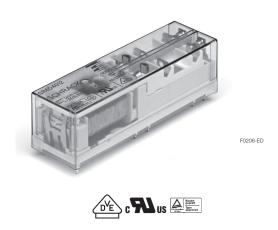


Force Guided Relay SR6 D/M

- 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.

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 | t load 6/150min ⁻¹ | | | |
| Contact ratings, IEC60947-5-1, | | | | |
| on 1 form A (NO) contact | AC15-5A | | | |
| | DC13-6A | | | |
| Mechanical endurance | 10x10 ⁶ operations | | | |
| Max. DC load breaking capacity | g Electrical endurance | | | |
| | | | | |
| 200 resistive load | | | | |
| | 250VAC resistive load | | | |
| | 10 ⁶ on 1 NO contact | | | |
| | | | | |
| | | | | |
| | 10 ⁵ AgSnO ₂ | | | |
| | | | | |
| ²² 20 | | | | |
| 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 | | | | |
| 0,1 0,2 0,5 1 2 5 10 20 | 10^4 0 1 2 3 4 5 6 7 8 | | | |
| S0403-B DC current [A] | 0 1 2 3 4 5 6 7 8 sr6_E01_LIM-A Switching current [A] | | | |
| S0403-B DC current [A] | | | | |

| Coil data | |
|--------------------|--|
| Coil voltage range | |

| Coil vers | sions, DC-co | bil | | | |
|-----------|--------------|---------|---------|------------------------|------------|
| Coil | Rated | Operate | Release | Coil | Rated coil |
| code | voltage | voltage | voltage | resistance | power |
| | VDC | VDC | VDC | $\Omega \pm 10\%^{1)}$ | 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 |

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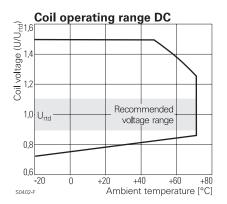
5 to 110VDC

Coil Data (continued)

| Coil vers | sions, DC-co | oil | | | |
|-----------|--------------|---------|---------|------------------------|------------|
| Coil | Rated | Operate | Release | Coil | Rated coil |
| code | voltage | voltage | voltage | resistance | power |
| | VDC | VDC | VDC | $\Omega \pm 10\%^{1)}$ | 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 $\pm 12\%$.

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



Insulation Data

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

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Catalog product data, 'Definitions' section, application notes and all specifications are subject to change. 1



Force Guided Relay SR6 D/M (Continued)

Other Data

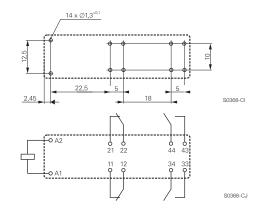
| Material compliance: EU | liance: EU RoHS/ELV, China RoHS, REACH, Halogen content | | | |
|---------------------------|---|--|--|--|
| | refer to the Product Compliance Support Center a | | | |
| | www.te.com/customersupport/rohssupportcente | | | |
| Ambient temperature | -25 to 70°C | | | |
| Category of environment | al Protection | | | |
| IEC 61 810 | RTIII | | | |
| Weight | 30g | | | |
| Resistance to soldering I | neat THT | | | |
| IEC 60068-2-20 | 260°C/5s | | | |
| Packaging/unit | tube/10 pcs. | | | |
| | | | | |

For more detailed information see product specification 2158003

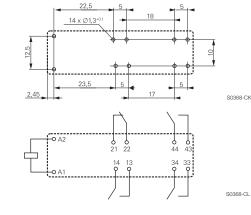
PCB layout / terminal assignment

Bottom view on solder pins

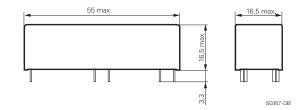
2 form A + 2 form B, 2 NO + 2 NC contacts



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 Image: Contact arrangement Image: Contact arrangement Image: Contact (2 NO + 2 NC) Image: Contact (3 NO + 1 NC) Image: Contact material <td

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

| Product code | Туре | 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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