



APPLICATION NOTES:

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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, 400Hz, 1 Ø and 115/200 Vac, 400Hz, 3 Ø**

Weight **1.70lbs max.**

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, 3 Ø | 28 Vdc [2] | 115 Vac 400 Hz [2] |
| Resistive | 50 | 90 | 90 | 120 | 120 |
| Inductive [1] | 30 | 90 | 90 | 80 | 120 |
| Motor | 30 | 60 | 60 | 80 | 80 |



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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 LC**

| CODE | A Vdc | N Suppressed [5] Vdc |
|---|----------|-------------------------|
| Nominal operating voltage | 28 | 28 |
| Maximum operating voltage | 29 | 29 |
| Pick-up voltage, maximum | | |
| - Nominal | 18 | 18 |
| - High temp test | 20 | 20 |
| - Continuous current test | 22.5 | 22.5 |
| Drop-out voltage, maximum | 7 | 7 |
| Coil resistance in Ohms $\pm 20\%$ at $+25^\circ\text{C}$ | 77 | 77 |
| Coil current max. @ nom. Volt. and $+25^\circ\text{C}$ | 0.40 Amp | 0.40 Amp |

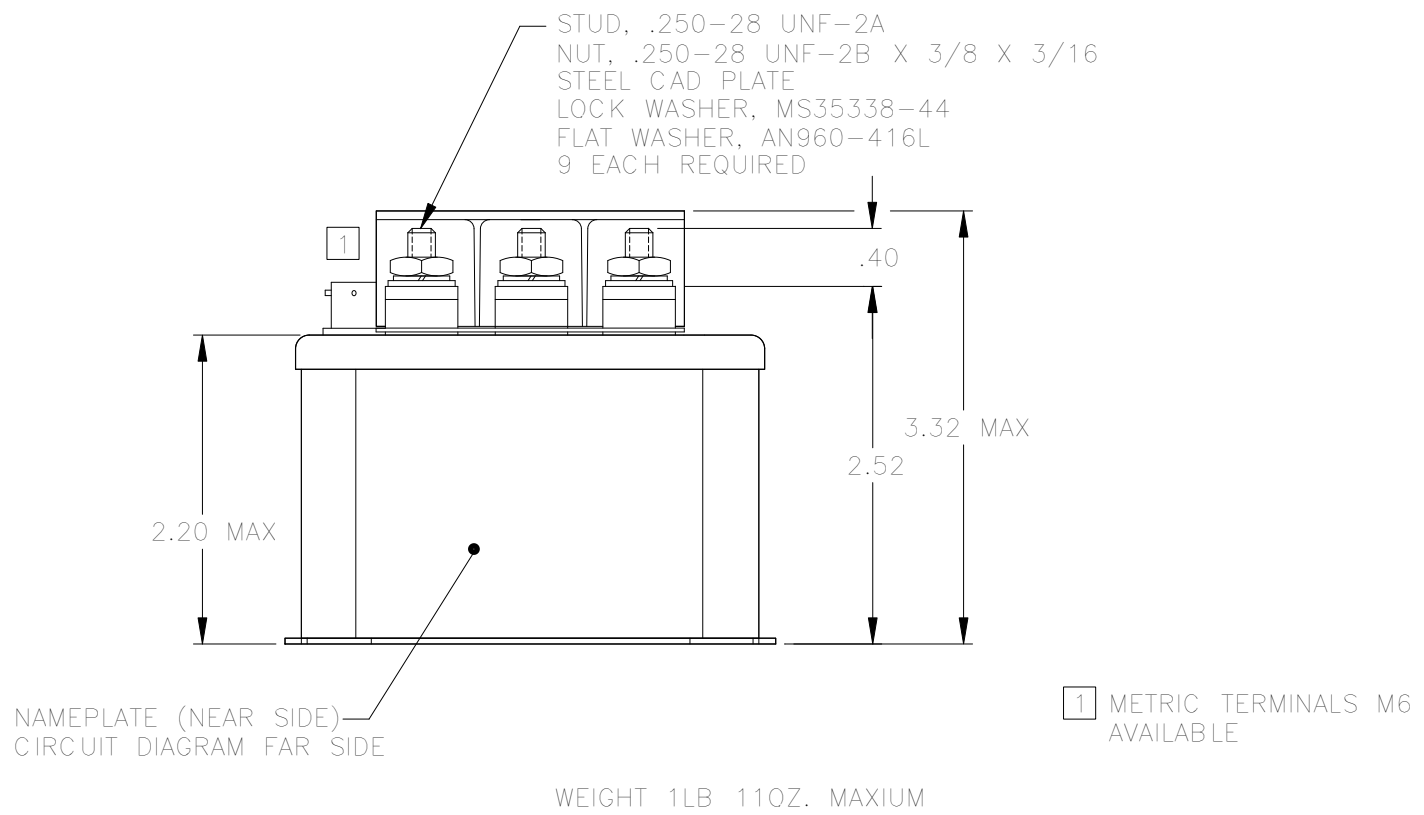
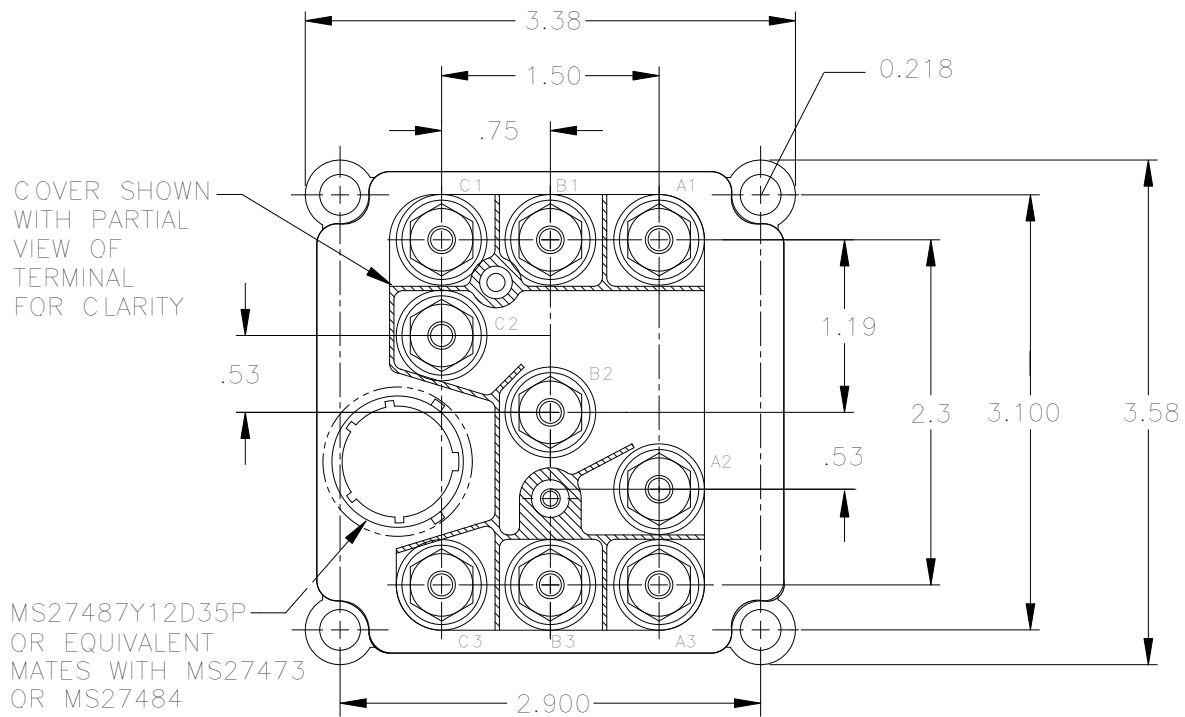
GENERAL CHARACTERISTICS

| | |
|---|----------------------|
| 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 | 100,000 |
| Dielectric strength at sea level | |
| - All circuits to ground and circuit to circuit | 1500 VRMS |
| - Coil to ground and aux. contacts | 1250 VRMS |
| Dielectric strength at altitude | |
| - Main contacts | 700 VRMS |
| - Coil and auxiliary contacts | 500 VRMS |
| Insulation resistance | |
| - Initial (500 Vdc) | 100 M Ω min |
| - After environmental tests (500 Vdc) | 50 M Ω min |
| Sinusoidal vibration | 10 G / 55 to 1000 Hz |
| Shock (6 ms duration) | 15 G |
| Maximum contact opening time under vibration and shock | 10 μs |
| Operate time at nominal voltage (Including bounce) | 40 ms max |
| Release time at nominal voltage (Including bounce) | 40 ms max [4] |
| Contact bounce at nominal voltage | 3 ms max |
| Weight | Noted |
| Overload at 115/200 Vac, 400 Hz | 600 Amps |
| Rupture at 115/200 Vac, 400 Hz | 800 Amps |
| Altitude | 50,000 Feet |

NOTES

- [1] Inductive load life, 20,000 cycles.
 [2] Ratings for double make terminal type 2, 4, & 6.
 3. Alternate contact configurations and other special models available upon request. Please contact factory.
 [4] Greater values for suppressed coils.
 [5] Suppressed "N" coil has back EMF suppression to 62 Volts max.
 6. This series drawing is for general use only. Please consult factory for special requirements.

MOUNTING STYLE A ONLY

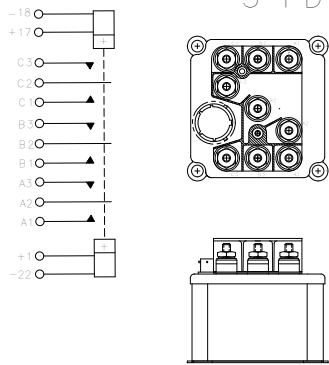


COIL CIRCUIT CONFIGURATION

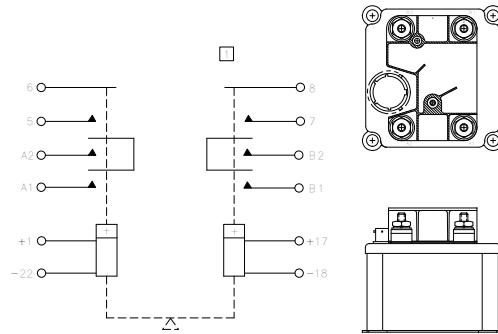


Standard Tolerance: .XX ±.03, .XXX ±.010

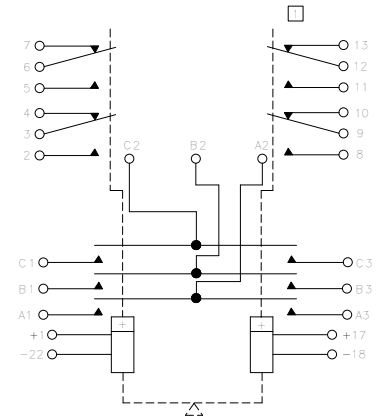
TERMINAL TYPE 1
3 PDT



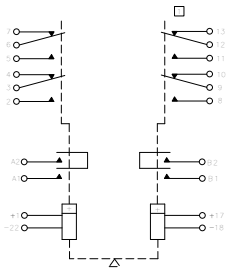
TERMINAL TYPE 2
SPDT WITH 2 PST-N.O. AUXILIARY CONTACTS



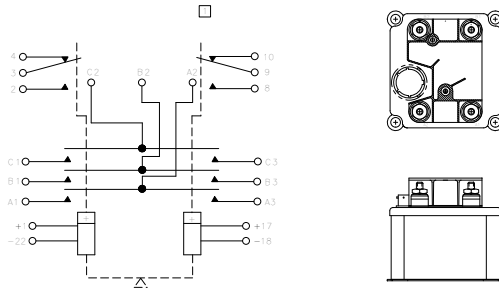
TERMINAL TYPE 3
3 PDT WITH 4 PDT AUXILIARY CONTACTS



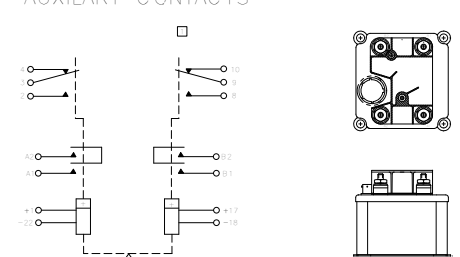
TERMINAL TYPE 4
SPDT DOUBLE MAKE WITH 4 PDT AUXILIARY CONTACTS



TERMINAL TYPE 5
3 PDT WITH 2 PDT AUXILIARY CONTACTS



TERMINAL TYPE 6
SPDT DOUBLE MAKE WITH 2 PDT AUXILIARY CONTACTS



TERMINAL TYPE 9

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

NOTES:

- 1 AUXILIARY CONTACT RATING: 28 VDC OR 115 VAC
- RESISTIVE 5 AMP
- INDUCTIVE 3 AMP
- LAMP 1 AMP
- BOUNCE AT NOMINAL VOLTAGE .004 SEC MAX
- OTHER AUXILIARY CONTACT FORMS AVAILABLE, INCLUDING LOW LEVEL CAPACITY

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

| | | | | | |
|----------------------------|----|---|---|---|---|
| Relay family | LC | - | X | 0 | X |
| 1-Mounting Style (A,B,Etc) | | | | | |
| 2-Terminal & Circuit | | | | | |
| 3-Coil Voltage (A,B,C,F,N) | | | | | |