

Safety Relay SR6

6 pole 8 A



F0206-B

Features

- Forcibly guided contacts according to EN50205
- Small 6 pole safety relay with either 4 N/O+2 N/C or 3 N/O+3 N/C or 5 N/O+1 N/C contacts
- 6 kV surge resistance between poles
- RoHS compliant (Directive 2002 / 95 / EC) as per product date code 0407

Applications

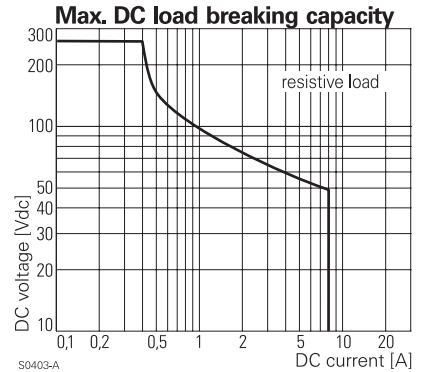
Emergency shut-off, press control, machine control, elevator and escalator control, safety modules



Technical data of approved types on request

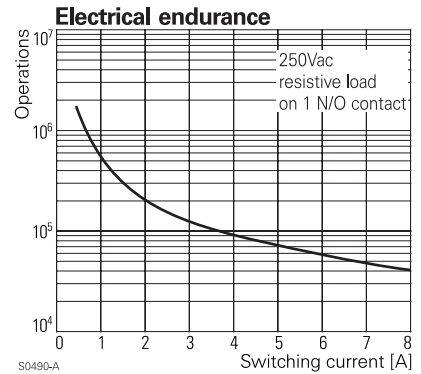
Contact data

| | |
|---|---|
| Configuration | 3 N/O contact and 3 N/C contact or 4 N/O contact and 2 N/C contact or 5 N/O contact and 1 N/C contact |
| Type of contact | single contact, forcibly guided type A according to EN 50205 |
| Continuous thermal load | 8 A |
| Rated voltage / max.breaking voltage AC | 240 Vac / 400 Vac |
| Maximum breaking capacity AC | 2000 VA |
| Minimum contact load | > 50 mW |
| Contact resistance | ≤100 mΩ / 1 A / 24 Vdc ≤20 Ω / 10 mA / 5 Vdc |



Coil data

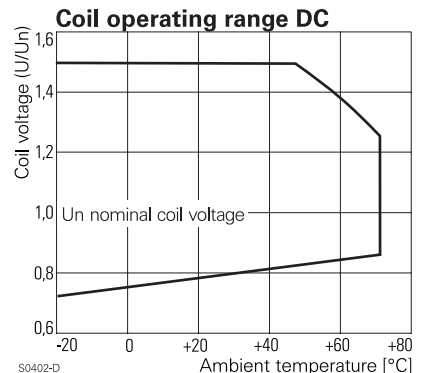
| | |
|--------------------|-------------|
| Nominal voltage | 5...110 Vdc |
| Nominal coil power | 1200 mW |
| Operative range | 2 |



Coil versions

| Coil code | Nominal voltage Vdc | Pull-in voltage Vdc | Release voltage Vdc | Maximum voltage Vdc | Coil resistance Ω | Coil current mA |
|-----------|---------------------|---------------------|---------------------|---------------------|-------------------|-----------------|
| 005 | 5 | 3.8 | 0.5 | 7.5 | 21±10% | 238.1 |
| 006 | 6 | 4.5 | 0.6 | 9.0 | 30±10% | 200.0 |
| 009 | 9 | 6.8 | 0.9 | 13.5 | 68±10% | 132.4 |
| 012 | 12 | 9.0 | 1.2 | 18.0 | 120±10% | 100.0 |
| 018 | 18 | 13.5 | 1.8 | 22.5 | 270±10% | 66.7 |
| 021 | 21 | 15.8 | 2.1 | 27.0 | 368±10% | 57.1 |
| 024 | 24 | 18.0 | 2.4 | 36.0 | 480±10% | 50.0 |
| 036 | 36 | 27.0 | 3.6 | 54.0 | 1080±10% | 33.3 |
| 040 | 40 | 30.0 | 4.0 | 60.0 | 1333±10% | 30.0 |
| 048 | 48 | 36.0 | 4.8 | 72.0 | 1920±10% | 25.0 |
| 060 | 60 | 45.0 | 6.0 | 90.0 | 3000±12% | 20.0 |
| 085 | 85 | 64.0 | 8.5 | 127.5 | 6021±12% | 14.1 |
| 110 | 110 | 82.5 | 11.0 | 165.0 | 10080±12% | 10.9 |

All figures are given for coil without preenergization, at ambient temperature +20°C
Other coil voltages on request



Edition: 07/2004

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Insulation

| | |
|-----------------------------------|--------------------------------|
| Dielectric strength | |
| coil-contacts | 3000 V_{rms} |
| open contact circuit | 1500 V_{rms} |
| adjacent contacts | 3000 V_{rms} |
| Clearance / creepage | |
| coil-contact | 5.5 / 5.5 mm |
| adjacent contacts | 5.5 / 5.5 mm |
| Insulation to IEC 60664 | |
| Voltage rating | 250 V |
| Pollution degree | 2 |
| Overvoltage category | III |
| Insulation resistance (500 Vdc) | > 100x10 ⁶ Ω |
| Tracking resistance of relay base | CTI 250 |

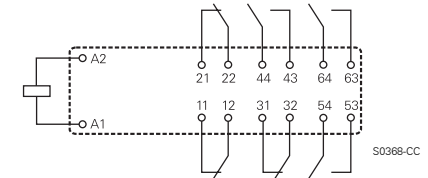
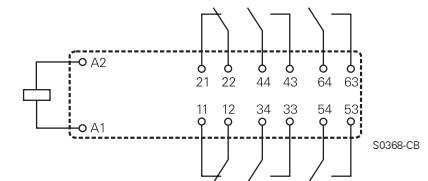
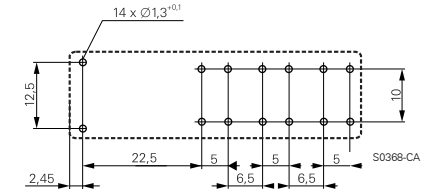
Other data

| | |
|---|---|
| RoHS - Directive 2002 / 95 / EC | compliant as per product date code 0407 |
| Ambient temperature | -25...+70 °C |
| Mechanical life | $\geq 10 \times 10^6$ operations |
| Max. switching rate at rated- / minimum load | 6 min ⁻¹ / 150 min ⁻¹ |
| Vibration resistance N/O / N/C contact | > 8 / 5 g, 10...200 Hz |
| Shock resistance (function) N/O contact / N/C contact | > 8 / 5 g, 16ms half sine |
| Category of protection (IEC 61810) | RT III |
| | ask factory for washing process parameters |
| Relay weight | 30 g |
| Packaging unit | 10 pcs. |

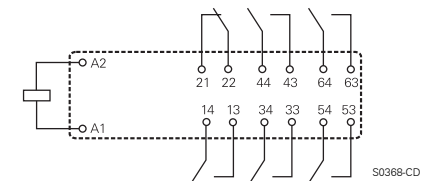
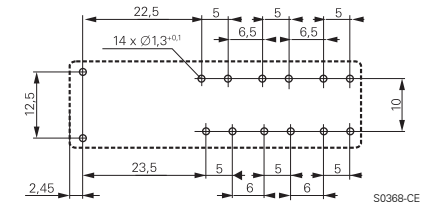
PCB layout / terminal assignment

Bottom view
Dimensions in mm

4 N/O+2 N/C and 3 N/O+3 N/C versions

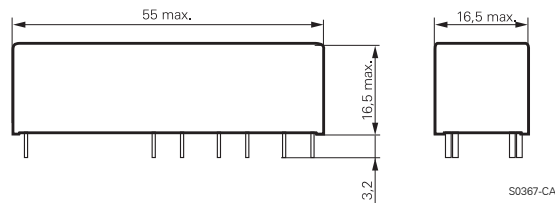


5 N/O + 1 N/C version



Dimensions

Dimensions in mm



Product key

V 2 3 0 5 0 - A 1 - A 5

| | |
|-----------------------|--|
| Type | |
| Version | A1 standard |
| Coil | Coil code = nominal voltage (e.g. 024=24Vdc) |
| Contact type | A single contact |
| Contact material | 5 AgSnO ₂ |
| Contact configuration | 33 3 N/O and 3 N/C contacts 42 4 N/O and 2 N/C contacts 51 5 N/O and 1 N/C contacts |

Other types on request

Safety Relay SR6**6 pole 8 A**

| Product key | Version | Contact material | Configuration | Coil | Part number |
|-------------------|----------|------------------|---------------|---------|-------------|
| V23050-A1005-A533 | standard | AgSnO | 3 N/O + 3 N/C | 5 Vdc | 8-1415017-1 |
| V23050-A1005-A542 | | | 4 N/O + 2 N/C | 5 Vdc | 0-1393260-1 |
| V23050-A1005-A551 | | | 5 N/O + 1 N/C | 5 Vdc | 2-1415017-1 |
| V23050-A1006-A533 | | | 3 N/O + 3 N/C | 6 Vdc | 9-1415017-1 |
| V23050-A1006-A542 | | | 4 N/O + 2 N/C | 6 Vdc | 0-1393260-2 |
| V23050-A1006-A551 | | | 5 N/O + 1 N/C | 6 Vdc | 3-1415017-1 |
| V23050-A1009-A533 | | | 3 N/O + 3 N/C | 9 Vdc | 0-1415018-1 |
| V23050-A1009-A542 | | | 4 N/O + 2 N/C | 9 Vdc | 0-1393260-3 |
| V23050-A1009-A551 | | | 5 N/O + 1 N/C | 9 Vdc | 4-1415017-1 |
| V23050-A1012-A533 | | | 3 N/O + 3 N/C | 12 Vdc | 1-1415015-1 |
| V23050-A1012-A542 | | | 4 N/O + 2 N/C | 12 Vdc | 0-1393260-4 |
| V23050-A1012-A551 | | | 5 N/O + 1 N/C | 12 Vdc | 1-1415017-1 |
| V23050-A1015-A533 | | | 3 N/O + 3 N/C | 15 Vdc | 1-1415018-1 |
| V23050-A1015-A542 | | | 4 N/O + 2 N/C | 15 Vdc | 6-1415014-1 |
| V23050-A1015-A551 | | | 5 N/O + 1 N/C | 15 Vdc | 5-1415017-1 |
| V23050-A1018-A533 | | | 3 N/O + 3 N/C | 18 Vdc | 2-1415018-1 |
| V23050-A1018-A542 | | | 4 N/O + 2 N/C | 18 Vdc | 0-1393260-5 |
| V23050-A1018-A551 | | | 5 N/O + 1 N/C | 18 Vdc | 6-1415017-1 |
| V23050-A1021-A533 | | | 3 N/O + 3 N/C | 21 Vdc | 3-1415018-1 |
| V23050-A1021-A542 | | | 4 N/O + 2 N/C | 21 Vdc | 0-1393260-6 |
| V23050-A1021-A551 | | | 5 N/O + 1 N/C | 21 Vdc | 7-1415017-1 |
| V23050-A1024-A533 | | | 3 N/O + 3 N/C | 24 Vdc | 0-1415015-1 |
| V23050-A1024-A542 | | | 4 N/O + 2 N/C | 24 Vdc | 0-1393260-7 |
| V23050-A1024-A551 | | | 5 N/O + 1 N/C | 24 Vdc | 0-1415017-1 |
| V23050-A1036-A533 | | | 3 N/O + 3 N/C | 36 Vdc | 4-1415018-1 |
| V23050-A1036-A542 | | | 4 N/O + 2 N/C | 36 Vdc | 0-1393260-8 |
| V23050-A1036-A551 | | | 5 N/O + 1 N/C | 36 Vdc | 0-1415019-1 |
| V23050-A1040-A533 | | | 3 N/O + 3 N/C | 40 Vdc | 5-1415018-1 |
| V23050-A1040-A542 | | | 4 N/O + 2 N/C | 40 Vdc | 0-1393260-9 |
| V23050-A1040-A551 | | | 5 N/O + 1 N/C | 40 Vdc | 1-1415019-1 |
| V23050-A1048-A533 | | | 3 N/O + 3 N/C | 48 Vdc | 6-1415018-1 |
| V23050-A1048-A542 | | | 4 N/O + 2 N/C | 48 Vdc | 1-1393260-0 |
| V23050-A1048-A551 | | | 5 N/O + 1 N/C | 48 Vdc | 2-1415019-1 |
| V23050-A1060-A533 | | | 3 N/O + 3 N/C | 60 Vdc | 7-1415018-1 |
| V23050-A1060-A542 | | | 4 N/O + 2 N/C | 60 Vdc | 1-1393260-1 |
| V23050-A1060-A551 | | | 5 N/O + 1 N/C | 60 Vdc | 3-1415019-1 |
| V23050-A1085-A533 | | | 3 N/O + 3 N/C | 85 Vdc | 8-1415018-1 |
| V23050-A1085-A542 | | | 4 N/O + 2 N/C | 85 Vdc | 1-1393260-2 |
| V23050-A1085-A551 | | | 5 N/O + 1 N/C | 85 Vdc | 4-1415019-1 |
| V23050-A1110-A533 | | | 3 N/O + 3 N/C | 110 Vdc | 9-1415018-1 |
| V23050-A1110-A542 | | | 4 N/O + 2 N/C | 110 Vdc | 1-1393260-3 |
| V23050-A1110-A551 | | | 5 N/O + 1 N/C | 110 Vdc | 5-1415019-1 |