

Application Notes: 101 102 007

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

1.70 lb 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]	50	90	90	80	120
Motor	30	60	90	80	80

COIL CHARACTERISTICS (Vdc)

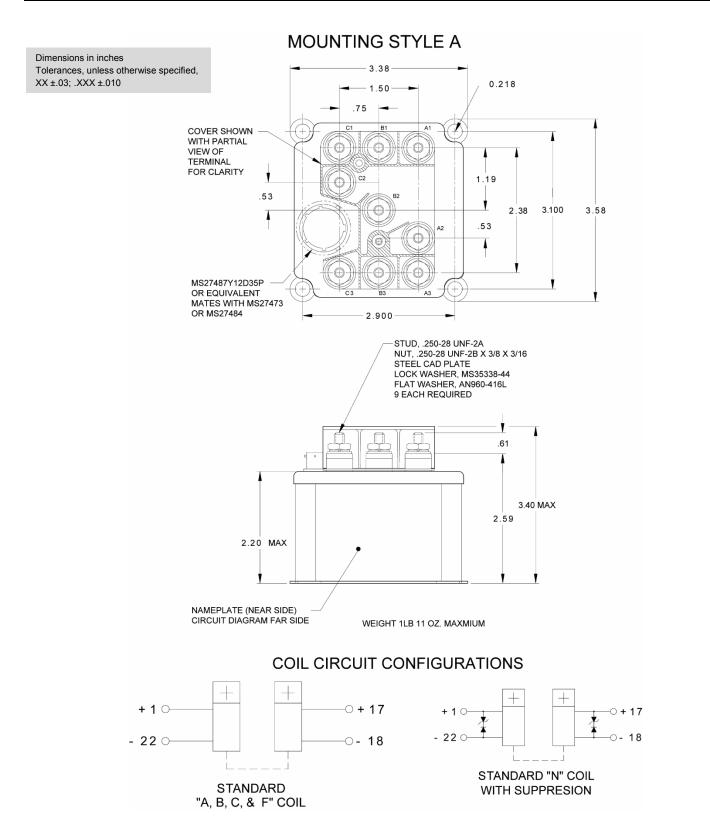
CODE	A Vdc	N Suppressed [5] Vdc	
Nominal operating voltage	28	28	
Maximum operating voltage	29	29	
Pick-up voltage, maximum			
Nominal	18	18	
High temp test	20	20	
Continuous current test	22.5	22.5	
Drop-out voltage, maximum	7	7	
Coil resistance in Ohms ±10% at +25° C	77	77	
Coil current Amp max. @ nom. Volt. and +25° 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	1,500 Vrms
Coil to ground and aux. contacts	1,250 Vrms
Dielectric strength at altitude	
Main contacts	700 Vrms
Coil and aux. contacts	500 Vrms
Insulation resistance	
Initial (500 Vdc)	100 M Ω min
After environmental tests	50 M Ω min
Sinusoidal vibration	10 G / 55 to 1,000 Hz
Shock (10-12 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

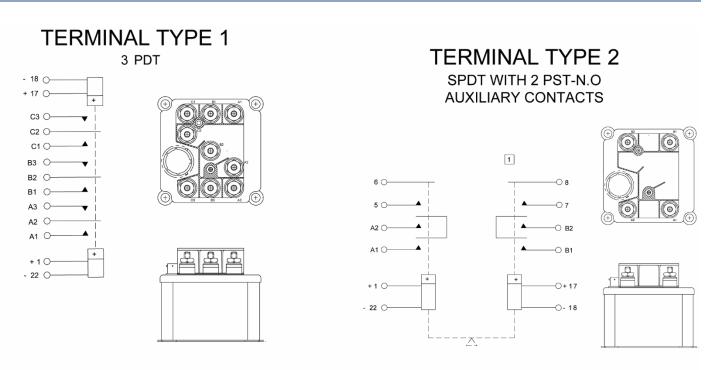
LC SERIES CONTACTOR, CENTER-OFF 90 AMP

CONFIGURATION STYLES

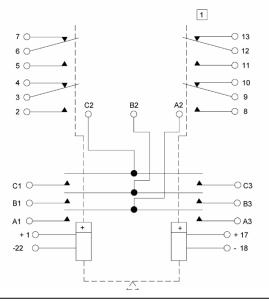


LC SERIES CONTACTOR, CENTER-OFF 90 AMP

TERMINAL CONFIGURATION AND CIRCUIT DIAGRAMS

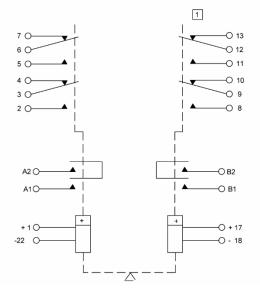


3 PDT WITH 4 PDT AUXILIARY CONTACTS



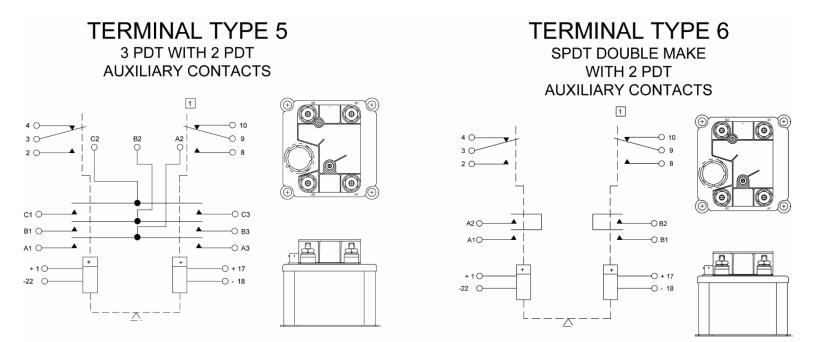
NOTE: Although all configuration and/or terminal type options are available, some combinations may require a setup charge and be subject to minimum order size

SPDT WITH 4 PDT AUXILIARY CONTACTS



LC SERIES CONTACTOR, CENTER-OFF 90 AMP

TERMINAL CONFIGURATION AND CIRCUIT DIAGRAMS



TERMINAL TYPE 9

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

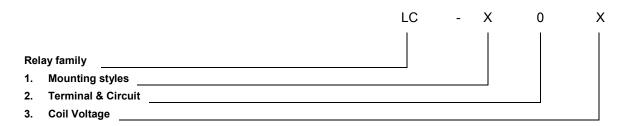
NOTES

1 AUXILIARY CONTACT RATING: 28 VDC OR 115 VAC RESISTIVE: 5 AMP INDUCTIVE: 3 AMP LAMP: 1 AMP BOUNCE AT NOMINAL VOLTAGE: 0.004 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



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.

For any inquiries, please contact your local sales representative: leachcorp.com