

Safety Relay

OA/OW 5670

Features

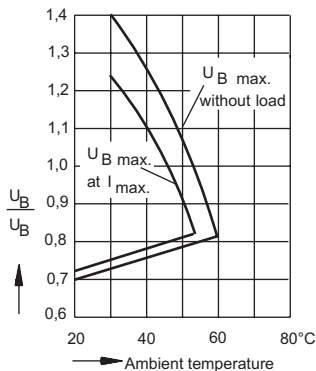
- 4 output contacts
- International approvals: TÜV, UL, cUL
- Quality control check for each safety relay
- Forced-guided contacts, all gold flash plated
- Contact Gap > 0.5 mm throughout life of relay
- Various contact materials, mixed contact material optional
- High coil voltage range
- High breakdown voltage: contact/coil \geq 4 kV
contact/contact \geq 3kV
- High creeping distance: contact/coil \geq 8 mm
contact/contact \geq 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



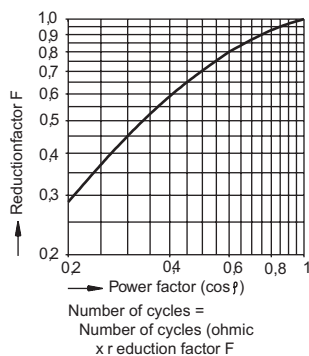
Technical Data

- **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+0.2 μ mAu Standard
.....AgSnO₂+0.2 μ mAu, AgNi10+5 μ mAu Optional
- **Mechanical Life**..... \geq 50x10⁶ operation cycles
- **Electrical Life**AgSnO₂ >2x10⁵, AgNi10 >1.2x10⁵
.....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

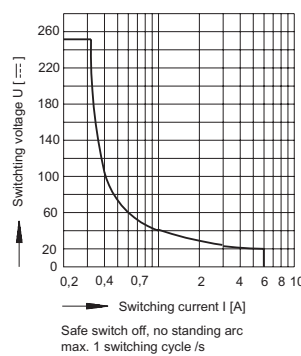
Diagrams



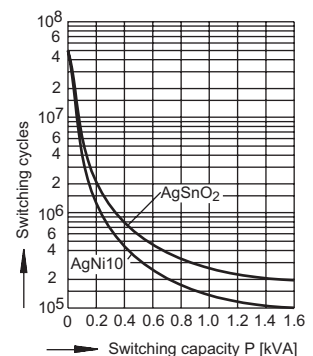
Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve



Mechanical life

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□

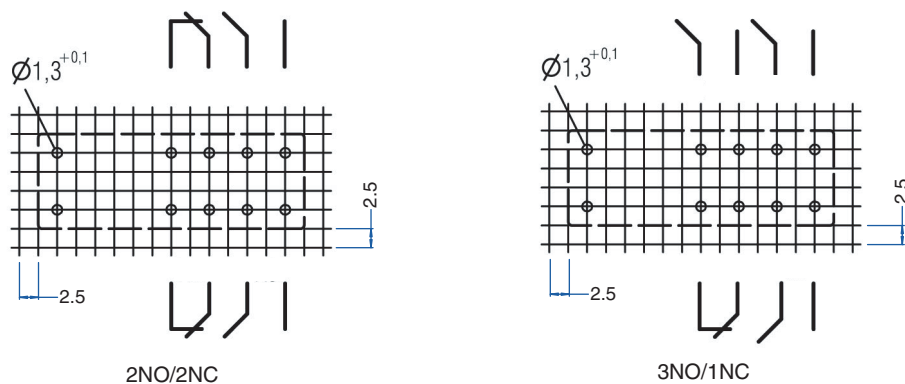
Protection Class, Example: _____

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

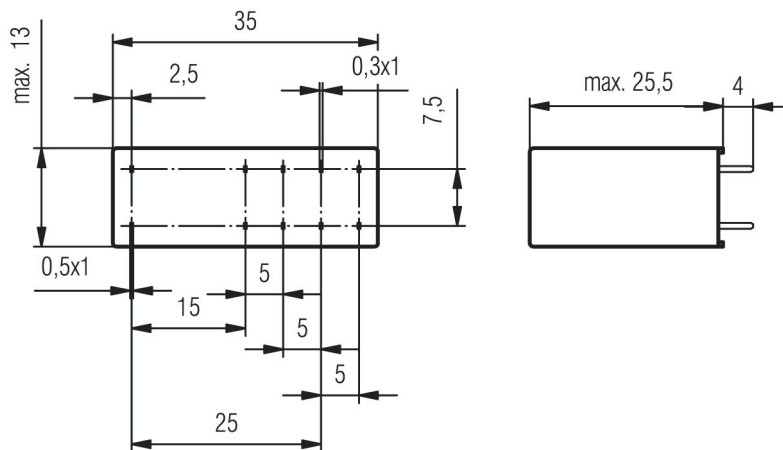
Contact Material, Example: CAgSnO₂+2μmAu

- NAgNi10+.2μmAu
- SAgNi0.15+5μmAu

Footprints (solder side)



Dimensions



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