

Force Guided Relay SR6 A/B/C/V

- 6 pole relay with force guided contacts according to EN61810-3 (formerly EN50205)
- Reinforced insulation between all contacts

Typical applications
Emergency shut-off, press control, machine control, elevator and escalator control, safety relays



F0206-EA



Approvals
VDE Cert. No. 128935, UL E214025, TUV 968/EL 350,
CCC 2020970303000302
Technical data of approved types on request

Contact Data

| | |
|-------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------|
| Contact arrangement | 3 form A + 3 form B contacts 3 NO + 3 NC, 4 form A + 2 form B contacts 4 NO + 2 NC, 5 form A + 1 form B contacts 5 NO + 1 NC |
| Rated voltage | 250VAC |
| Max. switching voltage | 400VAC |
| Rated current | 8A |
| Contact material | AgSnO ₂ , AgSnO ₂ + 0.2µm Au |
| Contact style | single contact, force guided type A according to EN61810-3 (formerly EN50205) |
| Min. recommended contact load | 5V, 10mA |
| Initial contact resistance | ≤100mΩ at 1A, 24VDC ≤20Ω at 10mA, 5VDC |
| Frequency of operation, with/without load | 6/150min ⁻¹ |

Contact ratings

IEC61810-1
on 1 form A (NO) contact

| | | |
|--------------|--------------------------|--------------------|
| 1200mW-coil: | 8A, 250VAC, cosφ = 1,70C | 20x10 ³ |
| 800mW-coil: | 6A, 250VAC, cosφ = 1,70C | 40x10 ³ |

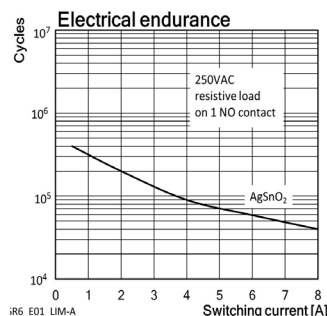
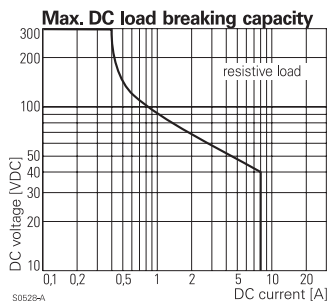
IEC60947-5-1
on 1 form A (NO) contact

| | |
|----------------|--|
| AC15 - 250V/5A | |
| DC13 - 24V/6A | |

UL508
on 1 form A (NO) contact

| | |
|----------------------------------|-------|
| 8A, 250VAC, general purpose, 70C | 6.000 |
| B300 | 6.000 |

Mechanical endurance: 10x10⁶ operations



Coil Data

| | |
|--------------------|-----------------|
| Coil voltage range | 5 to 110VDC |
| Max. coil power | 1200mW or 800mW |

Coil versions, DC-coil 800mW

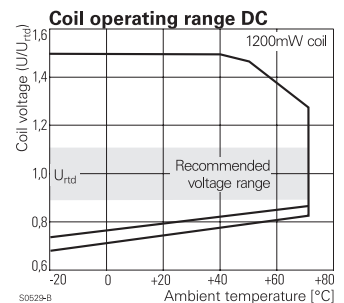
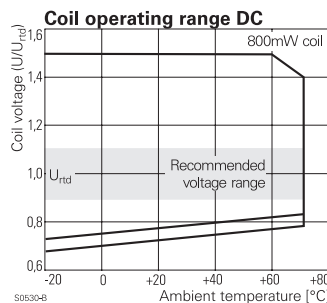
| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| K12 | 12 | 9 | 1.2 | 180 | 800 |
| K15 | 15 | 11.3 | 1.5 | 281 | 801 |
| K18 | 18 | 13.5 | 1.8 | 405 | 800 |
| K21 | 21 | 16 | 2.1 | 551 | 800 |
| K24 | 24 | 18 | 2.4 | 720 | 800 |
| K36 | 36 | 27 | 3.6 | 1620 | 800 |
| K48 | 48 | 36 | 4.8 | 2880 ¹⁾ | 800 |
| L10 | 110 | 82.5 | 11.0 | 15130 ¹⁾ | 800 |

1) Coil resistance ±12%.
All figures are given for coil without pre-energization, at ambient temperature +23°C.

Coil versions, DC-coil 1200mW

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% ¹⁾ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-------------------------------------|---------------------|
| 005 | 5 | 3.8 | 0.5 | 20.8 | 1200 |
| 006 | 6 | 4.5 | 0.6 | 30.0 | 1200 |
| 009 | 9 | 6.8 | 0.9 | 67.5 | 1200 |
| 012 | 12 | 9 | 1.2 | 120 | 1200 |
| 018 | 18 | 13.5 | 1.8 | 270 | 1200 |
| 021 | 21 | 16 | 2.1 | 368 | 1200 |
| 024 | 24 | 18 | 2.4 | 480 | 1200 |
| 036 | 36 | 27 | 3.6 | 1080 | 1200 |
| 040 | 40 | 30 | 4.0 | 1333 | 1200 |
| 048 | 48 | 36 | 4.8 | 1920 | 1200 |
| 060 | 60 | 45 | 6.0 | 3000 ¹⁾ | 1200 |
| 110 | 110 | 83 | 11.0 | 10080 ¹⁾ | 1200 |

1) Coil resistance ±12%.
All figures are given for coil without pre-energization, at ambient temperature +23°C.



Force Guided Relay SR6 A/B/C/V (Continued)

Insulation Data

| | |
|--------------------------------------------|----------------------|
| Initial dielectric strength | |
| between open contacts | 1500V _{rms} |
| between contact and coil | 4000V _{rms} |
| between adjacent contacts | 3000V _{rms} |
| Clearance/creepage | |
| between open contacts | microdisconnection |
| between contact and coil | ≥5.5/5.5mm |
| between adjacent contacts | ≥5.5/5.5mm |
| Insulation to EN 50178, type of insulation | |
| between contact and coil | reinforced |
| between adjacent contacts | reinforced |

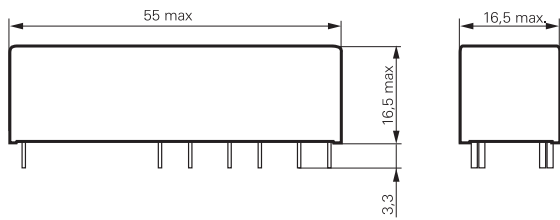
Other Data

| | |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter | |
| Ambient temperature | -25 to 70°C |
| Category of environmental Protection | IEC 61 810 |
| | RTIII ¹⁾ |
| 1) See product specification 2158003 4.6 and 4.8. | |
| Weight | 30g |
| Resistance to soldering heat THT | |
| IEC 60068-2-20 | 260°C/5s |
| Packaging/unit | tube/10 pcs. |

For more detailed information see product specification 2158003

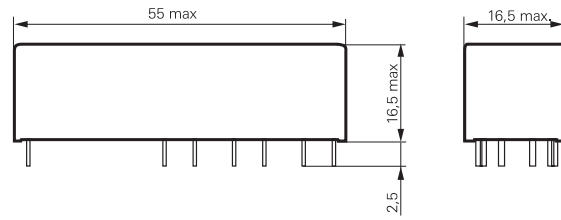
Dimensions

SR6 A/B/C



S0367-DN

SR6 V



S0367-DU

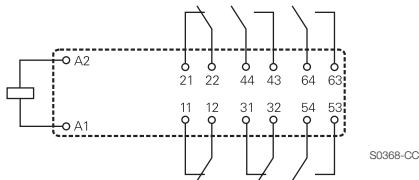
PCB layout / terminal assignment

Bottom view

3 form A + 3 form B, 3 NO + 3 NC versions
SR6 A

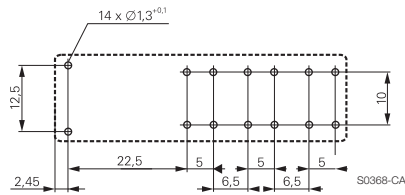


S0368-CA

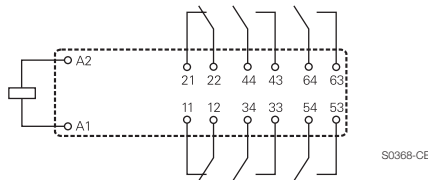


S0368-CC

4 form A + 2 form B, 4 NO + 2 NC versions
SR6 B

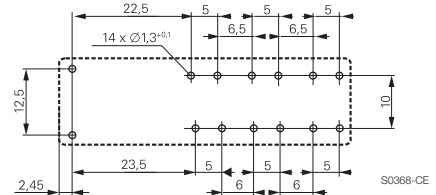


S0368-CA

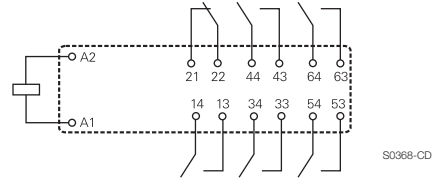


S0368-CB

5 form A + 1 form B, 5 NO + 1 NC versions
SR6 C



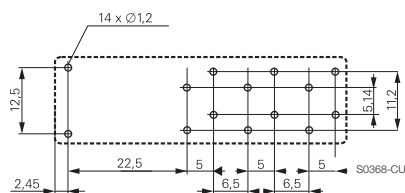
S0368-CE



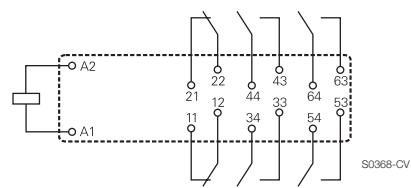
S0368-CD

4 form A + 2 form B, 4 NO + 2 NC versions
SR6 V

The design of the SR6 V allows clearance/creepage of 5.5 mm on the PCB.



S0368-CU



S0368-CV