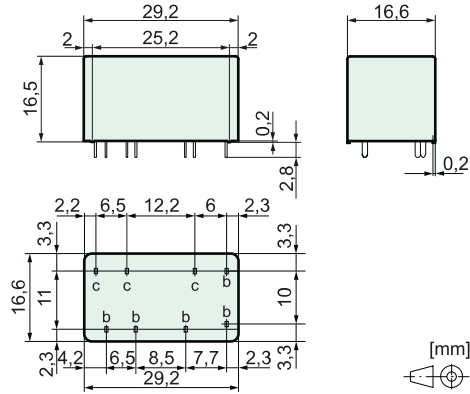




Features

- 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 assembly
SIS212: 2 NO + 1 NC

Dimensions



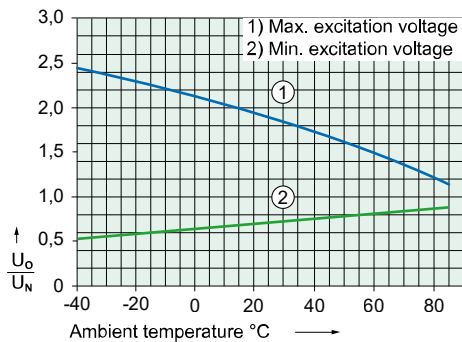
| | |
|-----------------------------|--------------|
| Pin dimension b | 1,0 x 0,3 mm |
| Pin dimension c | 1,0 x 0,4 mm |
| Recommended drilling on PCB | Ø 1,3 mm |

Coil data at 20 °C

| | |
|------------------------|--------|
| Nominal power (typ.) | 0,6 W |
| Holding power (typ.) | 0,18 W |
| Coil limit temperature | 120 °C |

| Nominal voltage (VDC) | Min. Pick-up voltage (VDC) | Min. Drop-out voltage (VDC) | Nominal current (mA) | Resistance (Ohm) |
|-----------------------|----------------------------|-----------------------------|----------------------|--------------------|
| 5,0 | 3,5 | 0,5 | 120 | 42 (1 ± 10 %) |
| 12,0 | 8,4 | 1,2 | 50 | 240 (1 ± 10 %) |
| 18,0 | 12,6 | 1,8 | 33 | 540 (1 ± 10 %) |
| 24,0 | 16,8 | 2,4 | 25 | 960 (1 ± 10 %) |
| 48,0 | 33,6 | 4,8 | 13 | 3840 (1 ± 10 %) |
| 60,0 | 42,0 | 6,0 | 10 | 6000,0 (1 ± 13 %) |
| 110,0 | 77,0 | 11,0 | 5 | 20150,0 (1 ± 15 %) |

Excitation voltage range



Test conditions:

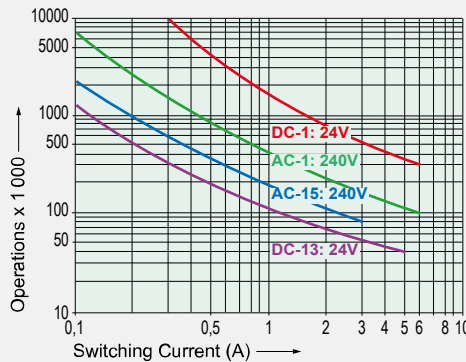
- Graph 1: Contact current 4 A MAX
- Graph 2: without previous operation
- Free-standing relay on PCB
- Duty cycle 100%

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 (0,1 Hz, rel. duty cycle 10%) | 90 000 |
| 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** | 1 000 A |
| with pre-fuse | SCPD 6 A gG / gL (fuse) |

* Reference values ** Prospective short-circuit current

Electrical life (NO contacts)

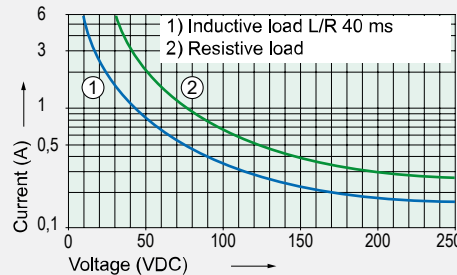


Switching capacity (IEC 61810-1)

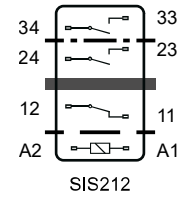
| | |
|--------|-------------------------|
| AC-1: | 240 V / 6 A MAX |
| AC-15: | 240 V / 3 A MAX |
| DC-1: | 24 V / 6 A MAX |
| DC-13: | 24 V / 5 A / 0,1 Hz MAX |

| | |
|--|------------|
| Switching capacity (UL 508) | B300, R300 |
| Continuous current per contact at load of: | |
| 1 or 2 contacts | 6 A MAX |

Contact load limit curve (DC)



Circuit diagram (top view)



Insulation data

| | |
|--|-------------------------------|
| Rated insulation voltage (IEC 60664-1) | 250 VAC |
| Basic insulation | 4 mm |
| - Air and creepage distance (min.) | 4 mm |
| - Test voltage | 2500 V _{rms} / 1 min |
| Double or reinforced insulation | 5,5 mm |
| - Air and creepage distance (min.) | 5,5 mm |
| - Test voltage | 4000 V _{rms} / 1 min |
| Double or reinforced insulation | 8 mm |
| - Air and creepage distance (min.) | 8 mm |
| - Test voltage | 4000 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

| | |
|---|---------------------------------|
| Mechanical lifetime (min.) | 10 x 10 ⁶ operations |
| 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: 10g |
| Vibration resistance (10-200 Hz) (min.) | NO: 7g / NC: 3g |
| Weight | approx. 20 g |
| Mounting position | any |
| Mounting distance (min.) | 1 mm |

* without coil wiring

Other 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 |
| Other coil designs | possible |
| Coils accord. to EN 50155 (railway applications) | possible |

Product key

SIS 2 1 2 24VDC XX

| | | |
|-------|-----------------------|----------------------|
| SIS | Type designation | |
| 2 | Number of contacts NO | |
| 1 | Number of contacts NC | |
| 2 | Connection technology | 2 = Solder terminals |
| 24VDC | Nominal coil voltage | |
| XX | Options | |