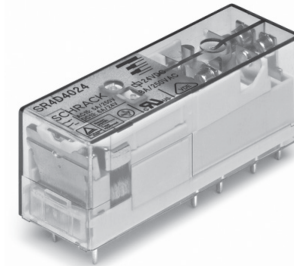


## Force Guided Relay SR4 D/M

- 4 pole relay with force guided contacts according to EN 61810-3 (formerly EN50205)
- Compact design and space efficient

### Typical applications

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



F0244-C



### Approvals

VDE Cert. No. 40005334, UL E214025, TUV 968/EL 230, CCC 2020970303000303

Technical data of approved types on request

### Contact Data

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

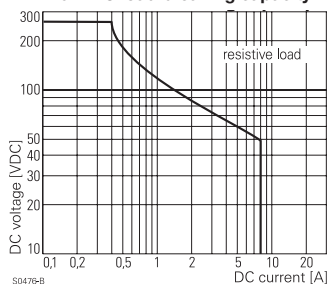
### Contact ratings

| Type                              | Contact             | Load                              | Cycles             |
|-----------------------------------|---------------------|-----------------------------------|--------------------|
| <b>IEC 61810</b>                  |                     |                                   |                    |
| SR4                               | 1xA (NO)            | 8A, 250VAC, cosφ=1, 70°C          | 20x10 <sup>3</sup> |
| SR4                               | 1xB (NC)            | 5A, 250VAC, cosφ=1, 70°C          | 20x10 <sup>3</sup> |
| <b>UL 61810-1 (former UL 508)</b> |                     |                                   |                    |
| SR4                               | A/B (NO/NC)         | 8A, 250VAC, general purpose, 70°C | 6.000              |
| SR4                               | 1xA (1xNO)          | R300, B300                        | 6.000              |
| SR4                               | 1xB (1xNC)          | R300                              | 6.000              |
| <b>EN60947-5-1</b>                |                     |                                   |                    |
| SR4                               | 1xA/1xB (1xNO/1xNC) | 3A, 24VDC, DC13                   | 6.050              |
| SR4                               | 1xA (1xNO)          | 3A, 250VAC AC-15                  | 6.050              |

More ratings and information see product specification 2158002

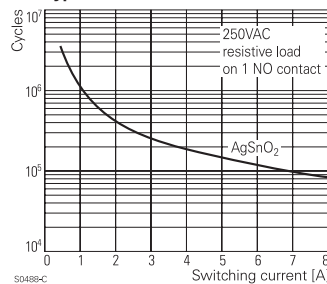
Mechanical endurance 10x10<sup>6</sup> operations

### Max. DC load breaking capacity



S0476-B

### Typical Electrical endurance



S0489-C

### Coil data

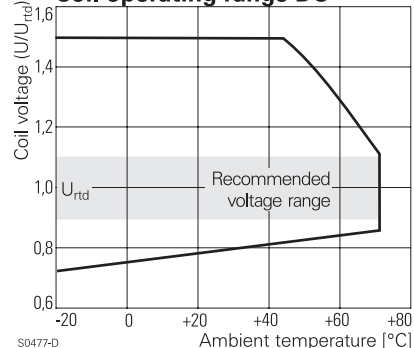
Coil voltage range 5 to 110VDC

### Coil versions, DC-coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-----------------------|---------------------|
| 005       | 5                 | 3.8                 | 0.5                 | 31                    | 806                 |
| 006       | 6                 | 4.5                 | 0.6                 | 45                    | 800                 |
| 009       | 9                 | 6.8                 | 0.9                 | 101                   | 802                 |
| 012       | 12                | 9.0                 | 1.2                 | 180                   | 800                 |
| 015       | 15                | 11.3                | 1.5                 | 281                   | 801                 |
| 018       | 18                | 13.5                | 1.8                 | 405                   | 800                 |
| 021       | 21                | 16.0                | 2.1                 | 551                   | 800                 |
| 024       | 24                | 18.0                | 2.4                 | 720                   | 800                 |
| 036       | 36                | 27.0                | 3.6                 | 1620                  | 800                 |
| 040       | 40                | 30.0                | 4.0                 | 2000                  | 800                 |
| 048       | 48                | 36.0                | 4.8                 | 2880                  | 800                 |
| 060       | 60                | 45.0                | 6.0                 | 4500                  | 800                 |
| 085       | 85                | 63.8                | 8.5                 | 9031                  | 800                 |
| 110       | 110               | 83.0                | 11.0                | 15125                 | 800                 |

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

### Coil operating range DC



S0477-D

**Force Guided Relay SR4 D/M** (Continued)

**Insulation Data**

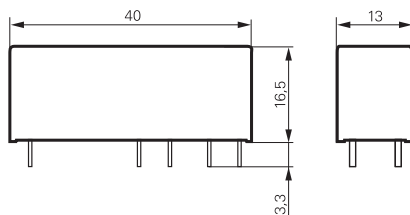
|                                                                |                    |
|----------------------------------------------------------------|--------------------|
| Initial dielectric strength                                    |                    |
| between open contacts                                          | 1500Vrms           |
| between contact and coil                                       | 4000Vrms           |
| between adjacent contacts                                      | 2500Vrms           |
| Clearance/creepage                                             |                    |
| between open contacts                                          | microdisconnection |
| between contact and coil                                       | ≥10/10mm           |
| between adjacent contacts                                      | ≥3/3.5mm           |
| Insulation to EN 62477-1 (former EN 50178), type of insulation |                    |
| between contact and coil                                       | reinforced         |
| between adjacent contacts                                      | basic              |

**Other Data**

|                                                                                                                                                                                                                                         |              |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="http://www.te.com/customer-support/rohssupportcenter">www.te.com/customer-support/rohssupportcenter</a> |              |
| Ambient temperature                                                                                                                                                                                                                     | -25 to 70°C  |
| Category of environmental Protection                                                                                                                                                                                                    | RTIII        |
| IEC 61 810                                                                                                                                                                                                                              | RTIII        |
| Weight                                                                                                                                                                                                                                  | 16g          |
| Resistance to soldering heat THT                                                                                                                                                                                                        |              |
| IEC 60068-2-20                                                                                                                                                                                                                          | 260°C/5s     |
| Packaging/unit                                                                                                                                                                                                                          | tube/10 pcs. |

For more detailed information see product specification 2158002

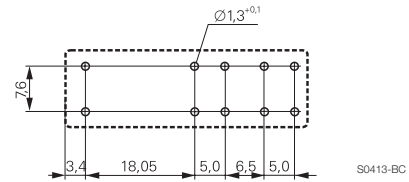
**Dimensions**



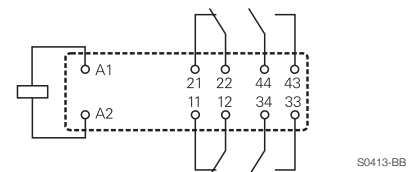
S0412-BH

**PCB layout / terminal assignment**

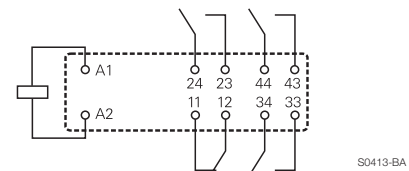
Bottom view on solder pins



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



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



**Product code structure**

Typical product code **SR4 D 4 012**

**Type**

**SR4** Relay with force guided contacts SR4

**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** AgSnO<sub>2</sub>

**Coil**

Coil code: please refer to coil versions table (e.g. 012=12VDC)

Other types on request

**Force Guided Relay SR4 D/M** (Continued)

| Product code | Type                                          | Contact arrangement                             | Contact material   | Coil   | Part number |
|--------------|-----------------------------------------------|-------------------------------------------------|--------------------|--------|-------------|
| SR4D4005     | 4 pole<br>relay with<br>force guided contacts | 2 form A + 2 form B,<br>2 NO + 2 NC<br>contacts | AgSnO <sub>2</sub> | 5VDC   | 7-1415054-1 |
| SR4D4006     |                                               |                                                 |                    | 6VDC   | 8-1415054-1 |
| SR4D4009     |                                               |                                                 |                    | 9VDC   | 9-1415054-1 |
| SR4D4012     |                                               |                                                 |                    | 12VDC  | 1415055-1   |
| SR4D4018     |                                               |                                                 |                    | 18VDC  | 1-1415055-1 |
| SR4D4021     |                                               |                                                 |                    | 21VDC  | 2-1415055-1 |
| SR4D4024     |                                               |                                                 |                    | 24VDC  | 3-1415055-1 |
| SR4D4036     |                                               |                                                 |                    | 36VDC  | 4-1415055-1 |
| SR4D4040     |                                               |                                                 |                    | 40VDC  | 5-1415055-1 |
| SR4D4048     |                                               |                                                 |                    | 48VDC  | 6-1415055-1 |
| SR4D4060     |                                               |                                                 |                    | 60VDC  | 7-1415055-1 |
| SR4D4085     |                                               |                                                 |                    | 85VDC  | 8-1415055-1 |
| SR4D4110     |                                               |                                                 |                    | 110VDC | 9-1415055-1 |
| SR4M4005     |                                               | 3 form A + 1 form B,<br>3 NO + 1 NC<br>contacts |                    | 5VDC   | 5-1415053-1 |
| SR4M4006     |                                               |                                                 |                    | 6VDC   | 6-1415053-1 |
| SR4M4009     |                                               |                                                 |                    | 9VDC   | 7-1415053-1 |
| SR4M4012     |                                               |                                                 |                    | 12VDC  | 8-1415053-1 |
| SR4M4018     |                                               |                                                 |                    | 18VDC  | 9-1415053-1 |
| SR4M4021     |                                               |                                                 |                    | 21VDC  | 1415054-1   |
| SR4M4024     |                                               |                                                 |                    | 24VDC  | 4-1415053-1 |
| SR4M4036     |                                               |                                                 |                    | 36VDC  | 1-1415054-1 |
| SR4M4040     |                                               |                                                 |                    | 40VDC  | 2-1415054-1 |
| SR4M4048     |                                               |                                                 |                    | 48VDC  | 3-1415054-1 |
| SR4M4060     |                                               |                                                 |                    | 60VDC  | 4-1415054-1 |
| SR4M4085     |                                               |                                                 |                    | 85VDC  | 5-1415054-1 |
| SR4M4110     |                                               |                                                 |                    | 110VDC | 6-1415054-1 |