

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

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: 2 PDTs. Input voltage: 230 V AC

The figure shows the 24 V DC version



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	68.0 g
Custom tariff number	85364900
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 ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

Coil side

Nominal input voltage U_N	230 V AC
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	6 mA

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

Technical data

Coil side

Typical response time	3 ms ... 12 ms
Typical release time range	3 ms ... 20 ms
Coil voltage	230 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

Contact side

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 10 mA)
Min. switching current	10 mA (At 5 V)
Maximum inrush current	12 A (20 ms, N/O contact)
Limiting continuous current	8 A (see diagram)
Interrupting rating (ohmic load) max.	192 W (at 24 V DC)
	124 W (at 48 V DC)
	108 W (at 60 V DC)
	52 W (at 110 V DC)
	48 W (at 220 V DC)
	2500 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 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 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

Connection data output side

Connection name	Contact side
Connection method	Push-in connection

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

Technical data

Connection data output side

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.)
Test voltage PDT/PDT	2.5 kV _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT III (Relay)
Mechanical service life	Approx. 10 ⁷ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
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
Insulation	Safe isolation, basic insulation, and 4 kV rated surge voltage between all changeover contacts.
Degree of pollution	2
Overvoltage category	III

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

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-230AC/21-21 - 2961451



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 230 V AC

Plug-in module - RIF-LV-120-230 AC/110 DC - 2900944



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 120 - 230 V AC/110 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

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

Classifications

eCl@ss

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
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39121516

Approvals

Approvals

Approvals

EAC / GL / LR / EAC

Ex Approvals

Approvals submitted

Approval details

EAC

GL

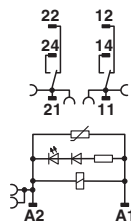
LR

EAC

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

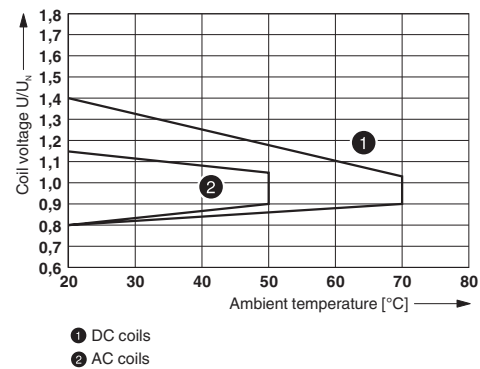
Drawings

Circuit diagram



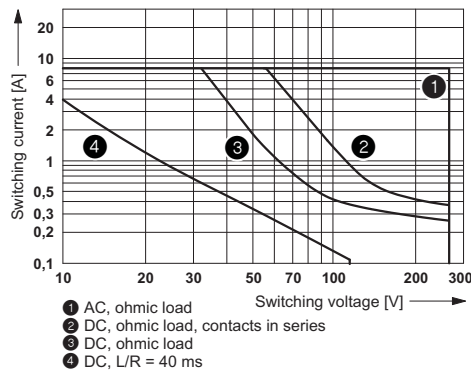
AC coils

Diagram



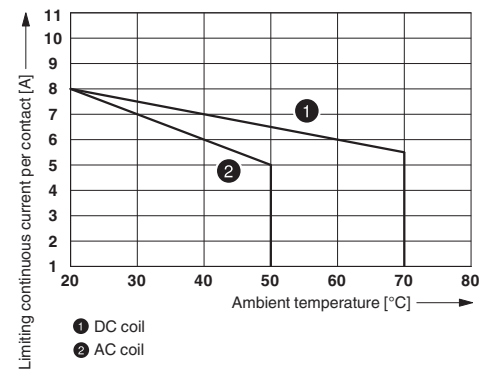
Operating voltage range

Diagram



Interrupting rating

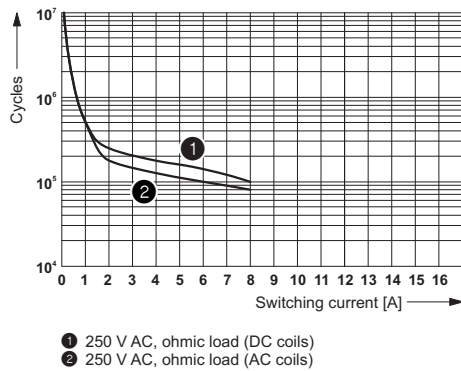
Diagram



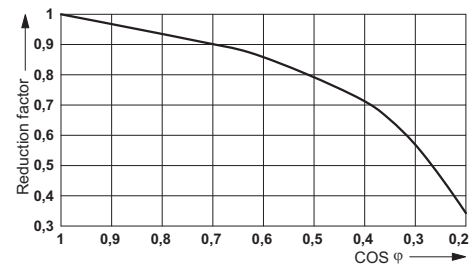
Contact derating

Relay Module - RIF-1-RPT-LV-230AC/2X21 - 2903331

Diagram



Diagram



Electrical service life

Service life reduction factor