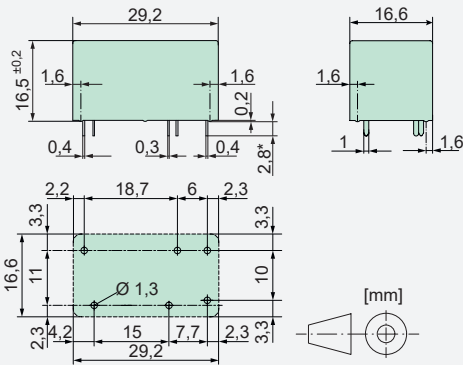




Relay Key Data

- PCB relay with forcibly guided contacts
- Protective separation between control and load circuit (leakage and creepage distances >10 mm)
- IEC 61810-3 Type A
- Double and reinforced insulation between the contacts
- Contact mounting: SIS112 1 NO / 1 NC
- Small external dimensions
- Nominal coil power 0,2 W
- Holding coil power 0,04 W

Dimensions



*with 2,2 mm or 3,8 mm length available

Contact Data

Contact material	AgCuNi +0,2-0,4 μm Au
Type of contact	Single contact with notched crown
Rated switching capacity	250 VAC 6 A AC1 1500 VA
Electr. Life AC1 (360 S / h)	>90 000
Inrush current max.	30 A for 20 ms
Switching voltage range	5 to 250 VDC / VAC
Switching current range**	3 mA to 6 A
Switching capacity range**	40 mW to 1500 W(VA)
Contact resistance (as delivered)	≤100 mΩ / 6 V / 100 mA

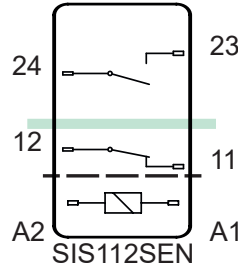
**Guided values

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
3,0	≤2,25	≥0,30	66,6	45,0 ± 10%
3,3	≤2,47	≥0,33	60,6	54,4 ± 10%
4,5	≤3,37	≥0,45	44,5	101,0 ± 10%
5,0	≤3,75	≥0,50	40,0	125,0 ± 10%
6,0	≤4,50	≥0,60	33,3	180,0 ± 10%
9,0	≤6,75	≥0,90	22,2	405,0 ± 10%
12,0	≤9,00	≥1,20	16,6	720,0 ± 10%
24,0	≤18,00	≥2,40	8,3	2880,0 ± 10%
48,0	≤36,00	≥4,80	4,1	11520,0 ± 13%
60,0	≤45,00	≥6,00	3,3	18000,0 ± 13%

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	>10 mm
Test voltage	5000 V / 50 Hz / 1 min
Test voltage contact open	1500 V / 50 Hz / 1 min
Creepage resistance	CTI 175
Pollution degree	2
Overvoltage category	III
Insulation resistance at Up 500 VDC	>100 MΩ

Additional Data

Mechanical endurance	>10x10 ⁶ operations
Switching frequency, mechanical	12 Hz
Response time (NO closed)	typically 15 ms
Drop-out time*** (NC closed)	typically 5 ms
Bounce time of NO contact	typically 2 ms
Bounce time of NC contact	typically 15 ms
Shock resistance 16 ms	NO > 17g NC > 7g
Vibration resistance (10-200 Hz)	NO > 7g NC > 2g
Resistance to short circuiting contacts	1000 A SCPD 6 A gG / gL (pre-fuse)
Ambient temperature	-40°C to +85 °C
Thermal Resistance	55 K / W
Temperature limit for coil	120 °C
Weight	approx. 18 g
Mounting position	any
Mounting distance	rec. >1 mm
Test method	A / group assembly
Type of protection	RT III
Solder bath temperature	270 °C / 5 s

***without spark suppression

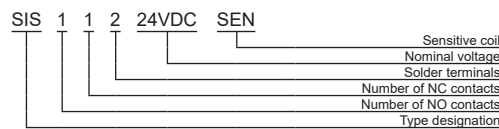
Tests, Regulations, Standards

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

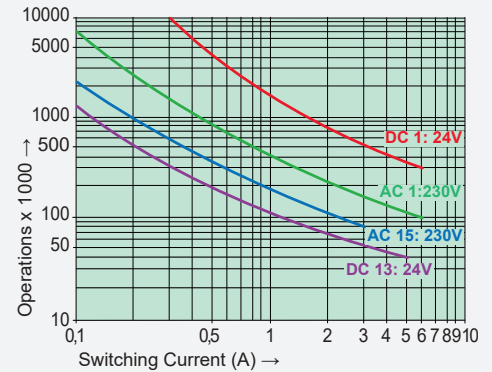
Options, Accessories

DIN rail socket	
Pin length	2,2 to 3,8 mm

Product Key



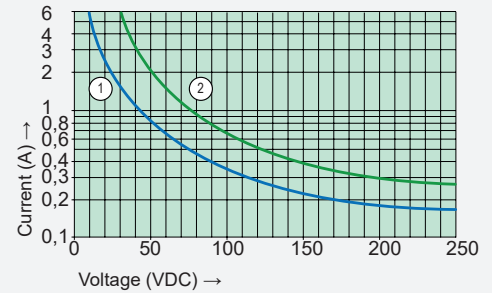
Contact Lifetime for NO Contact



Maximal switching characteristics (DIN EN 60947-5-1)

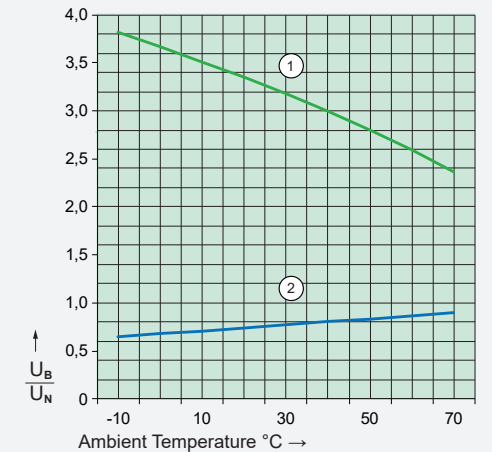
AC 1:	250 V / 6 A
AC 15:	230 V / 3 A
DC 1:	24 V / 6 A
DC 13:	24 V / 5 A / 0,1 Hz
UL 508:	B300 / R300

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: ≤4 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%.