

Relay Module - RIF-0-RSC-12DC/21 - 2903375

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 screw connection, consisting of: relay base with ejector and power contact relay. Contact type: 1 changeover contact. Input voltage: 12 V DC

The figure shows the 24 V DC version



Key Commercial Data

Packing unit	1
GTIN	
GTIN	4046356731645
Custom tariff number	85364110

Technical data

Note

Utilization restriction	EMC: class A product, see manufacturer's declaration in the download area
-------------------------	---

Dimensions

Width	6.2 mm
Height	84 mm
Depth	82 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	12 V DC
-----------------------------	---------

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Technical data

Coil side

Input voltage range in reference to U_N	see diagram
Typical input current at U_N	16 mA
Typical response time	5 ms
Typical release time	8 ms
Coil voltage	12 V DC
Protective circuit	Damping diode
Operating voltage display	Yellow LED
Power dissipation for nominal condition	0.19 W

Contact side

Contact type	1 PDT
Type of switch contact	Single contact
Contact material	AgSnO
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (at 100 mA)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	6 A
Interrupting rating (ohmic load) max.	140 W (at 24 V DC)
	20 W (at 48 V DC)
	18 W (at 60 V DC)
	23 W (at 110 V DC)
	40 W (at 220 V DC)
	1500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (at 24 V, DC13)
	0.2 A (at 110 V, DC13)
	0.1 A (at 220 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	3 A (at 230 V, AC15)

Connection data input side

Connection name	Coil side
Connection method	Screw connection
Stripping length	7 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross section flexible	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 2.5 mm ² (Ferrules without plastic sleeve)
	0.5 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve)

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Technical data

Connection data input side

Conductor cross section AWG	20 ... 12
Torque	0.5 Nm

Connection data output side

Connection name	Contact side
Connection method	Screw connection
Stripping length	7 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross section flexible	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 2.5 mm ² (Ferrules without plastic sleeve)
	0.5 mm ² ... 1.5 mm ² (Ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 12
Torque	0.5 Nm

General

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. 2x 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Standards and Regulations

Standards/regulations	DIN EN 50178
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV
Insulation	safe isolation
Degree of pollution	2
Overvoltage category	III

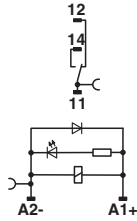
Environmental Product Compliance

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

Drawings

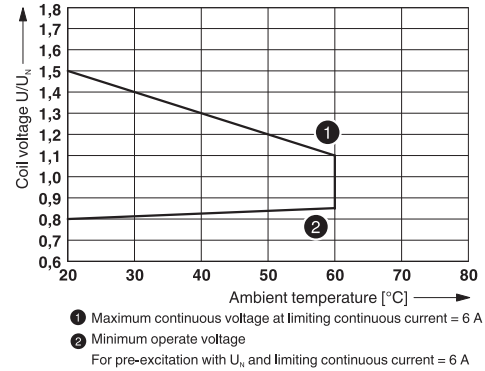
Relay Module - RIF-0-RSC-12DC/21 - 2903375

Circuit diagram



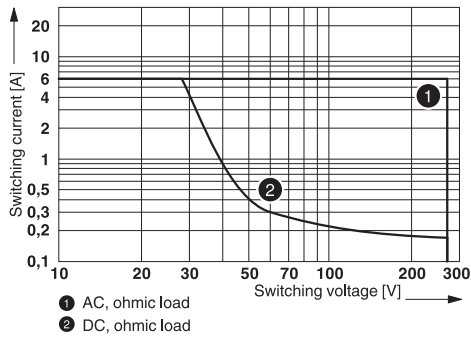
DC coils

Diagram

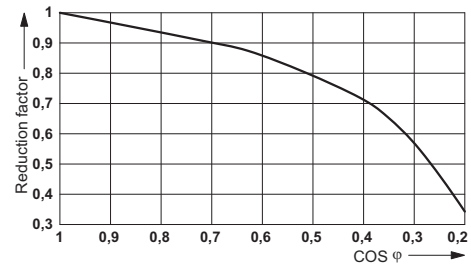


Operating voltage range

Diagram



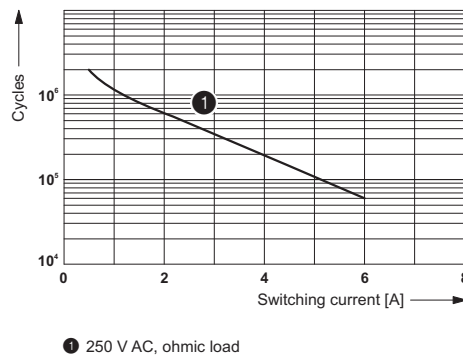
Diagram



Interrupting rating

Service life reduction factor with various cos phi

Diagram



Electrical service life

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Articles in set

Single relay - REL-MR- 12DC/21 - 2961150



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 12 V DC

Relay socket - RIF-0-BSC/21 - 2900957



RIF-0... relay base, for miniature power relay with 1 changeover contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5

Classifications

eCl@ss

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 2.0	EC001437
ETIM 3.0	EC001437
ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437

UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39122334

Relay Module - RIF-0-RSC-12DC/21 - 2903375

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

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

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Accessories

Insulating sleeve - MPS-IH YE - 0201692



Insulating sleeve, Color: yellow

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

Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 10.7 mm, Number of positions: 2, Color: red

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Accessories

Plug-in bridge - FBS 3-6 - 3030242



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 16.9 mm, Number of positions: 3, Color: red

Plug-in bridge - FBS 4-6 - 3030255



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 23.1 mm, Number of positions: 4, Color: red

Plug-in bridge - FBS 5-6 - 3030349



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 29.3 mm, Number of positions: 5, Color: red

Plug-in bridge - FBS 10-6 - 3030271



Plug-in bridge, Pitch: 6.2 mm, Length: 23 mm, Width: 60.3 mm, Number of positions: 10, Color: red

Plug-in bridge - FBS 20-6 - 3030365



Plug-in bridge, Pitch: 6.2 mm, Length: 23 mm, Width: 122.3 mm, Number of positions: 20, Color: red

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Accessories

Plug-in bridge - FBS 50-6 - 3032224



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 50, Color: red

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



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 10.7 mm, Number of positions: 2, Color: blue

Plug-in bridge - FBS 3-6 BU - 3036945



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 16.9 mm, Number of positions: 3, Color: blue

Plug-in bridge - FBS 4-6 BU - 3036958



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 23.1 mm, Number of positions: 4, Color: blue

Plug-in bridge - FBS 5-6 BU - 3036961



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 29.3 mm, Number of positions: 5, Color: blue

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Accessories

Plug-in bridge - FBS 10-6 BU - 3032198



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 10, Color: blue

Plug-in bridge - FBS 20-6 BU - 3032208



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 20, Color: blue

Plug-in bridge - FBS 50-6 BU - 3032211



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 50, Color: blue

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



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 10.7 mm, Number of positions: 2, Color: gray

Plug-in bridge - FBS 3-6 GY - 3032240



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 16.9 mm, Number of positions: 3, Color: gray

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Accessories

Plug-in bridge - FBS 4-6 GY - 3032279



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 23.1 mm, Number of positions: 4, Color: gray

Plug-in bridge - FBS 5-6 GY - 3032266



Plug-in bridge, Pitch: 6.2 mm, Length: 3 mm, Width: 29.3 mm, Number of positions: 5, Color: gray

Plug-in bridge - FBS 10-6 GY - 3032253



Plug-in bridge, Pitch: 6.2 mm, Number of positions: 10, Color: gray

Terminal marking

Zack marker strip - ZB 6:UNBEDRUCKT - 1051003



Zack marker strip, Strip, white, unlabeled, can be labeled with: CMS-P1-PLOTTER, PLOTMARK, Mounting type: Snap into tall marker groove, for terminal block width: 6.2 mm, Lettering field: 6.15 x 10.5 mm

Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm² conductor cross section, Color: silver

Relay Module - RIF-0-RSC-12DC/21 - 2903375

Accessories

Spare parts

Single relay - REL-MR- 12DC/21 - 2961150



Plug-in miniature power relay, with power contact, 1 PDT, input voltage 12 V DC

Relay socket - RIF-0-BSC/21 - 2900957



RIF-0... relay base, for miniature power relay with 1 changeover contact or identical solid-state relays, screw connection, for mounting on NS 35/7,5
