

## Latching - DC

Nominal voltage	Latch coil resistance in Ohms $\pm 10\%$	Unlatch coil resistance in Ohms $\pm 10\%$	Nominal coil power	Coil voltages	Insulation resistance	Operate voltage (latch/unlatch) at 25°C (77°F) (see note)
5 VDC	14	45	1.2 W	5 to 110 VDC	1,000 M $\Omega$ min. @ 500 VDC	75% of nominal
6 VDC	20	64				
12 VDC	80	275				
24 VDC	330	1,070				
48 VDC	1,290	2,850				
110 VDC	5,125	10,750				

**Note:** 120% of nominal or greater (one second duration single pulse) unlatch voltage - - above this the relay latches again.  
 Maximum continuous voltage: 120% of nominal (one coil only).

## ■ Characteristics

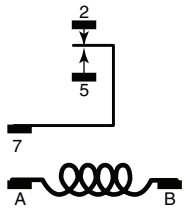
<b>Operate time</b>		15 ms nominal; 20 ms maximum	
<b>Release time</b>		6 ms nominal; 10 ms maximum	
<b>Latch time</b>		13 ms nominal with a one second pulse of nominal voltage (See note)	
<b>Unlatch time</b>		13 ms nominal with a one second pulse of nominal unlatch voltage after latching with a one second pulse of nominal latching voltage (See note)	
<b>Operating ambient temperature</b>	<b>AC: 1 &amp; 2 pole</b>	<b>Operating</b>	-45° to 60°C (-49° to 140°F)
		<b>Storage</b>	-65° to 100°C (-85° to 212°F)
	<b>AC: 3 pole</b>	<b>Operating</b>	-45° to 45°C (-49° to 113°F)
		<b>Storage</b>	-65° to 100°C (-85° to 212°F)
	<b>DC: 1, 2 &amp; 3 pole</b>	<b>Operating</b>	-45° to 70°C (-49° to 158°F)
		<b>Storage</b>	-65° to 100°C (-85° to 212°F)
<b>Insulation material</b>		High quality phenolic	
<b>Duty cycle</b>		Rated for continuous duty operation at 25% overvoltage	
<b>Shock</b>		15 g's 11 $\pm$ 1 ms (non-operating test, no mechanical damage)	
<b>Vibration</b>		0.1" DA or 10 g's, 10 to 55 Hz (operating test, no contact chatter)	
<b>Life expectancy</b>		<b>Electrical at rated load</b>	100,000 operations
		<b>Mechanical</b>	10,000,000 operations
<b>Dielectric strength</b>		Greater than 750 VAC, RMS 60 Hz across open contacts Greater than 2,500 VAC, RMS 60 Hz all other mutually insulated elements	
<b>Terminals</b>		Quick Connect	
<b>Weight</b>		64 g (2.3 oz) open relay 54 g (3.0 oz) enclosed relay	

**Note:** A latch pulse of 50 ms minimum at nominal voltage is recommended to insure positive latching.

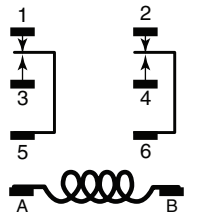
# Terminal Arrangement

## ■ Non-Latching

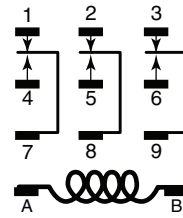
Reference only



1 Form C (SPDT)

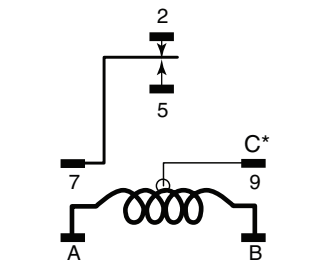


2 Form C (DPDT)



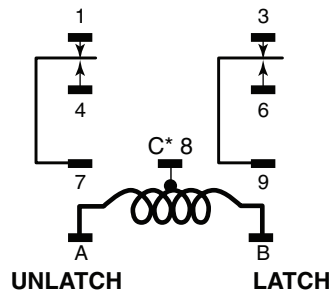
3 Form C (3PDT)

## ■ Latching / Unlatching



UNLATCH LATCH

1 Form C (SPDT)



UNLATCH LATCH

2 Form C (DPDT)

\* C denoted common connection. On 3-pole relays the common connection is a wire lead coming off of the coil. It is not terminated to the relay header. Consult your Omron representative for single coil or isolated double coil models.