

## Relay Module - PR1-RSC3-LDP-24DC/2X21 - 2834481

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Preassembled relay modules with screw connection, consisting of: Relay socket, power contact relay with pluggable display or interference suppression module and retaining bracket. Input voltage: 24 V DC, 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)	65.4 GRM
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	78.5 mm
Depth	71 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 $U_N$	24 V DC
Typical input current at $U_N$	19 mA
Typical response time	8 ms
Typical release time	10 ms
Operating voltage display	Yellow LED
Protective circuit	Damping diode

### Contact side

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA (At 5 V)
Limiting continuous current	8 A
Interrupting rating (ohmic load) max.	2000 W (for 250 V AC)
	44 W (at 110 V DC)
	60 W (at 220 V DC)
	190 W (at 24 V DC)
	At 440 V AC
	85 W (at 48 V DC)
	60 W (at 60 V DC)
Interrupting rating (lamp load) max.	50 mW
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 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
	EN 50178
	IEC 62103
Pollution degree	3

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## Technical data

### General

Surge voltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

### Connection data

Connection method	Screw connection
Stripping length	8 mm
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	2.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	2.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil max	14
Conductor cross section AWG/kcmil min.	26
Screw thread	M3

## Articles in set

### Relay socket - PR1-BSC3/2X21 - 2833521



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, screw connections, connection facility for input/interference suppression modules

### Single relay - REL-MR- 24DC/21-21 - 2961192



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

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



Plug-in module, for mounting on PR1 and PR2, with damping diode and yellow LED, polarity: A1+, A2-, input voltage: 12 -24 V DC ± 20%

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## Articles in set

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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

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## 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	27371603

### ETIM

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

### UNSPSC

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

## Accessories

Accessories

Bridge

## Relay Module - PR1-RSC3-LDP-24DC/2X21 - 2834481

### Accessories

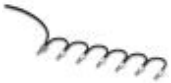
Wire bridge - DB 50- 90 BU - 2821180

Wire bridge, Color: blue



Wire bridge - DB 50- 90 BK - 2820916

Wire bridge, Color: black



Wire bridge - DB 50- 90 GY - 2820929

Wire bridge, Color: gray



### Device marking

Label - EML (15X6) R YE - 0819288



Label, Roll, yellow, unlabeled, can be labeled with: THERMOMARK ROLL, THERMOMARK X, THERMOMARK S1.1,  
Mounting type: Adhesive, Lettering field: 15 x 6 mm

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### Marking material

Marker labels - MP 1 - 2833631



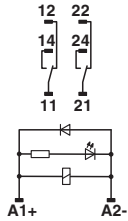
Equipment marker, labeling surface 6 x 15 mm

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## Accessories

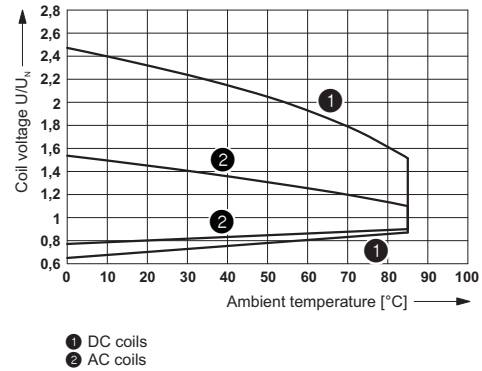
### Drawings

Circuit diagram



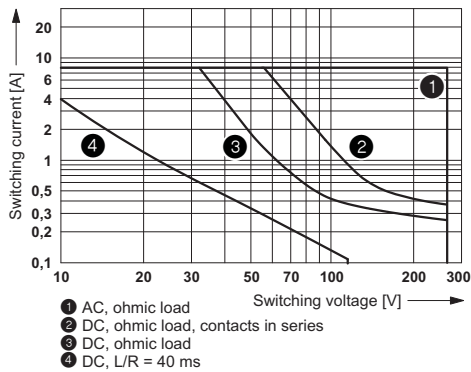
DC coils

Diagram



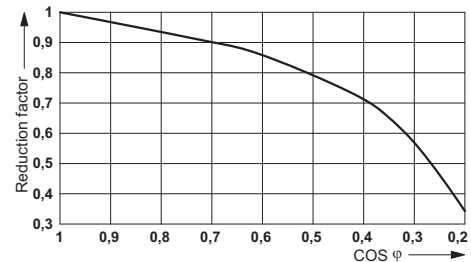
Operating voltage range of the relay

Diagram



Interrupting rating

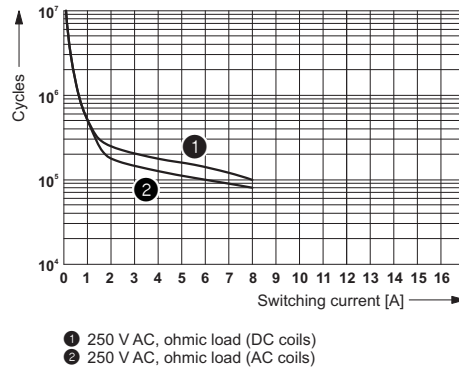
Diagram



Service life reduction factor with various cos phi

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Diagram



Electrical service life