

# Relay Module - RIF-1-RPT-LDP-24DC/1X21 - 2903342

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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 DC, 1 PDT



## Key commercial data

package_quantity	10
GTIN	4046356732246

## Technical data

### Dimensions

Width	16 mm
Height	96 mm
Depth	75 mm

### Ambient conditions

Ambient temperature (operation)	-40 °C ... 70 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

### Coil side

Nominal input voltage $U_N$	24 V DC
Input voltage range in reference to $U_N$	(refer to the diagram)
Nominal input current at $U_N$	18 mA
Typical response time	8 ms
Typical release time	10 ms
Operating voltage display	Yellow LED
Protective circuit	Damping diode
Protective circuit	Polarity protection diode

### Contact side

Contact type	1 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Maximum inrush current	50 A (20 ms, N/O contact)

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## Technical data

### Contact side

Min. switching current	10 mA (at 12 V)
Limiting continuous current	11 A (refer to the diagram)
Interrupting rating (ohmic load) max.	264 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.	2750 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 (Relaissockel)
Degree of protection	RT III (relay)
Mechanical service life	Approx. 3 x 10 <sup>7</sup> cycles
Standards/regulations	DIN EN 50178
Standards/regulations	IEC 62103
Rated surge voltage / insulation	6 kV/safe isolation
Rated insulation voltage	250 V AC
Pollution degree	2
Surge voltage category	III

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## Technical data

### General

<b>Mounting position</b>	Any
<b>Assembly instructions</b>	In rows with zero spacing

## classifications

### eCl@ss

<b>eCl@ss 4.0</b>	27371102
<b>eCl@ss 4.1</b>	27371102
<b>eCl@ss 5.0</b>	27371603
<b>eCl@ss 5.1</b>	27371603
<b>eCl@ss 6.0</b>	27371603
<b>eCl@ss 7.0</b>	27371603
<b>eCl@ss 8.0</b>	27371603

### ETIM

<b>ETIM 3.0</b>	EC001456
<b>ETIM 4.0</b>	EC001456
<b>ETIM 5.0</b>	EC001437

### UNSPSC

<b>UNSPSC 6.01</b>	30211917
<b>UNSPSC 7.0901</b>	39121516
<b>UNSPSC 11</b>	39121516
<b>UNSPSC 12.01</b>	39121516
<b>UNSPSC 13.2</b>	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



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## 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



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accessories

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## Terminal marking

ZB 5 :UNBEDRUCKT - 1050004



ZB 15:UNBEDRUCKT - 0811972

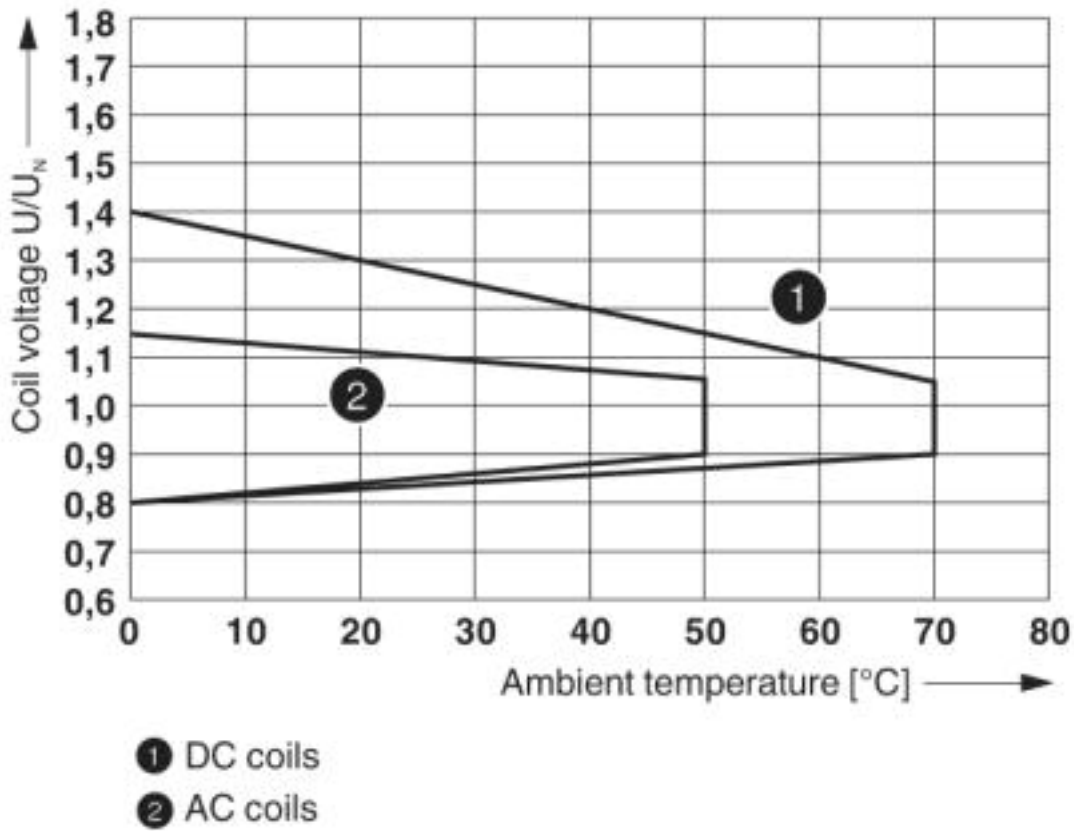


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## Drawings

# Relay Module - RIF-1-RPT-LDP-24DC/1X21 - 2903342

Diagram

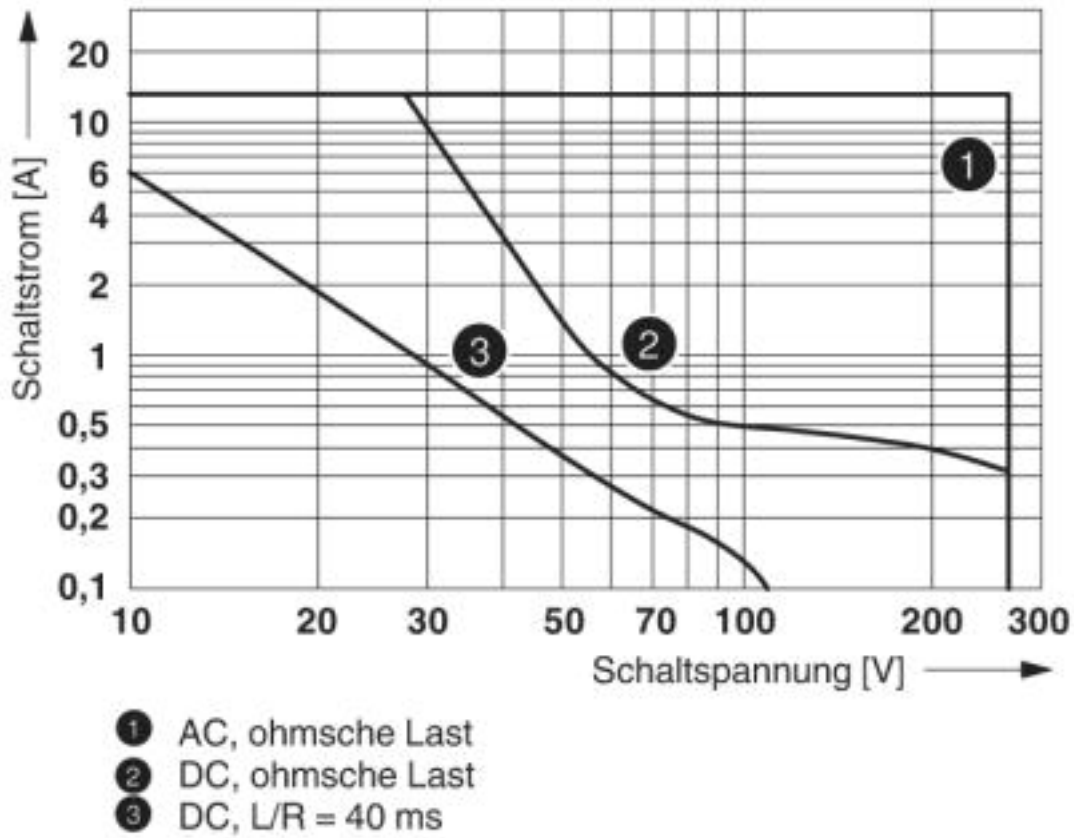


Operating voltage range



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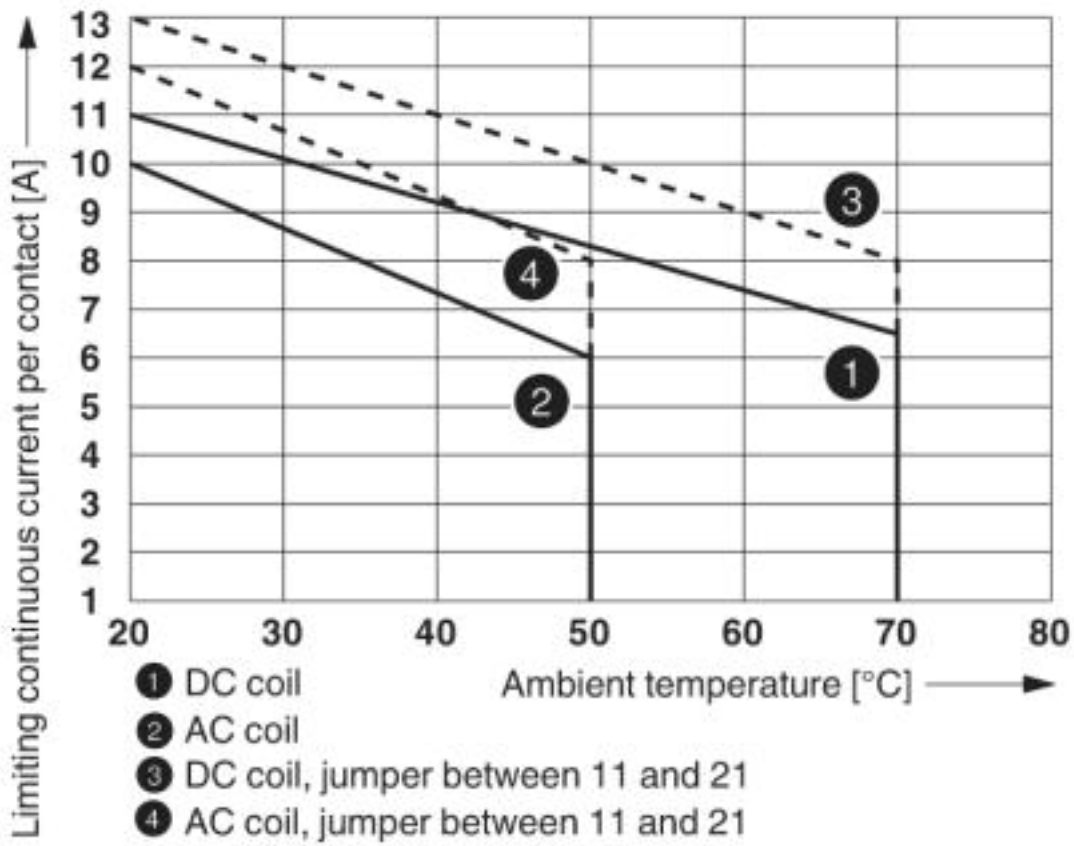
Diagram



Interrupting rating

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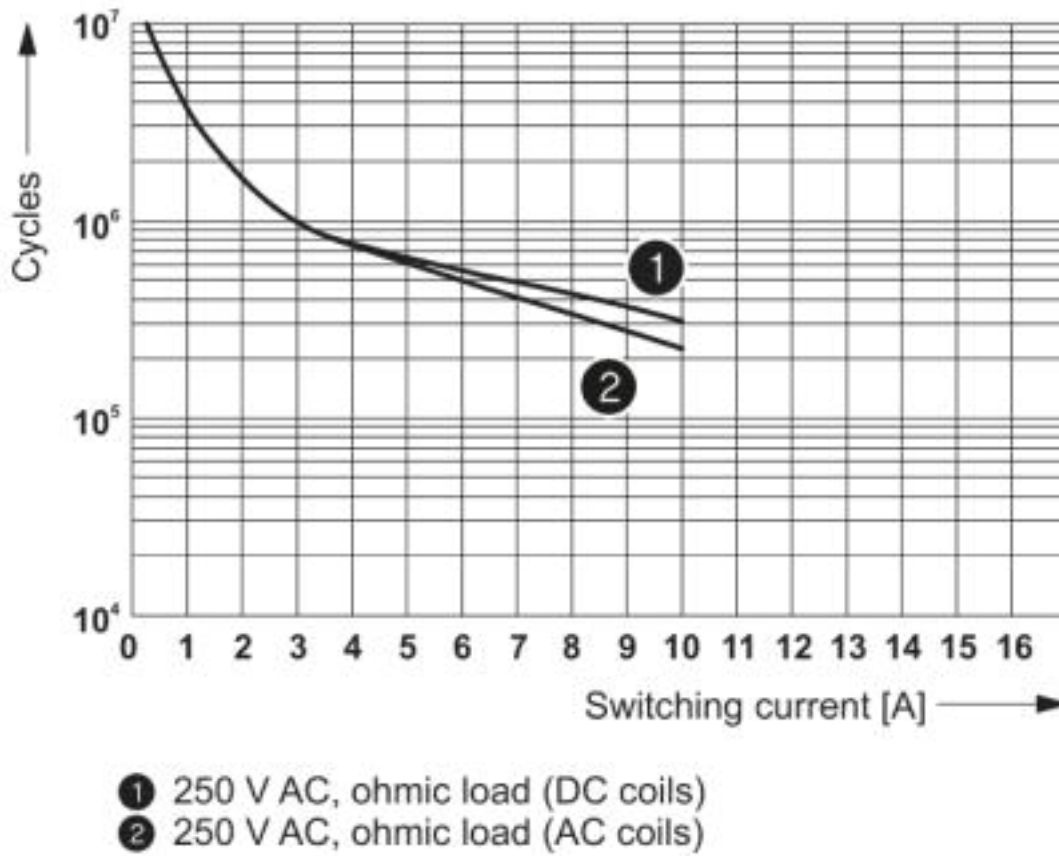
Diagram



Contact derating

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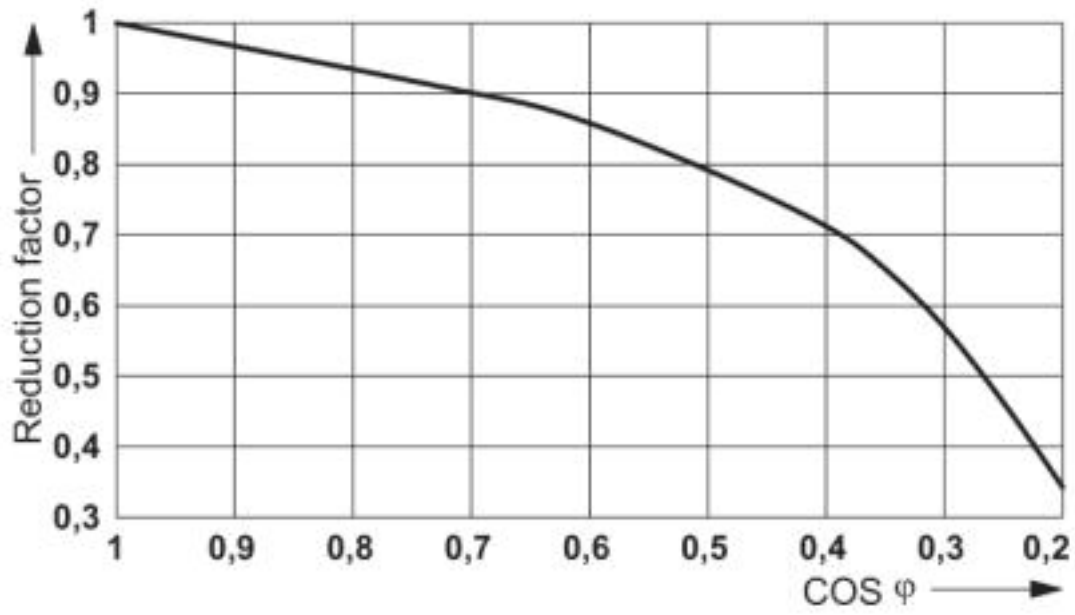
Diagram



Electrical service life

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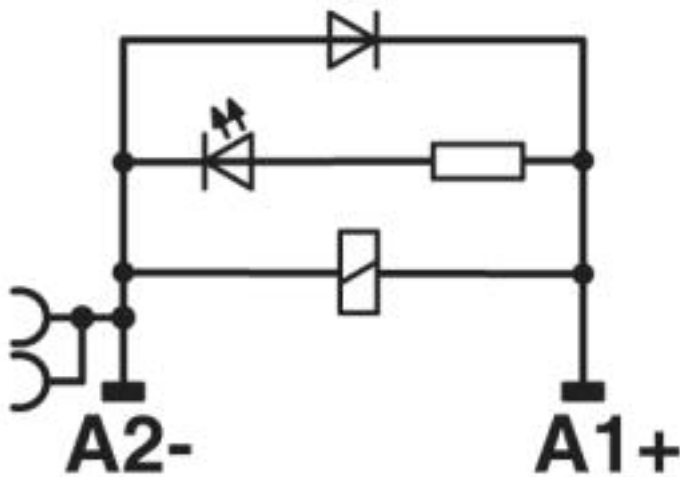
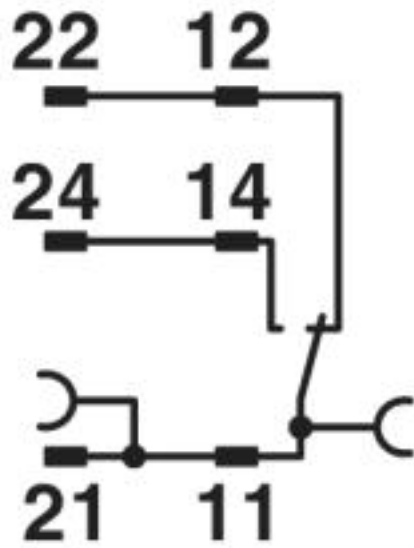
Diagram



Service life reduction factor

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Circuit diagram



DC coils

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