

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 input/output	2.5 kV (50 Hz, 1 min.)
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

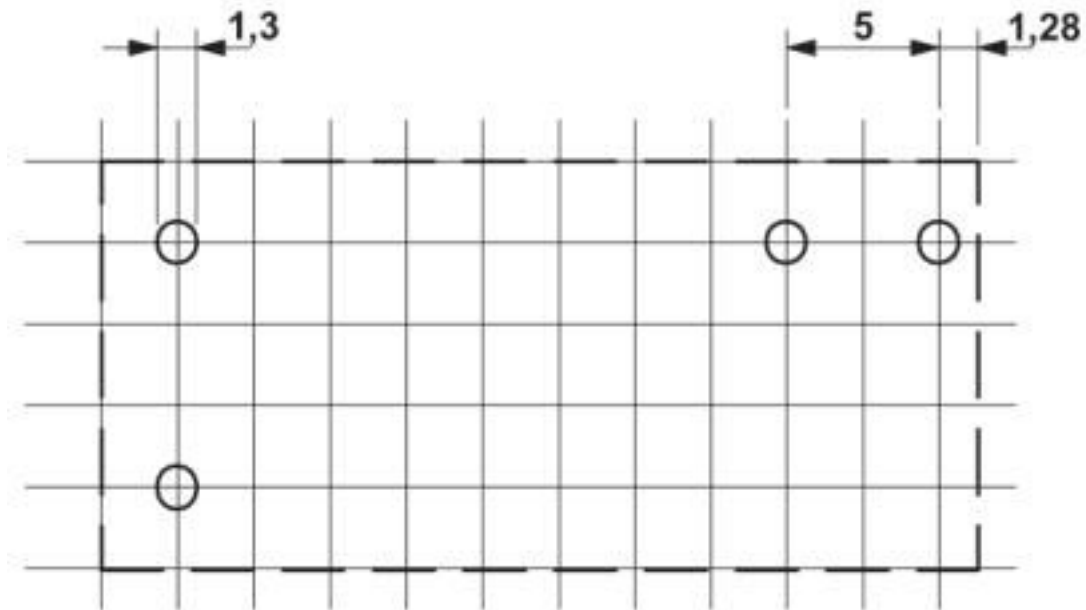
Connection in acc. with standard	CUL
Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	250 V AC
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50 years
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

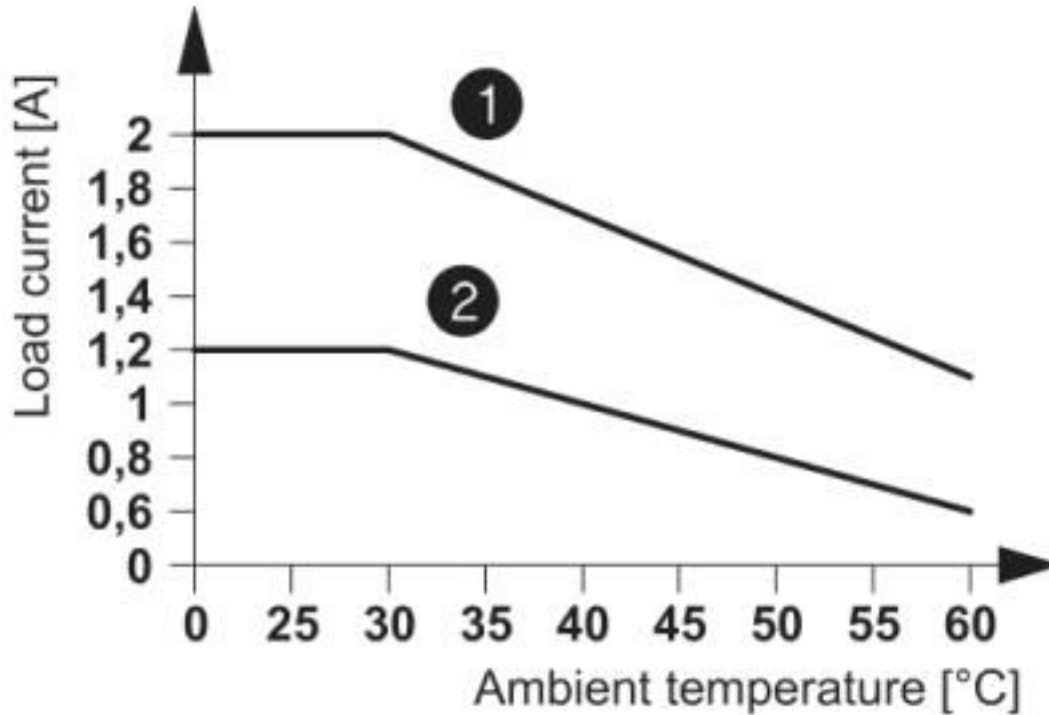
Drawings

Drilling diagram



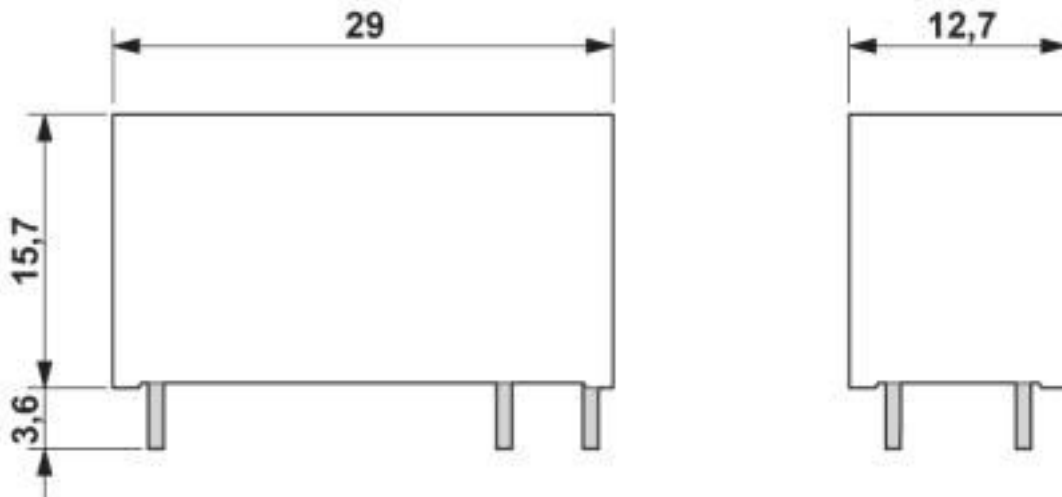
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Diagram



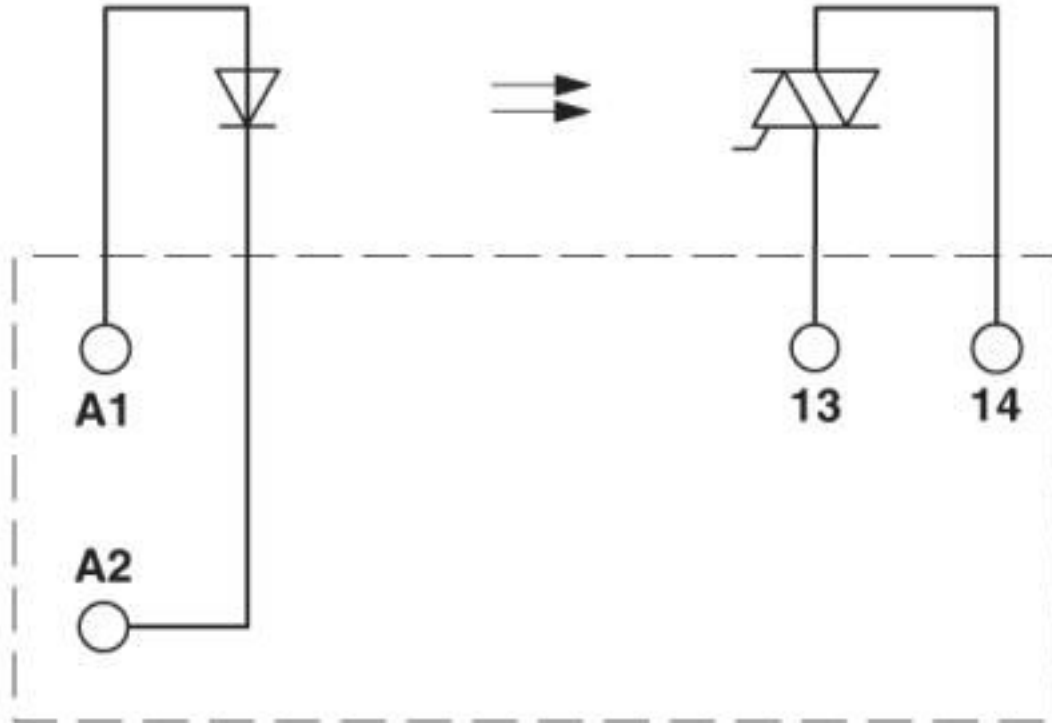
- ① In rows with 10 mm spacing
- ② In rows with zero spacing

Dimensional drawing



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Circuit diagram



Classifications

eCl@ss

eCl@ss 10.0.1	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 8.0	27371604
eCl@ss 9.0	27371604

ETIM

ETIM 2.0	EC001504
ETIM 3.0	EC001504
ETIM 4.0	EC001504
ETIM 5.0	EC001504
ETIM 6.0	EC001504

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Classifications

ETIM

ETIM 7.0	EC001504
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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

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
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cUL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
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UL Recognized		http://database.ul.com/cgi-bin/XYV/template/LISEXT/1FRAME/index.htm	FILE E 195083
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Approvals

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

Additional products

Relay base - PR1-BSC2/2X21 - 2833518



Relay base PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 2/2 level design, screw connections, connection facility for input/interference suppression modules

Relay base - PR1-BSC3/2X21 - 2833521



Relay base PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, screw connections, connection facility for input/interference suppression modules

Relay base - PR1-BSP3/2X21 - 2833534



Relay base PR1..., for miniature power relay or miniature switching relay with 1 or 2 PDT or solid-state relay of same construction, 1/3 level design, spring-cage connections, connection facility for input/interference suppression modules

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Accessories

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



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor 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