

# Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

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Pre-assembled relay module with push-in connection, consisting of: relay base, power contact relay, and retaining bracket. Contact type: 2 PDTs. Input voltage: 24 V DC



## Key Commercial Data

Packing unit	5 pc
GTIN	 4 046356 732864
Weight per Piece (excluding packing)	167.06 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
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### Dimensions

Width	43 mm
Height	111 mm
Depth	90 mm

### Ambient conditions

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

### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	see diagram
Typical input current at $U_N$	56 mA
Typical response time	20 ms

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## Technical data

### Coil side

Typical release time	20 ms
Coil voltage	24 V DC
Protective circuit	Damping diode
	Polarity protection diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	1.34 W

### Contact side

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	440 V AC
	250 V DC
Minimum switching voltage	10 V (At 24 mA)
Min. switching current	10 mA (at 24 V)
Maximum inrush current	50 A (20 ms, N/O contact)
Limiting continuous current	11 A (see diagram)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	70 W (at 220 V DC)
	2500 VA (for 250 V AC)
	4000 VA (At 440 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)
Single-phase motor load	800 W
Motor load according to UL 508	1/3 HP, 120 V AC (single-phase AC motor)
	1/2 HP, 240 V AC (single-phase AC motor)

### 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

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## Technical data

### Connection data output side

Connection name	Contact side
Connection method	Push-in connection
Stripping length	10 mm
Conductor cross section solid	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Ferrule with plastic sleeve)
	0.14 mm <sup>2</sup> ... 2.5 mm <sup>2</sup> (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 14

### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT I (Relay)
Mechanical service life	Approx. 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

Connection in acc. with standard	CSA
Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III

## Articles in set

Relay socket - RIF-4-BPT/3X21 - 2900961



RIF-4... relay base, for high-power relay with 2 or 3 PDTs or 3 N/O contacts, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

# Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

## Articles in set

Single relay - REL-PR2- 24DC/2X21 - 2903698



Plug-in high-power relay with power contacts, 2 PDTs, coil voltage: 24 V DC

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-4 - 2900956



Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relay

## Classifications

### eCl@ss

eCl@ss 4.0	27371102
eCl@ss 4.1	27371102
eCl@ss 5.0	27371601
eCl@ss 5.1	27371601
eCl@ss 6.0	27371601
eCl@ss 7.0	27371601
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

# Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

## Classifications

### UNSPSC

UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39121516

## Approvals

### Approvals

Approvals

CSA / EAC / GL / LR / EAC

Ex Approvals

Approvals submitted

### Approval details

CSA
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EAC
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GL
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LR
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EAC
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## 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

# Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

## Accessories

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### Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, Color: white

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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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## Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

### Accessories

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

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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, Length: 23 mm, Width: 10.7 mm, Number of positions: 2, 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 2-6 GY - 3032237



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

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### Terminal marking

## Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

### Accessories

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 5.2 mm, Lettering field: 5.1 x 10.5 mm

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972



Zack marker strip, Strip, white, unlabeled, can be labeled with: Plotter, Mounting type: Snap into tall marker groove, for terminal block width: 15.2 mm, Lettering field: 10.5 x 15.1 mm

### Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

### Spare parts

Relay socket - RIF-4-BPT/3X21 - 2900961



RIF-4... relay base, for high-power relay with 2 or 3 PDTs or 3 N/O contacts, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

Single relay - REL-PR2- 24DC/2X21 - 2903698



Plug-in high-power relay with power contacts, 2 PDTs, coil voltage: 24 V DC

# Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

## Accessories

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  $\pm 20\%$

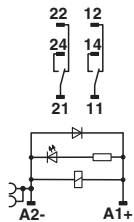
Retaining bracket - RIF-RH-4 - 2900956



Relay retaining bracket, with holder for marking material, suitable for RIF-4 relay base, for high-power relay

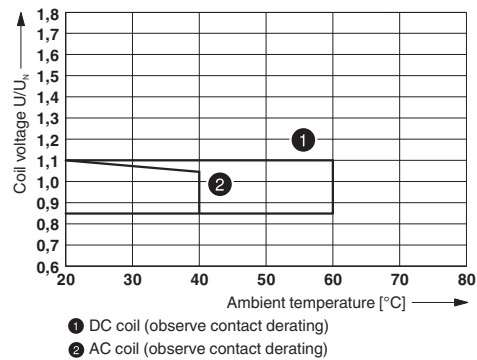
## Drawings

Circuit diagram



DC coils

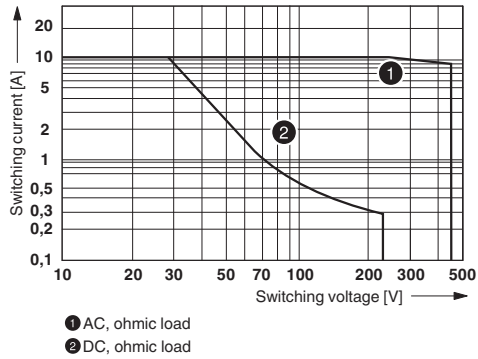
Diagram



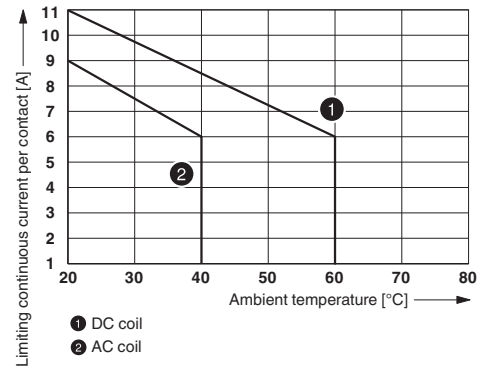
Operating voltage range

# Relay Module - RIF-4-RPT-LDP-24DC/2X21 - 2903281

Diagram

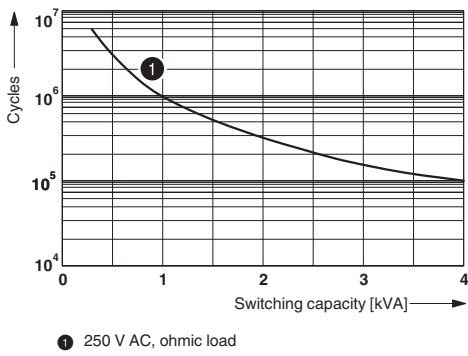


Diagram



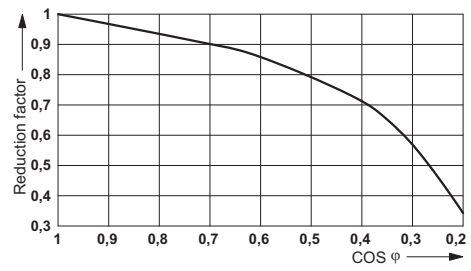
Interrupting rating

Diagram



Contact derating

Diagram



Electrical service life

Service life reduction factor