

## ENGINEERING DATA SHEET

**CONTACTOR, CURRENT SENSING  
BUSBAR MOUNTING  
3 PST+AUX, 50 AMP**



APPLICATION NOTES:

Dust sealed  
Balanced-Force Design  
Designed to the performance standards of **MIL-PRF-6106**

### PRINCIPLE TECHNICAL CHARACTERISTICS

Main Contacts rated at **28 Vdc; 115/200 Vac, 400Hz**  
Aux Contacts rated at **28 Vdc; 115 Vac, 400**  
Weight **1.125 lb max.**  
Dimensions **3.77in x 3.72in x 2.60in**

Special units available upon request.

### CONTACT ELECTRICAL CHARACTERISTICS

Contact rating per load type, main contact	Load current in Amps	
	@28 Vdc	115/200 Vac 400 Hz
Resistive	50	50
Inductive	20	50
Rupture	150	500
Contact rating per load type, auxiliary contact	28 Vdc	115 Vac/400 Hz
Resistive	5A and low level	5A
Inductive	3A	5A
Rupture	NA	NA



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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 HB**

CODE	A Vdc	B Vdc	C Vdc	F Vac 400Hz	N Vdc
Nominal operating voltage	28	12	6	115	28
Maximum operating voltage	29	14.5	7.3	124	29
Pick-up voltage, maximum					
-Normal	18	9	4.5	90	18
-High temp test	20	10	5	95	20
-Continuous current test	22.5	11	5.7	100	22.5
Drop-out voltage, maximum	1 TO 8	4.5	2.5	30	7
Coil resistance in Ohms $\pm 10\%$ @ 25°C	200	50	12	-	200
Coil current max. mA @ +25°C	-	-	-	90	-

**GENERAL CHARACTERISTICS**

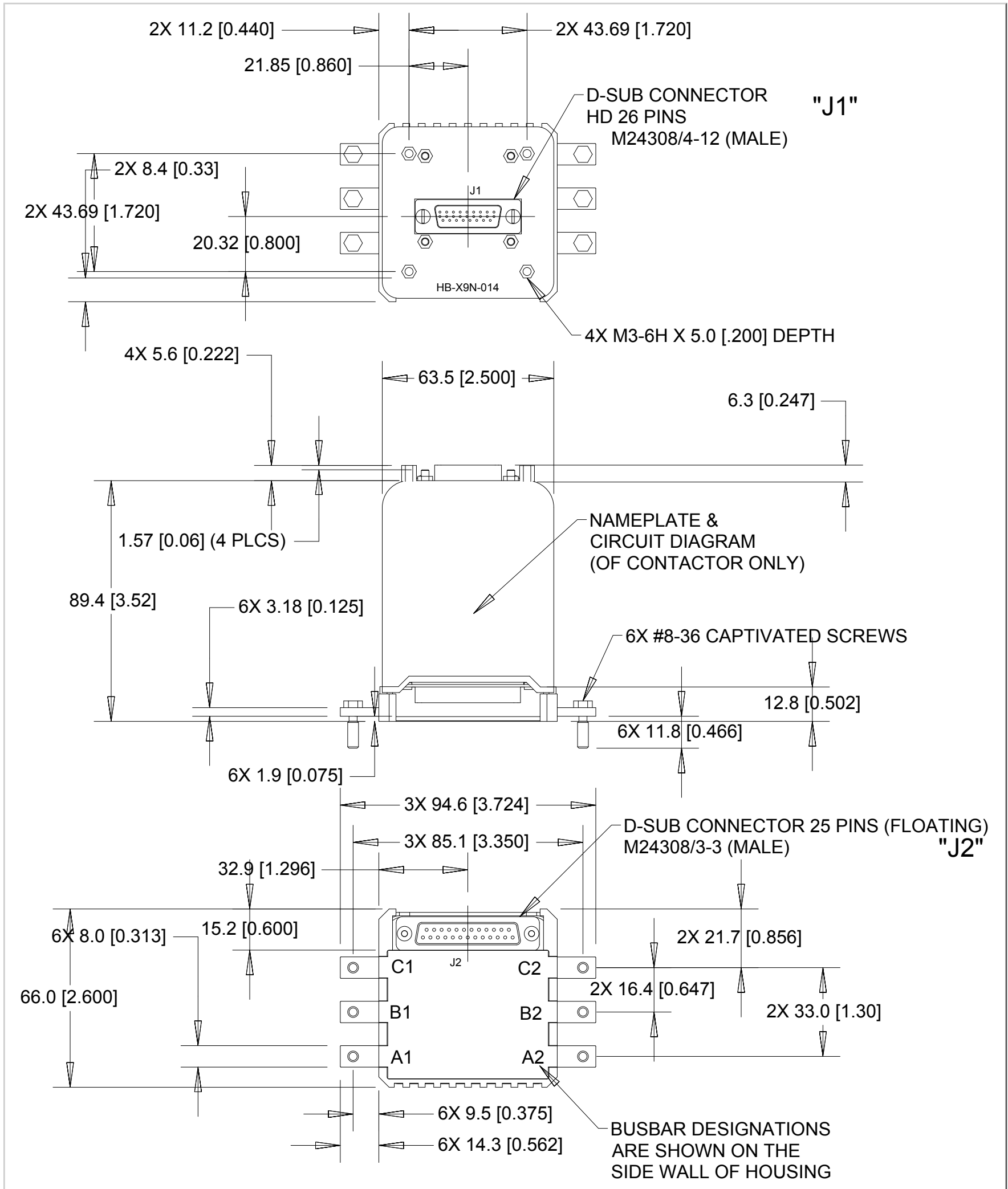
Temperature range	-54°C to +85°C
Minimum electrical operating cycles (life) at rated resistive load	50,000
Minimum mechanical operating cycles (life) at 25% rated resistive load	100,000
Dielectric strength at sea level	
- Coil and aux. contacts to ground	500 Vrms
- All main contacts to contacts and to ground	1,500 Vrms [5]
Dielectric strength at altitude- 50,000 feet	
- Coil and aux. contacts to ground	500 Vrms
- All main contacts to contacts and to ground	700 Vrms
Insulation resistance	
- Initial	100 M $\Omega$
- After environmental tests	50 M $\Omega$
Sinusoidal vibration	10 G / 70 to 2,000 Hz
Shock - 11 ms duration	20 G
Max. contact opening time under vibration and shock	<10 ms
Operation time at nominal voltage - including bounce	
- D.C. Coil	15 ms max
- A.C. Coil	50 ms max
Release time at nominal voltage - including bounce	
- D.C. Coil	25 ms max
- A.C. Coil	80 ms max
Contact bounce at nominal voltage	3 ms max
Overload @ 115/200 Vac 400Hz @ 28 Vdc	900 Amps
Rupture @ 115/200 Vac 400Hz @ 28 Vdc	500 Amps

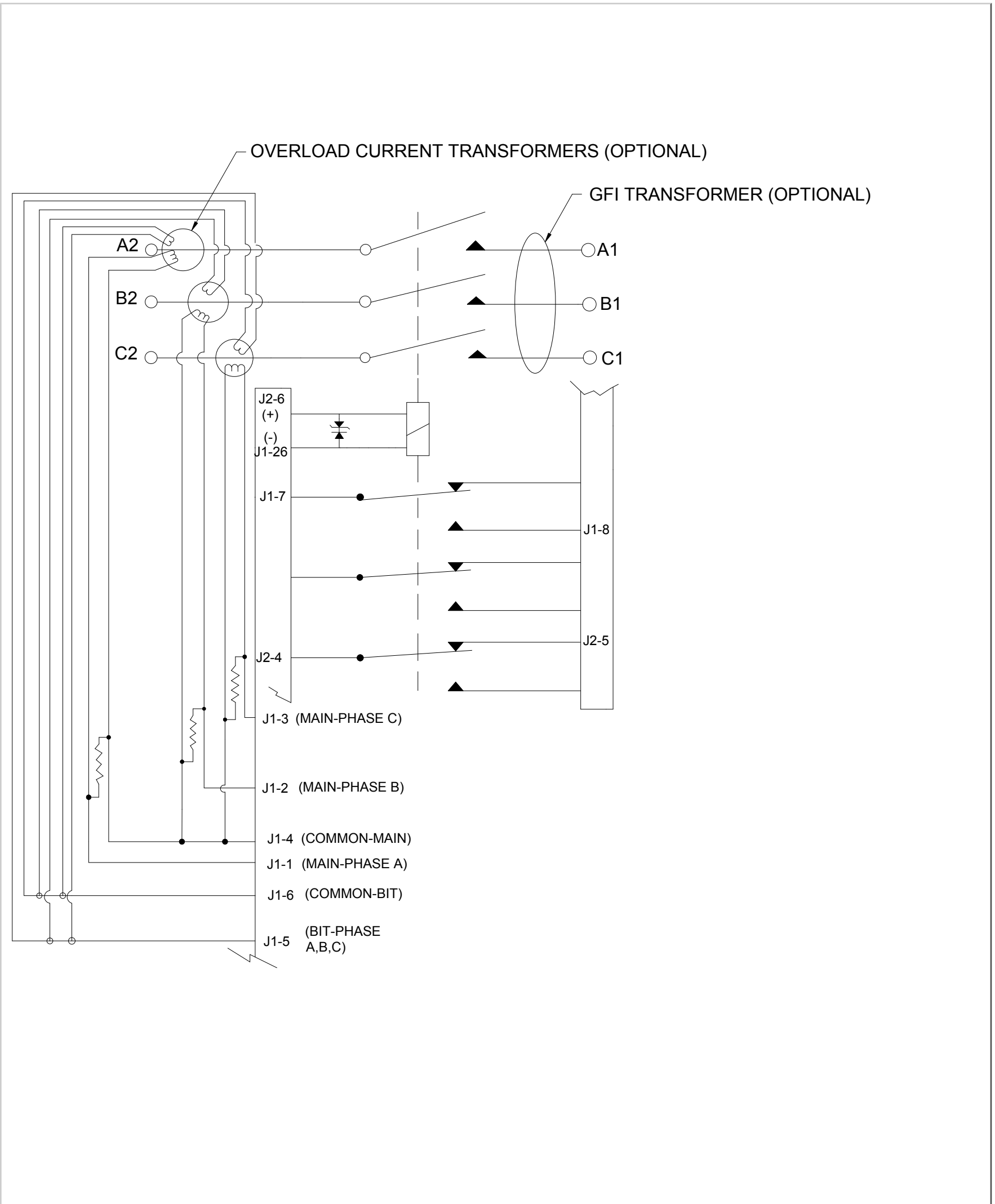
Relay family	HB	A	2	A
1-Mounting Style (A)				
2-Terminal & Circuit (2, 3, 9)				
3-Coil Voltage (A, B, C, F & N)				

NOTES

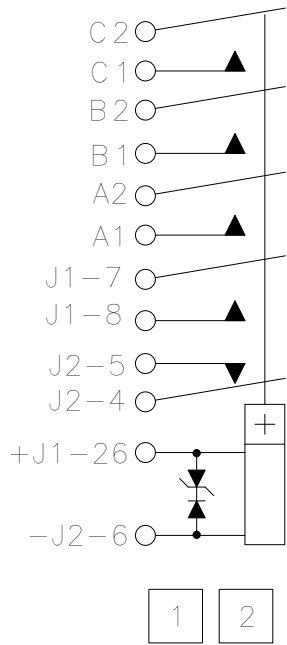
1. Wiring protection for ground fault and overload currents is available. Consult factory

CONFIGURATION STYLES

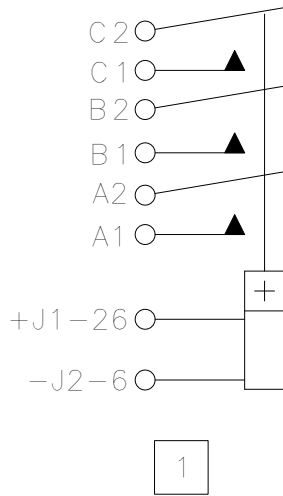




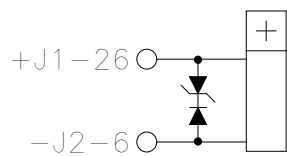
TERMINAL TYPE 3  
3PST-N.O. WITH  
SPST-N.O. & SPST N.C  
AUXILIARY CONTACTS



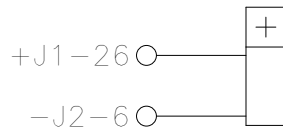
TERMINAL TYPE 7  
3PST-N.O.



TERMINAL TYPE 9  
IS A GENERAL CATEGORY USED FOR ALL  
TERMINAL TYPES NOT ILLUSTRATED  
FOR OTHER VARIATIONS OF TERMINAL  
CONFIGURATIONS  
PLEASE CONTACT FACTORY



STANDARD COIL  
"A", "B", "C", "D"



SUPPRESSED COIL  
"N"

1 POLARITY INDICATION APPLIES TO DC COILS ONLY.

2 AUXILIARY CONTACT RATING:

28 VDC OR 115 VAC

RESISTIVE	5 AMP
INDUCTIVE	3 AMP
LAMP	1 AMP
CONTACT BOUNCE AT NOMINAL VOLTAGE (SECONDS)	.004 MAX

NOTE: OTHER AUXILIARY CONTACT FORMS ARE  
AVAILABLE. PLEASE CONTACT FACTORY.