

PR1-RSP3-LV-120AC/21 - Relay module



2834423

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Pre-assembled relay modules with spring-cage connection, consisting of: relay base, plug-in miniature power relay with power contacts, plug-in display/interference suppression module, and relay retaining bracket. Input voltage: 120 V AC, contacts: 1 changeover contact, 10 A

Your advantages

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

Commercial data

Item number	2834423
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C463
Product key	CK6329
Catalog page	Page 392 (C-7-2013)
GTIN	4046356044318
Weight per piece (including packing)	65.89 g
Weight per piece (excluding packing)	65.89 g
Customs tariff number	85364900
Country of origin	DE

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Set consists of

PR1-BSP3/2X21 - Relay base

2833534

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PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays with the same design, 1/3-level version, spring-cage connections, plug-in option for input/interference suppression modules

REL-MR-120AC/21HC - Single relay

2961419

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Plug-in miniature power relay, with power contact for high continuous currents, 1 changeover contact, input voltage 120 V AC

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

2833738

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

EL1-P16 - Retaining bracket

2833547

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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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Technical data

Notes

Utilization restriction

EMC note	EMC: class A product, see manufacturer's declaration in the download area
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Product properties

Product type	Relay Module
Application	Universal
Operating mode	100% operating factor
Mechanical service life	3x 10 ⁷ cycles

Data management status

Date of last data management	21.05.2024
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Insulation characteristics

Overvoltage category	III
Pollution degree	3

Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.08 W
Test voltage (Winding/contact)	4 kV (50 Hz, 1 min., winding/contact)

Input data

Coil side

Nominal input voltage U _N	120 V AC
Input voltage range	93.6 V AC ... 186 V AC
Drive and function	monostable
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

Output data

Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC

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Minimum switching voltage	12 V (at 10 mA)
Limiting continuous current	10 A
Maximum inrush current	30 A (300 ms)
Min. switching current	10 mA (at 12 V)
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	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)

Connection data

Coil side

Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross section rigid	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

Contact side

Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross section rigid	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

Dimensions

Width	16 mm
Height	97 mm
Depth	72 mm

Material specifications

Color	green (RAL 6021)
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Environmental and real-life conditions

Ambient conditions

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

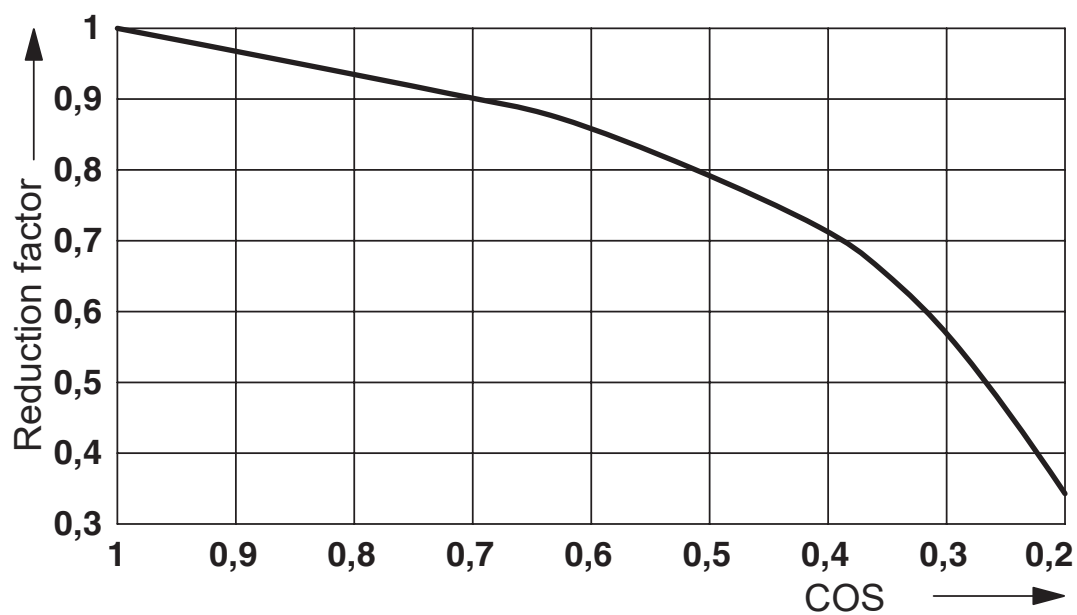
Standards/regulations	IEC 60664
	EN 50178

Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

Drawings

Diagram

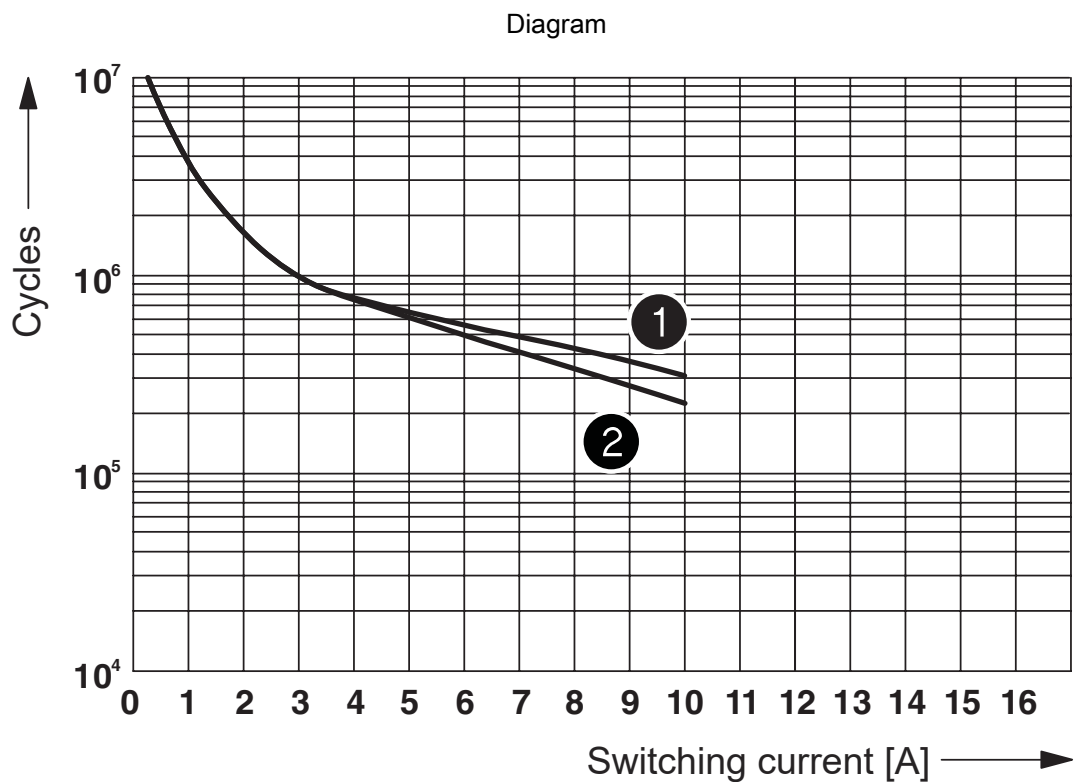


Service life reduction factor with various cos phi

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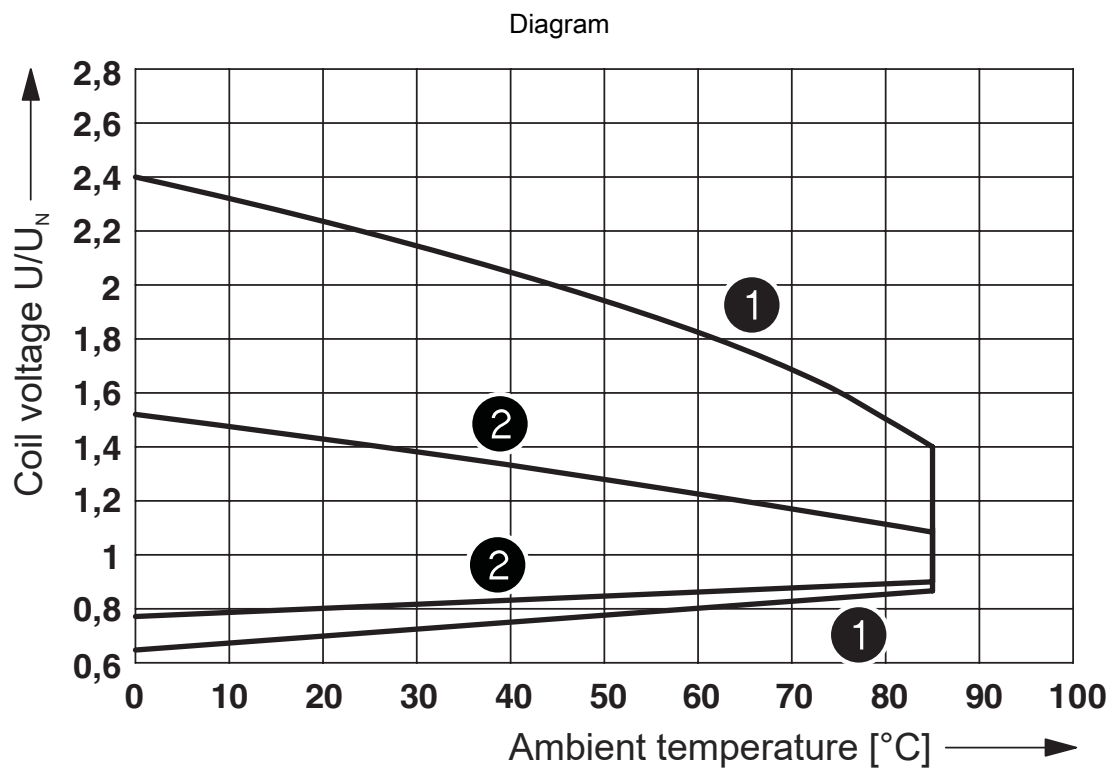
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- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

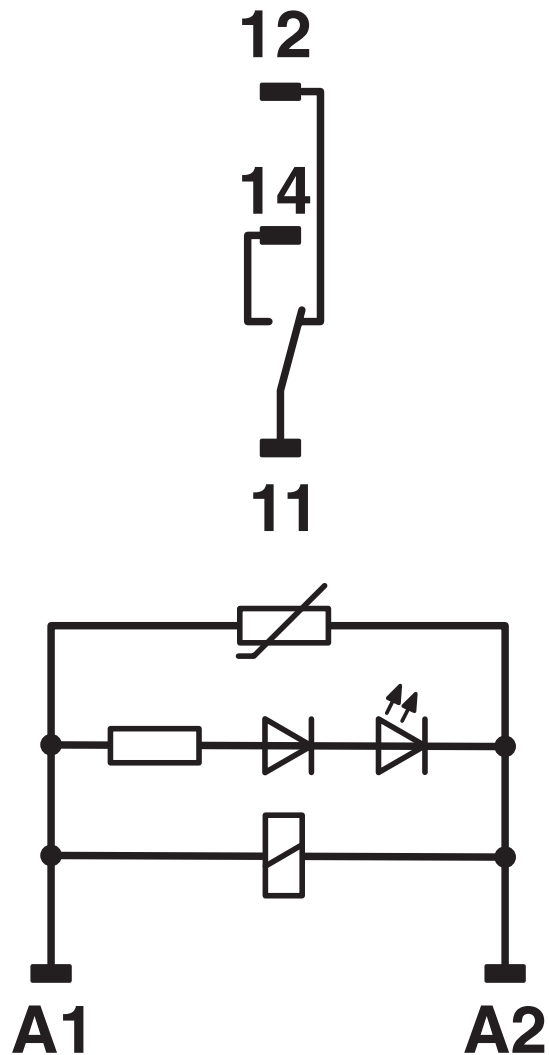
Electrical service life

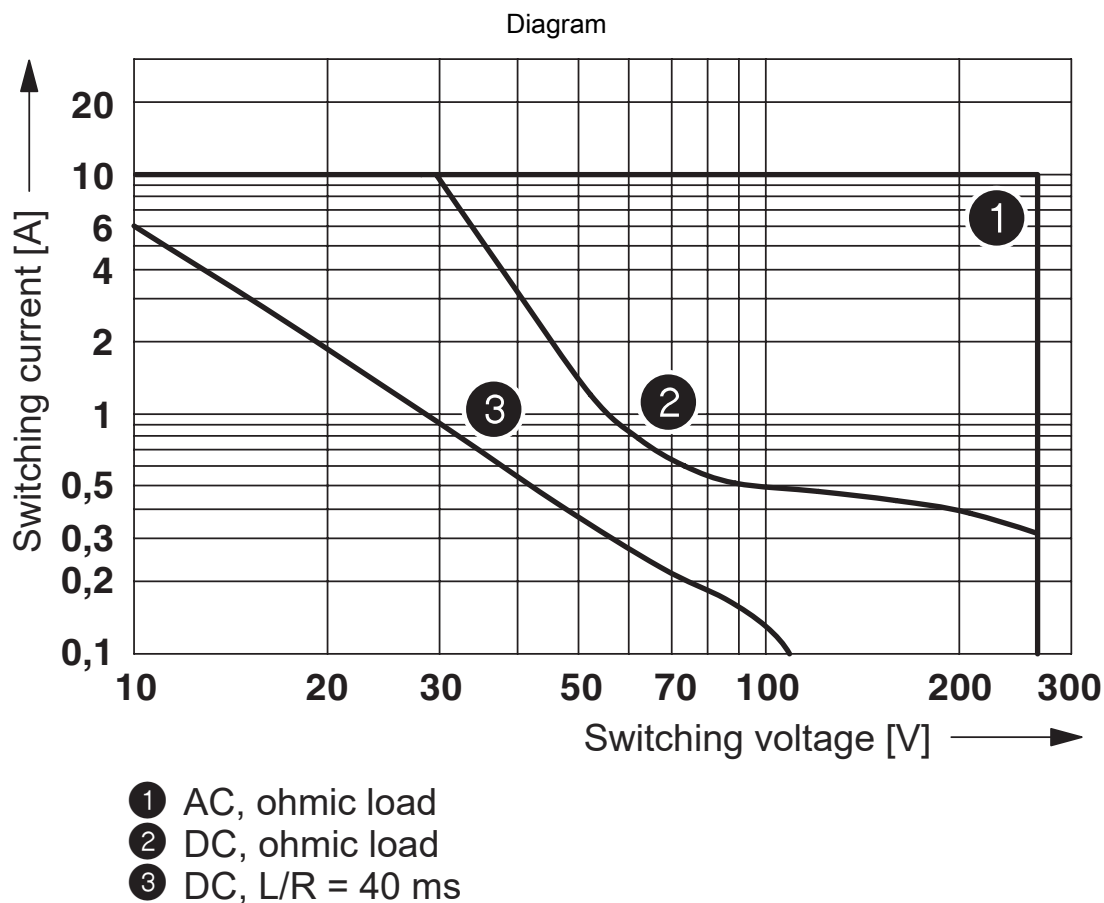


- ① DC coils
- ② AC coils

Operating voltage range of the relay

Circuit diagram





Interrupting rating

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Classifications

ECLASS

ECLASS-11.0	27371601
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Environmental product compliance

EU RoHS	
Fulfills EU RoHS substance requirements	Yes, No exemptions
China RoHS	
Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.
EU REACH SVHC	
REACH candidate substance (CAS No.)	No substance above 0.1 wt%

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