



#### Application Notes:

101  
102  
104  
105  
007

- Balanced-Force Design

- Hermetically sealed

- Designed to the performance standards of

MIL-PRF-6106

### PRINCIPLE TECHNICAL CHARACTERISTICS

- Contacts rated at

28 Vdc and 115 Vac, 400 Hz, 1Ø  
and 115/200 Vac, 400 Hz, 3Ø

- Weight

14.0 Oz.

- Special units available upon request, including models with auxiliary contacts. Optional Ground Fault Protection (GFP) feature available. Contact factor for information on MIL-qualified part numbers.

### CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type [1]	Load current in Amps					
	28 Vdc		115 Vac 400 Hz		115/200 Vac 400 Hz 3Ø	115 Vac 60 Hz DELTA
Resistive	50	50 [5]	60	65 [5]	60	30
Inductive [2]	20	20 [5]	60	65 [5]	60	30
Motor	20	-	-	-	40	30
Lamp	10	-	-	-	15	-
Load transfer [3]	-	-	12.5/60	12.5/60	12.5/60	-

### COIL CHARACTERISTICS (Vdc)

CODE	A Vdc	B Vdc	C Vdc	F Vac 400 Hz	N [6] Vdc
Nominal operating voltage	28	12	6	115	28
Maximum operating voltage	29	14.5	7.3	124	29
Pick-up voltage, maximum					
- Nominal	18	9	4.5	90	18
- High temp test	20	10	5	95	20
- Continuous current test	22.5	11	5.7	100	22.5
Drop-out voltage, maximum	7	4.5	2.5	30	7
Coil resistance in Ohms $\pm 10\%$ at +25° C	200	50	12	-	200
Coil current max. mA at +25° C	-	-	-	90	-

### GENERAL CHARACTERISTICS

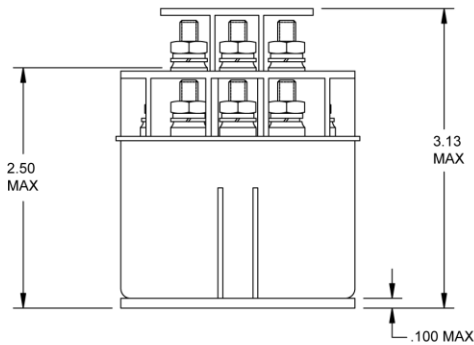
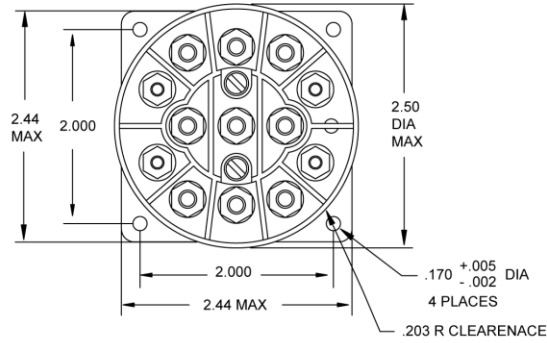
Temperature range	-55°C to +71°C
Minimum operating cycles (life) at rated resistive load	50,000
Minimum operating cycles (life) at 25% rated resistive load	200,000
<b>Dielectric strength at sea level</b>	
- All circuits to ground and circuit to circuit	1500 Vrms
- Coil to ground and aux. contacts	1000 Vrms
<b>Dielectric strength at altitude: 50,000 feet</b>	
- Main Contacts	700 Vrms
- Coil and aux. contacts	500 Vrms
<b>Insulation resistance</b>	
- Initial	100 M $\Omega$ min
- After environmental tests	50 M $\Omega$ min
Sinusoidal vibration	10 G / 70 to 2000 Hz
Shock (6 ms duration)	50 G
Maximum contact opening time under vibration and shock	10 $\mu$ s
Operate time at normal voltage (Including bounce)	50 ms max 35 ms max. [5]
<b>Release time at nominal voltage (Including bounce)</b>	
- DC	25 ms max
- AC	80 ms max
Contact bounce at nominal voltage	3 ms max
Weight	14.0 Oz. max. 11.5 Oz. max. [5]
<b>Power requirements:</b>	
- at pick-up +25°C	0.980 watt
- at nominal D.C. voltage	4.35 watt max.
Overload @ 115/200 Vac, 400Hz. @ 28 Vdc	400 Amp 125 Amp
Rupture @ 115/200 Vac, 400Hz. @ 28 Vdc	500 Amp 150 Amp

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

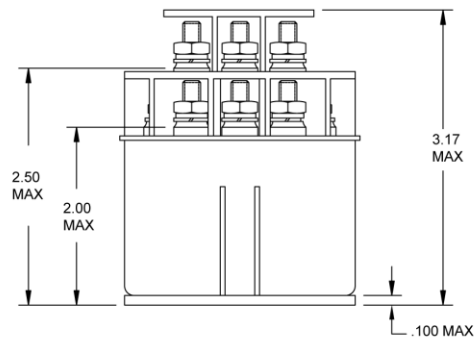
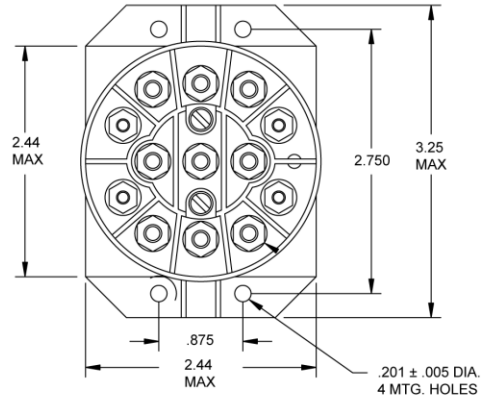
Dimensions in inches

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

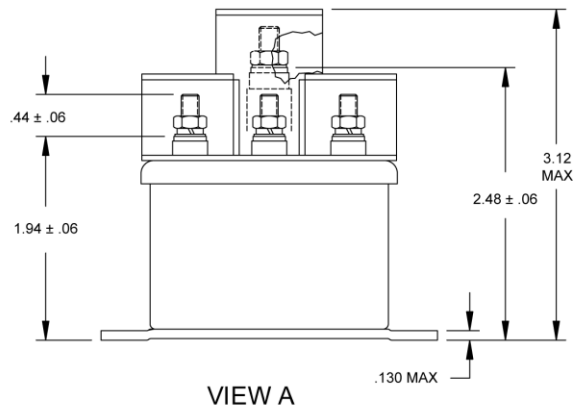
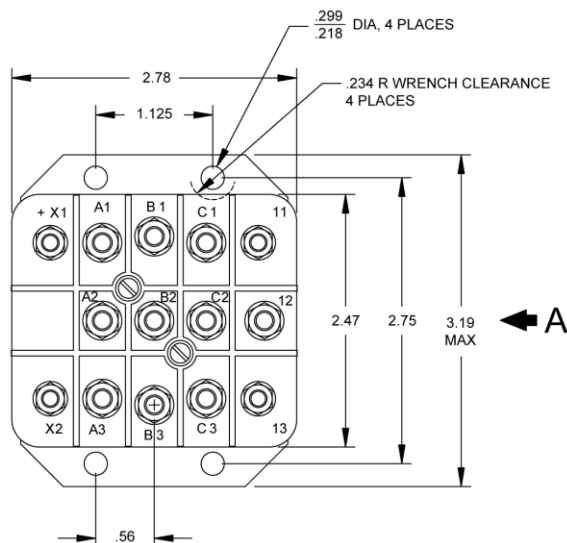
## MOUNTING STYLES



MOUNTING STYLE A



MOUNTING STYLE B

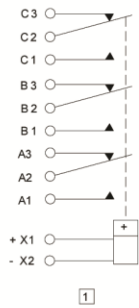


MOUNTING STYLE C

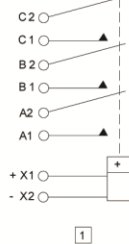
Dimensions in inches  
Tolerances, unless otherwise specified, XX ±.03; .XXX ±.010

## TERMINAL CONFIGURATION AND CIRCUIT

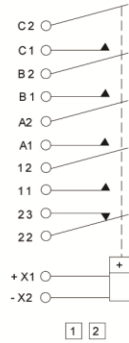
**TERMINAL TYPE 1**  
3 PDT



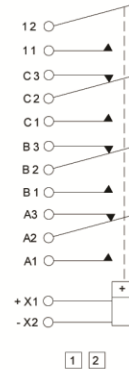
**TERMINAL TYPE 2**  
3 PST - N.O.



**TERMINAL TYPE 3**  
3 PST - N.O. WITH  
SPST - N.O. & SPST - N.C.  
AUXILIARY CONTACTS



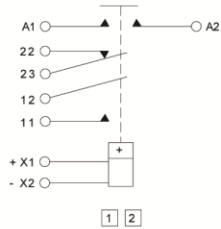
**TERMINAL TYPE 4**  
3 PDT - WITH  
SPST - N.O. AUX.



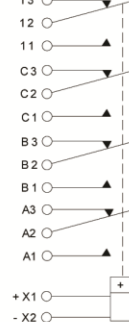
**TERMINAL TYPE 5**  
3 PDT WITH  
SPST - N.C. AUX.



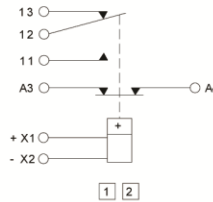
**TERMINAL TYPE 6**  
SPST - N.O. DM  
WITH SPST - N.O.  
SPST - N.C. AUX.



**TERMINAL TYPE 7**  
3 PDT WITH  
SPDT AUX.  
MOUNTING STYLE "C" ONLY

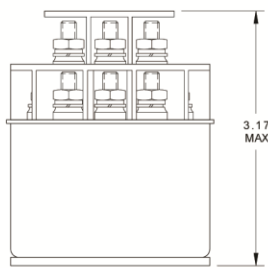
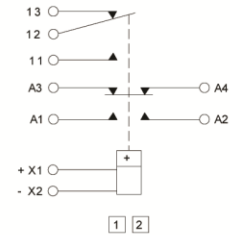


**TERMINAL TYPE 8**  
SPST - N.C. DB  
WITH 1 PDT AUX.



**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 10**  
SPDT - DB/DM  
WITH 1PDT AUX.



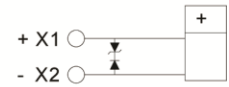
TERMINAL TYPE 1, 4, 5



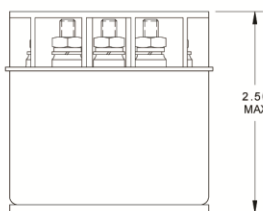
TERMINAL TYPE 7



STANDARD  
COIL  
"A", "B", "C", "F"



SUPPRESSED  
COIL  
"N"



TERMINAL TYPE 2, 3, 6, 8, 10

1 POLARITY INDICATION APPLIES TO D.C. COILS ONLY

2 AUXILIARY CONTACT RATING:

28 VDC OR 115 VAC

RESISTIVE	5 AMP
INDUCTIVE	3 AMP
LAMP	1 AMP

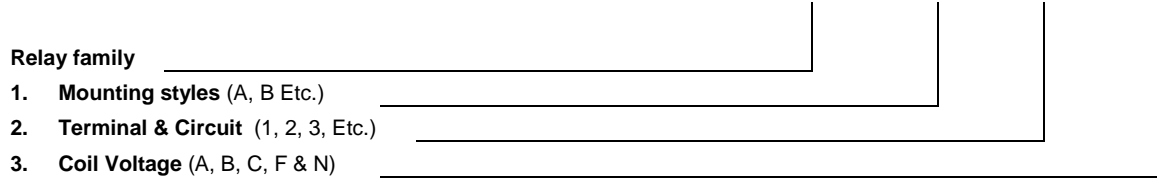
CONTACT BOUNCE AT NOMINAL VOLTAGE (SECONDS)	.004 MAX
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NOTE: OTHER AUXILIARY CONTACT FORMS ARE AVAILABLE. PLEASE CONTACT FACTORY.

## NUMBERING SYSTEM

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	H	-	X	0	X
[7]	HD	-	X	0	X
		-			
[4]	HT	-	X	0	X
[7]	HTD	-	X	0	X



## NOTES

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1. Auxiliary contact rating - see page 5, note [2]
2. Inductive load life, 20,000 cycles.
3. Applicable military specification: MS27751, MIL-R6106/26, MIL-R6106/43.
4. Suitable for transfer between unsynchronized A.C. power sources at the ratings indicated: 12.5 amperes for series "H, HD"; (MS27751-1,-7,-8,-9,-10 & -15).  
60 Amperes for series "HT, HTD"; (MS27751-11,-12,-17,-18,-19 & -20).
5. Terminal type 6, 8, & 10.
6. Suppressed "N" coil has back EMF suppression to 42 volts max. Consult factory.
7. Non-hermetic, gasket sealed version.

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