



Application Notes:

101
102
007

- Balanced-Force Design

- Hermetically sealed

- Qualified to **MS27750**

PRINCIPLE TECHNICAL CHARACTERISTICS

- Contacts rated at 28 Vdc and 115 Vac, 400 Hz, 1Ø and 115/200 Vac, 400Hz, 3Ø

- Weight 15.0 oz.

- Special units available upon request, including models with auxiliary contacts.

CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type	Load current in Amps		
	28 Vdc	115 Vac 400 Hz	115/200 Vac 400 Hz 3Ø
Resistive	25	50 [8]	50 [8]
Inductive [1]	15	50 [8]	50 [8]
Motor	15	30	30
Lamp	10	15	15
Transfer load [7]	-	12.5	12.5

COIL CHARACTERISTICS (Vdc)

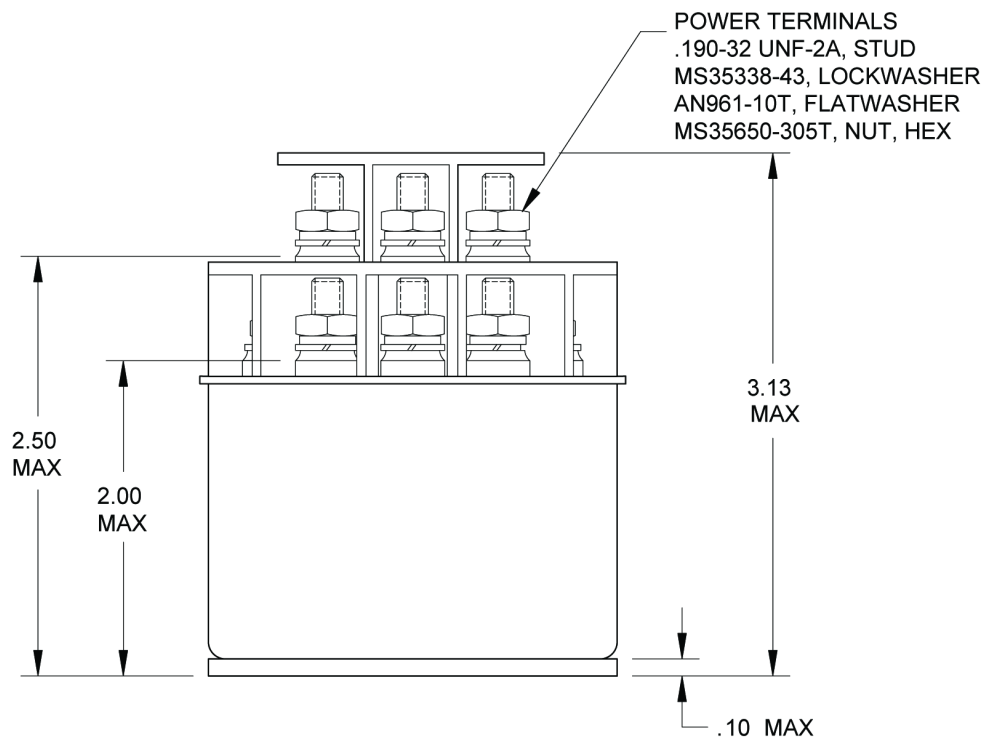
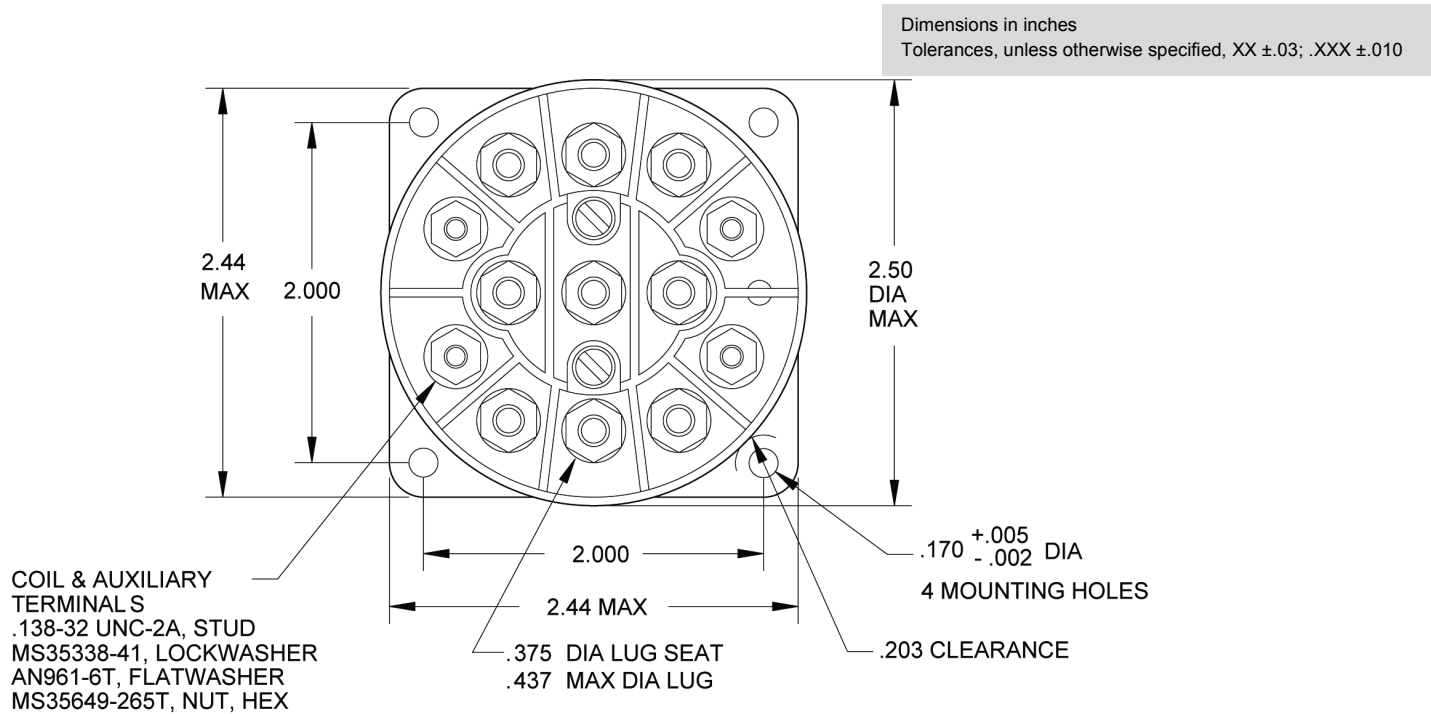
CODE	A Vdc	B Vdc	C Vdc	F Vac 400 Hz	N [4] Vdc
Nominal operating voltage	28	12	6	115	28
Maximum operating voltage	29	14.5	7.3	124	29
Pick-up voltage, at +71° C maximum					
- Nominal	18	9	4.5	90	18
- High temp test	20	10	5	100	20
- Continuous current test	21	10.5	5.3	105	21
Drop-out voltage, maximum	7	4.5	2.5	45	7
Coil resistance in Ohms $\pm 10\%$ at +25° C	175	44	11	-	200
Coil current max. mA at +25° C	-	-	-	100	-

GENERAL CHARACTERISTICS

Temperature range	-55°C to +71°C
Minimum operating cycles (life) at rated resistive load	50,000
Minimum operating cycles (life) at 25% rated resistive load	200,000
Dielectric strength at sea level	
All circuits to ground and circuit to circuit	1,500 Vrms [9]
Coil to ground and aux. contacts	1,000 Vrms
Dielectric strength at altitude: 50,000 feet	
Main contacts	700 Vrms
Coil and aux. contacts	500 Vrms
Insulation resistance	
Initial	100 M Ω min
After environmental tests	50 M Ω min
Sinusoidal vibration	10 G / 70 to 2000 Hz
Shock (6 ms duration)	50 G
Maximum contact opening time under vibration and shock	10 μ s
Operate time at normal voltage (Including bounce)	
D.C.	35 ms max
A.C.	60 ms max
Release time at nominal voltage (including bounce)	
D.C.	25 ms max
A.C.	80 ms max
Contact bounce at nominal voltage	3 ms max
Power requirements:	
- at nominal D.C voltage	4.35 watt
Overload - 115/200 Vac, 400Hz @ 28 Vdc	400 Amp 100 Amp
Rupture @ 115/200 Vac 400Hz @ 28 Vdc	400 Amp 125 Amp

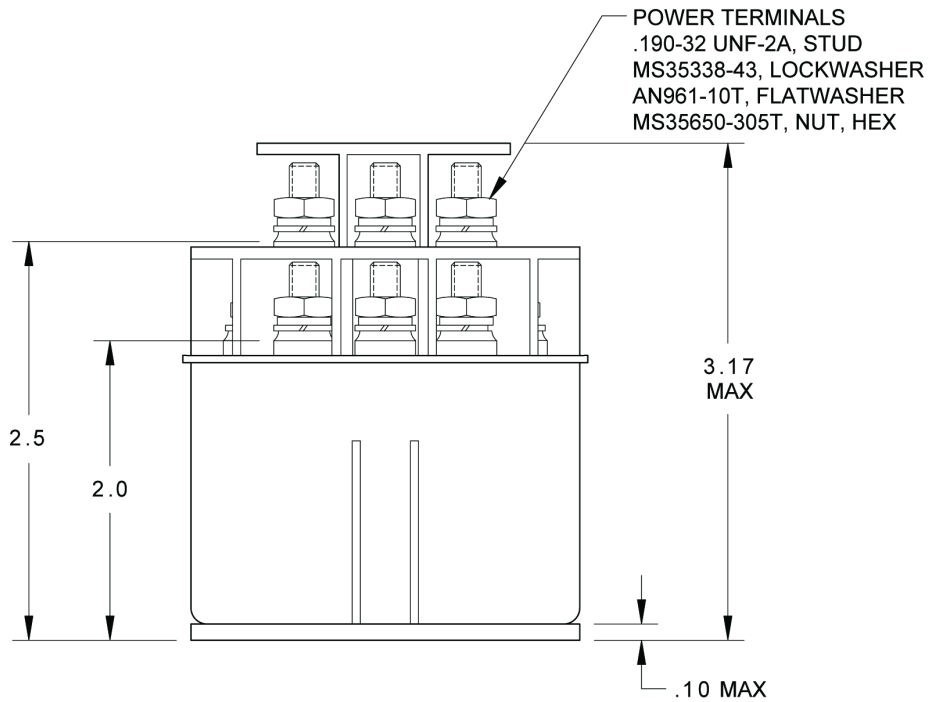
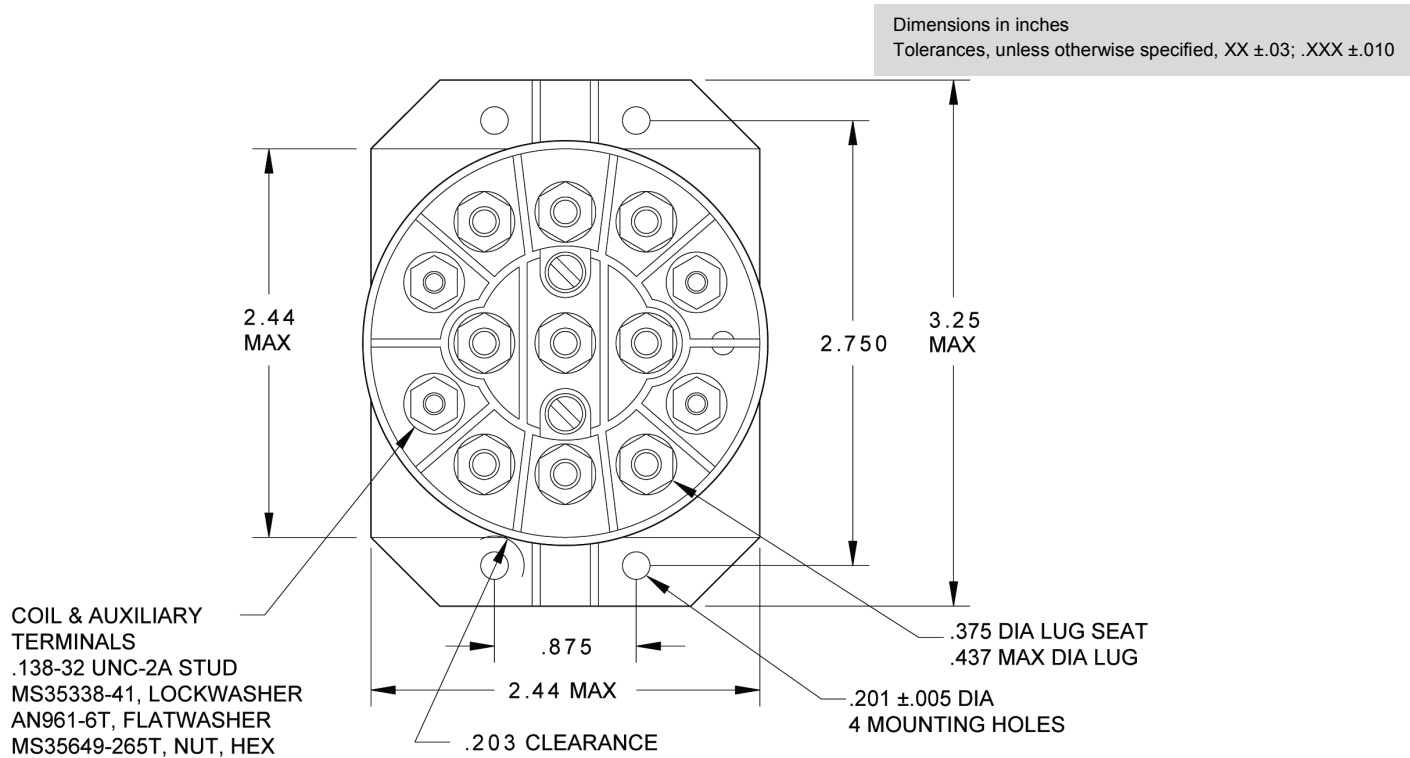
Unless otherwise noted, the specified temperature range applies to all relay characteristics.

CONFIGURATION STYLES



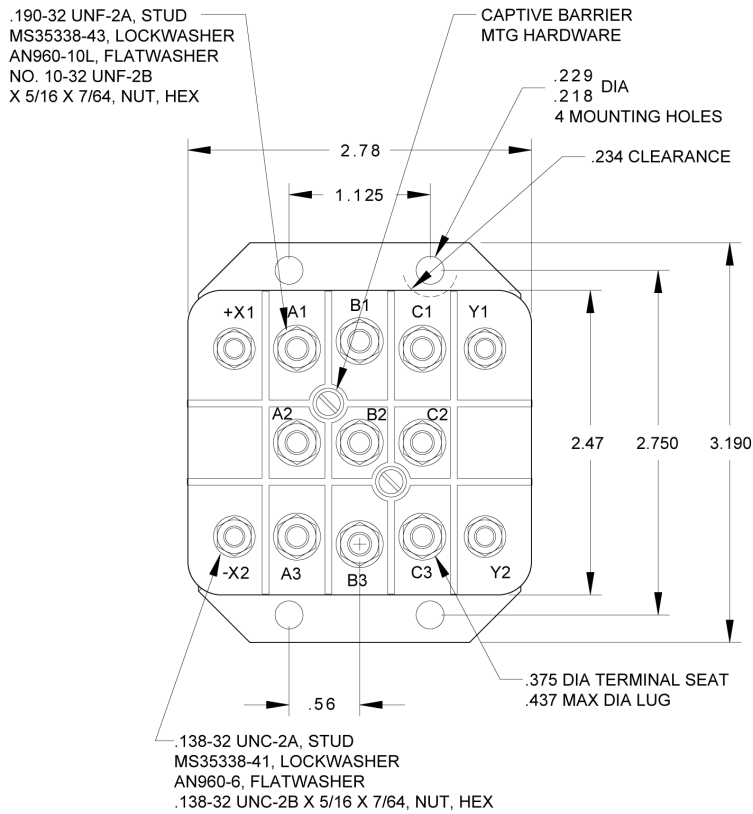
MOUNTING STYLE A

CONFIGURATION STYLES



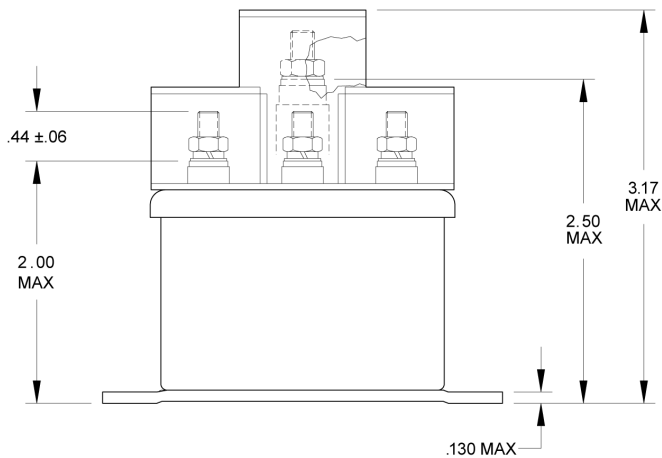
MOUNTING STYLE B

CONFIGURATION STYLES



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

← A

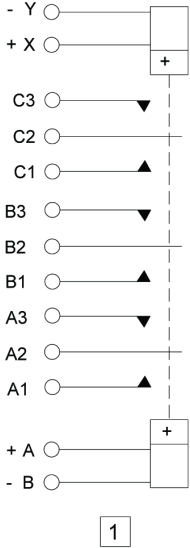


VIEW A

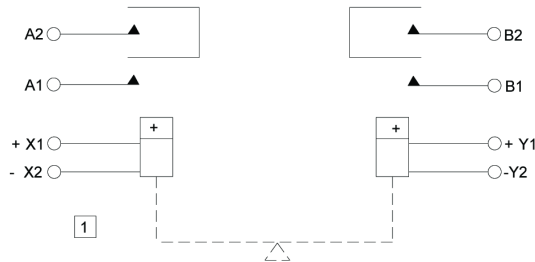
MOUNTING STYLE C

TERMINAL CONFIGURATION AND CIRCUIT DIAGRAMS

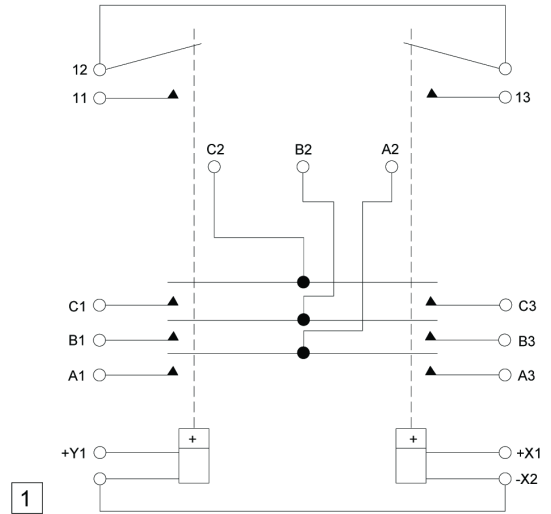
TERMINAL TYPE 1



TERMINAL TYPE 2



TERMINAL TYPE 3



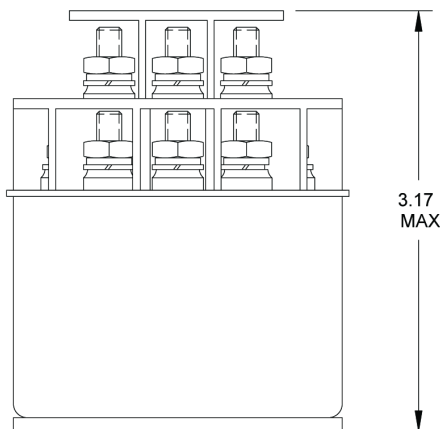
COIL CONFIGURATION 2



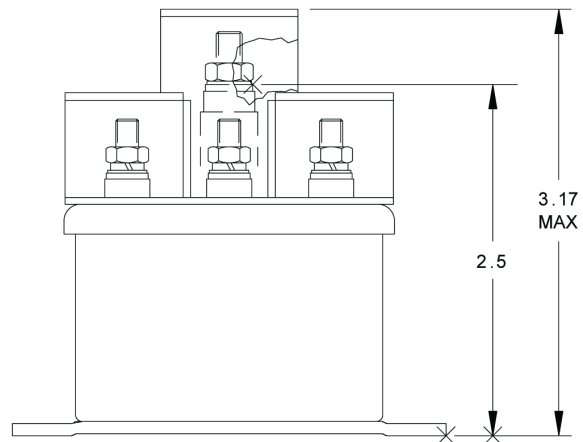
STANDARD COIL
"A, B, C & F"

SUPPRESSED COIL
"N"

TERMINAL TYPE 9
IS A GENERAL CATEGORY USED FOR ALL
TERMINAL TYPES NOT ILLUSTRATED.
FOR OTHER VARIATIONS OF TERMINAL
CONFIGURATIONS PLEASE CONTACT FACTORY.



TERMINAL TYPE 1 AND 2



TERMINAL TYPE 3

- 1 POLARITY INDICATION APPLIES TO D.C. COILS ONLY
AUXILIARY CONTACT RATING: 28 VDC OR 115 VAC
RESISTIVE: 5 AMP
INDUCTIVE: 3 AMP
LAMP: 1 AMP
BOUNCE AT NOMINAL VOLTAGE: .004 SEC MAX

NOTE: OTHER AUXILIARY CONTACT FORMS
AVAILABLE. PLEASE CONTACT FACTORY.

- 2 COIL TERMINALS MAY BE IDENTIFIED AS
A-B, X1-X2, Y1-Y2 OR X-Y.

NOTE: Although all configuration and/or terminal type options are available, some combinations may require a setup charge and be subject to minimum order size

NUMBERING SYSTEM

	HC			
[5]	HCD	-	X	0
[6]	HCP		X	0

Relay family _____

1. Mounting styles _____

2. Terminal & Circuit _____

3. Coil Voltage _____

NOTES

1. Inductive load life: 20,000 cycles.
2. Applicable military specification: MS27750.
3. Alternate contact configurations and other special models available upon request; Please contact factory.
4. Suppressed "N" coil has back EMF suppression to 42 volts max. Consult factory.
5. Non hermetic, gasket sealed version.
6. Non hermetic, not metallic cover, gasket sealed version. (Not available with mounting style C).
7. Suitable for transfer between unsynchronized AC power sources at ratings indicated.
8. These values are 30, for AC coil models.
9. 1250 VRMS for auxiliary contacts.

For any inquiries, please contact your local sales representative: leachcorp.com