

TECHNICAL DATA & ACCESSORIES

BYPASS SWITCH AUXILIARY CONTACTS

BP AUXILIARY CONTACT	STATUS (*)	BP SWITCH POSITION (AUX3)		
		EMERG	OFF	NORMAL
81-82	●			
83-84				
85-86	●			
87-88	●			
89-90	●			
91-92				
93-94				
101-102				
103-104				
105-106	●			
107-108				
109-110	●			
111-112	●			
113-114				
115-116				
117-118				
125-126				
127-128				

BYPASS SWITCH OPERATOR AUXILIARY CONTACTS

BP AUXILIARY CONTACT	STATUS (*)	BP SWITCH HANDLE POSITION			
		NORMAL (CCW)		OFF	EMERGENCY (CW)
		BYPASS (±90°)	<> ±20°		<> ±20°
(AUX4) 140-141	●				
140-142	●				
146-147	●				
146-148	●				
137-138	●				
(AUX5) 137-139	●				
143-144	●				
143-145	●				


ISOLATION (TRANSFER SWITCH CARRIAGE POSITION) AUXILIARY CONTACTS

IS AUXILIARY CONTACT	STATUS (*)	TRANSFER SWITCH CARRIAGE POSITION			
		CONNECT	> <	TEST	> <
1-2	●				
1-3	●				
4-5	●				
4-6	●				
7-8	●				
7-9	●				
10-11	●				
10-12	●				
13-14	●				
13-15	●				
16-17	●				
16-18	●				
19-20	●				
19-21	●				
22-23	●				
22-24	●				
25-26	●				
25-27	●				
28-29	●				
28-30	●				

(*) CONTACT AVAILABILITY STATUS:

● CONTACT PROVIDED & USED IN CIRCUITRY
 "BLANK" CONTACT NOT USED, IF PHYSICALLY AVAILABLE,
 CONTACT IS FOR FACTORY USE ONLY!

G 236733 TR BK 04/23/12
 REV. TO SHEET SEE ECN

PROJECT NAME:		WIRING DIAGRAM		THIRD ANGLE PROJECTION	
7000 SERIES (J7ACTB) 3PH 150-600 AMPS		"J" FRAME, GROUP 5 CONTROLS		COMPUTER GENERATED DRAWING	
BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055		SCALE	SIZE
JPB	10/10/06	ASSEMBLY REF. NO.		NONE	DS
CHECKED		PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		DWG. NO.	
PROJECT APPROVAL				806097	
FINAL APPROVAL	JPB 10/10/06	 ASCO Power Technologies, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		DRAWING G	ECON NO. 236733
				REV.	SHEET 2 OF 10

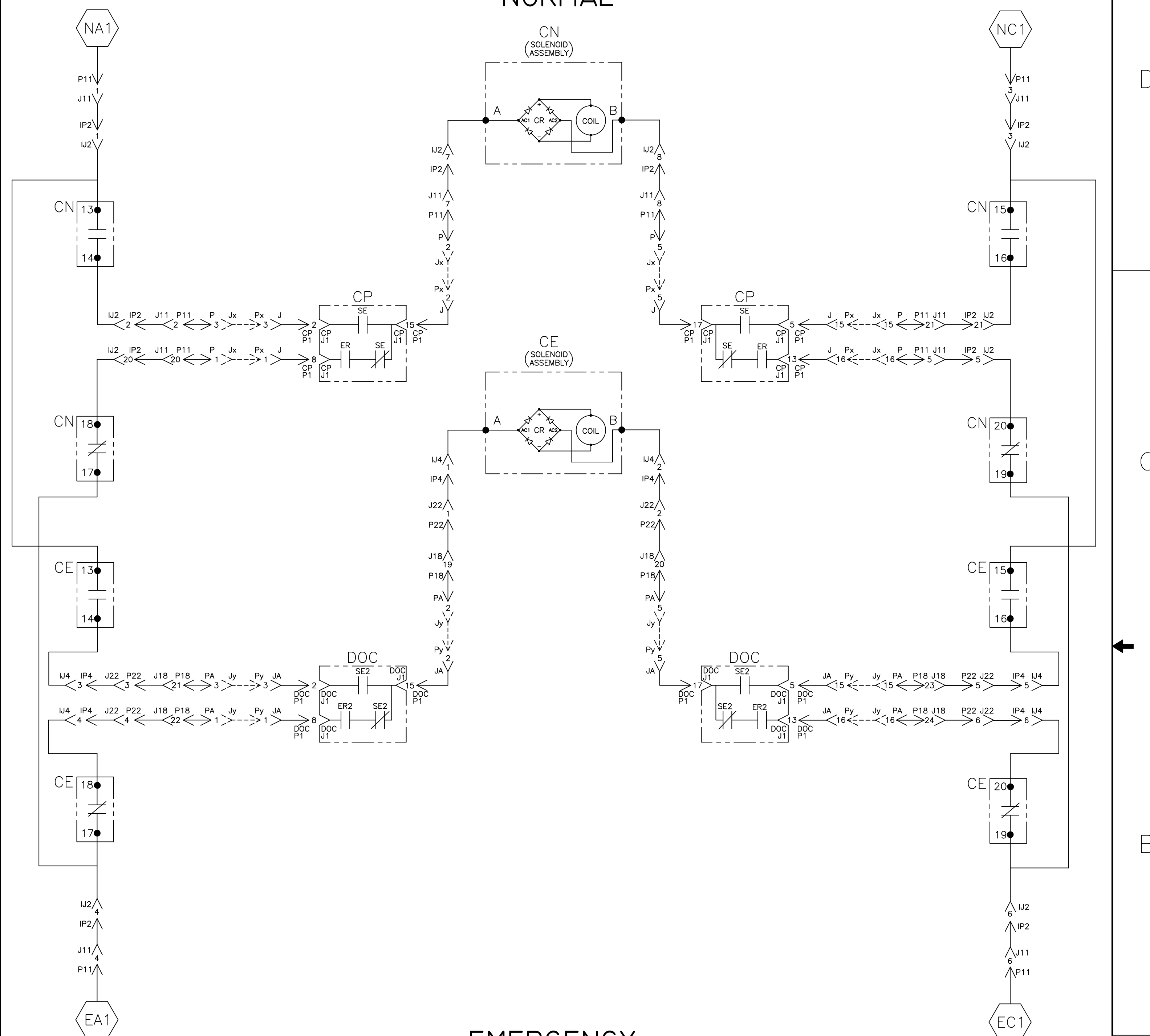
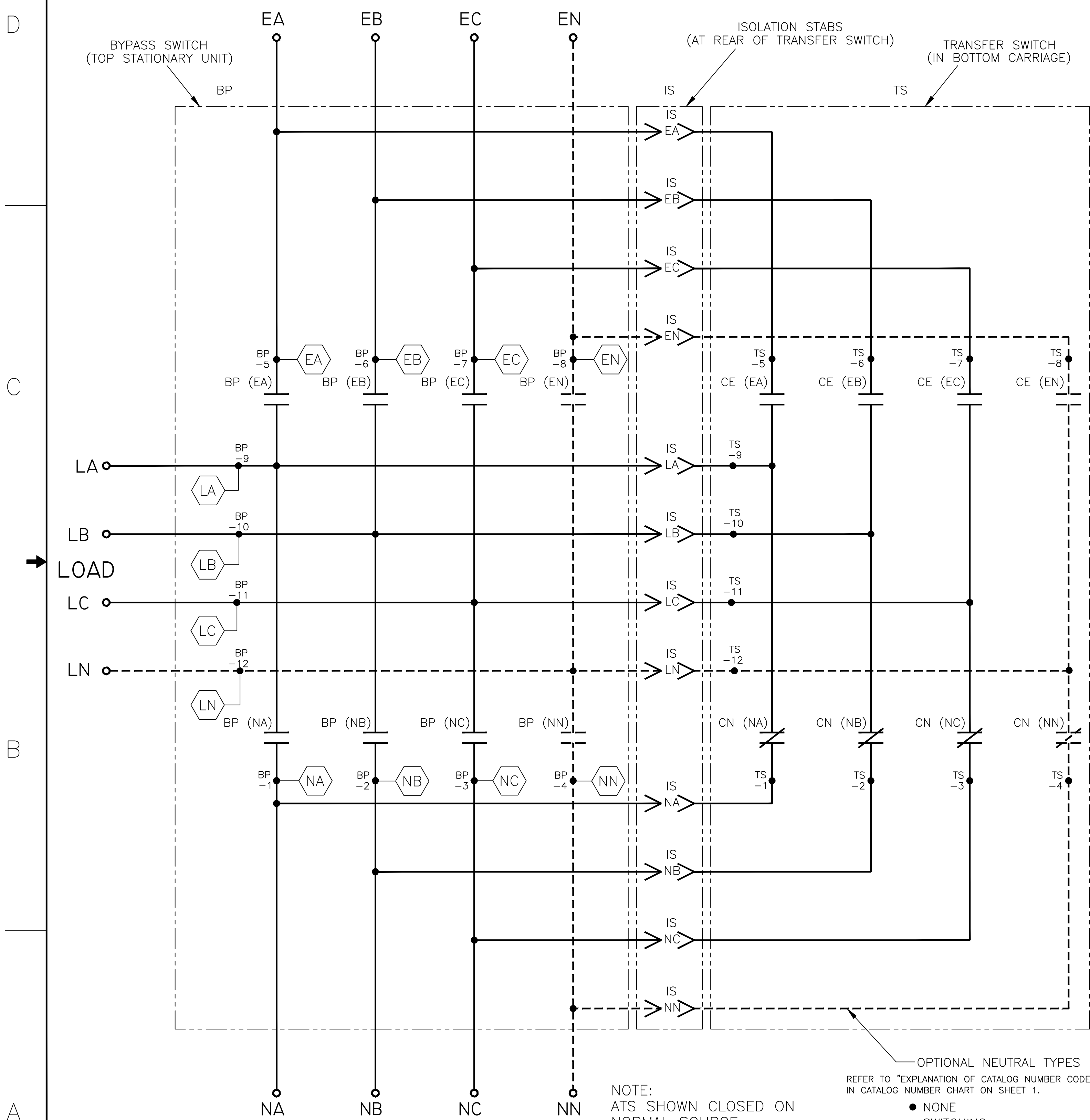
MAIN POWER POLES

TS OPERATOR CIRCUIT

EMERGENCY

NORMAL

EMERGENCY



NOTE: ATS SHOWN CLOSED ON NORMAL SOURCE. BYPASS SWITCH IN (AUTOMATIC) POSITION.

OPTIONAL NEUTRAL TYPES REFER TO "EXPLANATION OF CATALOG NUMBER CODES" IN CATALOG NUMBER CHART ON SHEET 1.

- NONE
- SWITCHING
- SOLID BUS PLATE

CN	SOLENOID POSITION			
	CN CLOSED	BEFORE TDC	AFTER TDC	CN OPEN
13-14				
15-16				
17-18				
19-20				

CE	SOLENOID POSITION			
	CE CLOSED	BEFORE TDC	AFTER TDC	CE OPEN
13-14				
15-16				
17-18				
19-20				

TDC (TOP DEAD CENTER) TRANSFER SWITCH TEST & ADJUSTMENT PROCEDURE SPECIFIES CONTROL CUT-OFF (CONTACT OPENING) SETTING.

TDC (TOP DEAD CENTER) TRANSFER SWITCH TEST & ADJUSTMENT PROCEDURE SPECIFIES CONTROL CUT-OFF (CONTACT OPENING) SETTING.

PROJECT NAME: **WIRING DIAGRAM**

7000 SERIES (J7ACTB) 3PH 150-600 AMPS "J" FRAME, GROUP 5 CONTROLS

REV. TO SHEET: G 236733 TR BK 04/23/12

SCALE: NONE SIZE DS

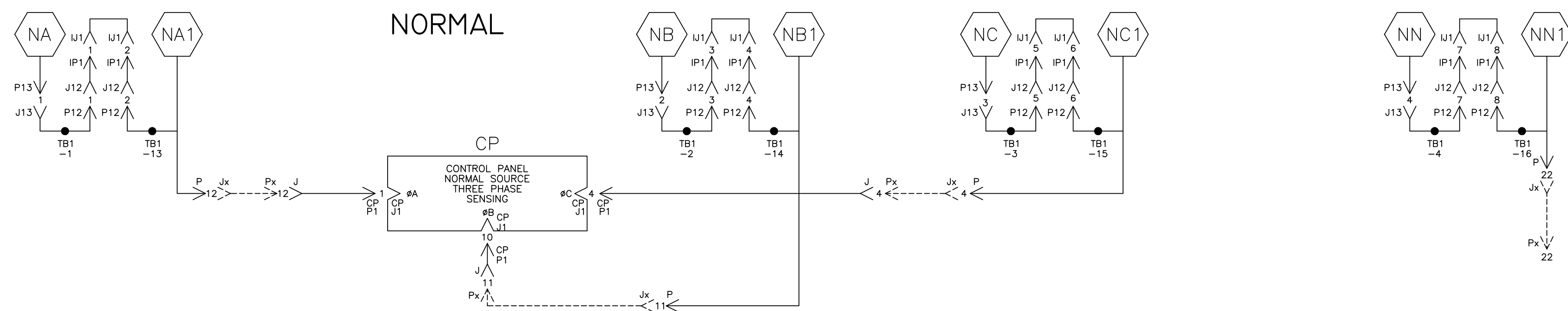
COMPUTER GENERATED DRAWING

ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.

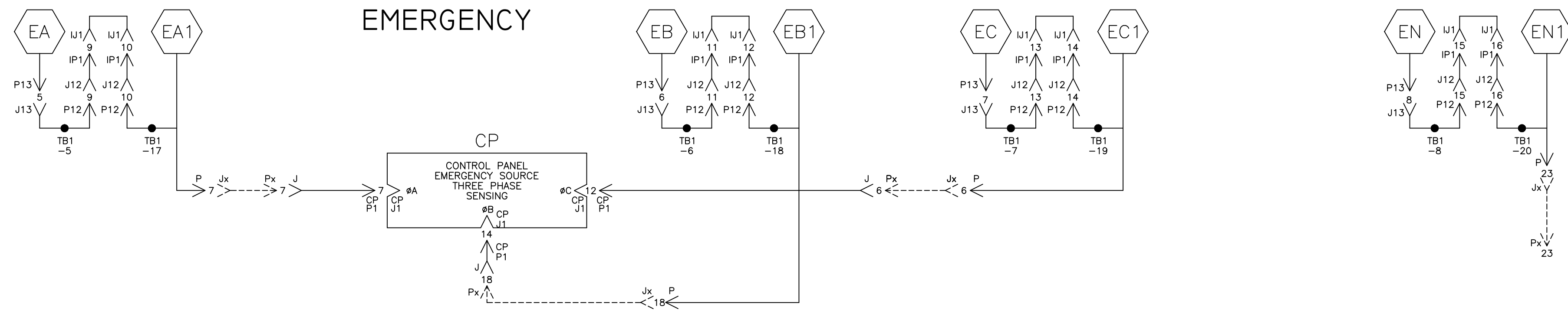
DWG. NO. 806097

REV. G ECN NO. 236733 SHEET 4 OF 10

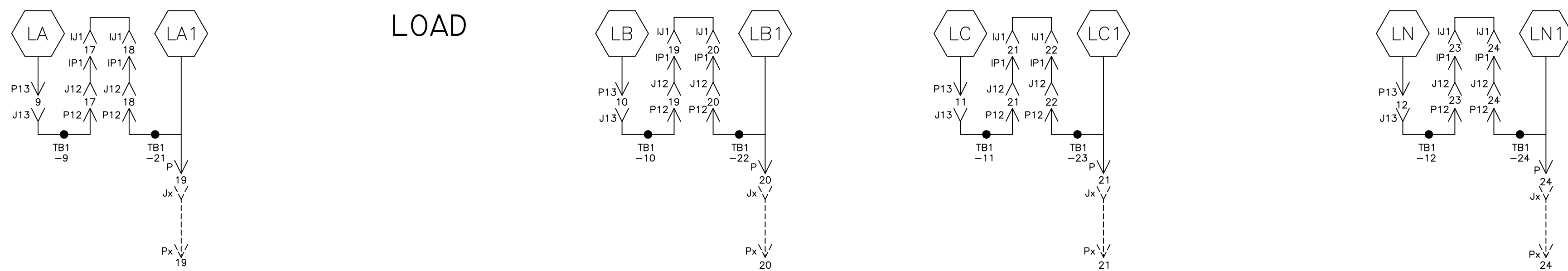
NORMAL SOURCE CIRCUITS



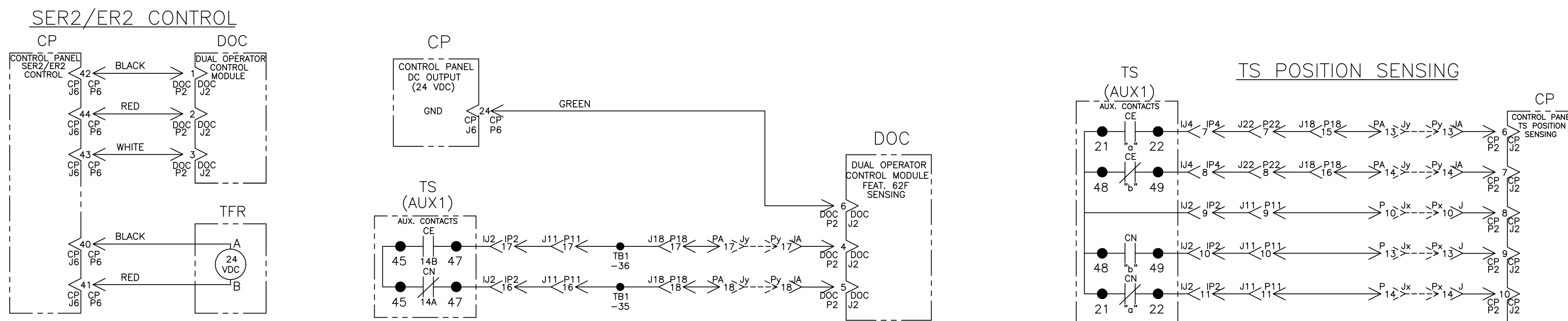
EMERGENCY SOURCE CIRCUITS



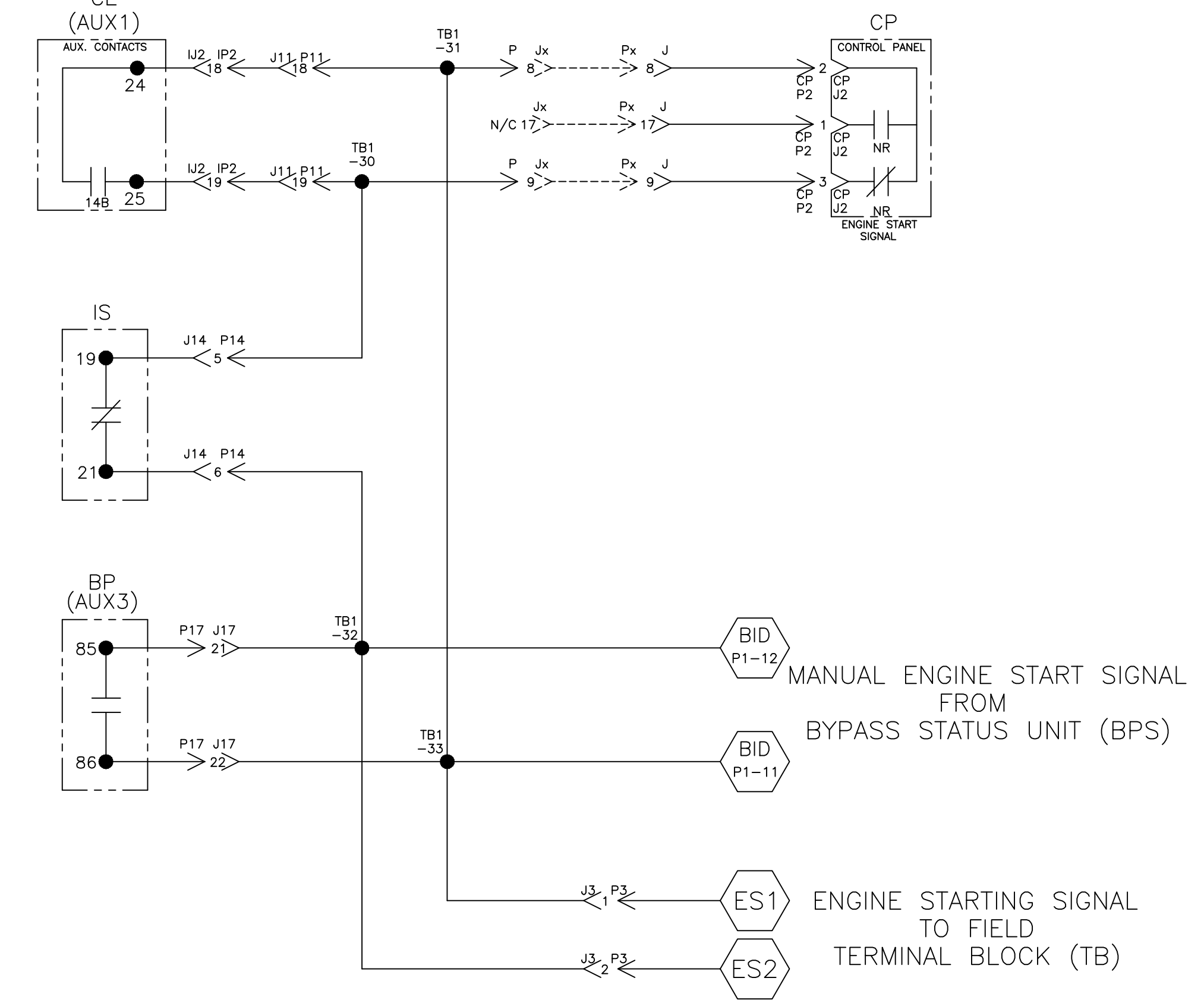
LOAD TERMINAL CIRCUITS



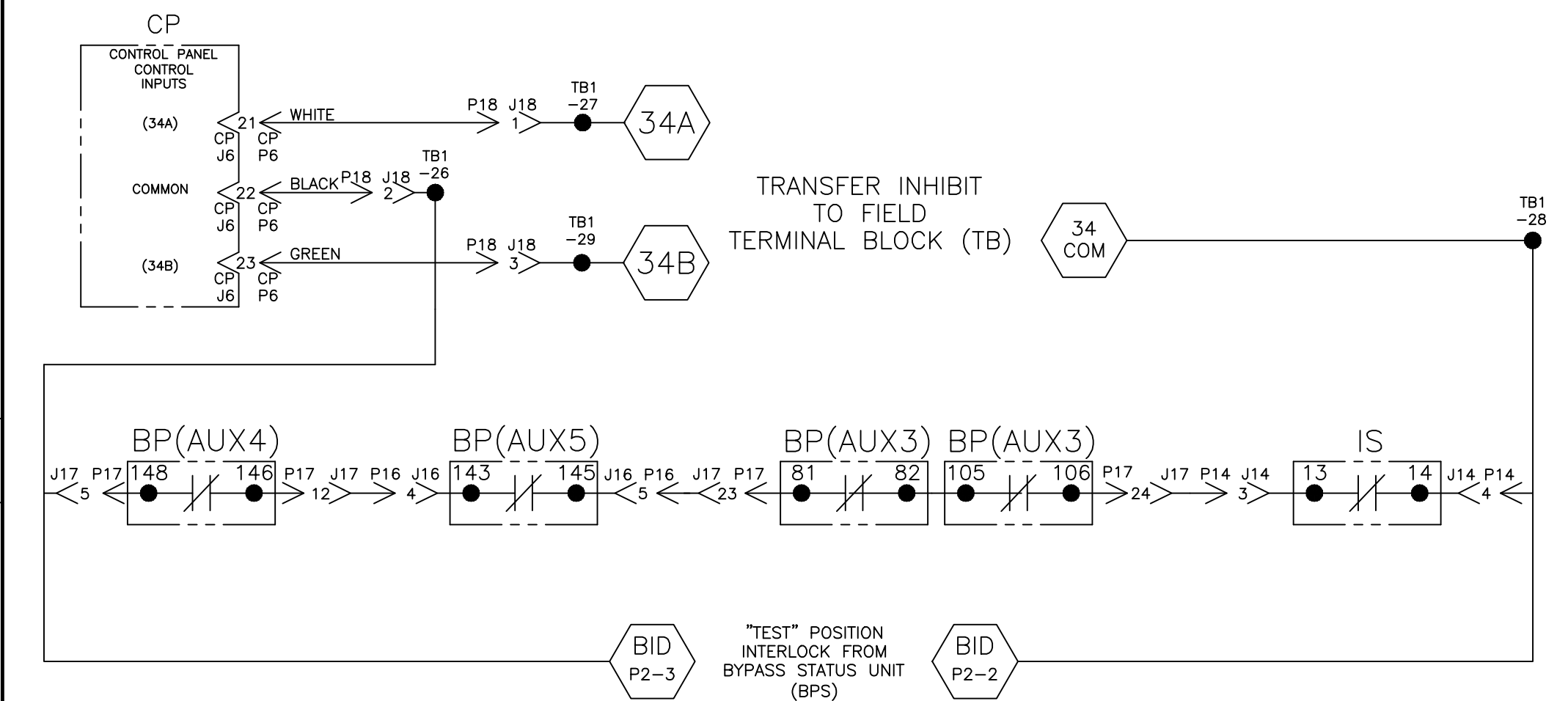
CONTROL SIGNALS & INDICATION



ENGINE START CIRCUIT



CONTROL PANEL/BYPASS-ISOLATION INTERLOCKS



PROJECT NAME:		236733 TR BK 04/23/12	
WIRING DIAGRAM		REV TO SHEET	ECN NO.
7000 SERIES (J7ACTB) 3PH 150-600 AMPS		BY	APP.
"J" FRAME, GROUP 5 CONTROLS		DATE	
DRAWN BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.	SCALE NONE
CHECKED		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SIZE DS
PROJECT APPROVAL		ASCO POWER TECHNOLOGIES, L.P.	DWG. NO. 806097
FINAL APPROVAL	JPB 10/10/06	FLORHAM PARK, NEW JERSEY 07932 U.S.A.	REV. G
		COMPUTER GENERATED DRAWING	SHEET 5 OF 10

8 7 6 5 4 3 2 1
↓
ADDITIONAL CIRCUITS

D

D

C

C

B

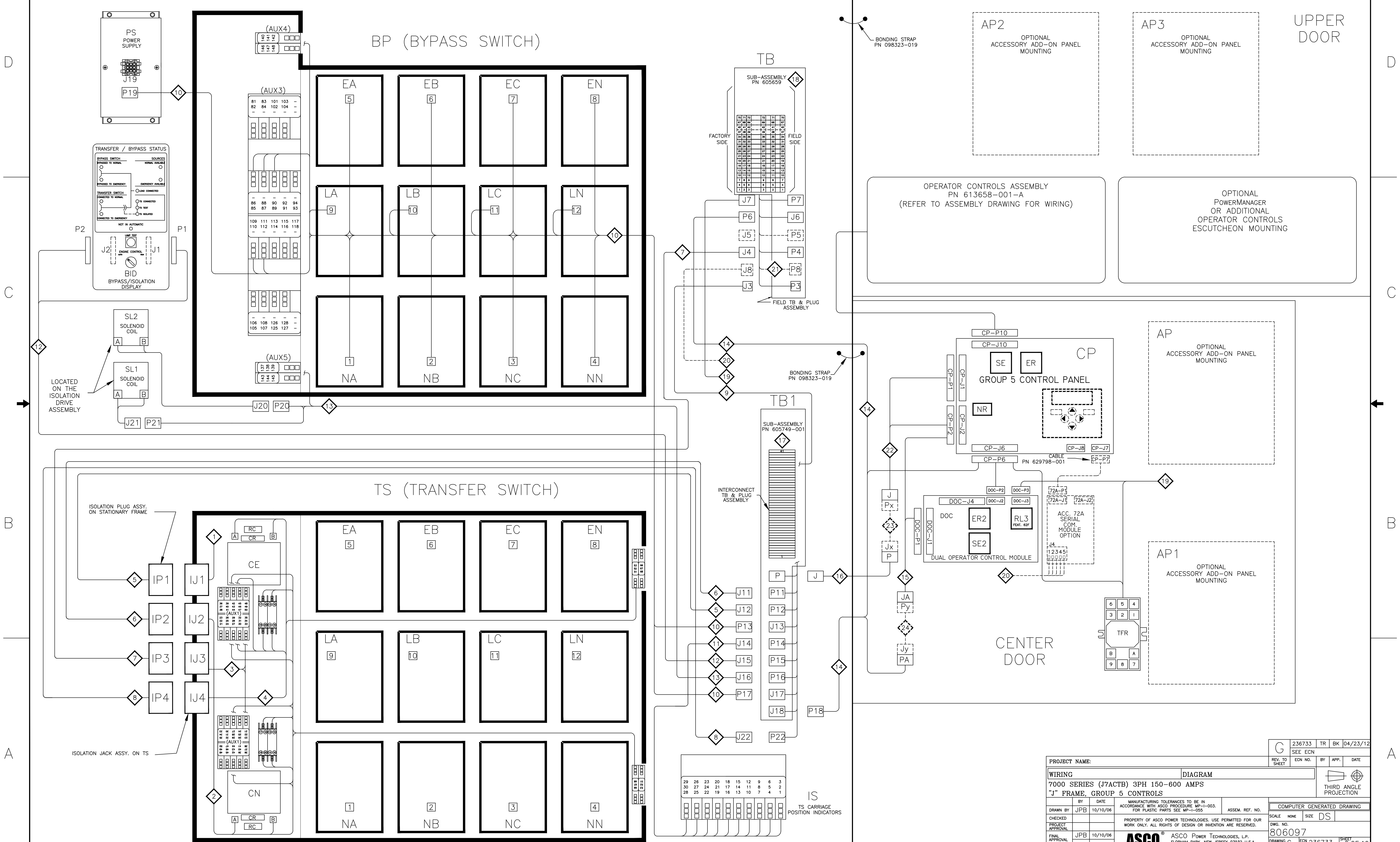
B

A

A

PROJECT NAME:		G		236733	TR	BK	04/23/12		
REV. TO SHEET	ECN NO.	BY	APP.	DATE					
WIRING		DIAGRAM		THIRD ANGLE PROJECTION					
7000 SERIES (J7ACTB) 3PH 150-600 AMPS		"J" FRAME, GROUP 5 CONTROLS		COMPUTER GENERATED DRAWING					
DRAWN BY	JPB	DATE	10/10/06	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055.	ASSEM. REF. NO.	SCALE	NONE	SIZE	DS
CHECKED				PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		DWG. NO.	806097		
PROJECT APPROVAL				ASCO [®] ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		DRAWING G REV.	ECN NO.	236733	SHEET 6 OF 10

PHYSICAL DIAGRAM



PROJECT NAME:		236733 TR BK 04/23/12	
WIRING DIAGRAM		REV. TO SHEET	ECN NO.
7000 SERIES (J7ACTB) 3PH 150-600 AMP "J" FRAME, GROUP 5 CONTROLS			
DRAWN BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.	ASSEM. REF. NO.
CHECKED	10/10/06	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE NONE SIZE DS
PROJECT APPROVAL			COMPUTER GENERATED DRAWING
FINAL APPROVAL	10/10/06	ASCO® ASCO POWER TECHNOLOGIES, L.P. FLOHAM PARK, NEW JERSEY 07932 U.S.A.	DWG. NO. 806097
			REV. G ECN NO. 236733 SHEET 8 OF 10

WIRE RUN LISTING

Table 1: HARNESS LOCATOR 1 (J1) TS. WIRE No. 1-12, AWG 16. Includes wires like 1J1-1,J1-2, 2J1-3,J1-4, etc.

Table 2: HARNESS LOCATOR 4 (J4) TS. WIRE No. 228-325, AWG 16. Includes wires like 228J4-1,CE-CR-AC1, 229J4-2,CE-CR-AC2, etc.

Table 3: HARNESS LOCATOR 7 (IP3,J4) STATIONARY FRAME. WIRE No. 50-73, AWG 16. Includes wires like 50IP3-1,J4-1, 51IP3-2,J4-2, etc.

Table 4: HARNESS LOCATOR 10 (P13, P17, P19, BP) BP. WIRE No. 1-171, AWG 16. Includes wires like 1P13-1,BP-1, 2BP-1,P19-1, etc.

Table 5: HARNESS LOCATOR 12 (J15, BID-P1, BID-P2) BYPASS ISOLATION DISPLAY. WIRE No. 121-151, AWG 22. Includes wires like 121J15-1,BID-P1-12, 120J15-2,BID-P1-11, etc.

Table 6: HARNESS LOCATOR 16 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 245-312, AWG 16. Includes wires like 245P6-6, 246P6-7, etc.

Table 7: HARNESS LOCATOR 16 (P,J) CONTROL PANEL EXTENSION. WIRE No. 39-124, AWG 16. Includes wires like 39P-1,J-1, 14P-2,J-2, etc.

Table 8: HARNESS LOCATOR 2 (J2) TS. WIRE No. 1-339, AWG 16. Includes wires like 1J2-1,CN-13, 1CN-13,CE-13, etc.

Table 9: HARNESS LOCATOR 5 (IP1,J12) STATIONARY FRAME. WIRE No. 1-12, AWG 16. Includes wires like 1IP1-1,J12-1, 2IP1-2,J12-2, etc.

Table 10: HARNESS LOCATOR 8 (IP4,J22) STATIONARY FRAME. WIRE No. 228-421, AWG 16. Includes wires like 228IP4-1,J22-1, 229IP4-2,J22-2, etc.

Table 11: HARNESS LOCATOR 13 (J16, P20, P21) BP/IS INTERLOCKS. WIRE No. 154-190, AWG 16. Includes wires like 154J16-1,P21-1, 170J16-2,P20-2, etc.

Table 12: HARNESS LOCATOR 16 (JA,CP-P2,DOC-P1) DOC. WIRE No. 228-325, AWG 16. Includes wires like 228JA-2,DOC-P1-15, 320JA-3,DOC-P1-2, etc.

Table 13: HARNESS LOCATOR 4 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-1,CP-P6-21, 191P18-2,CP-P6-22, etc.

Table 14: HARNESS LOCATOR 3 (J3) TS. WIRE No. 50-67, AWG 16. Includes wires like 50J3-1,CN(AUX1)-27, 51CN(AUX1)-27,CE(AUX1)-27, etc.

Table 15: HARNESS LOCATOR 6 (IP2,J11) STATIONARY FRAME. WIRE No. 1-43, AWG 16. Includes wires like 1IP2-1,J11-1, 2IP2-2,J11-2, etc.

Table 16: HARNESS LOCATOR 9 (J3,TB1) ENGINE START. WIRE No. 120-123, AWG 16. Includes wires like 120J3-1,TB1-35, 121J3-2,TB1-32, etc.

Table 17: HARNESS LOCATOR 11 (J14,S) ISOLATION AUX. CONTACTS. WIRE No. 150-167, AWG 16. Includes wires like 150J14-3,IS-13, 151J14-4,IS-14, etc.

Table 18: HARNESS LOCATOR 14 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-4,P6-1, 151P18-5,P6-2, etc.

Table 19: HARNESS LOCATOR 4 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-1,CP-P6-21, 191P18-2,CP-P6-22, etc.

Table 20: HARNESS LOCATOR 5 (JA,CP-P2,DOC-P1) DOC. WIRE No. 228-325, AWG 16. Includes wires like 228JA-2,DOC-P1-15, 320JA-3,DOC-P1-2, etc.

Table 21: HARNESS LOCATOR 3 (J3) TS. WIRE No. 50-67, AWG 16. Includes wires like 50J3-1,CN(AUX1)-27, 51CN(AUX1)-27,CE(AUX1)-27, etc.

Table 22: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 23: HARNESS LOCATOR 6 (IP2,J11) STATIONARY FRAME. WIRE No. 120-123, AWG 16. Includes wires like 120IP2-1,J11-1, 121IP2-2,J11-2, etc.

Table 24: HARNESS LOCATOR 9 (J3,TB1) ENGINE START. WIRE No. 120-123, AWG 16. Includes wires like 120J3-1,TB1-35, 121J3-2,TB1-32, etc.

Table 25: HARNESS LOCATOR 11 (J14,S) ISOLATION AUX. CONTACTS. WIRE No. 150-167, AWG 16. Includes wires like 150J14-3,IS-13, 151J14-4,IS-14, etc.

Table 26: HARNESS LOCATOR 14 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-1,CP-P6-21, 191P18-2,CP-P6-22, etc.

Table 27: HARNESS LOCATOR 5 (JA,CP-P2,DOC-P1) DOC. WIRE No. 228-325, AWG 16. Includes wires like 228JA-2,DOC-P1-15, 320JA-3,DOC-P1-2, etc.

Table 28: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 29: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 30: HARNESS LOCATOR 6 (IP2,J11) STATIONARY FRAME. WIRE No. 120-123, AWG 16. Includes wires like 120IP2-1,J11-1, 121IP2-2,J11-2, etc.

Table 31: HARNESS LOCATOR 9 (J3,TB1) ENGINE START. WIRE No. 120-123, AWG 16. Includes wires like 120J3-1,TB1-35, 121J3-2,TB1-32, etc.

Table 32: HARNESS LOCATOR 11 (J14,S) ISOLATION AUX. CONTACTS. WIRE No. 150-167, AWG 16. Includes wires like 150J14-3,IS-13, 151J14-4,IS-14, etc.

Table 33: HARNESS LOCATOR 14 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-1,CP-P6-21, 191P18-2,CP-P6-22, etc.

Table 34: HARNESS LOCATOR 5 (JA,CP-P2,DOC-P1) DOC. WIRE No. 228-325, AWG 16. Includes wires like 228JA-2,DOC-P1-15, 320JA-3,DOC-P1-2, etc.

Table 35: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 36: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 37: HARNESS LOCATOR 6 (IP2,J11) STATIONARY FRAME. WIRE No. 120-123, AWG 16. Includes wires like 120IP2-1,J11-1, 121IP2-2,J11-2, etc.

Table 38: HARNESS LOCATOR 9 (J3,TB1) ENGINE START. WIRE No. 120-123, AWG 16. Includes wires like 120J3-1,TB1-35, 121J3-2,TB1-32, etc.

Table 39: HARNESS LOCATOR 11 (J14,S) ISOLATION AUX. CONTACTS. WIRE No. 150-167, AWG 16. Includes wires like 150J14-3,IS-13, 151J14-4,IS-14, etc.

Table 40: HARNESS LOCATOR 14 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-1,CP-P6-21, 191P18-2,CP-P6-22, etc.

Table 41: HARNESS LOCATOR 5 (JA,CP-P2,DOC-P1) DOC. WIRE No. 228-325, AWG 16. Includes wires like 228JA-2,DOC-P1-15, 320JA-3,DOC-P1-2, etc.

Table 42: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 43: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Table 44: HARNESS LOCATOR 6 (IP2,J11) STATIONARY FRAME. WIRE No. 120-123, AWG 16. Includes wires like 120IP2-1,J11-1, 121IP2-2,J11-2, etc.

Table 45: HARNESS LOCATOR 9 (J3,TB1) ENGINE START. WIRE No. 120-123, AWG 16. Includes wires like 120J3-1,TB1-35, 121J3-2,TB1-32, etc.

Table 46: HARNESS LOCATOR 11 (J14,S) ISOLATION AUX. CONTACTS. WIRE No. 150-167, AWG 16. Includes wires like 150J14-3,IS-13, 151J14-4,IS-14, etc.

Table 47: HARNESS LOCATOR 14 (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS. WIRE No. 210-317, AWG 22. Includes wires like 210P18-1,CP-P6-21, 191P18-2,CP-P6-22, etc.

Table 48: HARNESS LOCATOR 5 (JA,CP-P2,DOC-P1) DOC. WIRE No. 228-325, AWG 16. Includes wires like 228JA-2,DOC-P1-15, 320JA-3,DOC-P1-2, etc.

Table 49: HARNESS LOCATOR 3 (J3) TS. WIRE No. 68-73, AWG 16. Includes wires like 68J3-19, 69J3-20, 70J3-21, etc.

Project information block including: PROJECT NAME: WIRING DIAGRAM, 7000 SERIES (J7ACTB) 3PH 150-600 AMPS 'J' FRAME, GROUP 5 CONTROLS. Includes drawing number 806097, date 10/10/06, and ASCO logo.

WIRE RUN LISTING

Table 1: HARNESS LOCATOR for SUB-ASSEMBLY 605749-001. Columns include WIRE No., SUB-ASSEMBLY, MAIN INTERCONNECT ASSEMBLY, CLR, and AWG. Lists various wire connections like P-2,P11-7, P-3,P11-2, etc.

Table 2: HARNESS LOCATOR for SUB-ASSEMBLY 605749-001. Columns include WIRE No., SUB-ASSEMBLY, MAIN INTERCONNECT ASSEMBLY, CLR, and AWG. Lists various wire connections like J18-1,TB1-27, J18-2,TB1-26, etc.

Table 3: HARNESS LOCATOR for SUB-ASSEMBLY 605659. Columns include WIRE No., SUB-ASSEMBLY, STD. FIELD TB, CLR, and AWG. Lists various wire connections like TB-1,P3-1, TB-2,P3-2, etc.

Table 4: HARNESS LOCATOR for HARNESS 806064-008. Columns include WIRE No., HARNESS, FIELD OUTPUTS, CLR, and AWG. Lists various wire connections like J7-1,TFR-9, J7-2,TFR-6, etc.

Table 5: HARNESS LOCATOR for HARNESS 605454-005. Columns include WIRE No., HARNESS, OPTIONAL SERIAL I/O, CLR, and AWG. Lists various wire connections like J8-1,72A-5, J8-2,72A-1, etc.

Table 6: HARNESS LOCATOR for HARNESS 605454-007. Columns include WIRE No., HARNESS, OPTIONAL SERIAL I/O, CLR, and AWG. Lists various wire connections like P8-1,TB-37, P8-2,TB-38, etc.

Table 7: HARNESS LOCATOR for HARNESS 483763. Columns include WIRE No., HARNESS, CONTROL PANEL, CLR, and AWG. Lists various wire connections like J-1,CP-P1-8, J-2,CP-P1-15, etc.

Table 8: HARNESS LOCATOR for HARNESS 309320-005. Columns include WIRE No., HARNESS, OPTIONAL 8 IN. EXTENSION HARNESS, CLR, and AWG. Lists various wire connections like Jx-1,Px-1, Jx-2,Px-2, etc.

Table 9: HARNESS LOCATOR for HARNESS 605454-005. Columns include WIRE No., HARNESS, OPTIONAL SERIAL I/O, CLR, and AWG. Lists various wire connections like J8-1,72A-5, J8-2,72A-1, etc.

Table 10: HARNESS LOCATOR for HARNESS 309320-005. Columns include WIRE No., HARNESS, OPTIONAL 8 IN. EXTENSION HARNESS, CLR, and AWG. Lists various wire connections like Jy-1,Py-1, Jy-2,Py-2, etc.

Table 11: WIRE No. and ADDITIONAL WIRING. Lists connections like J20-1,SL2-A, J20-2,SL2-B, etc.

Table 12: WIRE No. and ADDITIONAL WIRING. Lists connections like CN-CR-(+),CN-COIL-BLK1, CN-CR-(-),CN-COIL-BLK2, etc.

Table 13: WIRE No. and ADDITIONAL WIRING. Lists connections like J20-1,SL2-A, J20-2,SL2-B, etc.

Table 14: WIRE No. and ADDITIONAL WIRING. Lists connections like J20-1,SL2-A, J20-2,SL2-B, etc.

Project information block including PROJECT NAME, WIRING DIAGRAM, 7000 SERIES (J7ACTB) 3PH 150-600 AMPS, 'J' FRAME, GROUP 5 CONTROLS, and drawing details like 806097, ASCO Power Technologies, L.P.