

Safety Relay SR6

6 pole 8 A



- Smallest 6 pole safety relay
- 4 N/O+2 N/C or 3 N/O+3 N/C or 5 N/O+1 N/C contacts
- High separation distances
- According to EN50205
- Washable

Applications

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

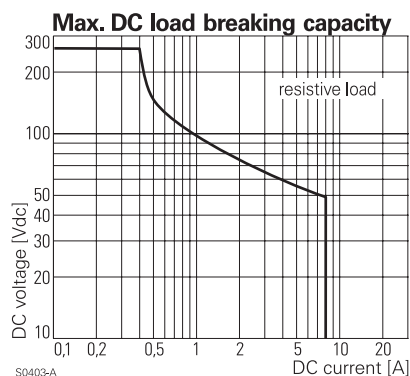
F0206-B



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
Continuous thermal load	1 contact with load 8 A
Rated voltage / max.breaking voltage AC	250 Vac / 440 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

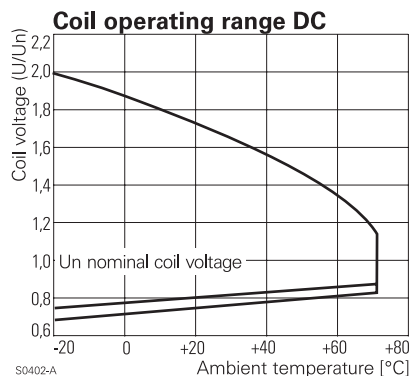
Nominal voltage	5...110 Vdc
Nominal coil power	1200 mW
Operative range	2

Coil versions

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

All figures are given for coil without preenergization, at ambient temperature +20°C
 $U_{op\ max}$: at 70 °C after preenergization with $1.1 \times U_{nom}$ the max. operate voltage is 85% of U_{nom} . U_{max} : at 70 °C the max. coil voltage is $1.1 \times U_{nom}$

Other coil voltages on request



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Insulation

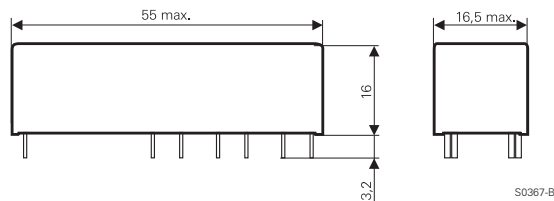
Dielectric strength	coil-contacts	3000 V _{rms}
	open contact circuit	1000 V _{rms}
	adjacent contacts	3000 V _{rms}
Clearance / creepage coil-contact		5.5 mm
	adjacent contacts	5.5 mm
Insulation to IEC 664/VDE 0110 (1/89)		
	Voltage rating	250 V
	Pollution degree	2
	Overvoltage category	III
Insulation resistance (500 Vdc)		> 1x10 ⁶ Ω
Tracking resistance of relay base		CTI 250

Other data

Ambient temperature	-25...+70 °C
Mechanical life	≥ 10x10 ⁶ operations
Max. switching rate at rated- / minimum load	6 min ⁻¹ / 300 min ⁻¹
Operate- / release time	typ. 11 / 3 ms
Vibration resistance N/O / N/C contact	> 8 / 5 g, 10...200 Hz
Shock resistance (function) N/O / N/C	> 8 / 6 g, 16ms half sine
Protection category	IP67
Relay weight	30 g
Packaging unit	10 pcs.

Dimensions

Dimensions in mm

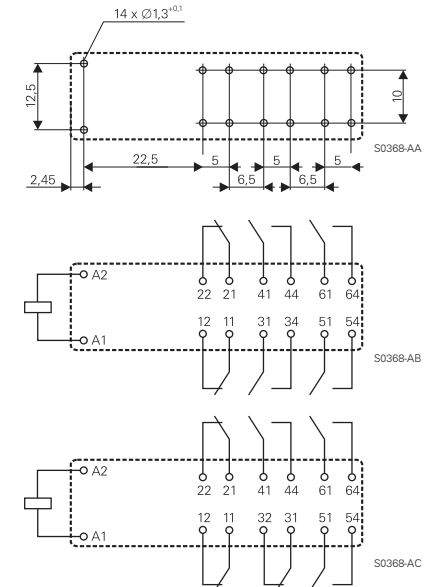


PCB layout / terminal assignment

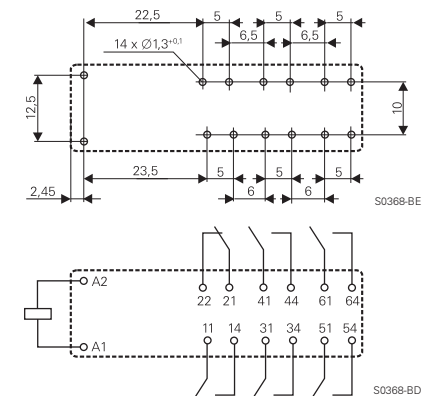
View on solder pins

Dimensions in mm

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



5 N/O + 1 N/C version



Ordering key

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

Type

Version

A1 standard, washable

Coil

Coil code: please refer to coil versions table

Contact type

A single contact

Contact material

5 AgSnO₂

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