

Safety Relay

OA 5612

Features

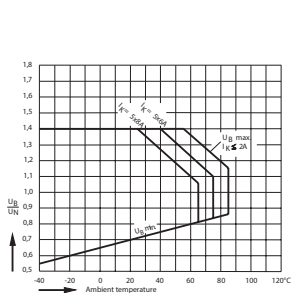
- 6 output contacts
- International approvals: TÜV, UL, cUL
- Quality control check for each safety relay
- Forced-guided contacts, all gold flash plated
- Contact Gap > 0.5 mm throughout life of relay
- Various contact materials, mixed contact material optional
- High coil voltage range
- Very high switching voltage
- High breakdown voltage: contact/coil ≥ 4 KV
contact/contact ≥ 2.5 KV
- High creeping distance: contact/coil ≥ 8 mm
contact/contact ≥ 4.5 mm
- Crown contacts
- Solid connection between coil and contact housing
- Compact size
- Custom design available,
 - coil voltage -IP67 washable
 - contact pressure -coil resistance
 - operate/release time
 - low power dissipation models



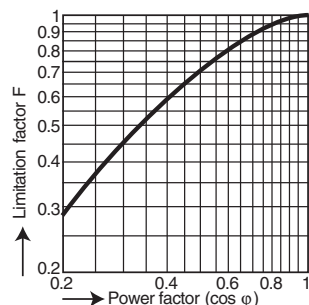
Technical Data

- | | |
|--|--|
| ■ Nominal Coil Voltage6, 12, 24, 48, 60, 110, DC | ■ Protection RatingIP 40 |
| ■ Coil Power Dissipation0.8 - 1.0 W | ■ Contact Arrangements2NO/4NC, 3NO/3NC, 4NO/2NC |
| ■ Max. Switching Voltage250V DC, 400V AC | ■ Contact MaterialAgNi10+0.2 μ mAu, AgSnO ₂ +0.2 μ mAu, AgNi10+5 μ mAu |
| ■ Max. Switching Current8 A | ■ Mechanical Life $\geq 50 \times 10^6$ operation cycles |
| ■ Max. Switching Power—DC200W | ■ Electrical LifeAgSnO ₂ $> 1.5 \times 10^5$, AgNi10 $> 10^5$
.....operation cycles @ 230V AC, 8A, cos $\varphi = 1$ |
| ■ Max. Switching Power—AC2000VA | ■ Ambient Temperature-40...+85°C |
| ■ Contact Switching Rate10 operations per second | ■ Cover MaterialThermoplast |
| ■ Relay Operate Time20 ms | ■ Weight38 g |
| ■ Relay Release Time6 ms | ■ More detailed data upon request |
| ■ Operation Vibration0.35 mm Ampl. max
.....@ 10...200Hz, 3g max | |

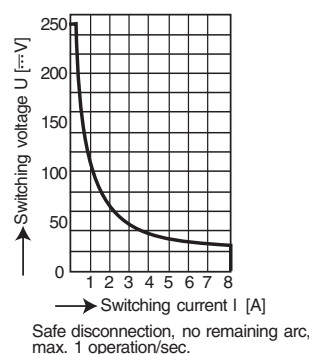
Diagrams



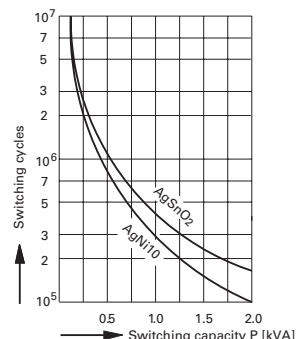
Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve



Mechanical life

Safety Relay OA 5612 Data

Relay Data

Ordering Information

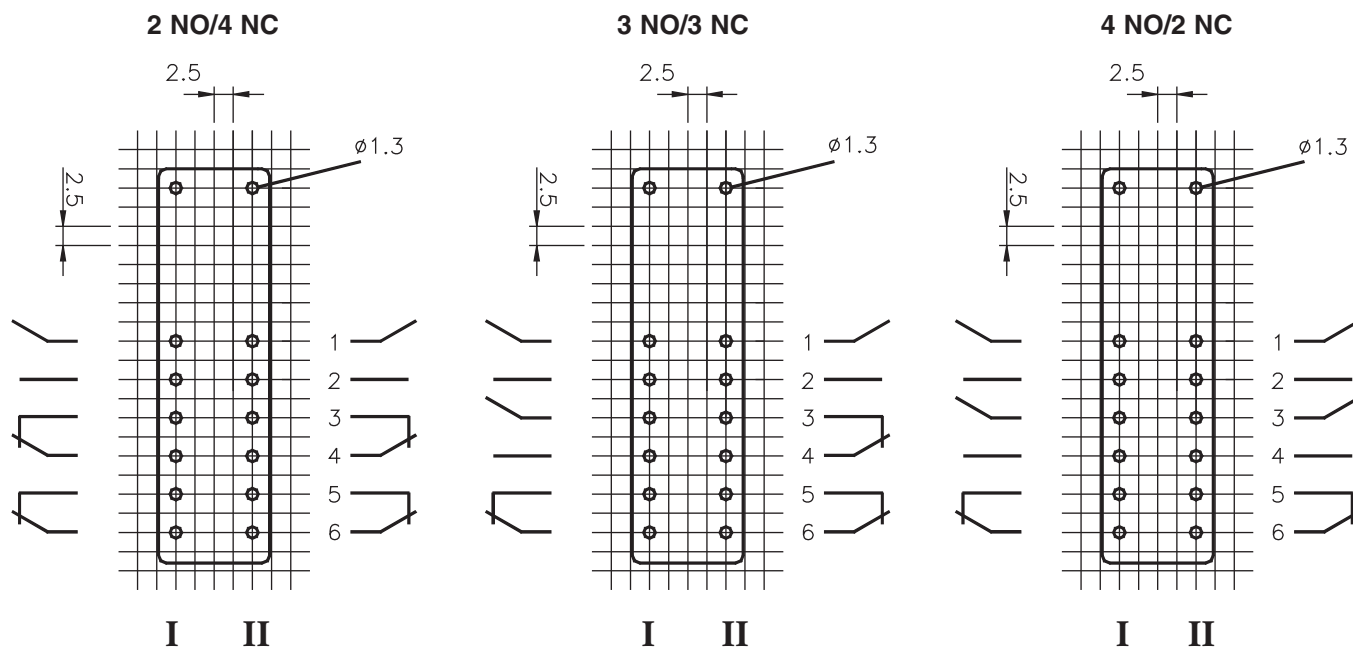
Rated Voltage	Voltage Range	Coil Resistance (10%)	2 NO/4 NC Type	Coil Resistance (10%)	3 NO/3 NC Type	4 NO/2 NC Type
6V	4.2 - 8.4V	36 Ω	56.OA12.0624□	45 Ω	56.OA12.0633□	56.OA12.0642□
12V	8.4 - 16.8V	145 Ω	56.OA12.1224□	180 Ω	56.OA12.1233□	56.OA12.1242□
24V	16.8 - 33.6V	600 Ω	56.OA12.2424□	720 Ω	56.OA12.2433□	56.OA12.2442□
48V	33.6 - 67.2V	2300 Ω	56.OA12.4824□	2880 Ω	56.OA12.4833□	56.OA12.4842□
60V	42.0 - 84.0V	3600 Ω	56.OA12.6024□	4500 Ω	56.OA12.6033□	56.OA12.6042□
110V	77.0 - 154.0V	12100 Ω	56.OA12.1124□	15125 Ω	56.OA12.1133□	56.OA12.1142□

Contact Material, Example: □ AgSnO₂+2μmAu

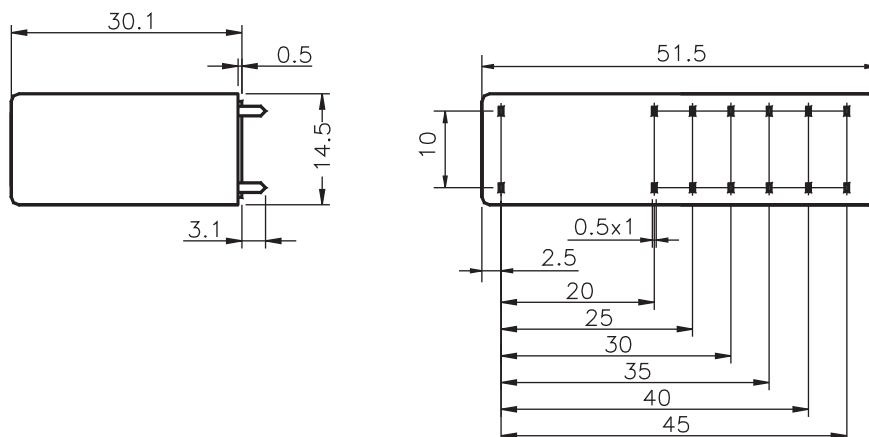
□ AgNi10+2μmAu

□ AgNi10+5μmAu

Footprints (solder side)



Dimensions



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

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