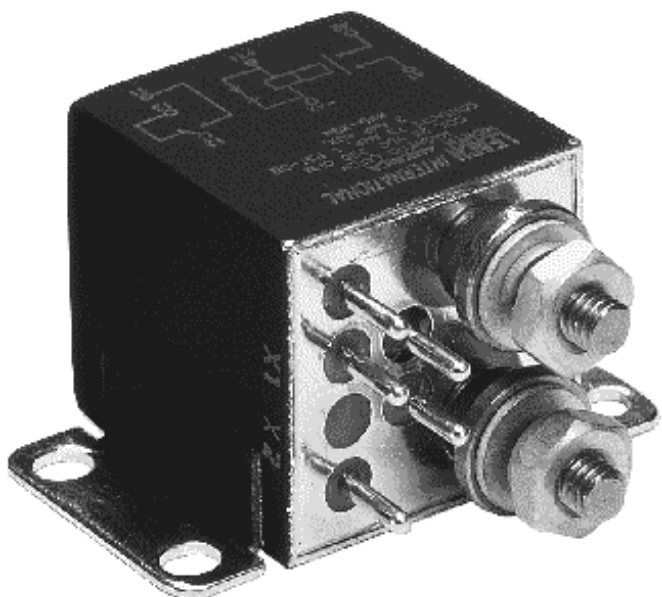


ENGINEERING DATA SHEET

SERIES KXD

RELAY - NONLATCH
1 PST/NO(DM)+AUX, 75 AMP



All welded construction
Contact arrangement

1 PST NO-DM Configuration with 1 PDT, 2 Amp auxiliary contacts in one inch cube

Designed to the performance standards of

MIL-PRF-6106

PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at

28 Vdc

Weight

3.0 oz max

Dimensions

1.12in x 1.01in x 1.01in

Hermetically sealed, corrosion resistant metal can.

CONTACT ELECTRICAL CHARACTERISTICS

| Contact rating per pole and load type [1] | Load current in Amps |
|---|------------------------|
| | @28 Vdc |
| Resistive [2] | 75 |
| Inductive [3] | 20 |
| Motor [3] | 20 |
| Lamp [3] | 10 |
| Overload | 400 |
| Auxiliary contact rating | @28Vdc or 115Vac/400Hz |
| Resistive | 2 |
| Inductive | 1 |
| Lamp | 0.5 |



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Hong Kong
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Data sheets are for initial product selection and comparison. Contact Esterline Power Systems prior to choosing a component.

COIL CHARACTERISTICS (Vdc)**SERIES KXD**

| CODE | A | B | C | M | N [6] | R [6] | V [6] |
|--|------|-------|-----|-----|-------|-------|-------|
| Nominal operating voltage | 28 | 12 | 6 | 48 | 28 | 12 | 6 |
| Maximum operating voltage | 29 | 14.5 | 7.3 | 50 | 29 | 14.5 | 7.3 |
| Maximum pickup voltage | | | | | | | |
| - 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 |
| - Drop-out voltage (Maximum) | 7 | 4.5 | 2.5 | 14 | 7 | 4.5 | 2.5 |
| Coil resistance Ω $\pm 10\%$ +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 | 20,000 [3] |
| Minimum operating cycles (life) at 25% rated load | 200,000 |
| Dielectric strength at sea level | |
| - All circuits to ground and circuit to circuit | 1250 Vrms |
| - Coil to ground and coil auxiliary contact gap | 1000 Vrms [9] |
| Dielectric strength at altitude 80,000 ft | 500 Vrms [4] |
| Insulation resistance | |
| - Initial (500 Vdc) | 100 M Ω min |
| - After environmental tests (500 Vdc) | 50 M Ω min |
| Sinusoidal vibration | 0.12" DA / 10 to 57 Hz 20G / 57 to 5000 Hz |
| Random vibration | |
| - Applicable specification | MIL-STD-202 |
| - Method | 214 |
| - Test condition | 1E (0.2G ² /Hz, 50 to 2000 Hz) |
| - Duration | 15 minutes each plane |
| Shock | 50G / 11 ms \pm 1ms |
| Maximum contact opening time under vibration and shock | 10 μ s |
| Operate time at nominal voltage @25°C | 15 ms max |
| Release time at nominal voltage @25°C | 15 ms max |
| Contact make bounce at nominal voltage @25°C -Power contacts -Auxiliary contacts | 1 ms max 4 mx max |
| Contact release break bounce at nominal voltage @25°C | 0.5 ms max [7] |
| Weight maximum | 3.0 oz |

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

NOTES

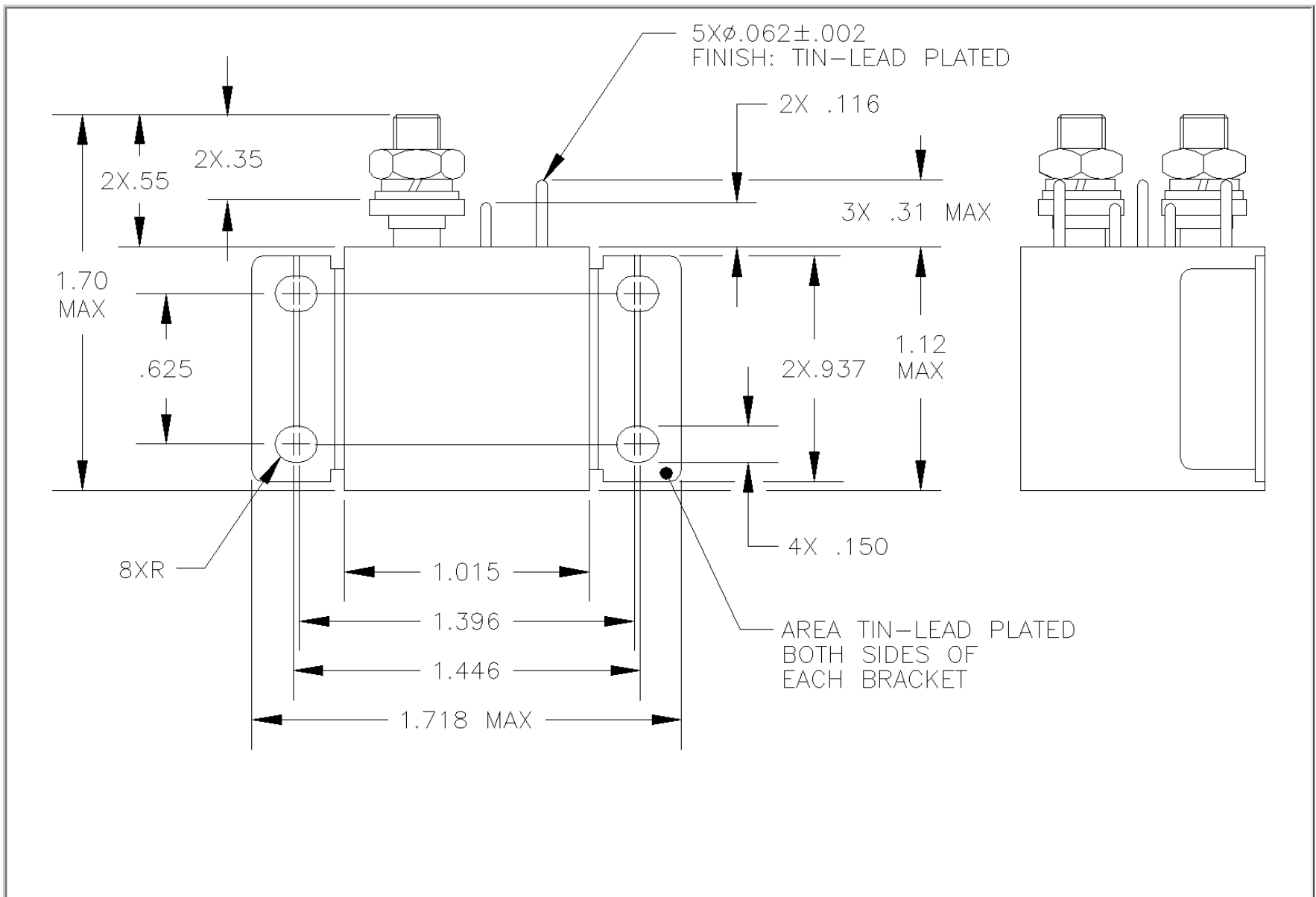
SERIES KXD

- [1] Standard Intermediate current test applicable.
- [2] For full rated load max. temp. and altitude use No. 6 wire or larger.
Relays to be mounted to limit mounting bracket temp. to 160 °C.
- [3] DC inductive load 10,000 cycles. Motor load 20,000 cycles, lamp load 10,000 cycles.
- [4] Applicable military specification: MIL-PRF-6106.
5. Special models available: i.e. high reliability testing, etc.
- [6] "N R & V" coils have back EMF suppression to - 42 volts maximum.
- [7] Applies to "N, R & V" coils only.
8. Relay will not operate, but will not be damaged by application of reverse polarity to coil.
- [9] Dielectric of auxiliary contact gap amp after life test 750 Vrms, 60Hz.

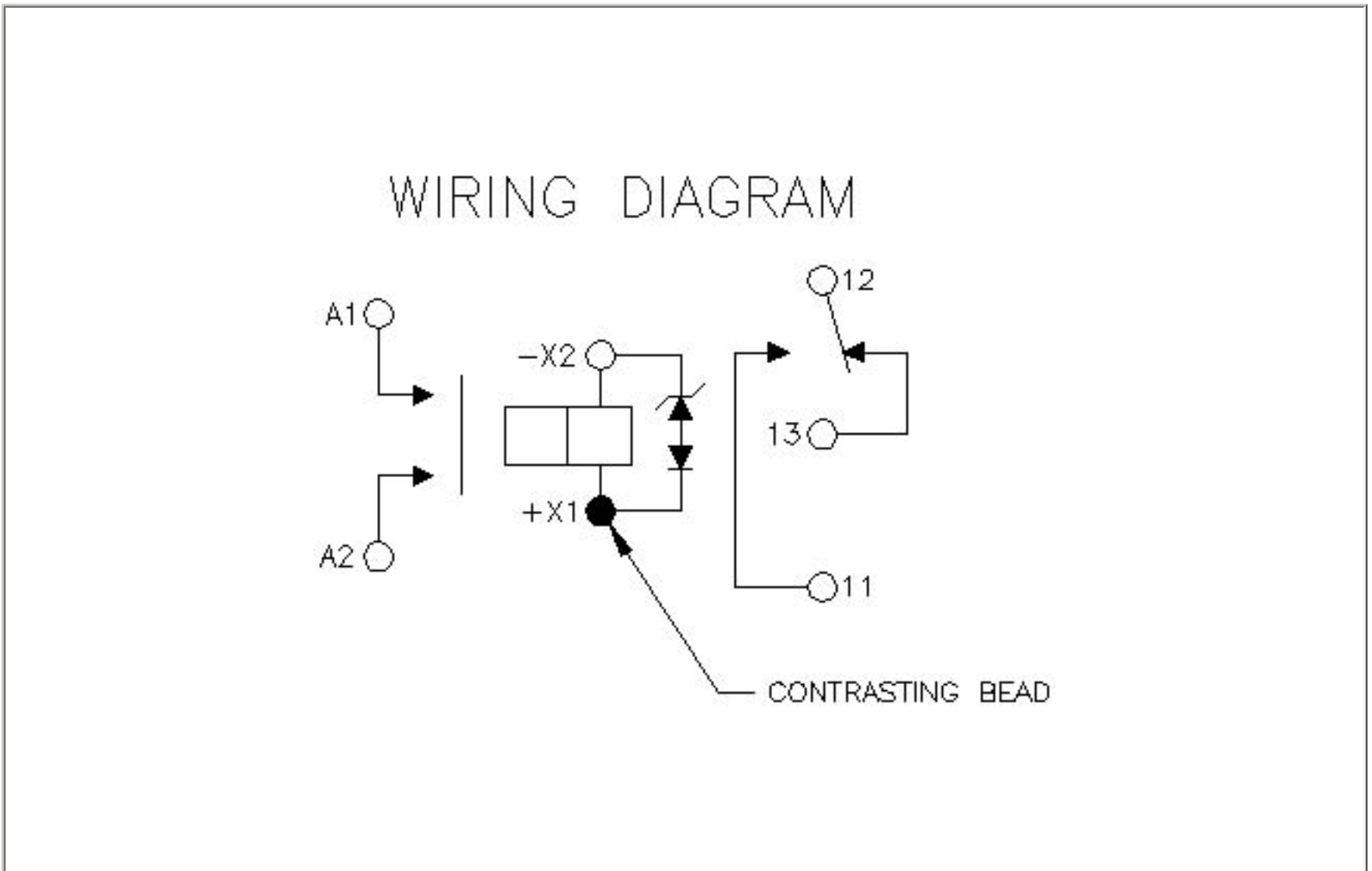
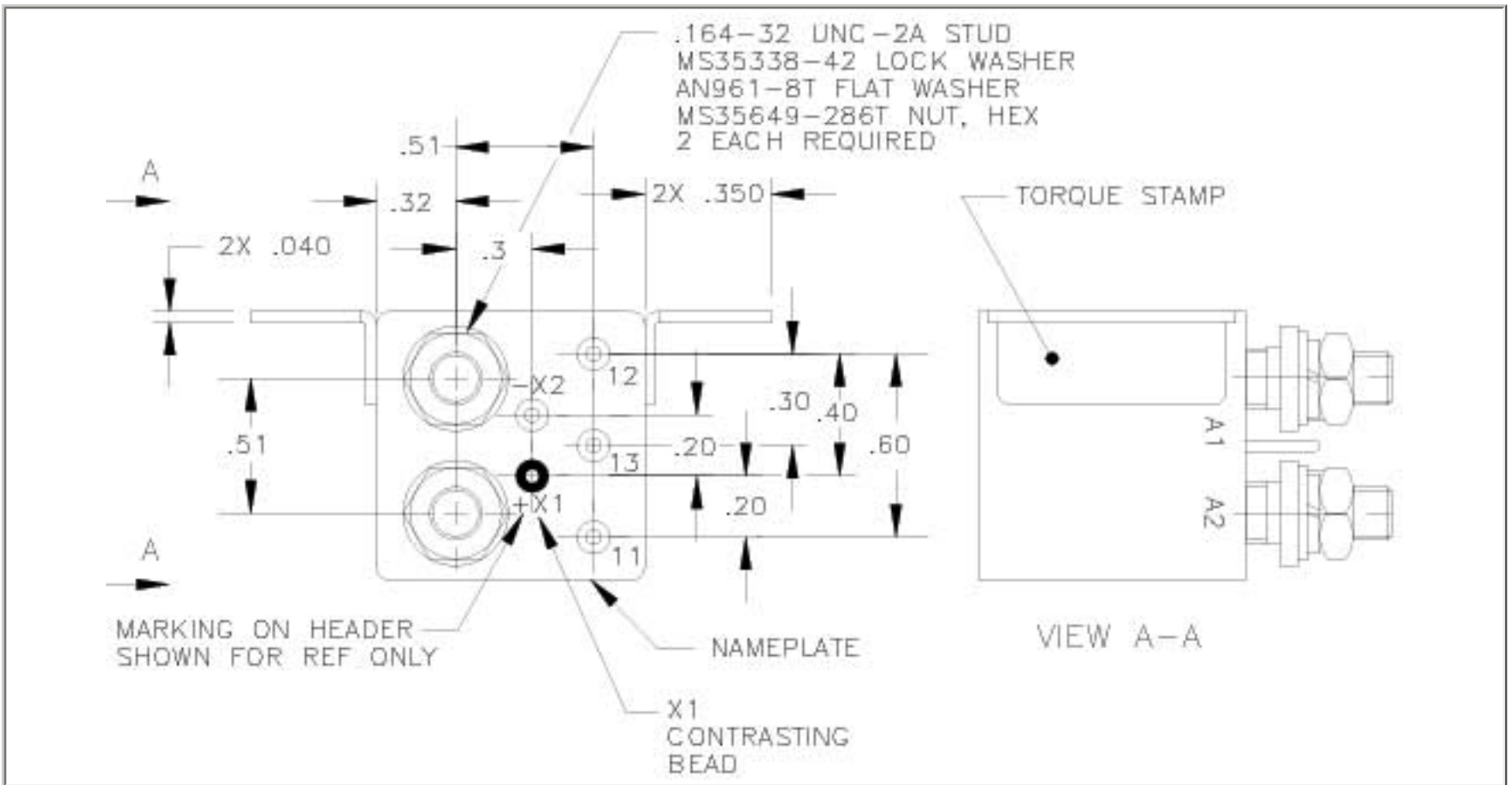
NUMBERING SYSTEM

| | | | | | |
|---|-----|---|---|---|---|
| | KXD | - | X | 9 | A |
| Basic series designation_____ | | | | | |
| 1-Mounting Style (Contact factory)_____ | | | | | |
| 2-Terminal Types (9)_____ | | | | | |
| 3-Coil Voltage see coil characteristics (A,B,C,M,N,R or V)_____ | | | | | |

MOUNTING STYLES



Standard Tolerance: .xx \pm .03, .xxx \pm .010



STANDARD TOLERANCE: .xx ±.03; .xxx±.010