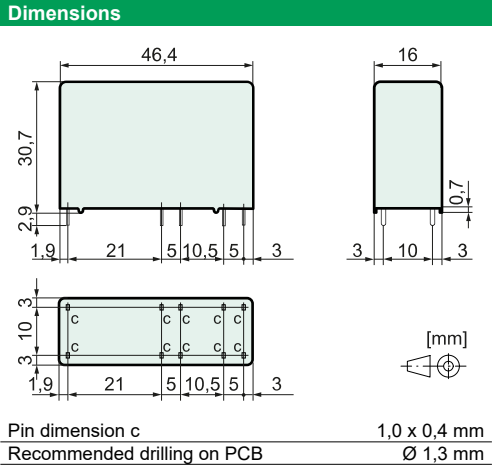




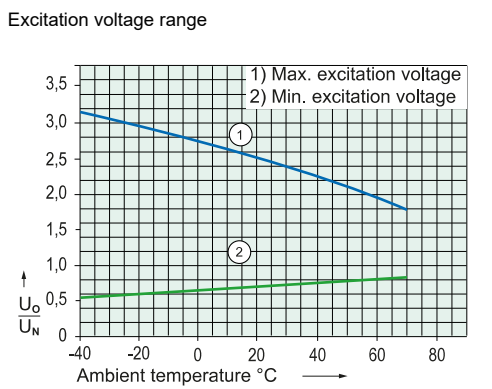
- Features**
- Relay with forcibly guided contacts according to IEC 61810-3
 - Application type A
 - Protective separation (see insulation data)
 - Suitable for print mounting
 - Low nominal and holding power
 - Contact assembly
SIR312 SEN: 2 NO + 1 NC, SIR222 SEN: 2 NO + 2 NC



Coil data at 20 °C

| | |
|------------------------|--------|
| Nominal power (typ.) | 0,36 W |
| Holding power (typ.) | 0,12 W |
| Coil limit temperature | 120 °C |

| Nominal voltage (VDC) | Min. Pick-up voltage (VDC) | Min. Drop-out voltage (VDC) | Nominal current (mA) | Resistance (Ohm) |
|-----------------------|----------------------------|-----------------------------|----------------------|------------------|
| 3,0 | 2,2 | 0,3 | 120 | 25 (1 ± 10 %) |
| 5,0 | 3,8 | 0,5 | 72 | 69 (1 ± 10 %) |
| 12,0 | 9,0 | 1,2 | 30 | 400 (1 ± 10 %) |
| 18,0 | 13,5 | 1,8 | 20 | 900 (1 ± 10 %) |
| 24,0 | 18,0 | 2,4 | 15 | 1600 (1 ± 10 %) |
| 48,0 | 36,0 | 4,8 | 8 | 6400 (1 ± 13 %) |
| 60,0 | 45,0 | 6,0 | 6 | 10000 (1 ± 15 %) |

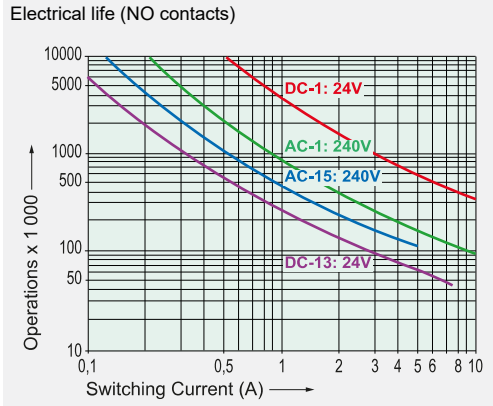


- Test conditions:**
- Graph 1: Contact current 6 A MAX
 - Graph 2: without previous operation
 - Free-standing relay on PCB
 - Duty cycle 100%

Contact data

| | |
|---|--|
| Contact material | AgSnO ₂ + 0,2, ..., 0,4 µm Au |
| Contact type | crown contact |
| Rated switching power | 2500 VA |
| 250 V / 10 A / AC-1 (max.) | |
| Electr. life time (0,1 Hz, rel. duty cycle 10%) | 100 000 |
| Inrush current | 25 A for 20 ms |
| Switching voltage range | 5, ..., 250 V DC / AC |
| Switching current range* | 10 mA, ..., 10 A |
| Switching power range* | 60 mW, ..., 2500 W (VA) |
| Contact resistance as new (max.) | 100 mΩ |
| Short circuit resistance of contacts** | 1 000 A |
| with pre-fuse | SCPD 10 A gG / gL (fuse) |

* Reference values ** Prospective short-circuit current



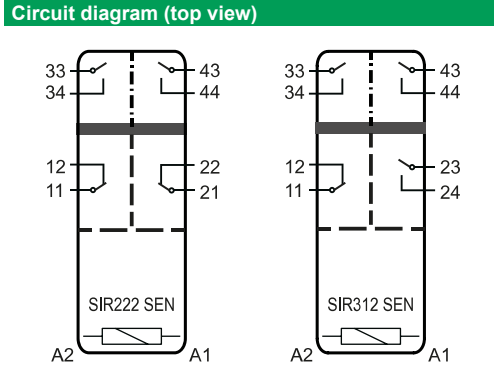
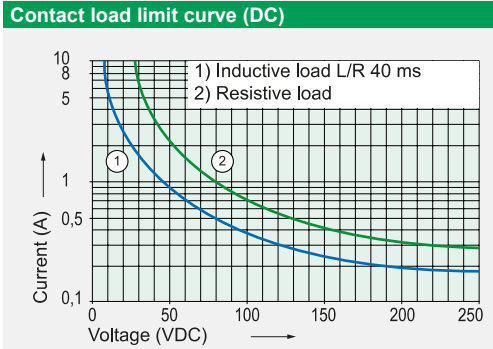
Switching capacity (IEC 61810-1)

| | |
|--------|---------------------------|
| AC-1: | 240 V / 10 A MAX |
| AC-15: | 240 V / 5 A MAX |
| DC-1: | 24 V / 10 A MAX |
| DC-13: | 24 V / 7,5 A / 0,1 Hz MAX |

Switching capacity (UL 508) C600, R300

Continuous current per contact at load of:

| | |
|-----------------|-----------|
| 1 or 2 contacts | 10 A MAX |
| 3 contacts | 8,4 A MAX |



Insulation data

| | |
|--|--------------------------------|
| Rated insulation voltage (IEC 60664-1) | 250 VAC |
| Basic insulation | 4 mm |
| - Air and creepage distance (min.) | 4 mm |
| - Test voltage | 2 500 V _{rms} / 1 min |
| Double or reinforced insulation | 8 mm |
| - Air and creepage distance (min.) | 10 mm |
| - Test voltage | 4 000 V _{rms} / 1 min |
| Open contact: Test voltage* | 1 500 V _{rms} / 1 min |
| Creepage resistance | CTI 250 |
| 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.) | 18 ms |
| Drop-out time (NC closed) (typ.)* | 5 ms |
| Bounce time (typ.) | NO: 6 ms / NC: 12 ms |
| Shock resistance (16 ms) (min.) | NO: 10g / NC: 6g |
| Vibration resistance (10-200 Hz) (min.) | NO: 5g / NC: 1,5g |
| Weight | approx. 30 g |
| Mounting position | any |
| Mounting distance (min.) | 5 mm |

* without coil wiring

Other data

| | |
|-------------------------|---------------------|
| Ambient temperature | -40 °C, ..., +70 °C |
| Thermal resistance | 55 K / W |
| Protection class | RT II |
| 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. 3 |

Options, Accessories

| | |
|--|----------|
| PCB socket | SRP SIR4 |
| Other coil designs | possible |
| Coils accord. to EN 50155 (railway applications) | possible |

Product key

SIR 3 1 2 24VDC SEN XX

| | | |
|-------|-----------------------|----------------------|
| SIR | Type designation | |
| 3 | Number of contacts NO | |
| 1 | Number of contacts NC | |
| 2 | Connection technology | 2 = Solder terminals |
| 24VDC | Nominal coil voltage | |
| SEN | sensitive coil | |
| XX | Options | |