

Relay Module - PR1-RSP3-LV- 24AC/21 - 2834410

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Preassembled relay modules with spring-cage connection, consisting of: Relay socket plug-in miniature power relay with power contacts, plug-in display/interference suppression module and relay retaining bracket. Input voltage: 24 V AC, contacts: 1 PDT, 10 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)	66.0 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	24 V AC
Typical input current at U_N	34 mA (at 50 Hz)
	26 mA (At 60 Hz)
Typical response time	3 ms ... 12 ms
Typical release time range	1.5 ms ... 14 ms
Protective circuit	Varistor
Operating voltage display	Yellow LED

Contact side

Contact type	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	30 A (300 ms)
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
Degree of pollution	3

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Technical data

General

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 ² ... 1.5 mm ²
Conductor cross section flexible	0.2 mm ² ... 1.5 mm ²
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- 24AC/21HC - 2961406



Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 24 V AC

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Articles in set

Plug-in module - LV- 12- 24UC - 2833712



Plug-in module, for mounting on PR1 and PR2, with varistor and yellow LED, input voltage: 12 - 24 V AC/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

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Approvals

Approvals

Approvals

EAC

Ex Approvals

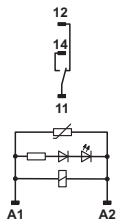
Approvals submitted

Approval details

EAC

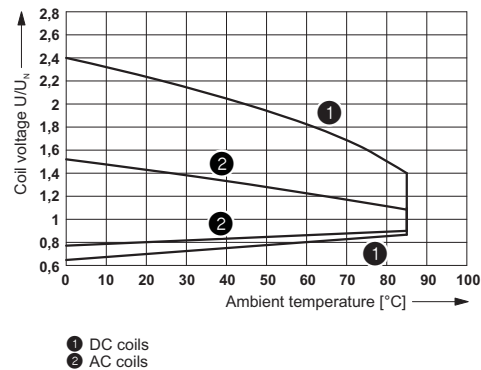
Drawings

Circuit diagram



AC coils

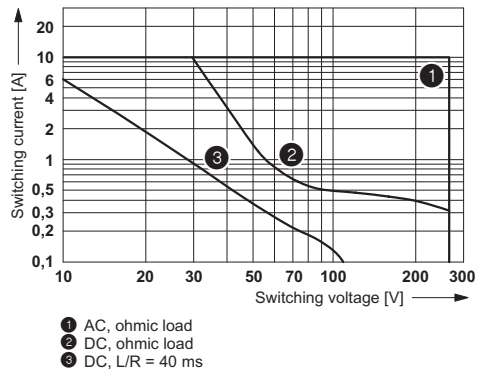
Diagram



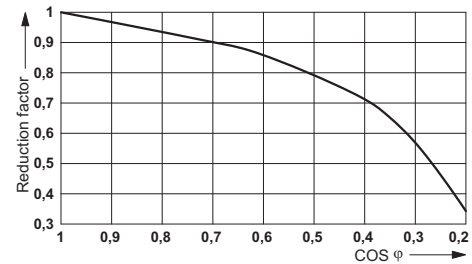
Operating voltage range of the relay

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Diagram



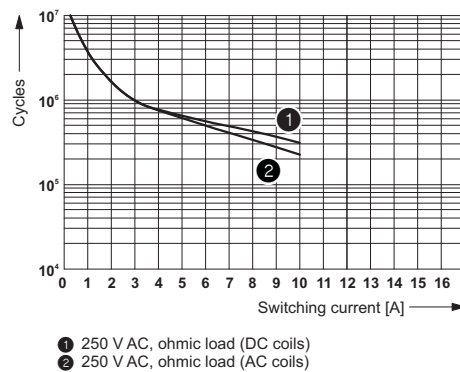
Diagram



Interrupting rating

Service life reduction factor with various cos phi

Diagram



Electrical service life