

# PCB-Relay SGR 642 H

# Power – PCB-Relay 1 pole 16A (Inrush Current 150A)

# ELESTA

## Technical Data



### Contact Data

Type of Contact	Parallel Contact	
No. of Contacts	1A	
Rated Voltage / Max. Switching Voltage	VAC	250 / 440
Rated Current	A	16
Inrush Current	A	150
Rated Breaking Capacity (cos φ = 1)	VA	4000
Contact Material	AgSnO	
Contact Resistance	mΩ	50

### General Data

Mechanical Life	> Operations	50 x 10 <sup>6</sup>
Electrical Life at Rated Voltage	> Operations	2 x 10 <sup>5</sup>
Max. Switching Frequency	Operations / h	360
Operate Time / Release Time	approx. in ms	8 / 3
Bounce Time	approx. in ms	0,5
Test Voltage Contact / Coil	≥ VAC <sub>eff</sub>	5000
Test Voltage Contact Open	≥ VAC <sub>eff</sub>	1000
Vibration Resistance (10-55Hz)		10g
Creeping-/Leakage Distance	mm	14
Insulation IEC 60664	- Rated Voltage (VAC)	250
	- Degree of Pollutin	2
	- Excess Voltage Category	III
Insulation Group / Rated Voltage (VDE 0110b 2/79)		C / 250
Ambient Temperature	°C	- 40...+ 70
Temperaturer of Soldering Bath	°C / s	270 / 5
Approvals		VDE; UL; CUR
Weight	gr.	20

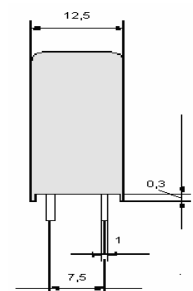
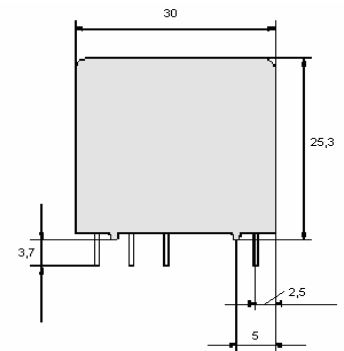
### Coil at + 20°C

Rated Voltage	VDC	6...110
Power Consumption (DC - Coil)	approx. W	0,5

### DC-Coil (0,5 W)

U <sub>N</sub> (V)	R Ω (Ohm)	U <sub>AN</sub> (V)	U <sub>AB</sub> (V)	I <sub>N</sub> (mA)
6	70 ± 10%	≤ 4,5	≥ 0,3	85,70
12	270 ± 10%	≤ 9,0	≥ 0,6	44,40
24	1100 ± 10%	≤ 18,0	≥ 1,2	21,80
48	4400 ± 13%	≤ 36,0	≥ 2,4	10,90
60	6850 ± 15%	≤ 45,0	≥ 3,0	8,75
110	20000 ± 15%	≤ 82,5	≥ 5,5	5,50

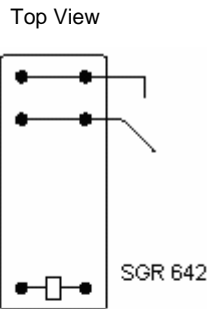
### Dimension Diagram



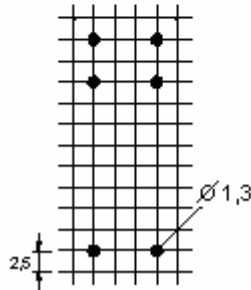
All measure in mm.

Other coil tensions on request.

**Schematic Diagram**



View of the solder side. All measure in mm.

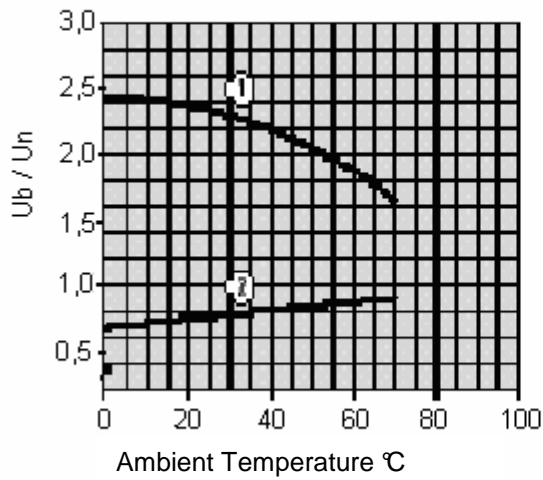


**Order Type**

<b>SGR 642 H</b>	<b>V</b>	<b>012VDC</b>	<b>ASO</b>
<b>Relay Type</b>			
642 H = 1 Normally Open Contact			
<b>Construction</b>			
Without = Washproof IP42			
O = Dust-Proof IP54			
<b>V = Sealed IP67</b>			
T = Mechanical Actuation Button			
S = Special type after customer wish			
<b>Coil Voltage</b>			
006VDC = 6VDC....110VDC = 110VDC			
<b>Contact Material</b>			
ASO = AgSnO			

**Electrical Specification**

Excitation Voltage Range



- 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