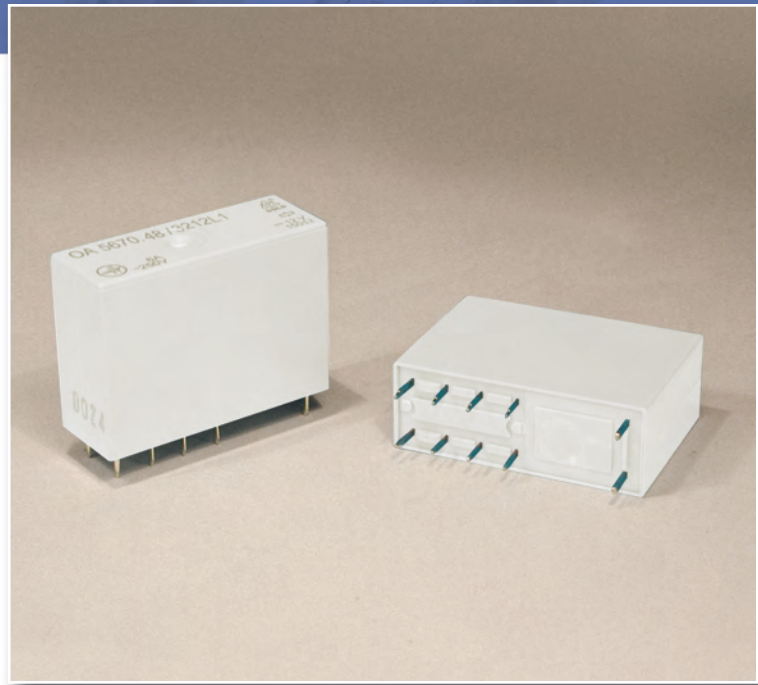


Safety Relay OA/OW 5670

Features

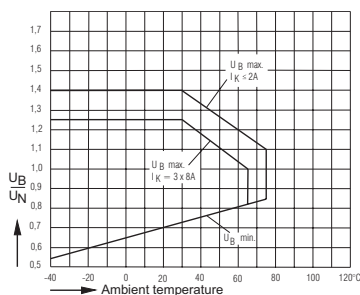
- 4 output contacts
- International approvals:
TÜV, UL, cUL
- Quality control check for each safety relay
- Forced-guided contacts, all gold flash plated
- Contact Gap > 0.5 mm throughout life of relay
- Various contact materials,
mixed contact material optional
- High coil voltage range
- High breakdown voltage: contact/coil ≥ 4 KV
- High creeping distance: contact/contact ≥ 3 KV
contact/coil ≥ 8 mm
contact/contact ≥ 4.5 mm
- Protection Rating
OA Version: RTII solder line proof
OW Version: RTIII wash proof
- Custom design available,
-coil voltage -coil resistance
-contact pressure -operate/release time
- Standard Pack: 42 piece sleeve or 210 piece case



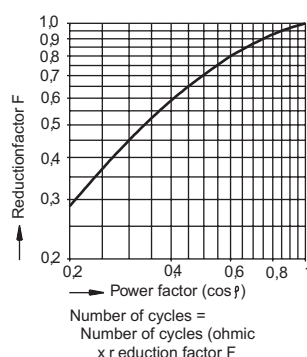
Technical Data

- **Nominal Coil Voltage**6, 12, 20, 24, 48, 60, 110, DC
- **Coil Power Dissipation**1.0 W
- **Min./Max. Switching Voltage**AC/DC10V / 250VDC, 400VAC¹
- **Min./Max. Switching Current**10mA / 6 A (3 x 6A simultaneous)¹
- **Min./Max. Switching Power – DC**0.1W / 200W¹
- **Min./Max. Switching Power – AC**0.1VA / 1500VA¹
- **Contact Switching Rate**10 operations per second
- **Relay Operate Time**11 ms
- **Relay Release Time**6 ms
- **Operation Vibration**10...200Hz; NC 5g; NO 10g
- **Contact Arrangements**2NO/2NC, 3NO/1NC
- **Contact Material**AgNi10+0.2 μ mAu
.....AgSnO₂+0.2 μ mAu, AgNi10+5 μ mAu
- **Mechanical Life** $\geq 50 \times 10^6$ operation cycles
- **Electrical Life**AgNi10 >2.6 $\times 10^5$
.....operation cycles @ 230V AC, 6A, cos ϕ =1
- **Ambient Temperature**-40...+75°C
- **Cover Material**Polyamide 6
- **Weight**21 g
- **Wave Solder Temperature/Duration**260°C/5s
- More detailed data upon request

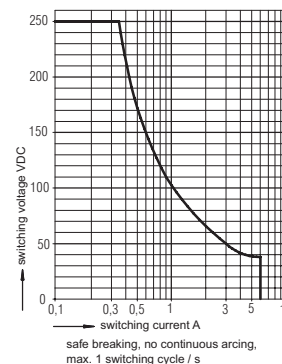
Diagrams



Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve

¹ AgNi10+5 μ mAu contact material has limited switching capacity
(Min./Max. 2V/60VAC/DC, 2mA/0.3A, 10mVA/12VA, 10mW/12W)

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□

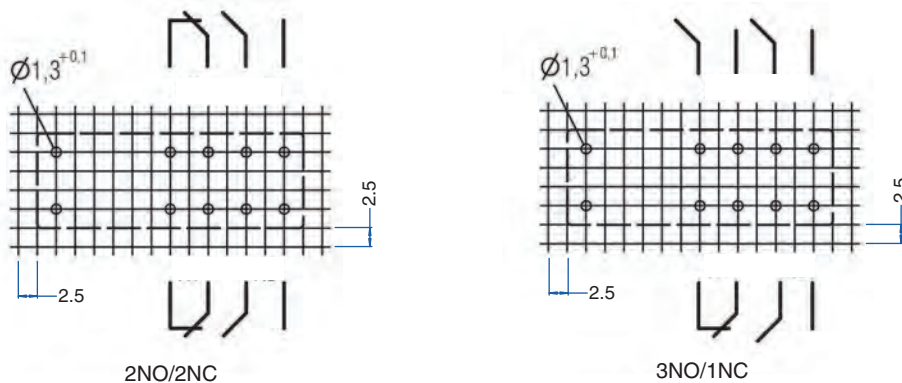
Protection Class, Example:

- A** RTII solder line proof
- W** RTIII wash proof

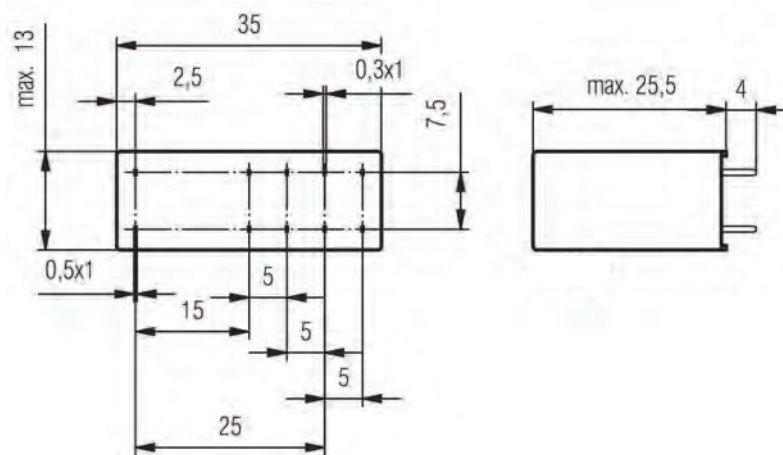
Contact Material, Example:

- C** AgSnO₂+0.2μmAu
- N** AgNi10+0.2μmAu
- S** AgNi10+5μmAu

Footprints (solder side)



Dimensions



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