



**Application Notes:**

101  
102  
103D  
007

- Balanced armature, nonlatching hermetically sealed relay

- Contact arrangement **2 PDT**

- Coil Supply **Alternating current**

- Qualified to the performance standards of **MIL-PRF-6106**

- Available in **SPACE** and **Hi-REL** quality

### PRINCIPLE TECHNICAL CHARACTERISTICS

• Contacts rated at	<b>28 Vdc; 115 Vac, 400 Hz, 1 Ø</b> and <b>115/200 Vac, 400 Hz, 3 Ø</b>
• Weight	0.44 lbs. max
• Dimensions	1.62 x 2.50 x 2.60 in. max
• Balanced-force design, all welded construction	
• Hermetically sealed, corrosion protected metal can	
• No make before break	
• Special models available upon request	

### CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type [1]	Load current in Amps			
	28 VDC	115 Vac 400Hz	115/200 Vac 400 Hz, 3Ø	120/208 Vac 50/60 Hz 1 & 3 Ø [2]
Resistive	10	10	10	6
Inductive [7]	10	10	10	4
Motor	6	6	6	3
Lamp	2	2	2	1.5

## COIL CHARACTERISTICS (Vdc)

COIL DATA	Vdc	115 Vac 400 Hz [3]	Suppressed Vdc [4]
Nominal operating voltage	28	115	28
Maximum operating voltage	30	124	30
Maximum Pick-up voltage @ +125° C	18	90	18
Drop-out voltage, max	7	30	7
Coil resistance $\Omega \pm 10\%$ at +25° C	160	-	160
Coil current max. mA at +25° C	-	55	-

## GENERAL CHARACTERISTICS

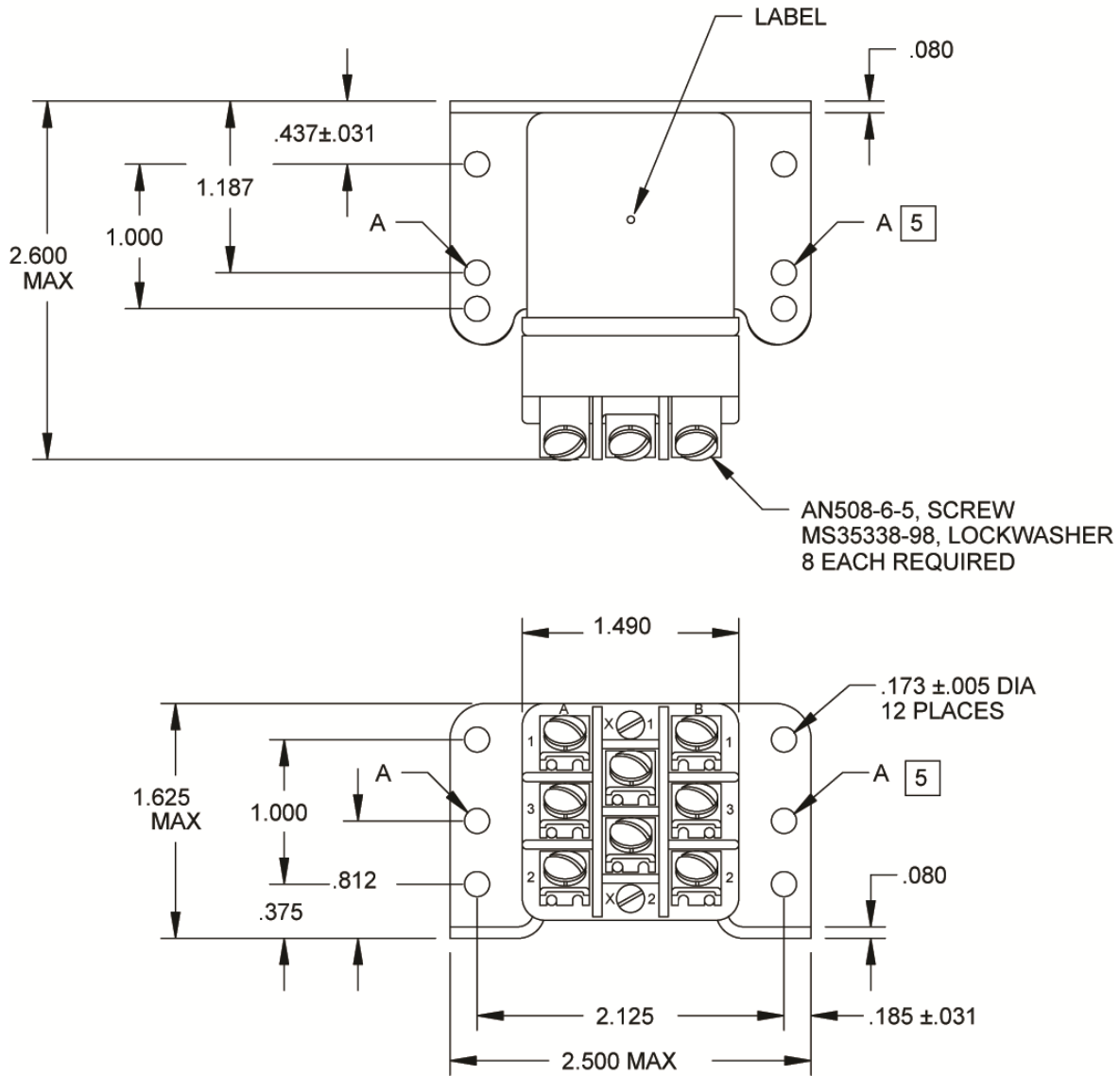
Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load	50,000
Minimum operating cycles (life) at 25% rated load	200,000
<b>Dielectric strength at sea level all points</b>	
All circuits to ground and circuit to circuit	1,500 Vrms / 50 Hz
Coil to ground	1,250 Vrms
Dielectric strength at altitude 80,000 ft	700 Vrms / 50Hz
Insulation resistance (at 500 Vdc)	100 M $\Omega$ min
Sinusoidal vibration (55-1500 Hz)	10 G
Shock (6-9 millisecond duration)	25 G
Maximum contact opening time under shock and vibration	10 $\mu$ s
Operate time at nominal voltage	20 ms max
<b>Release time at nominal voltage</b>	
DC	20 ms max
AC	50 ms max
<b>Contact bounce at nominal voltage</b>	
N.C. Contacts	2 ms max
N.O. Contacts	2 ms max
Overload and rupture	4 and 5 times rated load

Unless otherwise noted, the specified temperature range applies to all relay characteristics.

Dimensions in inches  
 Tolerances, unless otherwise specified  
 XXX ± .010  
 XX ± .03

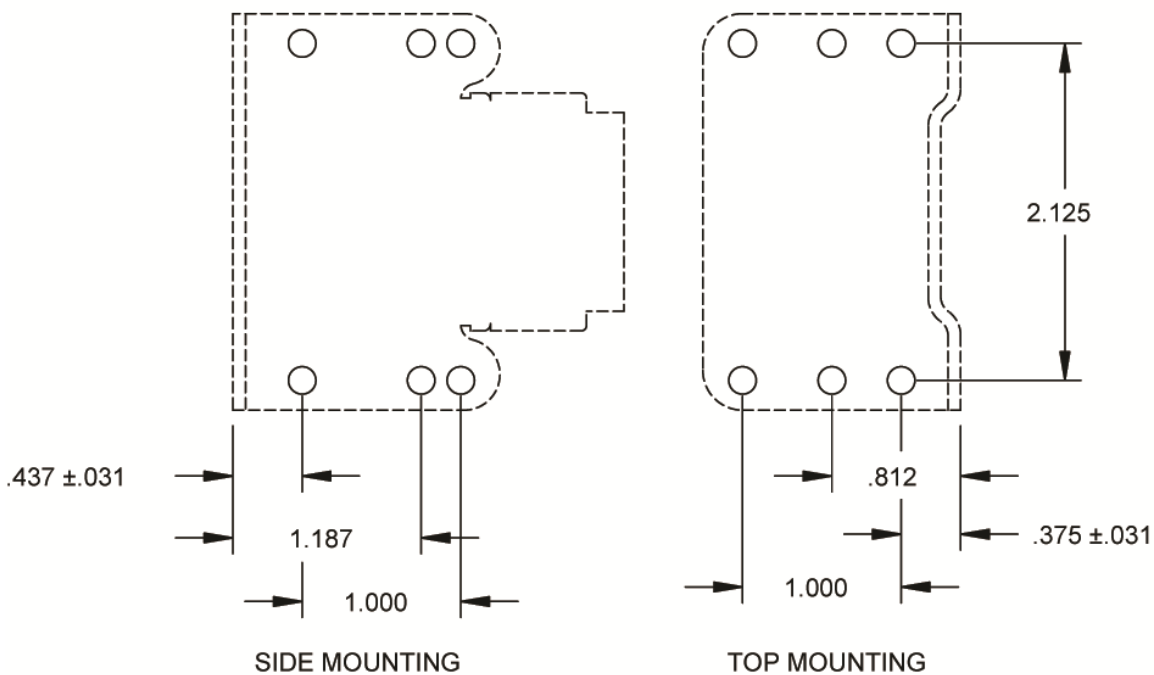
## CONFIGURATION

### MOUNTING STYLE 1



9330-10374 - 28 VDC SUPPRESSED  
 9330-4026 - 28 VDC  
 9330-4027 - 115 VAC, 400 Hz  
 9330-10375 - 115 VAC, 50/60 Hz

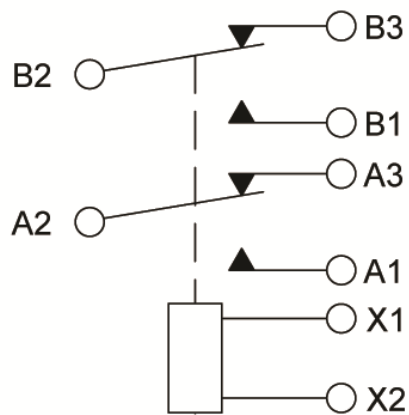
## MOUNTING DIMENSIONS



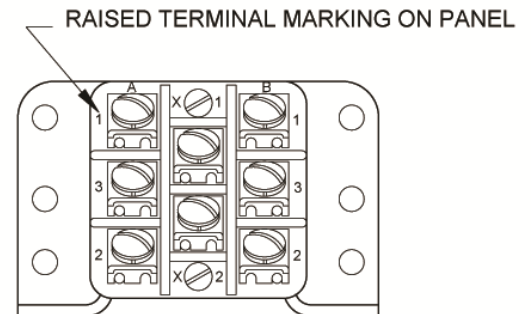
STANDARD TOLERANCE:  $\pm .005$

## SCHEMATIC DIAGRAM

### SCHEMATIC DIAGRAM



### STANDARD TERMINAL LAYOUT



## NOTES

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1. Standard intermediate current test applicable.
2. Values beyond applicable military specification requirements.
3. May be used on 115 Vac, 60 Hz if maximum ambient temperature is limited to +85° C.
4. P/N 9330-10374 has back EMF coil suppression to 42 Vdc.
5. Mounting holes "A" to be used when replacing AN3311.
6. Applicable Military specification.  
28 Vdc MS24149-D1 : Leach Part No. 9330-4026  
115 Vac MS24149-A1 : Leach Part NO. 9330-4027
7. Inductive load life is 20 percent of rated resistive load life.

For any inquiries, please contact your local sales representative: [leachcorp.com](http://leachcorp.com)