

ENGINEERING DATA SHEET

SERIES 9125

CONTACTOR
50 AMP



Balanced armature design
Hermetically sealed, mechanical interlock

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

PRINCIPLE TECHNICAL CHARACTERISTICS

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

Weight **2.9 lb max**

Dimensions **6.21in x 3.80in x 2.70in**

Special units available upon request.

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	440 Vac 60 Hz DELTA
Resistive	50	50	50	30	15
Inductive [4]	50	50	50	30	15
Motor	50	50	50	15	12
Intermediate current	5	5	5	15	-
Load transfer [3]	-	-	50	-	-



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No.8 Science Park West Avenue
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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 9125**

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.			
- @ +125°C	18	90	18
- High temp test	21	100	21
- Continuous current test	22.5	104	22.5
Drop-out voltage, max.	7	40	7
Coil resistance Ohms ±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	
- Auxiliary contacts	DC 1,250 Vrms AC 1,500 Vrms
- All other points	DC 1,250 Vrms AC 1,800 Vrms
- All circuits to ground and circuit to circuit	1,500 Vrms
- Coil to ground	DC 1,050 Vrms AC 1,250 Vrms
Dielectric strength at altitude 80,000 ft	700 Vrms
Insulation resistance (at 500 Vdc) minimum	100 M Ω min
Sinusoidal vibration (70-1500 Hz)	15 G
Shock (6-9 ms duration)	50 G
Maximum contact opening time under shock or vibration	2 ms
Operate time at nominal voltage	
- DC	30 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.	2.90 lb

RELAY NUMBERING SYSTEM

SERIES 9125

LEACH PART NO.	DESCRIPTION	MS NUMBER	CONFIGURATION	SCHEMATIC
9125-104897	3 PDT-NO, 50 AMP, DC COIL	-	1	1
9125-10498	3 PDT-NO, 50 AMP, DC COIL, SUPPRESSED	-	1	2
9125-10499	3 PDT-NO, 50 AMP, DC, AC COIL	-	1	1
9125-10500	3 PDT-NO, 50 AMP, AC COIL	-	1	1
9125-2Z-C7C4-001	3 PDT-NO, 50 AMP, DC COIL, AUX CONTACTS	-	2	3
9125-10341	3 PDT-NO, 50 AMP, DC COIL, SUPPRESSED, AUX CONTACTS	-	2	4
9125-2Z-C7D03-001	3 PDT-NO, 50 AMP, AC COIL, AUX CONTACTS	-	2	3
9125-10501	3 PDT-NO, 50 AMP, DC, AC COIL, AUX CONTACTS	-	2	3
9125-10502	6 PST-NO, 50 AMP, DC COIL	-	3	5
9125-10503	6 PST-NO, 50 AMP, DC COIL, SUPPRESSED	-	3	6
9125-10504	6 PST-NO, 50 AMP, DC COIL, AUX CONTACTS	-	4	7
9125-10505	6 PST-NO, 50 AMP, DC COIL, SUPPRESSED, AUX CONTACTS	-	4	8
9125-10506	6 PST-NO, 50 AMP, AC COIL	-	3	5
9125-10507	6 PST-NO, 50 AMP, AC COIL, AUX CONTACTS	-	4	7

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

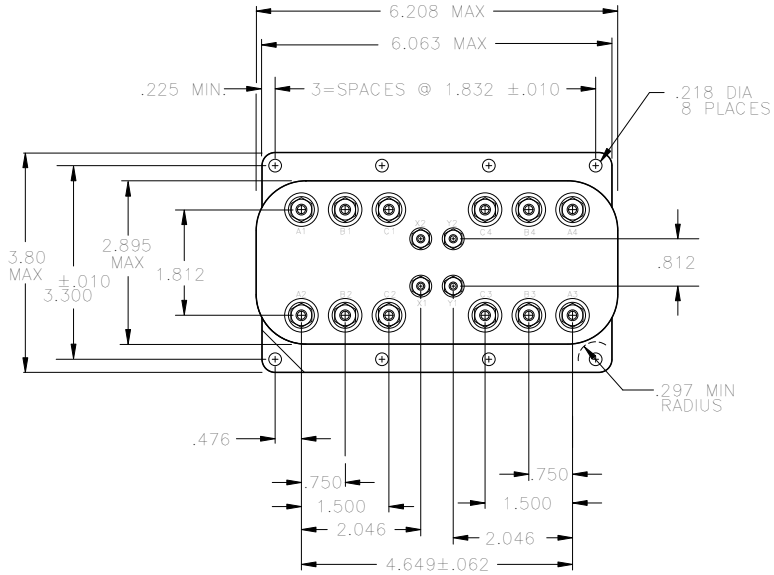
Bounce at nominal voltage maximum: .004 sec max

[2] Suppressed coils have back EMF suppression to 42 Vdc.

[3] Suitable for transfer between unsynchronized AC power at ratings indicated.

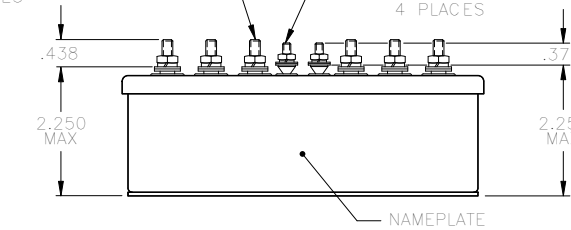
[4] Inductive load life is 20 percent of rated resistive load life.

FIGURE 1



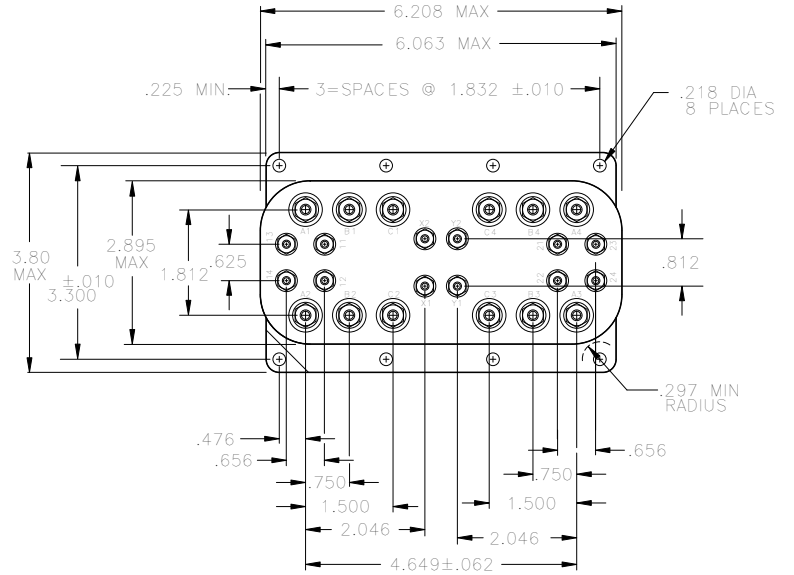
STUD, #10-32 UNF-2A
NUT, MS35650-305T
LOCKWASHER, MS35338-43
FLATWASHER, AN961-10T, QTY 2
12 PLACES

STUD, #6-32 UNC-2A
NUT, MS35649-265T
LOCKWASHER, MS35338-41
WASHER, AN961-6T, QTY 2
4 PLACES



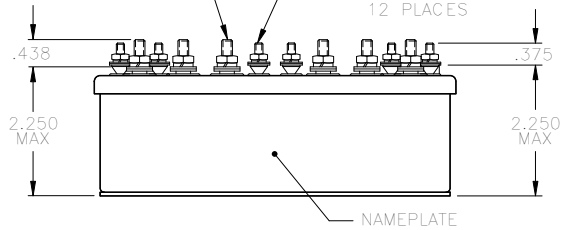
MODEL NUMBER	WEIGHT (MAX)
9125-10487	2.7 LB
9125-10489	2.7 LB
9125-10499	2.7 LB
9125-10500	2.7 LB

FIGURE 2



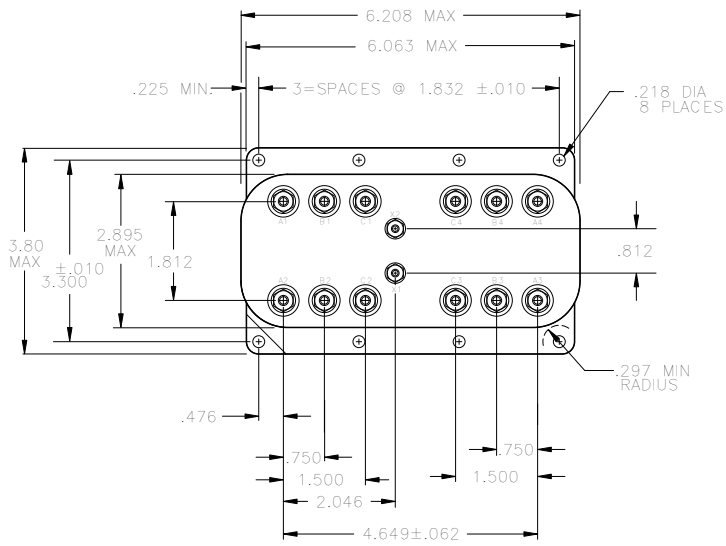
STUD, #10-32 UNF-2A
NUT, MS35650-305T
LOCKWASHER, MS35338-43
FLATWASHER, AN961-10T, QTY 2
12 PLACES

STUD, #6-32 UNC-2A
NUT, MS35649-265T
LOCKWASHER, MS35338-41
WASHER, AN961-6T, QTY 2
12 PLACES



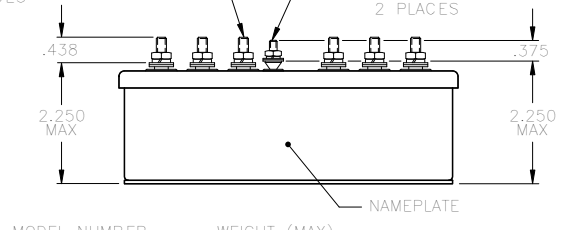
MODEL NUMBER	WEIGHT (MAX)
9125-10341	2.9 LB
9125-10501	2.9 LB
9125-2Z-C7C4-001	2.9 LB
9125-2Z-C7D3-001	2.9 LB

FIGURE 3



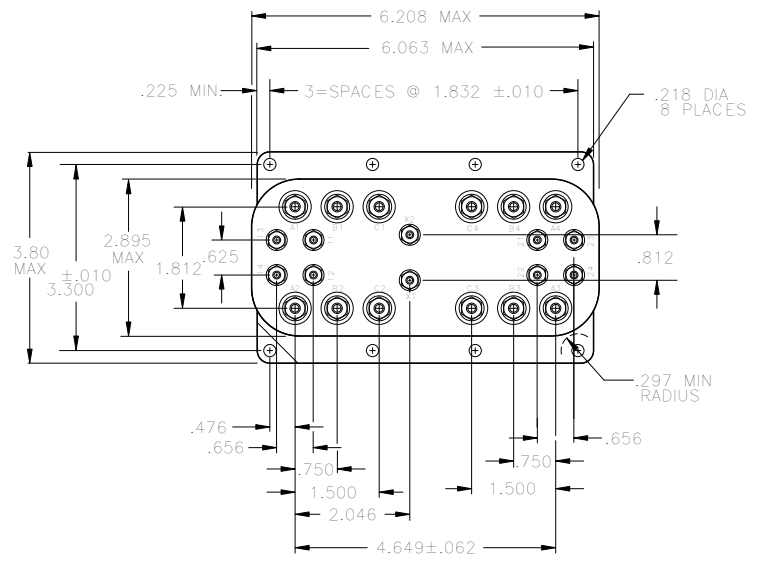
STUD, #10-32 UNF-2A
NUT, MS35650-305T
LOCKWASHER, MS35338-43
FLATWASHER, AN961-10T, QTY 2
12 PLACES

STUD, #6-32 UNC-2A
NUT, MS35649-265T
LOCKWASHER, MS35338-41
WASHER, AN961-6T, QTY 2
2 PLACES



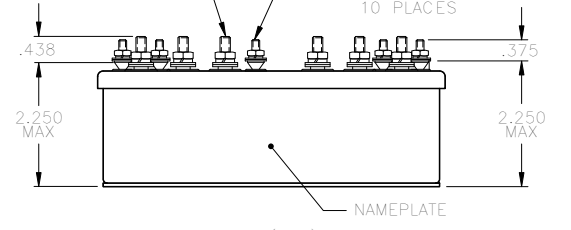
MODEL NUMBER	WEIGHT (MAX)
9125-10502	2.7 LB
9125-10503	2.7 LB
9125-10506	2.7 LB

FIGURE 4



STUD, #10-32 UNF-2A
NUT, MS35650-305T
LOCKWASHER, MS35338-43
FLATWASHER, AN961-10T, QTY 2
12 PLACES

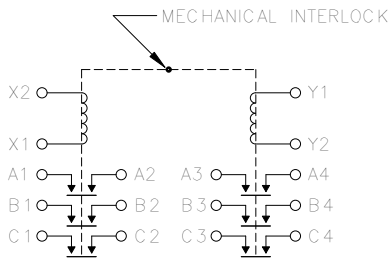
STUD, #6-32 UNC-2A
NUT, MS35649-265T
LOCKWASHER, MS35338-41
WASHER, AN961-6T, QTY 2
10 PLACES



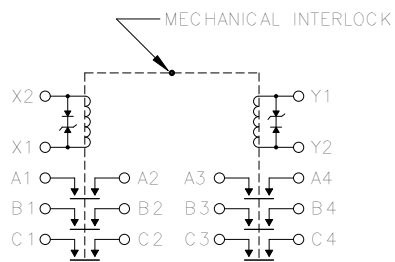
MODEL NUMBER	WEIGHT (MAX)
9125-10504	2.9 LB
9125-10505	2.9 LB
9125-10507	2.9 LB

STANDARD. TOLERANCE: ± .031

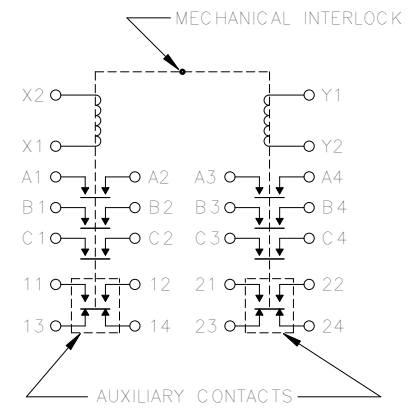
SCHEMATIC DIAGRAM #1



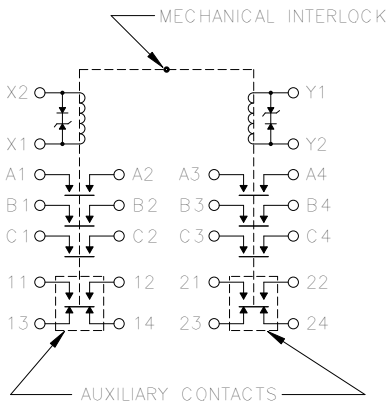
SCHEMATIC DIAGRAM #2



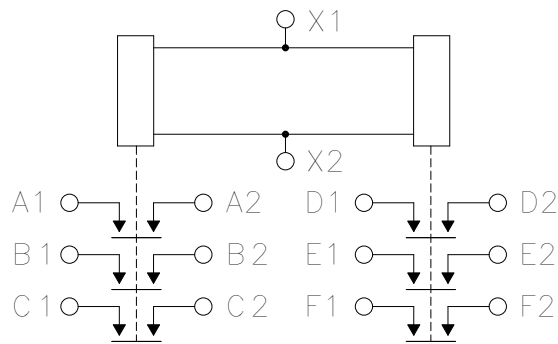
SCHEMATIC DIAGRAM #3



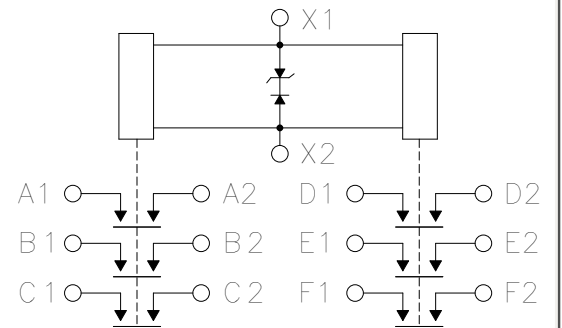
SCHEMATIC DIAGRAM #4



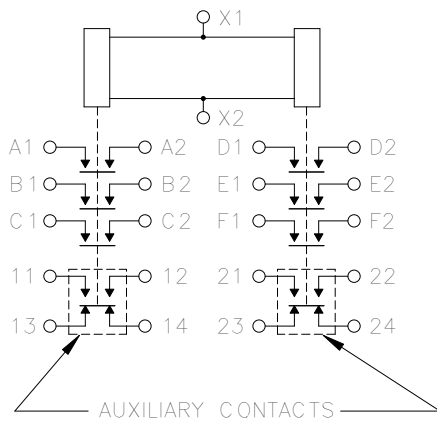
SCHEMATIC DIAGRAM #5



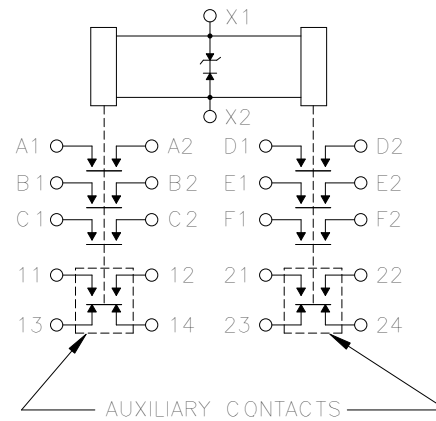
SCHEMATIC DIAGRAM #6



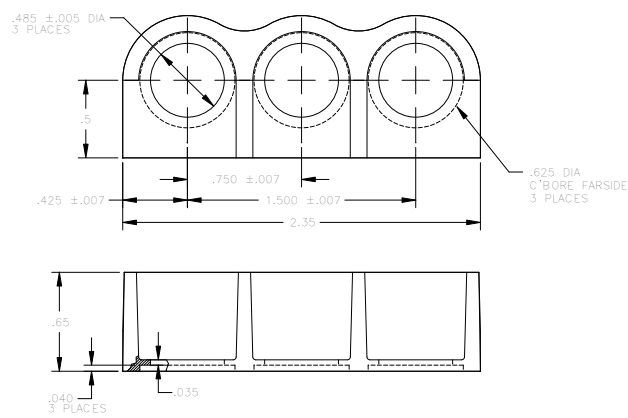
SCHEMATIC DIAGRAM #7



SCHEMATIC DIAGRAM #8



TERMINAL BARRIER (OPTIONAL)
PART NUMBER: 001-1908-000



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