

Force Guided Relay SR2M

- 2 pole relay with force guided contacts according to EN 50205
- Reinforced insulation between poles
- Version for use in sockets

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



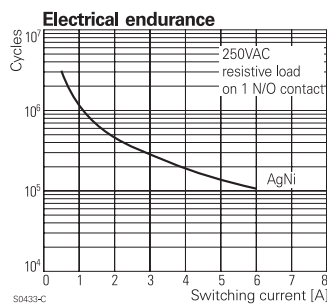
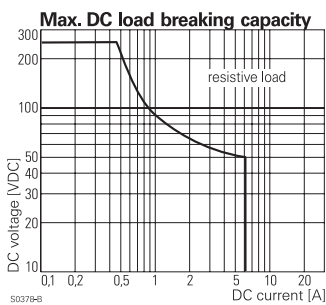
F0188-D



Approvals
VDE 116064, UL E214025, TUV 968/EZ 111, CQC0617015579
Technical data of approved types on request

Contact Data

| | |
|---|--|
| Contact arrangement | 1 form A + 1 form B contacts (1 NO + 1 NC) or 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 + 1 NC | type A according to EN 50205 |
| 2 form C, 2CO | type B 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 | 6/300min ⁻¹ |
| Contact ratings, IEC60947-5-1, on 1 form A (NO) contact | AC15-3A DC13-6A |
| Mechanical endurance | 10x10 ⁶ operations |



Coil Data
Coil voltage range 5 to 110VDC

Coil versions, DC-coil

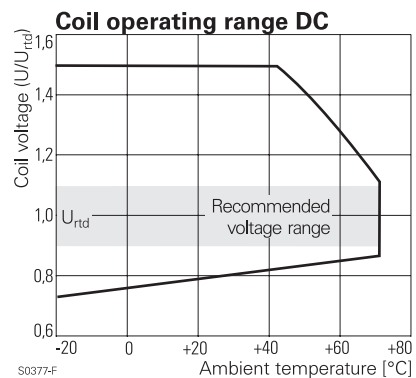
| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% ¹⁾ | Rated coil power mW |
|-----------|-------------------|---------------------|---------------------|-------------------------------------|---------------------|
| 005 | 5 | 3.8 | 0.5 | 35.7 | 700 |
| 006 | 6 | 4.5 | 0.6 | 51 | 706 |
| 009 | 9 | 6.8 | 0.9 | 116 | 698 |
| 012 | 12 | 9 | 1.2 | 206 | 699 |

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 |
|-----------|-------------------|---------------------|---------------------|-------------------------------------|---------------------|
| 015 | 15 | 11.3 | 1.5 | 321 | 701 |
| 018 | 18 | 13.5 | 1.8 | 483 | 671 |
| 021 | 21 | 16 | 2.1 | 630 | 700 |
| 024 | 24 | 18 | 2.4 | 823 | 700 |
| 036 | 36 | 27 | 3.6 | 1851 | 700 |
| 040 | 40 | 30 | 4.0 | 2286 | 700 |
| 048 | 48 | 36 | 4.8 | 3291 ¹⁾ | 700 |
| 060 | 60 | 45 | 6 | 5142 ¹⁾ | 700 |
| 080 | 85 | 63.8 | 8.5 | 9143 ¹⁾ | 700 |
| 110 | 110 | 83 | 11 | 17285 ¹⁾ | 700 |

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



Insulation

| | |
|--|----------------------|
| 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 | ≥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 |

Force Guided Relay SR2M (Continued)

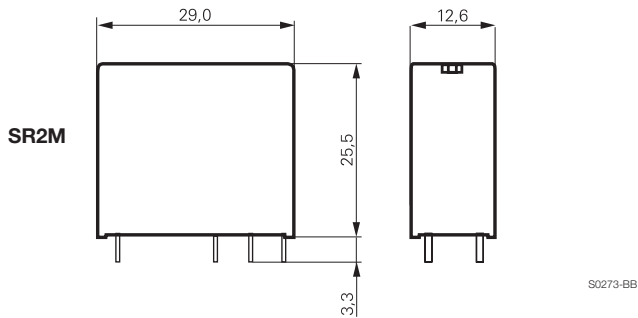
| Other Data | SR2M | SR2M Plug-in |
|---|----------------|--------------|
| Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customer-support/rohssupportcenter | | |
| Ambient temperature | | -25 to 70°C |
| Category of environmental Protection | IEC 61 810 | RTIII |
| 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

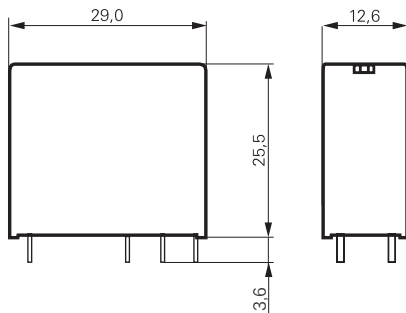
Accessories

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



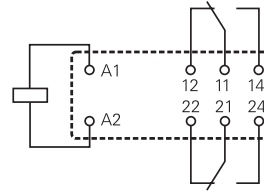
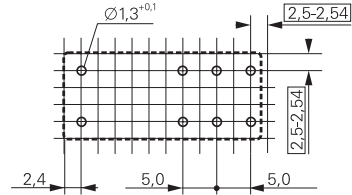
SR2M Plug-In



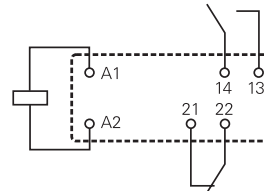
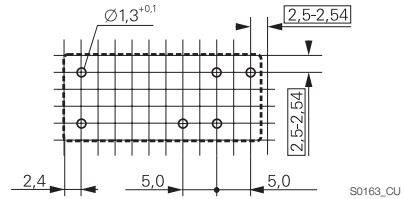
PCB layout / terminal assignment

Bottom view on solder pins

2 form C, 2 CO contacts



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



Force Guided Relay SR2M (Continued)

Product code structure

Typical product code **V23047 -A1 012 -A 5 11**

| |
|---|
| Type V23047 Relay with force guided contacts SR2M |
| 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) 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 | | | | 60VDC | 2-1393258-3 |
| V23047-A1110-A501 | | | 2 form C (CO) | 110VDC | 1-1415012-1 |
| V23047-A1110-A511 | | | 1 A + 1 B, (1 NO + 1 NC) | | 2-1415012-1 |
| V23047-P1005-A501 | Plug-in | | 2 form C (CO) | 5VDC | 7-1415543-4 |
| V23047-P1009-A501 | for socket use | | | 9VDC | 7-1415543-5 |
| V23047-P1012-A501 | | | | 12VDC | 7-1415543-6 |
| V23047-P1021-A501 | | | | 21VDC | 7-1415543-7 |
| V23047-P1024-A501 | | | | 24VDC | 7-1415543-8 |
| V23047-P1036-A501 | | | | 36VDC | 7-1415543-9 |
| V23047-P1110-A501 | | | | 110VDC | 8-1415543-0 |