

Double Pole, Electrically Held, 10 Amps and Less

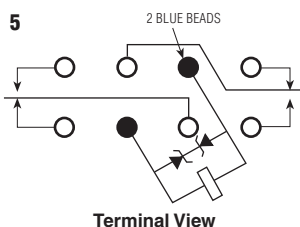
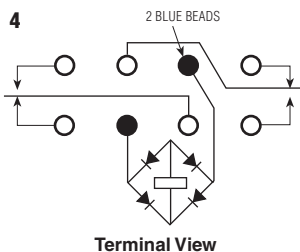
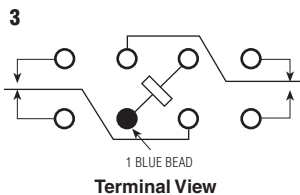
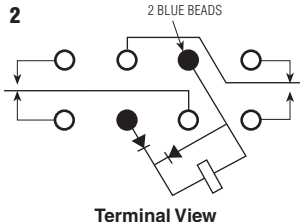
07

Two Pole 10 Amp High Performance Relay

Qualified to
MIL-R-5757/23
MS 27245 & MS 27247

Product Facts

- Hermetically sealed
- Up to 10 amps switching
- High shock & vibration ratings
- Optional terminals & mounting styles
- DC, AC & diode-suppressed coils



Electrical Characteristics

Contact Arrangement —

2 Form C (DPDT)

Contact Material —

Stationary — Silver cadmium oxide

Moveable — Silver cadmium oxide

Contact Resistance —

Before Life — 10 milliohms max.

After Life — 20 milliohms max.

(Measured at 10 A @ 28 Vdc)

Mechanical Life Expectancy —

1 million operations

Coil Voltage — 6 to 120 Vdc, 115 Vac

Coil Power — 4.3 watts max. @ 25°C

Duty Cycle — Continuous

Pick-up Voltage — Approximately

50% of nominal coil voltage

Pick-up Sensitivity — 565 mW

Operating Characteristics

Operate Time —

Std — 10 ms max.

QPL — 15 ms max.

AC Coil — 15 ms max.

Release Time —

Std — 10 ms max.

QPL — 15 ms max.

AC Coil — 20 ms max.

Contact Bounce —

Std — 5 ms max. (N.O. and N.C.)

QPL — 2 ms max. (N.O.)

QPL — 5 ms max. (N.C.)

Dielectric Withstanding Voltage —

Between Open Contacts —

500 Vrms 60 Hz

Between Adjacent Contacts —

1000 Vrms 60 Hz

Between Contacts and Coil —

1000 Vrms 60 Hz

Insulation Resistance —

1,000 megohms min. @ 500 Vdc

Environmental Characteristics

Temperature Range —

-65°C TO +125°C

Weight — 1.3 oz (37 gms) max.

Vibration Resistance —

Standard — 30 G's, 10 to 2,000 Hz

QPL — 20 G's, 10 to 2,000 Hz

Shock Resistance —

100 G's, 6 ±1 ms

QPL Approval —

MIL-R-5757/23

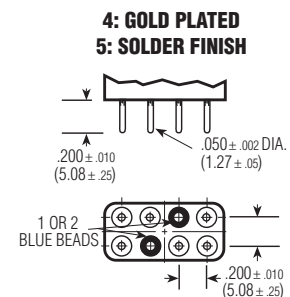
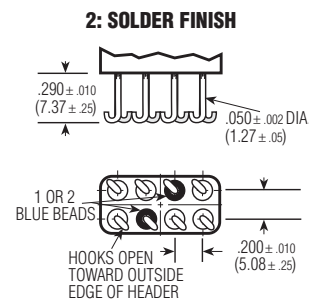
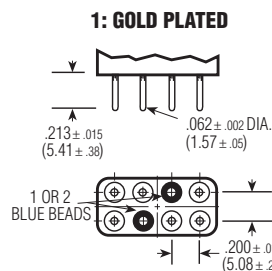
MS 27245

MS 27247

Contact Ratings

Contact Load	Type	Operations Min.
10 A @ 28 Vdc	Resistive	100,000
3 A @ 115 V, 60 Hz	Resistive	50,000
5 A @ 115 V, 400 Hz	Resistive	50,000
6 A @ 28 Vdc	Inductive	50,000
2 A @ 115 V, 60 Hz	Inductive	50,000
2.5 A @ 115 V, 400 Hz	Inductive	50,000
1 A @ 28 Vdc	Lamp	50,000
0.5 A @ 115 V, 60 Hz	Lamp	50,000
0.8 A @ 115 V, 400 Hz	Lamp	50,000
3 A @ 28 Vdc	Motor	50,000
1.5 A @ 115 V, 60 Hz	Motor	50,000
3 A @ 115 V, 400 Hz	Motor	50,000

*All ratings grounded case

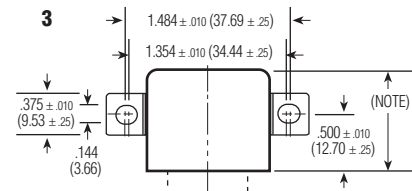
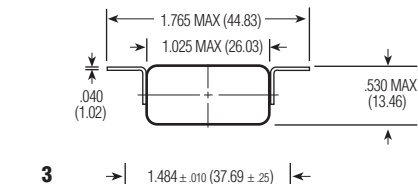
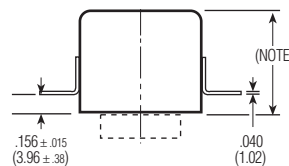
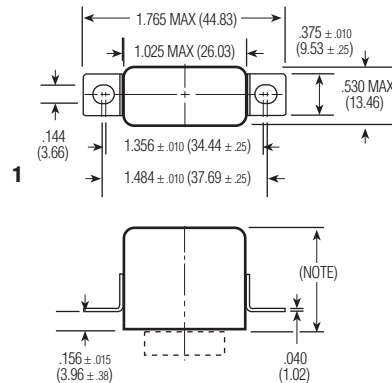
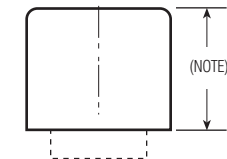
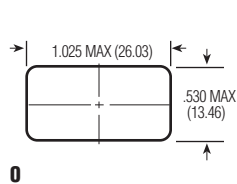


Terminals

Double Pole, Electrically Held, 10 Amps and Less (Continued)

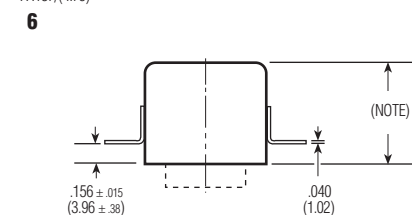
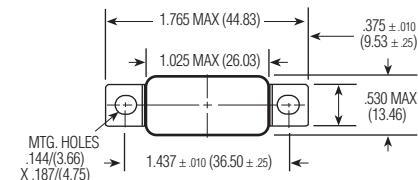
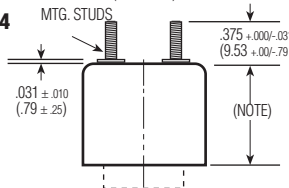
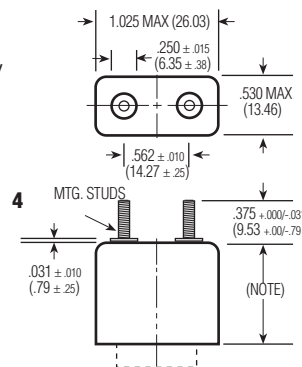
Coil Data

	Nom. Coil Voltage (Vdc)	Coil Resistance in Ohms $\pm 10\%$ @ 25°C	Pickup Voltage Vdc (Max.) @ 25°C	Pickup Voltage Vdc (Max.) @ 125°C	Drop-out Voltage Vdc (Min.) @ 25°C	Drop-out Voltage Vdc (Min.) @ -65°C	Nom. Coil Power (mW) @ 25°C	Max. Coil Voltage	Coil Desig.	Environmental
	6.0	19	3.6	4.5	0.4	0.25	1.89	9.0	AA	Temperature -55°C to +85°C
	12.0	75	7.2	9.0	0.9	0.5	1.92	16.0	AB	
	26.5	300	14.4	18.0	1.8	1.0	2.34	32.0	AC	
	48.0	1,200	29.0	36.0	3.6	2.0	1.92	52.0	AD	
	120.0	7,600	72.0	90.0	9.0	5.0	1.89	122.0	AE	
115 Vac 400 Hz		1,200	72.0	90.0	10.0	5.0	n/a	n/a	AR	Vibration 20G's, 10 to 2,000Hz
115 Vac 60-400 Hz		7,600	72.0	90.0	10.0	5.0	n/a	n/a	AS	
	6.0	19	3.3	4.5	0.4	0.25	1.89	9.0	BA	
	12.0	75	6.5	9.0	0.9	0.5	1.92	16.0	BB	
	26.5	300	13.0	18.0	1.8	1.0	2.34	32.0	BC	
	48.0	1,200	26.0	36.0	3.6	2.0	1.92	52.0	BD	Shock 50G's, 11ms
	120.0	7,600	66.0	90.0	9.0	5.0	1.89	122.0	BE	
115 Vac 400 Hz		1,200	75.0	90.0	10.0	5.0	n/a	n/a	BR	
115 Vac 60-400 Hz		7,600	75.0	90.0	10.0	5.0	n/a	n/a	BS	
	6.0	19	3.7	5.0	0.4	0.25	1.89	9.0	CA	
	12.0	75	7.4	10.0	0.9	0.5	1.92	16.0	CB	Temperature -65°C to +125°C
	26.5	300	14.7	20.0	1.8	1.0	2.34	32.0	CC	
	48.0	1,200	29.4	40.0	3.6	2.0	1.92	52.0	CD	
	120.0	7,600	74.0	100.0	9.0	5.0	1.89	122.0	CE	
115 Vac 400 Hz		1,200	80.0	100.0	10.0	5.0	n/a	n/a	CR	
115 Vac 60-400 Hz		7,600	80.0	100.0	10.0	5.0	n/a	n/a	CS	Vibration 30G's, 10 to 2,000Hz
										Shock 100G's, 6ms



Note:

A07 = .895 max (22.73), Schematic 3 only
B07 = 1.010 max (25.66), Schematic 3 only
B07 = 1.234 max (31.35), Schematics 2, 4 & 5 only



07 Mounting Styles

Specifying a Part Number Example:

Type	Rated	Mountings	Schematic	Terminals	Coil	Testing
B07	B	3	3	2	BC	1

* The part number example shown on this page is for catalog items. For a list of specific QPL part numbers, please see the index in Section 15.