

## Relay Module - RIF-1-RPT-LDP-24DC/1X21AU - 2903338

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Pre-assembled relay module with push-in connection, consisting of: relay base, multi-layer contact relay, plug-in display/suppressor module, and retaining bracket. Contact type: 1 PDT. Input voltage: 24 V DC

The figure shows the 24 V DC version



### Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	68.0 GRM
Custom tariff number	85364110
Country of origin	Germany

### Technical data

#### Dimensions

Width	16 mm
Height	93 mm
Depth	75 mm

#### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

#### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	(see diagram)
Nominal input current at $U_{IN}$	18 mA
Typical response time	8 ms
Typical release time	10 ms
Operating voltage display	Yellow LED

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## Technical data

### Coil side

Protective circuit	Damping diode
	Polarity protection diode

### Contact side

Contact type	1 PDT
Contact material	AgNi, hard gold-plated
Maximum switching voltage	30 V AC
	36 V DC
Minimum switching voltage	100 mV (at 10 mA)
Maximum inrush current	50 mA
Min. switching current	1 mA (at 24 V)
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	2 A (24 V (DC13))
	6 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	12 V (at 10 mA)
Limiting continuous current	50 A (20 ms, N/O contact)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	264 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2750 VA (for 250 V AC)

### Connection data

Connection method	Push-in connection
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 min.	0.14 mm <sup>2</sup>
Conductor cross section stranded 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 min.	26

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## Technical data

### Connection data

Conductor cross section AWG/kcmil max	16
Stripping length	8 mm

### General

Type of note	Notes on operation
Note	FBS 2-6... plug-in bridge for the input side (A2) and FBS-2-8... plug-in bridge for the output side (11/21)
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 II (Relay)
Mechanical service life	Approx. $3 \times 10^7$ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
Rated surge voltage / insulation	6 kV/safe isolation
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

### Relay socket - RIF-1-BPT/2X21 - 2900931



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

### Single relay - REL-MR- 24DC/21HC AU - 2961545



Pluggable miniature relays, with power contact for high continuous current and additional hard gold plating, 1 PDT, input voltage 24 V DC

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## Articles in set

Plug-in module - RIF-LDP-12-24 DC - 2900939



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with freewheeling diode and yellow LED, polarity: A1+, A2-, input voltage: 12 - 24 V DC  $\pm 20\%$

Retaining bracket - RIF-RH-1 - 2900953



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 16 mm tall miniature power relay and solid-state relay

## 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	27371603

### ETIM

ETIM 3.0	EC001456
ETIM 4.0	EC001456
ETIM 5.0	EC001437

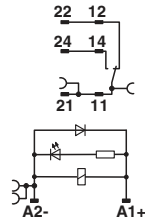
### UNSPSC

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

## Drawings

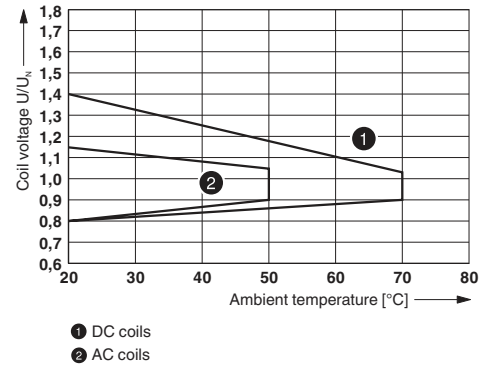
# Relay Module - RIF-1-RPT-LDP-24DC/1X21AU - 2903338

Circuit diagram



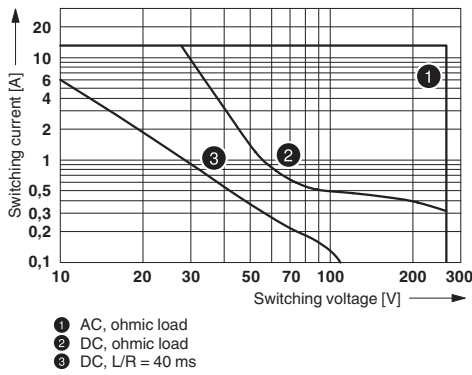
DC coils

Diagram



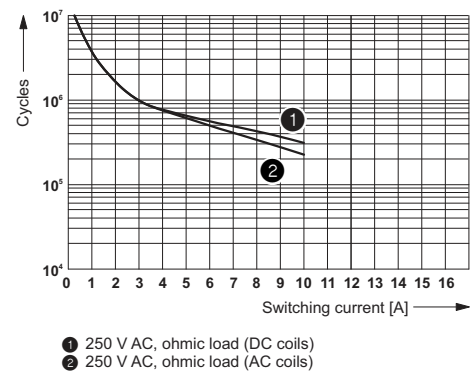
Operating voltage range

Diagram



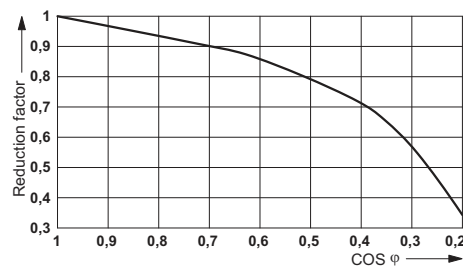
Interrupting rating

Diagram



Electrical service life

Diagram



Service life reduction factor

