

# Safety Relay SR2M

2 pole 6 A



## Features

- Forcibly guided contacts according to EN 50205
- 2 pole safety relay with either 1N/O+1N/C or 2C/O contacts
- 6 kV surge resistance between poles

## Applications

Emergency shut-off, machine control, elevator and escalator control, light barrier control

F0188-C



Technical data of approved types on request

## Contact data

Configuration	1 N/C contact and 1 N/O contact or 2 C/O contact *)
Type of contact	single contact, forcibly guided
Rated current	6 A
Rated voltage / max. breaking voltage AC	250 Vac / 440 Vac
Maximum breaking capacity AC	1500 VA
Contact material	AgNi
Minimum contact load	> 50 mW
Contact resistance	≤ 100 mΩ / 1 A / 24 Vdc ≤ 2 Ω / 10 mA / 5 Vdc

\*) According EN50205 only 1N/O / 1N / C i(11-14 and 22-21 or 12-11 and 21-24) shall be used as forcibly guided contacts.

## Coil data

Nominal voltage	5...110 Vdc
Nominal coil power	approx. 700 mW
Operative range	2

## Coil versions

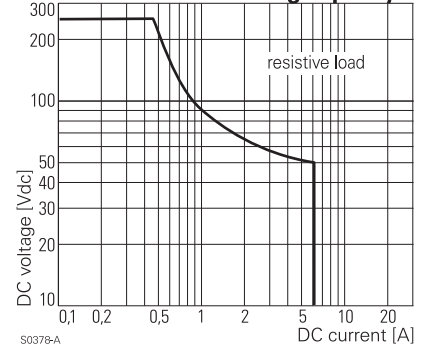
Coil code	Nominal voltage Vdc	Pull-in voltage Vdc	Release voltage Vdc	Coil resistance Ω	Coil current mA
005	5	3.8	0.5	35.7±10%	140.0
006	6	4.5	0.6	51±10%	117.6
009	9	6.75	0.9	116±10%	77.6
012	12	9.0	1.2	206±10%	58.3
018	18	13.5	1.8	483±10%	37.3
021	21	15.8	2.1	630±10%	33.3
024	24	18.0	2.4	823±10%	29.2
036	36	27.0	3.6	1851±10%	19.4
040	40	30.0	4.0	2286±10%	17.5
048	48	36.0	4.8	3291±12%	14.6
060	60	45.0	6.0	5142±12%	11.7
080	80	60.0	8.0	9143±12%	8.7
110	110	82.5	11.0	17285±12%	6.4

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  $1.1 \times U_{nom}$

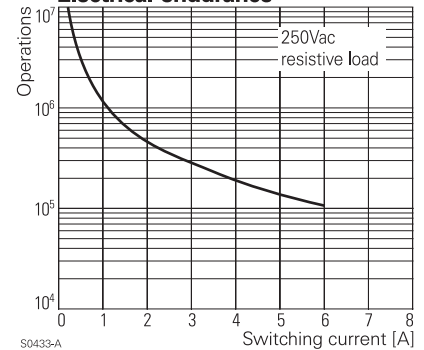
Other coil voltages on request

## Max. DC load breaking capacity



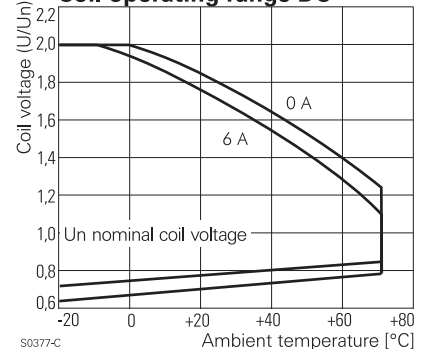
S0378-A

## Electrical endurance



S0433-A

## Coil operating range DC



S0377-C

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## Insulation

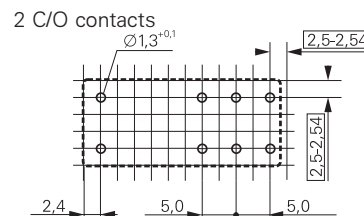
Dielectric strength	coil-contacts	4000 V <sub>rms</sub>
	open contact circuit	1000 V <sub>rms</sub>
	adjacent contacts	3000 V <sub>rms</sub>
Clearance / creepage	coil-contacts	8 / 8 mm
	adjacent contacts	5.5 / 5.5 mm
Insulation to IEC 60664		
	Voltage rating	250 V
	Pollution degree	2
	Overvoltage category	III
Insulation resistance (500 Vdc)		> 1x10 <sup>6</sup> Ω
Tracking resistance of relay base		CTI 250

## Other data

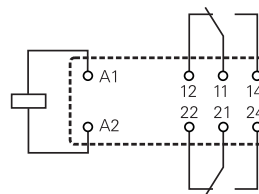
Ambient temperature	-25...+70 °C
Mechanical life	10x10 <sup>6</sup> operations
Max. switching rate at rated- / minimum load	6 min <sup>-1</sup> / 300 min <sup>-1</sup>
Operate- / release time	typ. 10 / 4 ms
Vibration resistance N/O / N/C contact	> 10 / 2.5 g, 15...200 Hz
Shock resistance (function)N/O contact / N/C contact	> 10 / 5 g, 11 ms half sine
Category of protection (IEC 61810)	RT III - wash tight
Relay weight	20 g
Packaging unit	20 pcs.
Accessories	see accessories SR2M

## PCB layout / terminal assignment

View on solder pins  
Dimensions in mm

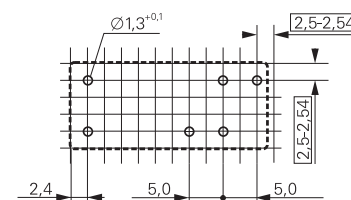


S0163-CO

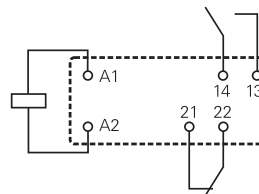


S0163-CJ

## 1 N/O and 1 N/C contacts



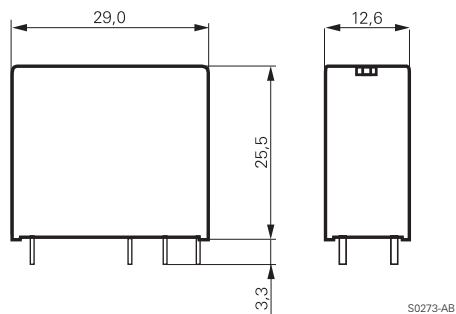
S0163-CU



S0163-CV

## Dimensions

Dimensions in mm



S0273-AB

## Product key

**V 2 3 0 4 7 - 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** AgNi

Contact configuration

**01** 2 C/O contacts

**11** 1 N/O and 1 N/C contact

Other types on request

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Product key	Version	Contact material	Configuration	Coil	Part number
V23047-A1005-A501	standard	AgNi	2 C/O contacts	5 Vdc	0-1393258-2
V23047-A1005-A511	wash tight		1 N/O + 1 N/C	5 Vdc	7-1415006-1
V23047-A1006-A501			2 C/O contacts	6 Vdc	3-1415011-1
V23047-A1006-A511			1 N/O + 1 N/C	6 Vdc	6-1415011-1
V23047-A1009-A501			2 C/O contacts	9 Vdc	0-1393258-3
V23047-A1009-A511			1 N/O + 1 N/C	9 Vdc	7-1415011-1
V23047-A1012-A501			2 C/O contacts	12 Vdc	0-1393258-4
V23047-A1012-A511			1 N/O + 1 N/C	12 Vdc	0-1393258-5
V23047-A1018-A501			2 C/O contacts	18 Vdc	0-1393258-8
V23047-A1018-A511			1 N/O + 1 N/C	18 Vdc	0-1393258-9
V23047-A1021-A501			2 C/O contacts	21 Vdc	1-1393258-1
V23047-A1021-A511			1 N/O + 1 N/C	21 Vdc	1-1393258-2
V23047-A1024-A501			2 C/O contacts	24 Vdc	1-1393258-5
V23047-A1024-A511			1 N/O + 1 N/C	24 Vdc	1-1393258-7
V23047-A1036-A501			2 C/O contacts	36 Vdc	2-1393258-0
V23047-A1036-A511			1 N/O + 1 N/C	36 Vdc	8-1415011-1
V23047-A1040-A501			2 C/O contacts	40 Vdc	2-1393258-1
V23047-A1040-A511			1 N/O + 1 N/C	40 Vdc	2-1393258-2
V23047-A1048-A501			2 C/O contacts	48 Vdc	3-1415006-1
V23047-A1048-A511			1 N/O + 1 N/C	48 Vdc	9-1415011-1
V23047-A1060-A511				60 Vdc	2-1393258-3