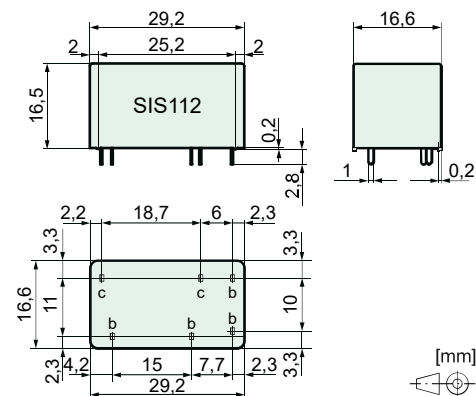




Features

- Relay with forcibly guided contacts according to IEC 61810-3
- Application type A
- Protective separation (see insulation data)
- Suitable for print mounting
- Compact design
- Contact mounting: SIS112: 1 NC + 1 NO

Dimensions



Pin dimension b	1,0 x 0,3 mm
Pin dimension c	1,0 x 0,4 mm
Recommended drilling on PCB	Ø 1,3 mm

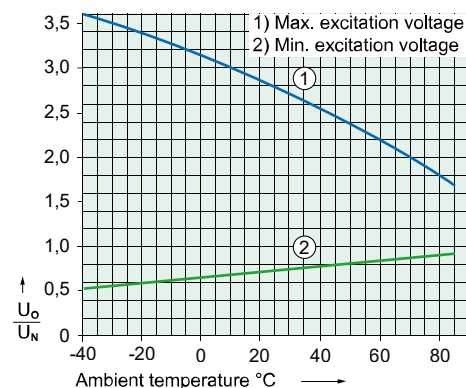
Coil data at 20 °C

Nominal power	0,27 W
Holding power	0,08 W
Limit temperature	120 °C

Nominal voltage (VDC)	Pick-up voltage (VDC)	Drop-out voltage (VDC)	Nominal current (mA)	Resistance (Ohm)
6,0	≤4,2	≥0,6	46	130 (1 ± 10 %)
12,0	≤8,4	≥1,2	23	520 (1 ± 10 %)
18,0	≤12,6	≥1,8	15	1180 (1 ± 10 %)
24,0	≤16,8	≥2,4	11	2100 (1 ± 10 %)
48,0	≤33,6	≥4,8	6	8350 (1 ± 13 %)
60,0	≤42,0	≥6,0	5	13100 (1 ± 15 %)

other voltage values possible

Excitation voltage range



Test conditions:

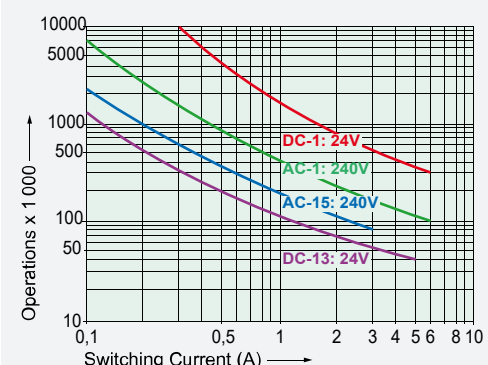
- Graph 1: Contact current 4 A MAX
- Graph 2: without previous operation
- Free-standing relay on PCB
- Duty cycle 100%

Contact data

Contact material	AgCuNi + 0,2, ..., 0,4 µm Au
Type of contact	Single contact with notched crown
Rated switching power	1500 VA
250 V / 6 A / AC-1 (max.)	
Electr. life time	90 000
(0,1 Hz, rel. duty cycle 10%)	
Inrush current	30 A for 20 ms
Switching voltage range	5, ..., 250 V DC / AC
Switching current range*	3 mA, ..., 6 A
Switching power range**	40 mW, ..., 1500 W (VA)
Contact resistance as new (max.)	100 mΩ
Short circuit resistance of contacts	1000 A
with pre-fuse	SCPD 6 A gG / gL

* Reference values ** Reference values

Electrical life (NO contacts)



Switching capacity (IEC 61810-1)

AC-1:	240 V / 6 A MAX
AC-15:	240 V / 3 A MAX
DC-1:	24 V / 6 A MAX
DC-13:	24 V / 5 A / 0,1 Hz MAX

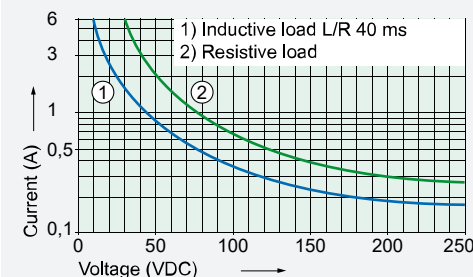
Switching capacity (UL 508)

B300, R300

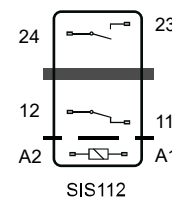
Continuous current per contact at load of:

1 contact 6 A MAX

Contact load limit curve (DC)



Circuit diagram (top view)



Insulation data

Rated insulation voltage (IEC 60664-1)	250 VAC
Basic insulation	
- Air and creepage distance (min.)	4 mm
- Test voltage	2500 V _{rms} / 1 min
Double or reinforced insulation	
- Air and creepage distance (min.)	10 mm
- Test voltage	5000 V _{rms} / 1 min
Open contact: Test voltage*	1500 V _{rms} / 1 min
Creepage resistance	CTI 175
Pollution degree	2
Overvoltage category	III
Insulation resistance (min.)	100 MΩ
- Test voltage	500 VDC

* Initial value

Mechanical Data

Life time (min.)	10 x 10 ⁶ switching cycles
Switching frequency (max.)	15 Hz
Response time (NO closed) (typ.)	10 ms
Drop-out time (NC closed) (typ.)*	3 ms
Bounce time (typ.)	NO: 2 ms / NC: 15 ms
Shock resistance (16 ms) (min.)	NO: 17g / NC: 7g
Vibration resistance (10-200 Hz) (min.)	NO: 7g / NC: 2g
Weight	approx. 18 g
Mounting position	any
Mounting distance (min.)	1 mm

* without coil wiring

Technical data

Ambient temperature	-40 °C, ..., +85 °C
Thermal resistance	55 K/W
Protection class	RT III
Solder bath temperature	270 °C / 5 s
Test method (heating)	A (group assembly)
Approvals	cULus, TÜV
Flammability class	UL 94 V-0
UL File	E188953 Sec. 5

Options, Accessories

Mounting rail socket	SRD-SIS3
Pin lengths for mounting rail socket	3,8 mm
Other pin lengths	possible
Coils accord. to EN 50155 (railway applications)	possible

Product key

SIS	1	1	2	24VDC	XX
Type designation	Number of NO contacts	Number of NC contacts	Solder terminals	Nominal coil voltage	Options