

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

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.



Plug-in high-power relay with power contacts, specifically for switching high DC loads, 1 N/O contact, blowout magnet, coil voltage: 24 V DC

## Commercial data

Item number	2908040
Packing unit	1 pc
Minimum order quantity	1 pc
Sales key	CK6
Product key	CK6961
Catalog page	Page 314 (C-5-2019)
GTIN	4055626266473
Weight per piece (including packing)	83.4 g
Weight per piece (excluding packing)	83.1 g
Customs tariff number	85364190
Country of origin	PL

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

## Technical data

### Product properties

Product type	Single relay
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

### Data management status

Date of last data management	02.05.2024
Article revision	02

### Insulation characteristics

Overvoltage category	III
Pollution degree	3

### Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	1.68 W
Test voltage (Winding/contact)	2.5 kV (50 Hz, 1 min., winding/contact)
Rated surge voltage	4 kV

### Input data

#### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range	20.4 V DC ... 26.4 V DC
Input voltage range in reference to $U_N$	see diagram
Drive and function	monostable
Drive (polarity)	non-polarized
Typical input current at $U_N$	70 mA
Typical response time	20 ms
Typical release time	15 ms

### Output data

#### Switching

Contact switching type	1 N/O contact
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	440 V AC 250 V DC
Minimum switching voltage	5 V (At 24 mA)
Limiting continuous current	16 A
Maximum inrush current	50 A (20 ms) 30 A (4 s)

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

Min. switching current	5 mA (at 24 V)
Interrupting rating (ohmic load) max.	384 W (at 24 V DC)
	744 W (at 48 V DC)
	900 W (at 60 V DC)
	1540 W (at 110 V DC)
	2640 W (at 220 V DC)
	4000 VA (for 250 V AC)
Switching capacity min.	120 mW
Switching capacity	1 A (220 V, DC13)
	1.5 A (240 V, AC15)
	16 A (24 V DC, L/R = 40 ms)
	12 A (48 V DC, L/R = 40 ms)
	9.5 A (60 V DC, L/R = 40 ms)
	5.4 A (110 V DC, L/R = 40 ms)
	3 A (220 V DC, L/R = 40 ms)
	2.7 A (250 V DC, L/R = 40 ms)

## Connection data

Connection method	Plug-in connection
-------------------	--------------------

## Dimensions

Width	38.6 mm
Height	36.1 mm
Depth	45.5 mm

## Environmental and real-life conditions

### Ambient conditions

Degree of protection	RT I
Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

## Standards and regulations

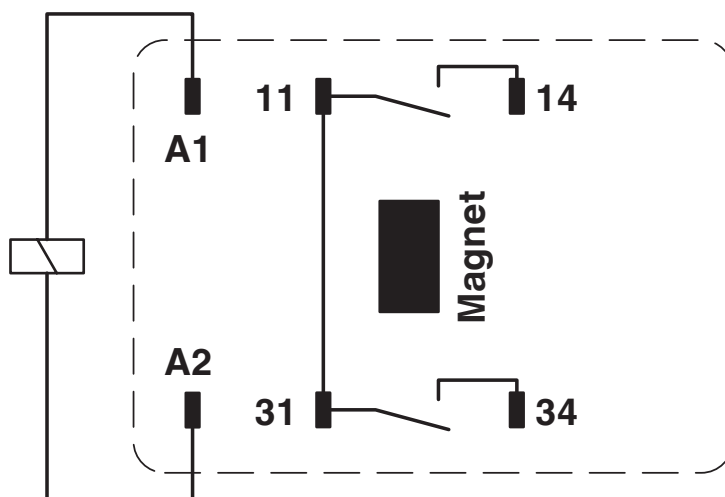
Standards/regulations	IEC 60664
	IEC 61810

## Mounting

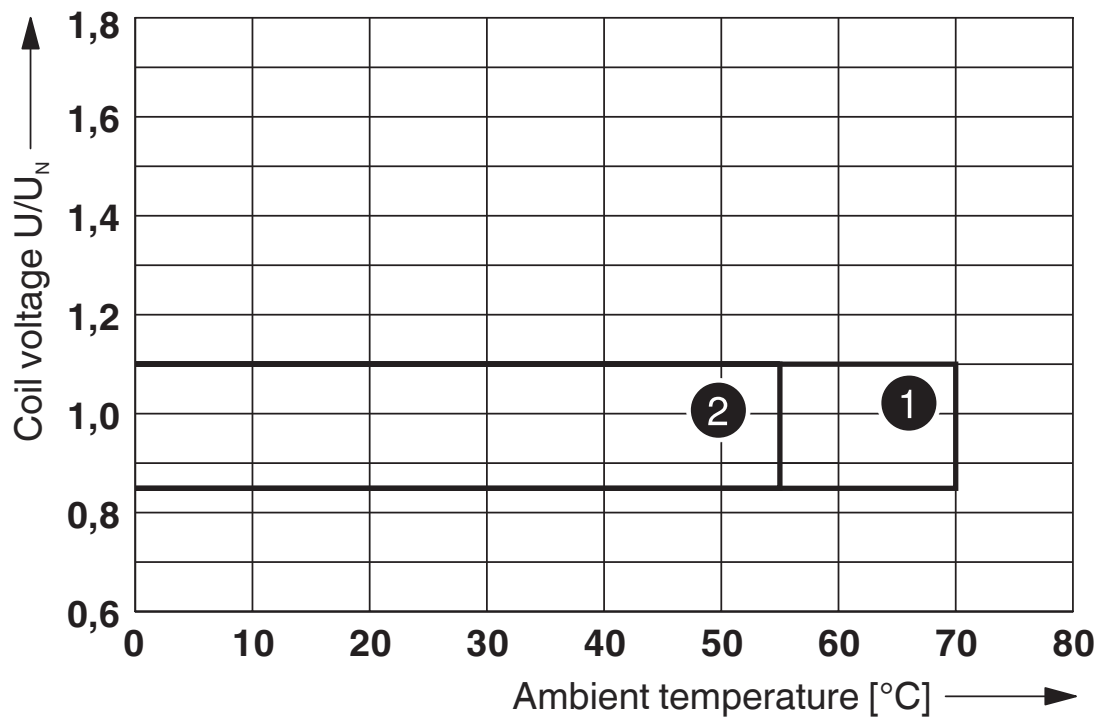
Mounting position	any
-------------------	-----

## Drawings

Circuit diagram



Diagram



- ① DC coils
- ② AC coils

Operating voltage range

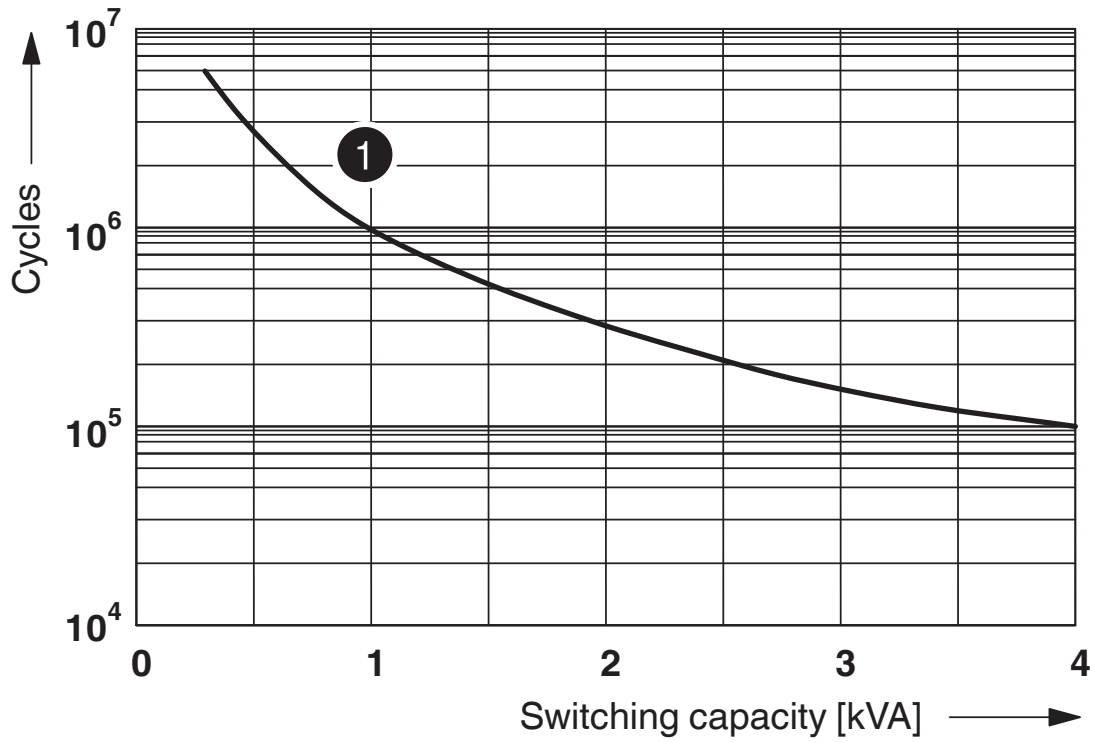
# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

Diagram



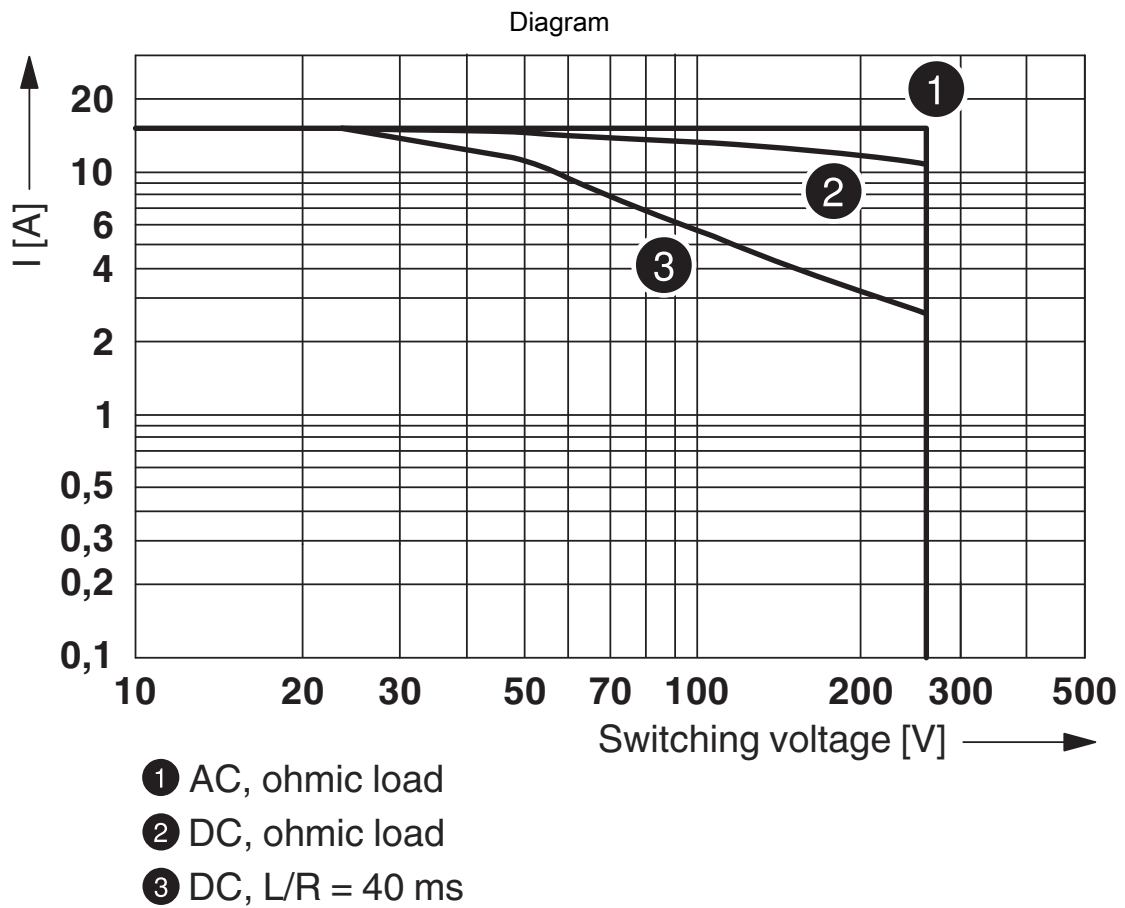
① 250 V AC, Ohmic load

Electrical service life

# REL-PR1-24DC/1/MB - Single relay

2908040

<https://www.phoenixcontact.com/in/products/2908040>



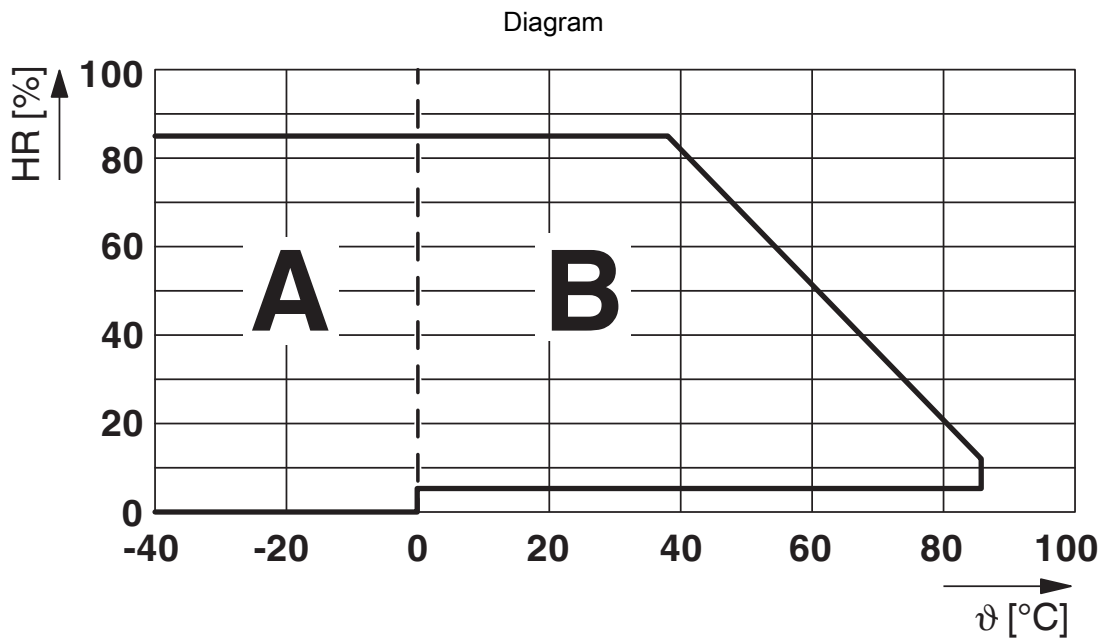
Interrupting rating

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>



Permissible humidity for operation and storage.

The maximum permissible ambient temperature as specified in the data sheet must be observed.

Area A: Ice buildup at ambient temperatures  $\leq 0^\circ\text{C}$  must be prevented

Area B: Condensation at ambient temperatures  $> 0^\circ\text{C}$  must be prevented

On 30 full days that are naturally distributed across an entire year, a humidity level of 95% is permissible at an ambient temperature  $\leq 25^\circ\text{C}$ .

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

## Approvals

To download certificates, visit the product detail page: <https://www.phoenixcontact.com/in/products/2908040>



**CSA**

Approval ID: 256725



**cUL Recognized**

Approval ID: FILE E 172140



**UL Recognized**

Approval ID: FILE E 172140



**EAC**

Approval ID: TR\_TS\_D\_00573\_c



**EAC**

Approval ID: RU\*C-DE.\*08.B.00010

**cULus Recognized**



# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

## Classifications

### ECLASS

ECLASS-11.0	27371601
ECLASS-12.0	27371601
ECLASS-13.0	27371601

### ETIM

ETIM 9.0	EC001437
----------	----------

### UNSPSC

UNSPSC 21.0	39122300
-------------	----------

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
---	--------------------

### China RoHS

Environment friendly use period (EFUP)	EFUP-E
	No hazardous substances above the limits

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
-------------------------------------	----------------------------

# REL-PR1-24DC/1/MB - Single relay



2908040

<https://www.phoenixcontact.com/in/products/2908040>

## Mandatory accessories

### RIF-4-BPT/3X21 - Relay base

2900961

<https://www.phoenixcontact.com/in/products/2900961>



Relay base RIF-4..., for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

### RIF-4-BSC/3X21 - Relay base

2900960

<https://www.phoenixcontact.com/in/products/2900960>



RIF-4... relay base, for high-power relay with 2 or 3 changeover contacts or 3 N/O contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Phoenix Contact 2024 © - all rights reserved

<https://www.phoenixcontact.com>

PHOENIX CONTACT (I) Pvt. Ltd.

A-58/2, Okhla Industrial Area, Phase - II, New Delhi-110 020

+91.1275.71420

[info@phoenixcontact.co.in](mailto:info@phoenixcontact.co.in)