# Slim 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**
- **RoHS compliant (Directive 2002/95/EC) as per product date code 0404**

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




F0140-C

## Approvals

VDE REG.-Nr. 6666, cULus 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 current | | 6 A | |
| Rated voltage / max.switching voltage AC | | 250/400 VAC | |
| Maximum breaking capacity AC | | 1500 VA | |
| Limiting making capacity, max 4 s, duty factor 10% | | 10 A | |
| Contact material | $AgSnO_2$ | $AgSnO_2$ gold plated | AgNi90/10 |
| Minimum contact load | 100mA, 12V | 50mW | 100mA, 12V |
| Mechanical endurance | | $10x10^6$ cycles | |
| Rated frequency of operation with / without load | | 6 /1200 $min^{-1}$ | |

### Contact ratings

| Type | Load | Cycles |
|---|---|---|
| V23092-*****-A302 | 3(1,5)A, 250VAC, 85°C, 1mm mounting distance, 6 cycles / min, EN60730-1 | $100x10^3$ |
| V23092-*****-A302 -A802 | 5(1,5)A, 250VAC, 85°C, 0,5mm mounting distance, 6 cycles / min, EN60730-1 | $10x10^3$ |
| V23092- | Pilot Duty R300 28 VDC, 85°C, 6000 cycles, UL508 | |
| V23092- | Pilot Duty B300 240 VAC, 85°C, 6000 cycles, UL508 | |

## Coil data

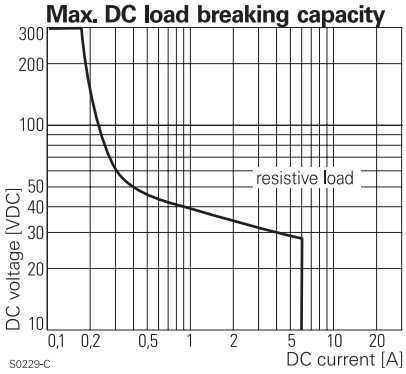
| | |
|---|---|
| Rated coil voltage range DC coil | 5...60 VDC |
| Coil power DC coil | typ. 170 mW |
| Operative range | 2 |

### 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 |

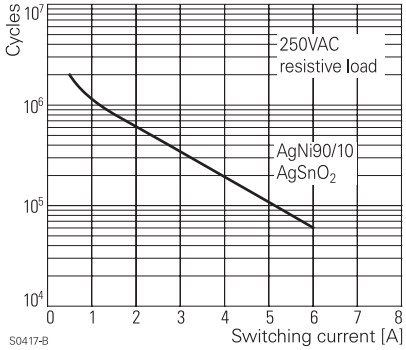
All figures are given for coil without preenergization, at ambient temperature +23°C
Other coil voltages on request

**Max. DC load breaking capacity**



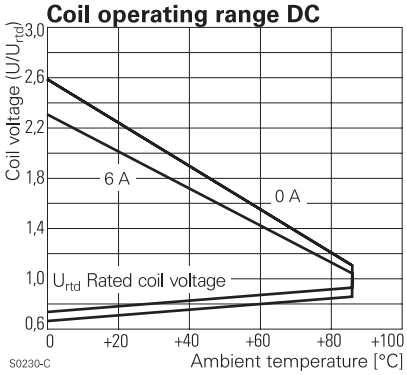

S0229-C

**Electrical endurance**




S0417-B

**Coil operating range DC**




S0230-C



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Specifications subject to change.

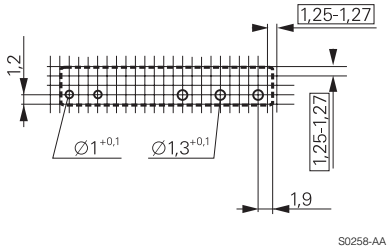
## Slim PCB Relay SNR (Continued)

| 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 60664-1 | | |
| Type of insulation coil-contact circuit | reinforced | |
| open contact circuit | micro disconnection | |
| Rated insulation voltage | 250 V | |
| Pollution degree | 3 | 2 |
| Rated voltage system | 230 V | 400 V |
| Overvoltage category | III | |

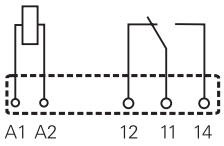
| Other data | |
|---|---|
| RoHS - Directive 2002/95/EC | compliant as per product date code 0404 |
| Flammability class according to UL94 | V-0 |
| Ambient temperature range | -40...+85°C |
| Operate- / release time | 5 / 2,5 ms |
| Bounce time NO / NC contact | 1,5 / 5 ms |
| Vibration resistance (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 |
| Mounting | pcb |
| Mounting position | any |
| Minimum mounting distance | 0 mm |
| Resistance to soldering heat | 260°C / 5 s |
| Relay weight | 6 g |
| Packaging unit | 20 / 1000 pcs |

| Accessories | |
|---|---|
| For details see datasheet | Accessories SNR |

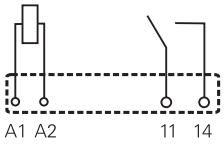
**PCB layout / terminal assignment**
Bottom view on solder pins




1 CO contact

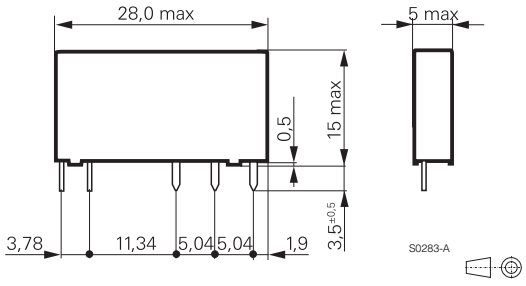



1 NO contact

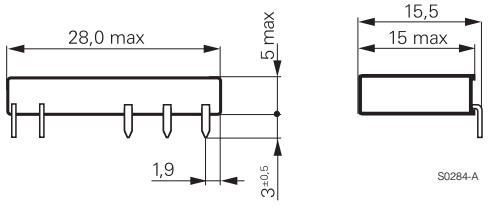



**Dimensions**

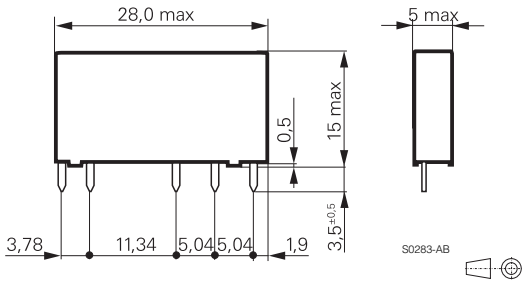
Vertical version




Flat pack version




Version for DIN-rail socket






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## Slim PCB Relay SNR (Continued)

**Product key**

| V | 2 | 3 | 0 | 9 | 2 | - | | 1 | | | | - | A | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|

Type

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
- **02** 1 NO contact

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 | 0-1393236-1 |
| V23092-A1005-A202 | vertical version | 1 NO contact | | | 8-1415067-1 |
| V23092-A1005-A301 | wash tight | 1 CO contact | $AgSnO_2$ | | 0-1393236-2 |
| 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 | | | 0-1415068-1 |
| V23092-A1012-A201 | | 1 CO contact | $AgSnO_2$, gold pl. | 12 VDC | 0-1393236-4 |
| V23092-A1012-A202 | | 1 NO contact | | | 0-1393236-5 |
| V23092-A1012-A301 | | 1 CO contact | $AgSnO_2$ | | 0-1393236-7 |
| V23092-A1012-A302 | | 1 NO contact | | | 0-1393236-8 |
| 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 |



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