

# ENGINEERING DATA SHEET

# SERIES 9123

CONTACTOR  
3 PST/NO, 25 AMP



Balanced armature design

Hermetically sealed

Contact arrangement **3 PST/NO**

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

## PRINCIPLE TECHNICAL CHARACTERISTICS

Contacts rated at **28 Vdc; 115 Vac, 400 Hz, 1Ø**  
**115/200 Vac, 400 Hz, 3Ø**

Weight **1.25 lb max**

Dimensions **3.31in x 3.73in x 2.44in**

Special units available upon request, including models with auxiliary contacts.

### APPLICATION NOTES:

[101](#)

[102](#)

[103F](#)

[007](#)

## 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 [5]	440 Vac 60 Hz [5] DELTA
Resistive	25	25	25	15	12.5
Inductive [6]	25	25	25	15	12.5
Motor	25	25	25	7	10
Intermediate current	2.5	2.5	2.5	-	-



Featuring **LEACH**® power and control solutions  
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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 9123**

CODE	Vdc	115 Vac 60/400 Hz	Suppressed Vdc [2]
Nominal operating voltage	28	115	28
Maximum operating voltage	29	124	29
Pick-up voltage, max.			
- Nominal	18	90	18
- High temp test	21	100	21
- Continuous current test	22.5	104	22.5
Drop-out voltage, max.			
Coil resistance ohms $\pm 10\%$ at +25° C	50	-	50
Coil current max. mA at +25° C	-	200	-

**GENERAL CHARACTERISTICS**

Temperature range	-70°C to +125°C
Minimum operating cycles (life) at rated load	50,000
Minimum operating cycles (life) at 25% rated load	100,000
Dielectric strength at sea level	
- Coil to case	DC 1,250 Vrms AC 1,500 Vrms
- Auxiliary contacts	DC 1,250 Vrms AC 1,500 Vrms
- All other points	DC 1,250 Vrms AC 1,800 Vrms
Dielectric strength at altitude 80,000 ft	700 Vrms (Coil 500 Vrms)
Insulation resistance (at 500 Vdc) minimum	100 M $\Omega$ min
Sinusoidal vibration (55-1500 Hz)	15G
Shock (6-9 millisecond duration)	50G
Maximum contact opening time under shock or vibration	2 ms
Operate time at nominal voltage	
- DC	25 ms max
- AC	30 ms max
Release time at nominal voltage	
- DC	10 ms max
- AC	50 ms max
Contact bounce at nominal voltage	2 ms max [1]
Weight, max.	1.25 lb

**RELAY NUMBERING SYSTEM**

**SERIES 9123**

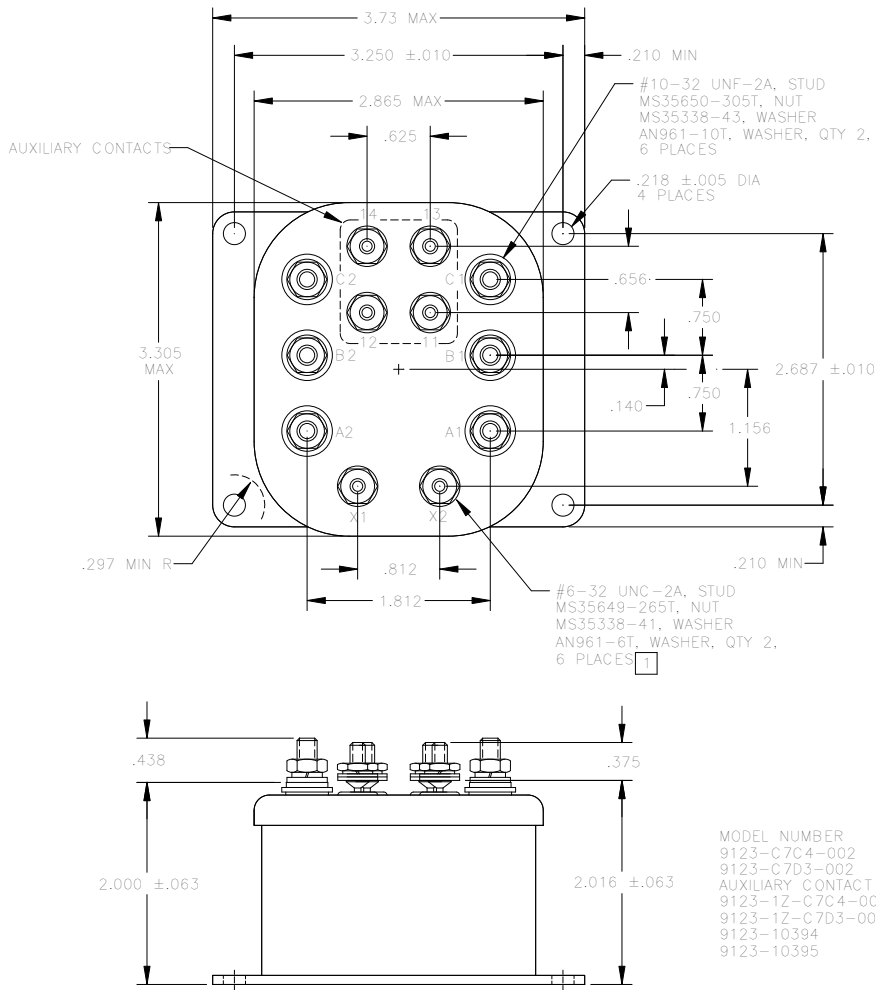
LEACH PART NO.	DESCRIPTION	MS NUMBER	MOUNTING STYLE [4]	SCHEMATIC DIAGRAM [4]
9123-C7C4-002	3 PST/NO, 25 AMP, DC COIL	MS27997-D1	1	1
9123-C7D3-002	3 PST/NO, 25 AMP, AC COIL	MS27997-A1	1	1
9123-1Z-C7C4-002	3 PST/NO, 25 AMP, DC COIL, AUX CONTACT	MS27997-D2	1	2
9123-1Z-C7D3-002	3 PST/NO, 25 AMP, AC COIL, AUX CONTACT	MS27997-A2	1	2
9123-8069	3 PST/NO, 25 AMP, DC COIL	MS24143-D1 [3]	2	1
9123-8070	3 PST/NO, 25 AMP, AC COIL	MS24143-A1 [3]	2	1
9123-8071	3 PST/NO, 25 AMP, DC COIL, AUX CONTACT	MS24143-D2 [3]	2	2
9123-8072	3 PST/NO, 25 AMP, AC COIL, AUX CONTACT	MS24143-A2 [3]	2	2
9123-10394	3 PST/NO, 25 AMP, DC SUPPRESSED COIL	-	1	3
9123-10395	3 PST/NO, 25 AMP, DC SUPPRESSED COIL, AUX CONTACT	-	1	4
9123-10396	3 PST/NO, 25 AMP, DC SUPPRESSED COIL	-	2	3
9123-10397	3 PST/NO, 25 AMP, DC SUPPRESSED COIL, AUX CONTACT	-	2	4

Special models available upon request, please contact factory.

**NOTES**

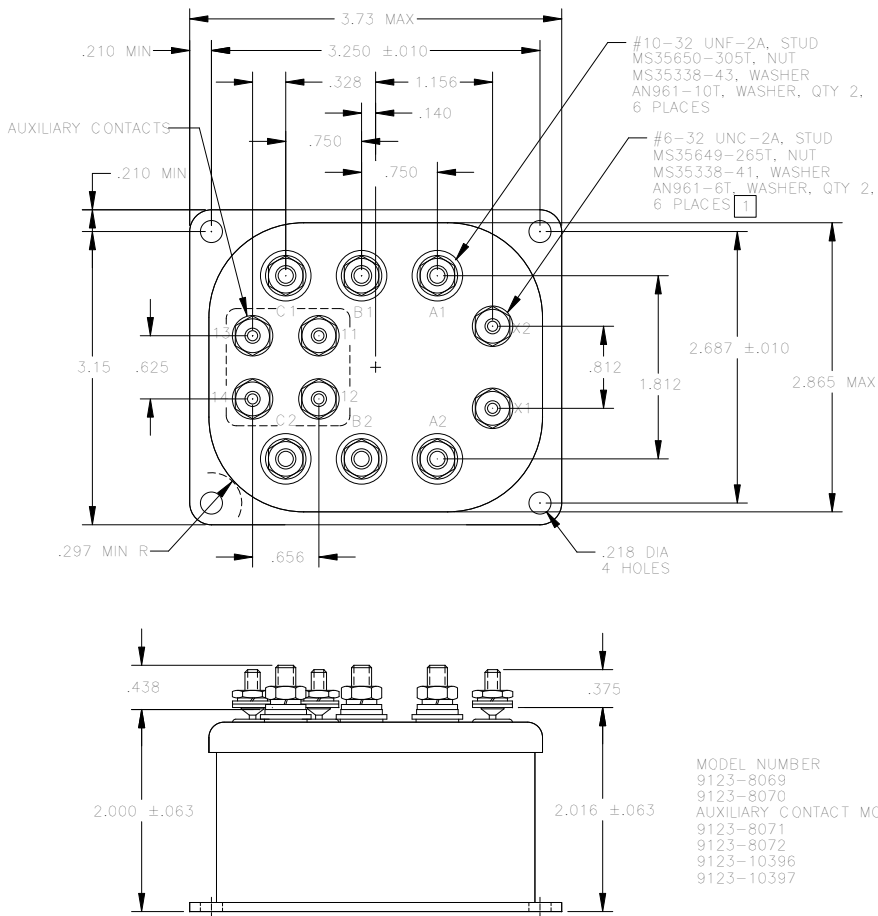
- [1] Auxiliary contact rating:  
 Resistive and inductive: (28 Vdc or 115 Vac) 5 Amp  
 Lamp: (28 Vdc or 115 Vac) 1 Amp  
 Bounce at nominal voltage: .004 sec max
- [2] Coils have back EMF suppression to 42 volts.
- [3] MS numbers are for reference only. Relays are electrically and mechanically interchangeable except the height is less on the  
 Leach relays similar to MS24143.
- [4] See the following pages for mounting styles and schematic diagram.
- [5] Ratings beyond MS requirements.
- [6] Inductive life is 20 percent of rated resistive load life.

MOUNTING STYLE 1



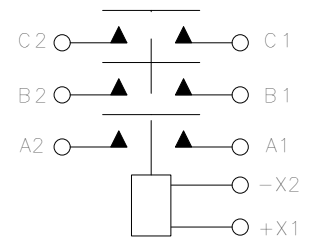
1 2 PLACES, FOR NON-AUXILIARY MODELS

MOUNTING STYLE 2

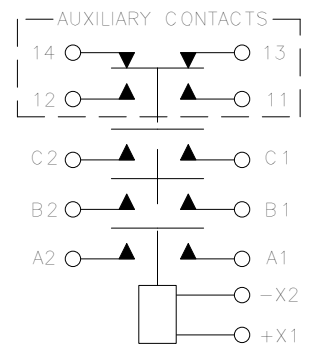


1 2 PLACES, FOR NON-AUXILIARY MODELS

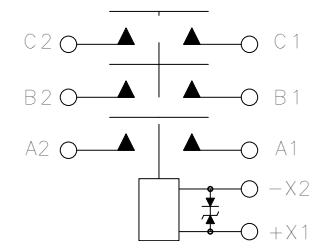
SCHEMATIC DIAGRAM NO 1



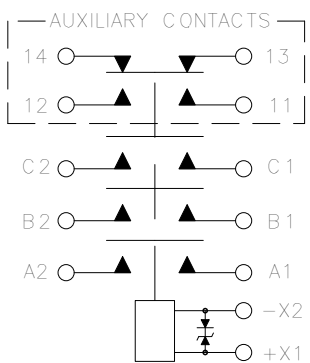
SCHEMATIC DIAGRAM NO 2



SCHEMATIC DIAGRAM NO 3

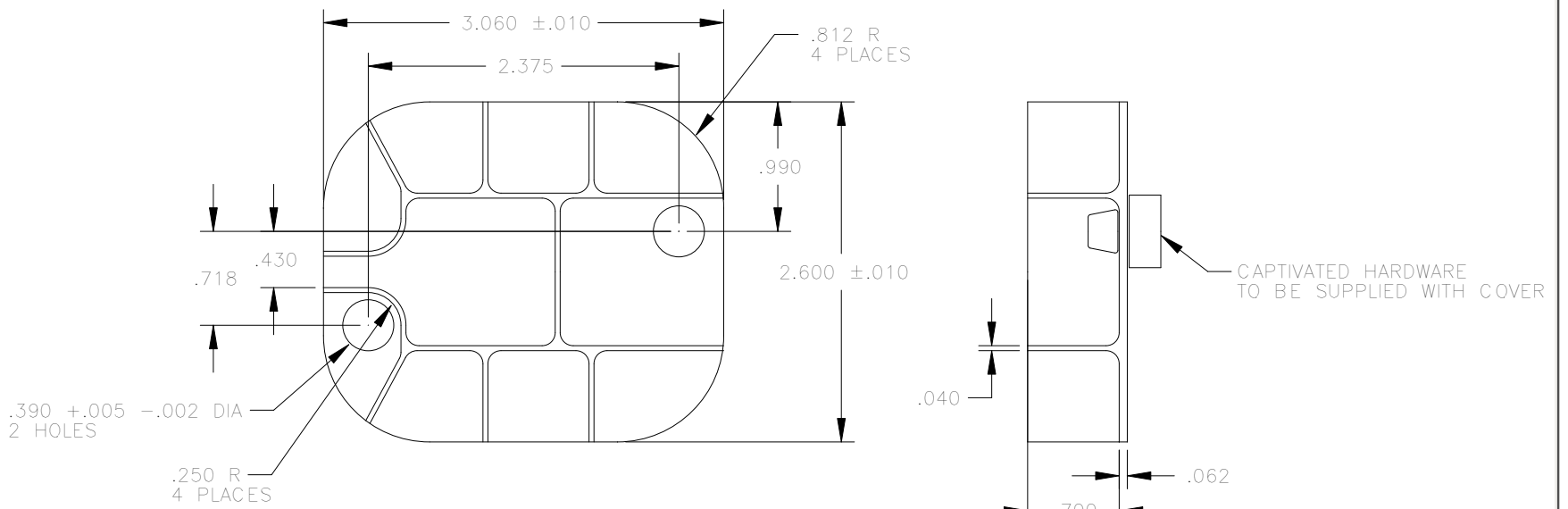


SCHEMATIC DIAGRAM NO 4



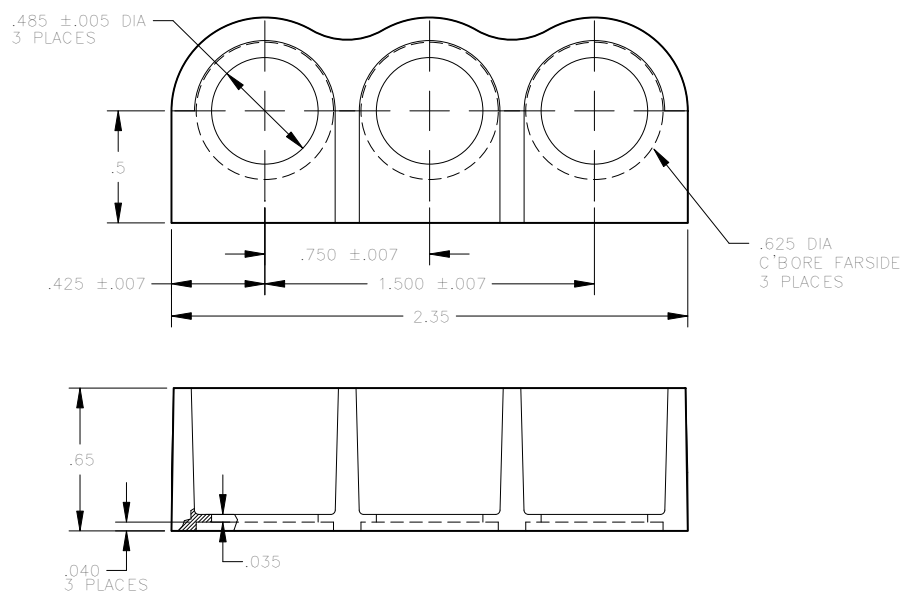
STANDARD. TOLERANCE: ± .031

PART NUMBER: 001-8708-000



1. MATERIAL: 30% GLASS FILLED NYLON  
COLOR, BLACK. MEETS OR EXCEEDS  
FED SPEC NO. LP-395.

PART NUMBER: 001-1908-000



1. MATERIALS: DIALL FS-80 (BLACK)
2. TWO EACH REQUIRED