

E110 RELAY (1PDT/10A)

Built to MIL-PRF-83536

FEATURES

- Balanced force design provides the benefit of consistently high contact pressure, reduced bounce, and less arcing 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: 1 Form C (1PDT)
- Dimensions: 0.810" x 0.410" x 0.640"
(20.6 x 10.4 x 16.3) mm
- Weight: 0.037 lb. (17 grams)

SWITCHING CHARACTERISTICS

- Operate Time @ +25°C: 6 ms. Max
- Release Time @ +25°C: 6 ms. Max
- Bounce Time: 25°C: 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)
Mounting Code 3: 100g, 6 ms
All Others: 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

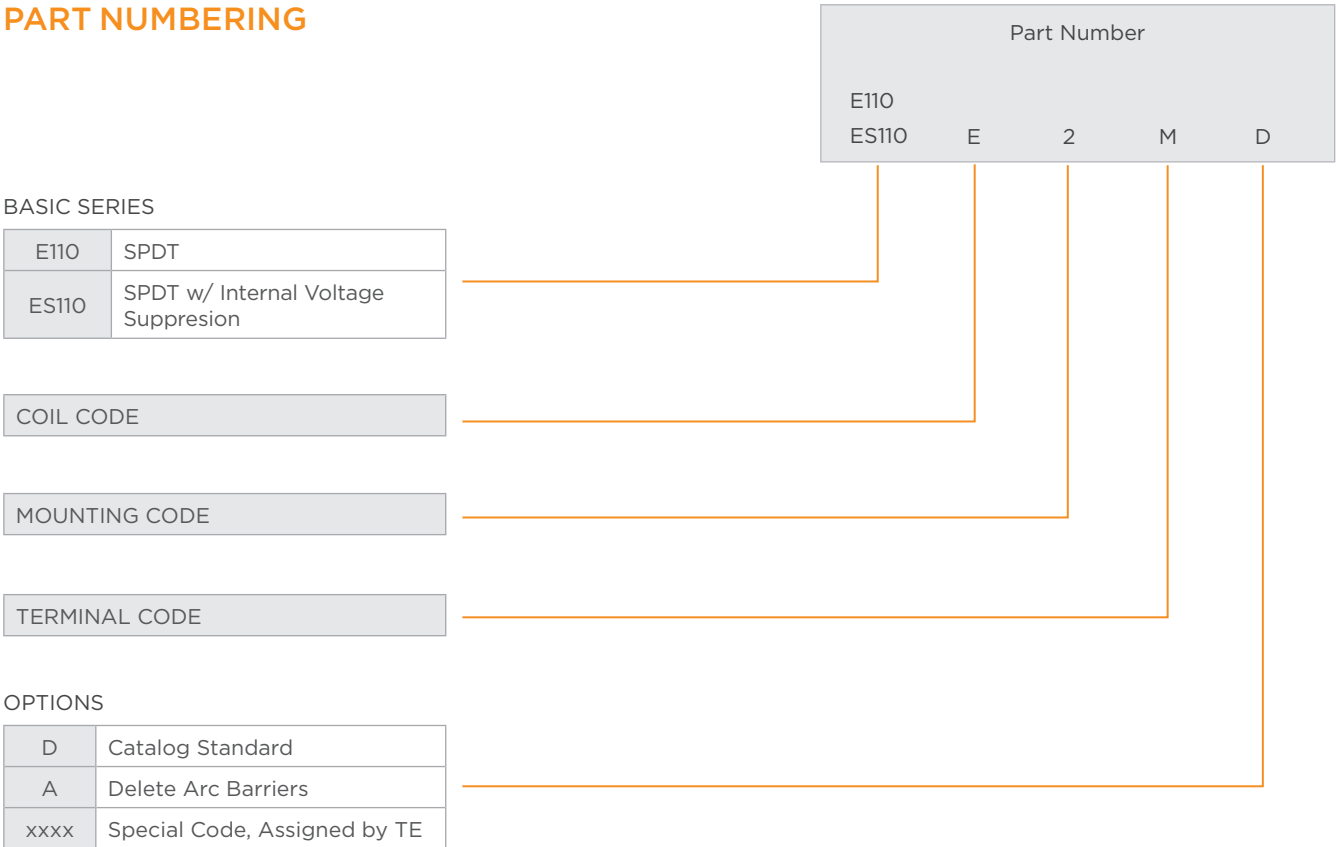
	Coil to Case	All Other Points
Initial @ 60 Hz:	1,000 V _{rms}	1,250 V _{rms}
After Life Test @ 60 Hz:	750 V _{rms}	1,000 V _{rms}
- Insulation Resistance
Initial: 100 MΩ Min, @ 500 Vdc
After Life Tests: 50 MΩ Min, @ 500 Vdc

E110 Relay (SPDT/10A)
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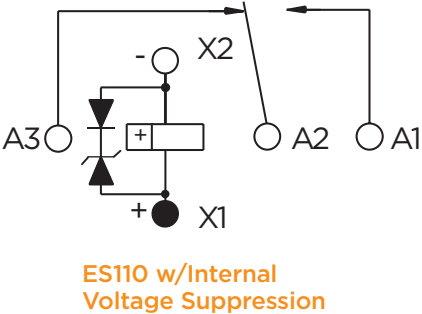
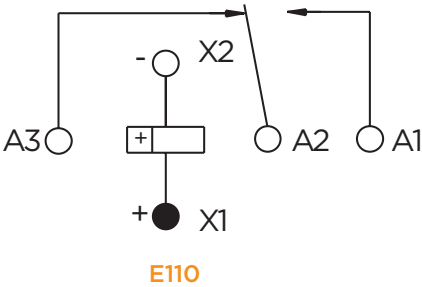
CONTACT RATING (AMPS)

Type of Load (High Level)	Cycles x 10 ³	28 Vdc	115 Vac, 400 Hz 1 Phase
Resistive	50	10	10
Inductive	10	6	N/A
Inductive	20	N/A	8
Motor	50	4	4
Lamp	50	2	2

PART NUMBERING



CIRCUIT DIAGRAM



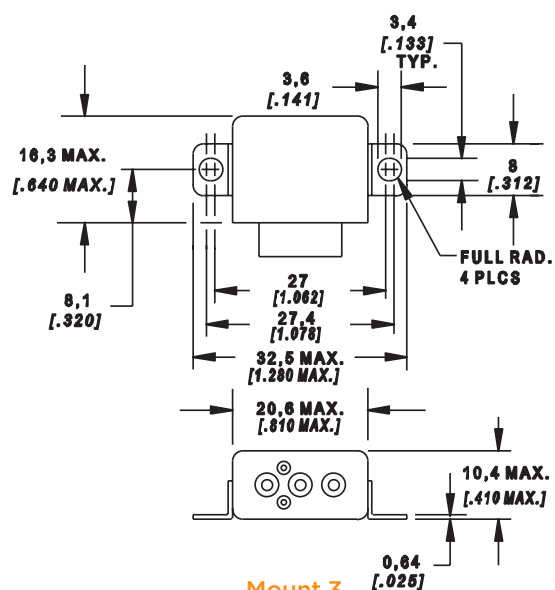
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Coil Code	Vdc				
	A	B	D	E	G
Nominal Coil Voltage	6	12	26.5	28	48
Maximum Pick-Up Voltage @ +25°C	3.2	6.5	13.5	13.5	24
Maximum Pick-Up Voltage @ +125°C	4.5	9	18	18	36
Maximum Hold Voltage @ +125°C	2.3	4.5	7	7	12
Minimum Drop-Out Voltage @ -70°C	0.25	0.5	1.2	1.5	2.4
Coil Resistance ($\Omega \pm 10\%$ @ +25°C)	23	90	440	500	1400
Maximum Coil Transient Suppression (ES110 Only) Vdc	-42	-42	-42	-42	-100

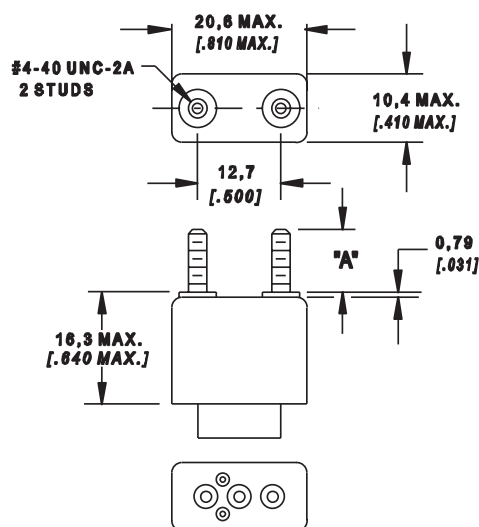
The technical drawings show the 4 PLC8 module from two perspectives:

- Front View (Left):** Shows the module's profile with a maximum height of 16,3 mm [0.640 MAX.] and a maximum width of 20,6 mm [0.810 MAX.]. The bottom section, containing four circular ports, has a maximum height of 10,4 mm [0.410 MAX.].
- Top View (Right):** Shows the module's footprint with a maximum width of 18,3 mm [0.640 MAX.]. The distance between the center of the four ports is 27 mm [1.062]. The total width of the port section is 32,5 mm [1.280 MAX.]. The distance from the left edge to the first port is 10,4 mm [0.410 MAX.]. The distance from the last port to the right edge is 7,9 mm [0.312]. The distance between the first and last port is 27,4 mm [1.076]. The distance from the left edge to the center of the port section is 20,6 mm [0.810 MAX.]. The distance from the center of the port section to the right edge is 3,6 mm [0.141]. The distance from the center of the port section to the right edge of the module is 3,4 mm [0.133].

Mount 2

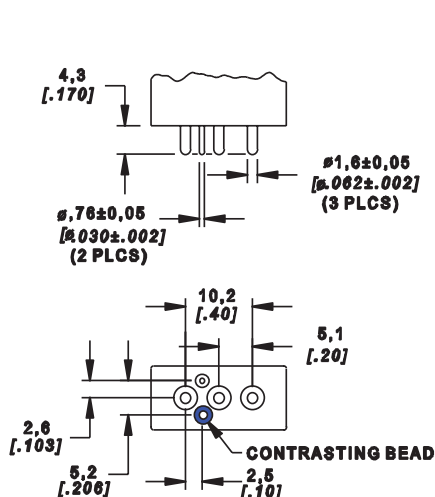


Mount 3

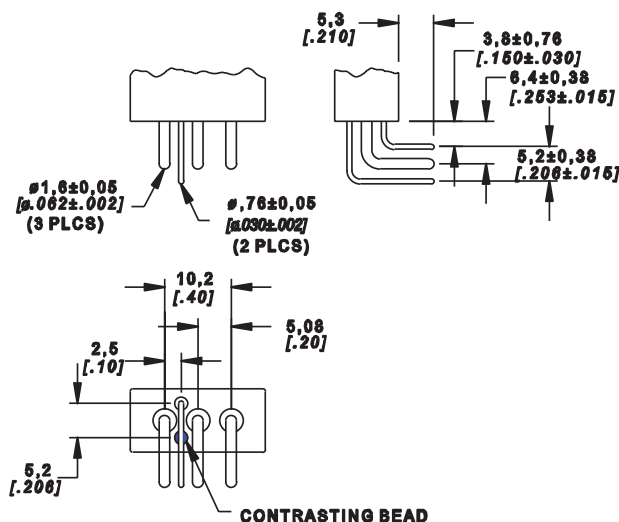


Mount M: A = 9.5 mm (0.375")
Mount R: A = 6.35 mm (0.250")

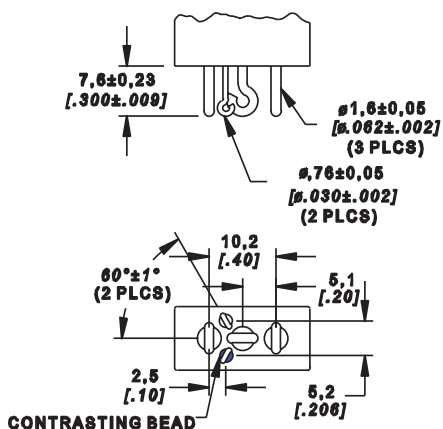
TERMINAL CODE



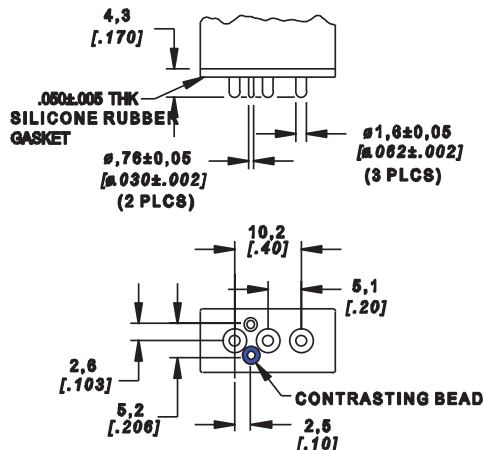
Terminal A: Tin Plated
Terminal B: Solder Dipped



Terminal D: Tin Plated
Terminal E: Solder Dipped



Terminal H: Tin Plated
Terminal J: Solder Dipped



Terminal M: Gold Plated

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