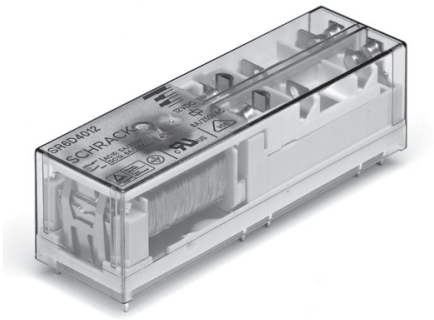
Force Guided Relay SR6 D/M

- **4 pole relay with force guided contacts according to EN 50205**
- **High insulation distances between electrical circuits**



F0206-ED

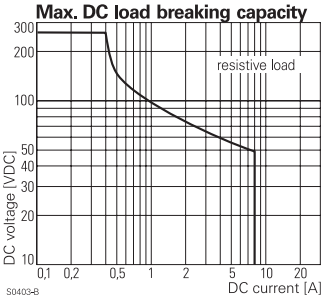
Typical applications
Emergency shut-off, press control, machine control, elevator and escalator control, safety relays.

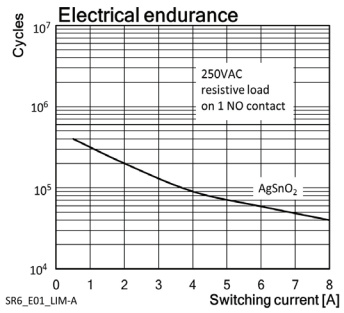
Approvals

VDE Cert. No. 128935, UL E214025, TUV 968/EL 350
Technical data of approved types on request.

Contact Data

Contact arrangement	3 form A + 1 form B contacts 3 NO + 1 NC, 2 form A + 2 form B contacts 2 NO + 2 NC
Rated voltage	250VAC
Max. switching voltage	400VAC
Rated current	8A
Contact material	$AgSnO_2$
Contact style	single contact, force guided type A 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	6/150min^{-1}
Contact ratings, IEC60947-5-1, on 1 form A (NO) contact	AC15-5A DC13-6A
Mechanical endurance	10x10^6 operations





Coil data

Coil voltage range	5 to 110VDC

Coil versions, DC-coil

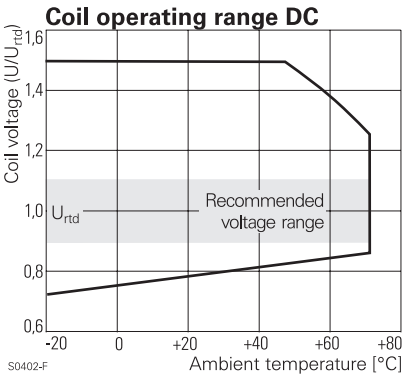
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ω±10%[1]	Rated coil power mW
005	5	3.8	0.5	21	1190
006	6	4.5	0.6	30	1200
009	9	6.8	0.9	68	1191
012	12	9	1.2	120	1200
018	18	13.5	1.8	270	1200
021	21	16	2.1	368	1198

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
024	24	18	2.4	480	1200
036	36	27	3.6	1080	1200
040	40	30	4.0	1333	1200
048	48	36	4.8	1920	1200
060	60	45	6	3000[1]	1200
110	110	83	11	10080[1]	1200

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



Insulation Data

Initial dielectric strength	
between open contacts	1500V$_{rms}$
between contact and coil	4000V$_{rms}$
between adjacent contacts	3000V$_{rms}$
in longitudinal direction	4000V$_{rms}$
Clearance/creepage	
between open contacts	microdisconnection
between contact and coil	≥5.5/5.5mm
between adjacent contacts	≥5.5/5.5mm
in longitudinal direction	≥15/15mm
Insulation to EN 50178, type of insulation	
between contact and coil	reinforced
between adjacent contacts	reinforced

Force Guided Relay SR6 D/M (Continued)

Other Data

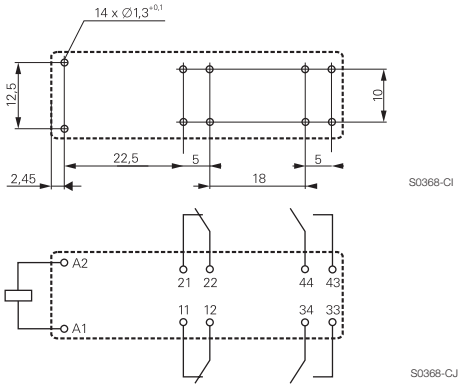
Material compliance: EU RoHS/ELV, China RoHS, REACH, Halogen content refer to the Product Compliance Support Center at www.te.com/customersupport/rohssupportcenter	
Ambient temperature	-25 to 70°C
Category of environmental Protection IEC 61 810	RTIII
Weight	30g
Resistance to soldering heat THT IEC 60068-2-20	260°C/5s
Packaging/unit	tube/10 pcs.

For more detailed information see product specification 2158003

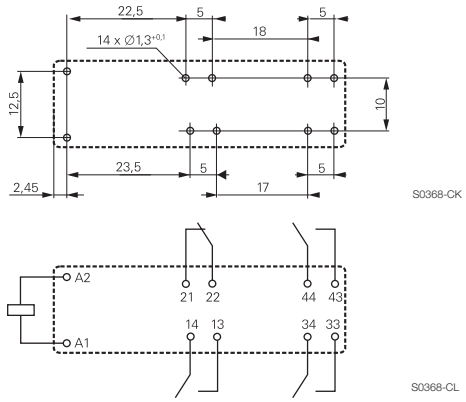
PCB layout / terminal assignment

Bottom view on solder pins

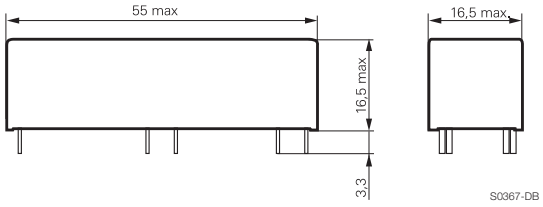
2 form A + 2 form B, 2 NO + 2 NC contacts



3 form A + 1 form B, 3 NO + 1 NC contacts



Dimensions



Product code structure

Typical product code: **SR6 D 4 012**

Type
SR6 Relay with force guided contacts SR6 D/M

Contact arrangement
D 2 form A + 2 form B contacts (2 NO + 2 NC)
M 3 form A + 1 form B contacts (3 NO + 1 NC)

Contact material
4 $AgSnO_2$

Coil
Coil code: please refer to coil versions table (e.g. 024=24VDC)

Other types on request.

Product code	Type	Contact arrangement	Contact material	Coil	Part Number
SR6D4012	4 pole	2 form A + 2 form B,	$AgSnO_2$	12VDC	1415078-1
SR6D4018	relay with	2 NO + 2 NC		18VDC	7-1415354-1
SR6D4021	force guided contacts	contacts		21VDC	8-1415353-1
SR6D4024				24VDC	6-1415027-1
SR6D4040				40VDC	9-1415366-1
SR6D4110				110VDC	1415062-1
SR6M4006		3 form A + 1 form B,		6VDC	6-1415053-1
SR6M4012		3 NO + 1 NC		12VDC	7-1415353-1
SR6M4018		contacts		18VDC	1415354-1
SR6M4021				21VDC	6-1415353-1
SR6M4024				24VDC	3-1415353-1
SR6M4110				110VDC	1-1415354-1