

Relay Module - RIF-1-RPT-LV-230AC/2X21MS - 2905292

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Pre-assembled relay module with push-in connection, consisting of: relay base, relay retaining bracket, plug-in suppressor module, and power contact relay with test button and integrated status LED. Contact type: 2 PDTs. Input voltage: 230 V AC



Key Commercial Data

Packing unit	1 pc
Weight per Piece (excluding packing)	70.0 g
Custom tariff number	85364900
Country of origin	Germany

Technical data

Note

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

Width	16 mm
Height	93 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	230 V AC (50/60 Hz)
Input voltage range in reference to U_N	see diagram
Typical input current at U_N	4.5 mA
Typical response time	4 ms ... 12 ms
Typical release time range	4 ms ... 20 ms

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Technical data

Coil side

Coil voltage	230 V AC
Protective circuit	Varistor
Operating voltage display	Yellow LED

Contact side

Contact type	2 PDT
Contact material	AgNi
Maximum switching voltage	250 V AC/DC
Minimum switching voltage	12 V (at 10 mA)
Min. switching current	10 mA (at 12 V)
Maximum inrush current	16 A (20 ms, N/O contact)
Limiting continuous current	see diagram
Interrupting rating (ohmic load) max.	192 W (at 24 V DC)
	62 W (at 48 V DC)
	42 W (at 60 V DC)
	55 W (at 110 V DC)
	66 W (at 220 V DC)
	2000 VA (for 250 V AC)
Switching capacity min.	120 mW
Switching capacity in acc. with DIN VDE 0660/IEC 60947	1 A (at 24 V, DC13)
	1.5 A (at 24 V, AC15)
	1.5 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 ² ... 1.5 mm ²
Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1.5 mm ² (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 ² ... 1.5 mm ²

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Connection data output side

Conductor cross section flexible	0.14 mm ² ... 1.5 mm ²
	0.14 mm ² ... 1 mm ² (Ferrule with plastic sleeve)
	0.14 mm ² ... 1.5 mm ² (Ferrules without plastic sleeve)
Conductor cross section AWG	26 ... 16

General

Test voltage relay winding/relay contact	4 kV _{rms} (50 Hz, 1 min.)
Test voltage PDT/PDT	2.5 kV _{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor
Degree of protection	IP20 (Relay socket)
	RT II (Relay)
Mechanical service life	Approx. 5 x 10 ⁶ cycles
Standards/regulations	DIN EN 50178
	IEC 62103
Rated surge voltage/insulation	6 kV/safe isolation
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

Standards/regulations	DIN EN 50178
	IEC 62103
Rated insulation voltage	250 V AC
Rated surge voltage/insulation	6 kV/safe isolation
Degree of pollution	2
Overvoltage category	III

Articles in set

Relay socket - RIF-1-BPT/2X21 - 2900931



RIF-1... relay base, for miniature power relay with 1 or 2 PDTs or solid-state relays of the same design, push-in connection, plug-in option for input/suppressor modules, for mounting on NS 35/7,5

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Articles in set

Single relay - REL-MR-230AC/21-21/MS - 2987972



Plug-in miniature relay, with power contact, 2 PDTs, test button, mechanical switch position indicator, status LED, coil 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 $\pm 20\%$

Retaining bracket - RIF-RH-1-H - 2904468



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 25 mm tall miniature power relay and solid-state relay

Classifications

eCl@ss

eCl@ss 4.1	27371102
eCl@ss 5.1	27371603
eCl@ss 6.0	27371603
eCl@ss 8.0	27371601
eCl@ss 9.0	27371601

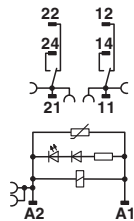
ETIM

ETIM 4.0	EC000236
ETIM 5.0	EC001437

Drawings

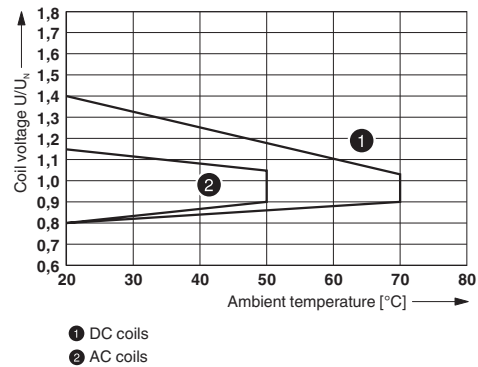
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Circuit diagram



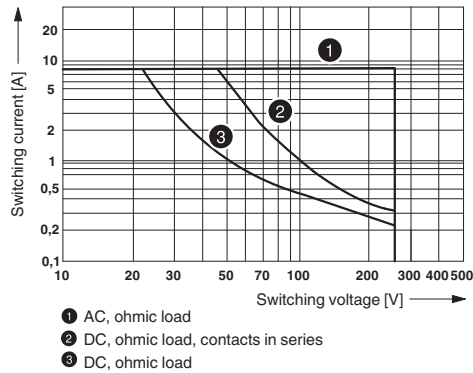
AC coils

Diagram



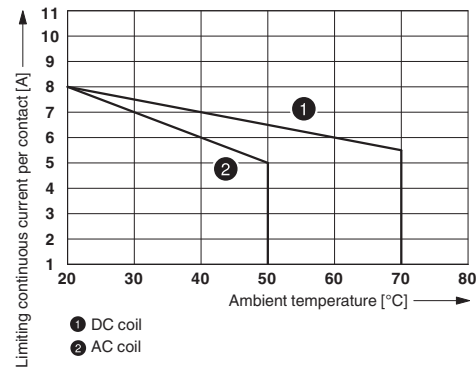
Operating voltage range

Diagram



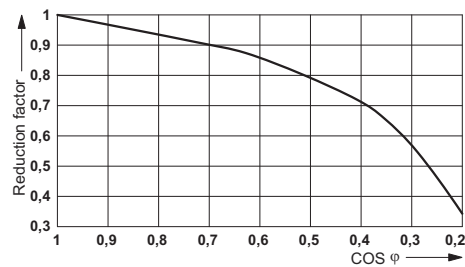
Interrupting rating

Diagram



Contact derating

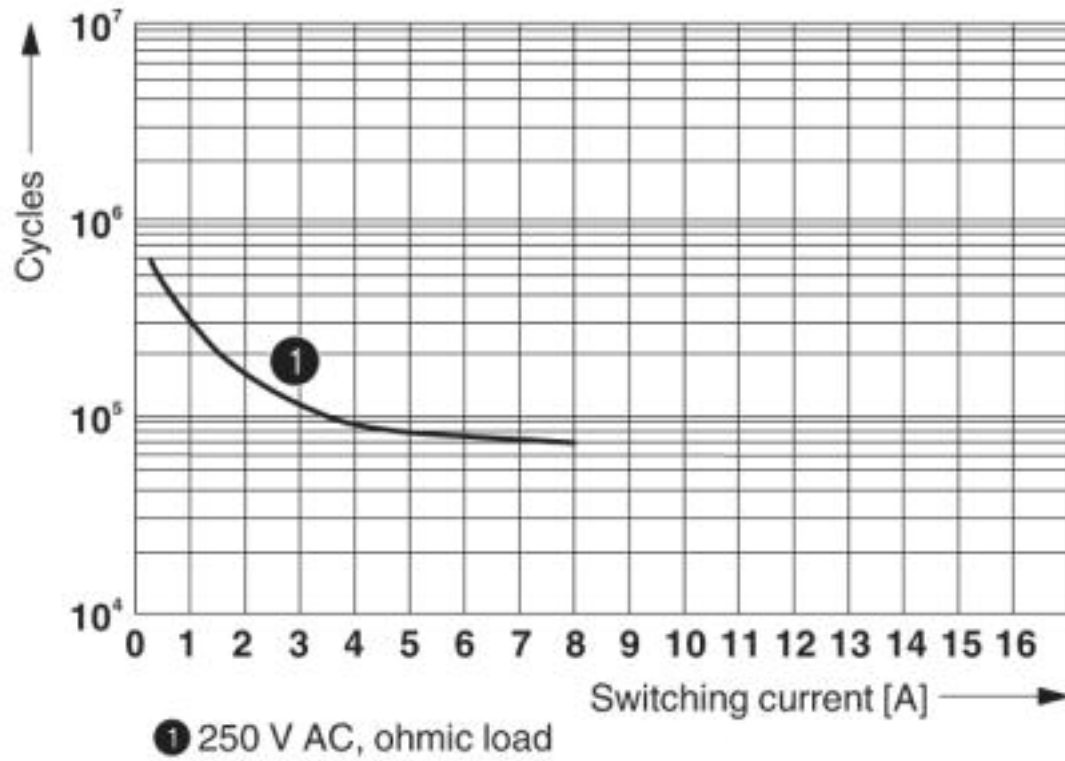
Diagram



Service life reduction factor

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Diagram



Electrical service life