

## Relay Module - PR1-RSP3-LV-120AC/2X21AU - 2834627

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Preassembled relay modules with spring-cage connection, consisting of: Relay socket, multi-layer contact relay, pluggable display or interference suppression module and retaining bracket. Input voltage: 120 V AC, two PDTs, 8 A

### Product Features

- 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	1 pc
Minimum order quantity	5 pc
Weight per Piece (excluding packing)	65.6 g
Custom tariff number	85364900
Country of origin	Germany

### 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

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### Technical data

#### Coil side

Nominal input voltage $U_N$	120 V AC
Typical input current at $U_N$	9 mA (at 50 Hz)
	7 mA (At 60 Hz)
Typical response time	3 ms ... 12 ms
Typical release time range	1.5 ms ... 16 ms
Protective circuit	Varistor
Operating voltage display	Yellow LED

#### Contact side

Contact type	2 PDT
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)
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V
Limiting continuous current	8 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA
Interrupting rating (ohmic load) max.	2000 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 A (at 250 V, AC15)

#### 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	$3 \times 10^7$ cycles
Standards/regulations	IEC 60664

## Relay Module - PR1-RSP3-LV-120AC/2X21AU - 2834627

### Technical data

#### General

	EN 50178
	IEC 62103
Degree of pollution	3
Overvoltage category	III
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
	IEC 62103
Degree of pollution	3
Overvoltage category	III

### Articles in set

Relay socket - PR1-BSP3/2X21 - 2833534



Relay socket 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-120AC/21-21AU - 2961477



Plug-in miniature power relay, with multi-layer gold contact, 2 PDTs, input voltage 120 V AC

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## Articles in set

Plug-in module - LV-120-230AC/110DC - 2833738



Plug-in module, for mounting on PR1 and PR2, with varistor and yellow LED, input voltage: 120 - 230 V AC/110 V DC  $\pm$  20%

Relay retaining bracket - EL1-P16 - 2833547



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

## Classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371603
eCl@ss 5.1	27371603
eCl@ss 6.0	27371603
eCl@ss 7.0	27371603
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

### ETIM

ETIM 2.0	EC001456
ETIM 3.0	EC001456
ETIM 4.0	EC001456
ETIM 5.0	EC001437

### UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39121516

# Relay Module - PR1-RSP3-LV-120AC/2X21AU - 2834627

## Approvals

Approvals

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Approvals

EAC

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Ex Approvals

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Approvals submitted

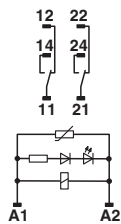
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## Approval details

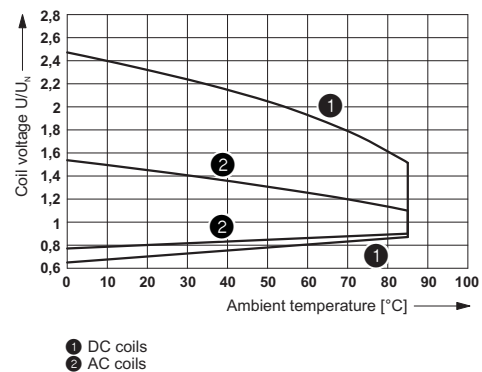
EAC

## Drawings

Circuit diagram



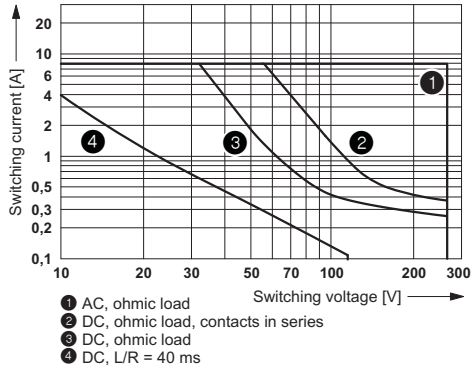
Diagram



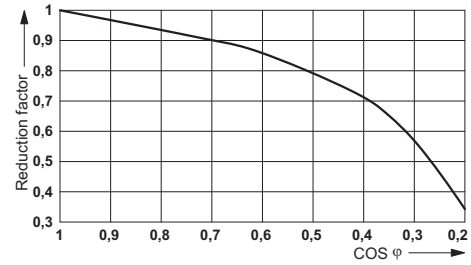
Operating voltage range of the relay

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Diagram



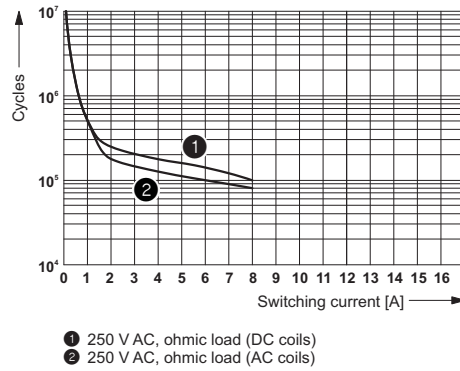
Diagram



Interrupting rating

Service life reduction factor with various cos phi

Diagram



Electrical service life