

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

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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 GRM
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
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#### 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

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## Technical data

### Coil side

Typical input current at $U_N$	16 mA
Typical response time	5 ms
Typical release time	8 ms
Operating voltage display	Yellow LED
Protective circuit	Damping diode

### 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)
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

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section stranded min.	0.14 mm <sup>2</sup>
Conductor cross section stranded max.	1.5 mm <sup>2</sup>
Conductor cross section solid min.	0.14 mm <sup>2</sup>
Conductor cross section solid max.	1.5 mm <sup>2</sup>
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section stranded, with ferrule with plastic sleeve max.	1.5 mm <sup>2</sup>
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm <sup>2</sup>
Conductor cross section stranded, with ferrule without plastic sleeve max.	1.5 mm <sup>2</sup>
Conductor cross section AWG/kcmil max	16

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

## Technical data

### Connection data

Conductor cross section AWG/kcmil min.	26
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### 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
Pollution degree	2
Surge voltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

## 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

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## Classifications

### eCl@ss

eCl@ss 5.0	27371603
eCl@ss 5.1	27371603
eCl@ss 6.0	27371603
eCl@ss 7.0	27371603
eCl@ss 8.0	27371603

### 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

## 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/21 - 2903371

### Accessories

Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, Color: red

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Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, Color: blue

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Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

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Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

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Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

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

### Accessories

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

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### Jumper

Plug-in bridge - FBS 2-6 - 3030336



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

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Plug-in bridge - FBS 3-6 - 3030242



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

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Plug-in bridge - FBS 4-6 - 3030255



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

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Plug-in bridge - FBS 5-6 - 3030349



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

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

### Accessories

Plug-in bridge - FBS 10-6 - 3030271



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

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Plug-in bridge - FBS 20-6 - 3030365



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

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Plug-in bridge - FBS 50-6 - 3032224



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

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



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

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



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

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

### Accessories

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



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

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



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

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



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

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



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

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



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

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

### Accessories

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



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

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



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

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



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

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



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

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



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

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### Terminal marking

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

## 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

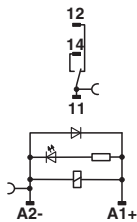
Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

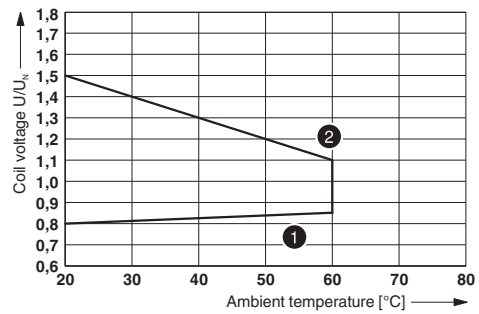
## Drawings

Circuit diagram



DC coils

Diagram

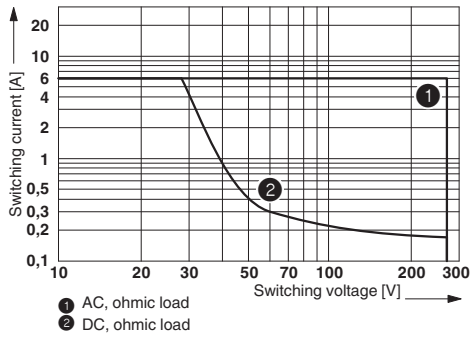


- ① Maximum continuous voltage at limiting continuous current = 6 A
  - ② Minimum operate voltage
- For pre-excitation with  $U_n$  and limiting continuous current = 6 A

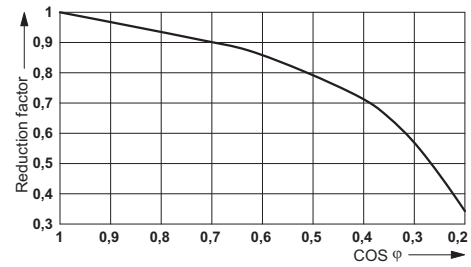
Operating voltage range

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

Diagram



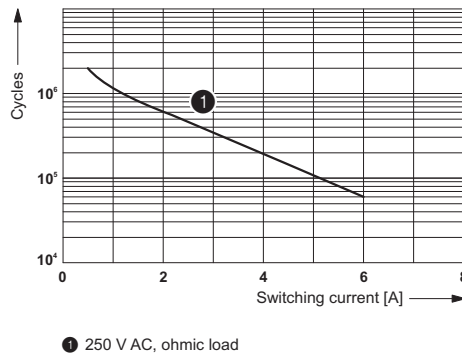
Diagram



## Interrupting rating

### Service life reduction factor

Diagram



## Electrical service life