



#### Application Notes:

101  
102  
007

• All welded construction

• Contact arrangement **1 PST NO-DM Configuration in one inch cube**

• Designed to the performance standards of **MIL-PRF-6106**

### PRINCIPLE TECHNICAL CHARACTERISTICS

• Contacts rated at **28 Vdc**

• Weight **0.188 lb max**

• Dimensions **1.025in x 1.025in x 1.66in**

• Hermetically sealed, corrosion resistant metal can. Detail specifications and ordering data appear on the following pages.

### CONTACT ELECTRICAL CHARACTERISTICS

Type of Load	Load current in Amps @28 Vdc
Resistive [2]	50
Inductive [3]	15 [3]
Motor [3]	8 [3]
Lamp [3]	-
Overload	200
Rupture	-

## COIL CHARACTERISTICS (Vdc)

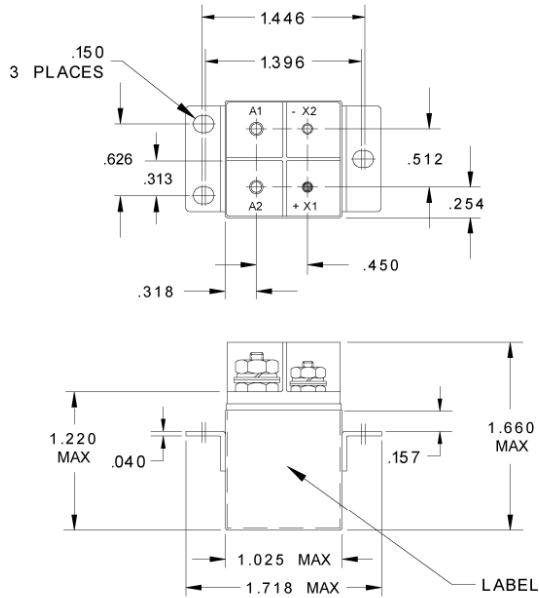
CODE	A	B	C	M	N [7]	R [7]	V [7]
Nominal operating voltage	28	12	6	48	28	12	6
Maximum operating voltage	29	14.5	7.3	50	29	14.5	7.3
<b>Maximum pickup voltage</b>							
- Cold coil at +125° C	18	9	4.5	36	18	9	4.5
- During high temp test at +125° C	19.8	9.9	5	38	19.8	9.9	5
- During continuous current test at +125° C	22.5	11.25	5.7	42	22.5	11.25	5.7
Maximum drop-out voltage	7	4.5	2.5	14	7	4.5	2.5
Coil resistance $\Omega$ $\pm 10\%$ +25° C except type "C" & "V" +20%, -10%	290	70	18	890	290	70	18

## GENERAL CHARACTERISTICS

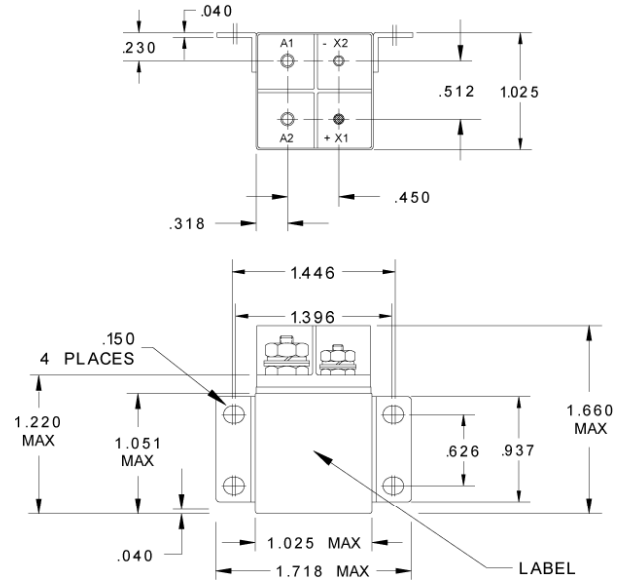
Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load	50,000 [3]
Minimum operating cycles (life) at 25% rated load	200,000
<b>Dielectric strength at sea level</b>	
- All circuits to ground and circuit to circuit	1250 Vrms
- Coil to ground	1000 Vrms
Dielectric strength at altitude 80,000 ft.	500 Vrms [4]
<b>Insulation resistance</b>	
- Initial (500 Vdc)	100 M $\Omega$ min
- After environmental tests (500 Vdc)	50 M $\Omega$ min
Sinusoidal vibration	0.12 d.a. / 10 to 57 Hz 20G /57 to 2000 Hz
<b>Random vibration</b>	
- Applicable specification	MIL-STD-202
- Method	214
- Test condition	1E (0.2G <sup>2</sup> /Hz, 50 to 2000 Hz)
- Duration	15 minutes each plane
Shock	50G / 11 ms $\pm$ 1 ms
Maximum contact opening time under vibration and shock	10 $\mu$ s
Operate time at nominal voltage @25°C	20 ms max
Release time at nominal voltage @25°C	15 ms max
Contact make bounce at nominal voltage @25°C	1 ms max
Contact release break bounce at nominal voltage @25°C	0.5 ms max [8]
Weight maximum	0.188 lb

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

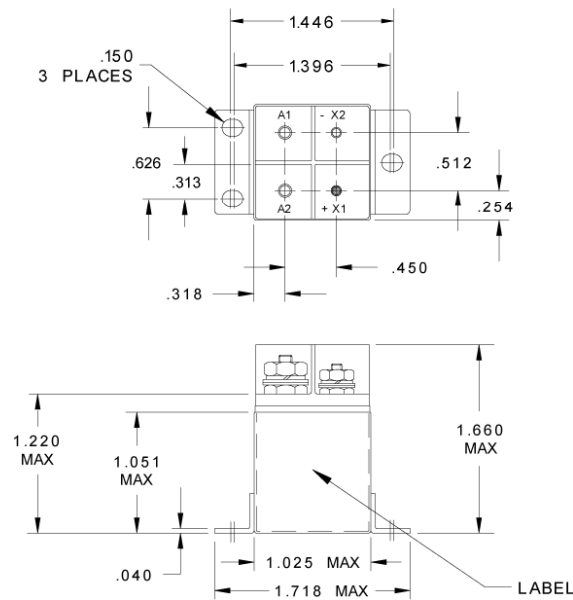
## MOUNTING STYLES



MOUNTING STYLE D



MOUNTING STYLE J

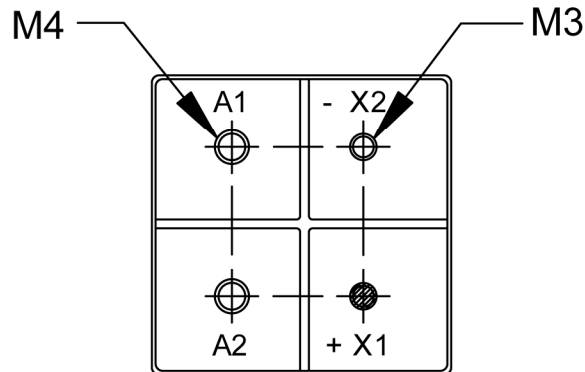


MOUNTING STYLE U

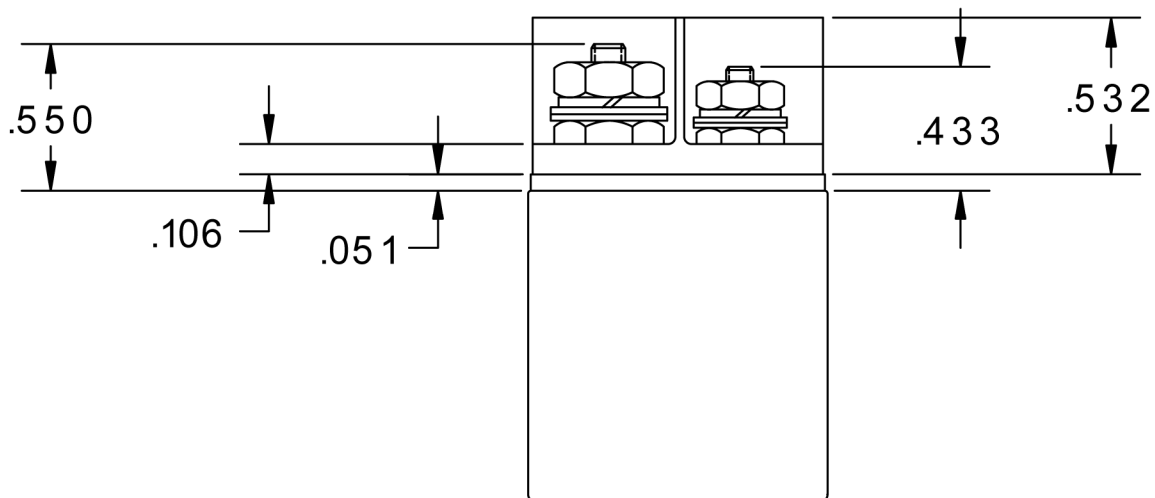
Dimensions in inches  
Tolerances, unless otherwise specified  
XXX ± .010  
XX ± .03

## TERMINAL TYPES

### TERMINAL TYPE 5

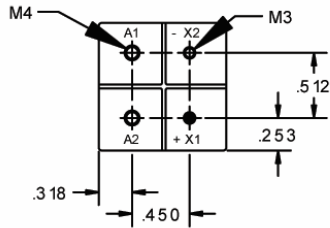


M3, M4 = Metric thread sizes

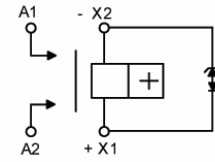
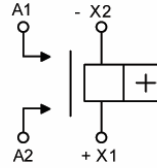


## MOUNTING DATA & SCHEMATIC DIAGRAM

TERMINAL LAYOUT

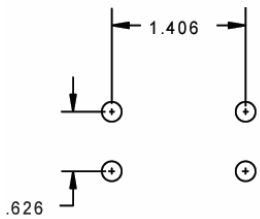


SCHEMATIC DIAGRAM

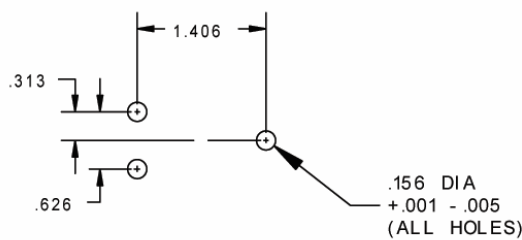


(SUPPRESSED COIL, SEE NOTE 7 & 8)

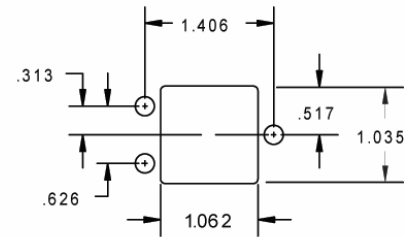
MOUNTING DIMENSIONS



J



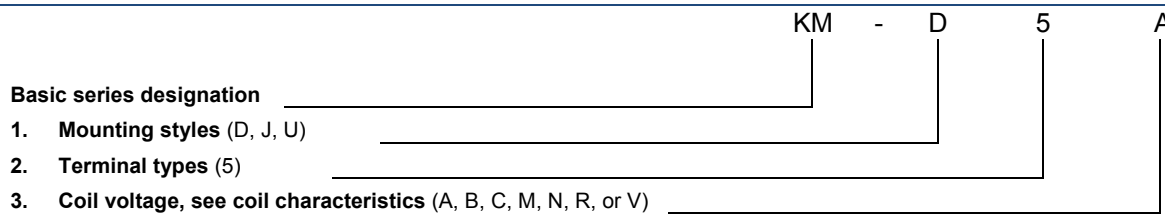
U



D

TOL: .XX ±.03; .XXX ±.010

## NUMBERING SYSTEM



## NOTES

- Standard Intermediate current test applicable.
- For full rated load max temp. and altitude use No. 8 wire or larger.
- Relays to be mounted to limit mounting bracket temp. to 160 °C.
- DC inductive load 10,000 cycles. Motor load 20,000 cycles, lamp load 10,000 cycles.
- Applicable military specification: MIL-PRF-6106.
- Special models available: i.e. high reliability testing, etc.
- "N R & V" coils have back EMF suppression to - 42 volts maximum.
- Applies to "N, R & V" coils only.
- Relay will not operate, but will not be damaged by application of reverse polarity to coil.

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