



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

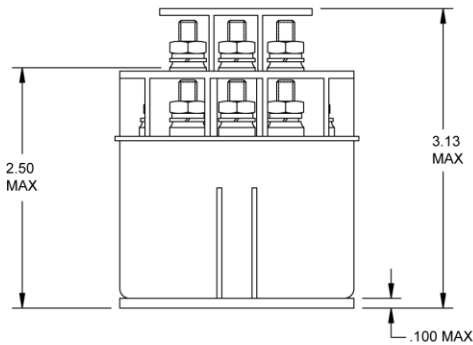
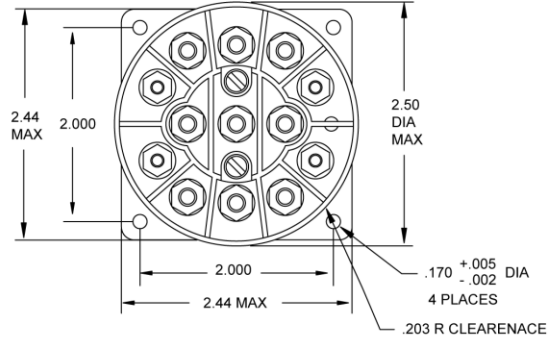
Temperature range	-55°C to +71°C
Minimum operating cycles (life) at rated resistive load	50,000
Minimum operating cycles (life) at 25% rated resistive load	200,000
Dielectric strength at sea level	
- All circuits to ground and circuit to circuit	1500 Vrms
- Coil to ground and aux. contacts	1000 Vrms
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)	50 ms max 35 ms max. [5]
Release time at nominal voltage (Including bounce)	
- 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]
Power requirements:	
- 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.

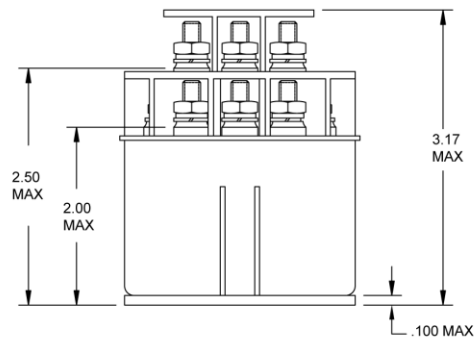
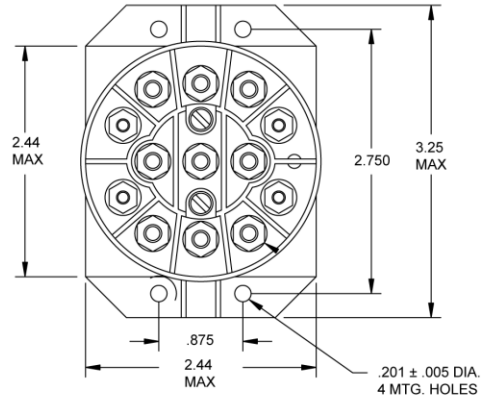
Dimensions in inches

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

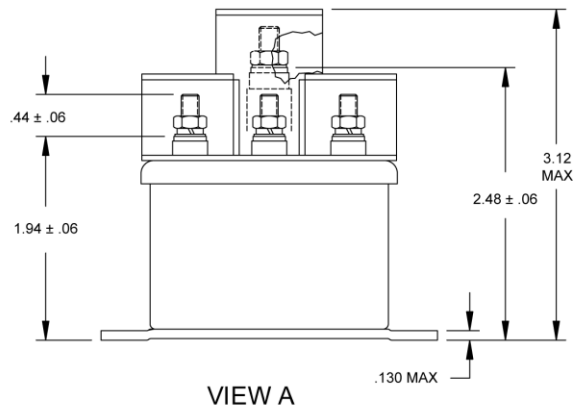
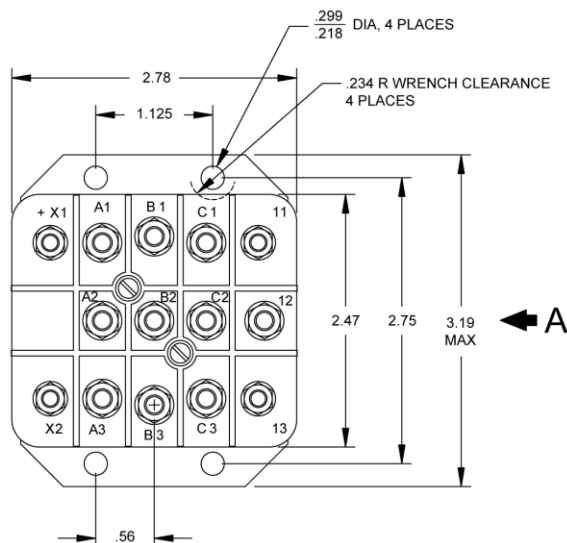
MOUNTING STYLES



MOUNTING STYLE A



MOUNTING STYLE B

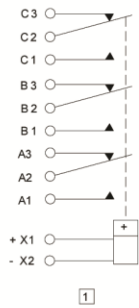


MOUNTING STYLE C

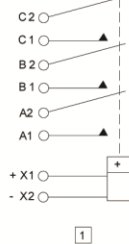
Dimensions in inches
Tolerances, unless otherwise specified, XX ±.03; .XXX ±.010

TERMINAL CONFIGURATION AND CIRCUIT

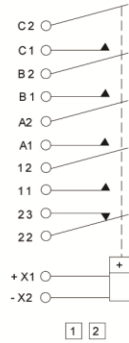
TERMINAL TYPE 1
3 PDT



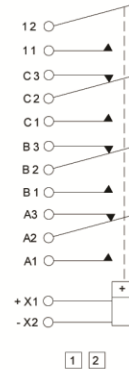
TERMINAL TYPE 2
3 PST - N.O.



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



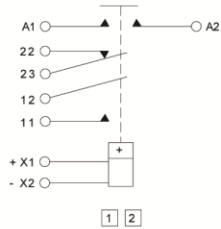
TERMINAL TYPE 4
3 PDT - WITH
SPST - N.O. AUX.



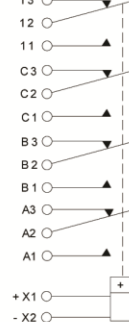
TERMINAL TYPE 5
3 PDT WITH
SPST - N.C. AUX.



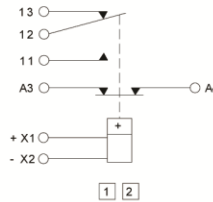
TERMINAL TYPE 6
SPST - N.O. DM
WITH SPST - N.O.
SPST - N.C. AUX.



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

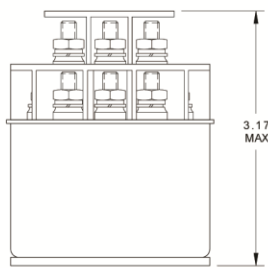
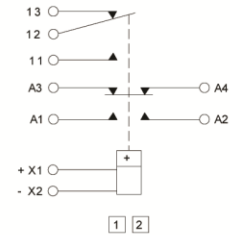


TERMINAL TYPE 8
SPST - N.C. DB
WITH 1 PDT AUX.



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

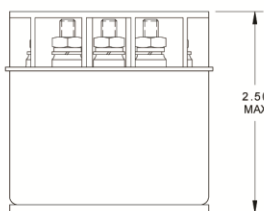
TERMINAL TYPE 10
SPDT - DB/DM
WITH 1PDT AUX.



TERMINAL TYPE 1, 4, 5



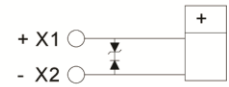
TERMINAL TYPE 7



TERMINAL TYPE 2, 3, 6, 8, 10



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



SUPPRESSED
COIL
"N"

1 POLARITY INDICATION APPLIES TO D.C. COILS ONLY

2 AUXILIARY CONTACT RATING:

28 VDC OR 115 VAC

RESISTIVE 5 AMP

INDUCTIVE 3 AMP

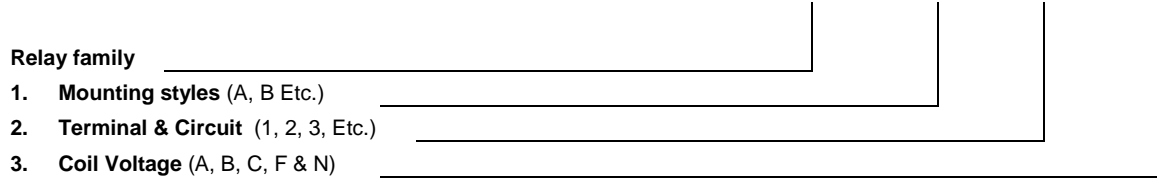
LAMP 1 AMP

CONTACT BOUNCE AT NOMINAL
VOLTAGE (SECONDS) .004 MAX

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

NUMBERING SYSTEM

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



NOTES

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