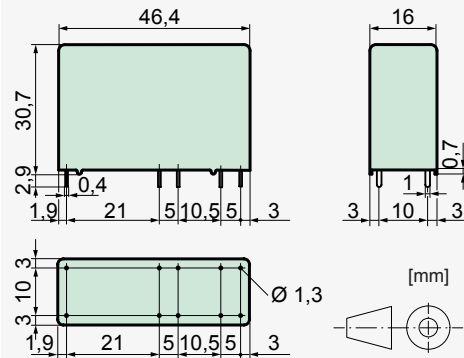


Relay Key Data

- PCB relay with forcibly guided contacts
- Protective separation between coil/control contact and output contacts (>10 mm), as well as output contacts against each other (>8 mm)
- IEC 61810-3 Type A
- Contact mounting: SIR312 3 NO / 1 NC
SIR222 2 NO / 2 NC
- Small external dimensions
- Nominal coil power 0,6 W
- Holding coil power 0,18 W
- Coil for railway application according EN 50 155 on request

Dimensions



Contact Data

Contact material	AgSnO ₂ + 0,2 μ m Au
Type of contact	crown contact
Rated switching capacity	250 VAC 10 A AC1 2500 VA
Electr. Life AC1(360 S / h)	approx. 100000
Inrush current max.	25 A for 20 ms
Switching voltage range	5 to 250 VDC / VAC
Switching current range*	10 mA to 10 A
Switching capacity range*	60 mW to 2500 W(VA)
Contact resistance (as delivered)	≤ 100 m Ω / 6 V / 100 mA

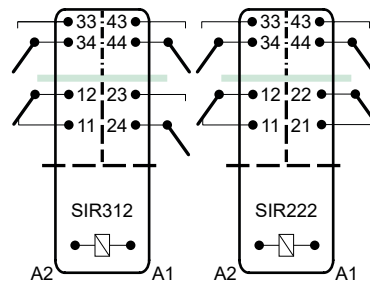
*Guided values

Standard Coils for Direct Current

(other voltages on request)

Nominal voltage VDC	Min. pick-up voltage VDC at 20 °C	Drop-out voltage VDC at 20 °C	Nominal current in mA at 20 °C	Resistance in Ohm at 20 °C
5	3,5	$\geq 0,5$	121,0	41 $\pm 10\%$
6	4,2	$\geq 0,6$	100,0	60 $\pm 10\%$
12	8,4	$\geq 1,2$	50,0	240 $\pm 10\%$
18	12,6	$\geq 1,8$	33,3	540 $\pm 10\%$
24	16,8	$\geq 2,4$	25,2	950 $\pm 10\%$
48	33,6	$\geq 4,8$	12,6	3800 $\pm 10\%$
60	42,0	$\geq 6,0$	10,0	6000 $\pm 13\%$
110	77,0	$\geq 11,0$	5,5	20000 $\pm 15\%$

Circuit Diagram (relay top view)



Insulation Data

- Basic insulation	at 250 VAC
- Air and creepage distance	>4 mm
- Test voltage	2500 V / 50 Hz / 1 min
- Double or reinforced insulation	at 250 VAC
- Air and creepage distance	>8 mm
- Test voltage	4000 V / 50 Hz / 1 min
- Double or reinforced insulation	at 250 VAC
- Air and creepage distance	>10 mm
- Test voltage	5000 V / 50 Hz / 1 min
Test voltage contact open	1500 V / 50 Hz / 1 min
Creepage resistance	CTI 250
Pollution degree	2
Overvoltage category	III
Insulation resistance at Up 500 VDC	>100 M Ω

Additional Data

Mechanical endurance	>10 x 10 ⁶ operations
Switching frequency, mechanical	15 Hz
Response time (all NO closed)	typically 15 ms
Drop-out time** (NC closed)	typically 4 ms
Bounce time of NO contact	typically 6 ms
Bounce time of NC contact	typically 12 ms
Shock resistance 16 ms	NO > 10g NC > 6g
Vibration resistance (10-200 Hz)	NO > 5g NC > 1,5g
Resistance to short circuiting contacts	1000 A SCPD 10 A gG / gL (pre-fuse)
Ambient temperature	-40°C to +70°C
Thermal Resistance	55 K / W
Temperature limit for coil	120°C
Weight	approx. 30 g
Mounting position	any
Mounting distance	rec. >5 mm
Test method	A / group assembly
Type of protection	RT II
Solder bath temperature	270°C / 5 s

**without spark suppression

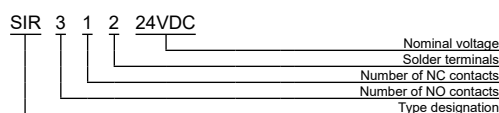
Tests, Regulations, Standards

Approvals	
UL File E188953	Sec. 3
Insulation class IEC 60664-1	250 VAC
Fire protection requirements	UL 94 / V0
Standards IEC 61810-1, IEC 61810-3	

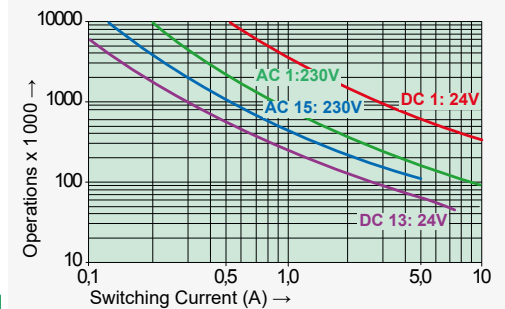
Options, Accessories

Print socket

Product Key



Contact Lifetime NO Contacts



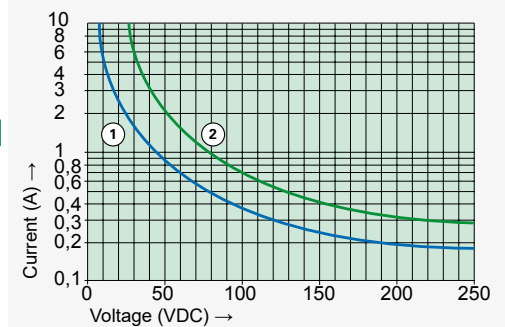
Maximal switching capacity (DIN EN 60947-5-1, Tab. C2)

AC 15:	230 V / 5 A
DC 13:	24 V / 7,5 A / 0,1 Hz
UL 508:	C600 / R300

Maximal contact load at AC 1 with 230 V:

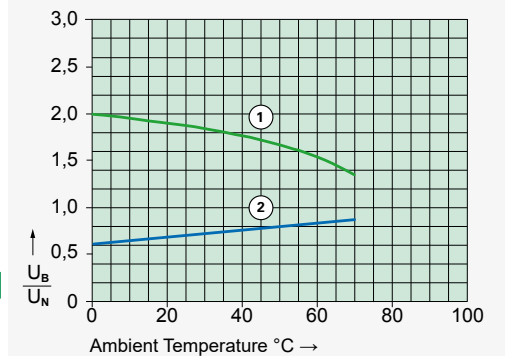
- 2 contacts with 10 A each
- 3 contacts with 8,4 A each

Load Limit Curve with Direct Current



- 1) Inductive load L/R 40 ms
- 2) Resistive load

Excitation Voltage Range



- 1) Max. excitation voltage with contact load: ≤ 6 A
- 2) Min. excitation voltage (guaranteed values) without previous operation

Single relay on print, no heat accumulation due to surrounding components with self-heating, duty cycle 100%.