

# PR1-RSP3-LV-120AC/21

Order No.: 2834423

<http://eshop.phoenixcontact.de/phoenix/treeViewClick.do?UID=2834423>

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: 120 V AC, contacts: 1 PDT, 10 A

## Commercial data

EAN	4046356044318
Pack	5 pcs.
Customs tariff	85364900
Weight/Piece	0.06589 KG
Catalog page information	Page 70 (IF-2009)

## Product notes

WEEE/RoHS-compliant since:  
01/10/2007



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## Technical data

### Coil side

Nominal input voltage $U_N$	120 V AC
Nominal input current at $U_{IN}$	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
Operating voltage display	Yellow LED
Protective circuit/component	Varistor

#### Contact side

Contact type	Single contact, 1-PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V
Maximum inrush current	30 A (300 ms)
Min. switching current	100 mA
Limiting continuous current	10 A
Interrupting rating (ohmic load) max.	2500 VA

#### General data

Width	16 mm
Height	72 mm
Depth	97 mm
Test voltage relay winding/relay contact	4 kV (50 Hz, 1 min)
Ambient temperature (operation)	-25 °C ... 60 °C
Ambient temperature (storage/transport)	-25 °C ... 85 °C
Operating mode	100% operating factor
Service life mechanical	3 x 10 <sup>7</sup> cycles
Standards/regulations	IEC 60664 IEC 60664 A DIN VDE 0110 EN 60730/DIN VDE 0631 DIN EN 50178/DIN VDE 0160 (in relevant parts) IEC 60255/DIN VDE 0435 (in relevant parts)
Pollution degree	3
Surge voltage category	III
Mounting position	Any
Assembly instructions	In rows with zero spacing

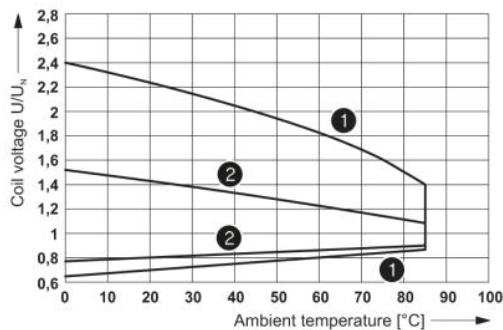
#### Connection data

Type of connection	Spring-cage connection
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Conductor cross section solid min.	0.2 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section stranded min.	0.2 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil min.	24
Conductor cross section AWG/kcmil max	16
Stripping length	10 mm

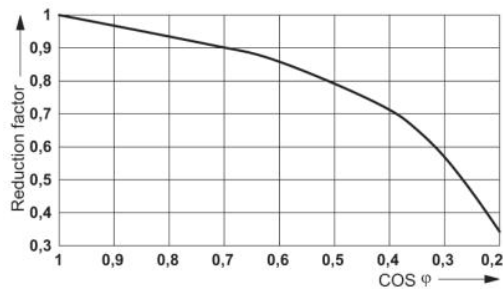
**Diagrams/Drawings**

Diagram

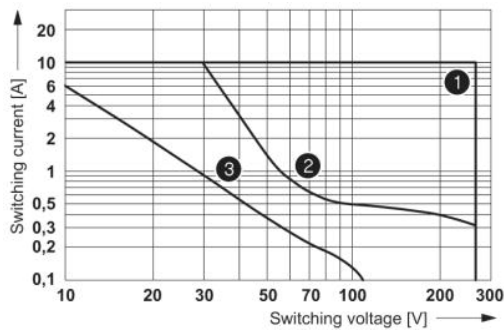


- ① DC coils
- ② AC coils

Operating voltage range of the relay

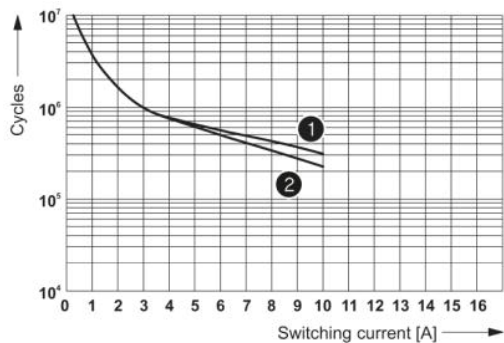


Service life reduction factor with various cos phi



- ① AC, ohmic load
- ② DC, ohmic load
- ③ DC, L/R = 40 ms

Interrupting rating

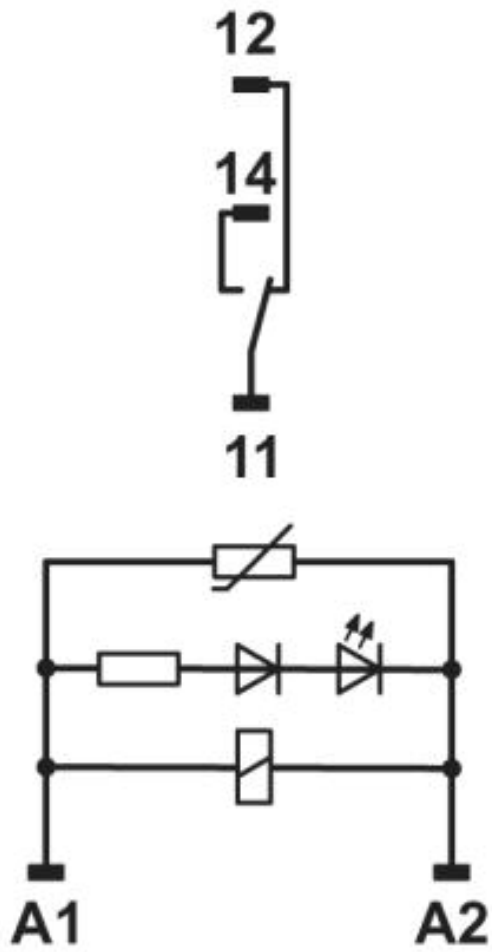


- ① 250 V AC, ohmic load (DC coils)
- ② 250 V AC, ohmic load (AC coils)

Electrical service life

Circuit diagram

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