

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

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 multi-layer gold contact relay. Contact type: 1 PDT. Input voltage: 12 V DC



### Key Commercial Data

Packing unit	10 pc
Minimum order quantity	10 pc
GTIN	 4 046356 732970
Weight per Piece (excluding packing)	27.8 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
Typical input current at $U_N$	16 mA
Typical response time	5 ms
Typical release time	8 ms

# Relay Module - RIF-0-RPT-12DC/21AU - 2903369

## Technical data

### Coil side

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, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Min. switching current	1 mA
Maximum inrush current	50 mA
Limiting continuous current	50 mA
Interrupting rating (ohmic load) max.	1.2 W (at 24 V DC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (24 V (DC13))
	3 A (230 V (AC 15))
Note	the following values are applicable if a gold layer is destroyed
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Limiting continuous current	6 A
Min. switching current	10 mA (at 12 V)
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	2 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)

# Relay Module - RIF-0-RPT-12DC/21AU - 2903369

## Technical data

### Connection data input side

	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

### 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/21AU - 2903369

### Articles in set

Single relay - REL-MR- 12DC/21AU - 2961163



Plug-in miniature power relay, with multi-layer gold 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

### Approvals

#### Approvals

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Approvals

Approvals

EAC / GL / LR

---

Ex Approvals

---

Approvals submitted

---

### Approval details

EAC

---

GL

---

LR

---

### Accessories

Accessories

End block

End clamp - CLIPFIX 35 - 3022218



Quick mounting end clamp for NS 35/7,5 DIN rail or NS 35/15 DIN rail, with marking option, width: 9.5 mm, color: gray

---

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, Color: white

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Accessories

Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, Color: red

---

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, Color: blue

---

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

---

Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

---

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Accessories

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

---

Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Length: 23 mm, Width: 10.7 mm, Number of positions: 2, Color: red

---

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, Length: 23 mm, Width: 16.9 mm, Number of positions: 3, Color: red

---

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, Length: 23 mm, Width: 23.1 mm, Number of positions: 4, Color: red

---

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Length: 23 mm, Width: 29.3 mm, Number of positions: 5, Color: red

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Accessories

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Length: 23 mm, Width: 60.3 mm, Number of positions: 10, Color: red

---

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Length: 23 mm, Width: 122.3 mm, Number of positions: 20, Color: red

---

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Number of positions: 50, Color: red

---

Plug-in bridge - FBS 2-6 BU - 3036932



Plug-in bridge, Number of positions: 2, Color: blue

---

Plug-in bridge - FBS 3-6 BU - 3036945



Plug-in bridge, Number of positions: 3, Color: blue

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Accessories

Plug-in bridge - FBS 4-6 BU - 3036958



Plug-in bridge, Number of positions: 4, Color: blue

Plug-in bridge - FBS 5-6 BU - 3036961



Plug-in bridge, Number of positions: 5, Color: blue

Plug-in bridge - FBS 10-6 BU - 3032198



Plug-in bridge, Number of positions: 10, Color: blue

Plug-in bridge - FBS 20-6 BU - 3032208



Plug-in bridge, Number of positions: 20, Color: blue

Plug-in bridge - FBS 50-6 BU - 3032211



Plug-in bridge, Number of positions: 50, Color: blue

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Accessories

Plug-in bridge - FBS 2-6 GY - 3032237



Plug-in bridge, Number of positions: 2, Color: gray

Plug-in bridge - FBS 3-6 GY - 3032240



Plug-in bridge, Number of positions: 3, Color: gray

Plug-in bridge - FBS 4-6 GY - 3032279



Plug-in bridge, Number of positions: 4, Color: gray

Plug-in bridge - FBS 5-6 GY - 3032266



Plug-in bridge, Number of positions: 5, Color: gray

Plug-in bridge - FBS 10-6 GY - 3032253



Plug-in bridge, Number of positions: 10, Color: gray

### Terminal marking

## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

### Accessories

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

---

### Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

---

### Spare parts

Single relay - REL-MR- 12DC/21AU - 2961163



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

---

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



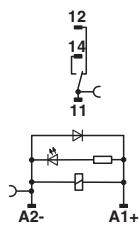
RIF-0... relay base, for miniature power relay with 1 PDT or solid-state relays of the same design, push-in connection, for mounting on NS 35/7,5

---

### Drawings

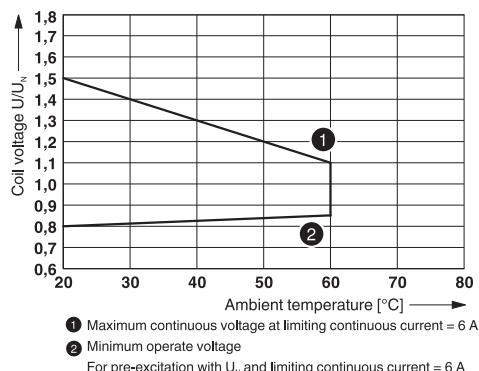
## Relay Module - RIF-0-RPT-12DC/21AU - 2903369

Circuit diagram



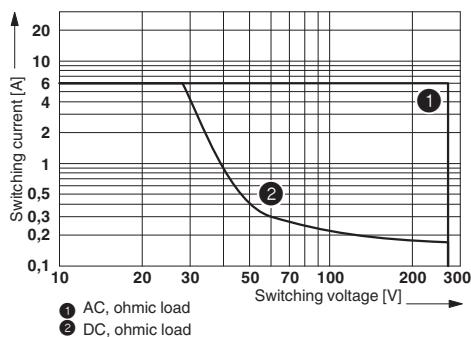
DC coils

Diagram



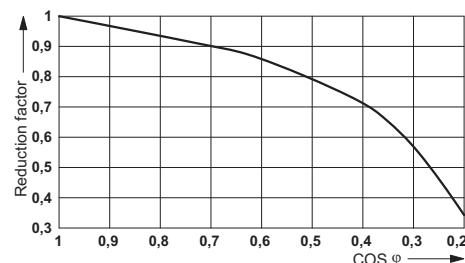
Operating voltage range

Diagram



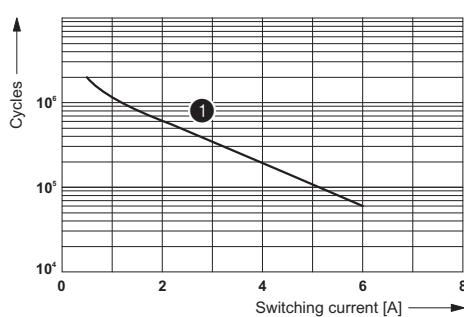
Interrupting rating

Diagram



Service life reduction factor

Diagram



① 250 V AC, ohmic load

Electrical service life