

Force Guided Relay SR6 D/M

- 4 pole relay with force guided contacts according to EN 50205
- High insulation distances between electrical circuits

Typical applications

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



F0206-ED



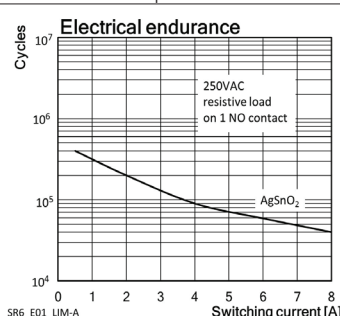
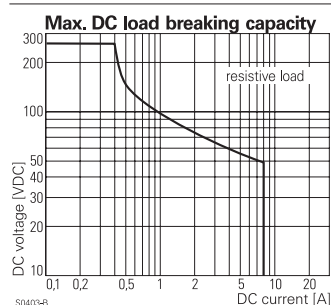
Approvals

VDE Cert. No. 128935, UL E214025, TUV 968/EL 350

Technical data of approved types on request.

Contact Data

| | |
|--|---|
| Contact arrangement | 3 form A + 1 form B contacts 3 NO + 1 NC, 2 form A + 2 form B contacts 2 NO + 2 NC |
| Rated voltage | 250VAC |
| Max. switching voltage | 400VAC |
| Rated current | 8A |
| Contact material | AgSnO ₂ |
| Contact style | single contact, force guided type A according to EN 50205 |
| 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, IEC60947-5-1, on 1 form A (NO) contact | AC15-5A DC13-6A |
| Mechanical endurance | 10x10 ⁶ operations |



Coil data

Coil voltage range 5 to 110VDC

Coil versions, DC-coil

| 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 | 21 | 1190 |
| 006 | 6 | 4.5 | 0.6 | 30 | 1200 |
| 009 | 9 | 6.8 | 0.9 | 68 | 1191 |
| 012 | 12 | 9 | 1.2 | 120 | 1200 |
| 018 | 18 | 13.5 | 1.8 | 270 | 1200 |
| 021 | 21 | 16 | 2.1 | 368 | 1198 |

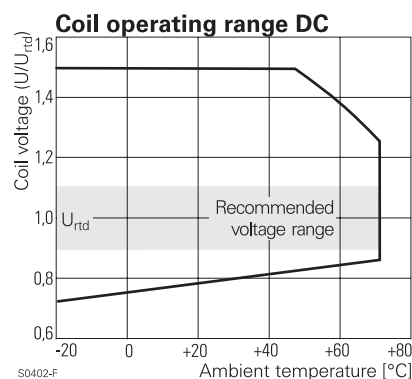
Coil Data (continued)

Coil versions, DC-coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% ¹⁾ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-------------------------------------|---------------------|
| 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 | 3000 ¹⁾ | 1200 |
| 110 | 110 | 83 | 11 | 10080 ¹⁾ | 1200 |

¹⁾ Coil resistance ±12%.

All figures are given for coil without pre-energization, at ambient temperature +23°C.



Insulation Data

| | | |
|--|--|----------------------|
| Initial dielectric strength | | 1500V _{rms} |
| between open contacts | | 4000V _{rms} |
| between contact and coil | | 3000V _{rms} |
| between adjacent contacts | | 4000V _{rms} |
| in longitudinal direction | | |
| Clearance/creepage | | microdisconnection |
| between open contacts | | ≥5.5/5.5mm |
| between contact and coil | | ≥5.5/5.5mm |
| between adjacent contacts | | ≥15/15mm |
| in longitudinal direction | | |
| Insulation to EN 50178, type of insulation | | reinforced |
| between contact and coil | | reinforced |
| between adjacent contacts | | |

Force Guided Relay SR6 D/M (Continued)

Other Data

Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter

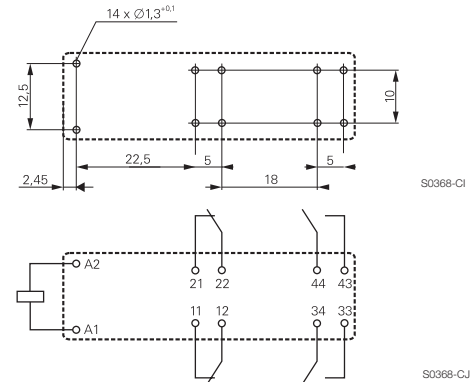
| | |
|--------------------------------------|--------------|
| Ambient temperature | -25 to 70°C |
| Category of environmental Protection | RTIII |
| IEC 61 810 | |
| Weight | 30g |
| Resistance to soldering heat THT | |
| IEC 60068-2-20 | 260°C/5s |
| Packaging/unit | tube/10 pcs. |

For more detailed information see product specification 2158003

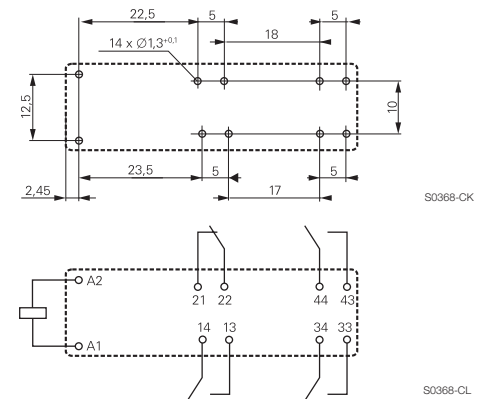
PCB layout / terminal assignment

Bottom view on solder pins

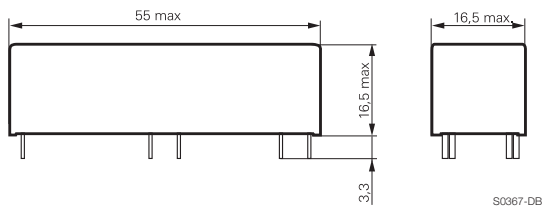
2 form A + 2 form B, 2 NO + 2 NC contacts



3 form A + 1 form B, 3 NO + 1 NC contacts



Dimensions



Product code structure

Typical product code **SR6 D 4 012**

Type

SR6 Relay with force guided contacts SR6 D/M

Contact arrangement

D 2 form A + 2 form B contacts (2 NO + 2 NC)

M 3 form A + 1 form B contacts (3 NO + 1 NC)

Contact material

4 AgSnO₂

Coil

Coil code: please refer to coil versions table (e.g. 024=24VDC)

Other types on request.

| Product code | Type | Contact arrangement | Contact material | Coil | Part Number |
|--------------|-----------------------|----------------------|--------------------|--------|-------------|
| SR6D4012 | 4 pole | 2 form A + 2 form B, | AgSnO ₂ | 12VDC | 1415078-1 |
| SR6D4018 | relay with | 2 NO + 2 NC | | 18VDC | 7-1415354-1 |
| SR6D4021 | force guided contacts | contacts | | 21VDC | 8-1415353-1 |
| SR6D4024 | | | | 24VDC | 6-1415027-1 |
| SR6D4040 | | | | 40VDC | 9-1415366-1 |
| SR6D4110 | | | | 110VDC | 1415062-1 |
| SR6M4006 | | 3 form A + 1 form B, | | 6VDC | 6-1415053-1 |
| SR6M4012 | | 3 NO + 1 NC | | 12VDC | 7-1415353-1 |
| SR6M4018 | | contacts | | 18VDC | 1415354-1 |
| SR6M4021 | | | | 21VDC | 6-1415353-1 |
| SR6M4024 | | | | 24VDC | 3-1415353-1 |
| SR6M4110 | | | | 110VDC | 1-1415354-1 |

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