

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

28 Vdc; 115 Vac, 400 Hz, 1 Ø				
and 115/200 Vac, 400 Hz, 3 Ø				
0.44 lbs. max				
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				
	and 115/200 Vac, 400 Hz, 3 Ø 0.44 lbs. max 1.62 x 2.50 x 2.60 in. max ed construction protected metal can			

### 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	

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#### 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
Dielectric strength at sea level all points	
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 Ω min
Sinusoidal vibration (55-1500 Hz)	10 G
Shock (6-9 millisecond duration)	25 G
Maximum contact opening time under shock and vibration	10 µs
Operate time at nominal voltage	20 ms max
Release time at nominal voltage	
DC	20 ms max
AC	50 ms max
Contact bounce at nominal voltage	
N.C. Contacts	2 ms max
N.O. Contacts	2 ms max
Overload and rupture	4 and 5 times rated load

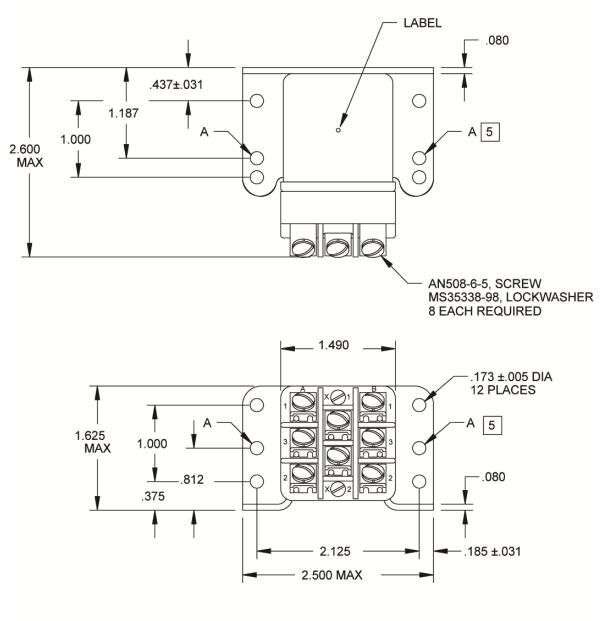
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

### **9330** RELAY – NONLATCH 10 AMP, 2PDT

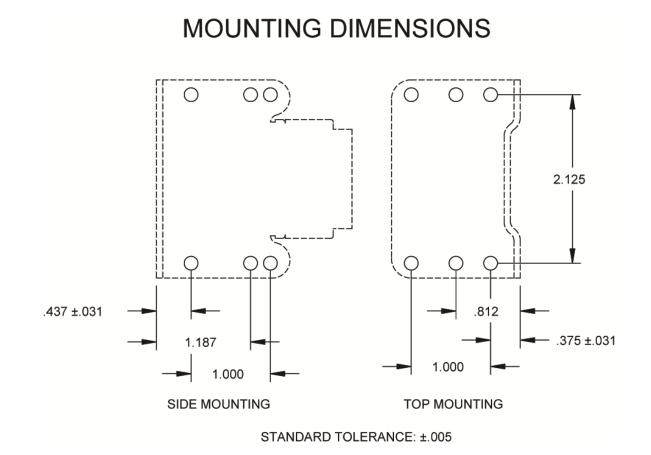
Dimensions in inches Tolerances, unless otherwise specified XXX  $\pm$  .010 XX  $\pm$  .03

### CONFIGURATION



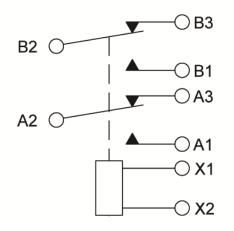


9330-10374 - 28 VDC SUPPRESSED 9330-4026 - 28 VDC 9330-4027 - 115 VAC, 400 Hz 9330-10375 - 115 VAC, 50/60 Hz



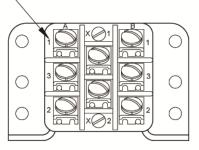
#### SCHEMATIC DIAGRAM

### SCHEMATIC DIAGRAM



### STANDARD TERMINAL LAYOUT

RAISED TERMINAL MARKING ON PANEL



#### NOTES

- 1. Standard intrmediate 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.
- 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