

S(UL) Series

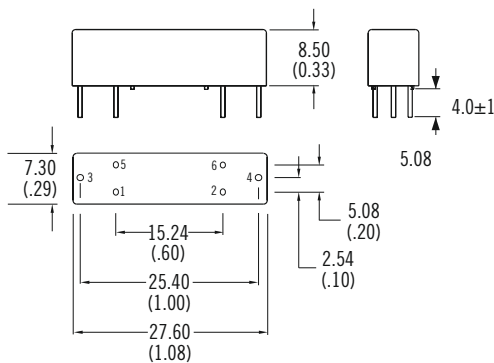
UL Approved* High Voltage Relays



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.

Mechanical Dimensions

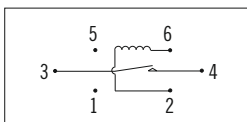
All dimensions are in Millimetres (inches)



PIN SIZE

PINS 1, 2, 5 & 6 0.7 Square (0.025")
PINS 3 & 4 0.8 (0.031") dia.

Relay Circuit Diagram



(Viewed from Underside)

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

- **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**



Contact Specification	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	Ωmin	(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.	10
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

Relay Specification

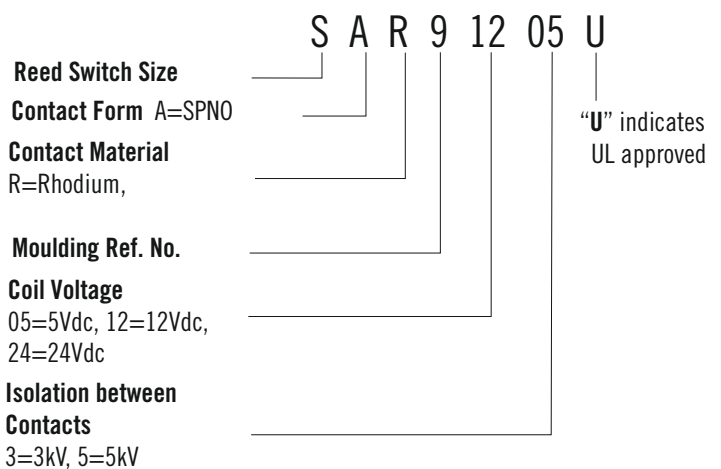
Isolation contact/coil	kV	5	5
Insulation resistance contact to all terminals	Ωmin (typical)	10 ¹⁰ (10 ¹³)	10 ¹⁰ (10 ¹³)
Environmental			
Operating Temp range	°C	-20 to +70	-20 to +70
Weight	gm	3.1	3.1

*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 sales@cynergy3.com.

Part Numbering System



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ISO9001 CERTIFIED

S(UL) Series 2019



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