Relay Module - RIF-1-RPT-LV-120AC/1X21 - 2903340

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The figure shows the 24 V DC version

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: 1 PDT. Input voltage: 120 V AC

Key commercial data

Packing unit	1 pc
Weight per Piece (excluding packing)	68.0 GRM
Custom tariff number	85364900
Country of origin	Germany

Technical data

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	120 V AC
Input voltage range in reference to U_N	(see diagram)
Nominal input current at U_{IN}	8 mA
Typical response time	3 ms ... 12 ms
Typical release time range	3 ms ... 20 ms
Operating voltage display	Yellow LED

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Technical data

Coil side

Protective circuit	Varistor

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	25 A (20 ms, N/O contact)
Min. switching current	10 mA (at 12 V)
Limiting continuous current	10 A (see diagram)
Interrupting rating (ohmic load) max.	240 W (at 24 V DC)
	58 W (at 48 V DC)
	48 W (at 60 V DC)
	50 W (at 110 V DC)
	80 W (at 220 V DC)
	2500 VA (for 250 V AC)
Switching capacity in acc. with DIN VDE 0660/IEC 60947	2 A (24 V (DC13))
	6 A (230 V (AC 15))

Connection data

Connection method	Push-in connection
Conductor cross section solid min.	0.14 mm²
Conductor cross section solid max.	1.5 mm²
Conductor cross section stranded min.	0.14 mm²
Conductor cross section stranded max.	1.5 mm²
Conductor cross section stranded, with ferrule with plastic sleeve min.	0.14 mm²
Conductor cross section stranded, with ferrule with plastic sleeve max.	1.5 mm²
Conductor cross section stranded, with ferrule without plastic sleeve min.	0.14 mm²
Conductor cross section stranded, with ferrule without plastic sleeve max.	1.5 mm²
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_{rms} (50 Hz, 1 min.)
Operating mode	100% operating factor

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Technical data

General

Degree of protection	IP20 (Relay socket)
	RT III (Relay)
Mechanical service life	Approx. 10^7 cycles
Standards/regulations	DIN EN 50178
	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

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

Single relay - REL-MR-120AC/21HC - 2961419



Pluggable miniature relays, with power contact for high continuous current, 1 PDT, input voltage 120 V AC

Plug-in module - RIF-LV-120-230 AC/110 DC - 2900944



Plug-in module, for mounting on RIF-1, RIF-2, RIF-3, and RIF-4, with varistor and yellow LED, input voltage: 120 - 230 V AC/110 V DC ±20%

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Articles in set

Retaining bracket - RIF-RH-1 - 2900953



Relay retaining bracket, with ejector function and holder for marking material, suitable for RIF-1 relay base, for 16 mm tall miniature power relay and solid-state 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	27371603

ETIM

ETIM 3.0	EC001456
ETIM 4.0	EC001456
ETIM 5.0	EC001437

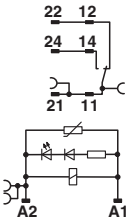
UNSPSC

UNSPSC 6.01	30211917
UNSPSC 7.0901	39121516
UNSPSC 11	39121516
UNSPSC 12.01	39121516
UNSPSC 13.2	39121516

Drawings

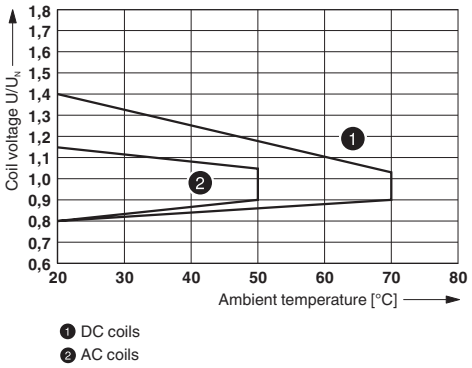
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Circuit diagram



AC coils

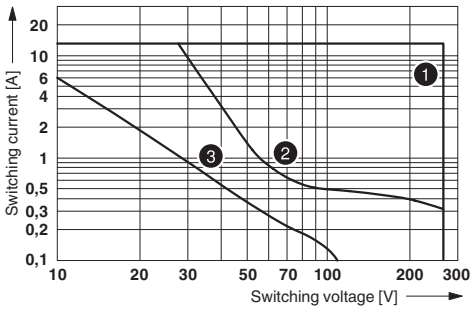
Diagram



❶ DC coils
❷ AC coils

Operating voltage range

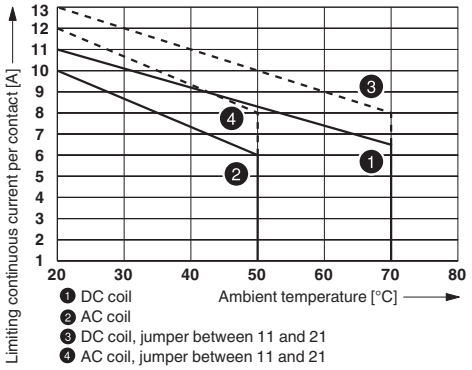
Diagram



❶ AC, ohmic load
❷ DC, ohmic load
❸ DC, L/R = 40 ms

Interrupting rating

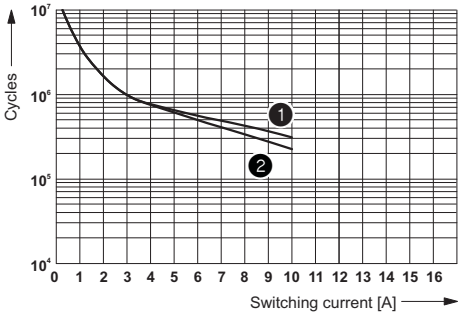
Diagram



❶ DC coil
❷ AC coil
❸ DC coil, jumper between 11 and 21
❹ AC coil, jumper between 11 and 21

Contact derating

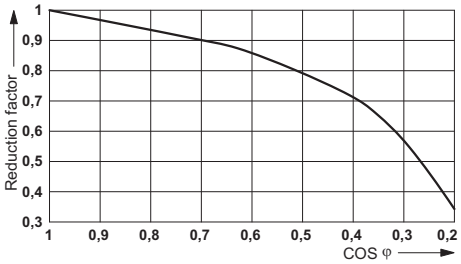
Diagram



❶ 250 V AC, ohmic load (DC coils)
❷ 250 V AC, ohmic load (AC coils)

Electrical service life

Diagram



Service life reduction factor

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