PR1-RSP3-LDP-24DC/2X21AU - Relay module

2834601

https://www.phoenixcontact.com/us/products/2834601

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Pre-assembled relay modules with spring-cage connection, consisting of: relay base, multi-layer contact relay, plug-in display/interference suppression module, and retaining bracket. Input voltage: 24 V DC, 2 changeover contacts, 8 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	2834601
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C463
Product key	DK632G
GTIN	4046356044493
Weight per piece (including packing)	73.2 g
Weight per piece (excluding packing)	65.94 g
Customs tariff number	85364900
Country of origin	CN

Set consists of

PR1-BSP3/2X21 - Relay base

2833534

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

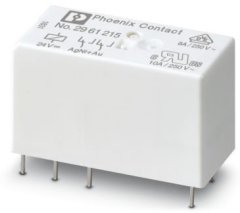


PR1... relay base, for miniature power relays or miniature switching relays with 1 or 2 changeover contacts or solid-state relays with the same design, 1/3-level version, spring-cage connections, plug-in option for input/interference suppression modules

REL-MR- 24DC/21-21AU - Single relay

2961215

https://www.phoenixcontact.com/us/products/2961215



Plug-in miniature power relay, with multi-layer gold contact, 2 changeover contacts, input voltage 24 V DC

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 ±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

Technical data

Product properties

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

Insulation characteristics

Overvoltage category	III
Pollution degree	3

Data management status

Date of last data management	19.03.2025

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)
Test voltage (Contact/contact)	2.5 kV (50 Hz, 1 min., contact/contact)

Input data

Coil side

Nominal input voltage U_N	24 V DC
Input voltage range	15.6 V DC ... 59.5 V DC
Drive and function	monostable
Typical input current at U_N	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	2 changeover contacts
Type of switch contact	Single contact
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Limiting continuous current	50 mA
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)

Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)

Switching: when the gold layer is destroyed

Note	the following values are applicable if a gold layer is destroyed
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V
Limiting continuous current	8 A
Maximum inrush current	15 A (300 ms)
Min. switching current	10 mA
Interrupting rating (ohmic load) max.	2000 VA (for 250 V AC)
Switching capacity	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	2 A (at 24 V, AC15)
	2 A (at 120 V, AC15)
	2 A (at 250 V, AC15)

Connection data

Coil side

Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross-section rigid	0.2 mm² ... 1.5 mm²
Conductor cross-section flexible	0.2 mm² ... 1.5 mm²
Conductor cross-section AWG	24 ... 16

Contact side

Connection method	Spring-cage connection
Stripping length	10 mm
Conductor cross-section rigid	0.2 mm² ... 1.5 mm²
Conductor cross-section flexible	0.2 mm² ... 1.5 mm²
Conductor cross-section AWG	24 ... 16

Dimensions

Width	16 mm
Height	97 mm
Depth	72 mm

Material specifications

Color	green (RAL 6021)

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

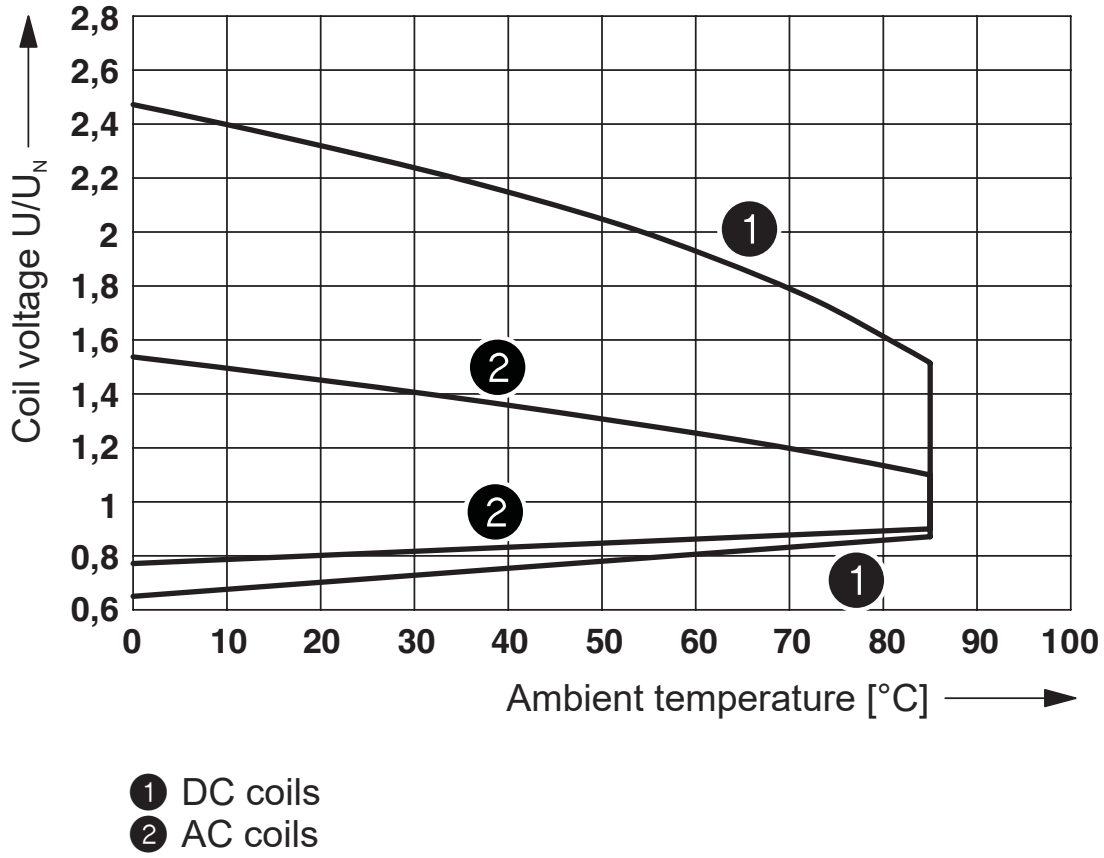
Standards/regulations	IEC 60664
	EN 50178

Mounting

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

Drawings

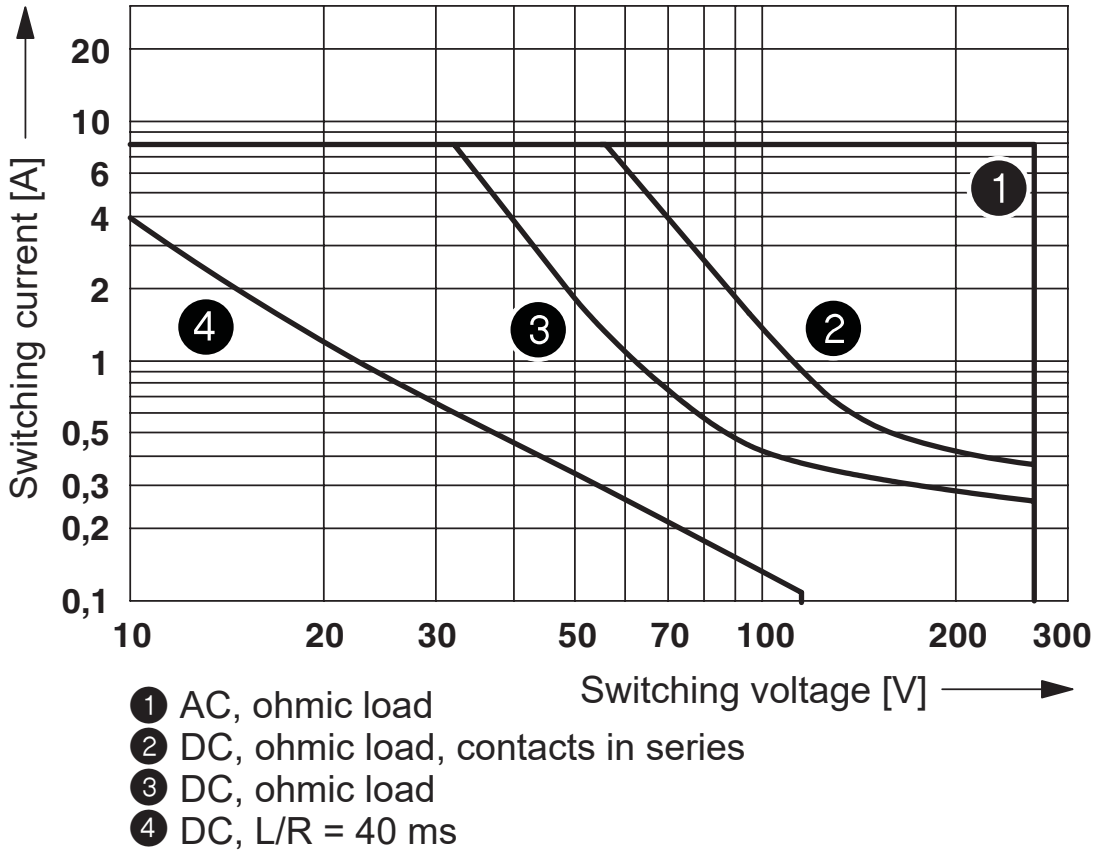
Diagram



1 DC coils
2 AC coils

Operating voltage range of the relay

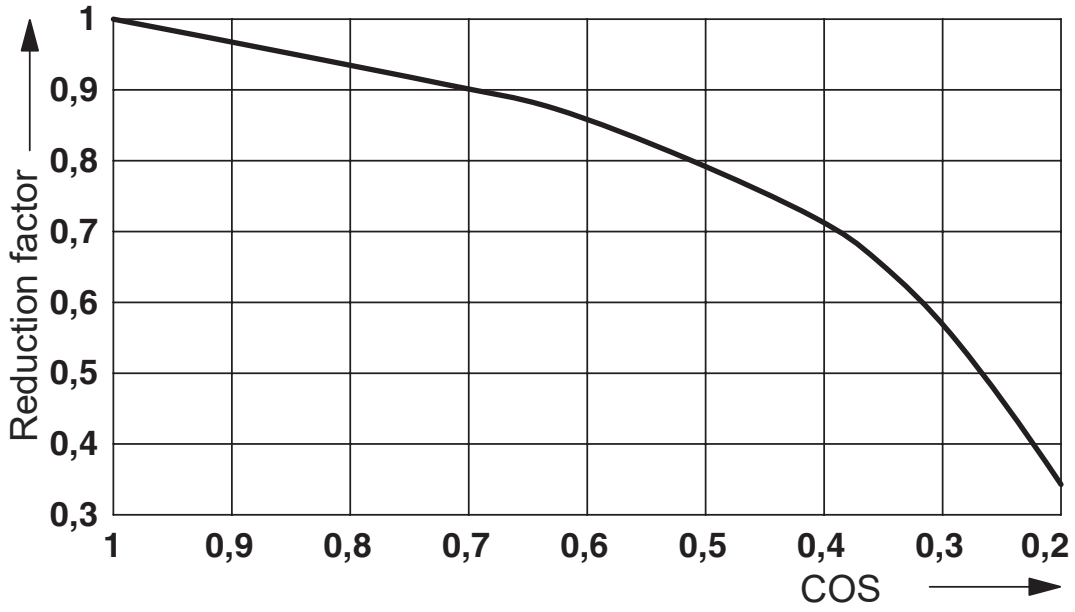
Diagram



1 AC, ohmic load
2 DC, ohmic load, contacts in series
3 DC, ohmic load
4 DC, L/R = 40 ms

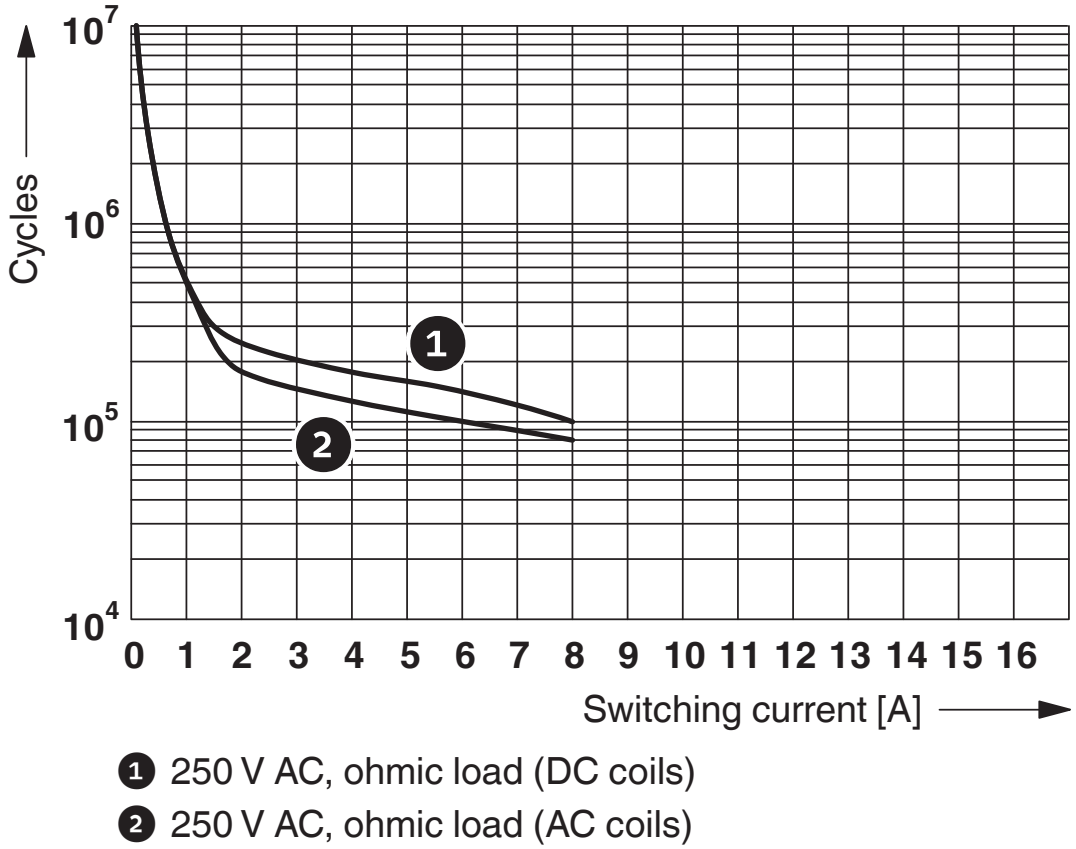
Interrupting rating

Diagram



Service life reduction factor with various cos phi

Diagram

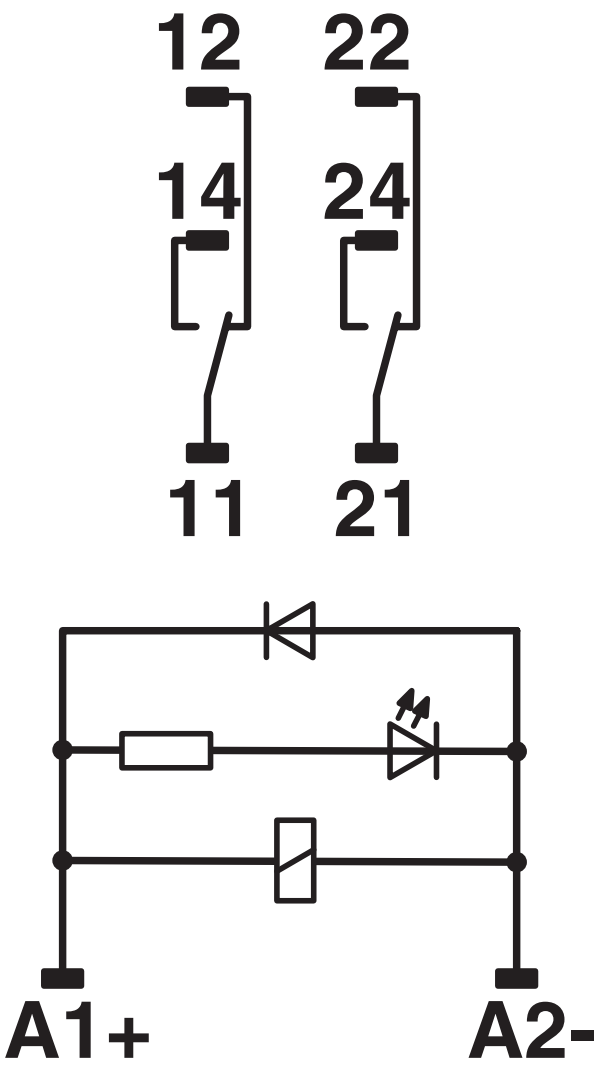


1 250 V AC, ohmic load (DC coils)

2 250 V AC, ohmic load (AC coils)

Electrical service life

Circuit diagram



Classifications

UNSPSC

UNSPSC 21.0	39122334

Environmental product compliance

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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