

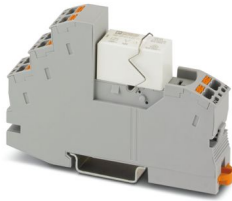
# RIF-1-RPT-MH-230AC/1X21 - Relay module



1021593

<https://www.phoenixcontact.com/us/products/1021593>

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Preassembled relay module with Push-in connection, consisting of: relay base, power contact relay, and metal retaining bracket. Contact switching type: 1 changeover contact. Input voltage: 230 V AC

## Product description

The pluggable electromechanical and solid-state relays in the RIFLINE complete product range and the base are recognized and approved in accordance with UL 508. The relevant approvals can be called up at the individual components in question.

## Commercial data

Item number	1021593
Packing unit	1 pc
Note	Made to order (non-returnable)
Sales key	C465
Product key	DK6529
GTIN	4055626514505
Weight per piece (including packing)	64 g
Weight per piece (excluding packing)	64 g
Customs tariff number	85364900
Country of origin	AT

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## Set consists of

### RIF-1-BPT/2X21 - Relay base

2900931

<https://www.phoenixcontact.com/us/products/2900931>



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

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### REL-MR-230AC/21HC - Single relay

2961422

<https://www.phoenixcontact.com/us/products/2961422>



Plug-in miniature power relay, with power contact for high continuous currents, 1 changeover contact, input voltage 230 V AC

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## RIF-RHM-1-H - Relay retaining bracket

2905985

<https://www.phoenixcontact.com/us/products/2905985>



Relay retaining bracket, wire model, suitable for RIF-1 relay base, for 25 mm high octal miniature power relays

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## Technical data

### Product properties

Product type	Relay Module
Product family	RIFLINE complete
Application	Universal
Operating mode	100% operating factor
Mechanical service life	approx. $10^7$ cycles

### Insulation characteristics

Insulation	Safe isolation between input and output
	Basic insulation between the changeover contacts
Overvoltage category	III
Pollution degree	2

### Data management status

Date of last data management	12.09.2025
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### Electrical properties

Service life electrical	see diagram
Maximum power dissipation for nominal condition	0.7 W
Test voltage (Winding/contact)	4 kV <sub>rms</sub> (50 Hz, 1 min., winding/contact)
Rated insulation voltage	250 V AC
Rated surge voltage	6 kV (Input/output)
	4 kV (between the changeover contacts)

### Input data

#### Coil side

Nominal input voltage $U_N$	230 V AC
Input voltage range	184 V AC ... 264.5 V AC (20 °C)
Input voltage range in reference to $U_N$	see diagram
Mains frequency	50/60 Hz
Drive and function	monostable
Drive (polarity)	polarized
Typical input current at $U_N$	3 mA
Typical response time	3 ms ... 12 ms
Typical release time range	3 ms ... 20 ms
Coil voltage	230 V AC

### Output data

#### Switching

Contact switching type	1 changeover contact
Type of switch contact	Single contact

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Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (10 mA)
Limiting continuous current	10 A (20 °C)
Maximum inrush current	25 A (20 ms, N/O contacts)
Min. switching current	10 mA (12 V)
Interrupting rating (ohmic load) max.	264 W (24 V DC) 58 W (48 V DC) 48 W (60 V DC) 50 W (110 V DC) 80 W (220 V DC) 2750 VA (250 V AC)
Utilization category CB Scheme (IEC 60947-5-1)	AC15, 1.5 A/240 V (N/O contact) AC15, 3 A/250 V (N/C contact) DC13, 2 A/24 V (N/C contact) DC13, 0.2 A/250 V (N/O contact)

## Connection data

Connection method	Push-in connection
Stripping length	8 mm
Conductor cross-section rigid	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 mm <sup>2</sup> (Ferrule with plastic sleeve, two conductors on double terminal block)
Conductor cross-section AWG	26 ... 16 (solid) 26 ... 16 (flexible)

## Dimensions

### Item dimensions

Width	16 mm
Height	96 mm
Depth	60 mm

### Drill hole

Diameter	3.2 mm
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## Material specifications

Color	gray (RAL 7042)
Flammability rating according to UL 94 (Housing)	V2 (Housing)

## Environmental and real-life conditions

### Ambient conditions

Degree of protection (Relay)	RT III (Relay)
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Degree of protection (Relay base)	IP20 (Relay base)
Ambient temperature (operation)	-40 °C ... 50 °C
Ambient temperature (storage/transport)	-40 °C ... 85 °C

## Approvals

### Corrosive gas test

Identification	ISA-S71.04. G3 Harsh Group
	EN 60068-2-60

## Standards and regulations

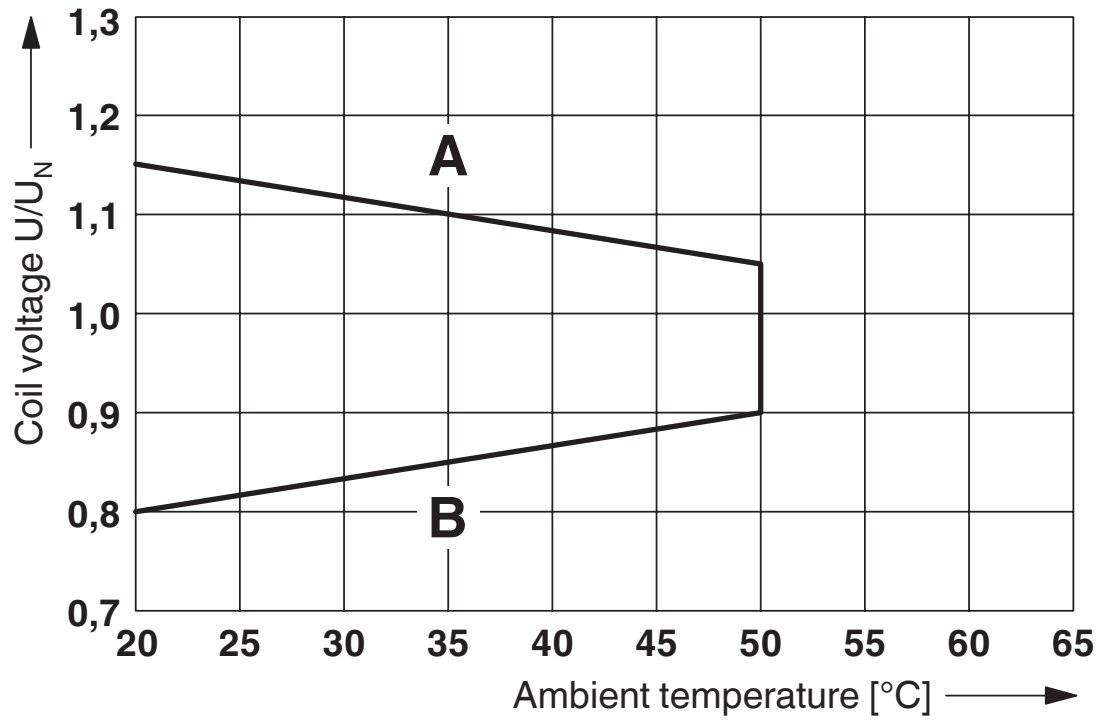
Standards/regulations	IEC 60947-5-1
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## Mounting

Mounting type	DIN rail mounting
Assembly note	in rows with zero spacing
Mounting position	any

## Drawings

Diagram

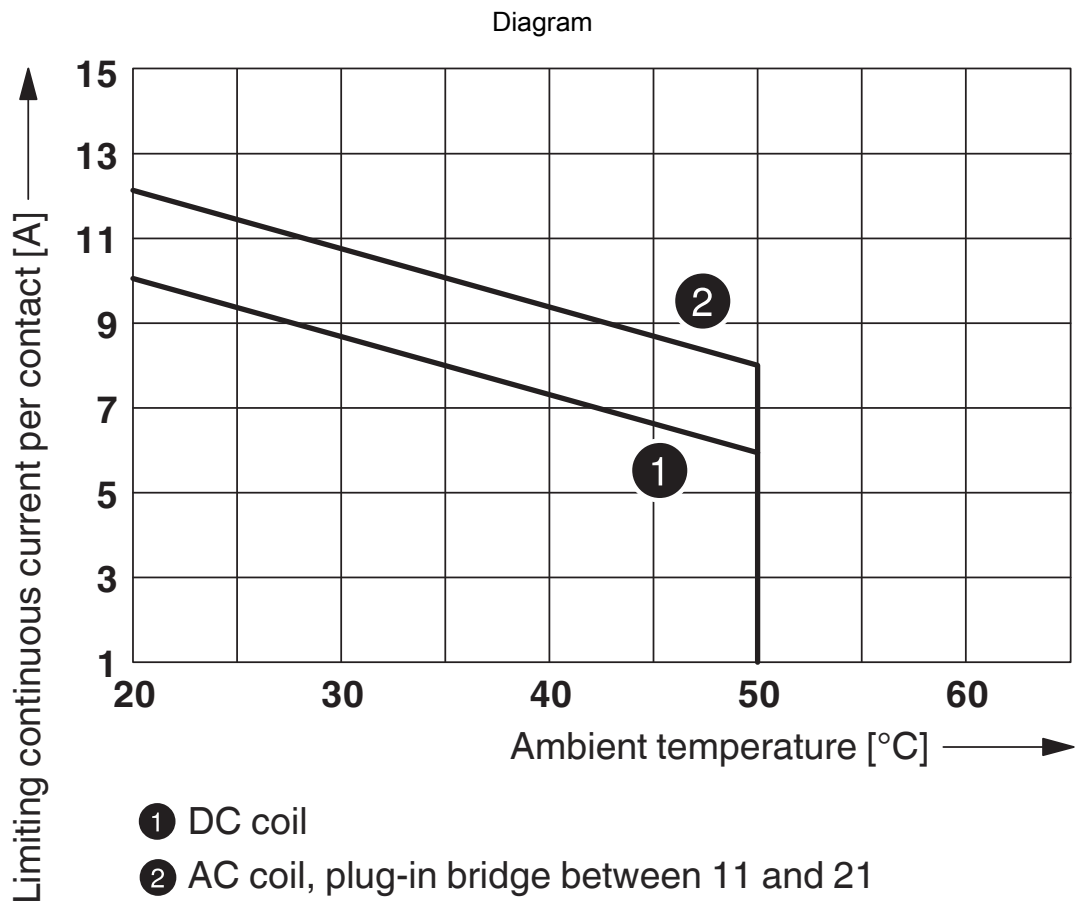


Operating voltage range



- ① AC, ohmic load
- ② DC, ohmic load
- ③ DC, L/R = 40 ms

Interrupting rating



Contact derating

Diagram



- 1 250 V AC, ohmic load (DC coils)
- 2 250 V AC, ohmic load (AC coils)

Electrical service life

Diagram

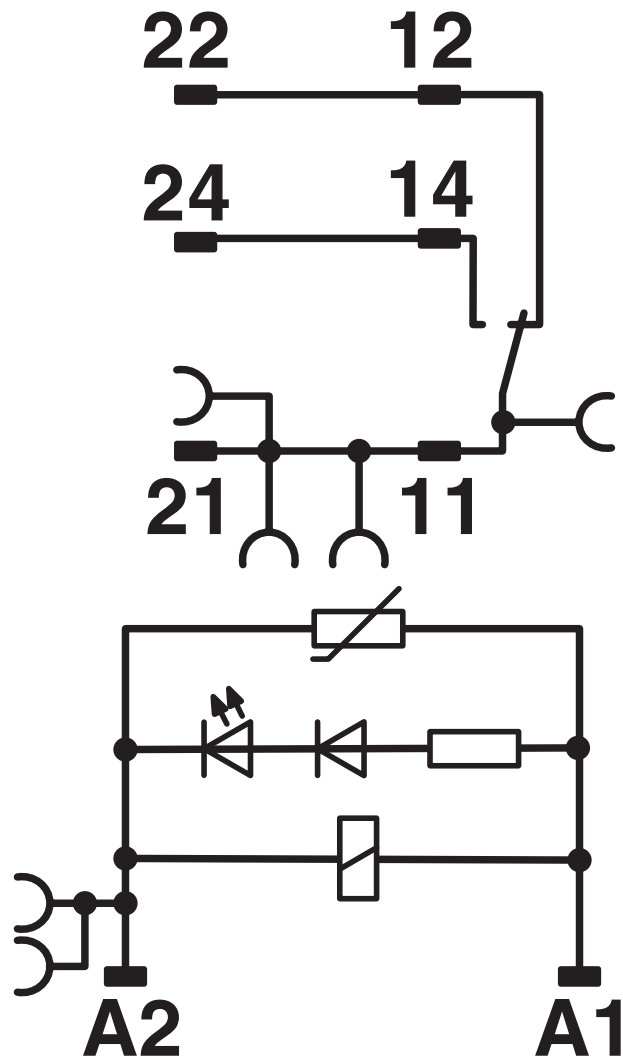


Service life reduction factor

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Circuit diagram



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## Classifications

### ECLASS

ECLASS-13.0

27371601

### ETIM

ETIM 9.0

EC001437

### UNSPSC

UNSPSC 21.0

39122300

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## Environmental product compliance

### China RoHS

Environment friendly use period (EFUP)	EFUP-50
	An article-related China RoHS declaration table can be found in the download area for the respective article under "Manufacturer declaration". For all articles with EFUP-E, no China RoHS declaration table issued and required.

### EU REACH SVHC

REACH candidate substance (CAS No.)	No substance above 0.1 wt%
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