



## SGR-PCB RELAYS 642 H

Special relay suitable for switching lighting loads

No. of contacts: **1 NO**  
 Rated current: **16 A**  
 Inrush current: **150 A**

### Order description

SGR 642H ...VDC

### Contact data

Contact material	AgSnO <sub>2</sub>
Type of contact	Parallel contact
Rated switching capacity	250 VAC 16A AC1 4000 VA 440 VAC 6A AC15
Max. switching voltage	440 VAC
Electrical life	approx. 200.000 operations 250 VAC 16 A
Contact resistance	50 mΩ

### Coil data

Nominal voltages	6-12-24-48-60-110 VDC
Pick-up voltage	approx. 0,75 x Nominal voltage (at 20 °C)
Power consumption	typically 500 mW

### Options

Washproof IP 54  
 SGR 6x2HO ...VDC  
 Sealed IP 67  
 SGR 6x2HV ...VDC

### General data

Mechanical life	> 50 x 10 <sup>6</sup> Operations
Max. switching frequency	360 Operations/h
Operate time	typically 8 ms
Release time	typically 3 ms
Bounce time	typically NO: 0,5 ms
Vibration resistance	NO: 10 g (10-55 Hz)
Test voltage coil-contact	5.000 V <sub>eff</sub> (typically 6.000 V <sub>eff</sub> )
Test voltage contact open	1.000 V <sub>eff</sub>
Weight	approx. 20 g
Ambient temperature	-40°C - +70°C
Temperature of soldering bath	270°C / 5 s
Protection category	IP 42

### Accessories

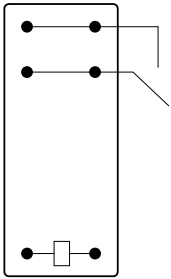
PCB mounting socket  
 ZGR 001  
 Socket with screw terminals  
 ZGE 007  
 ZGE 107  
 Modules  
 ZAE ...

### Tests, regulations

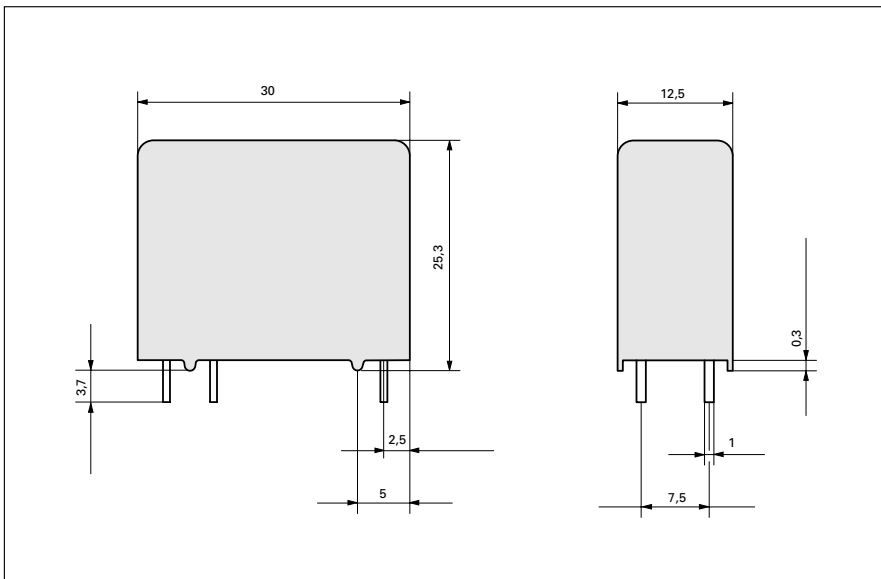
Approvals	on request
Insulation group	C/250
Creeping and leakage distance	> 14 mm

**Diagram**

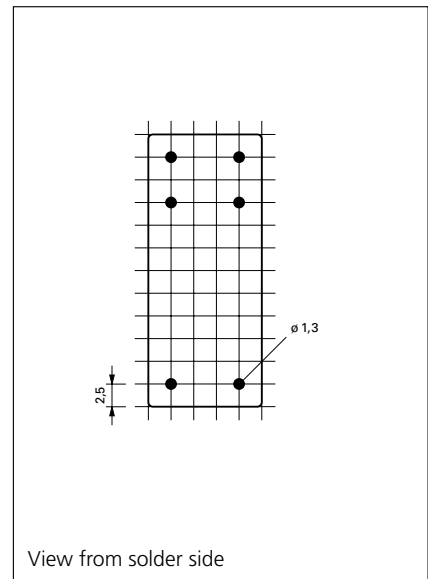
View from above



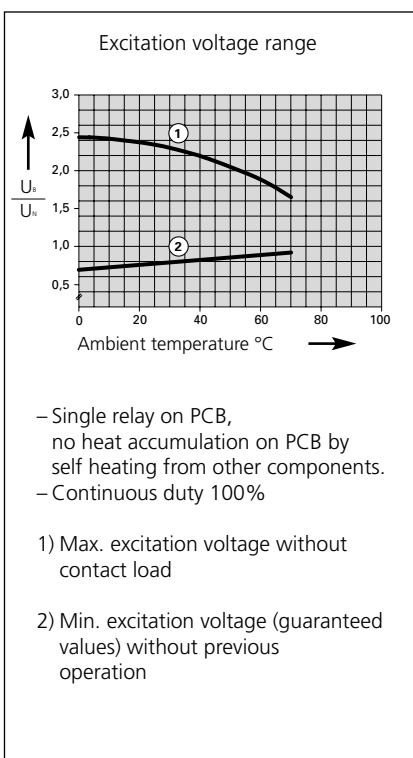
**Dimensions drawing (mm)**



**Drilling pattern (mm)**



**Coil data**



**Standard coil 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 mA	Resistance Ohm at 20°C	Tolerance %
6	4,5	0,3	85,70	70	10
12	9,0	0,6	44,40	270	10
24	18,0	1,2	21,80	1.100	10
48	36,0	2,4	10,90	4.400	13
60	45,0	3,0	8,75	6.850	15
110	82,5	5,5	5,50	20.000	15