

Miniature Power PCB Relay RY II

1 pole 8 A



Features

- Low component height 12.3 mm
- 1 C/O or 1 N/O or 1 N/C contact
- 5 kV / 8 mm coil-contact
- Protection class II (VDE 0700)
- Pinnings: 3.2 and 5 mm
- Sockets with PCB-type or screw-type terminals
- Especially suitable for resistive and inductive loads on N/O and N/C contacts

Applications

Heating control, interface technology, domestic appliances, timers, temperature control

F0142-C



Technical data of approved types on request

Contact data

Configuration	1 C/O contact, 1 N/O contact, 1 N/C contact
Type of contact	single contact
Rated current	8 A
Rated voltage / max.breaking voltage AC	250 Vac / 440 Vac
Maximum breaking capacity AC	2000 VA
Make current (max. 4 s at duty cycle 10%)	30 A
Contact material	AgCdO, Ag, AgSnO

Contact ratings

Type	Load	Operations	Standard
RY610	B 300, 120 Vac, 70 °C		UL 508
RY610	B 300, 240 Vac, 70 °C		UL 508
RY610	1 / 4 hp, 120 Vac, 70 °C		UL 508
RY610	1 / 2 hp, 240 Vac, 70 °C		UL 508
RY610	8 A, 28 Vdc, 70 °C	>3x10 ⁴	UL 508
RY610	0.28 A, 250 Vdc, 70 °C	>3x10 ⁴	UL 508
RY531	6 (4) A, 250 Vac, 85 °C	1x10 ⁵	VDE 0631

Coil data

Nominal voltage	5...48 Vdc
Nominal coil power	approx. 220 mW
Operate category	2 / b

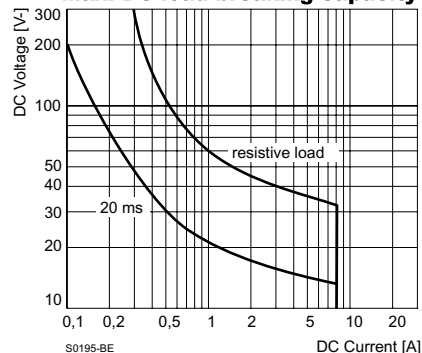
Coil versions

Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Maximum voltage Vdc	Coil resistance Ω	Coil current mA
005	5	3.5	0.5	11.8	113±10%	44.0
006	6	4.2	0.6	14.1	164±10%	36.7
012	12	8.4	1.2	28.2	620±10%	19.3
024	24	16.8	2.4	56.4	2350±10%	10.2
048	48	33.6	4.8	112.8	9600±10%	5.0

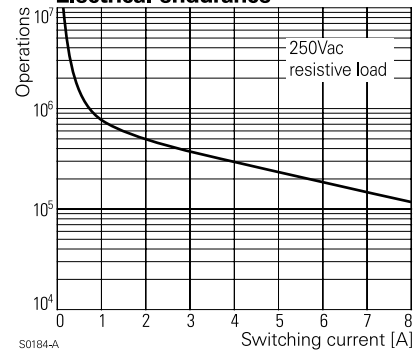
All figures are given for coil without preenergization, at ambient temperature +20°C

Other coil voltages on request

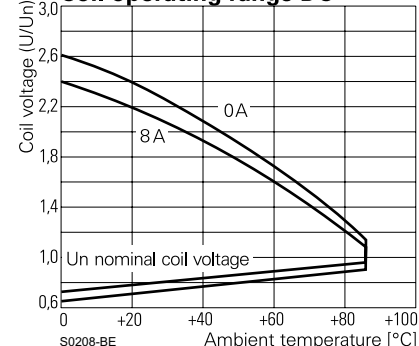
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



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Insulation

Dielectric strength	coil-contacts	5000 V _{rms}
	open contact circuit	1000 V _{rms}
Clearance / creepage		8 / 8 mm
Insulation to IEC 60664		
Voltage rating		250 V
Pollution degree		3
Overvoltage category		III
Insulation to VDE 0110b (2/79)		
Insulation category / reference voltage		C / 250
Tracking resistance of relay base		CTI 250

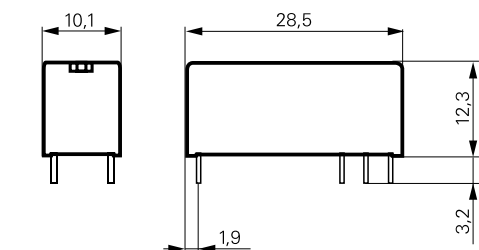
Other data

Ambient temperature	-40...+85 °C
Mechanical life	30x10 ⁶ operations
Max. switching rate at rated- / minimum load	6 min ⁻¹ / 20 s ⁻¹
Operate- / release time	7 / 3 ms
Bounce time N/O contact	1 ms
Vibration resistance N/O / N/C contact	20 / 5 g, 10...500 Hz
Shock resistance (destruction)	100 g
Category of protection (IEC 61810)	RT II - flux proof, RT III - wash tight
Relay weight	8 g
Packaging unit	20 / 500 pcs.
Accessories	see accessories RY

Dimensions

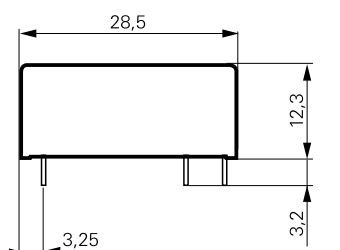
Dimensions in mm

Pinning 3.2 mm



S0274-AA

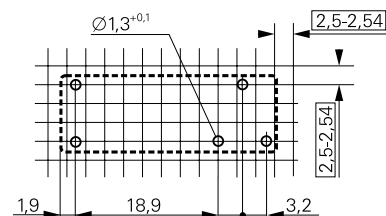
Pinning 5 mm



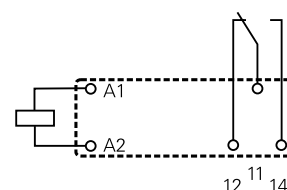
S0274-AB

PCB layout / terminal assignment

1 C/O contact, 3.2 mm

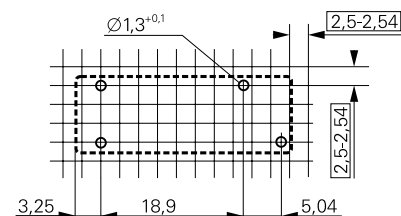


S0254-AA

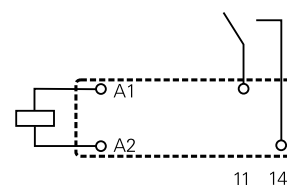


S0254-AB

1 N/O contact, 5 mm



S0254-AC



S0254-AD

View on solder pins
Dimensions in mm

Product key

Type

Version

2 pinning 3.2 mm, flux proof	6 pinning 3.2 mm, wash tight
5 pinning 5 mm, flux proof	A pinning 5 mm, wash tight

Contacts

1 1 C/O contact, pinning 3.2 mm	3 1 N/O contact, pinning 5 mm
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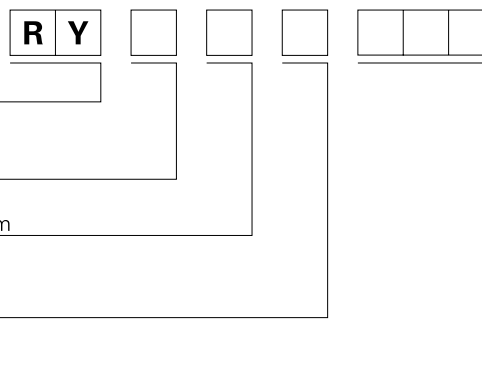
Contact material

0 AgCdO	2 Ag, gold plated
1 Ag	3 AgSnO

Coil

Coil code: please refer to coil versions table

Other types on request



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