

# Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

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: 3 changeover contacts. Input voltage: 230 V AC



## Key Commercial Data

Packing unit	5 STK
GTIN	
GTIN	4046356732048
Weight per Piece (excluding packing)	188.000 g
Custom tariff number	85364900
Country of origin	China
Note	Made to Order (non-returnable)

## Technical data

### Note

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

### Dimensions

Width	40 mm
Height	96 mm
Depth	90 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

# Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

## Technical data

### Coil side

Mains frequency	50/60 Hz
Typical input current at $U_N$	13 mA
Typical response time	5 ms ... 15 ms
Typical release time range	5 ms ... 20 ms
Coil voltage	230 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

### Contact side

Contact type	3 PDTs
Type of switch contact	Single contact
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	10 V (At 24 mA)
Min. switching current	10 mA (at 24 V)
Maximum inrush current	30 A (20 ms, N/O contact)
Limiting continuous current	6 A (see diagram)
Interrupting rating (ohmic load) max.	144 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)
	1500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (at 24 V, DC13)
	0.22 A (at 120 V, DC13)
	0.11 A (at 250 V, DC13)
	3 A (at 24 V, AC15)
	3 A (at 120 V, AC15)
	1.5 A (at 240 V, AC15)

### Connection data input side

Connection name	Input side
Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section solid (2 conductors with same cross section)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (stranded)

# Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

## Technical data

### Connection data input side

Torque	0.5 Nm ... 0.6 Nm
--------	-------------------

### Connection data output side

Connection name	Contact side
Connection method	Screw connection
Stripping length	8 mm
Conductor cross section solid	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
Conductor cross-section solid (2 conductors with same cross section)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
Conductor cross section flexible	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup>
	0.5 mm <sup>2</sup> ... 4 mm <sup>2</sup> (Ferrule with plastic sleeve)
Conductor cross section flexible (2 conductors with same cross section)	0.5 mm <sup>2</sup> ... 2.5 mm <sup>2</sup>
	0.5 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (TWIN ferrule with plastic sleeve)
Conductor cross section AWG	20 ... 10 (solid)
	20 ... 12 (stranded)
Torque	0.5 Nm ... 0.6 Nm

### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2 kV <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay base)
	RT I (Relay)
Mechanical service life	Approx. 2x 10 <sup>7</sup> 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	4 kV
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III
Flammability rating according to UL 94	V2

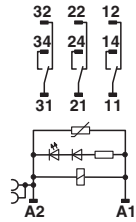
### Environmental Product Compliance

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

## Drawings

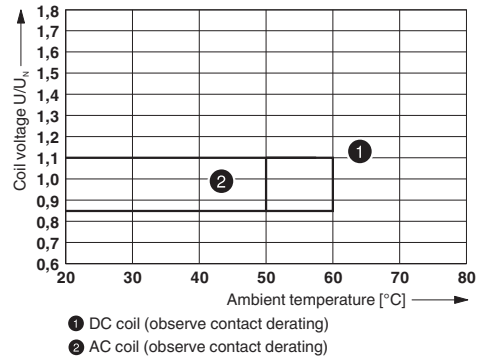
# Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

Circuit diagram



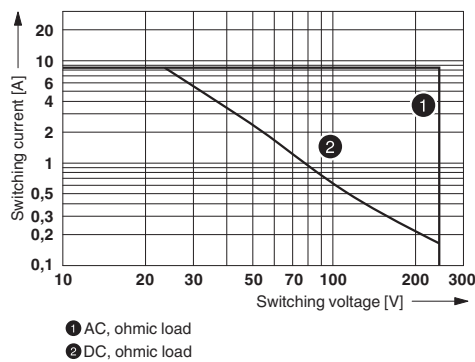
AC coils

Diagram

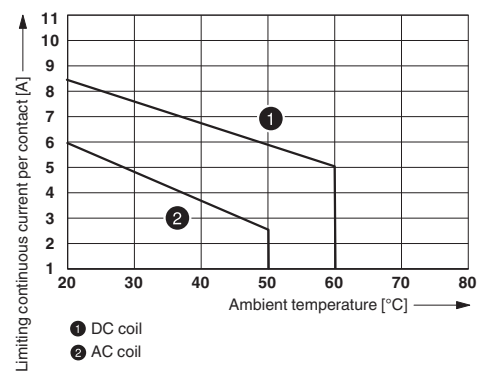


Operating voltage range

Diagram

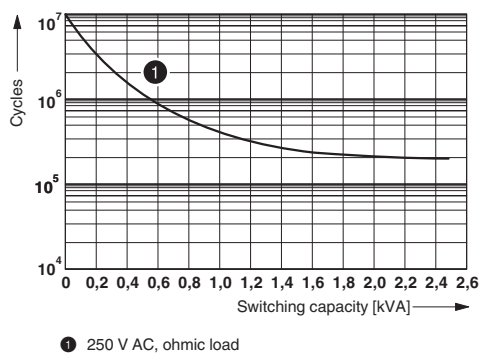


Diagram



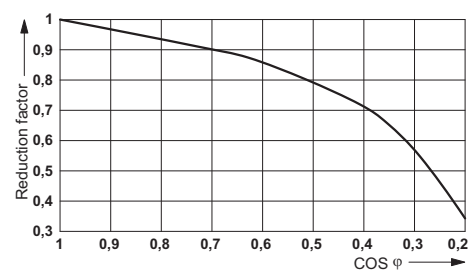
Interrupting rating

Diagram



Contact derating

Diagram



Electrical service life

Service life reduction factor

# Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

## Articles in set

Relay base - RIF-3-BSC/3X21 - 2900936



RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

Single relay - REL-OR3/L-230AC/3X21 - 2903696



Pluggable octal relay with power contacts, 3 PDT, test button, mechanical switching position indication, input voltage: 230 V AC

Plug-in module - RIF-V-120-230 UC - 2900948



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 120 ... 230 V AC/DC ±20 %

Retaining bracket - RIF-RH-3 - 2900955



Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

## 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

# Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

## Classifications

### ETIM

ETIM 4.0	EC001437
ETIM 5.0	EC001437
ETIM 6.0	EC001437

### UNSPSC

UNSPSC 6.01	30211916
UNSPSC 7.0901	39121515
UNSPSC 11	39121515
UNSPSC 12.01	39121515
UNSPSC 13.2	39122334

## Approvals

### Approvals

Approvals


DNV GL / CSA / EAC

Ex Approvals

### Approval details

DNV GL	<a href="http://exchange.dnv.com/tari/">http://exchange.dnv.com/tari/</a>	TAA000018V
--------	---	------------

CSA		<a href="http://www.csagroup.org/services-industries/product-listing/">http://www.csagroup.org/services-industries/product-listing/</a>	2607057
-----	---	---	---------

EAC		RU C- DE.A*30.B.01082
-----	---	--------------------------

## Accessories

Accessories

End block

## Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

### 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-3-RSC-LV-230AC/3X21 - 2903298

### 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



### Jumper

Plug-in bridge - FBS 2-6 - 3030336



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: red

---

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



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: blue

---



## Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

### Accessories

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



Plug-in bridge, pitch: 6.2 mm, width: 10.7 mm, number of positions: 2, color: gray

---

### Marker carriers

Marker carriers - STP 5-2 - 0800967



Double marker carrier, snaps onto the double-level spring-cage terminal block STTB 2,5, STTB 4, PTTB 2,5, PTTB 4 can be marked with UC-TM 5, ZB 5 or UC-TMF 5, ZBF 5

---

### Terminal marking

Zack marker strip - ZB 5 :UNBEDRUCKT - 1050004



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: 5.2 mm, lettering field size: 5.1 x 10.5 mm

---

Zack marker strip - ZB 15:UNBEDRUCKT - 0811972



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: 15.2 mm, lettering field size: 10.5 x 15.1 mm

---

Marker for terminal blocks - UC-TM 16 - 0819217



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into tall marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 10.5 mm

---

## Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

### Accessories

Marker for terminal blocks - UC-TMF 16 - 0819262



Marker for terminal blocks, Sheet, white, unlabeled, can be labeled with: BLUEMARK CLED, BLUEMARK LED, CMS-P1-PLOTTER, PLOTMARK, mounting type: snap into flat marker groove, for terminal block width: 16 mm, lettering field size: 15.45 x 5.1 mm

---

### Test plug terminal block

Test plugs - MPS-MT - 0201744



Test plugs, with solder connection up to 1 mm<sup>2</sup> conductor cross section, color: silver

---

### Spare parts

Relay base - RIF-3-BSC/3X21 - 2900936



RIF-3... relay base, for octal relay with 3 changeover contacts, screw connection, plug-in option for input/interference suppression modules, for mounting on NS 35/7,5

---

Single relay - REL-OR3/L-230AC/3X21 - 2903696



Pluggable octal relay with power contacts, 3 PDT, test button, mechanical switching position indication, input voltage: 230 V AC

---

Plug-in module - RIF-V-120-230 UC - 2900948



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor, input voltage: 120 ... 230 V AC/DC ±20 %

## Relay Module - RIF-3-RSC-LV-230AC/3X21 - 2903298

### Accessories

Retaining bracket - RIF-RH-3 - 2900955



Relay retaining bracket, with holder for marking material, suitable for RIF-3 relay base, for octal relay

---

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