



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	50	100	50	50
Inductive	100	100	50	100	50	
Motor [3]	100	100	50	100	50	

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 Ω min
Sinusoidal vibration (55-500 Hz)	10G
Shock (6-9 millisecond duration)	50G
Maximum contact opening time under shock or vibration	2 μ 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	

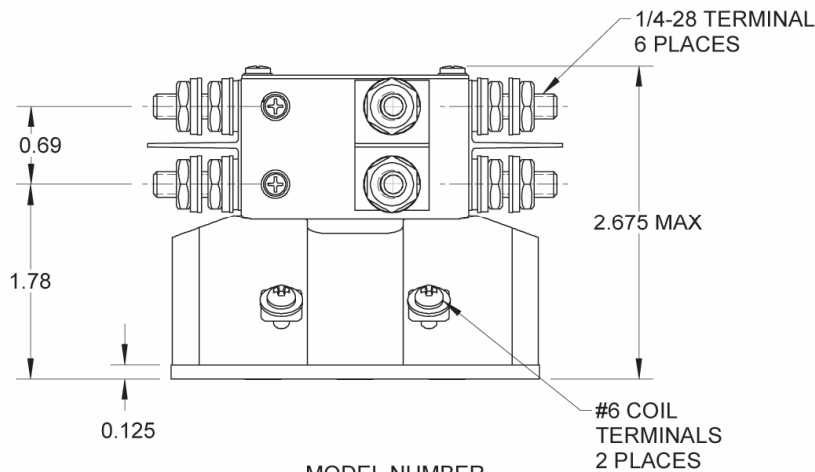
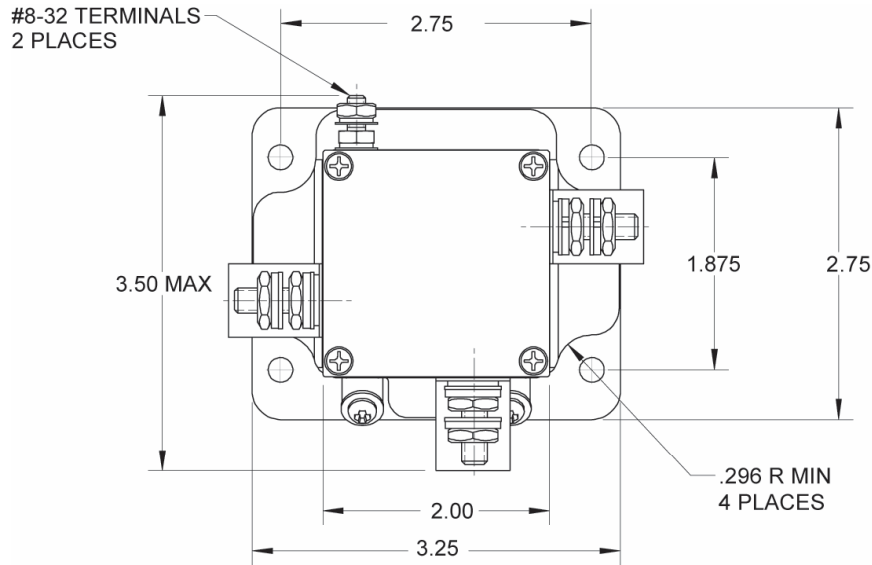
Notes

[1] Defense Supply Center Columbus.
[3] Motor load inrush limited to 400 Amp.

[2] See page three and four for configurations and schematics.
[4] Contact factory for auxiliary contact ratings

CONFIGURATION

Dimensions in inches
Tolerances, unless otherwise specified, XX ±.03; .XXX ±.010

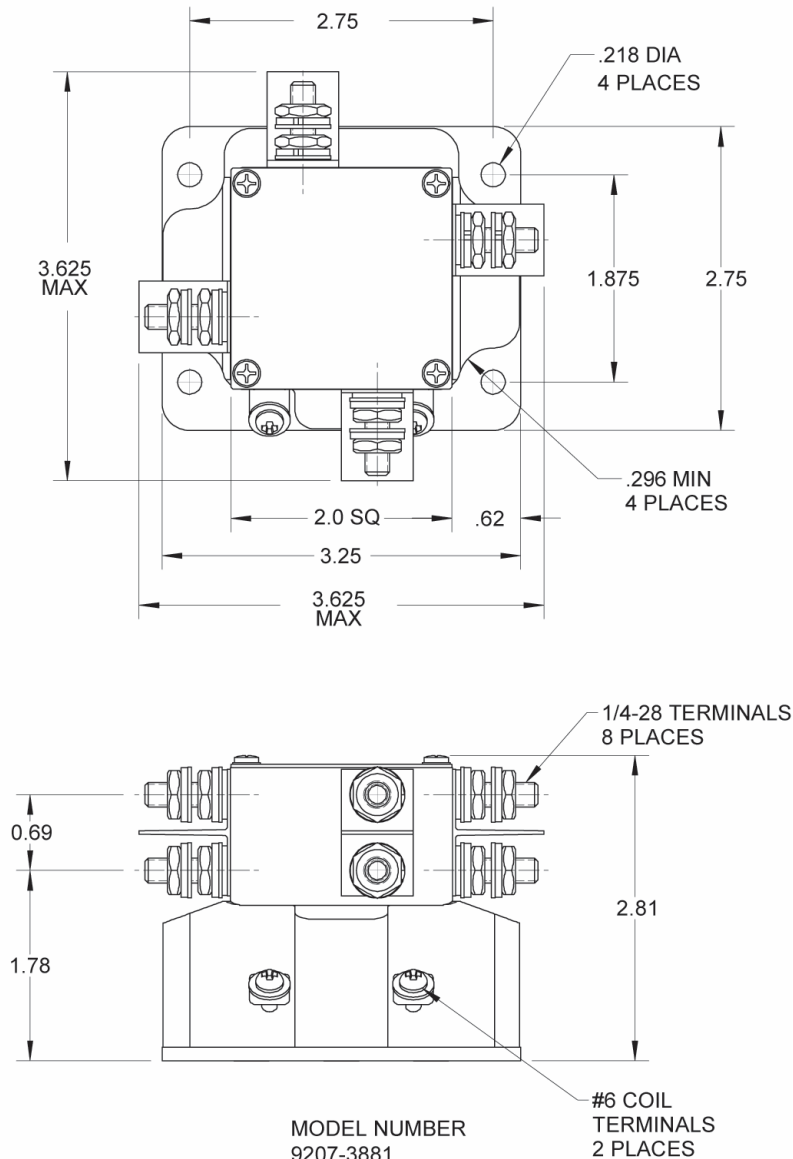


MODEL NUMBER
9207-8053
9207-10336
9207-10339
9207-10345
9207-10217

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
---	---	--	---

CONFIGURATION

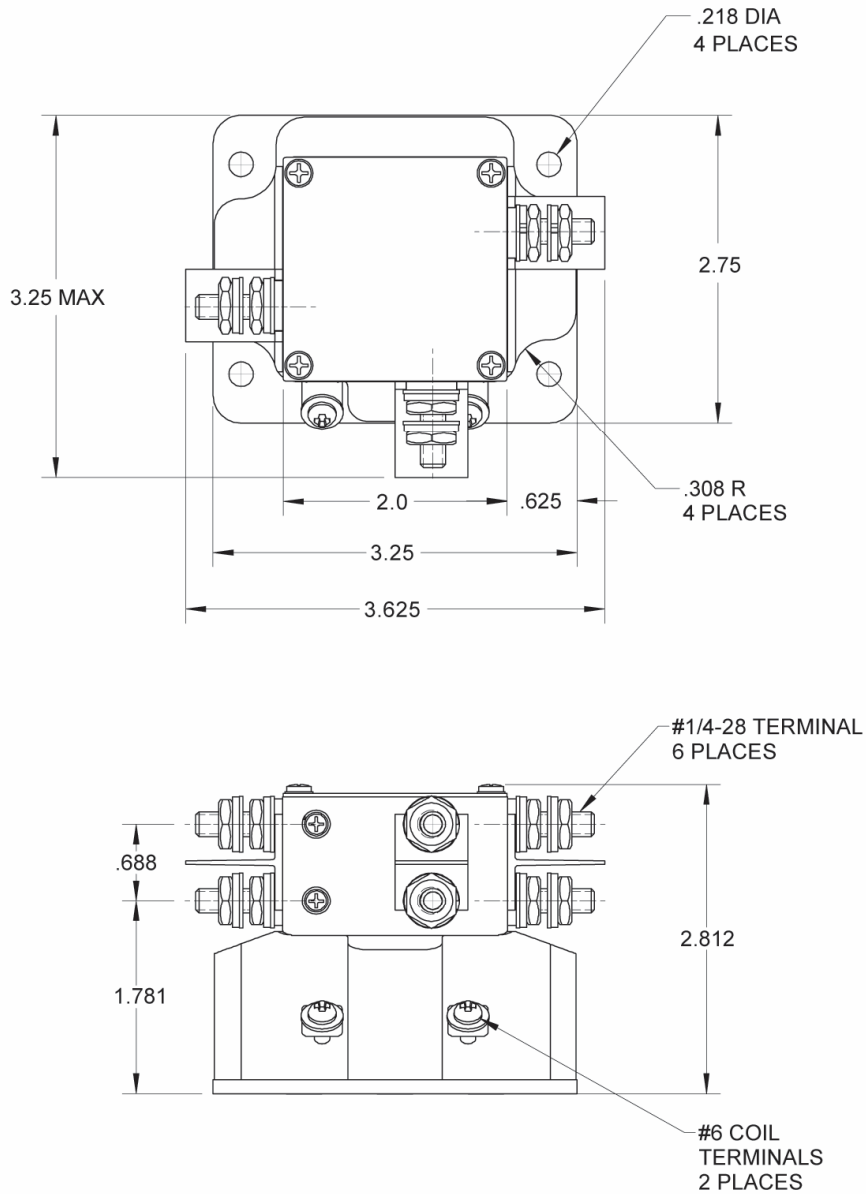
Dimensions in inches
Tolerances, unless otherwise specified, XX ±.03; .XXX ±.010



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
---	---	--	---

CONFIGURATION

Dimensions in inches
Tolerances, unless otherwise specified, XX ±.03; .XXX ±.010

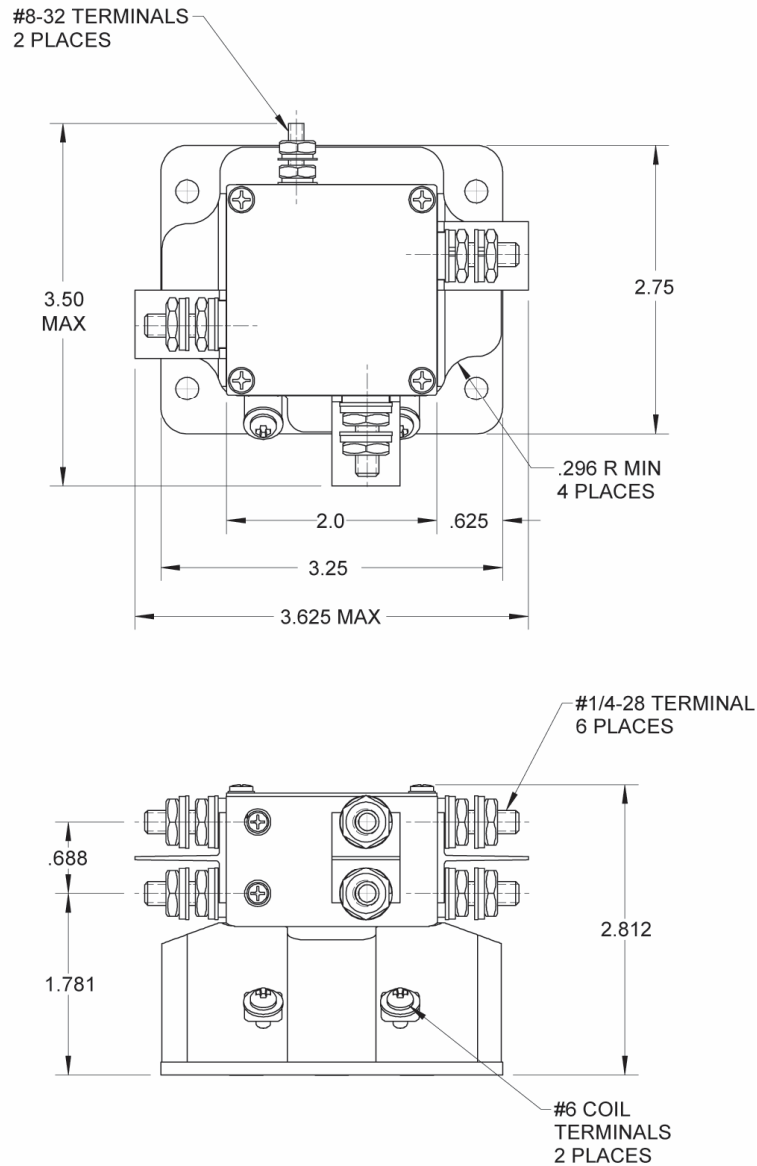


MODEL NUMBER
9207-4521
9207-10337
9207-10341
9207-10346

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
---	---	--	---

CONFIGURATION

Dimensions in inches
Tolerances, unless otherwise specified, XX ±.03; .XXX ±.010



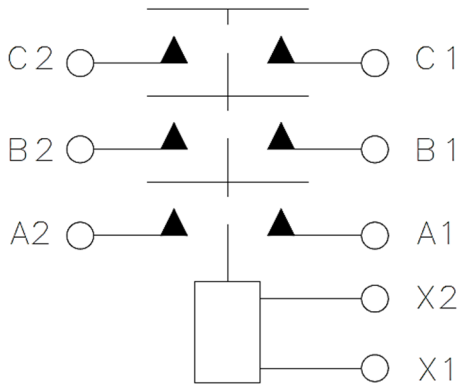
MODEL NUMBER

9207-4990
9207-10332
9207-10333
9207-10338
9207-10207
9207-10342

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
---	---	--	---

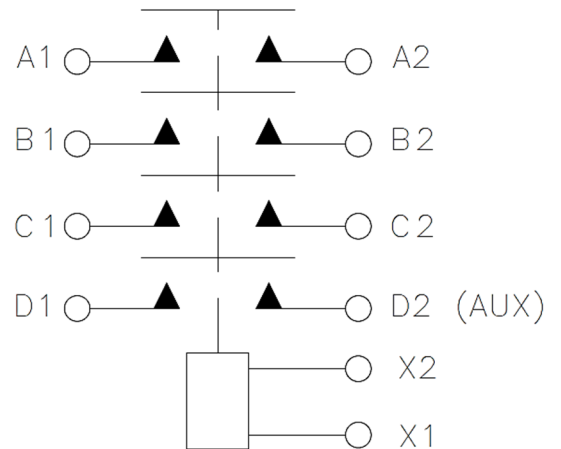
SCHEMATIC DIAGRAM

CONTACT CONFIGURATION
3PST-DM



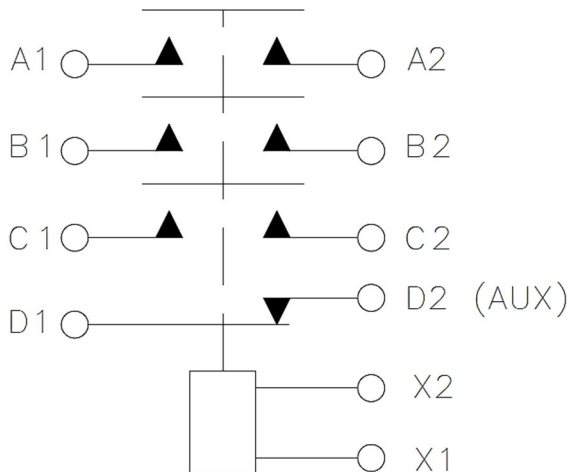
MODEL NUMBER
9207-4990
9207-10207
9207-10332
9207-10333
9207-10338
9207-10342

CONTACT CONFIGURATION
4PST-DM



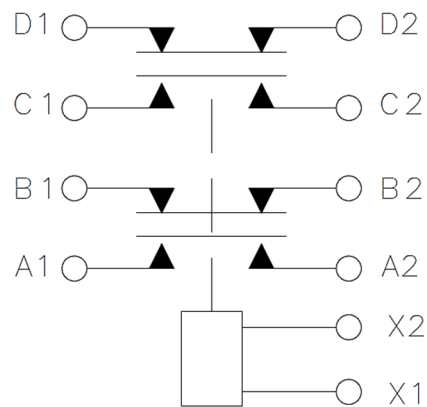
MODEL NUMBER
9207-3731
9207-3881
9207-10334
9207-10335
9207-10340
9207-10343
9207-10344

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