PCB-Relay
SGR 02K

Miniature – PCB-Relay
1 pole 10A

ELESTA

Technical Data

Contact Data		
Type of Contact		Songle Contact
No. of Contacts		1A
Max. Switching Voltage	VDC / VAC	220 / 380
Rated Current	A	10
Rated Breaking Capacity (cos φ = 1)	VA	1500
Switching Load (Min.)	VDC / mA	5 / 100
Contact Material		AgSnO

General Data		
Mechanical Life	> Operations	20×10^6
Electrical Life at Rated Voltage	> Operations	1×10^5
Max. Switching Frequency	Operations / h	360
Operate Time / Release Time	approx. in ms	6 / 4
Test Voltage Contact / Coil	$\geq VAC_{eff}$	4000
Test Voltage Contact Open	$\geq VAC_{eff}$	1000
Creeping-/Leakage Distance	mm	5,5 / 4,5
Insulation IEC 60664 - Rated Voltage (VAC)		250
- Degree of Pollutin		3
- Excess Voltage Category		III
Insulation Group / Rated Voltage (VDE 0110b 2/79)		C / 250
Ambient Temperatur	℃	- 40…+ 85
Approvals		VDE**, C-UL
Weight	gr.	5

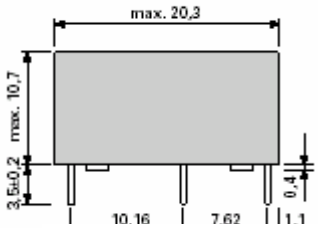
** in the pipeline

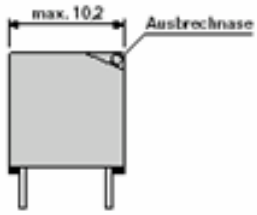
Coil at + 20℃		
Rated Voltage	VDC	3…48
Power Consumption	approx. W	0,28
Max. Actuating Voltage	VDC	1,5 x U_N

U_N (V)	R (Ohm)	U_{AN} (V)	U_{AB} (V)
3	32 ± 10%	≤ 2,3	≥ 0,3
5	± 10%	≤ 3,9	≥ 0,5
6	128 ± 10%	≤ 4,7	≥ 0,6
9	289 ± 10%	≤ 7,0	≥ 0,9
12	480 ± 10%	≤ 9,4	≥ 1,2
18	1080 ± 10%	≤ 14,0	≥ 1,8
24	2057 ± 10%	≤ 18,7	≥ 2,4
36	4320 ± 10%	≤ 28,1	≥ 3,6
48	7680 ± 10%	≤ 37,4	≥ 4,8

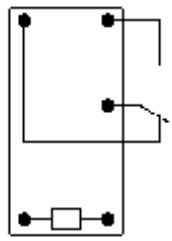
Other coil tensions on request.

Dimension Diagram

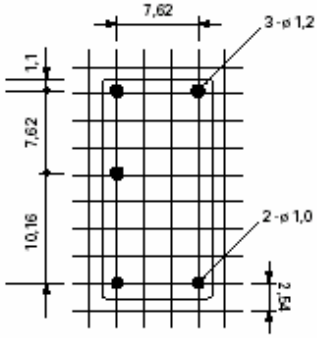




Schematic Diagram



Top view



View on circuit points. All measure in mm.

Order Type

SGR 02 K	012VDC	1A	AN

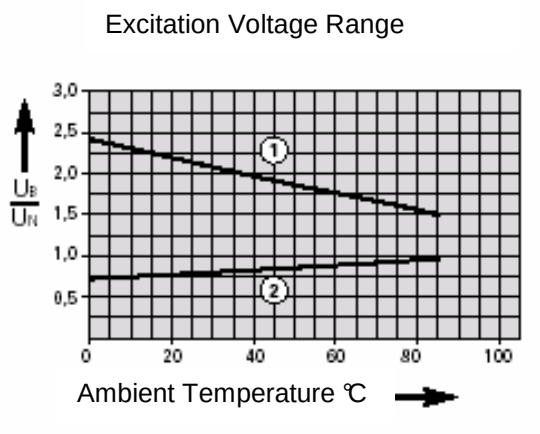
Relay Type

Coil Voltage
003VDC = 3VDC…0048VDC = 48VDC

Type of Contact
1A = 1 Normally Open Contact

Contact Material
ASO = AgSnO

Electrical Specification



- Single relay on PCB,
no heat accumulation on PCB by self heating from other components.
- Continuous duty 100%

1) Max. excitation voltage without contact load

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