

**Safety Relay SR2M**

- 2 pole safety relay with either 1NO+1NC or 2CO contacts
- Forcibly guided contacts according to EN 50205
- Rated current 6 A
- 6 kV surge resistance between poles

**Applications**

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



F0188-D

**Approvals**

VDE REG.-Nr. 116064, **UL** us E214024, 968/EZ 111.03/05  
 Technical data of approved types on request

**Contact data**

Contact configuration	1 NO contact and 1 NC contact or 2 CO contacts <sup>1)</sup>
Contact set	single contact, forcibly guided 1 NC + 1NO: type A according to EN 50205 2 CO: type B according to EN 50205
Type of interruption	micro disconnection
Rated voltage / max. switching voltage AC	250 / 400 VAC
Rated current	6 A
Maximum breaking capacity AC	1500 VA
Contact material	AgNi
Minimum contact load	10 mA / 5 V
Contact resistance	≤ 100 mOhm / 1 A / 24 VDC ≤ 20 Ohm / 10 mA / 5 VDC
Rated frequency of operation with / without load	6 min <sup>-1</sup> / 300 min <sup>-1</sup>

<sup>1)</sup> According EN50205 only 1NO / 1NC (11-14 and 22-21 or 12-11 and 21-24) shall be used as forcibly guided contacts.

**Contact ratings**

Type	Contact	Load <sup>*</sup> )	Ambient temp. [°C]	Cycles
<b>UL 508</b>				
V23047-A1...-A501	1 NO	B300 pilot duty	40°C	6x10 <sup>3</sup>
V23047-A1...-A501	1 NO	R300 pilot duty	40°C	6x10 <sup>3</sup>
V23047-A1...-A511	1 NO	B300 pilot duty	40°C	6x10 <sup>3</sup>
V23047-A1...-A511	1 NO	R300 pilot duty	40°C	6x10 <sup>3</sup>

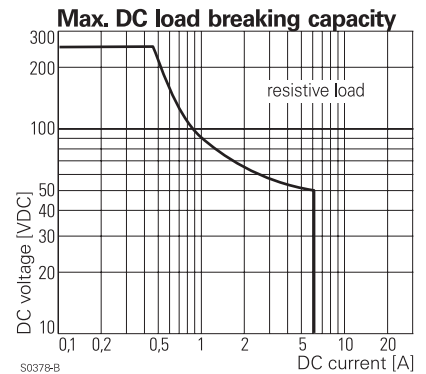
<sup>\*</sup>) load on one pole

**Coil data**

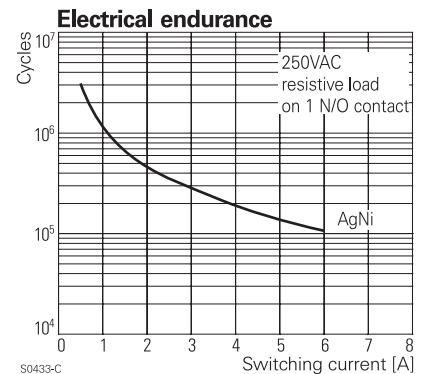
Rated coil voltage range DC coil	5...110 VDC
Operative range to IEC 61810	2

**Coil versions, DC-coil**

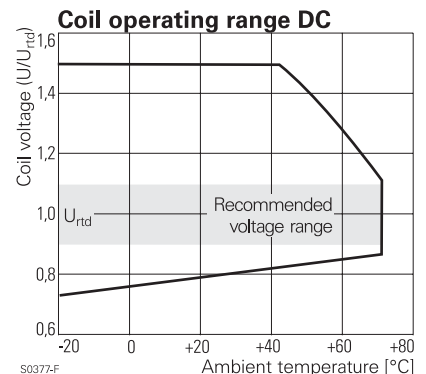
Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
005	5	3.8	0.5	35,7 ± 10%	700
006	6	4.5	0.6	51 ± 10%	706
009	9	6.8	0.9	116 ± 10%	698
012	12	9.0	1.2	206 ± 10%	699
015	15	11.3	1.5	321 ± 10%	700
018	18	13.5	1.8	483 ± 10%	671
021	21	15.8	2.1	630 ± 10%	700
024	24	18.0	2.4	823 ± 10%	700
036	36	27.0	3.6	1851 ± 10%	700



S0378-B



S0433-C



S0377-F

**Safety Relay SR2M (Continued)**

**Coil versions, DC-coil (continued)**

Coil code	Rated voltage VDC	Operate voltage VDC	Release voltage VDC	Coil resistance Ohm	Rated coil power mW
040	40	30.0	4.0	2286 ± 10%	700
048	48	36.0	4.8	3291 ± 12%	700
060	60	45.0	6.0	5142 ± 12%	700
080	80	64.0	8.5	9143 ± 12%	700
110	110	82.5	11.0	17285 ± 12%	700

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

**Insulation**

Dielectric strength coil-contact circuit	4000 V <sub>rms</sub>
open contact circuit	1500 V <sub>rms</sub>
adjacent contact circuits	3000 V <sub>rms</sub>
Clearance / creepage coil-contact circuit	≥ 8 / 8 mm
adjacent contact circuits	≥ 5.5 / 5.5 mm
Material group of insulation parts	IIIa
Tracking index of relay base	PTI 250
Insulation to IEC 61810-1	
Type of insulation coil-contact circuit	reinforced
open contact circuit	micro disconnection
adjacent contact circuits	basic
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**

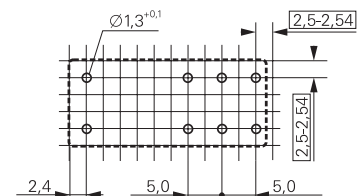
Mechanical endurance	10x10 <sup>6</sup> cycles
Material	
RoHS - Directive 2002/95/EC	compliant as per product date code 0407
Environment	
Ambient temperature range	-25...+70 °C
Vibration resistance (function) NO / NC contact	> 10 / 2.5 g, 15...200 Hz
Shock resistance (function) NO / NC contact	> 10 / 5 g, 11 ms half sine
Category of protection	RT III <sup>2)</sup>
Processing	
Resistance to soldering heat	260°C / 5 s
Relay weight	20 g
Packaging unit	20 pcs

<sup>2)</sup> please contact technical support for washing parameters

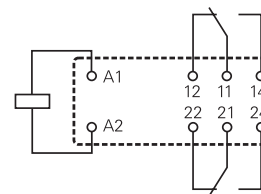
**PCB layout / terminal assignment**

Bottom view on solder pins

2 CO contacts

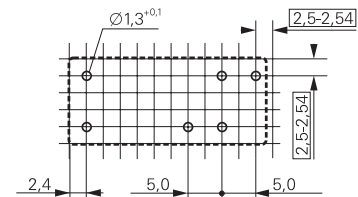


S0163-CO

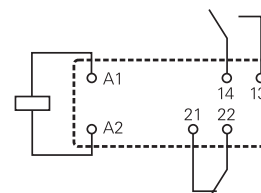


S0163-BJ

1 NO and 1 NC contacts

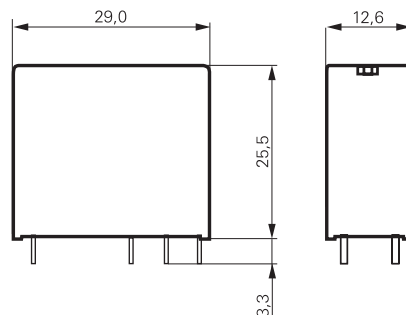


S0163-CU



S0163-CV

**Dimensions**



S0273-BB

**Safety Relay SR2M** (Continued)

<b>Product key</b>	Typical product key	<b>V23047</b>	<b>-A1</b>	<b>012</b>	<b>-A</b>	<b>5</b>	<b>11</b>
<b>Type</b>	V23047 Safety Relay SR2M						
<b>Version</b>	A1 standard						
<b>Coil</b>	Coil code = rated coil voltage (e.g. 024=24 VDC)						
<b>Contact set</b>	A single contact						
<b>Contact material</b>	5 AgNi						
<b>Contact configuration</b>	<b>01</b> 2 CO contacts (2 form C) <b>11</b> 1 NO and 1 NC contact (1 form A + 1 form B)						

Other types on request

Product key	Version	Contact material	Configuration	Coil	Part number
V23047-A1005-A501	standard	AgNi	2 CO contacts	5 VDC	1393258-2
V23047-A1005-A511	wash tight		1 NO + 1 NC		7-1415006-1
V23047-A1006-A501			2 CO contacts	6 VDC	3-1415011-1
V23047-A1006-A511			1 NO + 1 NC		6-1415011-1
V23047-A1009-A501			2 CO contacts	9 VDC	1393258-3
V23047-A1009-A511			1 NO + 1 NC		7-1415011-1
V23047-A1012-A501			2 CO contacts	12 VDC	1393258-4
V23047-A1012-A511			1 NO + 1 NC		1393258-5
V23047-A1018-A501			2 CO contacts	18 VDC	1393258-8
V23047-A1018-A511			1 NO + 1 NC		1393258-9
V23047-A1021-A501			2 CO contacts	21 VDC	1-1393258-1
V23047-A1021-A511			1 NO + 1 NC		1-1393258-2
V23047-A1024-A501			2 CO contacts	24 VDC	1-1393258-5
V23047-A1024-A511			1 NO + 1 NC		1-1393258-7
V23047-A1036-A501			2 CO contacts	36 VDC	2-1393258-0
V23047-A1036-A511			1 NO + 1 NC		8-1415011-1
V23047-A1040-A501			2 CO contacts	40 VDC	2-1393258-1
V23047-A1040-A511			1 NO + 1 NC		2-1393258-2
V23047-A1048-A501			2 CO contacts	48 VDC	3-1415006-1
V23047-A1048-A511			1 NO + 1 NC		9-1415011-1
V23047-A1060-A511				60 VDC	2-1393258-3
V23047-A1110-A511				110 VDC	2-1415012-1