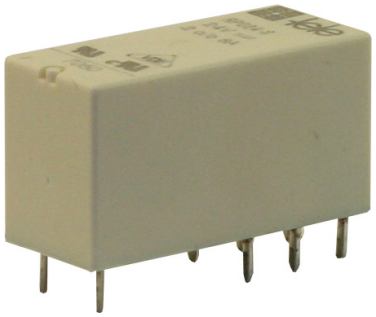
Coupling relays - PCB power relays

PCB power relays

2 change over contacts

Pluggable and solderable



Technical data

1. Mechanical Design
Self-extinguishing plastic housing, IP rating IP67
Mounting position: any

2. Coil
AC-Type:

Type	Rated voltage AC	Coil resistance Ω (±10%)
RP 512-2	12V	100
RP 524-2	24V	400
RP 615-2	115V	9600
RP 730-2	230V	38500

hv gold-plated contacts

Rated frequency: 50/60 Hz
Rated consumption (50Hz): 0.75VA
Must release voltage: ≥0.15 x U_N
Tolerance: 0.8 to 1.2 x U_N

DC-Type:

Type	Rated voltage DC	Coil resistance Ω (±10%)
RP 012-2	12V	360
RP 024-2	24V	1440
RP 024-hv	24V	1440

hv gold-plated contacts

Rated consumption: 0.5W
Must release voltage: ≥0.1 x U_N
Tolerance: 0.7 to 2.55 x U_N

3. Contacts
Rated switching voltage: 250V AC
Switching voltage: max. 440V AC
min. 5V (AC/DC)
Rated load: AC1: 8A/250V AC
AC15: 3A / 120V
1,5A / 240V (B300)
AC3: 550W (single-phase motor)
DC1: 8A/24V DC
DC13: 0,22A / 120V
0,1A / 250V (R300)
Rated switching current: 8A
Min. switching current: 5mA
2mA (gold-plated contacts)
Rated inrush current: 15A
Breaking capacity: AC1: max. 2000VA
DC1: max. 190W
min. 0.3W
min. 0.05W (gold-plated contacts)
Contact resistance: ≤100mΩ
Switching frequency: max. 10/min at rated load AC1
max. 1200/min, no load
Contact material: AgNi or AgNi/Au 5µm

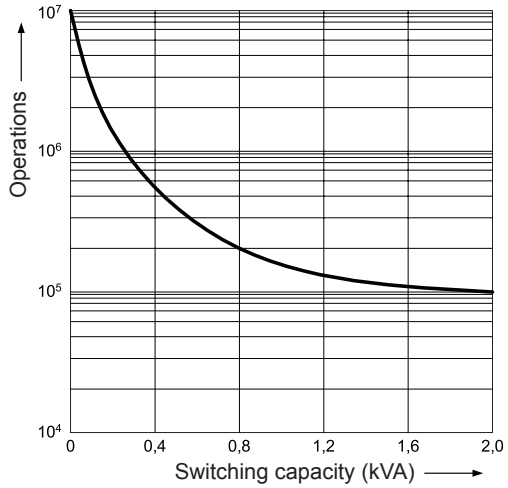
4. General data
Operating time
AC: 7ms
DC: 7ms
Release time
AC: 3ms
DC: 3ms
Mechanical life: 30 x 10^6 switching cycles
Electrical life: 10 x 10^4 switching cycles
at 8A / 250V (AC1)
Vibration: 10g/5g (NO/NC, 10 to 150Hz)
Shock resistance: 10g

5. Insulation (according to EN 60664-1)
Insulation rated voltage: 400V AC
Dielectric strength test voltage:
Coil - contact: 5000V AC
Contact - contact: 1000V AC
Pole - pole: 2500V AC
Insulation:
Coil - contact: reinforced
Pole - pole: basic
Clearance contact - contact: micro-disconnection
Rated surge voltage: 4000V (1,2 / 50µs)
Overvoltage category: III
Contact - coil distance:
Clearance: ≥ 10mm
Creepage: ≥ 10mm
Insulation pollution degree: 3

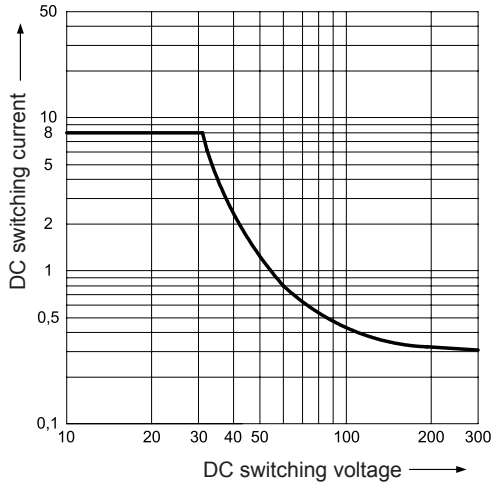
6. Ambient conditions
Ambient temperature:
AC: -40 to +70°C
DC: -40 to +85°C
Storage temperature: -40 to +85°C
Solder bath temperature /
Soldering time: max. 270°C / max. 5s

Reduction factors

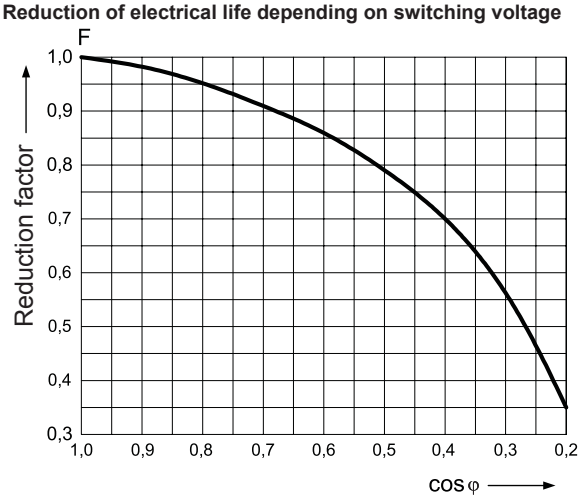
Reduction of electrical life depending on load



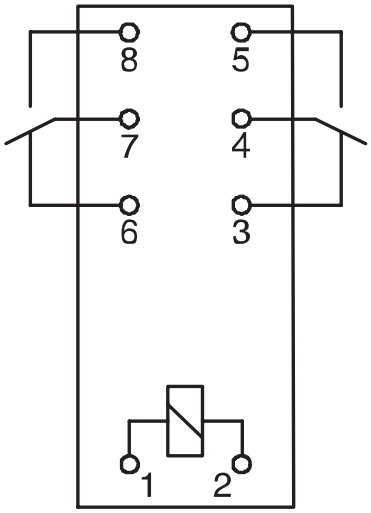
Reduction of switching capacity depending on switching voltage



Reduction of electrical life depending on switching voltage



Connections



Dimensions