

Safety Relay

OA 5612

Features

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



GERMANY



C US
USA/CANADA

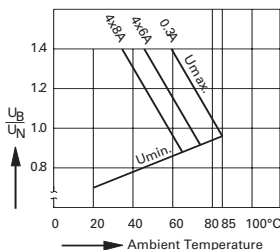


CANADA

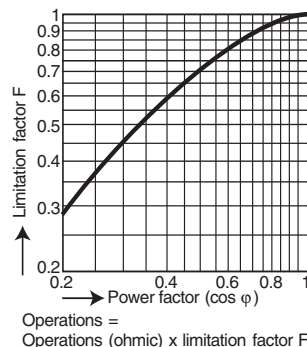
Technical Data

- | | |
|--|---|
| <ul style="list-style-type: none"> n Nominal Coil Voltage.....6, 12, 24, 48, 60, 110, DC n Coil Power Dissipation.....0.8 - 1.0 W n Max. Switching Voltage.....250V DC, 400V AC n Max. Switching Current.....8 A n Max. Switching Power—DC.....200W n Max. Switching Power—AC.....2000VA n Contact Switching Rate.....10 operations per second n Relay Operate Time.....20 ms n Relay Release Time.....6 ms n Operation Vibration.....0.35 mm Ampl. max
@ 10...200Hz, 3g max n Protection Rating.....IP 40 | <ul style="list-style-type: none"> n Contact Arrangements.....2NO/4NC, 3NO/3NC, 4NO/2NC n Contact Material.....AgNi10+0.2µmAu, AgSnO₂ +0.2µmAu, AgNi10+5µmAu n Mechanical Life.....50x10⁶ operation cycles n Electrical Life.....AgSnO₂ >3x10⁵, AgNi10 >2x10⁵
.....operation cycles @ 230V AC, 5A, cos φ=1
.....AgSnO₂ >1.5x10⁵, AgNi10 >10⁵
.....operation cycles @ 230V AC, 8A, cos φ=1 n Ambient Temperature.....-25...+85°C n Cover Material.....Thermoplast n Weight.....38 g n More detailed data upon request |
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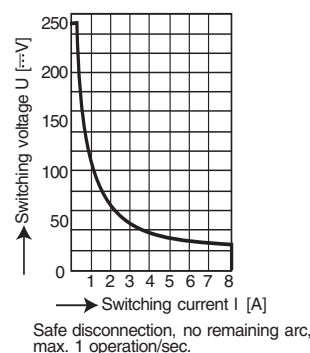
Diagrams



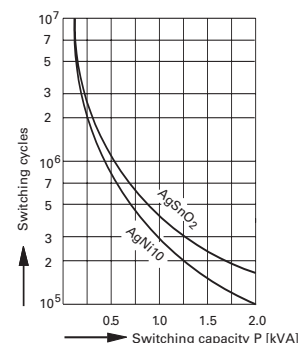
Relay operation voltage vs. ambient temperature



Limitation factor for inductive loads



Maximum switching power curve



Mechanical life

Safety Relay 5612 Data

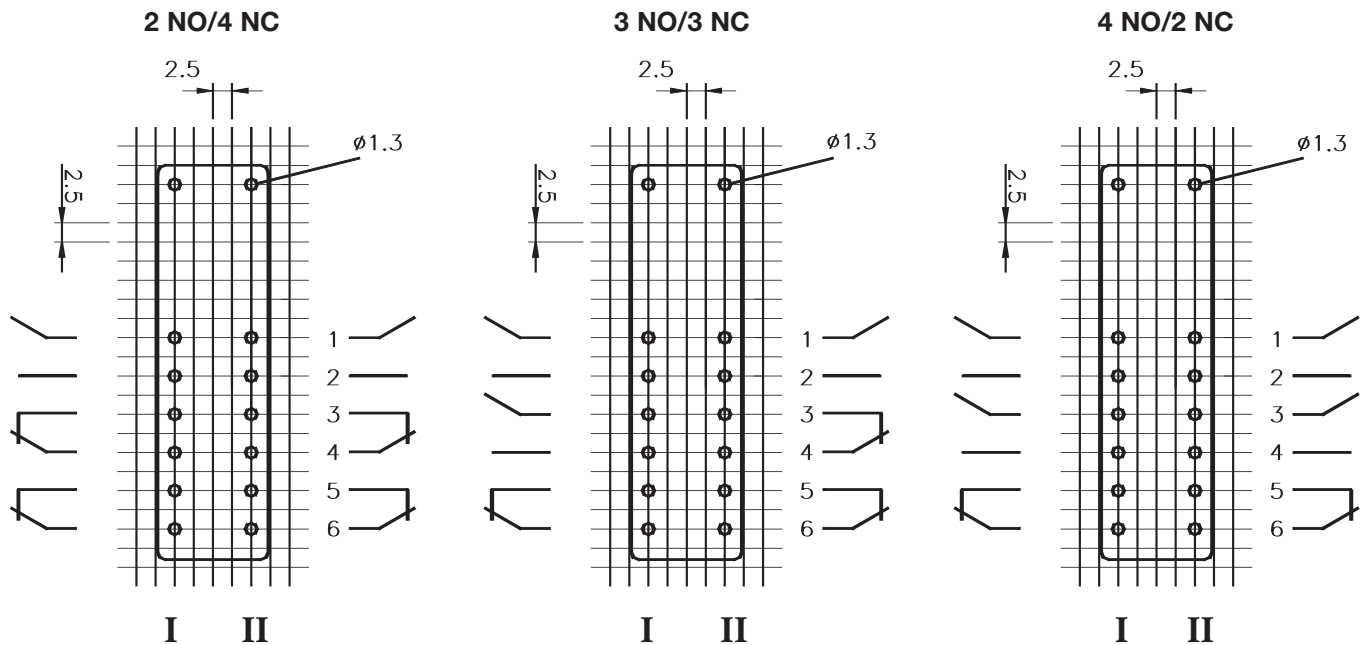
Relay Data				Ordering Information		
Rated Voltage	Voltage Range	Coil Resistance	2 NO/4 NC Type	Coil Resistance	3 NO/3 NC Type	4 NO/2 NC Type
6V	4.2 - 8.4V	36 Ω	56.OA12.0624□	45 Ω	56.OA12.0633□	56.OA12.0642□
12V	8.4 - 16.8V	145 Ω	56.OA12.1224□	180 Ω	56.OA12.1233□	56.OA12.1242□
24V	16.8 - 33.6V	600 Ω	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 - 145.0V	12100 Ω	56.OA12.1124□	15125 Ω	56.OA12.1133□	56.OA12.1142□

Contact Material, Example: □ AgSnO₂+2μmAu

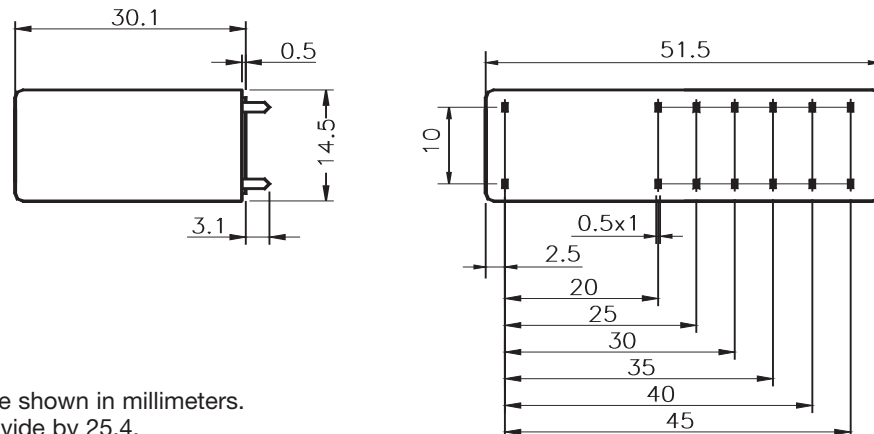
□ AgNi10+.2μmAu

□ AgNi10+5μmAu

Footprints (Note: Shown at their actual size.)



Dimensions (Note: Shown at their actual size.)



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