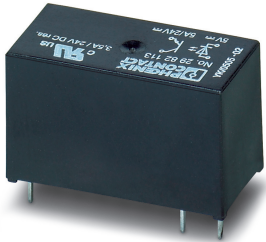


Miniature solid-state relay - OPT- 5DC/ 24DC/ 5 - 2982113

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Plug-in miniature solid-state relay, power solid-state relay, 1 N/O contact, input: 5 V DC, output: 3 - 33 V DC/5 A

Your advantages

- Vibration and shock resistant
- RT III-proof (wash-proof)
- 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
GTIN	 4 017918 989774
GTIN	4017918989774
Weight per Piece (excluding packing)	11.060 g
Custom tariff number	85364190
Country of origin	Hungary

Technical data

Dimensions

Width	12.7 mm
Height	29 mm
Depth	15.7 mm

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Technical data

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	≤ 0.8 V
Switching threshold "1" signal voltage	≥ 2.5 V
Typical input current at U_N	9 mA
Typical response time	10 μ s
Typical turn-off time	400 μ s
Type of protection	Reverse polarity protection
Protective circuit/component	Polarity protection diode
Transmission frequency	300 Hz
Power dissipation for nominal condition	0.05 W

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-conductor, floating
Type of protection	Reverse polarity protection
	Surge protection
Protective circuit/component	Polarity protection diode

General

Test voltage	2.5 kV (50 Hz, 1 min., input/output)
Mounting position	any
Assembly instructions	in rows with zero spacing
Operating mode	100% operating factor
Flammability rating according to UL 94	V0 (Housing)

Standards and Regulations

Connection in acc. with standard	CUL
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Technical data

Standards and Regulations

Designation	Standards/regulations
Standards/regulations	IEC 60664
	EN 50178
Rated insulation voltage	100 V DC
Insulation	Basic insulation
Pollution degree	2
Overvoltage category	III

Conformance/approvals

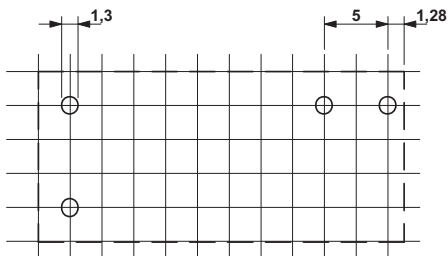
Designation	Corrosive gas test
Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

Environmental Product Compliance

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

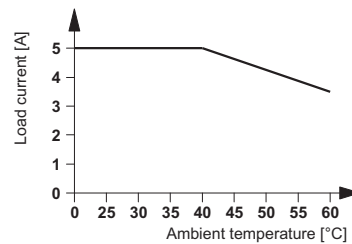
Drawings

Drilling diagram



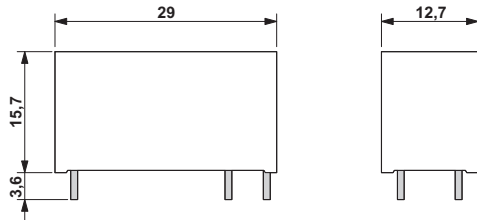
Basic pitch 2.5 mm

Diagram

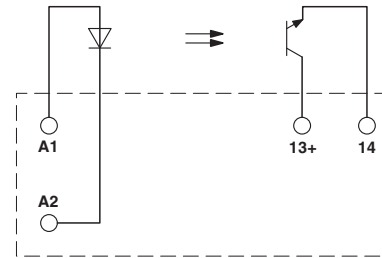


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Dimensional drawing



Circuit diagram



Pin assignments: View of the connections

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

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

Accessories

Additional products

Miniature solid-state relay - OPT- 5DC/ 24DC/ 5 - 2982113

Accessories

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