

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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

Please be informed that the data shown in this PDF document is generated from our online catalog. Please find the complete data in the user documentation. Our general terms of use for downloads are valid.



Pre-assembled relay modules with spring-cage connection, consisting of: relay base, power contact relay, plug-in display/interference suppression module, and retaining bracket. Input voltage: 24 V DC, 1 changeover contact, 10 A

## Your advantages

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

## Commercial data

Item number	2834407
Packing unit	1 pc
Minimum order quantity	5 pc
Note	Made to order (non-returnable)
Sales key	C463
Product key	CK6329
Catalog page	Page 392 (C-7-2013)
GTIN	4046356044295
Weight per piece (including packing)	72.28 g
Weight per piece (excluding packing)	66.06 g
Customs tariff number	85364900
Country of origin	CN

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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

## Set consists of

### PR1-BSP3/2X21 - Relay base

2833534

<https://www.phoenixcontact.com/us/products/2833534>

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- 24DC/21HC - Single relay

2961312

<https://www.phoenixcontact.com/us/products/2961312>

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



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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

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

2833657

<https://www.phoenixcontact.com/us/products/2833657>



Plug-in module, with freewheeling diode and yellow LED, polarity: **A1+**, **A2-**,  
input voltage: 12 ... 24 V DC  $\pm 20\%$

---

## EL1-P16 - Retaining bracket

2833547

<https://www.phoenixcontact.com/us/products/2833547>



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

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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

## Technical data

### Product properties

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

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.46 W
Test voltage (Winding/contact)	4 kV (50 Hz, 1 min., winding/contact)

### Input data

#### Coil side

Nominal input voltage U <sub>N</sub>	24 V DC
Input voltage range	15.6 V DC ... 57.6 V DC
Drive and function	monostable
Typical input current at U <sub>N</sub>	19 mA
Typical response time	8 ms
Typical release time	10 ms
Protective circuit	Freewheeling diode
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
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

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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

Switching capacity	58 W (at 48 V DC)
	48 W (at 60 V DC)
	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 <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 16

### Contact side

Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross section rigid	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.2 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section AWG	24 ... 16

## Dimensions

Width	16 mm
Height	97 mm
Depth	72 mm

## Environmental and real-life conditions

### Ambient conditions

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

## Standards and regulations

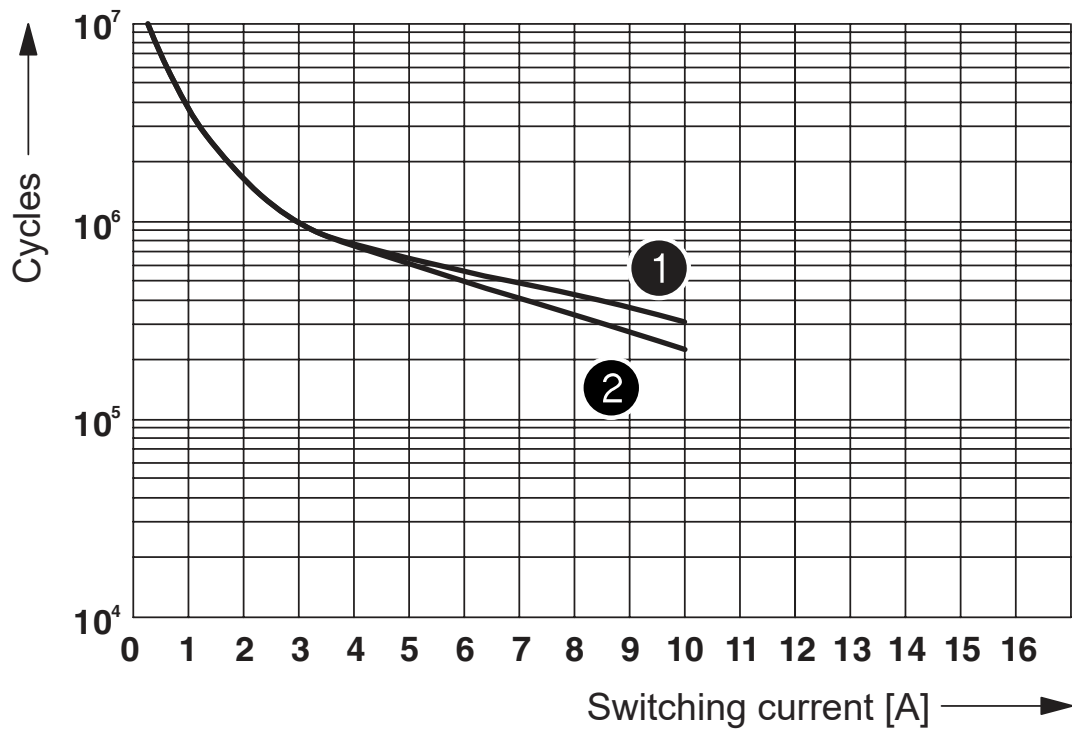
Standards/regulations	IEC 60664
	EN 50178

## Mounting

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

## Drawings

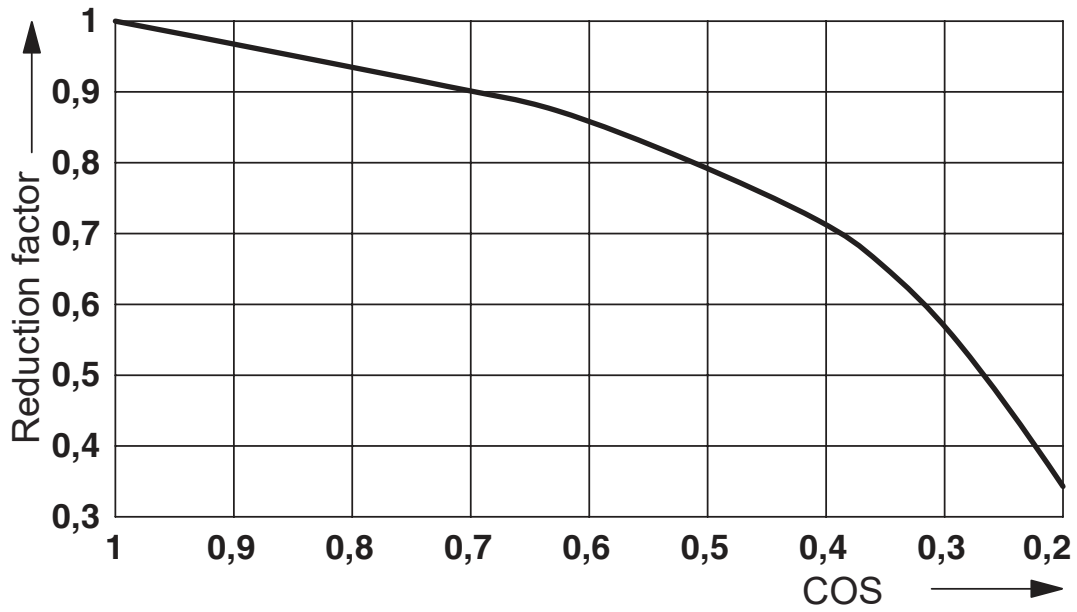
Diagram



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

Electrical service life

Diagram



Service life reduction factor with various cos phi

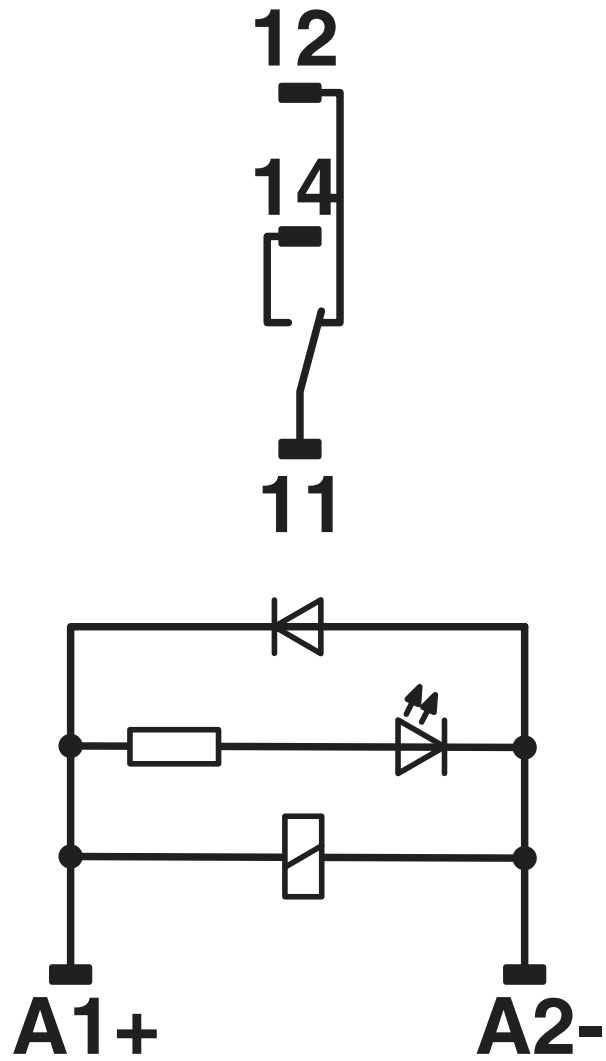
# PR1-RSP3-LDP-24DC/21 - Relay Module



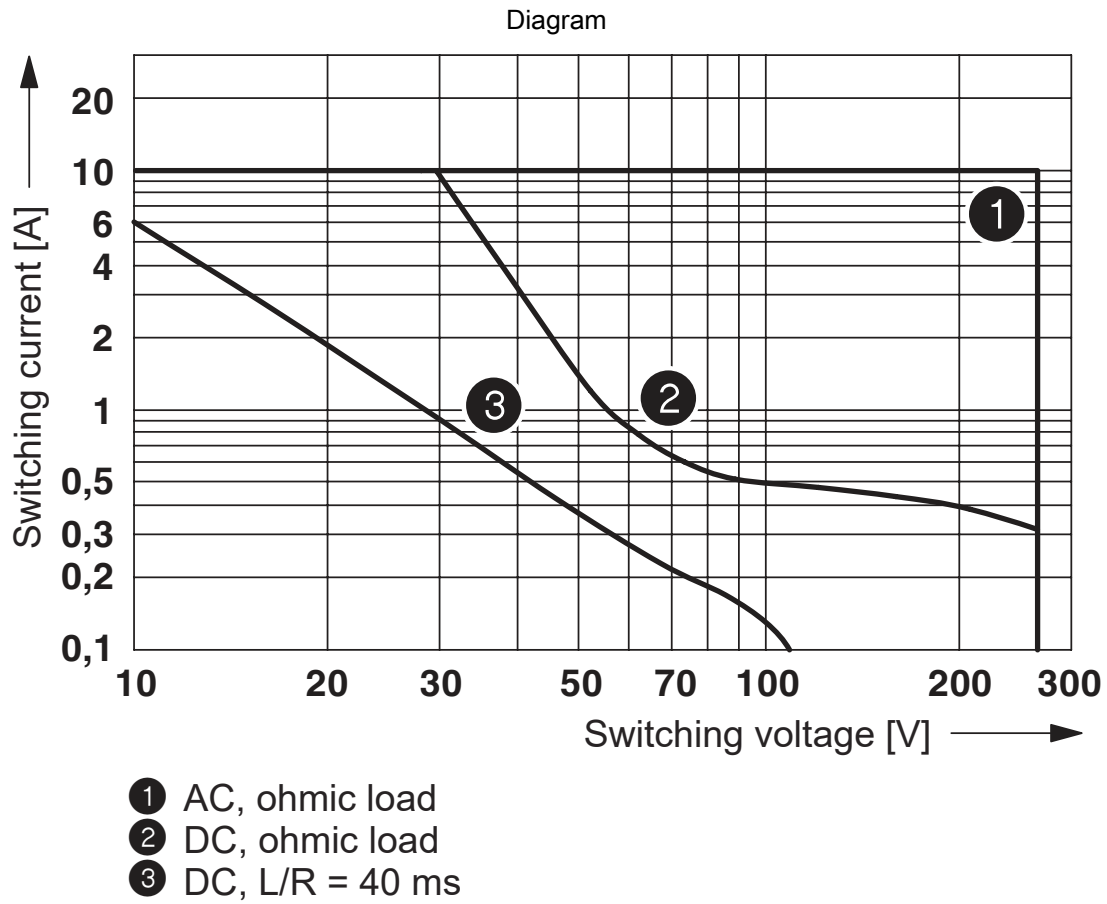
2834407

<https://www.phoenixcontact.com/us/products/2834407>

Circuit diagram

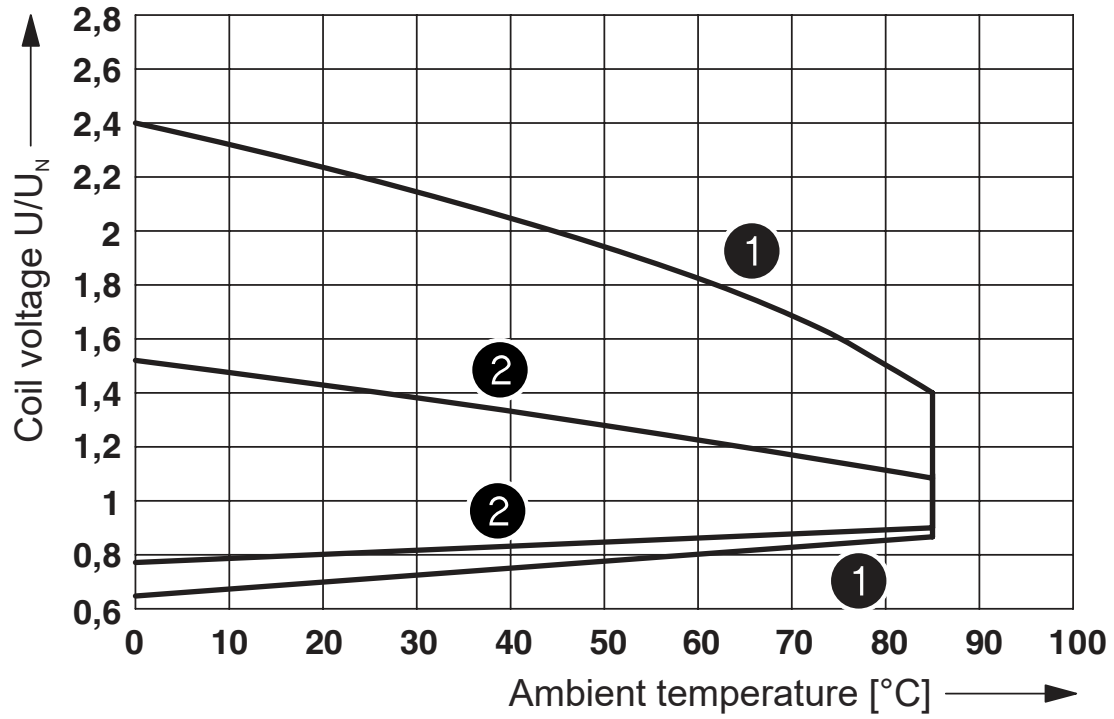






Interrupting rating

Diagram



- ① DC coils
- ② AC coils

Operating voltage range of the relay

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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

## Classifications

### ECLASS

ECLASS-11.0

27371601

### ETIM

ETIM 7.0

EC001437

### UNSPSC

UNSPSC 21.0

39122334

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



2834407

<https://www.phoenixcontact.com/us/products/2834407>

## Environmental product compliance

China RoHS	Environmentally Friendly Use Period = 50 years For information on hazardous substances, refer to the manufacturer's declaration available under "Downloads"
------------	--

Phoenix Contact 2023 © - all rights reserved  
<https://www.phoenixcontact.com>

Phoenix Contact USA  
586 Fulling Mill Road  
Middletown, PA 17057, United States  
(+717) 944-1300  
[info@phoenixcon.com](mailto:info@phoenixcon.com)