

# Relay Module - PR1-RSP3-LDP-24DC/2X21AU - 2834601

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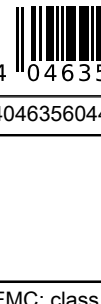
Preassembled relay modules with spring-cage connection, consisting of: relay base, multi-layer contact relay, pluggable display or interference suppression module and retaining bracket. Input voltage: 24 V DC, two PDTs, 8 A

## Why buy this product

- Safe isolation between coil and contact side
- Operational reliability thanks to sealed relay
- Logical contact arrangement thanks to 1/3-level relay base



## Key Commercial Data

Packing unit	5 STK
GTIN	 4 046356 044493
GTIN	4046356044493

## Technical data

### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
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### Dimensions

Width	16 mm
Height	97 mm
Depth	72 mm

### Ambient conditions

Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C

### Coil side

Nominal input voltage $U_N$	24 V DC
Typical input current at $U_N$	19 mA

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## Technical data

### Coil side

Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.46 W

### Contact side

Contact type	2 PDT
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC 36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Min. switching current	1 mA (at 24 V)
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

### General

Test voltage relay winding/relay contact	4 kV (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	3x 10 <sup>7</sup> cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

### Connection data input side

Connection name	Coil side
Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross section solid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 16

### Standards and Regulations

Standards/regulations	IEC 60664 EN 50178
Degree of pollution	3
Overvoltage category	III

### Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
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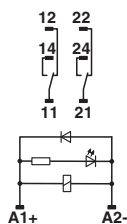
## Technical data

### Environmental Product Compliance

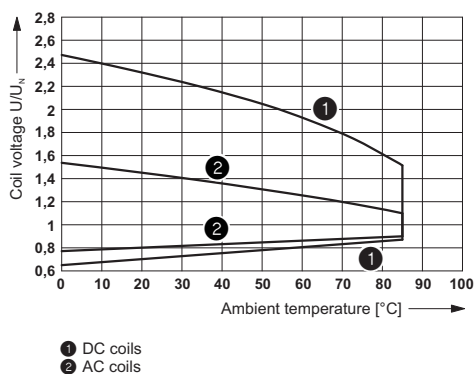
For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

## Drawings

Circuit diagram

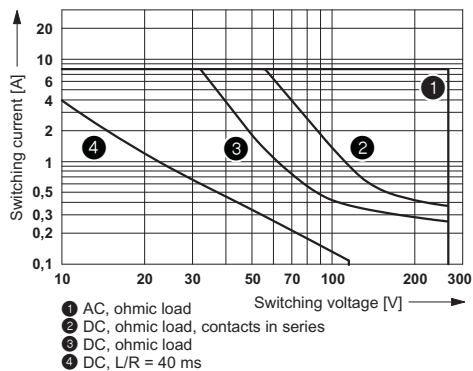


Diagram



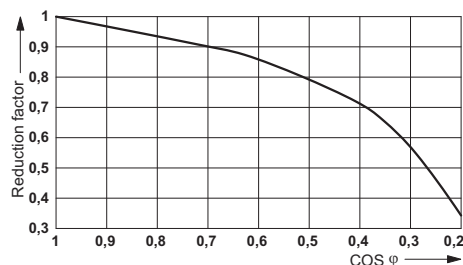
Operating voltage range of the relay

Diagram



Interrupting rating

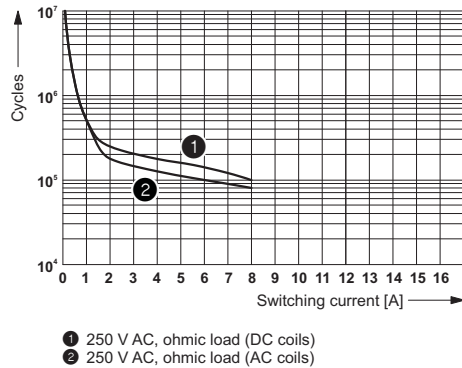
Diagram



Service life reduction factor with various cos phi

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Diagram



Electrical service life

### Articles in set

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

Single relay - REL-MR- 24DC/21-21AU - 2961215



Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 24 V DC

Plug-in module - LDP- 12- 24DC - 2833657



Plug-in module, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 12 ... 24 V DC  $\pm 20\%$

Retaining bracket - EL1-P16 - 2833547



Relay retaining bracket, with eject function and integrated equipment marking area (7.5 x 15 mm), to suit relay base PR1, for 16 mm high miniature power relay and solid-state relay

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## Articles in set

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### Approvals

Approvals

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Approvals

EAC

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Ex Approvals

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### Approval details

EAC		RU C- DE.A*30.B.01082
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