

Relay Module - PR1-RSP3-LDP-24DC/21 - 2834407

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Preassembled relay modules with spring-cage connection, consisting of: Relay socket, power contact relay, pluggable display or interference suppression module and retaining bracket. Input voltage: 24 V DC, 1 PDT, 10 A

Product Features

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



Key commercial data

Packing unit	1 pc
Minimum order quantity	5 pc
Weight per Piece (excluding packing)	66.06 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	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	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	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Maximum inrush current	30 A (300 ms)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	10 A
Interrupting rating (ohmic load) max.	3000 W (for 250 V AC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	288 W (at 24 V DC)
	At 440 V AC
	58 W (at 48 V DC)
	48 W (at 60 V DC)
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)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 V, AC15)

General

Test voltage relay winding/relay contact	4 kV (50 Hz, 1 min.)
Operating mode	100% operating factor
Mechanical service life	3×10^7 cycles
Standards/regulations	IEC 60664
	EN 50178
	IEC 62103
Pollution degree	3
Surge voltage category	III

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Technical data

General

Mounting position	any
Assembly instructions	In rows with zero spacing

Connection data

Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross section stranded min.	0.2 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section solid min.	0.2 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section AWG/kcmil max	16
Conductor cross section AWG/kcmil min.	24

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- 24DC/21HC - 2961312



Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, 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 $\pm$ 20%

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Articles in set

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	27371603

ETIM

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

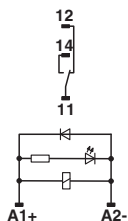
UNSPSC

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

Drawings

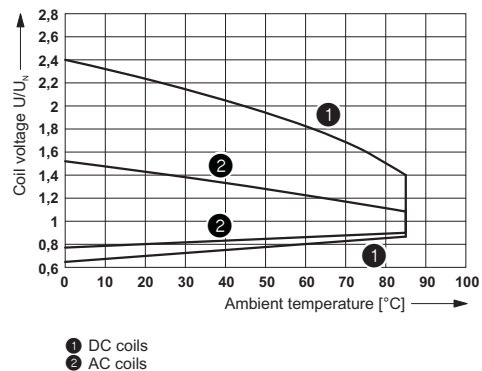
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Circuit diagram



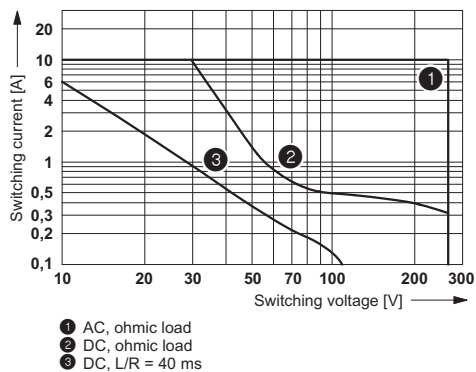
DC coils

Diagram



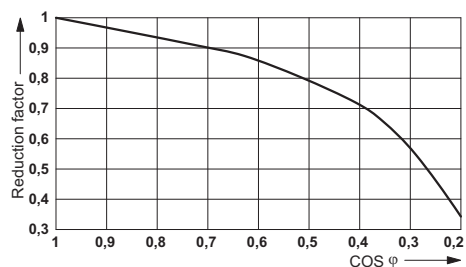
Operating voltage range of the relay

Diagram



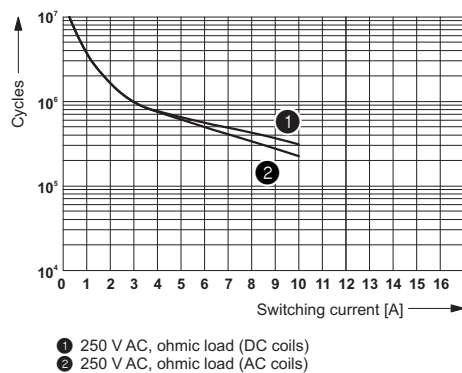
Interrupting rating

Diagram



Service life reduction factor with various cos phi

Diagram



Electrical service life

