DC
Switching threshold "1" signal voltage	> 3 V DC
Typical input current at U_N	15 mA
Typical response time	10 ms
Typical turn-off time	10 ms
Type of protection	Reverse polarity protection
Protective circuit/component	Polarity protection diode
Transmission frequency	10 Hz
Power dissipation for nominal condition	0.08 W

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	< 1 mA
Surge current	30 A (10 ms)
Max. load value	4 A ² 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	2.5 kV (50 Hz, 1 min., input/output)
Mounting position	any
Assembly instructions	See derating curve

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Technical data

General

Operating mode	100% operating factor
Flammability rating according to UL 94	V0 (Housing)

Standards and Regulations

Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	250 V AC
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

Conformance/approvals

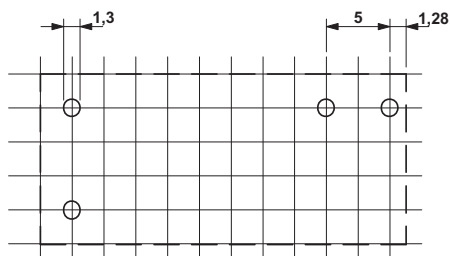
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Environmental Product Compliance

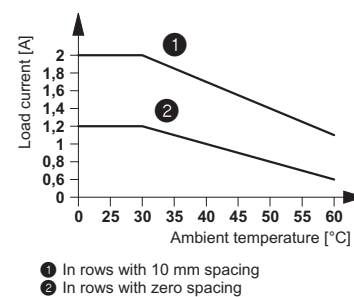
China RoHS	Environmentally friendly use period: unlimited = EFUP-e
	No hazardous substances above threshold values

Drawings

Drilling diagram

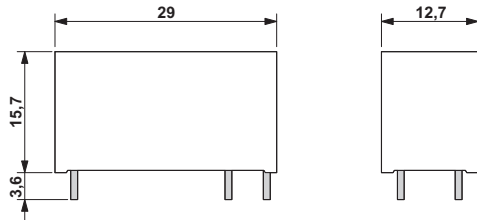


Diagram

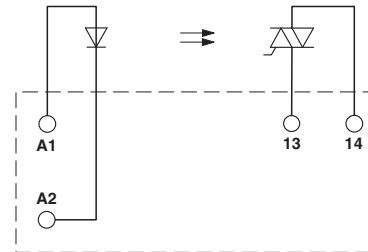


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Dimensional drawing



Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	27371604
eCl@ss 11.0	27371604
eCl@ss 4.0	27371100
eCl@ss 4.1	27371100
eCl@ss 5.0	27371000
eCl@ss 5.1	27371000
eCl@ss 6.0	27371600
eCl@ss 7.0	27371604
eCl@ss 9.0	27371604

ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 6.0	EC001504
ETIM 7.0	EC001504

UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121542
UNSPSC 11	39121542
UNSPSC 12.01	39121542
UNSPSC 13.2	39122326
UNSPSC 18.0	39122326
UNSPSC 19.0	39122326
UNSPSC 20.0	39122326
UNSPSC 21.0	39122326

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Approvals

Approvals

Approvals

UL Recognized / cUL Recognized / UL Recognized / cUL Recognized / EAC / EAC

Ex Approvals

Approval details

UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
EAC			TR_TS_D_00573_c
EAC			RU*C- DE.*08.B.00010

Accessories

Additional products

Miniature solid-state relay - OPT- 5DC/230AC/ 2 - 2982168

Accessories

Relay base - PR1-BSC2/2X21 - 2833518



PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays of the same design, 2/2-level version, screw connections, plug-in option for input/interference suppression modules

Relay base - PR1-BSC3/2X21 - 2833521



PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays of the same design, 1/3-level version, screw connections, plug-in option for input/interference suppression modules

Relay base - PR1-BSP3/2X21 - 2833534



PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays with the same design, 1/3-level version, spring-cage connections, plug-in option for input/interference suppression modules

Relay base - RIF-1-BPT/2X21 - 2900931



Relay base RIF-1..., for miniature power relay with 1 or 2 changeover contacts or solid-state relays of the same design, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Relay base - RIF-1-BSC/2X21 - 2900930



RIF-1... relay base, for miniature power relay with 1 or 2 changeover contacts or identical solid-state relays, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

