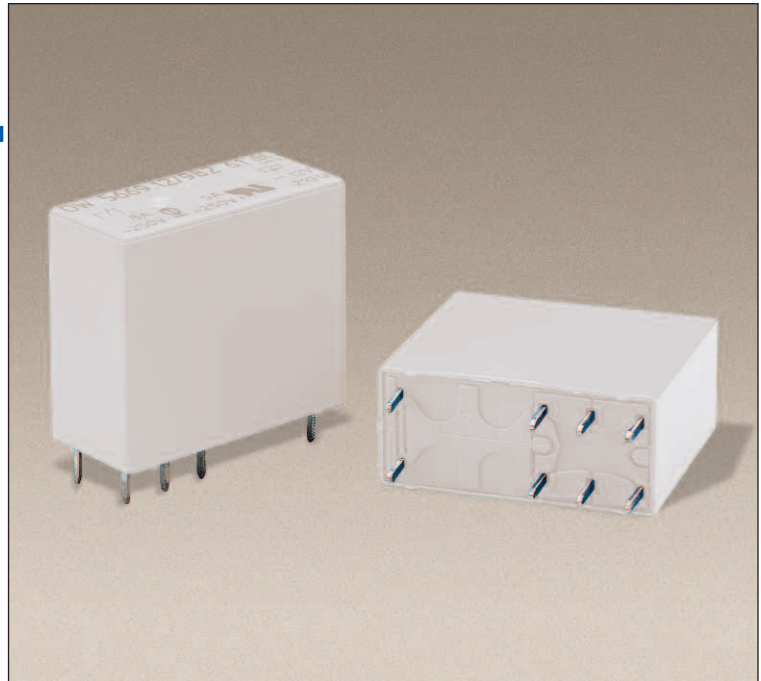


Safety Relay

OA/OW 5669

Features

- n 2 output contacts
- n International approvals:
TÜV, CSA, UL, cUL
- n Quality control check for each safety relay
- n Forced-guided contacts, all gold flash plated
- n Contact Gap > 0.5 mm throughout life of relay
- n Various contact materials,
mixed contact material optional
- n High coil voltage range
- n High breakdown Voltage: contact/coil > 4 kV
- n High Creeping Distance: contact/coil > 8 mm
- n Protection Rating
OA Version: IP 40, flow solder proof
OW Version: IP 67, washable
- n Custom design available,
-coil voltage -coil resistance,
-contact pressure -operate/release time



GERMANY



USA/CANADA

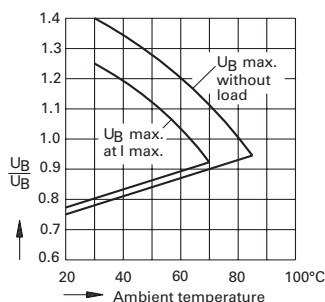


CANADA

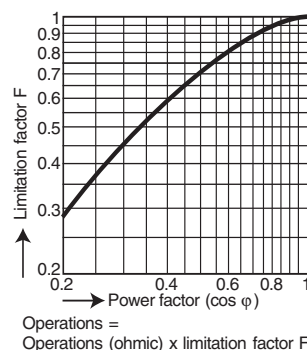
Technical Data

- n **Nominal Coil Voltage** 5, 6, 12, 20, 24, 48, 60, 110, DC
- n **Coil Power Dissipation** 0.7 W
- n **Max. Switching Voltage** 250V DC, 400V AC
- n **Max. Switching Current** 8 A (2 x 5A simultaneous)
- n **Max. Switching Power — DC** 200W (2 x 160W simultaneous)
- n **Max. Switching Power — AC** 2000VA (2 x 1250VA simultaneous)
- n **Contact Switching Rate** 10 operations per second
- n **Relay Operate Time** ≤15 ms
- n **Relay Release Time** ≤12 ms
- n **Operation Vibration** 0.35 mm Ampl. max
..... @ 10...55Hz, 5g max
- n **Contact Arrangements** 1NO/1NC, 2CO, 2NO, 2NC
- n **Contact Material** AgNi10+0.2μmAu Standard
..... AgSnO₂+0.2μmAu, AgNi0.15+5μmAu Optional
- n **Mechanical Life** 50x10⁶ operation cycles
- n **Electrical Life** AgSnO₂ >2x10⁵, AgNi10 >10⁵
..... operation cycles @ 230V AC, 6A, cos φ=1
- n **Ambient Temperature** -20...+85°C
- n **Cover Material** Polyamide 6
- n **Weight** 15 g
- n More detailed data upon request

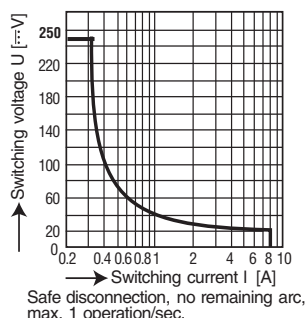
Diagrams



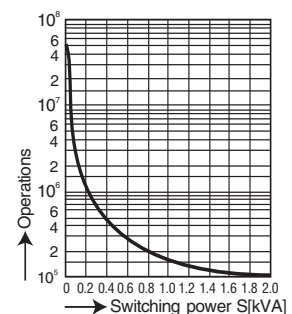
Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve



Mechanical life

Safety Relay 5669 Data

Relay Data				Ordering Information			
Rated Voltage	Voltage Range	Coil Resistance	1 NO/1 NC Type	2 CO Type	2 NO Type	2 NC Type	
5V	4.0 - 8.0V	36 Ω	56.O□69.0511□	56.O□69.0500□	56.O□69.0520□	56.O□69.0502□	
6V	4.8 - 9.6V	50 Ω	56.O□69.0611□	56.O□69.0600□	56.O□69.0620□	56.O□69.0602□	
12V	9.6 - 19.2V	210 Ω	56.O□69.1211□	56.O□69.1200□	56.O□69.1220□	56.O□69.1202□	
20V	16.0 - 32.0V	580 Ω	56.O□69.2011□	56.O□69.2000□	56.O□69.2020□	56.O□69.2002□	
24V	19.2 - 38.4V	820 Ω	56.O□69.2411□	56.O□69.2400□	56.O□69.2420□	56.O□69.2402□	
48V	38.4 - 76.8V	3200 Ω	56.O□69.4811□	56.O□69.4800□	56.O□69.4820□	56.O□69.4802□	
60V	48.0 - 96.0V	5200 Ω	56.O□69.6011□	56.O□69.6000□	56.O□69.6020□	56.O□69.6002□	
110V	88.0 - 176.0V	18000 Ω	56.O□69.1111□	56.O□69.1100□	56.O□69.1120□	56.O□69.1102□	

Protection Class, Example:

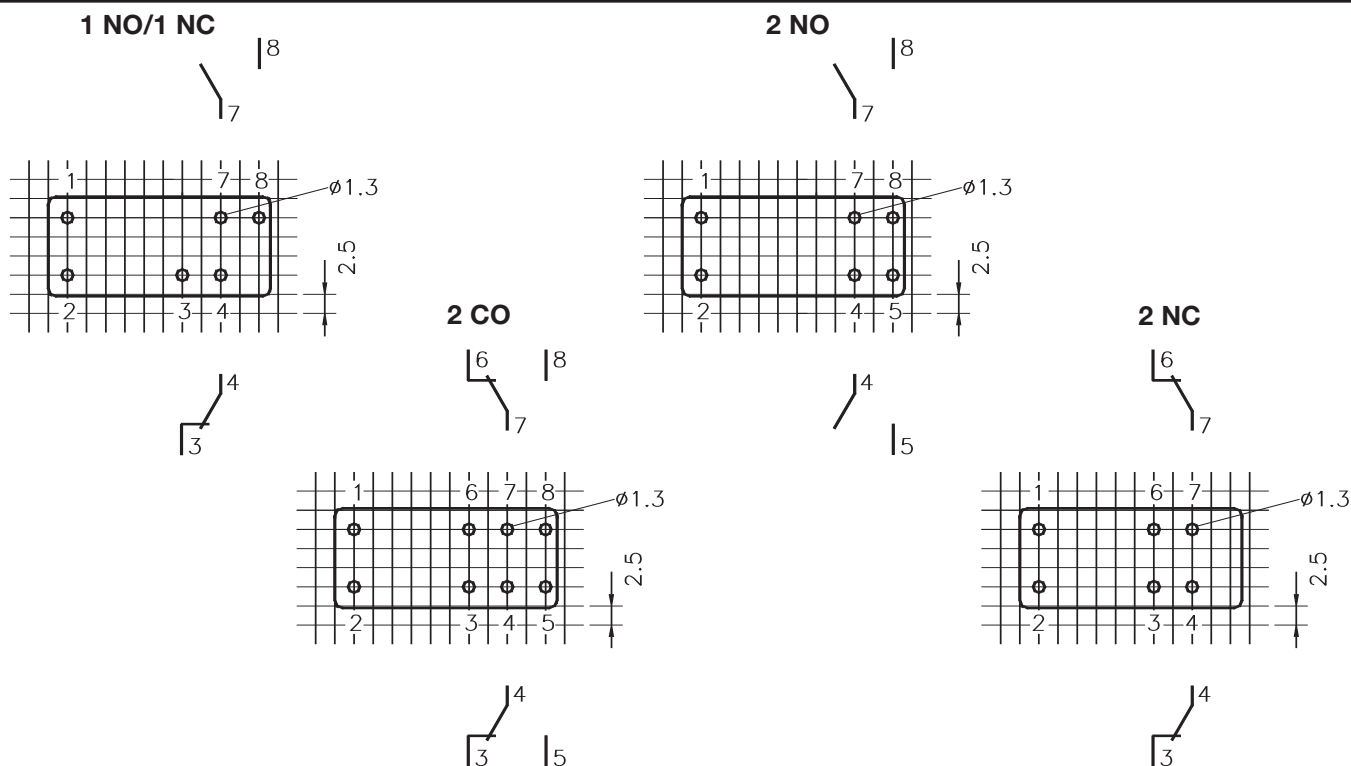
- A IP 40, Flow Solder Proof
W IP 67, Washable

Contact Material, Example:

- C AgSnO₂+2 μ mAu
N AgNi10+2 μ mAu
S AgNi0.15+5 μ mAu

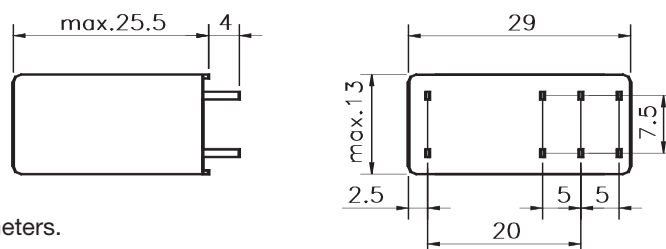
Footprints

(Note: Shown at their actual size.)



Dimensions

(Note: Shown at their actual size.)



Note: All dimensions are shown in millimeters.
To convert to inches, divide by 25.4.

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Altech:](#)

[56.OA11.2431N](#) [56.OA11.1122N](#) [56.5669.DR](#) [56.OA11.0631N](#) [56.OA11.1131N](#)