

## Force Guided Relay SR2M

- 2 pole relay with force guided contacts according to EN61810-3 (formerly EN50205)
- Reinforced insulation between poles
- Version P1 for use in sockets



F0188-D

### Typical applications

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



### Approvals

VDE 116064, UL E214025, TUV 968/EZ 111, CCC 2014010305743065

Technical data of approved types on request

### Contact Data

|   |  |
|---|--|
| Contact arrangement   | 1 form A + 1 form B contacts<br>(1 NO + 1 NC) or<br>2 form C contacts (2 CO) |
| According EN50205 only 1NO / 1NC (11-14 and 22-21 or 12-11 and 21-24) shall be used as force guided contacts. |  |
| Rated voltage   | 250VAC   |
| Max. switching voltage  | 400VAC   |
| Rated current   | 6A   |
| Contact material  | AgNi   |
| Contact style   | single contact, force guided   |
| 1 form A + B, 1 NO + 1NC  | type A according to EN61810-3  |
| 2 form C, 2CO   | type B according to EN61810-3  |
| Min. recommended contact load   | 5V/10mA  |
| Initial contact resistance  | $\leq 100\text{m}\Omega$ at 1A, 24VDC<br>$\leq 20\Omega$ at 10mA, 5VDC       |
| Frequency of operation, with/without load   | 6/300min <sup>-1</sup>   |

### Contact ratings

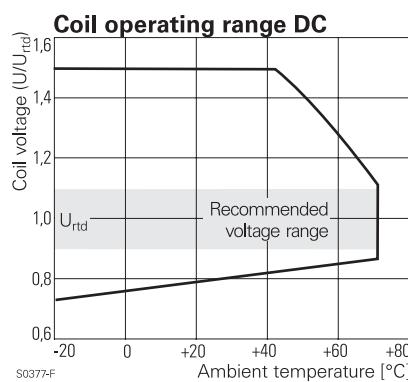
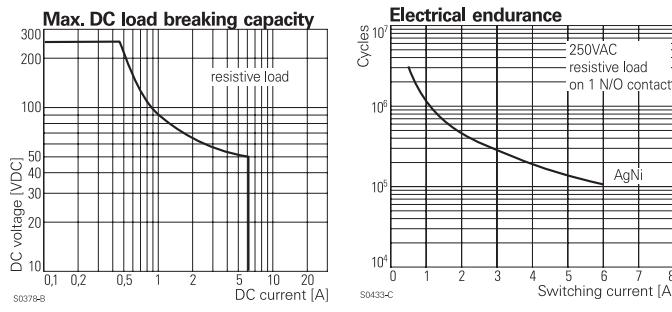
#### IEC61810-1

|                          |  |
|--------------------------|--|
| on 1 form A (NO) contact | 6A, 250VAC, $\cos\phi = 1,70\text{C}$ $100 \times 10^3$  |
| on 1 form A (NO) contact | AC15 - 250V/3A<br>DC13 - 24V/3A<br>on the basis of DC13 - 24V/6A<br>under conditions specified in<br>product spec. 2158001 |

#### UL508

|                           |  |
|---------------------------|--|
| on 1 form A (NO) contact  | 6A, 250VAC, $\cos\phi = 1,70\text{C}$ $100 \times 10^3$<br>R300 and B300 |
| form A (NO) + form B (NC) | 1A/24VDC gen. purpose, 70°C<br>$100 \times 10^3$                         |

#### Mechanical endurance



**Force Guided Relay SR2M (Continued)**
**Insulation**

|  |                      |
|--|----------------------|
| Initial dielectric strength                |                      |
| between open contacts                      | 1500V <sub>rms</sub> |
| between contact and coil                   | 4000V <sub>rms</sub> |
| between adjacent contacts                  | 3000V <sub>rms</sub> |
| Clearance/creepage                         |                      |
| between open contacts                      | microdisconnection   |
| between contact and coil                   | ≥8/8mm               |
| between adjacent contacts                  | ≥5.5/5.5mm           |
| Insulation to EN 50178, type of insulation |                      |
| between contact and coil                   | reinforced           |
| between adjacent contacts                  | reinforced           |

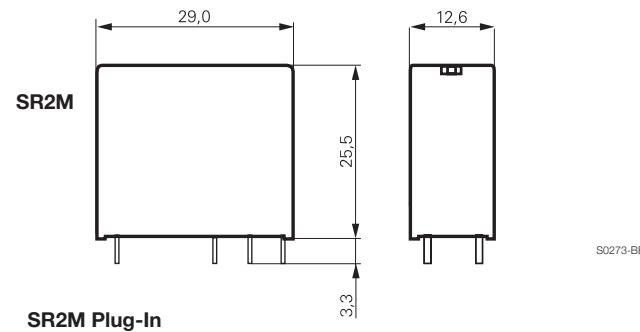
**Other Data**

| SR2M  | SR2M Plug-in |
|---|--------------|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at <a href="http://www.te.com/customersupport/rohssupportcenter">www.te.com/customersupport/rohssupportcenter</a> |              |
| Ambient temperature   | -40 to 70°C  |
| Category of environmental Protection  |              |
| IEC 61 810  | RTIII        |
| Weight  | 20g          |
| Resistance to soldering heat THT  |              |
| IEC 60068-2-20  | 260°C/5s     |
| Packaging/unit  | tube/20 pcs. |

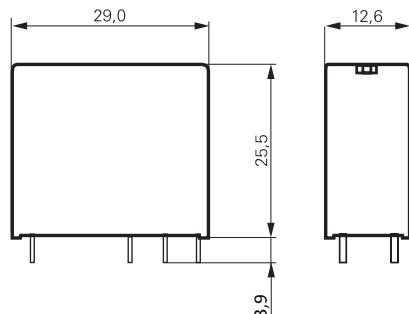
For more detailed information see product specification 2158001

**Accessories**

For details see datasheet [Accessories Force Guided Relay SR2M plugin](#)  
NOTE: indicated contact ratings and electrical endurance data for direct wiring of relays (according IEC 61810-1); for relays mounted on sockets deratings may apply.

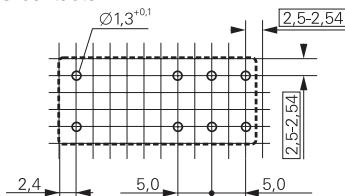
**Dimensions**


3.9mm

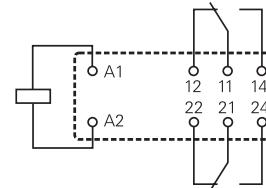

**PCB layout / terminal assignment**

Bottom view on solder pins

2 form C, 2 CO contacts

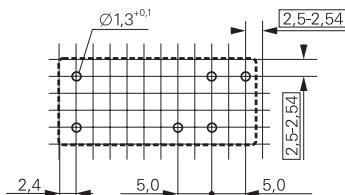


S0163-CO

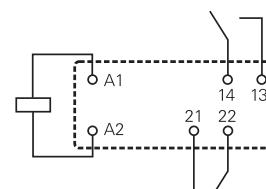


S0163-BJ

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



S0163-CU



S0163-CV

## Force Guided Relay SR2M (Continued)

## Product code structure

|                       |  |                      |         |     |     |    |   |    |
|-----------------------|--|----------------------|---------|-----|-----|----|---|----|
| Type                  | V23047 Relay with force guided contacts SR2M                                 | Typical product code | V23047  | -A1 | 012 | -A | 5 | 11 |
| Version               | A1 standard  | P1                   | Plug-In |     |     |    |   |    |
| Coil                  | Coil code: please refer to coil versions table (e.g. 024=24VDC)              |                      |         |     |     |    |   |    |
| Contact set           | A single contact   |                      |         |     |     |    |   |    |
| Contact material      | 5 AgNi   |                      |         |     |     |    |   |    |
| Contact configuration | 01 2 form C contacts (2 CO)<br>11 1 form A + 1 form B contacts (1 NO + 1 NC) |                      |         |     |     |    |   |    |

Other types on request

| Product code      | Version                   | Cont. material | Contact arrangement      | Coil   | Part number |
|-------------------|---------------------------|----------------|--------------------------|--------|-------------|
| V23047-A1005-A501 | Standard                  | AgNi           | 2 form C (CO)            | 5VDC   | 1393258-2   |
| V23047-A1005-A511 | wash tight                |                | 1 A + 1 B, (1 NO + 1 NC) |        | 7-1415006-1 |
| V23047-A1006-A501 |                           |                | 2 form C (CO)            | 6VDC   | 3-1415011-1 |
| V23047-A1006-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 6-1415011-1 |
| V23047-A1009-A501 |                           |                | 2 form C (CO)            | 9VDC   | 1393258-3   |
| V23047-A1009-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 7-1415011-1 |
| V23047-A1012-A501 |                           |                | 2 form C (CO)            | 12VDC  | 1393258-4   |
| V23047-A1012-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 1393258-5   |
| V23047-A1018-A501 |                           |                | 2 form C (CO)            | 18VDC  | 1393258-8   |
| V23047-A1018-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 1393258-9   |
| V23047-A1021-A501 |                           |                | 2 form C (CO)            | 21VDC  | 1-1393258-1 |
| V23047-A1021-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 1-1393258-2 |
| V23047-A1024-A501 |                           |                | 2 form C (CO)            | 24VDC  | 1-1393258-5 |
| V23047-A1024-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 1-1393258-7 |
| V23047-A1036-A501 |                           |                | 2 form C (CO)            | 36VDC  | 2-1393258-0 |
| V23047-A1036-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 8-1415011-1 |
| V23047-A1040-A501 |                           |                | 2 form C (CO)            | 40VDC  | 2-1393258-1 |
| V23047-A1040-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 2-1393258-2 |
| V23047-A1048-A501 |                           |                | 2 form C (CO)            | 48VDC  | 3-1415006-1 |
| V23047-A1048-A511 |                           |                | 1 A + 1 B, (1 NO + 1 NC) |        | 9-1415011-1 |
| V23047-A1060-A511 |                           |                | 2 form C (CO)            | 60VDC  | 2-1393258-3 |
| V23047-A1110-A501 |                           |                | 1 A + 1 B, (1 NO + 1 NC) | 110VDC | 1-1415012-1 |
| V23047-A1110-A511 |                           |                | 2 form C (CO)            |        | 2-1415012-1 |
| V23047-P1005-A501 | Plug-in<br>for socket use |                | 1 A + 1 B, (1 NO + 1 NC) |        |             |
| V23047-P1009-A501 |                           |                | 2 form C (CO)            | 5VDC   | 7-1415543-4 |
| V23047-P1012-A501 |                           |                |                          | 9VDC   | 7-1415543-5 |
| V23047-P1021-A501 |                           |                |                          | 12VDC  | 7-1415543-6 |
| V23047-P1024-A501 |                           |                |                          | 21VDC  | 7-1415543-7 |
| V23047-P1036-A501 |                           |                |                          | 24VDC  | 7-1415543-8 |
| V23047-P1110-A501 |                           |                |                          | 36VDC  | 7-1415543-9 |
|                   |                           |                |                          | 110VDC | 8-1415543-0 |

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[3-1415006-1](#)