

**Application Notes:**  
103G

• Rotary Design Power Contactor

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

### PRINCIPLE TECHNICAL CHARACTERISTICS

- **Contacts rated at** 28 Vdc; 115 Vac, 60/400 Hz,  
1Ø 115/200 Vac, 60/400 Hz, 3Ø
- **Weight** 1.75 lbs. max
- **Dimensions** 3.62 in x 3.62 in x 2.87 in
- **Special units available upon request including models with auxiliary contacts.**

### CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per pole and load type [1]	Load current in Amps					
	28 Vdc	115 Vac 400 Hz	115 Vac 60 Hz	115/200 Vac 400 Hz	115/200 Vac 60 Hz	440 Vac 60 Hz DELTA
Resistive	100	100	10	2.5	5	50
Inductive	100	100	8	2.5	5	
Motor [3]	100	100	4	2	2	

**AMERICAS.**

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## COIL CHARACTERISTICS (Vdc)

CODE	Vdc	115 Vac 400 Hz	115 Vac 60 Hz
Nominal operating voltage	28	115	115
Maximum operating voltage	29	124	124
Pick-up voltage, max	18	95	95
Drop-out voltage, max	7	35	30
Coil resistance ohms $\pm 10\%$ at +25° C	44.5	-	-
Coil current max. mA at +25° C	-	200	200

## GENERAL CHARACTERISTICS

Temperature range	-55°C to +85°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	
All circuits to ground and circuit to circuit	1,500 Vrms
Coil to ground	1,250 Vrms
Dielectric strength at altitude 50,000 ft.	500 Vrms
Insulation resistance (at 500 Vdc) minimum	100 M $\Omega$ min
Sinusoidal vibration (55-500 Hz)	10G
Shock (6-9 millisecond duration)	50G
Maximum contact opening time under shock or vibration	2 $\mu$ s
Operate time at nominal voltage	
DC	30 ms max
Release time at nominal voltage	
DC	30 ms max
AC	50 ms max
Weight, max.	1.75 lb

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

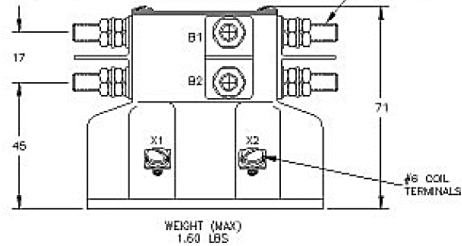
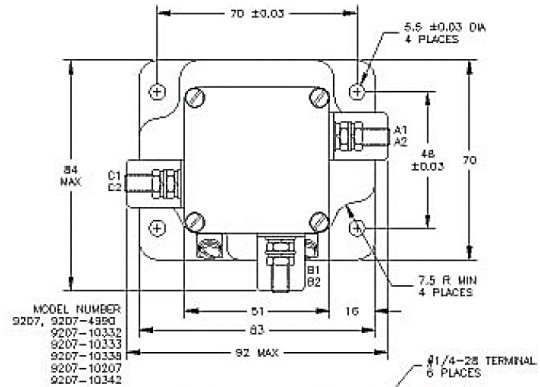
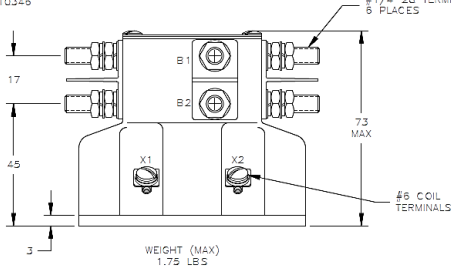
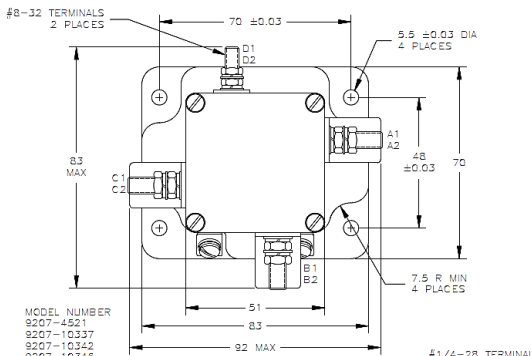
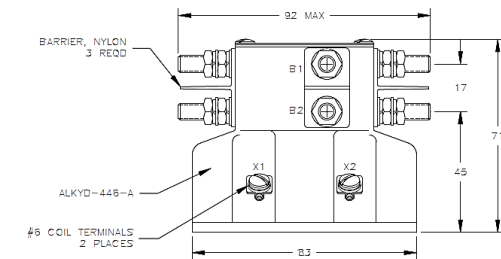
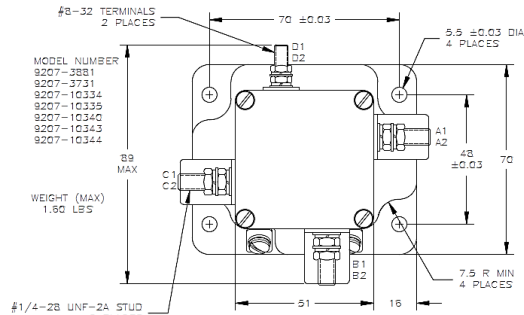
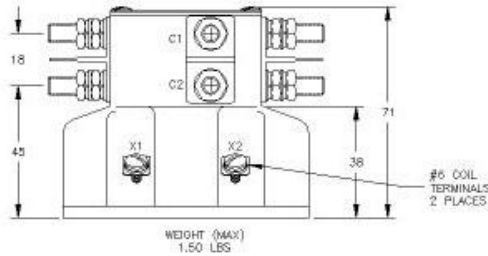
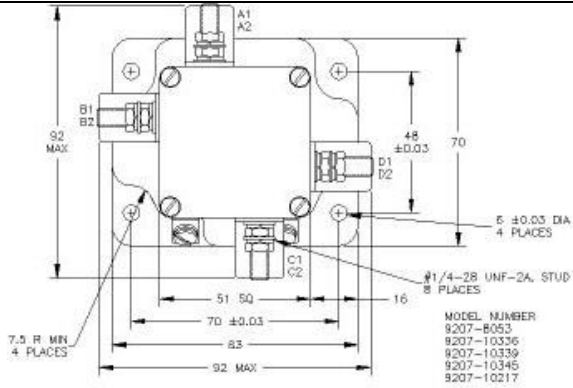
**RELAY NUMBERING SYSTEM**

STANDARD ITEMS					
28 VDC		115 VAC/400 Hz		115 VAC/60 Hz	
LEACH PART NO.	CONTACT CONF.	LEACH PART NO.	CONTACT CONF.	LEACH PART NO.	CONTACT CONF.
9207-3731	3 PST-DM 1 PST-N.O. AUX	9207	3 PST-DM 1 PST-N.O. AUX	9207-4990	3 PST-DM
9207-8053	2 PDT-DB-DM	9207-3881	3 PST-DM 1 PST-N.O. AUX	9207-10217	2 PDT-DB-DM
9207-10207	3 PST-DM	9207-4521	3 PST-DM 1 PST-N.C. AUX		
D.S.C.C. PART NO. [1]		COIL VOLTAGE		CONTACT CONFIGURATION	LEACH PART NO.
84192-001		28 VDC		3 PST-DM	9207-10332
84192-002		115 VAC 60 Hz		3 PST-DM	9207-10333
84192-003		28 VDC		3 PST-DM; 1 PST-N.O. Aux	9207-10334
84192-004		115 VAC 60 Hz		3 PST-DM; 1 PST-N.O. Aux	9207-10335
84192-005		115 VAC 60 Hz		2 PDT-DB-DM	9207-10336
84192-006		28 VDC		3 PST-DM; 1 PST-N.C. AUX	9207-10337
84192-007		28 VDC		3 PST-DM	9207-10338
84192-008		28 VDC		2 PDT-DB-DM	9207-10339
84192-009		28 VDC		3 PST-DM; 1 PST-N.O. AUX	9207-10340
84192-010		28 VDC		3 PST-DM; 1 PST-N.C. AUX	9207-10341
84192-011		115 VAC 400 Hz		3 PST-DM	9207-10342
84192-012		115 VAC 60 Hz		3 PST-DM; 1 PST-N.O. AUX	9207-10343
84192-013		115 VAC 400 Hz		3 PST-DM; 1 PST-N.O. AUX	9207-10344
84192-014		115 VAC 400 Hz		2 PDT-DB-DM	9207-10345
84192-015		115 VAC 400 Hz		3 PST-DM; 1 PST-N.C. AUX	9207-10346

**Notes**

- [1] Defense Supply Center Columbus.
- 2. See page three and four for configurations and schematics.
- [3] Motor load inrush limited to 400 Amp.

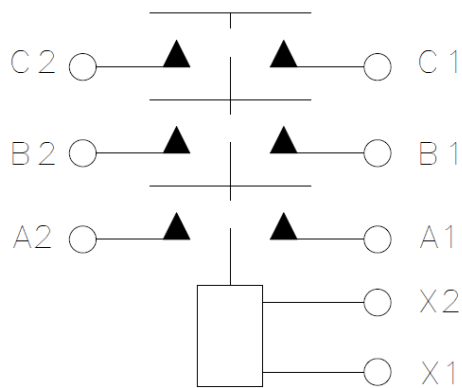
**CONFIGURATION**



Standard Terminal Hardware Per Applicable Stud	#8-32 UNC-2A Stud MS35649-282 Nut MS35338-42 Lockwasher AN960-8L Washer	#1/4-28 UNC-2A Stud AN316-4R Nut MS35338-44 Lockwasher AN960-416L Flat Washer	MS35338-41 Lockwasher AN960-6 Washer
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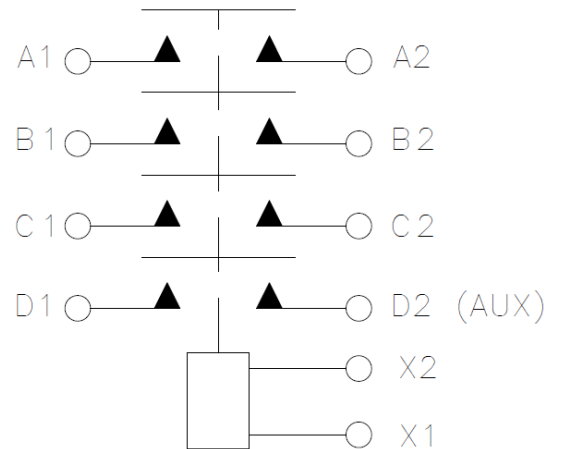
**SCHEMATIC DIAGRAM**

CONTACT CONFIGURATION  
 3PST-DM



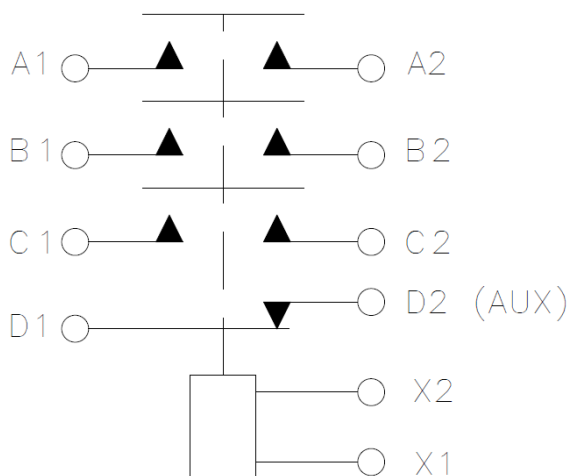
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 9207-10207  
 9207-10332  
 9207-10333  
 9207-10338  
 9207-10342

CONTACT CONFIGURATION  
 4PST-DM



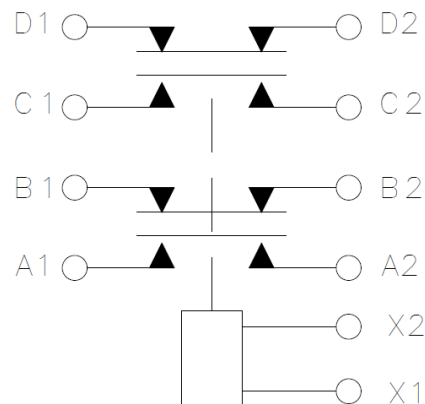
MODEL NUMBER  
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 9207-3881  
 9207-10334  
 9207-10335  
 9207-10340  
 9207-10343  
 9207-10344

CONTACT CONFIGURATION  
 3PST-DM+1PST-NC AUX



MODEL NUMBER  
 9207-4521  
 9207-10337  
 9207-10341  
 9207-10346

CONTACT CONFIGURATION  
 2PDT-DB-DM



MODEL NUMBER  
 9207-8053  
 9207-10217  
 9207-10336  
 9207-10339  
 9207-10345