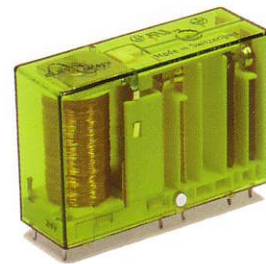
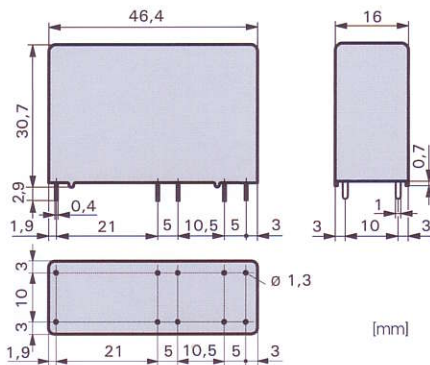


SIR 4 Contacts „Power“



General data

- PCB relay with forcibly guided contacts
- Protective separation between coil/control contacts and output contacts (> 8mm) as well as protective separation between the output contacts themselves (> 8mm)
- EN 50205, type A
- Contact mounting:
SIR312P Control contacts 1NO/1NC
Output contacts 2NO
SIR222P Control contacts 2NC
Output contacts 2NO
- Small external dimensions
- Mean coil power 0,75W



Control Contacts

Contact material	AgSnO ₂ +0,2µm Au
Rated switching capacity	250VAC 6A AC1 1'500VA
Electr. life AC1 (360 cycles/h)	approx. 100'000
Inrush current max.	15A for 20ms
Switching current range*	5mA to 6A
Switching capacity range*	60mW to 1'500W (VA)
Contact resistance (as delivered)	≤ 100mΩ

* Guide values

Output contacts

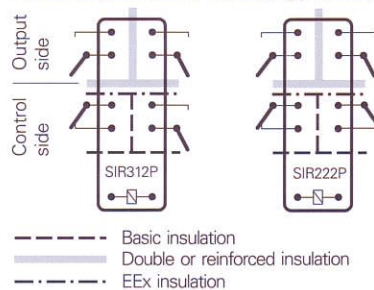
Contact material	AgSnO ₂
Rated switching capacity	250VAC (440VAC) 12A AC1 3'000VA
Electr. life AC1 (360 cycles/h)	approx. 250'000
Inrush current max.	60A for 20ms
Switching current range*	10mA to 22A
Switching capacity range*	120mW to 3'000W (VA)
Contact resistance (as delivered)	≤ 100mΩ

* Guide values

Standard coils for direct current (other voltages on request)

Nominal voltage VDC	Min. pick-up voltage at 20°C	Drop-out voltage at 20 °C	Nominal current in mA	Resistance in Ohm at 20 °C	Tolerance in %
5	≤ 3,5	≥ 0,5	151,0	33	± 10
6	≤ 4,2	≥ 0,6	125,0	48	± 10
12	≤ 6,3	≥ 0,9	63,1	190	± 10
24	≤ 8,4	≥ 1,2	31,5	760	± 10
48	≤ 12,6	≥ 1,8	15,7	3'050	± 10
60	≤ 16,8	≥ 2,4	12,5	4'800	± 10
110	≤ 33,6	≥ 4,8	6,8	16'000	± 15

Circuit diagram (view on relay upper side)



Mechanical life	> 10 x 10 ⁶ operations
Switching frequency, mechanical	15Hz
Response time	typically 15ms
Drop-out time**	typically 4ms
Bounce time of NO contact	typically 6ms
Bounce time of NC contact	typically 12ms
Shock resistance	16ms NO contact 17g NC contact 7g
Vibration resistance	10-200Hz NO contact 10g NC contact 4,5g
Test voltage coil/control contacts	2'500Veff 1min
Test voltage coil-control contacts/output contacts	5'000Veff 1min
Test voltage output contacts as against each other	4'000Veff 1min
Test voltage contact open	1'500Veff 1min
Insulation resistance	10 ¹¹ Ω
Creeping resistance	CTI 250
Weight	approx. 32g
Mounting position	any
Ambient temperature	-40°C to +70°C
Type of protection	RT II
Solder bath temperature	270 °C/5s
Thermal resistance	55K/W
Temperature limit for coil	120°C
Pollution degree	3
Overvoltage category	III
Resistance to short circuiting 1'000A SCPD 6A control contacts	gG (pre-fuse)
Resistance to short circuiting 1'000A SCPD 16A output contacts	gG (pre-fuse)

** without spark suppression

Insulation terms

Coil to control contacts: Basic insulation
Coil/control contacts to output contacts: Double or reinforced insulation
EEx insulation > 10mm

Output contacts as against each other: Double or reinforced insulation > 8mm

Tests, regulations

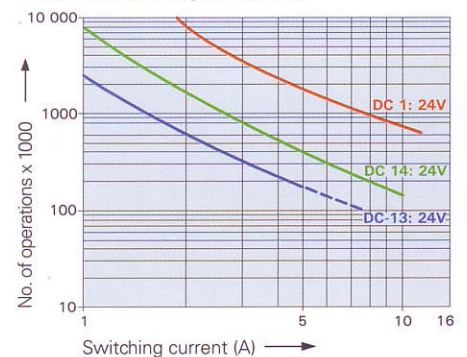
Approvals	SEV, UL, cUL, TÜV
Insulation class	VDE 0110 / group C 250VAC
Protection class II	VDE 0106
Fire protection requirements	UL 94 / V0

Options, accessories

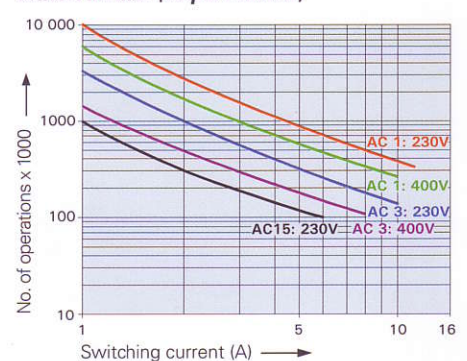
PCB socket

Diagrammes

Contact lifetime (output contacts)

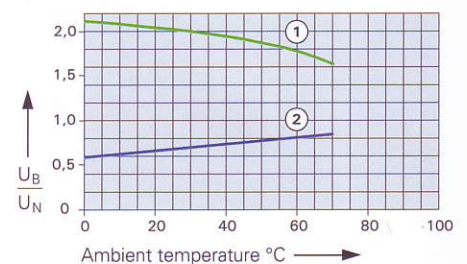


Contact lifetime (output contacts)



Maximal contact load at AC 1 with 230V:
2 contacts each with 12A

Excitation voltage range



- 1) Max. excitation voltage with contact load ≤ 2A control contacts / ≤ 5A output contacts
- 2) Min. excitation voltage (guaranteed values) without previous operation

No heat accumulation due to intrinsic heating of other components.
Continuous duty 100%.

Ordering example

SIR 3 1 2 P 24VDC
 _____ Coil voltage
 _____ Power version
 _____ Soldering tags
 _____ Number of NC contacts
 _____ Number of NO contacts
 _____ Type designation