

## Relay Module - RIF-0-RPT-12DC/21 - 2903371

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's documentation. Our General Terms of Use for Downloads are valid (<http://phoenixcontact.com/download>)



Pre-assembled relay module with push-in connection, consisting of: relay base with ejector and power contact relay. Contact type: 1 PDT. Input voltage: 12 V DC

The illustration shows the 24 V version.



### Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	28.0 g
Custom tariff number	85364110
Country of origin	Germany

### Technical data

#### Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---------------------------------------------------------------------------

#### Dimensions

Width	6.2 mm
Height	93 mm
Depth	78 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 60 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

#### Coil side

Nominal input voltage $U_N$	12 V DC
Input voltage range in reference to $U_N$	see diagram

# Relay Module - RIF-0-RPT-12DC/21 - 2903371

## Technical data

### Coil side

Typical input current at $U_N$	16 mA
Typical response time	5 ms
Typical release time	8 ms
Coil voltage	12 V DC
Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.19 W

### Contact side

Contact type	1 PDT
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	10 A (4 s)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

### Connection data input side

Connection name	Coil side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	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> ... 1.5 mm <sup>2</sup> (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

# Relay Module - RIF-0-RPT-12DC/21 - 2903371

## Technical data

### Connection data output side

Connection name	Contact side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	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> ... 1.5 mm <sup>2</sup> (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

### General

Test voltage relay winding/relay contact	4 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT III (Relay)
Mechanical service life	Approx. 2 x 10 <sup>7</sup> cycles
Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Degree of pollution	2
Overvoltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Insulation	safe isolation
Degree of pollution	2
Overvoltage category	III

# Relay Module - RIF-0-RPT-12DC/21 - 2903371

## Articles in set

Single relay - REL-MR- 12DC/21 - 2961150



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 12 V DC

Relay socket - RIF-0-BPT/21 - 2900958



RIF-0... relay base, for miniature power relay with 1 PDT or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

## Classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371603
eCl@ss 5.1	27371603
eCl@ss 6.0	27371603
eCl@ss 7.0	27371603
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

### ETIM

ETIM 3.0	EC001456
ETIM 4.0	EC001456
ETIM 5.0	EC001437

### UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39121516

# Relay Module - RIF-0-RPT-12DC/21 - 2903371

## Approvals

Approvals

---

Approvals

EAC / GL / LR

---

Ex Approvals

---

Approvals submitted

---

## Approval details

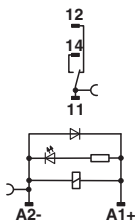
EAC

GL

LR

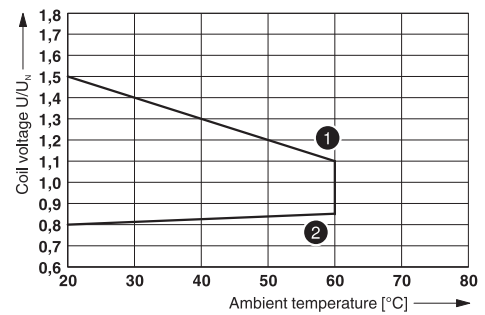
## Drawings

Circuit diagram



DC coils

Diagram

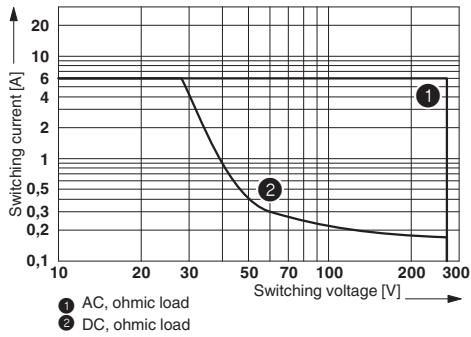


- 1 Maximum continuous voltage at limiting continuous current = 6 A
  - 2 Minimum operate voltage
- For pre-excitation with U<sub>n</sub> and limiting continuous current = 6 A

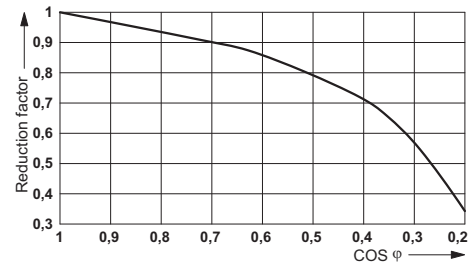
Operating voltage range

# Relay Module - RIF-0-RPT-12DC/21 - 2903371

Diagram



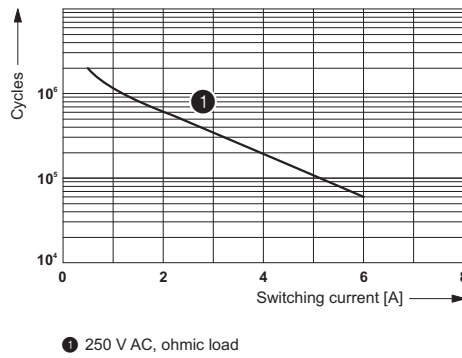
Diagram



## Interrupting rating

## Service life reduction factor

Diagram



## Electrical service life