

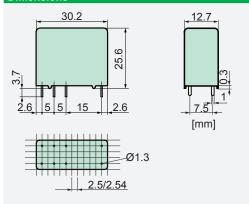
SGR 282 ZK Series



Relay Key Data

- PCB Relay with forcibly guided contacts
- Protective separation between coil and contacts (leakage and creepage distances >14mm); protective separation diagonally between left and right contact side (leakage and creepage distances >5.5mm)
- EN50205 type B
- 2 CO contacts with notched crown
- Mean coil power 0.7W
- Holding Power 0.21W

Dimensions



Contact Data

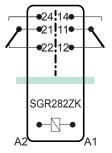
Contact material	AgCuNi+0.2µm AU
Type of contact	notched crown
Rated switching capacity	250VAC 8A AC1 2'000VA
Electr. life AC 1(360 cycles/h)	approx.100'000
Inrush current max.	15A for 20ms
Switching voltage range	5 to 250 VDC/VAC
Switching current range*	4mA to 8A
Switching capacity range*	50mW to 2'000W(VA)
Contact resistance (as delivered	d) ≤100mΩ/28V/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	140.0	35.7 ± 10%
6 12 18	4.5	≥0.6	116.0	51.4 ± 10%
12	9.0	≥1.2	58.5	205 ± 10%
18	13.5	≥1.8	38.9	462 ± 10%
24	18.0	≥2.4	29.1	822 ± 10%
48	36.0	≥4.8	14.5	3'290 ± 10%
60	45.0	≥6.0	11.6	5'140 ± 13%
110	82.5	≥11.0	6.3	17'280 ± 15%

Circuit Diagram (view on relay upper side)



Insulation Data

- Double or reinforced insula	ation 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 contact open	1'500V/50Hz/1min
Creepage resistance	CTI 550
Pollution degree	2
Overvoltage category	III
Insulation resistance at Up 500VDC	>100MΩ

>10x106 operations

typically 12ms

15Hz

Additional Data Mechanical endurance

Switching frequency, mechanical

Response time (all NO closed)

Drop-out time** (all NC	closed)	typically 5ms
Bounce time of NO cor	ntact	typically 4ms
Bounce time of NC cor	ntact	typically 8ms
Shock resistance 16ms	S	NO > 10g
		NC > 2.5g
Vibration resistance		NO > 10g
(10-55Hz)		NC > 1.5g
Resistance to short circ	cuiting	
NO 1	1'000A SCPD 1	0A gG/gL (pre-fuse)
NC	1'000A SCPD	6A gG/gL (pre-fuse)
Ambient temperature		-40°C to +70°C
Thermal resistance		50K/W
Temperature limit for co	oil	120°C
Weight		ca. 20g
Mounting position		any
Type of protection		RT II
Solder bath temperatur	re	270°C/5s
**without spark suppressio	n	
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Tests, Regulations

Approvals

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UL File E188953	Sec. 1
Insulation class IEC 60664-1	250VAC
Protection class II	VDE 0106
Fire protection requirements	UL 94 / V1

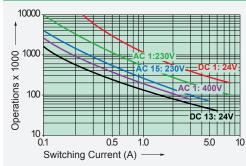
Options, Accessories

PCB socket, DIN rail socket	see page 28
Various modules	on request

Product Key



Contact Lifetime for NO Contacts

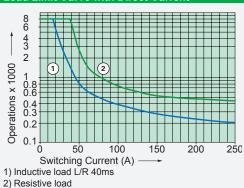


Maximal switching characteristics (DIN EN60947-5-1, Tab. C2)

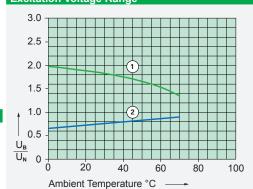
AC 15: 230V / 5A DC 13: 24V / 6A UL 508: C300

Maximal contact load at AC 1 with 230V: 2 contacts with 8A each

Load Limit Curve with Direct Current



Excitation Voltage Range



- 1) Max. excitation voltage with contact load: <4A
- 2) Min. excitation voltage (guaranteed values) without previous operation

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