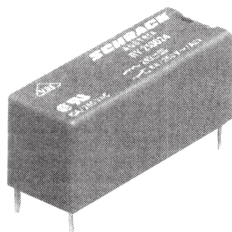


Miniature Power PCB Relay RY II

1 pole 8 A



F0142-C

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



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, AgNi 0.15, AgSnO ₂

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

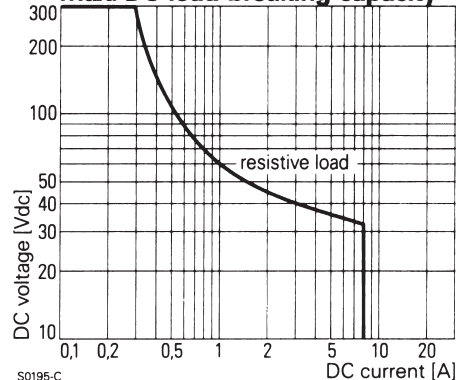
Coil versions

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

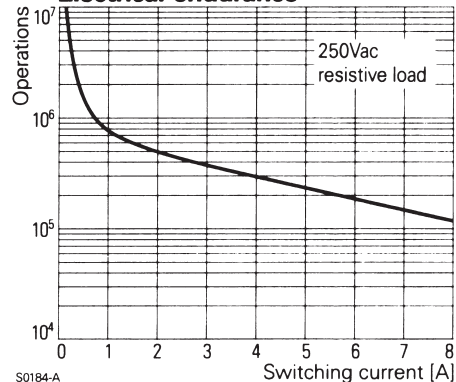
All figures are given for coil without preenergization, at ambient temperature +20°C

Other coil voltages on request

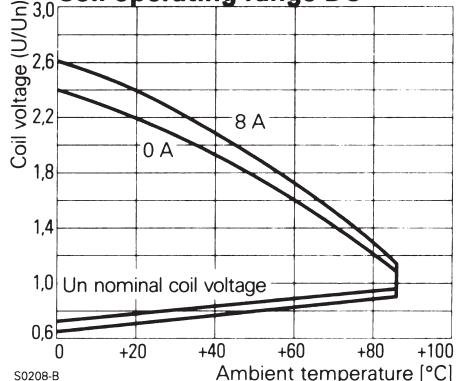
Max. DC load breaking capacity



Electrical endurance



Coil operating range DC



Miniature Power PCB Relay RY II

1 pole 8 A

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

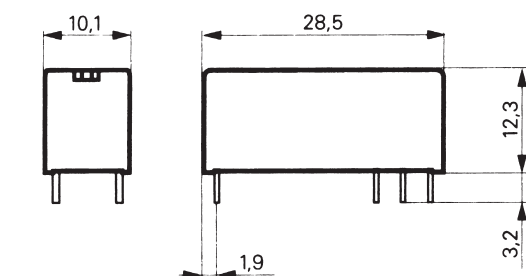
Ambient temperature	-40...+85 °C
Mechanical life	30x10 ⁶ operations
Max. switching rate at rated- / minimum load	6 min ⁻¹ / 20 s ⁻¹
Operate- / release time	7 / 3 ms
Bounce time N/O contact	1 ms
Vibration resistance N/O / N/C contact	20 / 5 g, 10...500 Hz
Shock resistance (destruction)	100 g
Category 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

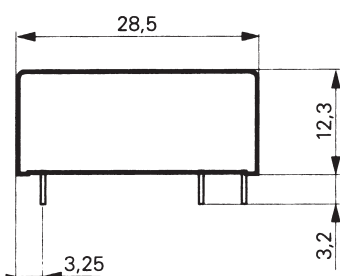
Dimensions in mm

Pinning 3.2 mm

Pinning 5 mm



S0274-AA



S0274-AB

Product key

Type

Version

- 2** pinning 3.2 mm, flux proof
5 pinning 5 mm, flux proof

- 6** pinning 3.2 mm, wash tight
A pinning 5 mm, wash tight

Contacts

- 1** 1 C/O contact, pinning 3.2 mm
3 1 N/O contact, pinning 5 mm

Contact material

- 0** AgCdO
1 AgNi0.15
2 AgNi0.15 gold plated
3 AgSnO₂

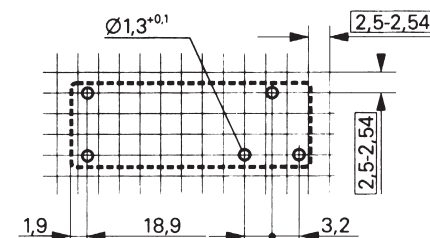
Coil

Coil code: please refer to coil versions table

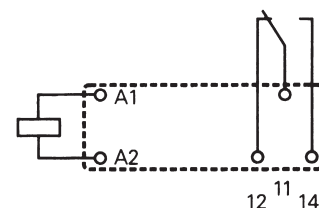
Other types on request

PCB layout / terminal assigment

1 C/O contact, 3.2 mm

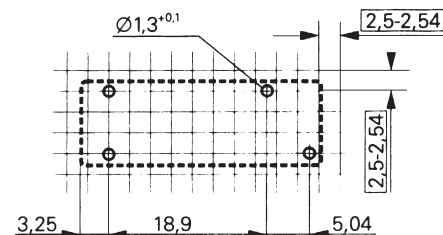


S0254-AA

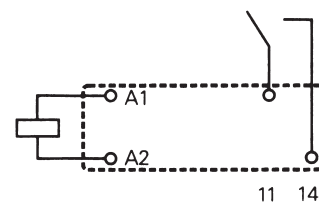


S0254-AB

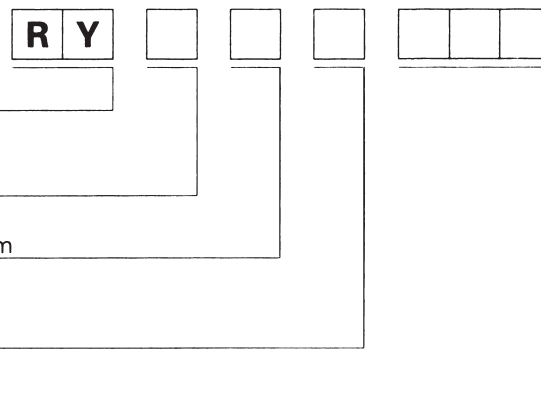
1 N/O contact, 5 mm



S0254-AC



S0254-AD

View on solder pins
Dimensions in mm

Miniature Power PCB Relay RY II

1 pole 8 A

4/7708
4/7709
93/3330

Product key	Version	Contacts	Contact material	Coil	Part number
RY210005	pinning 3.2 mm flux proof	1 C/O contact	AgCdO	5 Vdc	3-1393224-1
RY210012				12 Vdc	3-1393224-5
RY210024				24 Vdc	3-1393224-8
RY210048				48 Vdc	4-1393224-1
RY211005			AgNi 0.15	5 Vdc	4-1393224-2
RY211012				12 Vdc	4-1393224-6
RY211024				24 Vdc	4-1393224-9
RY211048				48 Vdc	5-1393224-1
RY212005			AgNi 0.15 gold plated	5 Vdc	5-1393224-2
RY212012				12 Vdc	5-1393224-5
RY212024				24 Vdc	5-1393224-8
RY212048				48 Vdc	5-1393224-9
RY213005	AgSnO	5 Vdc	6-1393224-0		
RY213012		12 Vdc	6-1393224-1		
RY213024		24 Vdc	6-1393224-2		
RY213048		48 Vdc	6-1393224-3		
RY530005	pinning 5 mm flux proof	1 N/O contact	AgCdO	5 Vdc	6-1393224-6
RY530012				12 Vdc	6-1393224-9
RY530024				24 Vdc	7-1393224-2
RY530048				48 Vdc	7-1393224-4
RY531005			AgNi 0.15	5 Vdc	7-1393224-6
RY531012				12 Vdc	7-1393224-9
RY531024				24 Vdc	8-1393224-2
RY531048				48 Vdc	8-1393224-3
RY532012			AgNi 0.15 gold plated	12 Vdc	8-1393224-4
RY532024				24 Vdc	8-1393224-5
RY533012			AgSnO	12 Vdc	8-1393224-8
RY533024				24 Vdc	8-1393224-9
RY533048	48 Vdc	9-1393224-0			
RY610005	pinning 3.2 mm wash tight	1 C/O contact		AgCdO	5 Vdc
RY610012			12 Vdc		1-1393225-0
RY610024			24 Vdc		1-1393225-4
RY610048			48 Vdc		1-1393225-5
RY611005			AgNi 0.15	5 Vdc	1-1393225-7
RY611012				12 Vdc	1-1393225-9
RY611024				24 Vdc	2-1393225-1
RY611048				48 Vdc	2-1393225-2
RY612005			AgNi 0.15 gold plated	5 Vdc	2-1393225-3
RY612012				12 Vdc	2-1393225-6
RY612024				24 Vdc	2-1393225-9
RY612048				48 Vdc	3-1393225-0
RY613005	AgSnO	5 Vdc	5-1419136-2		
RY613012		12 Vdc	3-1393225-1		
RY613024		24 Vdc	3-1393225-3		
RY613048		48 Vdc	3-1393225-4		
RYA30005	pinning 5 mm wash tight	1 N/O contact	AgCdO	5 Vdc	0-1393224-1
RYA30012				12 Vdc	0-1393224-4
RYA30024				24 Vdc	0-1393224-6
RYA30048				48 Vdc	7-1393225-7
RYA31005			AgNi 0.15	5 Vdc	0-1393224-7
RYA31012				12 Vdc	0-1393224-9
RYA31024				24 Vdc	1-1393224-2
RYA31048				48 Vdc	1-1393224-3
RYA32005			AgNi 0.15 gold plated	5 Vdc	1-1393224-4
RYA32012				12 Vdc	1-1393224-6
RYA32024				24 Vdc	1-1393224-8
RYA33005				AgSnO	5 Vdc
RYA33024	24 Vdc	2-1393224-1			