

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

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://download.phoenixcontact.com>)



Pre-assembled relay modules with push-in connection, consisting of: relay base, multi-layer contact relay, plug-in display/suppressor module, and retaining bracket. Input voltage: 230 V AC, 1 PDT

The figure shows the 24 V DC version



Key commercial data

Packing unit	1 pc
Custom tariff number	85364900
Country of origin	Germany

Technical data

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)
Nominal input current at U_{IN}	6 mA
Typical response time	3 ms ... 12 ms
Typical release time range	3 ms ... 20 ms
Operating voltage display	Yellow LED
Protective circuit	Varistor

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Technical data

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	25 A (20 ms, N/O contact)
Min. switching current	10 mA (at 12 V)
Interrupting rating (ohmic load) max.	240 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)
	2500 VA (for 250 V AC)

Connection data

Connection method	Push-in connection
Conductor cross section solid min.	0.14 mm ²
Conductor cross section solid max.	1.5 mm ²
Conductor cross section stranded min.	0.14 mm ²
Conductor cross section stranded max.	1.5 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule with plastic sleeve max.	1.5 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm ²
Conductor cross section stranded, with ferrule without plastic sleeve max.	1.5 mm ²
Conductor cross section AWG/kcmil min.	26
Conductor cross section AWG/kcmil max.	16
Stripping length	8 mm

General

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Technical data

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 II (Relay)
Mechanical service life	Approx. 10 ⁷ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
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-230AC/21HC AU - 2961529



Pluggable miniature relays, with power contact for high continuous current and additional hard gold plating, 1 PDT, input voltage 230 V AC

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Articles in set

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
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

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Accessories

Accessories

Bridge

Plug-in bridge - FBS 2-6 - 3030336



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

Plug-in bridge - FBS 2-6 BU - 3036932



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

Plug-in bridge - FBS 2-6 GY - 3032237



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

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Number of positions: 10, Color: red

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Accessories

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Number of positions: 20, Color: red

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Number of positions: 50, Color: red

Plug-in bridge - FBS 2-8 - 3030284



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

Plug-in bridge - FBS 2-8 BU - 3032567



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

Plug-in bridge - FBS 2-8 GY 7042 - 3032541



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

End block

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Accessories

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

Insulating sleeve

Insulating sleeve - MPS-IH WH - 0201663



Insulating sleeve, Color: white

Insulating sleeve - MPS-IH RD - 0201676



Insulating sleeve, Color: red

Insulating sleeve - MPS-IH BU - 0201689



Insulating sleeve, Color: blue

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Accessories

Insulating sleeve - MPS-IH GN - 0201702



Insulating sleeve, Color: green

Insulating sleeve - MPS-IH GY - 0201728



Insulating sleeve, Color: gray

Insulating sleeve - MPS-IH BK - 0201731



Insulating sleeve, Color: black

Terminal marking

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

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Accessories

Test plug terminal block

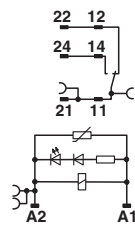
Test plugs - MPS-MT - 0201744



Test plugs, Color: silver

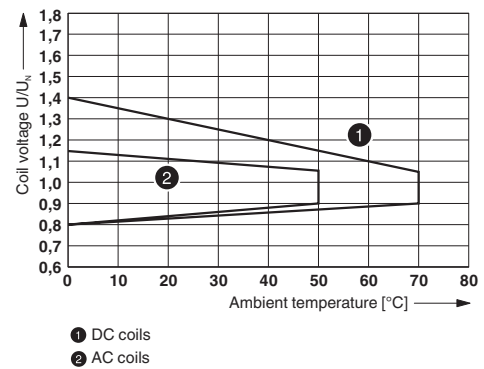
Drawings

Circuit diagram



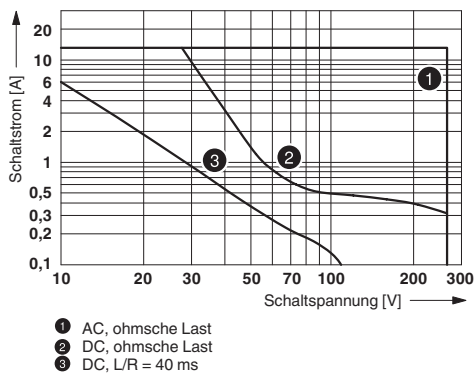
AC coils

Diagram



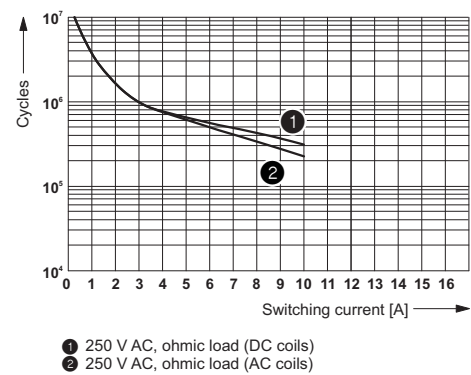
Operating voltage range

Diagram



Interrupting rating

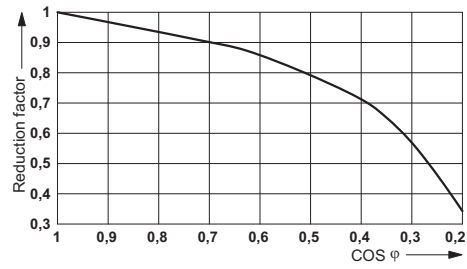
Diagram



Electrical service life

Relay Module - RIF-1-RPT-LV-230AC/1X21AU - 2903335

Diagram



Service life reduction factor