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# Relay Module - RIF-2-RPT-LV-120AC/2X21 - 2903311

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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: 120 V AC

The figure shows the 24 V DC version

## Key Commercial Data

Packing unit	10 STK
GTIN	 4 046356 732512

## Technical data

### Note

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

Width	31 mm
Height	96 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 Hz 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	120 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

# Relay Module - RIF-2-RPT-LV-120AC/2X21 - 2903311

## Technical data

### Contact side

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	5 V (At 24 mA)
Min. switching current	5 mA (at 24 V)
Maximum inrush current	30 A (20 ms, N/O contact)
Limiting continuous current	8.5 A (see diagram)
Interrupting rating (ohmic load) max.	204 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)
	2125 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 120 V, AC15)
	1.5 A (at 240 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 <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule with plastic sleeve)
	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

### Connection data output side

Connection name	Contact side
Connection method	Push-in connection
Stripping length	8 mm
Conductor cross section solid	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
Conductor cross section flexible	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup>
	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrule with plastic sleeve)
	0.14 mm <sup>2</sup> ... 1.5 mm <sup>2</sup> (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

### General

Test voltage relay winding/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)
Test voltage relay contact/relay contact	2.5 kV <sub>rms</sub> (50 Hz, 1 min.)

# Relay Module - RIF-2-RPT-LV-120AC/2X21 - 2903311

## Technical data

### General

Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT I (Relay)
Mechanical service life	Approx. $2 \times 10^7$ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Degree of pollution	2
Overvoltage category	III
Mounting position	any
Assembly instructions	In rows with zero spacing

### Standards and Regulations

Connection in acc. with standard	CSA
Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Insulation	Basic insulation
Degree of pollution	2
Overvoltage category	III

## Articles in set

### Relay socket - RIF-2-BPT/4X21 - 2900934



RIF-2... relay base, for industrial relay with 2 or 4 PDTs, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

### Single relay - REL-IR2/L-120AC/2X21 - 2903667



Plug-in industrial relay with power contacts, 2 PDTs, test key, status LED, mechanical switch position indicator, input voltage: 120 V AC

# Relay Module - RIF-2-RPT-LV-120AC/2X21 - 2903311

## Articles in set

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  $\pm 20\%$

Retaining bracket - RIF-RH-2 - 2900954



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-2 relay base, for industrial 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	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

# Relay Module - RIF-2-RPT-LV-120AC/2X21 - 2903311

## Approvals

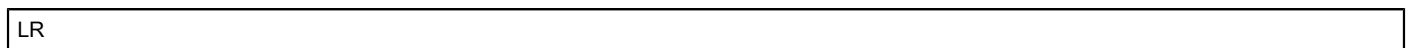
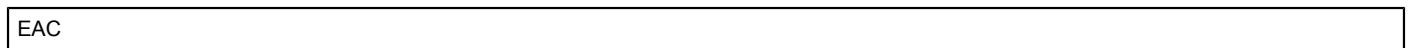
Approvals

CSA / EAC / LR

Ex Approvals

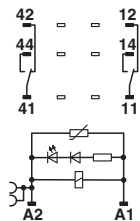
Approvals submitted

## Approval details



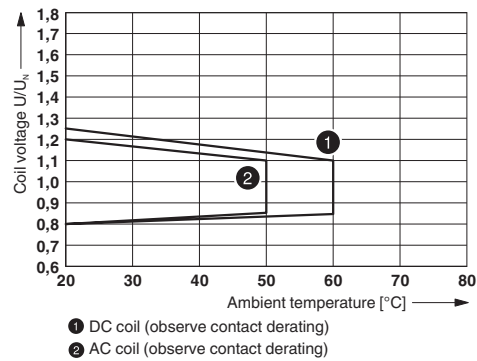
## Drawings

Circuit diagram



AC coils

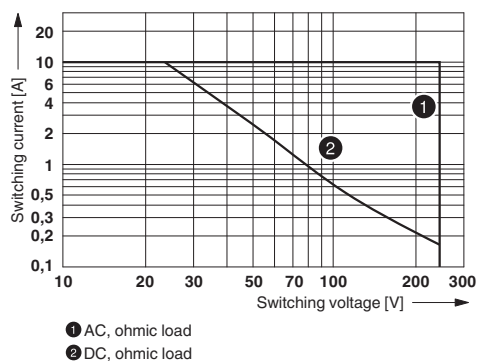
Diagram



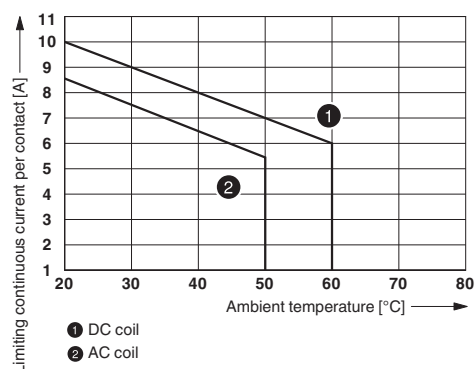
Operating voltage range

# Relay Module - RIF-2-RPT-LV-120AC/2X21 - 2903311

Diagram

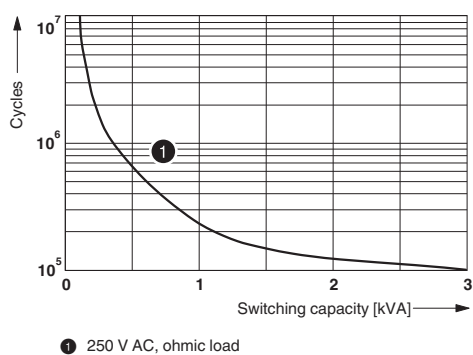


Diagram



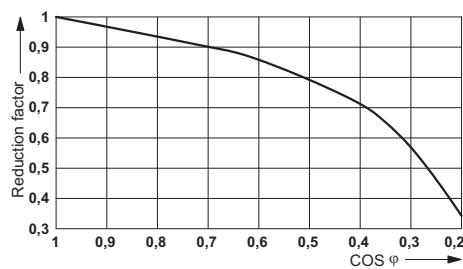
Interrupting rating

Diagram



Contact derating

Diagram



Electrical service life

Service life reduction factor

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Product	Code	Reference	Product link
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