

# RIF-3-RPT-LDP-24DC/2X21 - Relay module



2903297

<https://www.phoenixcontact.com/us/products/2903297>

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Preassembled relay module with Push-in connection, consisting of: relay base, power contact relay, and retaining bracket. Contact switching type: 2 changeover contacts. Input voltage: 24 V DC

## Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

## Commercial data

Item number	2903297
Packing unit	1 pc
Sales key	C465
Product key	DK652B
GTIN	4046356732017
Weight per piece (including packing)	163.8 g
Weight per piece (excluding packing)	163.8 g
Customs tariff number	85364110
Country of origin	DE

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## Set consists of

### RIF-3-BPT/2X21 - Relay base

2900937

<https://www.phoenixcontact.com/us/products/2900937>



Relay base RIF-3..., for octal relays with 2 changeover contacts, Push-in connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

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### REL-OR2/LDP- 24DC/2X21 - Single relay

2903689

<https://www.phoenixcontact.com/us/products/2903689>



Plug-in octal relays with power contacts, 2 changeover contacts, test button, freewheeling diode, mechanical switching position indicator, polarity: A1+, A2-, coil voltage: 24 V DC

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## RIF-RH-3 - Retaining bracket

2900955

<https://www.phoenixcontact.com/us/products/2900955>



Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

## Technical data

### Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. $2 \times 10^7$ cycles

### Insulation characteristics

Insulation	Basic insulation
Overvoltage category	III
Pollution degree	2

### Data management status

Date of last data management	01.04.2026
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### Electrical properties

Maximum power dissipation for nominal condition	1.44 W
Test voltage (Winding/contact)	2.5 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Test voltage (Contact/contact)	2 kV <sub>rms</sub> (50 Hz, 1 min., contact/contact)
Rated insulation voltage	250 V AC
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 (20 °C)
Input voltage range in reference to $U_N$	see diagram
Drive and function	monostable
Typical input current at $U_N$	60 mA
Typical response time	18 ms
Typical release time	20 ms
Coil voltage	24 V DC
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
Maximum switching voltage	250 V AC/DC

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Minimum switching voltage	10 V (24 mA)
Limiting continuous current	10 A (see diagram)
Maximum inrush current	30 A (20 ms, N/O contacts)
Min. switching current	10 mA (24 V)
Interrupting rating (ohmic load) max.	240 W (24 V DC)
	124 W (48 V DC)
	108 W (60 V DC)
	52 W (110 V DC)
	48 W (220 V DC)
	2500 VA (250 V AC)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 1.5 A/240 V (N/O contact)
	DC13, 2 A/240 V (N/O contact)

## Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross-section rigid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross-section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule with plastic sleeve)
	0.14 mm <sup>2</sup> ... 1 mm <sup>2</sup> (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross-section AWG	26 ... 16 (solid)
	26 ... 16 (flexible)

## Dimensions

### Item dimensions

Width	40 mm
Height	103 mm
Depth	90 mm

### Drill hole

Diameter	3.2 mm
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## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V2 (Housing)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (Relay base)	IP20 (Relay base)
Degree of protection (Relay)	RT I (Relay)
Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

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## Approvals

### Corrosive gas test

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

## Standards and regulations

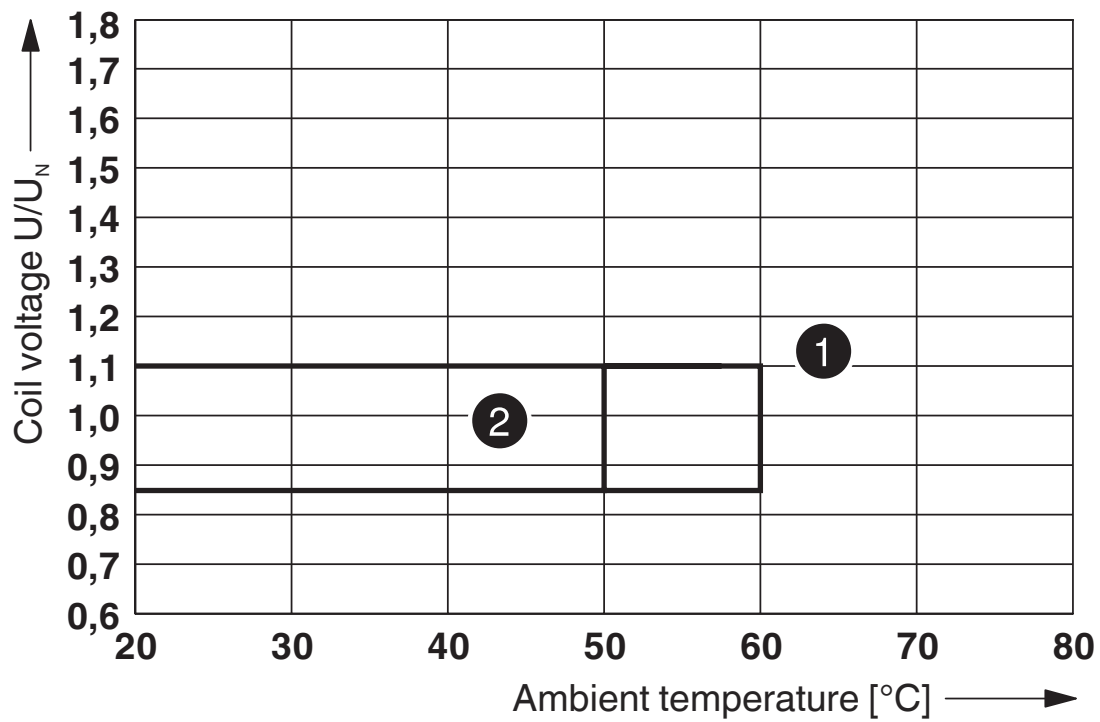
Standards/regulations	DIN EN 50178
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## Mounting

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

## Drawings

Diagram



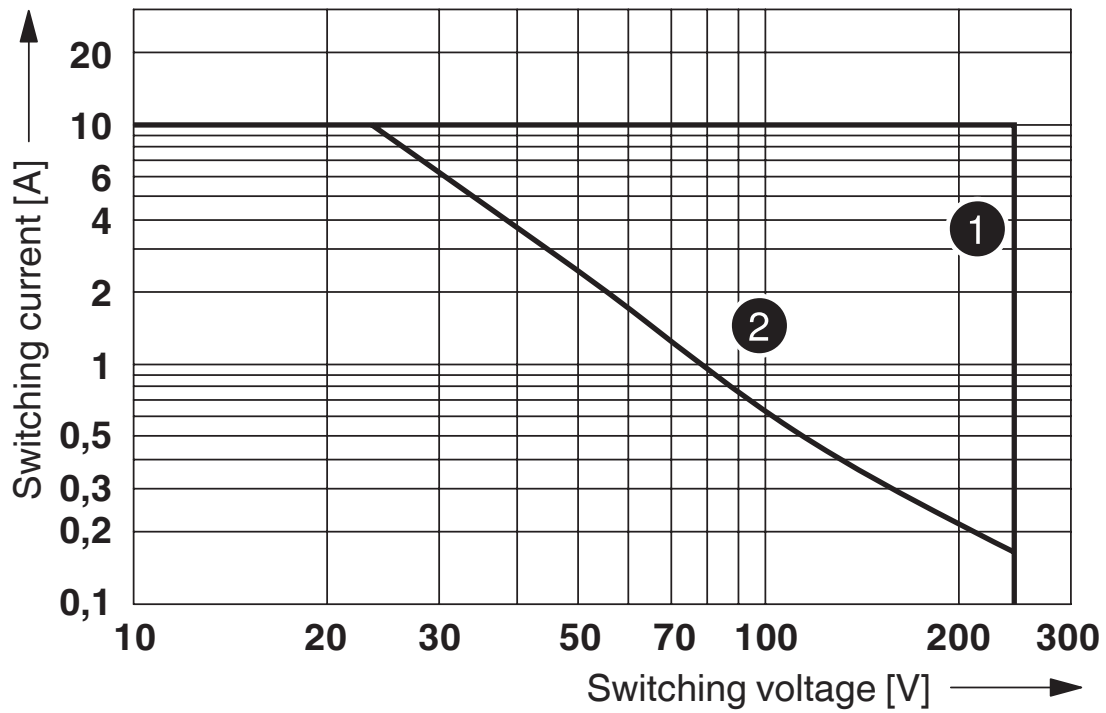
- ① DC coil (observe contact derating)
- ② AC coil (observe contact derating)

Operating voltage range

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Diagram



- ① AC, ohmic load
- ② DC, ohmic load

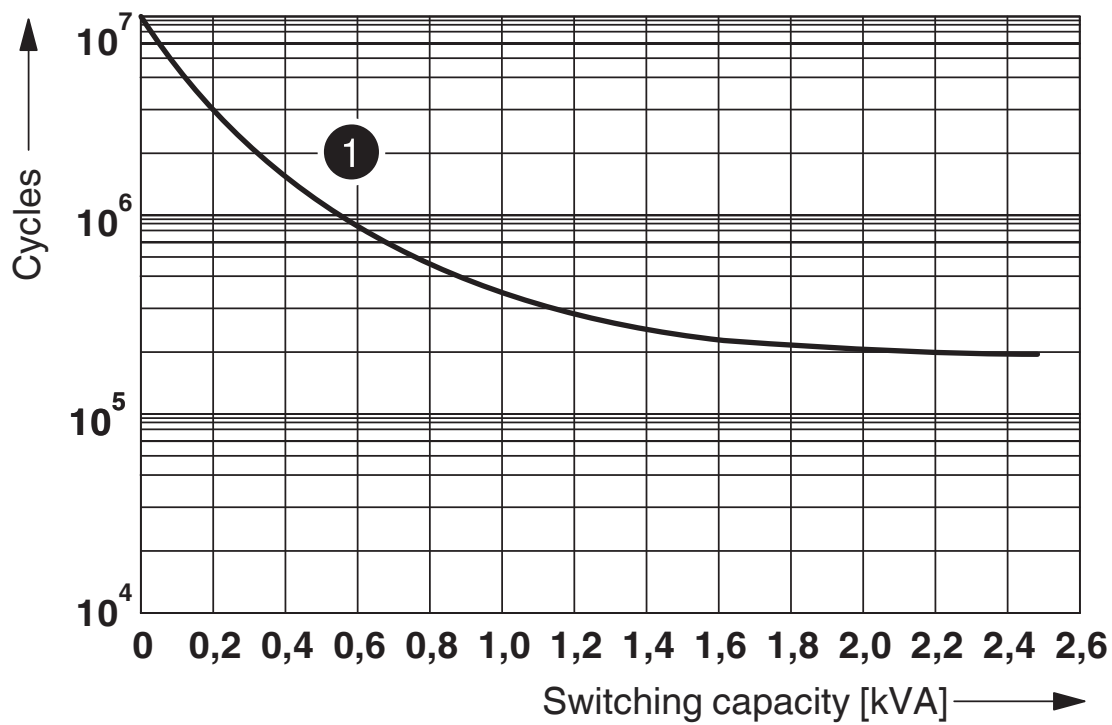
Interrupting rating

Diagram



Contact derating

Diagram



250 V AC, ohmic load

Electrical service life

Diagram



Service life reduction factor

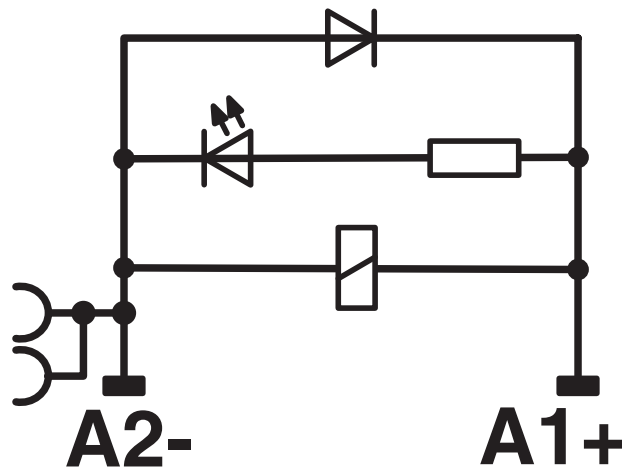
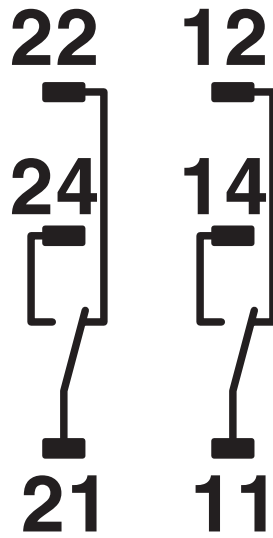
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Circuit diagram



DC coils

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## Classifications

### UNSPSC

UNSPSC 21.0	39122300
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## Environmental product compliance

### EU RoHS

Fulfills EU RoHS substance requirements	Yes, No exemptions
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### 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%
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