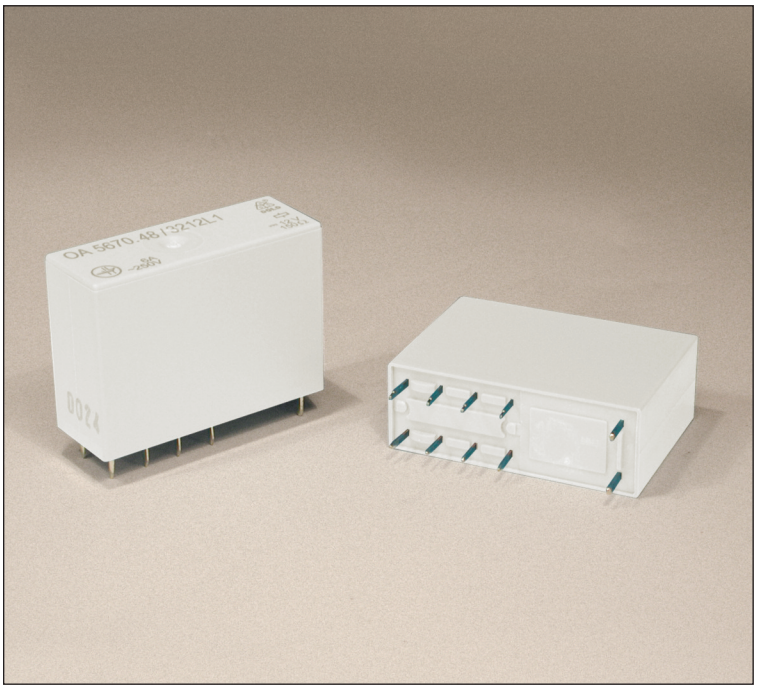
Safety Relay
OA/OW 5670



Features

- 4 output contacts
- International approvals:
  TÜV, 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
  contact/contact ≥ 3KV
- High creeping distance: contact/coil ≥ 8 mm
  contact/contact ≥ 4.5 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

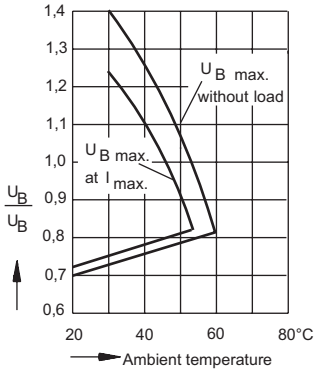
TÜVRheinland Type Approved
GERMANY

C US
USA/CANADA
E146415

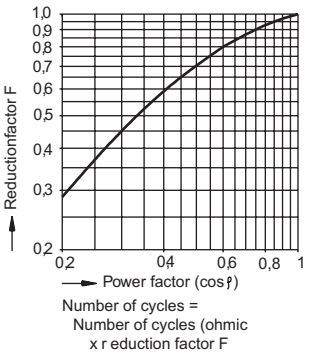
Technical Data

- **Nominal Coil Voltage** .....6, 12, 20, 24, 48, 60, 110, DC
- **Coil Power Dissipation** .....1.0 W
- **Max. Switching Voltage** .....250V DC, 400V AC
- **Max. Switching Current** .....6 A (3 x 6A simultaneous)
- **Max. Switching Power — DC**.....160W
- **Max. Switching Power — AC**.....1500VA
- **Contact Switching Rate** .....10 operations per second
- **Relay Operate Time** .....11 ms
- **Relay Release Time** .....6 ms
- **Operation Vibration** .....0.35 mm Ampl. max
  .....@ 10...200Hz, 5g max
- **Contact Arrangements**.....2NO/2NC, 3NO/1NC
- **Contact Material**.....AgNi10+0.2µmAu Standard
  .....$AgSnO_2$+0.2µmAu, AgNi10+5µmAu Optional
- **Mechanical Life**.....≥50x10^6 operation cycles
- **Electrical Life** .....$AgSnO_2$ >2x10^5, AgNi10 >1.2x10^5
  .....operation cycles @ 230V AC, 6A, cos φ=1
- **Ambient Temperature**.....-40...+75°C
- **Cover Material** .....Polyamide 6
- **Weight**.....20 g
- More detailed data upon request

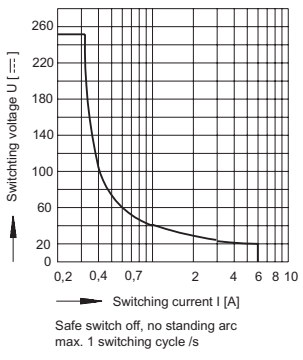
Diagrams



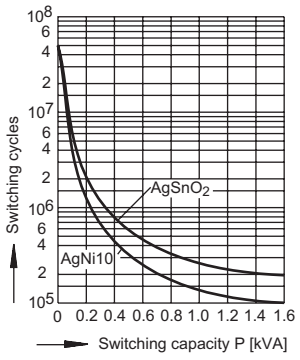
Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve



Mechanical life

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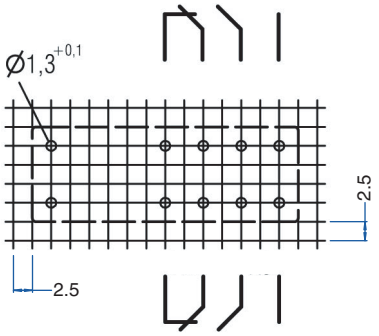
Safety Relay OA/OW 5670 Data

Relay Data			Ordering Information	
Rated Voltage	**Voltage Range**	**Coil Resistance (10%)**	**2 NO/2 NC Type**	**3 NO/1 NC Type**
6V	4.2 - 8.4V	36 Ω	56.O□70.0622□	56.O□70.0631□
12V	8.4 - 16.8V	150 Ω	56.O□70.1222□	56.O□70.1231□
20V	14.0 - 28.0V	400 Ω	56.O□70.2022□	56.O□70.2031□
24V	16.8 - 33.6V	580 Ω	56.O□70.2422□	56.O□70.2431□
48V	33.6 - 67.2V	2300 Ω	56.O□70.4822□	56.O□70.4831□
60V	42.0 - 84.0V	3600 Ω	56.O□70.6022□	56.O□70.6031□
110V	77.0 - 154.0V	12100 Ω	56.O□70.1122□	56.O□70.1131□

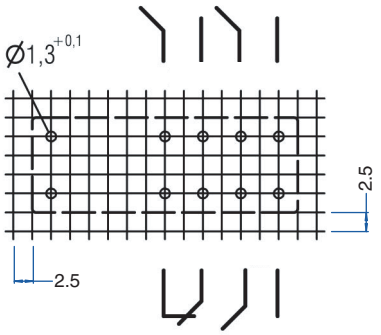
Protection Class, Example:
- A IP 40, Flow Solder Proof
- W IP 67, Washable

Contact Material, Example:
- C $AgSnO_2$+.2µmAu
- N AgNi10+.2µmAu
- S AgNi0.15+5µmAu

Footprints (solder side)

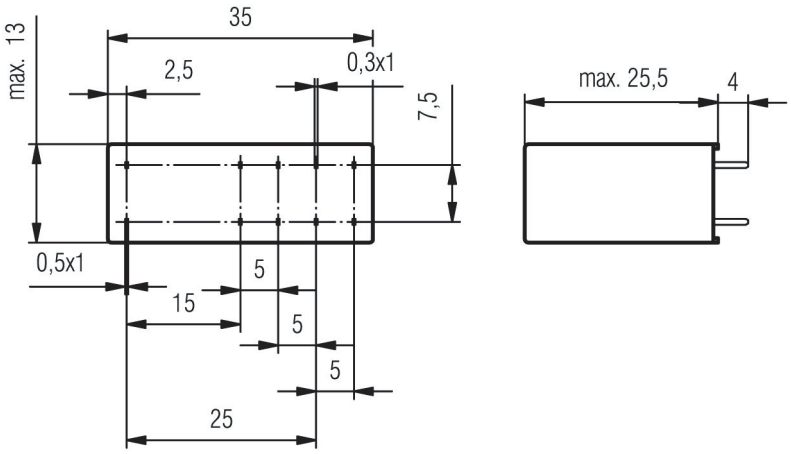


2NO/2NC



3NO/1NC

Dimensions



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