

Slimline PCB Relay SNR

- 1 pole 6 A, 1 CO or 1 NO contact
- Only 5 mm wide
- Sensitive coil 170 mW
- 4 kV coil-contact, 6 / 8 mm clearance/creepage, NO version with 8 / 8 mm clearance/creepage on request
- Reinforced insulation (protection class II)
- Strong coil pins for DIN-rail socket
- Allows high function- / packing density
- Cadmium-free contacts, AgNi 90/10 for AC-loads

Applications: centralized and decentralized heating control, extremely narrow interface elements, interface technology, timers, PLC's, I/O modules, I/O-ports



F0140-D

Approvals

 REG.-Nr. 6666,  E214024
Technical data of approved types on request

Contact data

| | | | |
|--|----------------------------|--------------------|------------|
| Contact configuration | 1CO or 1NO | | |
| Contact set | single contact | | |
| Type of interruption | micro disconnection | | |
| Rated voltage / max. switching voltage AC | 250 / 400 VAC | | |
| Rated current | 6 A | | |
| Maximum breaking capacity AC | 1500 VA | | |
| Limiting making capacity, max 4 s, duty factor 10% | 10 A | | |
| Contact material | AgSnO ₂ | AgSnO ₂ | AgNi90/10 |
| | gold plated | | |
| Minimum contact load | 100mA, 12V | 50mW | 100mA, 12V |
| Rated frequency of operation with / without load | 6 / 1200 min ⁻¹ | | |
| Operate- / release time | max 12 / 5 ms | | |
| Bounce time NO / NC contact | max 3 / 8 ms | | |

Contact ratings

| Type | Contact | Load | Ambient temp. [°C] | Cycles |
|-------------------------|---------|-------------------------------|--------------------|---------------------|
| IEC 61810 | | | | |
| V23092-****-A301, -A801 | CO | 6 A, 250 VAC, cosφ=1 | 85°C | 5x10 ³ |
| UL 508 | | | | |
| V23092-****-A301, -A801 | NO / NC | 6 A, 250 VAC, general purpose | 85°C | 6x10 ³ |
| V23092-****-A301, -A801 | NO / NC | B300 | 85°C | 6x10 ³ |
| V23092-****-A301, -A801 | NO / NC | R300 | 85°C | 6x10 ³ |
| EN60730-1 | | | | |
| V23092-****-A302 | NO | 3 A (1.5 A), 250 VAC, | 85°C | 100x10 ³ |
| V23092-****-A302, -A802 | NO | 5 A (1.5 A), 250 VAC, | 85°C | 10x10 ³ |

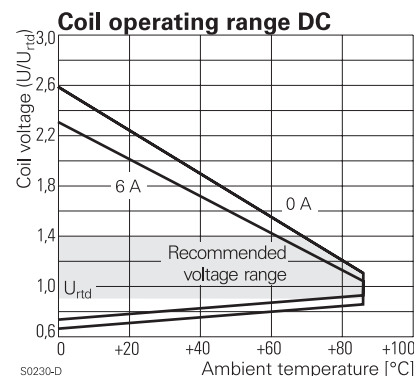
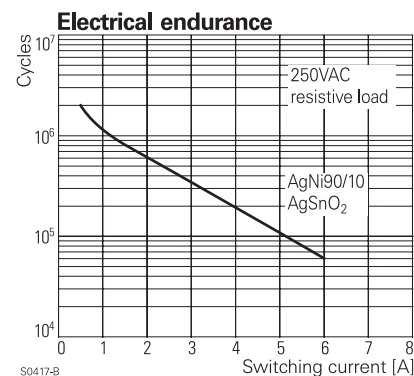
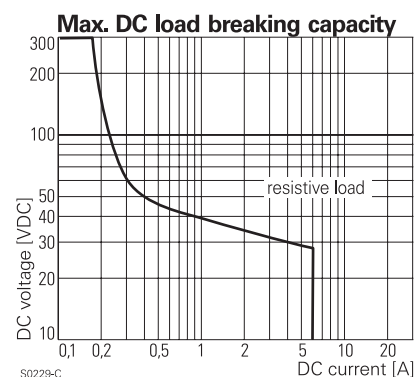
Coil data

| | |
|----------------------------------|------------|
| Rated coil voltage range DC coil | 5...60 VDC |
| Operative range to IEC 61810 | 2 |

Coil versions, DC-coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ohm | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|---------------------|---------------------|
| 005 | 5 | 3.5 | 0.25 | 147 ± 10% | 170 |
| 012 | 12 | 8.4 | 0.6 | 848 ± 10% | 170 |
| 024 | 24 | 16.8 | 1.2 | 3390 ± 10% | 170 |
| 048 | 48 | 33.6 | 2.4 | 10600 ± 15% | 217 |
| 060 | 60 | 42.0 | 3.0 | 20500 ± 15% | 176 |

All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request



Slimline PCB Relay SNR (Continued)

Insulation

| | | |
|---|---------------------|-----------------------|
| Dielectric strength coil-contact circuit | | 4000 V _{rms} |
| open contact circuit | | 1000 V _{rms} |
| Clearance / creepage coil-contact circuit | | ≥ 6 / 8 mm |
| Material group of insulation parts | | IIIa |
| Tracking index of relay base | | PTI 250 |
| Insulation to IEC 61810-1 | | |
| Type of insulation coil-contact circuit | reinforced | |
| open contact circuit | micro disconnection | |
| Rated insulation voltage | 250 V | |
| Pollution degree | 3 | 2 |
| Rated voltage system | 240 V | 230 / 400 V |
| Overvoltage category | III | |

Other data

| | |
|---|---|
| Other data | |
| Mechanical endurance | 10x10 ⁶ cycles |
| Material | RoHS - Directive 2002/95/EC compliant as per product date code 0404 |
| Environment | |
| Ambient temperature range | -40...+85°C |
| Vibration resistance (function) NO / NC contact | 10 / 5 g |
| Shock resistance (function) NO / NC contact | 10 / 5 g |
| Shock resistance (destruction) | 30 g |
| Category of protection | RTIII - wash tight |
| Processing | |
| Mounting | pcb |
| Mounting position | any |
| Minimum mounting distance | ≥ 0 mm |
| Resistance to soldering heat ¹⁾ | 260°C / 5 s |
| Relay weight | 6 g |
| Packaging unit | 20 / 1000 pcs |

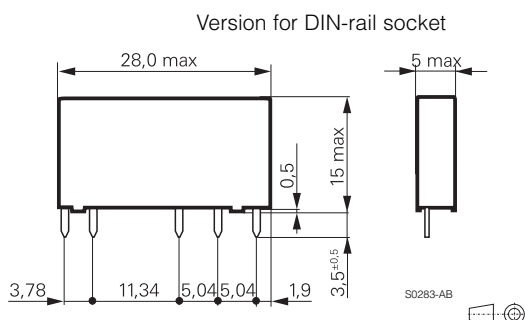
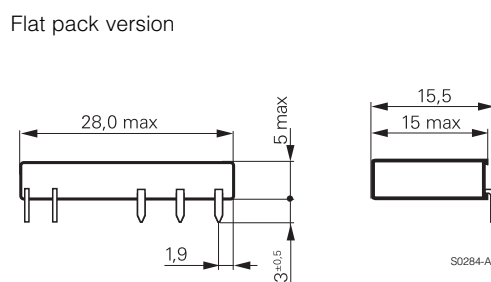
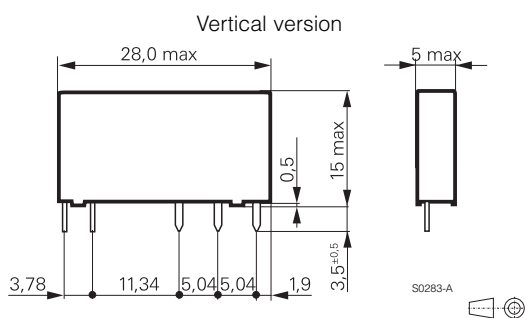
¹⁾ for flat pack version selective soldering is recommended.

Accessories

For details see datasheet

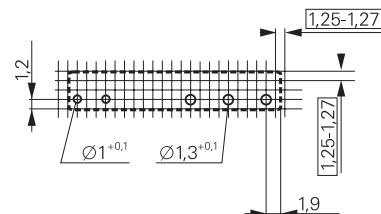
Accessories SNR

Dimensions



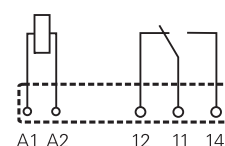
PCB layout / terminal assignment

Bottom view on solder pins



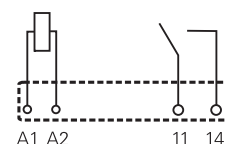
S0258-AA

1 CO contact



S0258-AR

1 NO contact



S0258.AC

Slimline PCB Relay SNR (Continued)

| | | | | | | | | |
|------------------------------|--|---------------|-----------|----------|------------|-----------|----------|-----------|
| Product key | Typical product key | V23092 | -A | 1 | 005 | -A | 3 | 01 |
| Type | V23092 Slimline PCB relay SNR | | | | | | | |
| Version | A PCB, vertical version B PCB, flat pack version S Plug-in, vertical version | | | | | | | |
| Version | 1 wash tight | | | | | | | |
| Coil | Coil code: please refer to coil versions table | | | | | | | |
| Contact system | A standard | | | | | | | |
| Contact material | 2 AgSnO ₂ , gold plated 3 AgSnO ₂ 8 AgNi 90/10 | | | | | | | |
| Contact configuration | 01 1 CO contact (1 form C) 02 1 NO contact (1 form A) | | | | | | | |

NO version with 8/8 mm clearance and creepage and other types on request

| Product key | Version | Contacts | Contact material | Coil | Part number |
|-------------------|------------------|--------------|----------------------------------|--------|-------------|
| V23092-A1005-A201 | PCB | 1 CO contact | AgSnO ₂ , gold pl. | 5 VDC | 1393236-1 |
| V23092-A1005-A202 | vertical version | 1 NO contact | | | 8-1415067-1 |
| V23092-A1005-A301 | wash tight | 1 CO contact | AgSnO ₂ | | 1393236-2 |
| V23092-A1005-A302 | | 1 NO contact | | | 9-1415067-1 |
| V23092-A1005-A801 | | 1 CO contact | AgNi 90/10 | | 1-1415068-1 |
| V23092-A1005-A802 | | 1 NO contact | | | 1415068-1 |
| V23092-A1012-A201 | | 1 CO contact | AgSnO ₂ , gold pl. | 12 VDC | 1393236-4 |
| V23092-A1012-A202 | | 1 NO contact | | | 1393236-5 |
| V23092-A1012-A301 | | 1 CO contact | AgSnO ₂ | | 1393236-7 |
| V23092-A1012-A302 | | 1 NO contact | | | 1393236-8 |
| V23092-A1012-A801 | | 1 CO contact | AgNi 90/10 | | 1-1393236-3 |
| V23092-A1012-A802 | | 1 NO contact | | | 2-1415068-1 |
| V23092-A1024-A201 | | 1 CO contact | AgSnO ₂ , gold pl. | 24 VDC | 2-1393236-1 |
| V23092-A1024-A202 | | 1 NO contact | | | 2-1393236-2 |
| V23092-A1024-A301 | | 1 CO contact | AgSnO ₂ | | 2-1393236-4 |
| V23092-A1024-A302 | | 1 NO contact | | | 2-1393236-5 |
| V23092-A1024-A801 | | 1 CO contact | AgNi 90/10 | | 3-1393236-0 |
| V23092-A1024-A802 | | 1 NO contact | | | 5-1415063-1 |
| V23092-A1048-A201 | | 1 CO contact | AgSnO ₂ , gold pl. | 48 VDC | 3-1393236-5 |
| V23092-A1048-A202 | | 1 NO contact | | | 3-1393236-6 |
| V23092-A1048-A301 | | 1 CO contact | AgSnO ₂ | | 3-1393236-7 |
| V23092-A1048-A302 | | 1 NO contact | | | 3-1393236-8 |
| V23092-A1048-A801 | | 1 CO contact | AgNi 90/10 | | 3-1393236-9 |
| V23092-A1048-A802 | | 1 NO contact | | | 3-1415068-1 |
| V23092-S1005-A201 | plug-in | 1 CO contact | AgSnO ₂ , gold plated | 5 VDC | 1956024-9 |
| V23092-S1005-A301 | vertical version | | AgSnO ₂ | | 1-1956024-0 |
| V23092-S1012-A201 | wash tight | | AgSnO ₂ , gold plated | 12 VDC | 1956024-1 |
| V23092-S1012-A301 | | | AgSnO ₂ | | 1956024-2 |
| V23092-S1024-A201 | | | AgSnO ₂ , gold plated | 24 VDC | 1956024-3 |
| V23092-S1024-A301 | | | AgSnO ₂ | | 1956024-4 |
| V23092-S1048-A201 | | | AgSnO ₂ , gold plated | 48 VDC | 1956024-5 |
| V23092-S1048-A301 | | | AgSnO ₂ | | 1956024-6 |
| V23092-S1060-A201 | | | AgSnO ₂ , gold plated | 60 VDC | 1956024-7 |
| V23092-S1060-A301 | | | AgSnO ₂ | | 1956024-8 |