

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

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, CCC 2020970303000150
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 EN61810-3 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 | ≤100mΩ at 1A, 24VDC ≤20Ω at 10mA, 5VDC |
| Frequency of operation, with/without load | 6/300min ⁻¹ |

Contact ratings

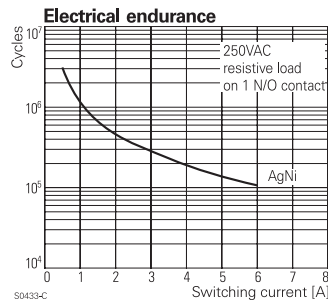
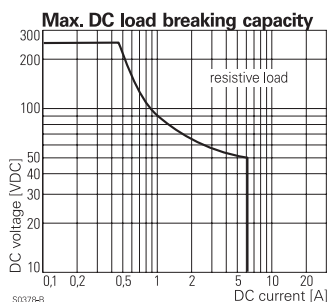
IEC61810-1
on 1 form A (NO) contact 6A, 250VAC, cosφ = 1,70C 100x10³

IEC60947-5-1
on 1 form A (NO) contact AC15 - 250V/3A
DC13 - 24V/3A
on the basis of DC13 - 24V/6A
under conditions specified in
product spec. 2158001

UL508

on 1 form A (NO) contact 6A, 250VAC, cosφ = 1,70°C 100x10³
R300 and B300
form A (NO) + form B (NC) 1A/24VDC gen. purpose, 70°C 100x10³

Mechanical endurance 10x10⁶ operations



Coil Data

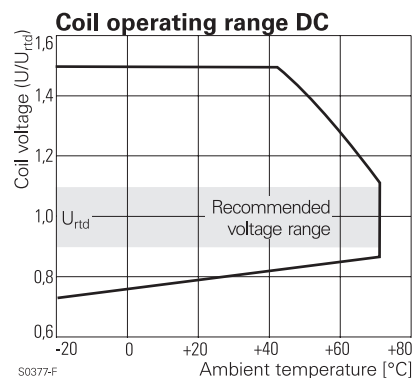
Coil voltage range 5 to 110VDC

Coil versions, DC-coil

| Coil code | Rated voltage VDC | Operate voltage VDC | Release voltage VDC | Coil resistance Ω±10% | 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 |
| 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 | 80 | 60 | 8 | 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.



Force Guided Relay SR2M (Continued)

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 |

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/customersupport/rohssupportcenter

Ambient temperature -40 to 70°C

Category of environmental Protection

IEC 61 810 RTIII RTII

Weight 20g

Resistance to soldering heat THT

IEC 60068-2-20 260°C/5s -

Packaging/unit tube/20 pcs.

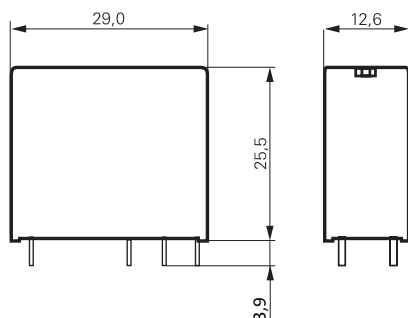
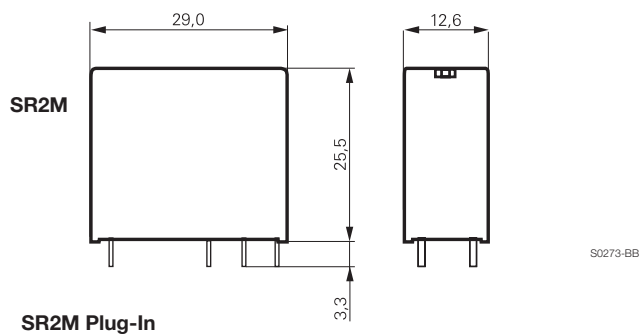
For more detailed information see product specification 2158001

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.

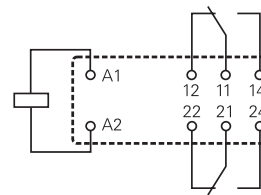
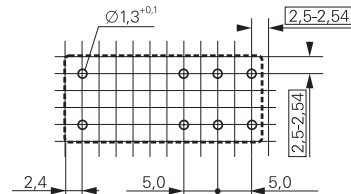
Dimensions



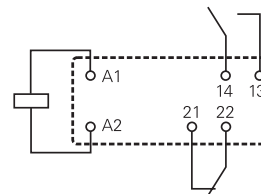
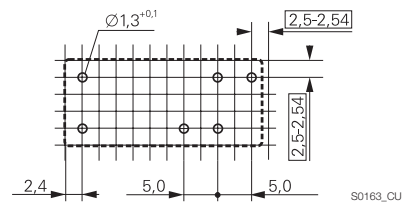
PCB layout / terminal assignment

Bottom view on solder pins

2 form C, 2 CO contacts



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



3.9mm

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 wash tight | AgNi | 2 form C (CO) | 5VDC | 1393258-2 |
| V23047-A1005-A511 | | | 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 | Plug-in for socket use | | 1 A + 1 B, (1 NO + 1 NC) | | 2-1415012-1 |
| V23047-P1005-A501 | | | 2 form C (CO) | 5VDC | 7-1415543-4 |
| V23047-P1009-A501 | | | | 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 |

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[1-1393258-5](#)