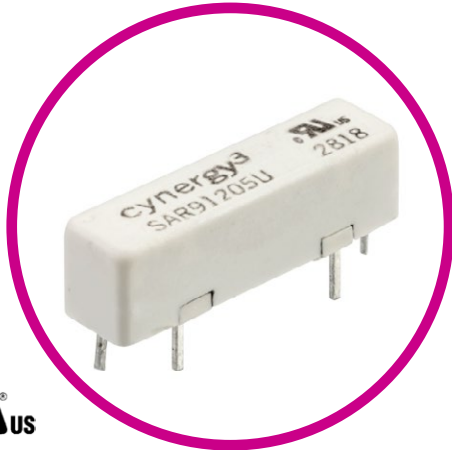




| S(UL) SERIES

UL APPROVED* HIGH VOLTAGE RELAYS



The S(UL) series relay was developed for the high voltage ATE market, where printed circuit board space is at a premium.

Recently approved by UL, the S(UL) series high voltage relay offers a 3kV or 5kV** isolation performance in a 30mm package. Low contact resistance, through the use of Rhodium contact reed switches, makes the S series suitable for many high voltage applications at DC and low frequency, where performance and reliability are paramount.

Features

- Compact footprint
- Designed specifically for High Voltage ATE
- Rhodium contacts for Low Contact Resistance
- 3kV or 5kV** Isolation between contacts and 5kV isolation between contacts and coil
- Excellent lifetime characteristics



SPECIFICATIONS

| Contact | Unit Condition | | 3kV SPNO | | | 5kV SPNO | | |
|---|------------------|-------------------------|--------------------------------------|------------|------------|--------------------------------------|------------|------------|
| Contact Material | | | Rhodium | | | Rhodium | | |
| Isolation across contacts | kV | DC or AC peak | 3 | | | 5* | | |
| Switching Power Max. | W | | 10 | | | 10 | | |
| Switching Voltage Max. | V | DC or AC peak | 20 | | | 20 | | |
| Switching Current Max. | A | DC or AC peak | 0.5 | | | 0.5 | | |
| Carry Current Max | A | DC or AC peak | 1.5 | | | 1.5 | | |
| Capacitance across contacts | pF | coil to screen grounded | <0.1 | | | <0.1 | | |
| Lifetime Operations | dry switching | | 10 ⁹ | | | 10 ⁹ | | |
| | 10W switching | | 10 ⁶ | | | 10 ⁶ | | |
| Contact Resistance | mΩ max (typical) | | 80 (30) | | | 80 (30) | | |
| Insulation Resistance | Ω min (typical) | | 10 ¹⁰ (10 ¹³) | | | 10 ¹⁰ (10 ¹³) | | |
| **DC only, Pin 3 at high voltage | | | | | | | | |
| Coil Specification at 20°C | | | 5V | 12V | 24V | 5V | 12V | 24V |
| Must Operate Voltage | V | DC | 3.7 | 9 | 20 | 3.7 | 9 | 20 |
| Must Release Voltage | V | DC | 0.5 | 1.25 | 4 | 0.5 | 1.25 | 4 |
| Operate Time | ms | diode fitted | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 | 1.0 |
| Release Time | ms | diode fitted | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 | 0.5 |
| Resistance | Ω | | 140 | 600 | 1000 | 140 | 600 | 1000 |

| Contact | Unit Condition | 3kV SPNO | 5kV SPNO |
|--|------------------------|-------------------------|-------------------------|
| Relay | | | |
| Isolation contact/coil | kV | 5 | 5 |
| Insulation resistance contact to all terminals | Ω min (typical) | 10^{10} (10^{13}) | 10^{10} (10^{13}) |
| Environmental Conditions | | | |
| Operating Temp range | $^{\circ}\text{C}$ | -20 to +70 | -20 to +70 |
| Weight | gm | 3.1 | 3.1 |

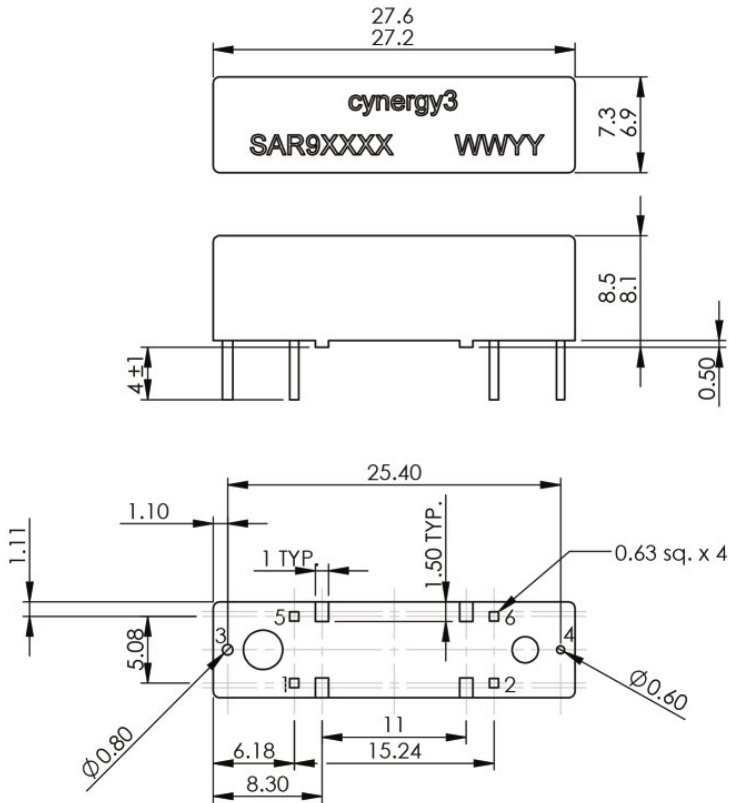
***Consult factory for UL ratings**

These products have been UL approved for use as per pollution degree 2 classification.
 If you require further information as to how this may affect product usage, please contact c3w_sales@cynergy3.com.

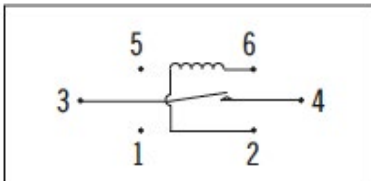


DIMENSIONS

All dimensions are in millimeters.



Relay Circuit Diagram



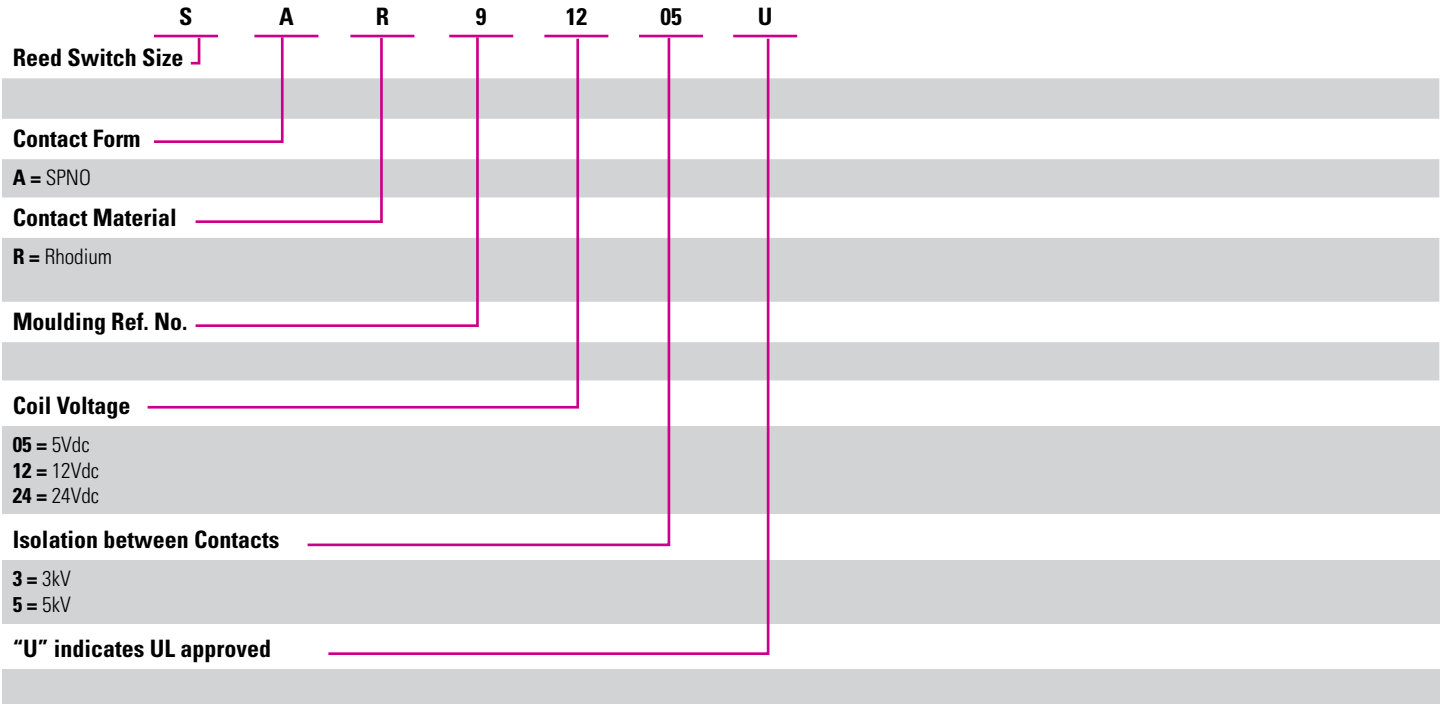
(Viewed from Underside)

Pin 1 is top left, when viewed from above, with respect to part marking



ORDERING OPTIONS

Example : SAR91205U



Made in the UK

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