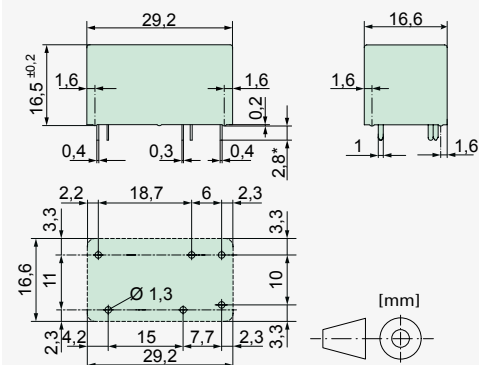




## Relay Key Data

- 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 0,27 W
- Holding coil power 0,08 W
- Coil for railway application according EN 50 155 on request

## Dimensions



## 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 AAC1 1500 VA
Electr. Life AC1 (360 S / h)	>90000
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

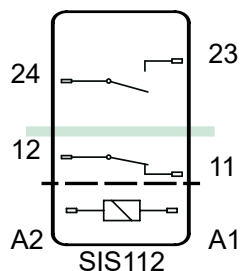
\*Guided values

## 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
5	≤3,5	≥0,5	54,9	91 ± 10%
6	≤4,2	≥0,6	46,1	130 ± 10%
9	≤6,3	≥0,9	30,5	295 ± 10%
12	≤8,4	≥1,2	23,0	520 ± 10%
18	≤12,6	≥1,8	15,2	1180 ± 10%
24	≤16,8	≥2,4	11,4	2100 ± 10%
48	≤33,6	≥4,8	5,7	8350 ± 13%
60	≤42,0	≥6,0	4,5	13100 ± 15%

### Circuit Diagram (relay top view)




### Insulation Data

- Basic insulation	at 250 VAC
- Air and creepage distance	>4 mm
- Test voltage	2 500 V / 50 Hz / 1 min
- Double or reinforced insulation	at 250 VAC
- Air and creepage distance	>10 mm
- Test voltage	5 000 V / 50 Hz / 1 min
Test voltage contact open	1 500 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 <sup>6</sup> operations
Switching frequency, mechanical	15 Hz
Response time (NO closed)	typically 10 ms
Drop-out time (NC closed)	typically 3 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	1 000A 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	

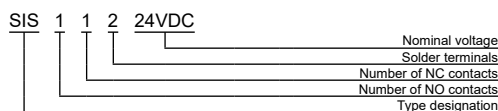
## Tests, Regulations, Standards

Approvals		
UL File E188953		Sec. 5
Insulation class IEC 60664-1		250 VAC
Fire protection requirements		UL 94 / V0
Standards IEC 61810-1, IEC 61810-3		

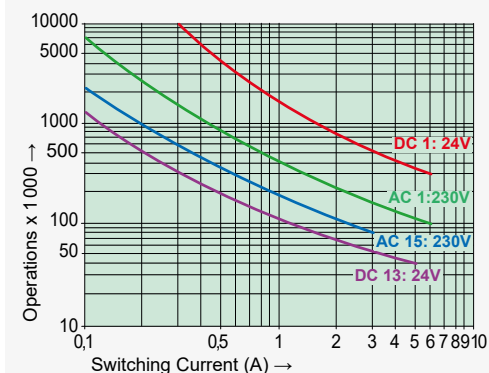
## Options, Accessories

none available

### Product Key



## Contact Lifetime for NO Contact



Maximal switching characteristics (EN60947-5-1)

AC 1: 250 V / 6 A

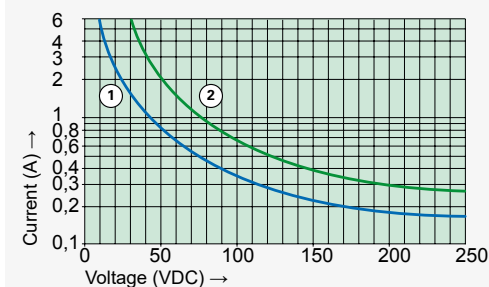
AC 15: 230 V / 3 A

DC 1: 24 V / 6 A

DC 13: 24 V / 5 A / 0,1 Hz

UL 508: B300 / R300

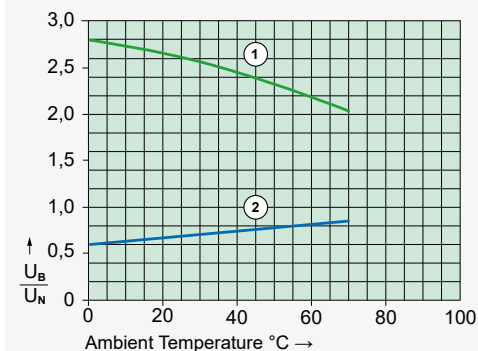
## Load Limit Curve with Direct Current



1) Inductive load L/R 40 ms

2) Resistive load

### Excitation Voltage Range



1) Max. excitation voltage with contact load:  $\leq 4 \text{ A}$

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%.