

Relay Module - RIF-1-RSC-LV-120AC/2X21 - 2903348

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, power contact relay, plug-in display/interference suppression module, and retaining bracket. Contact type: 2 changeover contacts. Input voltage: 120 V AC



Key Commercial Data

Packing unit	10 STK
GTIN	
GTIN	4046356732802

Technical data

Note

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

Dimensions

Width	16 mm
Height	89 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	120 V AC
Input voltage range in reference to U_N	see diagram
Mains frequency	50/60 Hz
Typical input current at U_N	8 mA
Typical response time	3 ms ... 12 ms
Typical release time range	3 ms ... 20 ms

Relay Module - RIF-1-RSC-LV-120AC/2X21 - 2903348

Technical data

Coil side

Coil voltage	120 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

Contact side

Contact type	2 PDT
Type of switch contact	Single contact
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)
	60 W (at 60 V DC)
	44 W (at 110 V DC)
	57 W (at 220 V DC)
	2000 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	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross-section solid (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.5 mm ² ... 4 mm ²
	0.5 mm ² ... 4 mm ² (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 1.5 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Torque	0.5 Nm ... 0.6 Nm

Connection data output side

Connection name	Contact side
Connection method	Screw connection

Relay Module - RIF-1-RSC-LV-120AC/2X21 - 2903348

Technical data

Connection data output side

Stripping length	8 mm
Conductor cross section solid	0.5 mm ² ... 4 mm ²
Conductor cross-section solid (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
Conductor cross section flexible	0.5 mm ² ... 4 mm ²
	0.5 mm ² ... 4 mm ² (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm ² ... 2.5 mm ²
	0.5 mm ² ... 1.5 mm ² (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (flexible)
Torque	0.5 Nm ... 0.6 Nm

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 base)
	RT III (Relay)
Mechanical service life	approx. 10 ⁷ cycles
Mounting position	any
Assembly instructions	In rows with zero spacing

Standards and Regulations

Standards/regulations	DIN EN 50178
Rated surge voltage	6 kV
Insulation	Safe isolation, basic insulation, and 4 kV rated surge voltage between all changeover contacts.
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V2

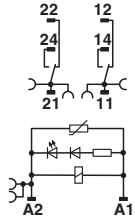
Environmental Product Compliance

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

Drawings

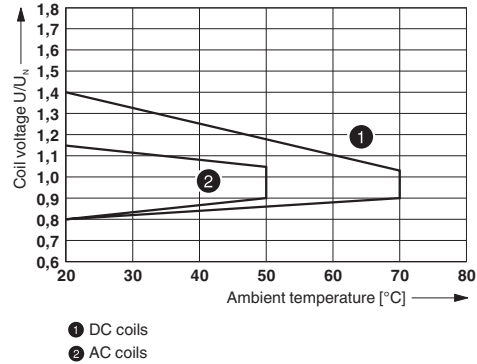
Relay Module - RIF-1-RSC-LV-120AC/2X21 - 2903348

Circuit diagram



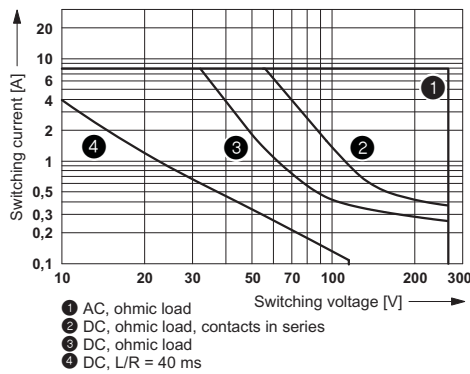
AC coils

Diagram



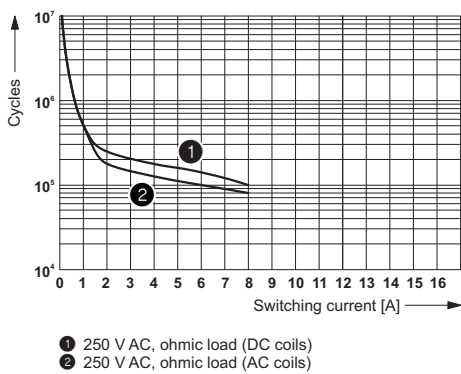
Operating voltage range

Diagram



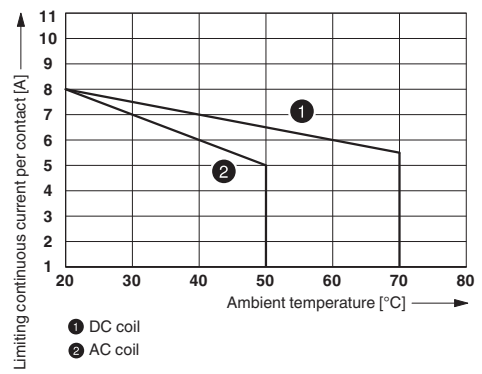
Interrupting rating

Diagram



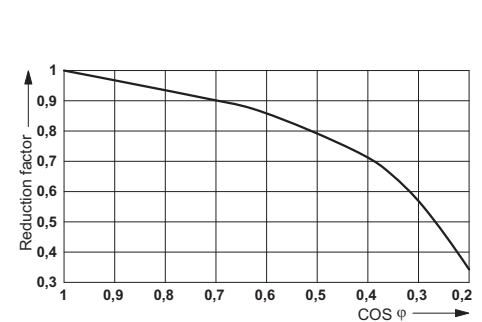
Electrical service life

Diagram



Contact derating

Diagram



Service life reduction factor

Relay Module - RIF-1-RSC-LV-120AC/2X21 - 2903348

Articles in set

Relay base - RIF-1-BSC/2X21 - 2900930



RIF-1... relay base, for miniature power relay with 1 or 2 changeover contacts or identical solid-state relays, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Single relay - REL-MR-120AC/21-21 - 2961448



Plug-in miniature power relay, with power contact, 2 PDTs, input voltage 120 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

Approvals

Approvals

Approvals

DNV GL / EAC

Ex Approvals

Approval details

Relay Module - RIF-1-RSC-LV-120AC/2X21 - 2903348

Approvals

DNV GL	http://exchange.dnv.com/tari/	TAA000018V
EAC		RU C- DE.A*30.B.01082

Phoenix Contact 2018 © - all rights reserved
<http://www.phoenixcontact.com>

PHOENIX CONTACT GmbH & Co. KG
Flachsmarktstr. 8
32825 Blomberg
Germany
Tel. +49 5235 300
Fax +49 5235 3 41200
<http://www.phoenixcontact.com>