

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

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, relay retaining bracket, and power contact relay with test button, integrated status LED, and freewheeling diode. Contact type: 2 PDTs. Input voltage: 24 V DC



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	68.0 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	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
Typical input current at U_N	18 mA

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

Technical data

Coil side

Typical response time	9 ms
Typical release time	10 ms
Coil voltage	24 V DC
Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.43 W

Contact side

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	16 A (20 ms, N/O contact)
Limiting continuous current	see diagram
Interrupting rating (ohmic load) max.	192 W (at 24 V DC)
	62 W (at 48 V DC)
	42 W (at 60 V DC)
	55 W (at 110 V DC)
	66 W (at 220 V DC)
	2000 VA (for 250 V AC)
Switching capacity min.	120 mW
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (at 24 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 A (at 120 V, AC15)
	1.5 A (at 240 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 ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

Connection data output side

Connection name	Contact side
-----------------	--------------

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

Technical data

Connection data output side

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

General

Test voltage relay winding/relay contact	4 kV _{rms} (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT II (Relay)
Mechanical service life	Approx. 5 x 10 ⁶ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
Rated surge voltage/insulation	6 kV/safe isolation
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
Rated surge voltage/insulation	6 kV/safe isolation
Degree of pollution	2
Overvoltage category	III

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

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/21-21/MS - 2987943



Plug-in miniature relay, with power contact, 2 PDTs, test button, mechanical switch position indicator, status LED, freewheeling diode, polarity A1+, A2, input voltage 24 V DC

Retaining bracket - RIF-RH-1-H - 2904468



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 25 mm tall miniature power relay and solid-state relay

Classifications

eCl@ss

eCl@ss 4.1	27371102
eCl@ss 5.1	27371603
eCl@ss 6.0	27371603
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

ETIM

ETIM 4.0	EC000236
ETIM 5.0	EC001437

Approvals

Approvals

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

Approvals

Approvals

EAC / EAC

Ex Approvals

Approvals submitted

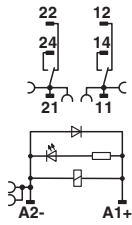
Approval details

EAC

EAC

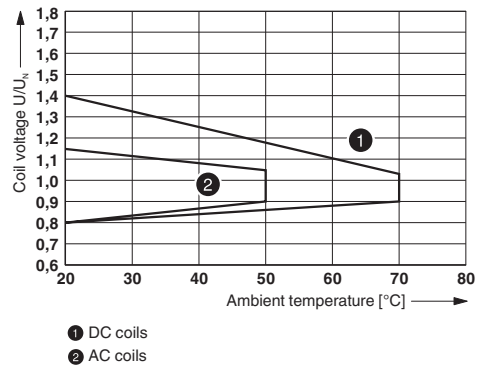
Drawings

Circuit diagram



DC coils

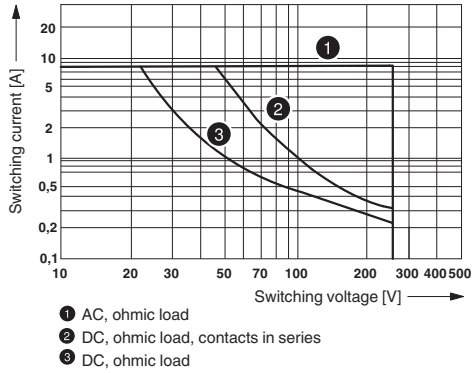
Diagram



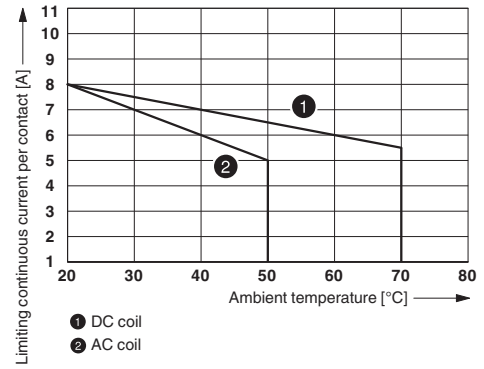
Operating voltage range

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

Diagram



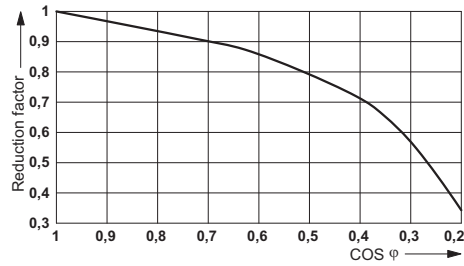
Diagram



Interrupting rating

Contact derating

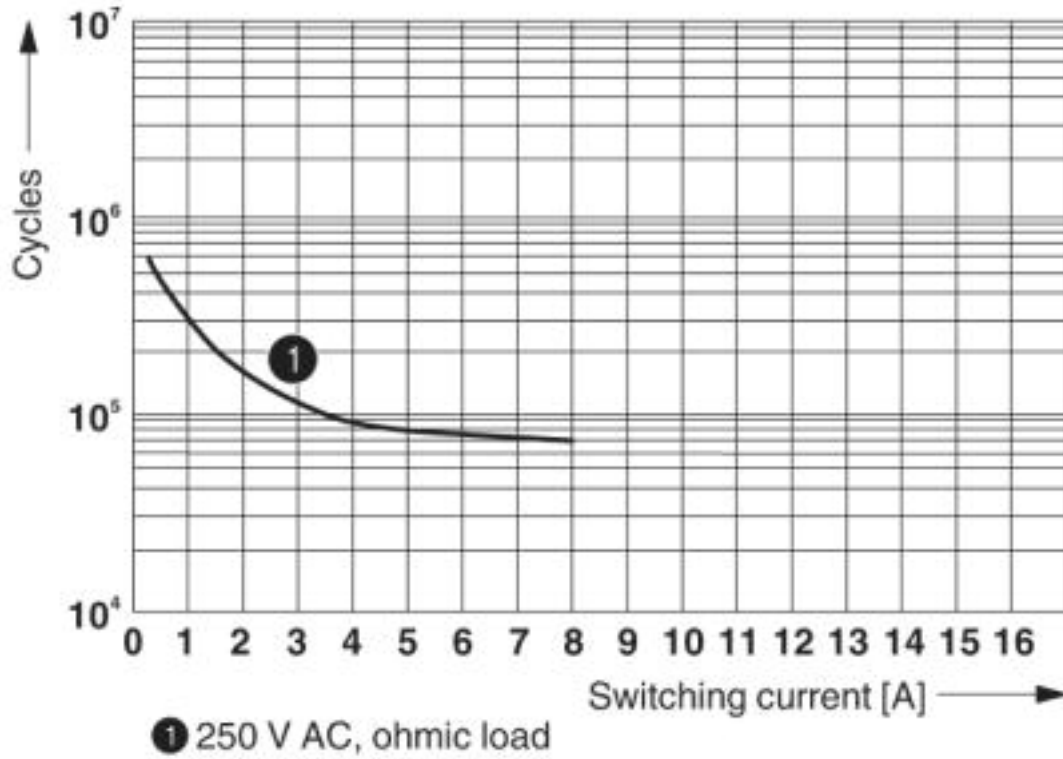
Diagram



Service life reduction factor

Relay Module - RIF-1-RPT-LDP-24DC/2X21MS - 2905291

Diagram



Electrical service life