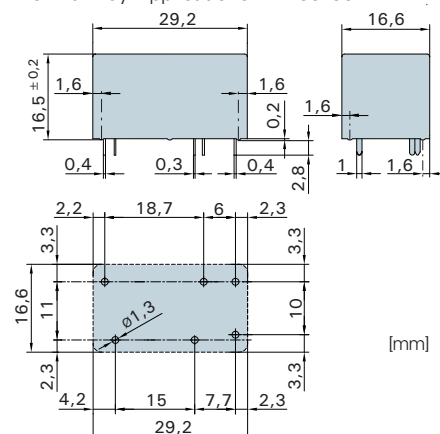


Diagrams

- PCB relay with forcibly guided contacts
- Protective separation between control and load circuit (leakage and creepage distances > 10mm)
- EN 50205, type A
- Double and reinforced insulation between the contacts
- Contact mounting: SIS112 1NO/1NC
- Small external dimensions
- Mean coil power 0.27W
- Holding power 0.08 W
- for Railway Applications: EN 50155



Contact material	AgCuNi+0,2-0,4μm Au
Type of contact	Single contact with notched crown
Rated switching capacity	250VAC 6A AC1 1'500VA
Electr. life AC1 (360 cycles/h)	approx. 100'000
Inrush current max.	30A for 20ms
Switching voltage range	5 to 250VDC/VAC
Switching current range*	5mA to 6A
Switching capacity range*	60mW to 1'500W (VA)
Contact resistance (as delivered)	<100mΩ /28V/100 mA

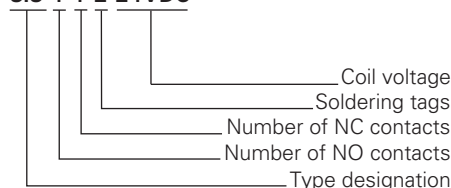
* Guide values

**Standard coils for direct current
(other voltages on request)**

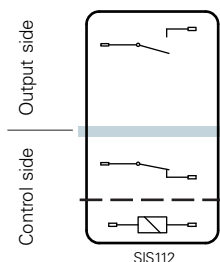
Nominal voltage VDC	Min. pick-up voltage at 20°C	Drop-out voltage at 20 °C	Nominal current in mA	Resistance in Ohm at 20 °C	Tolerance in %
5	≥ 3,5	≥ 0,5	54,9	91	± 10
6	≥ 4,2	≥ 0,6	46,1	130	± 10
9	≥ 6,3	≥ 0,9	30,5	295	± 10
12	≥ 8,4	≥ 1,2	23,0	520	± 10
18	≥ 12,6	≥ 1,8	15,2	1'180	± 10
24	≥ 16,8	≥ 2,4	11,4	2'100	± 10
48	≥ 33,6	≥ 4,8	5,7	8'350	± 13
60	≥ 42,0	≥ 6,0	4,5	13'100	+ 15

Ordering example

SIS 1 1 2 24VDC



Circuit diagram (view on relay upper side)



- - - - Basic insulation
 Double or reinforced insulation

Mechanical life	> 10 x 10 ⁶ operations
Switching frequency, mechanical	15Hz
Response time (NO closed)	typically 10ms
Drop-out time** (NC closed)	typically 3ms
Bounce time of NO contact	typically 2ms
Bounce time of NC contact	typically 15ms
Shock resistance 16ms	NO contact 17g NC contact 7g
Vibration resistance	NO contact 7g NC contact 2g
10-200Hz	
Test voltage	
coil/control contact	2'500Veff 1min
Test voltage	5'000Veff 1min
coil- control contact/output contact	
Test voltage contact open	1'500Veff 1min
Insulation resistance at Up 500V	10 ⁸ Ω
Creepage resistance	CTI 175
Weight	approx. 18g
Mounting position	any
Ambient temperature	-40°C to +70°C
Type of protection	RT III
Solder bath temperature	270°C/5s
Thermal resistance	55K/W
Temperature limit for coil	120°C
Pollution degree	2
Overvoltage category	III
Resistance to short circuiting	1'000A SCPD 6A gL/gG (pre-fuse)

** without spark suppression

Insulation terms

Coil to control contact: Basic insulation

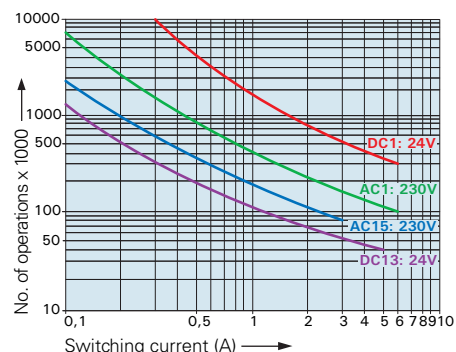
Coil/control contact to output contact:

Double or reinforced insulation $> 10\text{mm}$

Tests, regulations

Approvals	SEV, UL, cUL, TÜV
UL File E188953	Sec. 5
Insulation class IEC 60664-1	250VAC
Protection class II	VDE 0106
Fire protection requirements	UL 94 / V0

Contact lifetime



Max. switching characteristics (determined acc. to DIN EN 60947-4-1 / EN 60947-5-1):

AC 1: 250V/6A

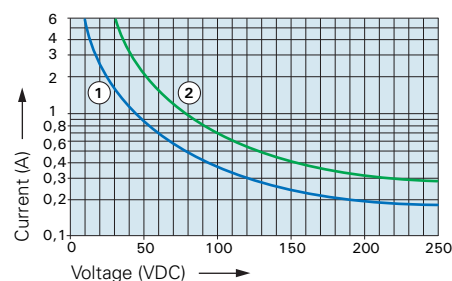
AC 15: 230V/3A

DC 1: 24V/6A

DC 13: 24V/5A/0,1 Hz

UL 508: B300 / R300

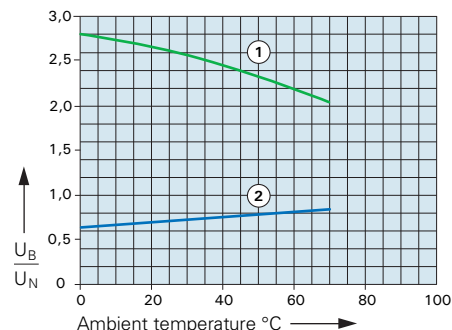
Load limit curve with direct current



1) Inductive load, L/R 40 ms

2) Resistive load

Excitation voltage range



1) Max. excitation voltage with contact load $\leq 2A$

2) Min. excitation voltage (guaranteed values) without previous operation

No heat accumulation due to intrinsic heating of other components.

Continuous duty 100%.