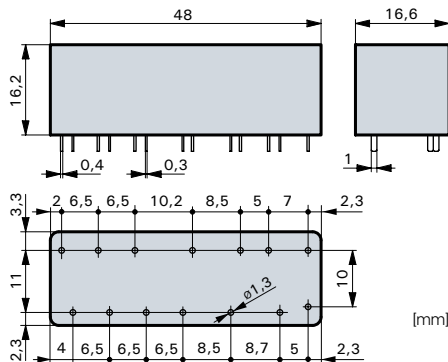




Relay data

- PCB relay with forcibly guided contacts
- Protective separation between control and load circuit (leakage and creepage distance > 8mm)
- EN 50205, type A
- Double and reinforced insulation between the contacts
- Contact mounting: SIS422
- Small external dimensions
- Mean coil power 0,7W



Contact material	AgCuNi+0,2-0,4μm Au
Type of contact	Single contact
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 440VDC/AC
Switching current range*	5mA to 6A
Switching capacity range*	60mW to 1'500W (VA)
Contact resistance (as delivered)	≤ 100mΩ

* Guide values

Standard coils for direct current (other voltages on request)

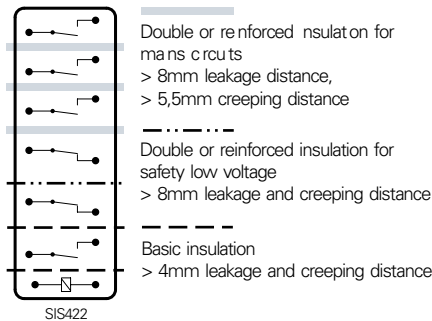
Nominal voltage VDC	Min. pick-up voltage at 20°C	Drop-out voltage at 20°C	Nominal current in mA	Resistance in Ohm at 20°C	Tolerance in %
5	3,5	≥ 0,5	133	37,5	± 10
9	6,3	≥ 0,9	73,7	122	± 10
12	8,4	≥ 1,2	55,8	215	± 10
18	12,6	≥ 1,8	37,1	485	± 10
24	16,8	≥ 2,4	29,7	860	± 10
48	33,6	≥ 4,8	13,9	3'450	± 10
60	42,0	≥ 6,0	11,1	5'400	± 13
110	77,0	≥ 11,0	6,0	18'300	± 15

Ordering example

SIS . . . **ZGR009** Wash-resistant, RT III
 Coil voltage
 Soldering tags
 Number of NC contacts
 Number of NO contacts
 Type designation

General data

Circuit diagram (view on relay upper side)



Mechanical life	> 10 x 10 ⁶ operations
Switching frequency, mechanical	15Hz
Response time (all NO closed)	typically 15ms
Drop-out time** (all NC closed)	typically 5ms
Bounce time of NO contact	typically 2ms
Bounce time of NC contact	typically 15ms
Shock resistance	16ms NO contact 10g NC contact 9g
Vibration resistant	NO contact 10g NC contact 3g
10-200Hz	
Test voltage	
coil/control contacts	2'500Veff 1min
Test voltage	4'000Veff 1min
output contacts as against each other	
Test voltage contact open	1'500Veff 1min
Insulation resistance at Up 500V	10 ⁸ Ω
Creeping resistance	CTI 175
Weight	approx. 35g
Mounting position	any
Ambient temperature	-25°C to +70°C
Type of protection	RT II / RT III optionally
Solder bath temperature	270°C/5s
Thermal resistance	45K/W
Temperature limit for coil	120°C
Pollution degree	3
Overvoltage category	III
Resistance to short circuiting	1'000A SCPD 6A gG (pre-fuse)

** without spark suppression

Insulation terms

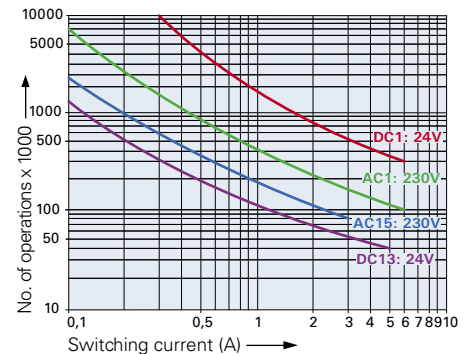
Coil/control contacts: Basic insulation
 Coil/control contacts to output contacts:
 Double or reinforced insulation > 8mm

Tests, regulations

Approvals	SEV, UL, cUL, TÜV
Insulation class	VDE 0110 / group C 250VAC
Protection class II	VDE 0106
Fire protection requirements	UL 94 / V0

Diagrammes

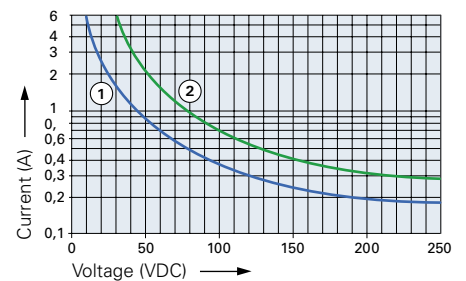
Contact lifetime



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

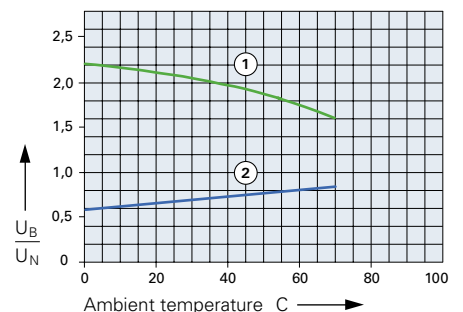
Maximal contact load at AC 1 with 230V:
 2 contacts each with 6A
 3 contacts each with 4A
 4 contacts each with 3A

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

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