

**Safety Relay SR6 D/M**

- 4 pole safety relay with either  
2 NO+2 NC or 3 NO+1 NC contacts
- Forcibly guided contacts according to EN 50205
- Rated current 8 A
- High insulation distances for safe separation of electrical circuits
- RoHS compliant (Directive 2002/95/EC) as per product date code 0407



F0245-A

**Applications**

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

**Approvals**

VDE REG.-Nr. 128935, c RU us E214024, 968/EL 141.01/03  
Technical data of approved types on request

**Contact data**

Contact configuration	3 NO contacts and 1 NC contact or 2 NO contacts and 2 NC contacts
Contact set	single contact, forcibly guided type A according to EN 50205
Type of interruption	micro disconnection
Rated current	8 A
Rated voltage / max.switching voltage AC	240/400 VAC
Maximum breaking capacity AC	2000 VA
Utilization class (AC-15) acc. IEC 60947-5-1	
NO contact	$I_e$ 3 A / $U_e$ 250 VAC (inrush 30 A)
NC contact	$I_e$ 1.5 A / $U_e$ 250 VAC (inrush 15 A)
Contact material	AgSnO <sub>2</sub>
Minimum contact load	10 mA / 5 V
Contact resistance	≤ 100 mOhm / 1 A / 24 VDC ≤ 20 Ohm / 10 mA / 5 VDC
Mechanical endurance	10x10 <sup>6</sup> cycles
Rated frequency of operation with / without load	6 min <sup>-1</sup> / 150 min <sup>-1</sup>

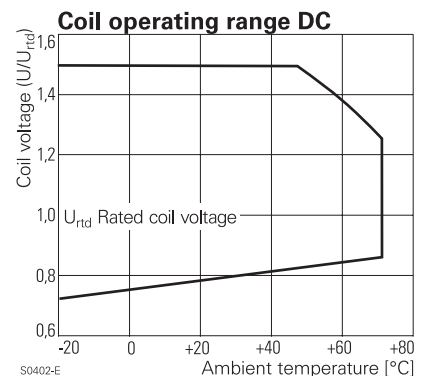
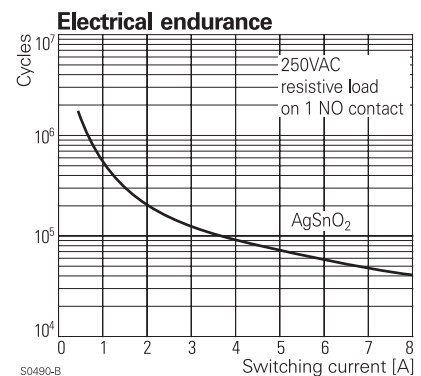
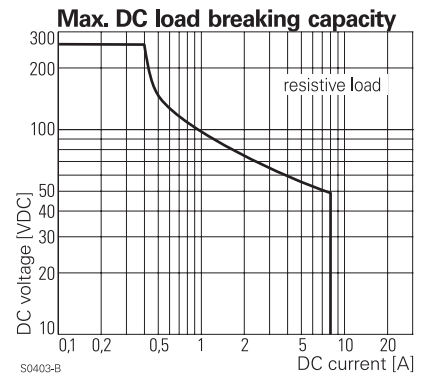
**Coil data**

Rated coil voltage range DC coil	5...110 VDC
Coil power DC coil	appr. 1200 mW
Operative range	2

**Coil versions, DC-coil**

Coil code	Rated voltage VDC	Operate voltage VDC	Release/Reset voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3.8	0.5	21±10%	1190
006	6	4.5	0.6	30±10%	1200
009	9	6.8	0.9	68±10%	1191
012	12	9.0	1.2	120±10%	1200
018	18	13.5	1.8	270±10%	1200
021	21	15.8	2.1	368±10%	1198
024	24	18.0	2.4	480±10%	1200
036	36	27.0	3.6	1080±10%	1200
040	40	30.0	4.0	1333±10%	1200
048	48	36.0	4.8	1920±10%	1200
060	60	45.0	6.0	3000±12%	1200
085	85	64.0	8.5	6021±12%	1200
110	110	82.5	11.0	10080±12%	1200

All figures are given for coil without preenergization, at ambient temperature +23°C  
Other coil voltages on request

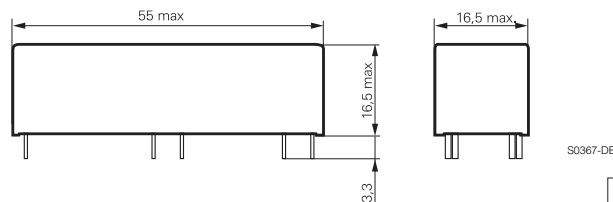


Insulation	
Insulation resistance coil-contact circuit	> 100x10 <sup>6</sup> Ohm
Dielectric strength coil-contact circuit	3000 V <sub>rms</sub>
open contact circuit	1500 V <sub>rms</sub>
adjacent contact circuits	3000 / 4000 V <sub>rms</sub> (in longitudinal direction)
Clearance / creepage coil-contact circuit	≥ 5.5 / 5.5 mm
adjacent contact circuits	≥ 5.5 / 5.5 mm
	≥ 12 / 12 mm (in longitudinal direction)
Material group of insulation parts	≥ IIIa
Tracking index of relay base	CTI 250
Insulation to IEC 60664-1	
Type of insulation coil-contact circuit	basic
open contact circuit	functional
adjacent contact circuits	reinforced (in longitudinal dir)
Rated insulation voltage	250 V
Pollution degree	2
Rated voltage system	230/400 V
Overvoltage category	III
Insulation to EN 50178	
Type of insulation coil-contact circuit	reinforced
adjacent contact circuits	reinforced

Other data	
RoHS - Directive 2002/95/EC	compliant as per product date code 0407
Ambient temperature range	-25...+70°C
Vibration resistance (function) NO / NC contact	> 8 / 2.5 g, 10...200 Hz
Shock resistance (function) NO / NC contact	> 10 / 2.5 g, 16 ms half sine
Category of protection	RT III <sup>1)</sup>
Resistance to soldering heat	260°C / 5 s
Relay weight	30 g
Packaging unit	10 pcs
<sup>1)</sup> please contact technical support for washing parameters	

Accessories	
PCB socket and hold down clip	contact technical support

**Dimensions**



**Product key**

Type

Contact configuration

- D** 2 NO + 2 NC contacts
- M** 3 NO + 1 NC contacts

Contact material

- 4** AgSnO<sub>2</sub>

Coil

Coil code = rated coil voltage (e.g. 024=24 VDC)

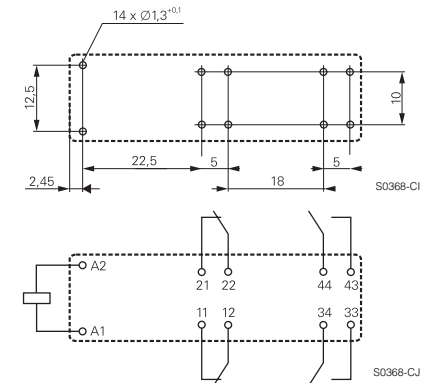
Other types on request

Product key	Type	Contact configuration	Contact material	Coil	Part number
SR6D4012	4-pole safety relay	2 NO + 2 NC contacts	AgSnO <sub>2</sub>	12 VDC	0-1415078-1
SR6D4018				18 VDC	7-1415354-1
SR6D4021				21 VDC	8-1415353-1
SR6D4024				24 VDC	6-1415027-1
SR6D4040				40 VDC	9-1415366-1
SR6D4110	3 NO + 1 NC contacts	3 NO + 1 NC contacts	AgSnO <sub>2</sub>	110 VDC	0-1415062-1
SR6M4006				6 VDC	6-1415053-1
SR6M4012				12 VDC	7-1415353-1
SR6M4018				18 VDC	0-1415354-1
SR6M4021				21 VDC	6-1415353-1
SR6M4024				24 VDC	3-1415353-1
SR6M4110				110 VDC	1-1415354-1

**PCB layout / terminal assignment**

Bottom view on solder pins

2 NO+2 NC versions



3 NO + 1 NC version

