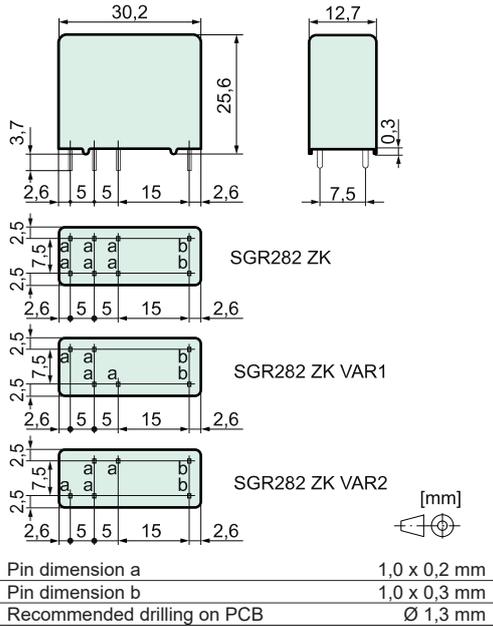




Features

- Relay with forcibly guided contacts according to IEC 61810-3
- Application type B and application type A (for VAR1 and VAR2)
- Protective separation (see insulation data)
- Suitable for print mounting
- Contact assignment
SGR282 ZK: 2 CO,
SGR282 ZK VAR1 / VAR2: 1 NO + 1 NC

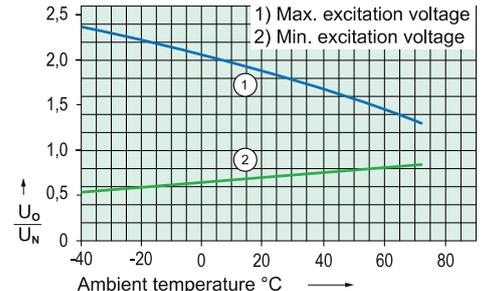
Dimensions



Coil data at 20 °C

Nominal power (typ.)	0,70 W
Holding power (typ.)	0,21 W
Coil limit temperature	120 °C

Nominal voltage (VDC)	Min. Pick-up voltage (VDC)	Min. Drop-out voltage (VDC)	Nominal current (mA)	Resistance (Ohm)
5,0	3,8	0,5	140	36 (1 ± 10 %)
12,0	9,0	1,2	59	205 (1 ± 10 %)
18,0	13,5	1,8	39	462 (1 ± 10 %)
24,0	18,0	2,4	29	822 (1 ± 10 %)
48,0	36,0	4,8	15	3290 (1 ± 10 %)
60,0	45,0	6,0	12	5140 (1 ± 13 %)
110,0	82,5	11,0	6	17280 (1 ± 15 %)

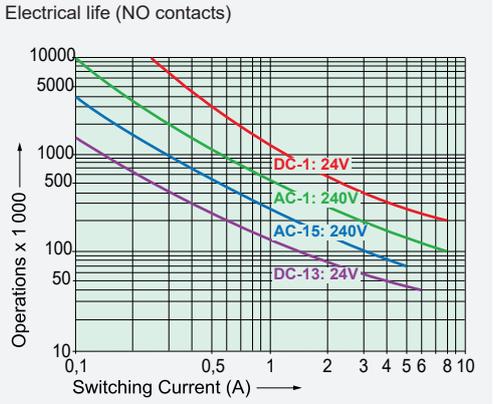


Test conditions:
 - Graph 1: Contact current 4 A MAX
 - Graph 2: without previous operation
 - Free-standing relay on PCB
 - Duty cycle 100%

Contact data

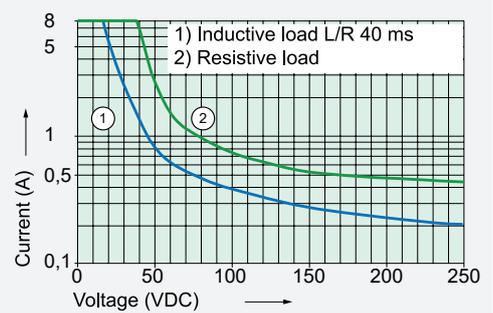
Contact material	AgCuNi + 0,2, ..., 0,4 µm Au
Type of contact	Single contact with notched crown
Rated switching power	2000 VA
250 V / 8 A / AC-1 (max.)	
Electr. life time (0,1 Hz, rel. duty cycle 10%)	100 000
Inrush current	15 A for 20 ms
Switching voltage range	5, ..., 250 V DC / AC
Switching current range*	4 mA, ..., 8 A
Switching power range*	50 mW, ..., 2000 W (VA)
Contact resistance as new (max.)	100 mΩ
Short circuit resistance of NO contacts**	1000 A with pre-fuse SCPD 10 A gG / gL (fuse)
Short circuit resistance of NC contacts**	1000 A with pre-fuse SCPD 6 A gG / gL (fuse)

* Reference values ** Prospective short-circuit current

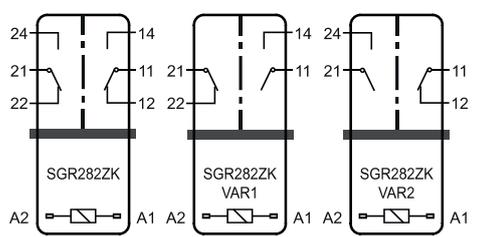


Switching capacity (IEC 61810-1)	240 V / 8 A MAX
AC-1:	240 V / 5 A MAX
AC-15:	24 V / 8 A MAX
DC-1:	24 V / 6 A / 0,1 Hz MAX
DC-13:	
Switching capacity (UL 508)	C300
Continuous current per contact at load of:	
1 or 2 contacts	8 A MAX

Contact load limit curve (DC)



Circuit diagram (top view)



Insulation data

Rated insulation voltage (IEC 60664-1)	250 VAC
Double or reinforced insulation	
- Air and creepage distance (min.)	5,5 mm
- Test voltage	4000 V _{rms} / 1 min
Double or reinforced insulation	
- Air and creepage distance (min.)	14 mm
- Test voltage	5000 V _{rms} / 1 min
Open contact: Test voltage*	1500 V _{rms} / 1 min
Creepage resistance	CTI 550
Pollution degree	2
Overvoltage category	III
Insulation resistance (min.)	100 MΩ
- Test voltage	500 VDC

Mechanical data

Mechanical lifetime (min.)	10 x 10 ⁶ operations
Switching frequency (max.)	15 Hz
Response time (NO closed) (typ.)	12 ms
Drop-out time (NC closed) (typ.)*	5 ms
Bounce time (typ.)	NO: 4 ms / NC: 8 ms
Shock resistance (16 ms) (min.)	NO: 10g / NC: 2,5g
Vibration resistance (10-200 Hz) (min.)	NO: 10g / NC: 1,5g
Weight	approx. 20 g
Mounting position	any
Mounting distance (min.)	5 mm

* without coil wiring

Other data

Ambient temperature	-40 °C, ..., +70 °C
Thermal resistance	50 K / W
Protection class	RT II
Solder bath temperature	270 °C / 5 s
Test method (heating)	A (group assembly)
Approvals	cULus, TÜV
Flammability class	UL 94 V-1
UL File	E188953 Sec.1

Options, Accessories

Mounting rail socket	SRD SGR2, SRD SGR2A KV2, SRD SGR2A KV2 PIK
PCB socket	SRP SGR2
Other coil designs	possible

Product key

SGR282 ZK	Type designation	
VAR1	Contact variant	VAR1, VAR2
24VDC	Nominal coil voltage	
XX	Options	