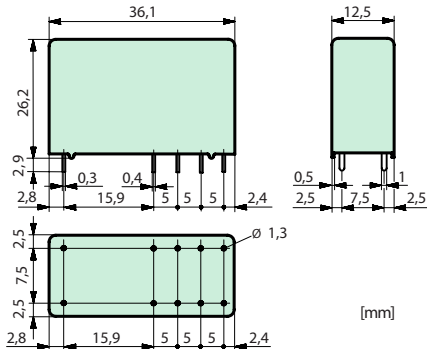


### Relais Eckdaten

- PCB Relay with forcibly guided Contacts
- Protective separation between Coil and Contacts (Air and Creepage Distance >14mm); Protective separation between left and right Contact Side (Air and Creepage Distance >5.5mm)
- EN50205 Type A
- Contact Mounting: SIM312 3NO / 1NC  
SIM222 2NO / 2NC
- Small external Dimensions
- Mean Coil Power 1W
- Holding Power 0.29W

### Dimensions



### Contact Data

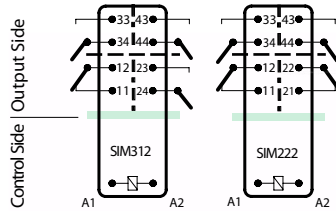
Contact Material	AgSnO <sub>2</sub> +0.2µm Au
Type of Contact	Crest Contact
Rated Switching Capacity	250VAC 8A AC1 2'500VA
Electr. life AC1(360 cycles/h)	approx. 100'000
Inrush Current max.	20A for 20ms
Switching Voltage Range	5 to 250 VDC/VAC
Switching Current Range*	10mA to 8A
Switching Capacity Range*	60mW to 2'000W(VA)
Contact resistance (as delivered)	≤100mΩ/6V/100mA

\*Guided Values

### Standard Coils for direct current (other voltages on request)

Nominal Voltage VDC	Min. Pick-Up Voltage at 20°C	Drop-Out Voltage at 20 °C	Nominal Current in mA	Resistance in Ohm at 20 °C
5	3.75	≥0.5	181.8	27.5 ± 10%
6	4.5	≥0.6	166.0	36 ± 10%
12	9.0	≥1.2	85.7	140 ± 10%
21	15.75	≥2.1	46.6	450 ± 10%
24	18.0	≥2.4	40.0	600 ± 10%
48	36.0	≥4.8	20.8	2'300 ± 10%
60	45.0	≥6.0	16.6	3'600 ± 13%
110	82.5	≥11.0	9.6	12'000 ± 15%

### Circuit Diagram (Topview)



### Insulation Data

Basic Insulation	at 250VAC
Air and Creepage Distance	>4mm
Test Voltage	2'500V/50Hz/1min
Double or Reinforced Insulation	at 250VAC
Air and Creepage Distance	>5.5mm
Test Voltage	4'000V/50Hz/1min
Double or Reinforced Insulation	at 250VAC
Air and Creepage Distance	>14mm
Test Voltage	5'000V/50Hz/1min
Test Voltage contacts open	1'500V/50Hz/1min
Creepage Resistance	CTI 250
Pollution Degree	2
Overvoltage Category	III
Insulation Resistance at Up 500VDC	>100 MΩ

### Additional Relay Data

Mechanical life	>10x10 <sup>6</sup> operations
Switching frequency, mechanical	15Hz
Response Time (all NO closed)	typ. 8ms
Drop-Out Time** (all NC closed)	typ. 4ms
Bounce Time of NO Contact	typ. 6ms
Bounce Time of NC Contact	typ. 12ms
Shock Resistance	16ms NO > 10g NC > 2.5g
Vibration Resistance (10-200Hz)	NO > 10g NC > 1g
Resistance to short circuiting output contacts	1'000A SCPD 10A gG/gL (pre-fuse)
Ambient Temperature	-40°C to +70°C
Thermal Resistance	50 K/W
Temperature Limit for Coil	120°C
Weight	approx. 25g
Mounting Position	any
Type of Protection	RT II
Solder bath Temperature	270°C/5s



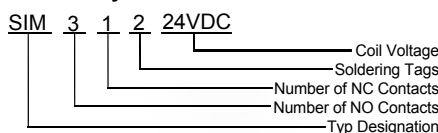
### Tests, Regulations

UL File E188953	Sec. 3
Insulation class (IEC 60664-1)	250VAC
Protection class II	VDE 0106
Fire Protection requirements	UL 94 / V0

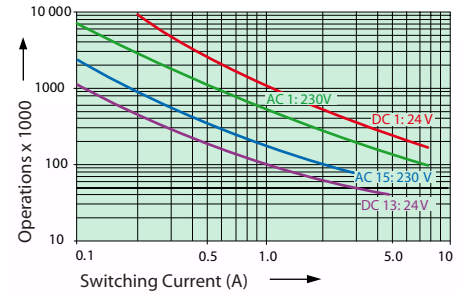
### Options, Accessories

PCB Socket, DIN Rail Socket see Page 28

### Product Key



### Contact Lifetime



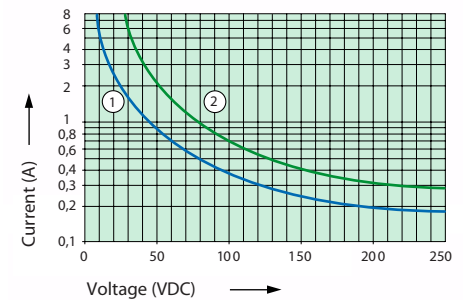
### Max. Switching Characteristics (DIN EN60947-5-1, Tab.C2):

AC1:	250V / 8A
AC15:	230V / 3A
DC1:	24V / 8A
DC13:	24V / 6A / 0.1Hz
UL 508:	C150 / R300

### Maximal Contact Load at AC1 with 230V:

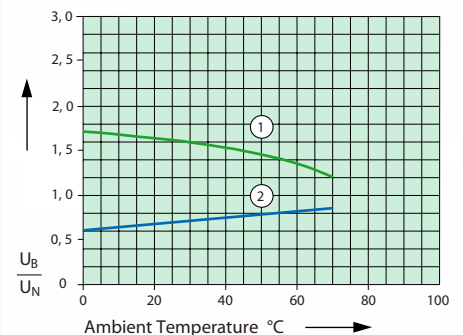
- 2 Contacts with 8A each
- 3 Contacts with 6A each

### Load Limit Curve with Direct Current



- 1) Inductive Load L/R 40ms
- 2) Resistive Load

### Excitation Voltage Range



- 1) Max. excitation Voltage with Contact Load: <6A
- 2) Min. excitation Voltage (guaranteed Values) without previous operation.

No heat accumulation due to intrinsic heating of other components. Continuous Duty 100%.