

## ■ Contact Ratings

Item	2-pole		4-pole		4-pole (bifurcated)	
	Resistive load ( $\cos\phi = 1$ )	Inductive load ( $\cos\phi = 0.4, L/R = 7\text{ ms}$ )	Resistive load ( $\cos\phi = 1$ )	Inductive load ( $\cos\phi = 0.4, L/R = 7\text{ ms}$ )	Resistive load ( $\cos\phi = 1$ )	Inductive load ( $\cos\phi = 0.4, L/R = 7\text{ ms}$ )
Rated load	5A, 250 VAC 5A, 30 VDC	2A, 250 VAC 2 A, 30 VDC	3 A, 250 VAC 3 A, 30 VDC	0.8 A, 250 VAC 1.5 A, 30 VDC	3 A, 250 VAC 3 A, 30 VDC	0.8 A, 250 VAC 1.5 A, 30 VDC
Carry current	10 A (see note)		5 A (see note)			
Max. switching voltage	250 VAC 125 VDC		250 VAC 125 VDC			
Max. switching current	10 A		5 A			
Max. switching power	2,500 VA 300 W	1,250 VA 300 W	1,250 VA 150 W	500 VA 150 W	1,250 VA 150 W	500 VA 150 W
Failure rate (reference value)	5 VDC, 1 mA		1 VDC, 1 mA		1 VDC, 100 $\mu$ A	

**Note:** Don't exceed the carry current of a Socket in use. Please see page 57.

## ■ Characteristics

Item	All Relays
Contact resistance	100 m $\Omega$ max.
Operate time	20 ms max.
Release time	20 ms max.
Max. operating frequency	Mechanical: 18,000 operations/hr Electrical: 1,800 operations/hr (under rated load)
Insulation resistance	1,000 M $\Omega$ min. (at 500 VDC)
Dielectric strength	2,000 VAC, 50/60 Hz for 1.0 min (1,000 VAC between contacts of same polarity)
Vibration resistance	Destruction: 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude) Malfunction: 10 to 55 to 10 Hz, 0.5 mm single amplitude (1.0 mm double amplitude)
Shock resistance	Destruction: 1,000 m/s <sup>2</sup> Malfunction: 200 m/s <sup>2</sup>
Endurance	See the following table.
Ambient temperature	Operating: -55°C to 70°C (with no icing)
Ambient humidity	Operating: 5% to 85%
Weight	Approx. 35 g

**Note:** The values given above are initial values.

## ■ Endurance Characteristics

Pole	Mechanical life (at 18,000 operations/hr)	Electrical life (at 1,800 operations/hr under rated load)
2-pole	AC:50,000,000 operations min.	500,000 operations min.
4-pole	DC:100,000,000 operations min.	200,000 operations min.
4-pole (bifurcated)	20,000,000 operations min.	100,000 operations min.

■ Approved Standards

**VDE Recognitions (File No. 112467UG, IEC 255, VDE 0435)**

No. of poles	Coil ratings	Contact ratings	Operations
2	6, 12, 24, 48/50, 100/110 110/120, 200/220, 220/240 VAC	10 A, 250 VAC (cosφ=1) 10 A, 30 VDC (L/R=0 ms)	10 x 10 <sup>3</sup>
4	6, 12, 24, 48, 100/110, 125 VDC	5 A, 250 VAC (cosφ=1) 5 A, 30 VDC (L/R=0 ms)	100 x 10 <sup>3</sup> MY4Z AC; 50 x 10 <sup>3</sup>

**UL508 Recognitions (File No. 41515)**

No. of poles	Coil ratings	Contact ratings	Operations
2	6 to 240 VAC 6 to 125 VDC	10 A, 30 VDC (General purpose) 10 A, 250 VAC (General purpose)	6 x 10 <sup>3</sup>
4		5 A, 250 VAC (General purpose) 5 A, 30 VDC (General purpose)	

**CSA C22.2 No. 14 Listings (File No. LR31928)**

No. of poles	Coil ratings	Contact ratings	Operations
2	6 to 240 VAC 6 to 125 VDC	10 A, 30 VDC 10 A, 250 VAC	6 x 10 <sup>3</sup>
4		5 A, 250 VAC (Same polarity) 5 A, 30 VDC (Same polarity)	

**IMQ (File No. EN013 to 016)**

No. of poles	Coil ratings	Contact ratings	Operations
2	6, 12, 24, 48/50, 100/110 110/120, 200/220, 220/240 VAC	10 A, 30 VDC 10 A, 250 VAC	10 x 10 <sup>3</sup>
4	6, 12, 24, 48, 100/110, 125 VDC	5 A, 250 VAC 5 A, 30 VDC	100 x 10 <sup>3</sup> MY4Z AC; 50 x 10 <sup>3</sup>

**LR Recognitions (File No. 98/10014)**

No. of poles	Coil ratings	Contact ratings	Operations
2	6 to 240 VAC 6 to 125 VDC	10 A, 250 VAC (Resistive) 2 A, 250 VAC (PF0.4) 10 A, 30 VDC (Resistive) 2 A, 30 VDC (L/R=7 ms)	50 x 10 <sup>3</sup>
4		5 A, 250 VAC (Resistive) 0.8 A, 250 VAC (PF0.4) 5 A, 30 VDC (Resistive) 1.5 A, 30 VDC (L/R=7 ms)	50 x 10 <sup>3</sup>

**SEV Listings (File No. 99.5 50902.01)**

No. of poles	Coil ratings	Contact ratings	Operations
2	6 to 240 VAC 6 to 125 VDC	10 A, 250 VAC 10 A, 30 VDC	10 x 10 <sup>3</sup>
4		5 A, 250 VAC 5 A, 30 VDC	100 x 10 <sup>3</sup> MY4Z AC; 50 x 10 <sup>3</sup>