

# Relay Module - RIF-1-RPT-LV-24AC/1X21 - 2903341

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Pre-assembled relay modules with push-in connection, consisting of: relay base, power contact relay, plug-in display/suppressor module, and retaining bracket. Input voltage: 24 V AC, 1 PDT

The figure shows the 24 V DC version

## Key commercial data

<b>package_quantity</b>	10
<b>GTIN</b>	4046356732253

## Technical data

### Dimensions

<b>Width</b>	16 mm
<b>Height</b>	96 mm
<b>Depth</b>	75 mm

### Ambient conditions

<b>Ambient temperature (operation)</b>	-40 °C ... 50 °C
<b>Ambient temperature (storage/transport)</b>	-40 °C ... 85 °C

### Coil side

<b>Nominal input voltage <math>U_N</math></b>	24 V AC
<b>Input voltage range in reference to <math>U_N</math></b>	(refer to the diagram)
<b>Nominal input current at <math>U_{IN}</math></b>	33 mA
<b>Typical response time</b>	3 ms ... 12 ms
<b>Typical release time range</b>	3 ms ... 20 ms
<b>Operating voltage display</b>	Yellow LED
<b>Protective circuit</b>	Varistor

### Contact side

<b>Contact type</b>	1 PDT
<b>Contact material</b>	AgNi
<b>Maximum switching voltage</b>	250 V AC/DC
<b>Minimum switching voltage</b>	12 V (at 10 mA)
<b>Maximum inrush current</b>	25 A (20 ms, N/O contact)
<b>Min. switching current</b>	10 mA (at 12 V)
<b>Limiting continuous current</b>	10 A (refer to the diagram)

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## Technical data

### Contact side

Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
Interrupting rating (ohmic load) max.	58 W (at 48 V DC)
Interrupting rating (ohmic load) max.	48 W (at 60 V DC)
Interrupting rating (ohmic load) max.	50 W (at 110 V DC)
Interrupting rating (ohmic load) max.	80 W (at 220 V DC)
Interrupting rating (ohmic load) max.	2500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (24 V (DC13))
Switching capacity in acc. with DIN VDE 0660/IEC 60947	6 A (230 V (AC 15))

### Connection data

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

### 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 <sub>rms</sub> (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20
Degree of protection	RT III (relay)
Mechanical service life	Approx. 10 <sup>7</sup> cycles
Standards/regulations	DIN EN 50178
Standards/regulations	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

# Relay Module - RIF-1-RPT-LV-24AC/1X21 - 2903341

## 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

## accessories

### Bridge

FBS 2-6 - 3030336



FBS 2-6 BU - 3036932



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## accessories

FBS 2-6 GY - 3032237



FBS 5-6 - 3030349



FBS 10-6 - 3030271



FBS 20-6 - 3030365



FBS 50-6 - 3032224



FBS 2-8 - 3030284



# Relay Module - RIF-1-RPT-LV-24AC/1X21 - 2903341

## accessories

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FBS 2-8 BU - 3032567



FBS 2-8 GY 7042 - 3032541



## End block

CLIPFIX 35 - 3022218



## Test plug terminal block

MPS-MT - 0201744



## Insulating sleeve

MPS-IH WH - 0201663



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## accessories

MPS-IH RD - 0201676



MPS-IH BU - 0201689



MPS-IH YE - 0201692



MPS-IH GN - 0201702



MPS-IH GY - 0201728



MPS-IH BK - 0201731



# Relay Module - RIF-1-RPT-LV-24AC/1X21 - 2903341

accessories

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## Terminal marking

ZB 5 :UNBEDRUCKT - 1050004



ZB 15:UNBEDRUCKT - 0811972

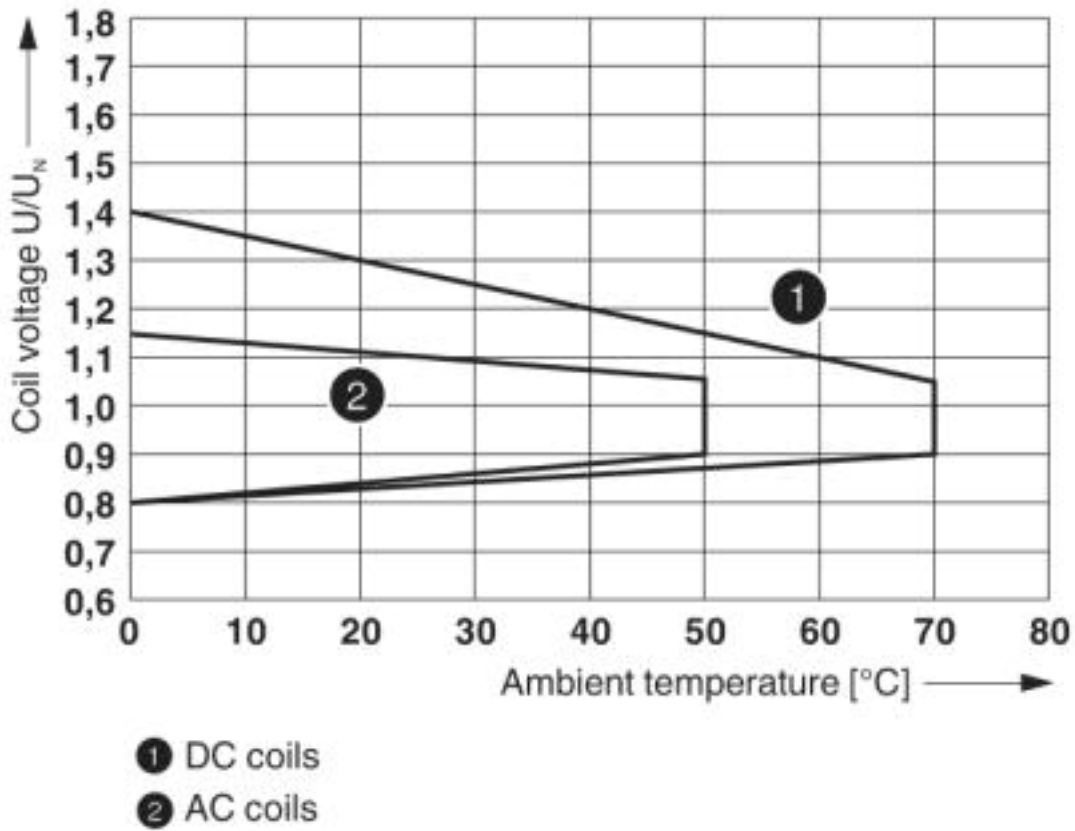


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## Drawings

# Relay Module - RIF-1-RPT-LV-24AC/1X21 - 2903341

Diagram

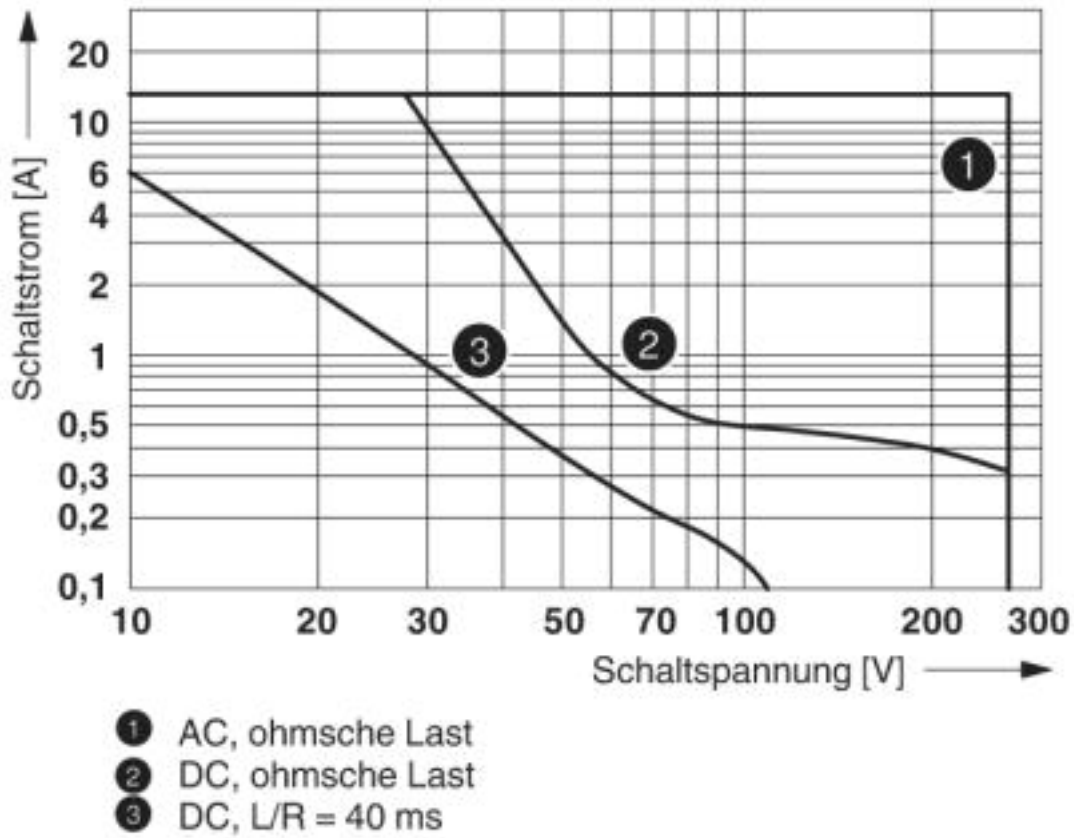


Operating voltage range



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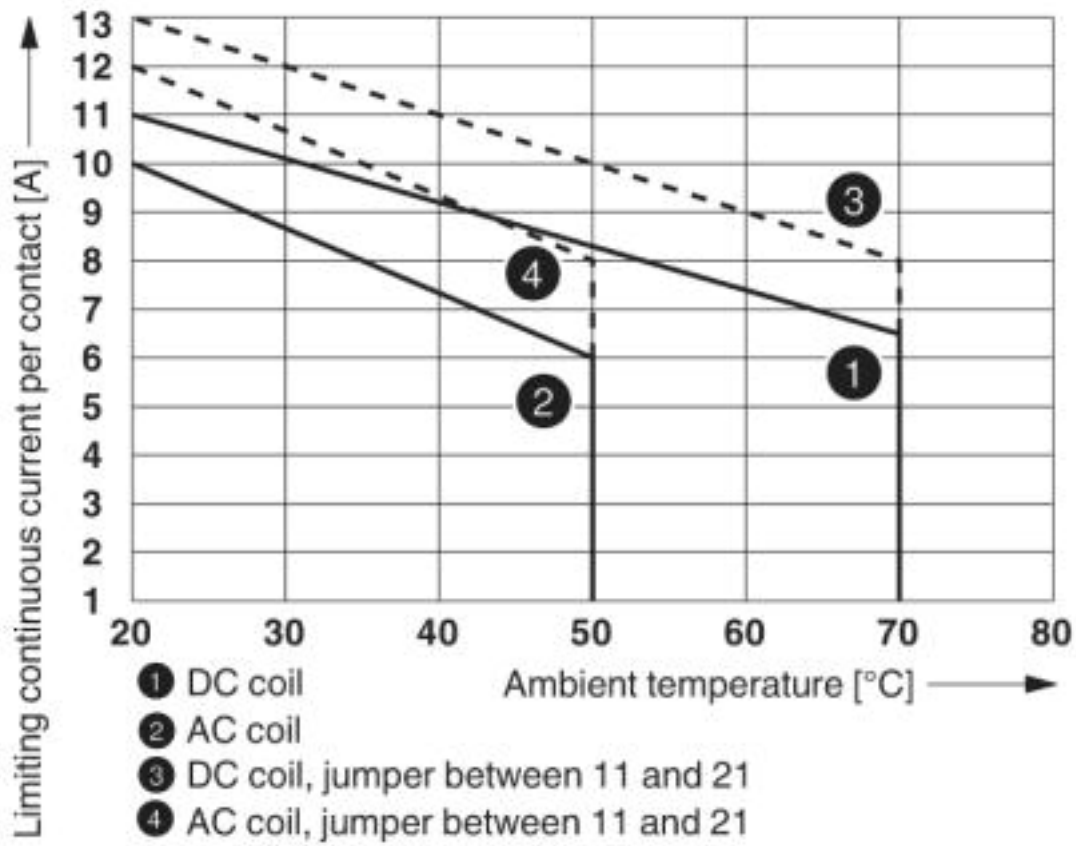
Diagram



Interrupting rating

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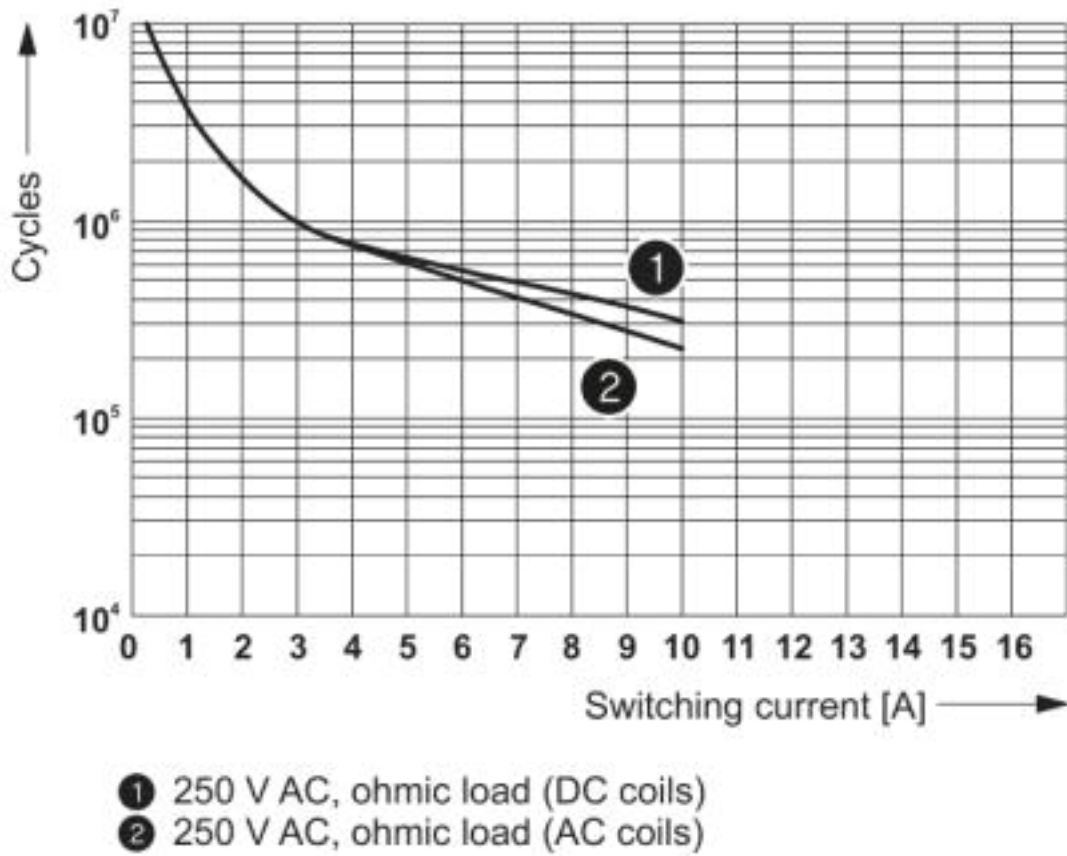
Diagram



Contact derating

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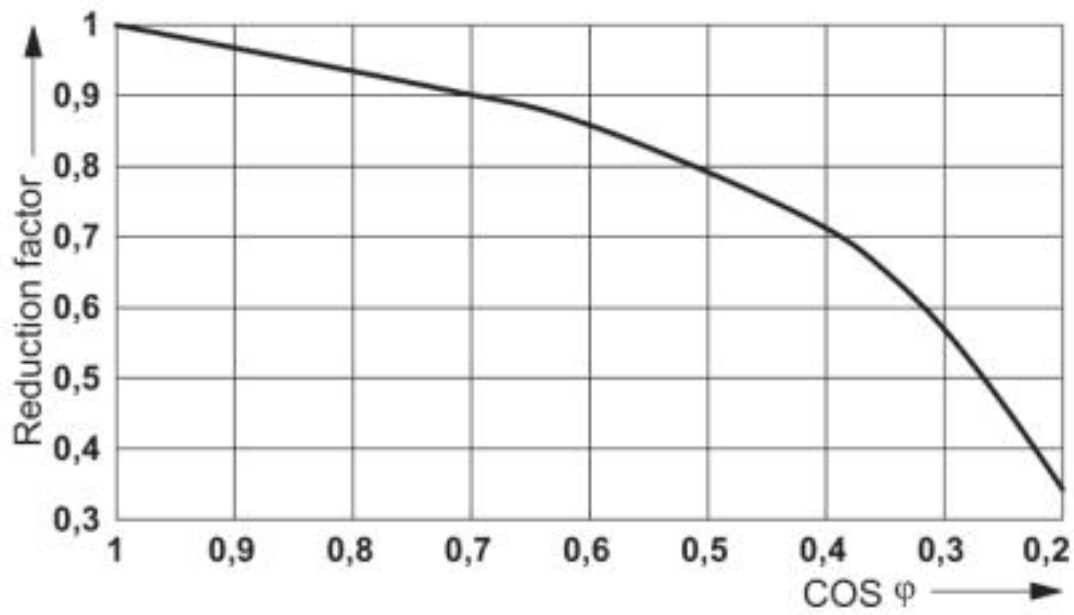
Diagram



Electrical service life

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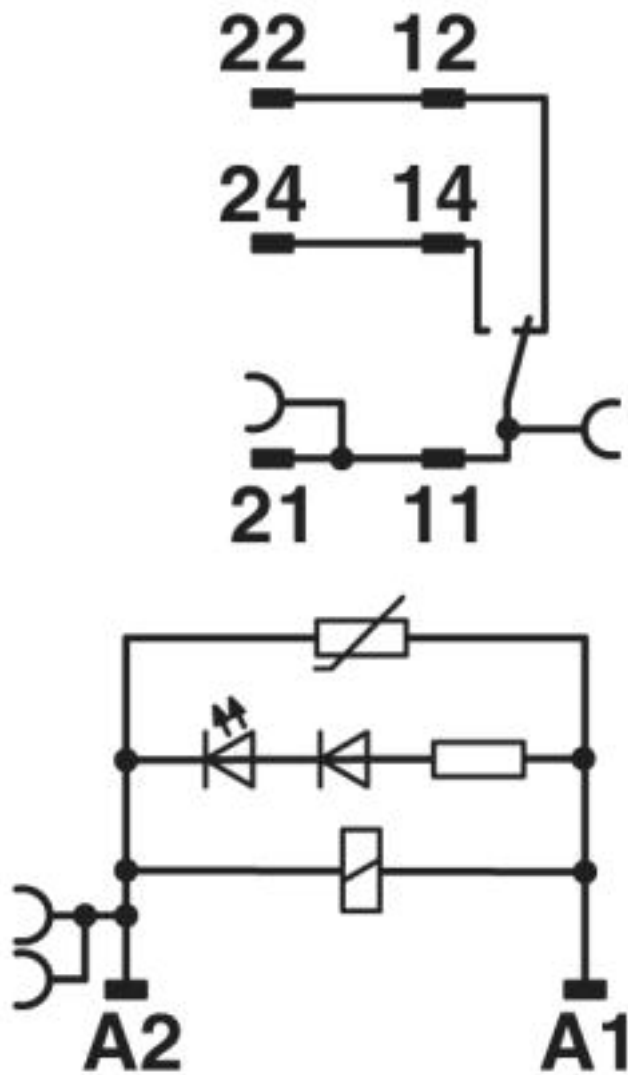
Diagram



Service life reduction factor

# Relay Module - RIF-1-RPT-LV-24AC/1X21 - 2903341

Circuit diagram



AC coils

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