

80 Amp PCB Latching Relay

PC10L-80



FEATURES

- Energy Saving Latching Operation
- 80 Amp Switching Capacity
- 39.0 x 25.0 x 15.0 mm Package Dimensions
- 5.0 mm Shorter than Completion's version
- Single or Dual Coil
- Manual Topside Switch
- RoHS Compliant

cULus E93379

Load Type	Voltage	1 Form A (SPST-NO)
Resistive	277 VAC	80 A

Additional ratings will be tested at UL in 2016

CONTACT DATA

Maximum Switching Power		23,000 VA
Maximum Switching Voltage		350 VAC
Maximum Switching Current		80 A
Material		AgSnO ₂
Initial Contact Resistance		≤ 20 mΩ
Service Life	Mechanical	5 X 10 ⁶
	Electrical	1 X 10 ⁵

CHARACTERISTICS

Operate Time	≤ 15 msec
Release Time	≤ 15 msec
Pulse Magnitude	≥ 50 msec
Insulation Resistance	1,000 MΩ min at 500 VDC
Dielectric Strength	50 Hz 1,500 V Between Contact
	50 Hz 4,000 V Between Contacts and Coil
Shock Resistance	98 m/s ² 11 msec Functional
	980 m/s ² 11 msec, Survival
Power Consumption	Single Coil: 1.5 W; Double Coil: 2 X 3.0 W

Creep	8 mm
Vibration Resistance	10 - 55 Hz Double Amplitude 1.5 mm
Terminal Strength	10 N
Solderability	235 °C ± 2°C 3 sec ± 0.5 sec
Operating Temperature	- 40 to 70°C
Storage Temperature	- 40 to 125°C
Relative Humidity	85% at 40°C
Weight	30 grams

ORDERING INFORMATION

Example:	PC10L-80	-1A	-3	- Nil	- D	- R	- X
Model:	PC10L-80						
Contact Form:	1A						
Coil Voltage:	6, 12, 24, 48						
Enclosure:	Nil: Dust Cover						
Coil:	Nil: Single Coil 1.5 W, D: Double Coil 2 X 3.0 W						
Polarity:	Nil: Standard, R: Reverse Polarity						
RoHS Compliant:	-X						

Box Quantity: 1000 ; Inner Box 500

COIL DATA

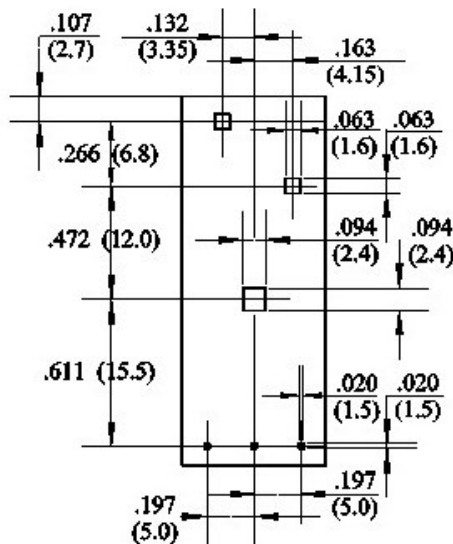
Coil Voltage		Coil Power		Must Operate Voltage Max (VDC)
		Resistance (Ohms ± 10%)		
Rated	Maximum	Single Coil 1.5 Watts	Dual Coil 2 x 3.0 Watts	
6	7	24	12 + 12	
9	10.6	54	27 + 27	
12	14.4	96	48 + 48	
24	28.8	384	192 + 192	
48	56	1,536	768 + 768	

Pulse Magnitude ≥ 50 ms;

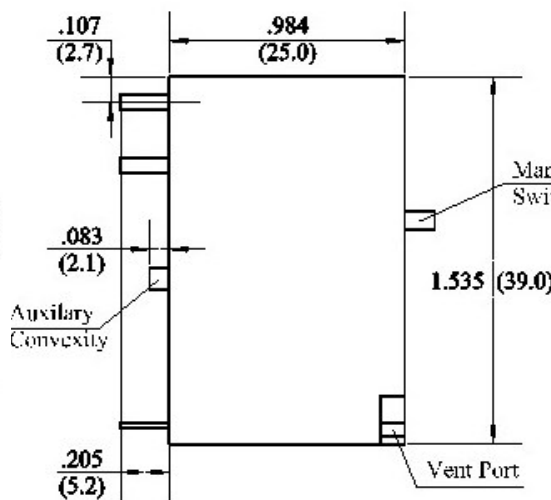
NOTES:

With the Dual Coil Version, the Latch and Reset Coils should not be pulsed at the same time for it is possible to set the relay into a magnetically neutral position. Coils should not be pulsed with less than the rated coil voltage and the pulse width should be a minimum of three times the specified operate time. If not, it is possible for the relay to settle in a magnetically neutral position.

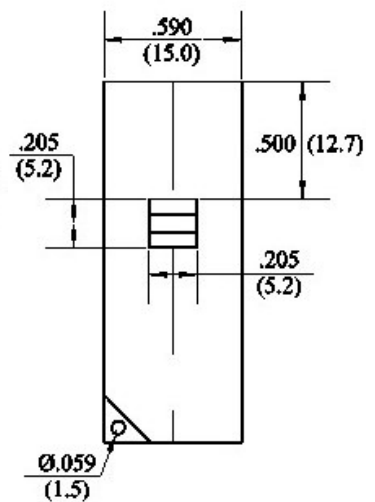
DIMENSIONS (inches/mm)



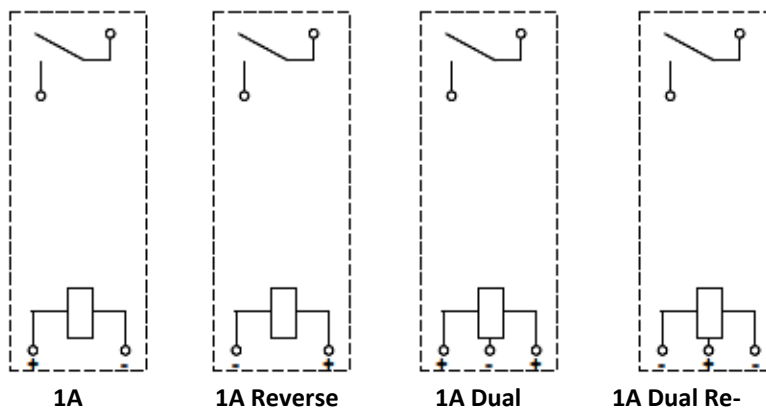
Bottom View of Relay



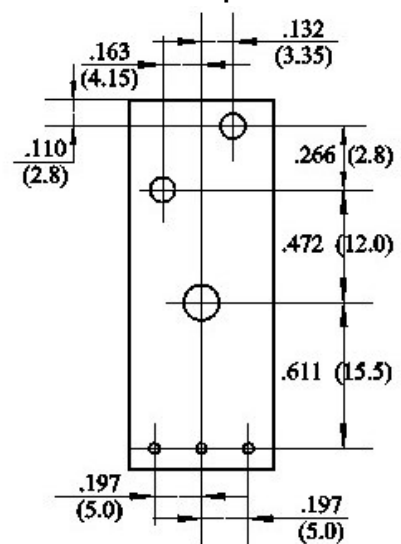
Side View of Relay



Top View of Relay



Wire Diagrams



PC Board Layout Top View



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