

EL210 RELAY (2PDT/10A MAGNETIC LATCHING)

Built to MIL-PRF-83536

FEATURES

- Balanced force design provides the benefit of consistently high contact pressure, reduced bounce, and less arching leading to extended contact life
- A variety of coil options are available which allow DC control
- Welded hermetically sealed, non-corrosive enclosure
- Wide choice of mounting and terminal styles

APPLICATIONS

- Rail
- Aerospace
- Ground vehicle
- Built to MIL-PRF-83536 for severe condition applications

GENERAL CHARACTERISTICS

- No. of Poles: 2 Form C (2PDT)
- Dimensions: 1.025" x 0.525" x 1.010"
(26.0 x 13.3 x 25.7)mm
- Mounting Code 4: 0.12 lb. (54.5 grams)
All Others: 0.09 lb. (40.9 grams)

SWITCHING CHARACTERISTICS

- Operate Time (Latch and Reset) @ +25°C
Mounting Code 4: 15 ms. Max
All Others: 10 ms. Max
- Bounce Time: 1 ms. Max
- Mechanical Life: Up to 400,000 Cycles

ENVIRONMENTAL CHARACTERISTICS

- Temperature Range: -70°C to +125°C
- Vibration (Sinusoidal): 30g 10-3,000 Hz
- Shock (Any Axis): 200g, 6 ms
- Seal: Hermetic (1×10^{-8} atm cm³/s)



ELECTRICAL CHARACTERISTICS

- Contact Voltage Drop (at Rated Resistive Load)
Initial: 150 mV Max.
After Guaranteed Life: 175 mV Max.
- Dielectric Strength @ Sea Level

Mounting Code 4:	Coil to Case	All Other Points
Initial @ 60 Hz:	1,000 V _{rms}	1,250 V _{rms}
After Life Test @ 60 Hz:	1,000 V _{rms}	1,000 V _{rms}

All Others		
Initial @ 60 Hz:	1,050 V _{rms}	1,500 V _{rms}
After Life Test @ 60 Hz:	1,050 V _{rms}	1,250 V _{rms}
- Insulation Resistance
Initial: 100 MΩ Min, @ 500 Vdc
After Life Tests (Mounting Code 4): 100 MΩ Min, @ 500 Vdc
After Life Tests (All Others): 50 MΩ Min, @ 500 Vdc
Max. Leakage Current (Mounting Code 4): 100 μA RMS

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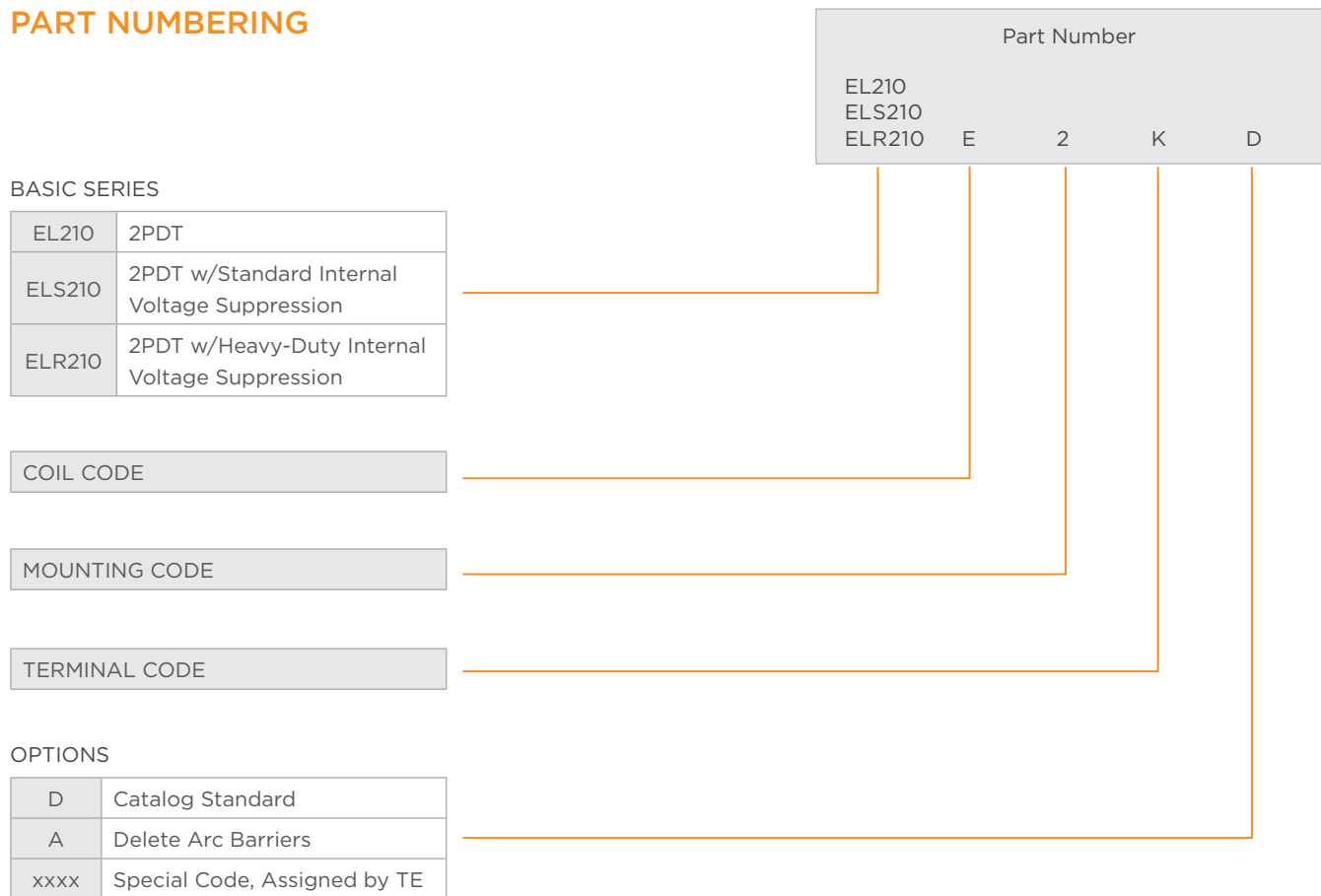
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CONTACT RATING (AMPS)

Type of Load (High Level)	Cycles x 10 ³	28 Vdc	115 Vac 400 Hz 1 Phase	115 Vac 50/60 Hz 1 Phase	115/200 Vac 400 Hz 3 Phase	115/200 Vac 50/60 Hz 3 Phase
Resistive	100	10	10	2.5	10	2.5
Inductive	20	8	8	N/A	8	N/A
Inductive	10	N/A	N/A	2.5	N/A	2.5
Motor	100	4	4	2	4	2
Lamp	100	2	2	1	N/A	N/A

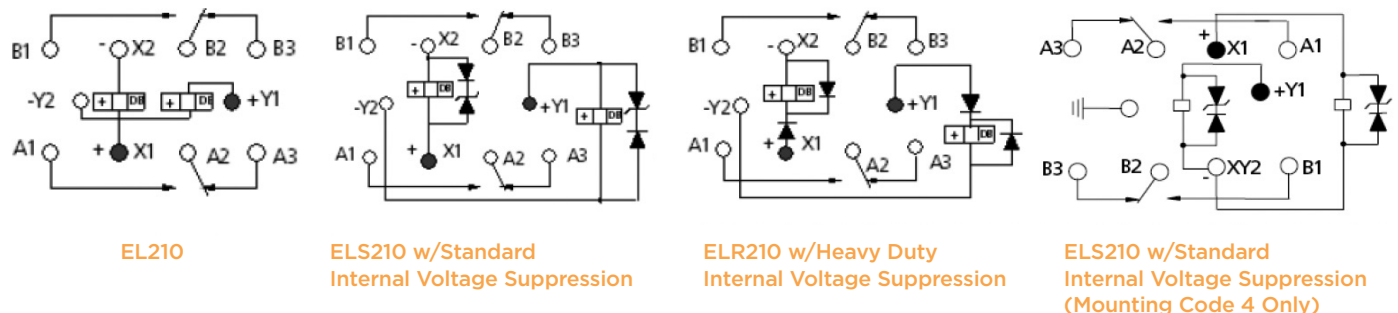
Note: 115 Vac 50/60 Hz life reduced to 10,000 Cycles for all load types

PART NUMBERING



CIRCUIT DIAGRAM

*Y Coil Last Energized



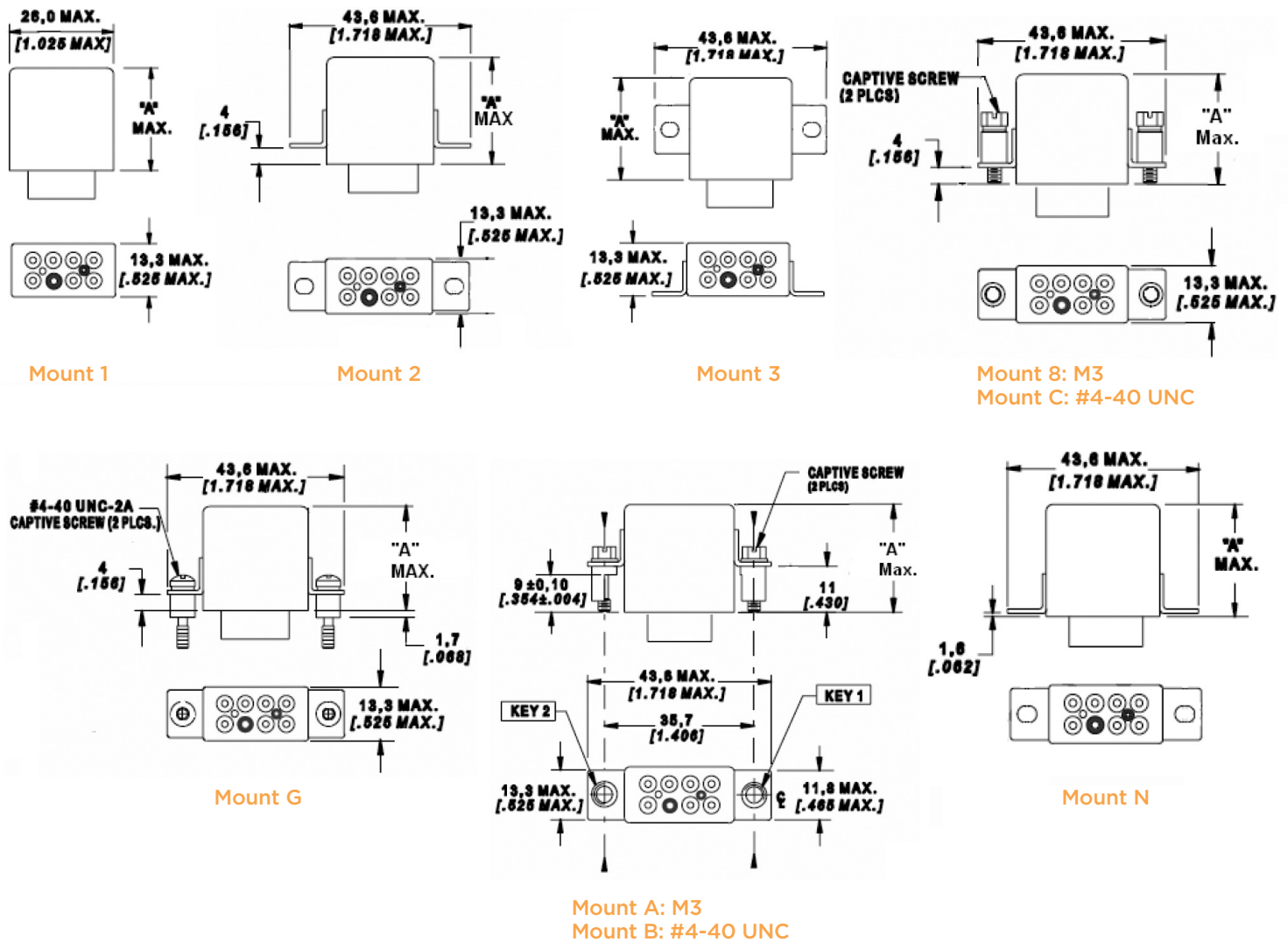
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COIL CODE

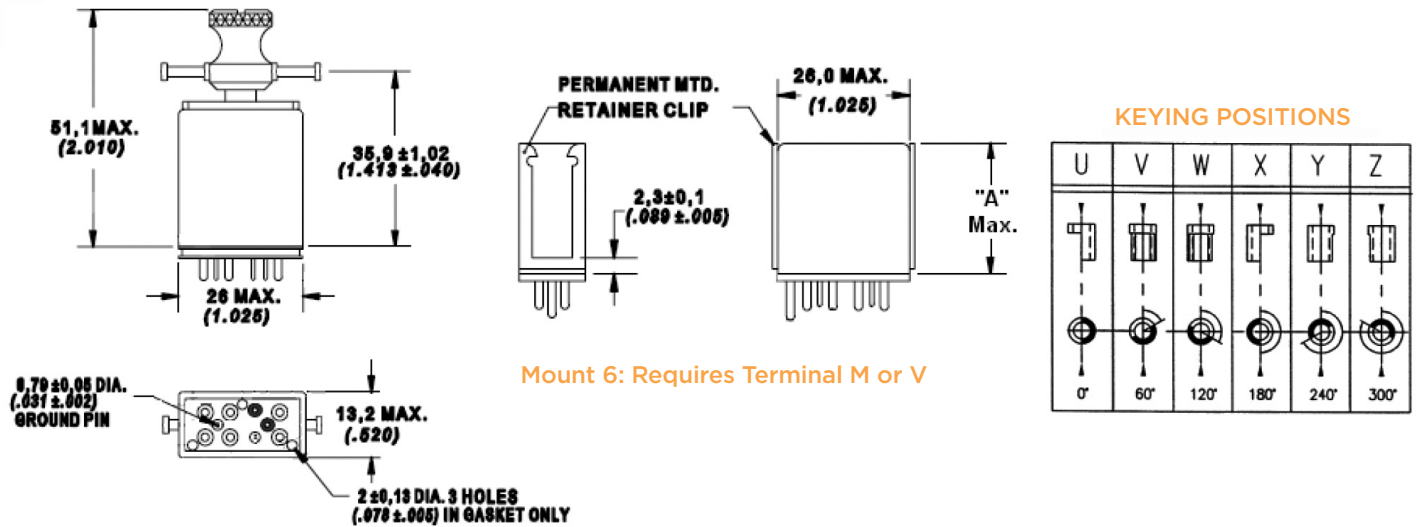
Coil Code	Vdc						
	A	B	D	E	F	G	J
Nominal Coil Voltage	6	12	26.5	28	28	48	110
Maximum Latch and Reset Voltage @ +25°C	3	6	13.5	14	14.5	24	55
Maximum Latch and Reset Voltage @ +125°C	4.5	9	18	18.7	18	36	70
Coil Resistance ($\Omega \pm 10\%$ @ +25°C)	15	60	280	300	450	1000	5000
Maximum Standard Coil Transient Suppression (ELS210 Only) Vdc	-42	-42	-42	-42	-42	-100	-227
Maximum Heavy Duty Coil Transient Suppression (ELR210 Only) Vdc	-5	-5	-5	-5	-5	-5	-5

MOUNTING CODE



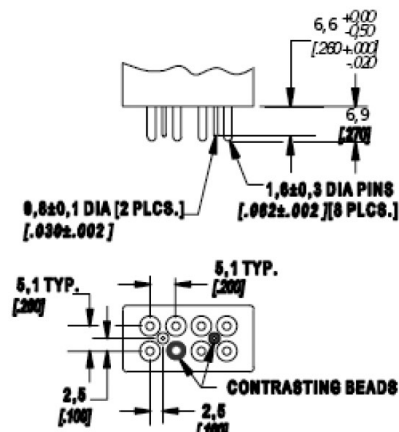
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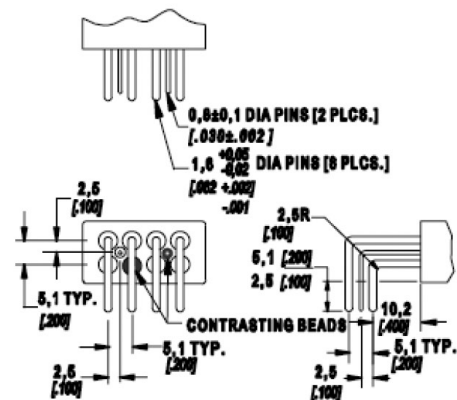


Mount 4: Requires Terminal M

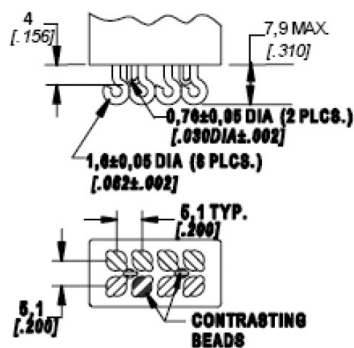
TERMINAL CODE



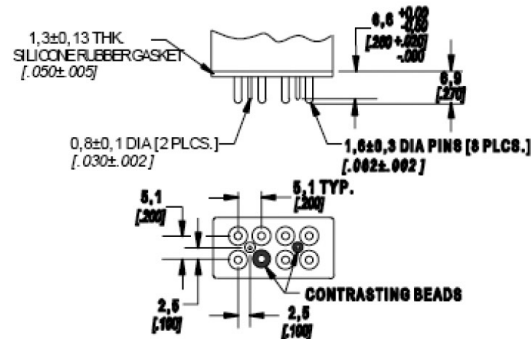
Terminal A: Tin Plated
Terminal B: Solder Dipped



Terminal D: Tin Plated
Terminal E: Solder Dipped

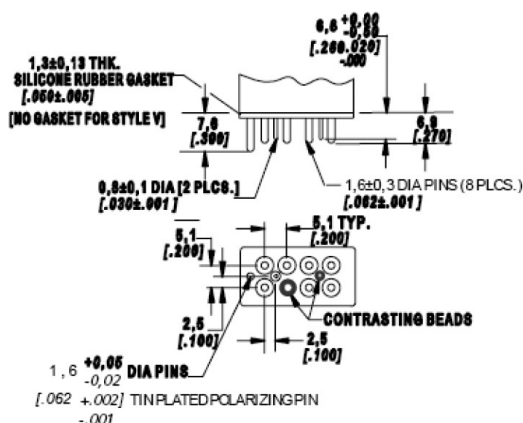


Terminal H: Tin Plated
Terminal J: Solder Dipped

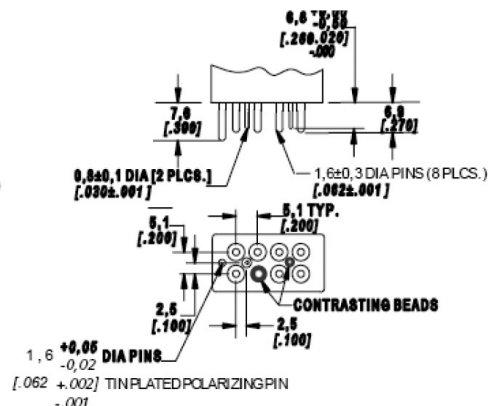


Terminal K: Gold Plated
w/out Polarizing Pin

TERMINAL CODE



**Terminal M: Gold Plated
w/ Polarizing Pin**



Terminal V: Tin Plated

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