

Relay Module - RIF-1-RPT-LDP-12DC/1X21 - 2906224

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, power contact relay, plug-in display/suppressor module, and retaining bracket. Contact type: 1 PDT. Input voltage: 12 V DC



Key Commercial Data

Packing unit	1 STK
Minimum order quantity	10 STK
Weight per Piece (excluding packing)	68.000 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	12 V DC
Input voltage range in reference to U_N	see diagram

Relay Module - RIF-1-RPT-LDP-12DC/1X21 - 2906224

Technical data

Coil side

Typical input current at U_N	33 mA
Typical response time	8 ms
Typical release time	10 ms
Coil voltage	12 V DC
Protective circuit	Damping diode
Operating voltage display	Yellow LED

Contact side

Contact type	1 PDT
Type of switch contact	Single contact
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	50 A (20 ms, N/O contact)
Limiting continuous current	11 A (see diagram)
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)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.2 A (at 250 V, DC13)
	6 A (at 24 V, AC15)
	6 A (at 120 V, AC15)
	6 A (at 250 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

Relay Module - RIF-1-RPT-LDP-12DC/1X21 - 2906224

Technical data

Connection data output side

Connection name	Contact 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

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 _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT III (Relay)
Mechanical service life	approx. 3x 10 ⁷ cycles
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

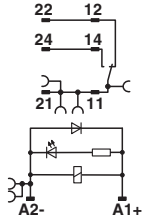
Environmental Product Compliance

China RoHS	Environmentally Friendly Use Period = 50
	For details about hazardous substances go to tab "Downloads", Category "Manufacturer's declaration"

Drawings

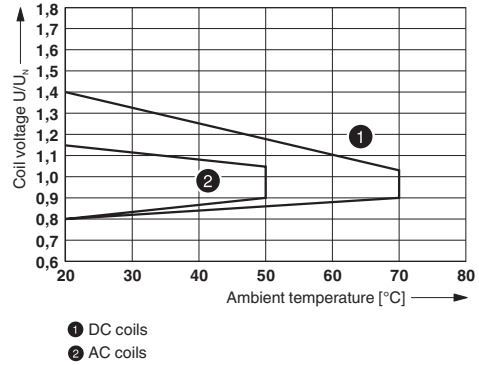
Relay Module - RIF-1-RPT-LDP-12DC/1X21 - 2906224

Circuit diagram



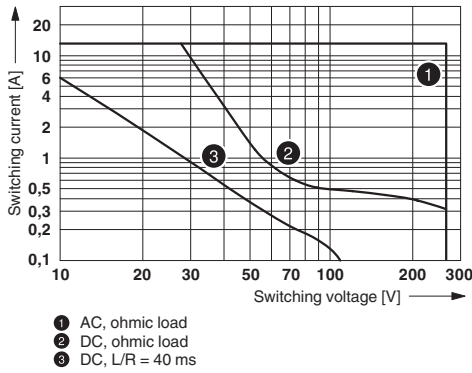
DC coils

Diagram



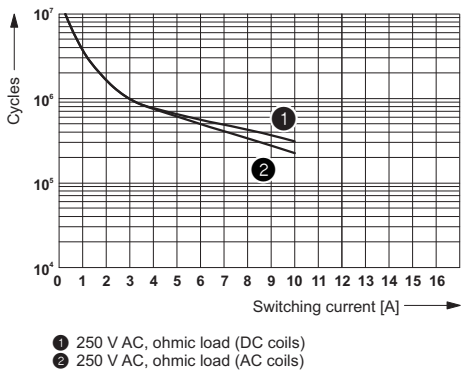
Operating voltage range

Diagram



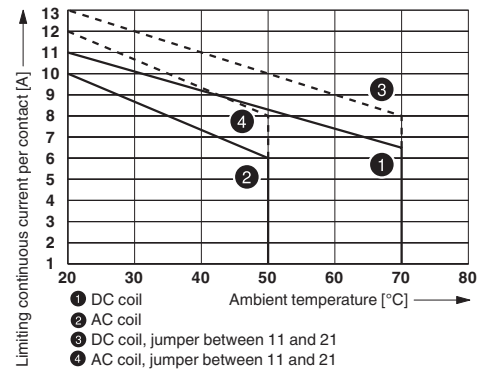
Interrupting rating

Diagram



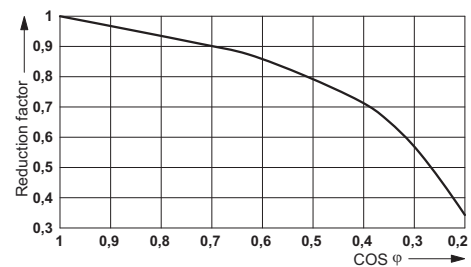
Electrical service life

Diagram



Contact derating

Diagram



Service life reduction factor

Relay Module - RIF-1-RPT-LDP-12DC/1X21 - 2906224

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- 12DC/21HC - 2961309



Plug-in miniature power relay, with power contact for high continuous currents, 1 PDT, input voltage 12 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-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