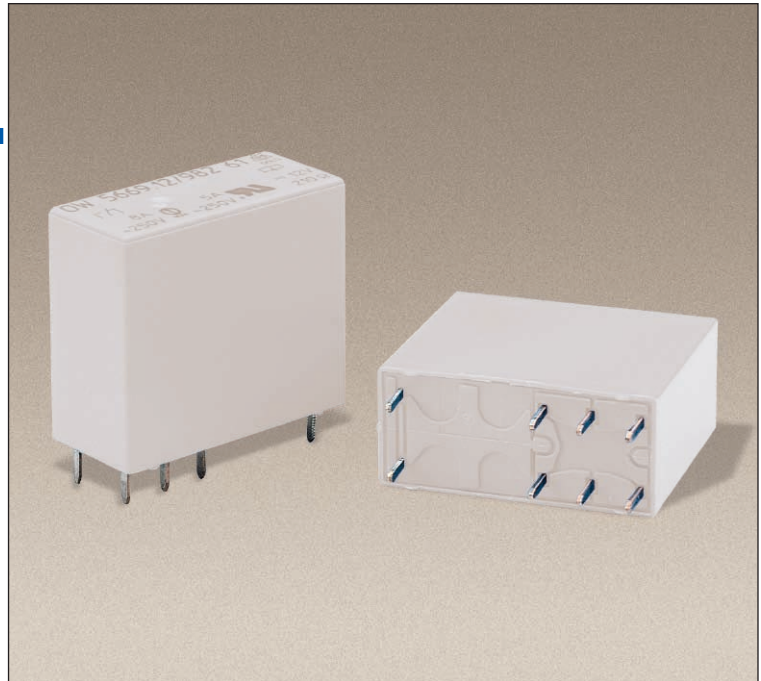


# Safety Relay OA/OW 5669

## Features

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



GERMANY



USA/CANADA  
E146415

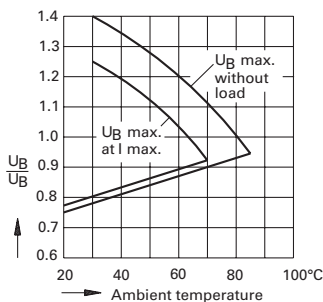


CANADA

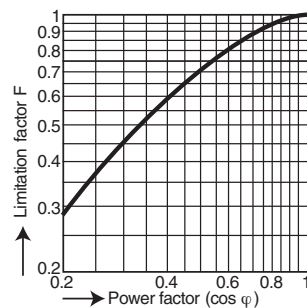
## Technical Data

- **Nominal Coil Voltage** .....5, 6, 12, 20, 24, 48, 60, 110, DC
- **Coil Power Dissipation** .....0.7 W
- **Max. Switching Voltage** .....250V DC, 400V AC
- **Max. Switching Current** .....8 A (2 x 5A simultaneous)
- **Max. Switching Power — DC** .....200W (2 x 160W simultaneous)
- **Max. Switching Power — AC** .....2000VA (2 x 1250VA simultaneous)
- **Contact Switching Rate** .....10 operations per second
- **Relay Operate Time** ..... ≤ 15 ms
- **Relay Release Time** ..... ≤ 12 ms
- **Operation Vibration** .....0.35 mm Ampl. max  
.....@ 10...55Hz, 5g max
- **Contact Arrangements** .....1NO/1NC, 2CO, 2NO, 2NC
- **Contact Material** .....AgNi10+0.2µmAu Standard  
.....AgSnO<sub>2</sub>+0.2µmAu, AgNi0.15+5µmAu Optional
- **Mechanical Life** .....50x10<sup>6</sup> operation cycles
- **Electrical Life** .....AgSnO<sub>2</sub> >2x10<sup>5</sup>, AgNi10 >10<sup>5</sup>  
.....operation cycles @ 230V AC, 6A, cos φ=1
- **Ambient Temperature** .....-20...+85°C
- **Cover Material** .....Polyamide 6
- **Weight** .....15 g
- More detailed data upon request

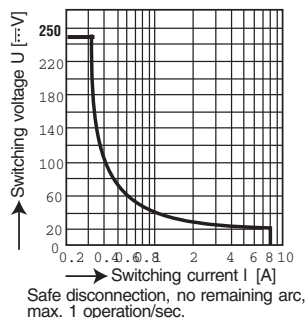
## Diagrams



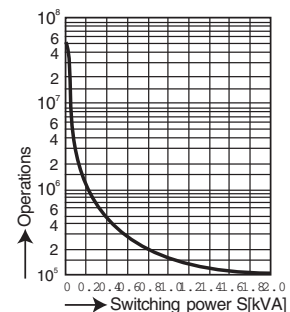
Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads  
Operations =  
Operations (ohmic) x limitation factor F



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□	
10V	8.0 - 16.0V	150 Ω	56.O□69.1011□	56.O□69.1000□	56.O□69.1020□	56.O□69.1002□	
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□	

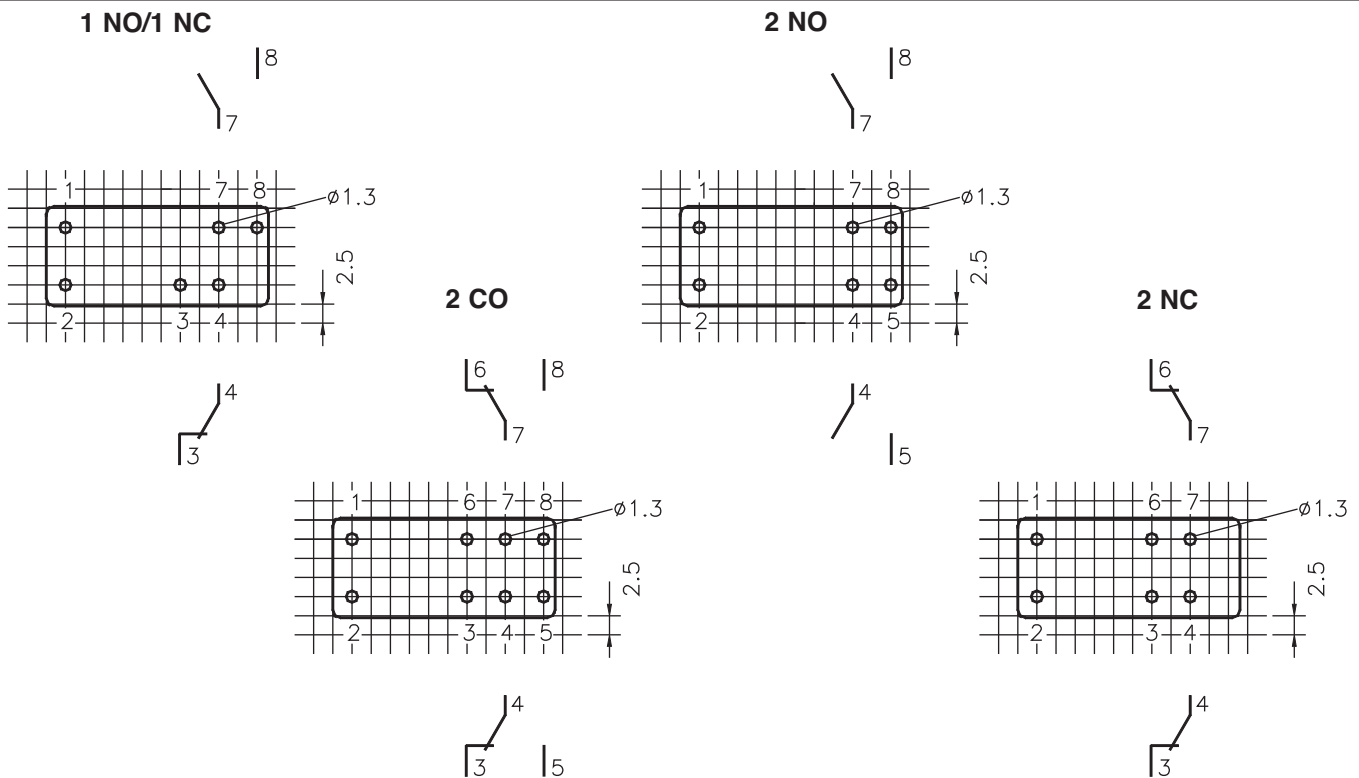
Protection Class, Example:

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

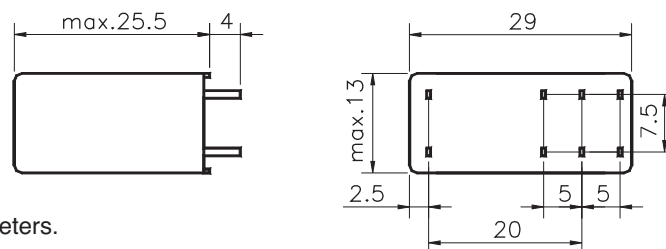
Contact Material, Example:

- C** AgSnO<sub>2</sub>+2μmAu
- N** AgNi10+2μmAu
- S** AgNi0.15+5μmAu

## Footprints



## Dimensions



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