



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 HANDLE POSITION (AUX4)	
		EMERG (OUT)	NORMAL (IN)
137-138	●		
137-139			
140-141	●		
140-142			

BYPASS SWITCH OPERATOR AUXILIARY CONTACTS

BP AUXILIARY CONTACT	STATUS (*)	BP SWITCH HANDLE POSITION (AUX5)		
		OFF	<> ±10°	BYPASS (±90°)
143-144	●			
143-145	●			
146-147	●			
146-148	●			

ISOLATION (TRANSFER SWITCH CARRIAGE POSITION) AUXILIARY CONTACTS

IS AUXILIARY CONTACT	STATUS (*)	TRANSFER SWITCH CARRIAGE POSITION				
		CONNECT	>	TEST	<	ISOLATE
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!

N	238233	TR	BK	07/30/12
	SEE ECN			
M	236784	TR	BK	04/24/12
	SEE ECN			

PROJECT NAME:		REV. TO SHEET	ECN NO.	BY	APP.	DATE
WIRING DIAGRAM						
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS "H" FRAME, GROUP 5 CONTROLS						
DRAWN BY	SDH	DATE	4/03	ASSEMBLY REF. NO.	SCALE	SIZE DS
CHECKED						
PROJECT APPROVAL						
FINAL APPROVAL	SDH	DATE	4/03	COMPUTER GENERATED DRAWING		DWG. NO. 736943
MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055.				PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		DRAWING N REV. 736943 ECN NO. 238233 SHEET 2 OF 10
ASCO® ASCO Power Technologies, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.						

# FIELD CONNECTIONS

D

D

C

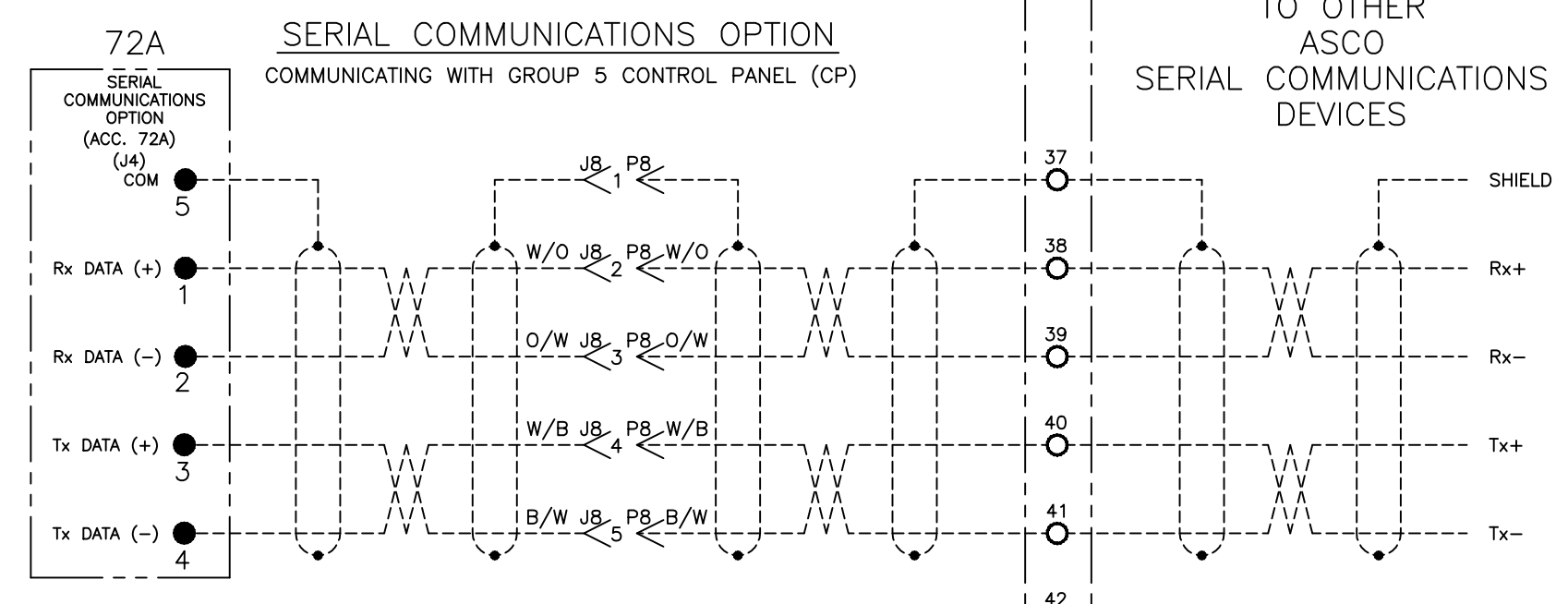
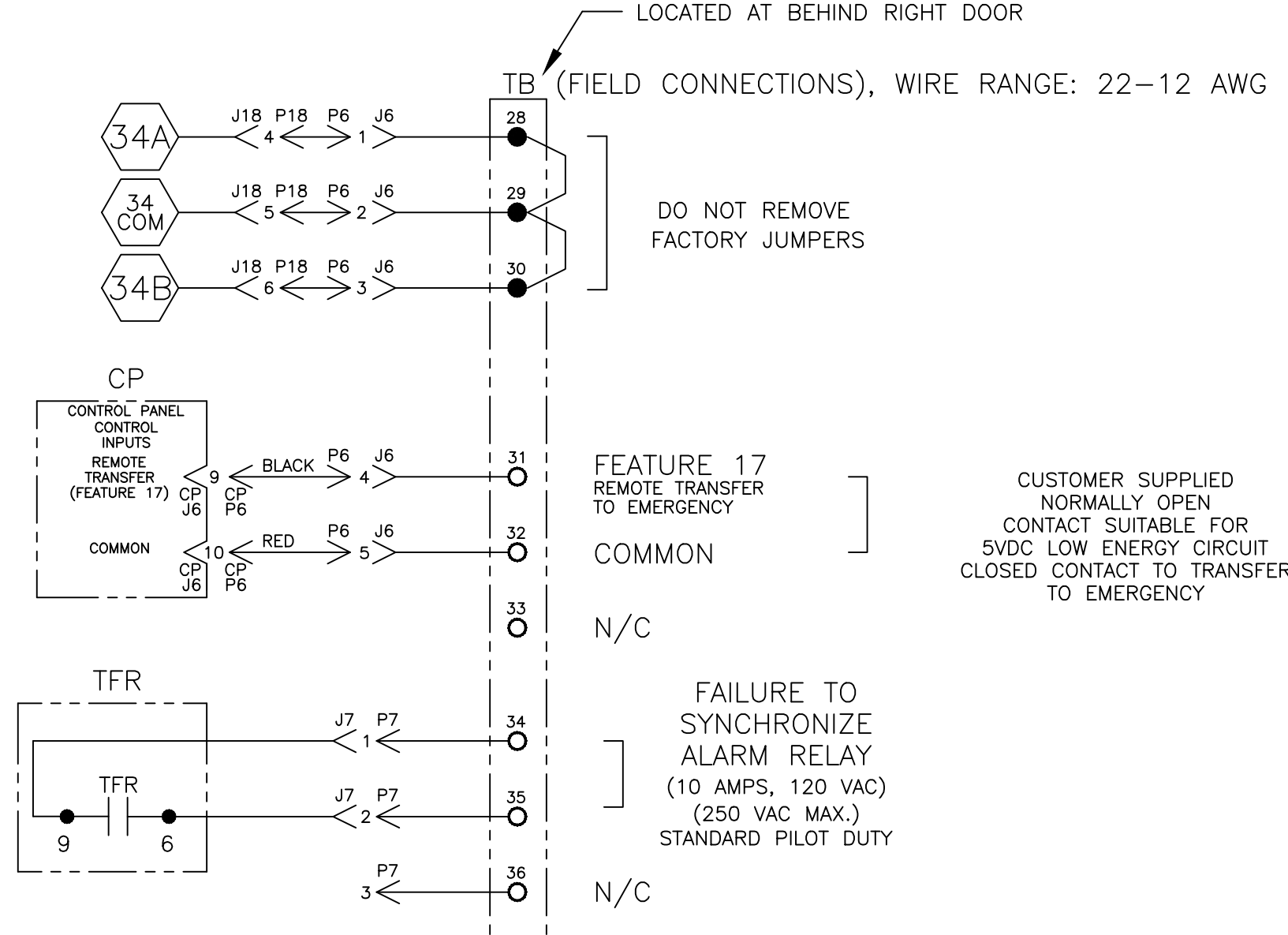
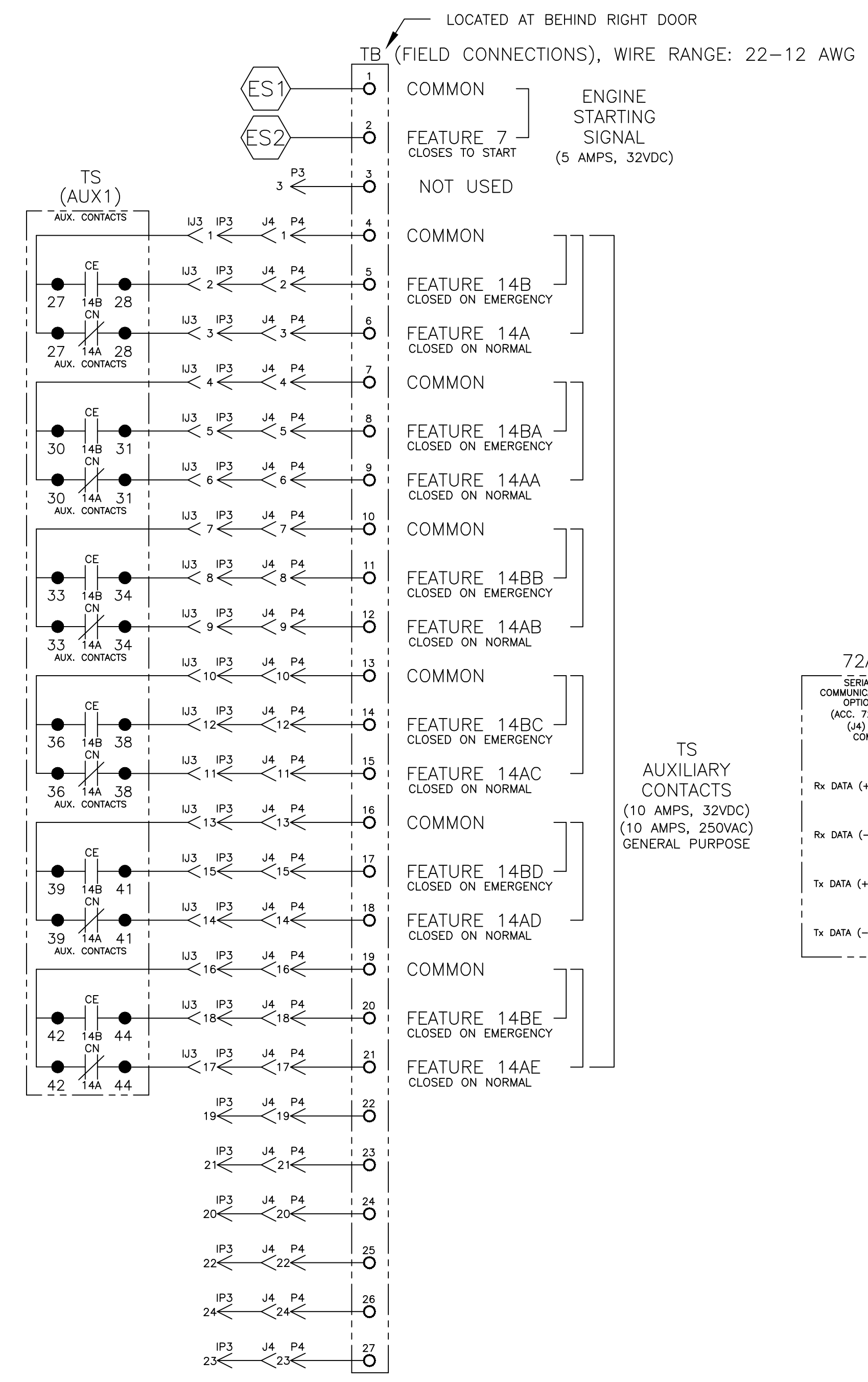
C

B

B

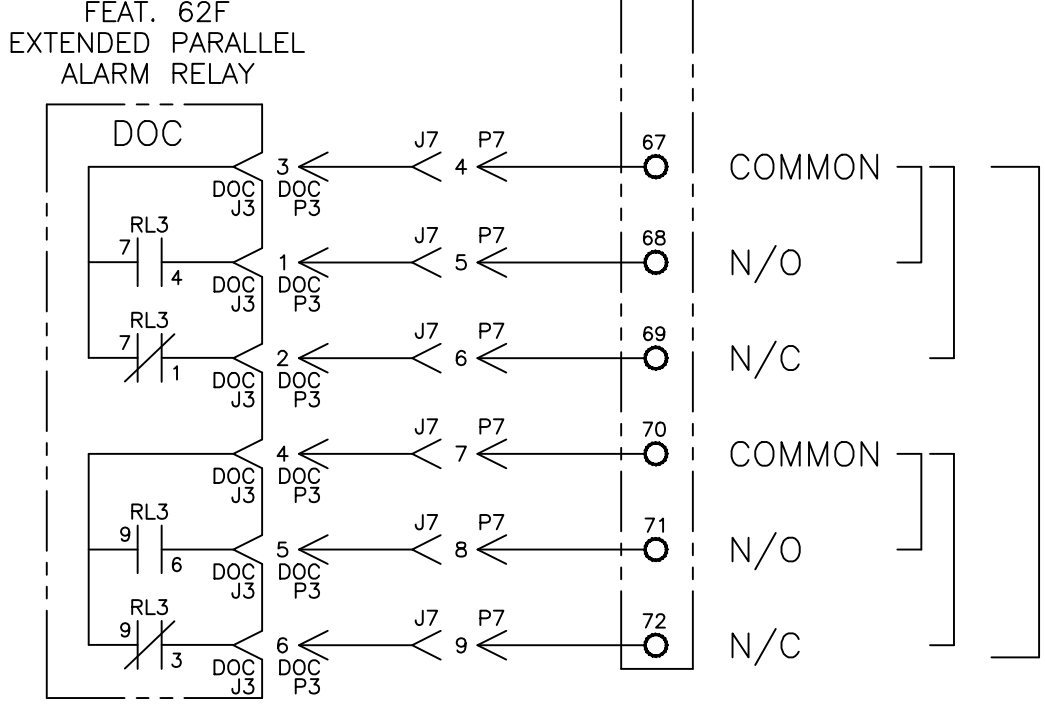
A

A



72A NOTES:

- EARTH GROUND SHIELD AT HOST DEVICE ONLY.
- FIELD WIRING: USE UL LISTED, STRANDED, TWISTED PAIRS, OVERALL FOIL SHIELD WITH STRANDED DRAIN WIRE SUITABLE FOR RS-422 EQUIVALENT TO: (STANDARD 80°C) BELDEN 9842 OR 9829 OR ALPHA 6202C OR 6222C (PLENUM RATED) BELDEN 89729 OR 82729 OR ALPHA 58902



N	238233	TR	BK	07/30/12
	SEE ECN			
M	236784	TR	BK	04/24/12
	SEE ECN			

PROJECT NAME:		DIAGRAM		REV. TO SHEET	ECN NO.	BY	APP.	DATE
WIRING		DIAGRAM						
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS		"H" FRAME, GROUP 5 CONTROLS		SCALE		SIZE		DS
DRAWN BY	SDH	DATE	4/03	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.	ASSEM. REF. NO.	COMPUTER GENERATED DRAWING		
CHECKED		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			DWG. NO.	736943		
PROJECT APPROVAL		ASCO Power Technologies, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.			DRAWING N REV.	ECN NO.	238233	SHEET 3 OF 10
FINAL APPROVAL	SDH	DATE	4/03					

MAIN POWER POLES

TS OPERATOR CIRCUIT

EMERGENCY

NORMAL

D

D

C

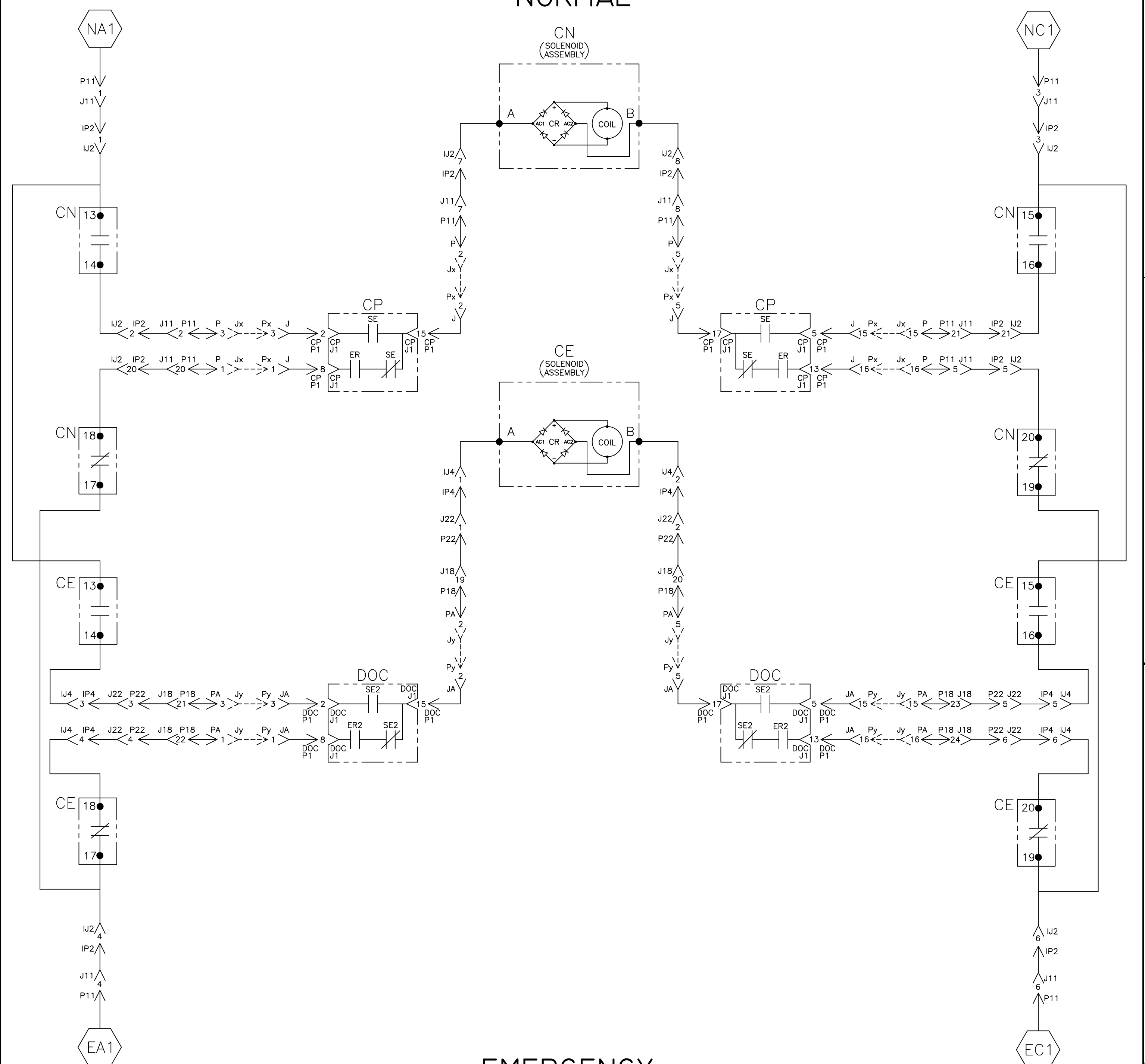
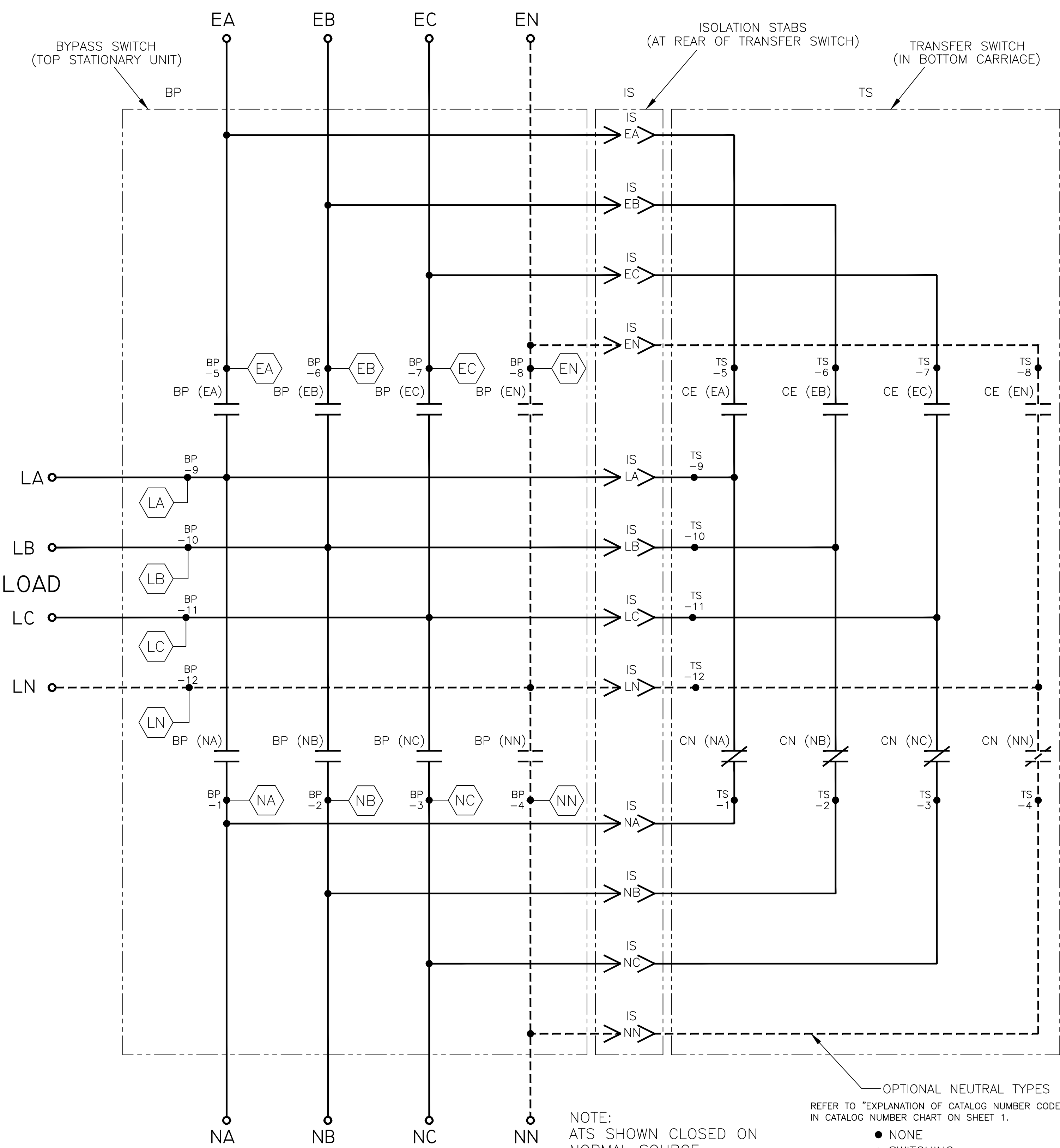
C

B

B

A

A



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 (H7ACTB) 3PH 600-1200 AMPS  
"H" FRAME, GROUP 5 CONTROLS

REV. TO SHEET	ECN NO.	BY	APP.	DATE
N	238233	TR	BK	07/30/12
M	236784	TR	BK	04/24/12

SCALE: NONE SIZE: DS

COMPUTER GENERATED DRAWING

736943

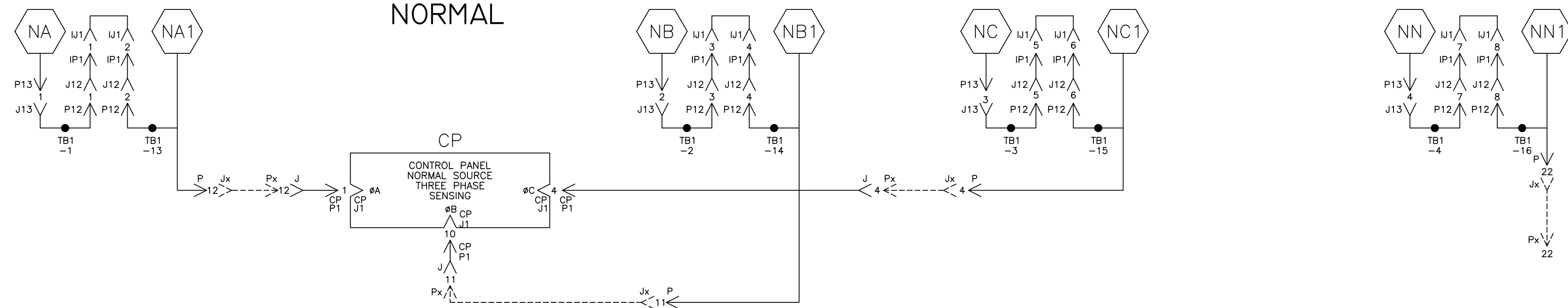
ASCO POWER TECHNOLOGIES, L.P.  
FLORHAM PARK, NEW JERSEY 07932 U.S.A.

DRAWING NO. ECN NO. 238233 SHEET 4 OF 10



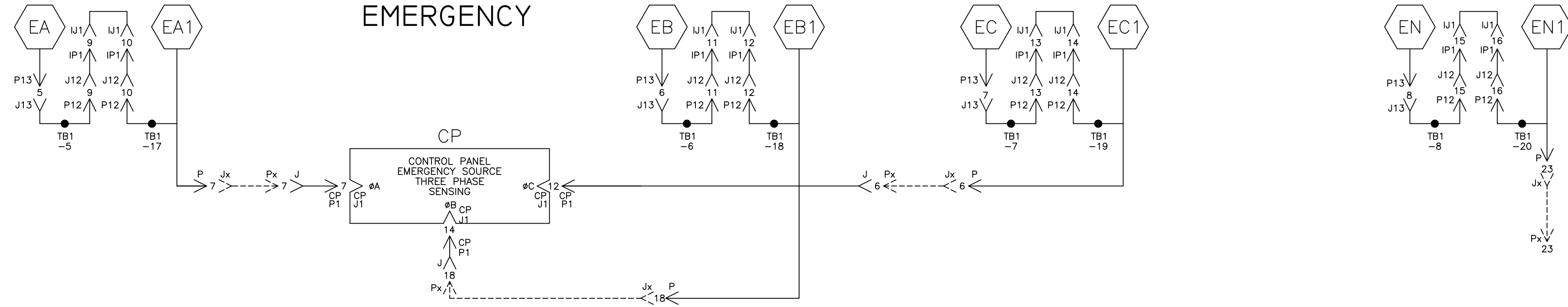
### NORMAL SOURCE CIRCUITS

#### NORMAL



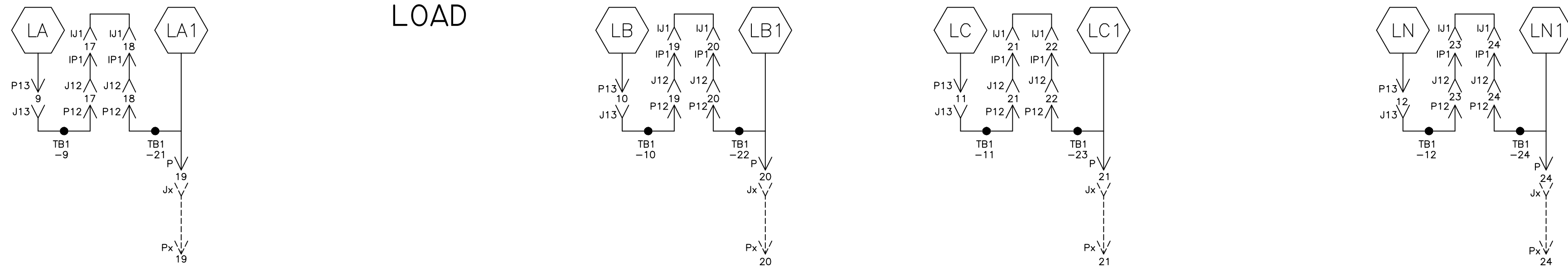
### EMERGENCY SOURCE CIRCUITS

#### EMERGENCY



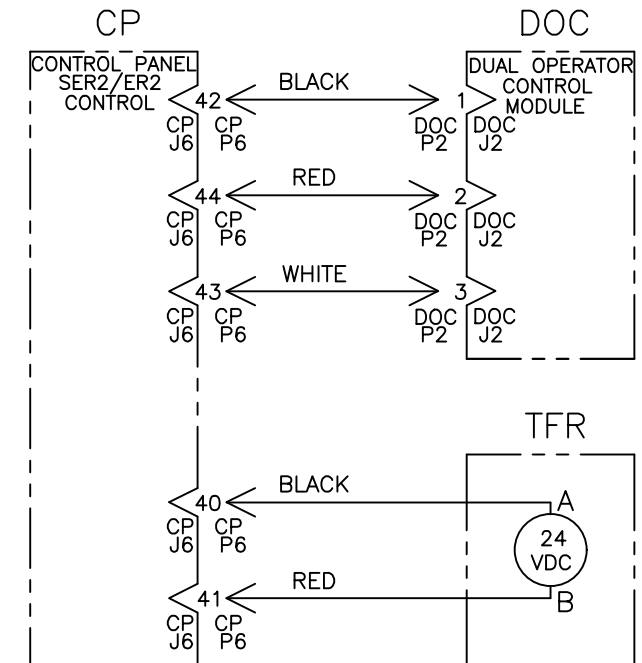
### LOAD TERMINAL CIRCUITS

#### LOAD

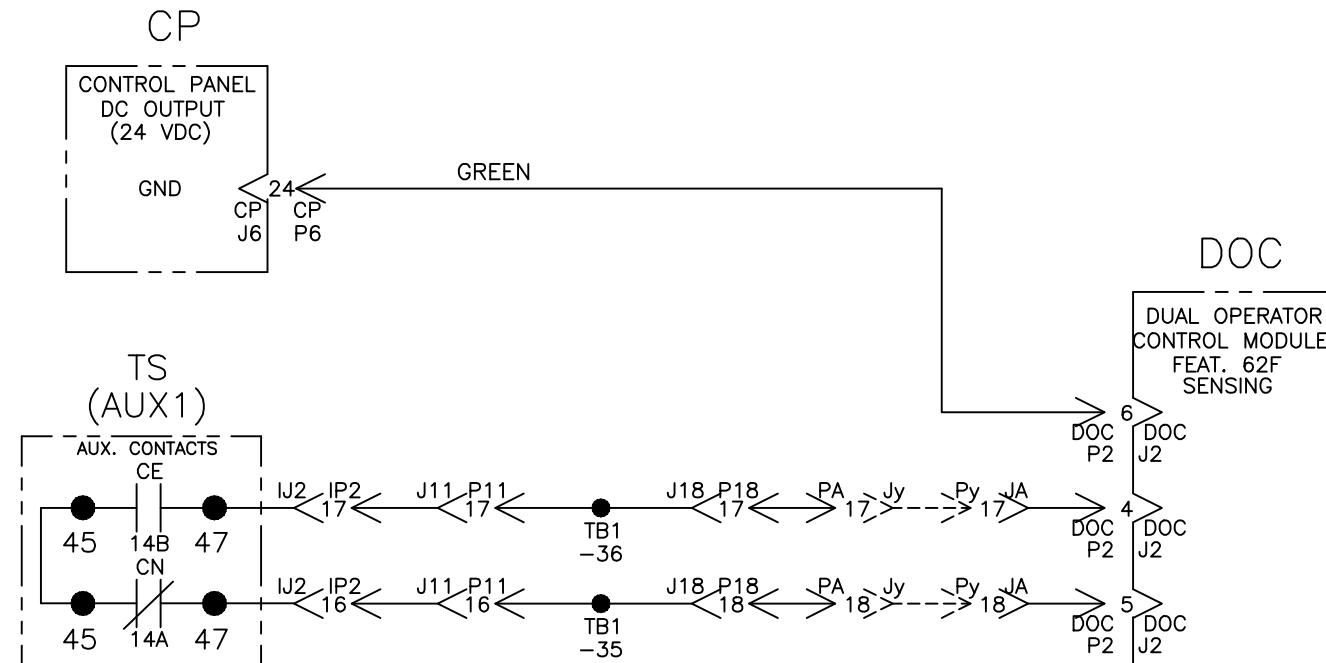


### CONTROL SIGNALS & INDICATION

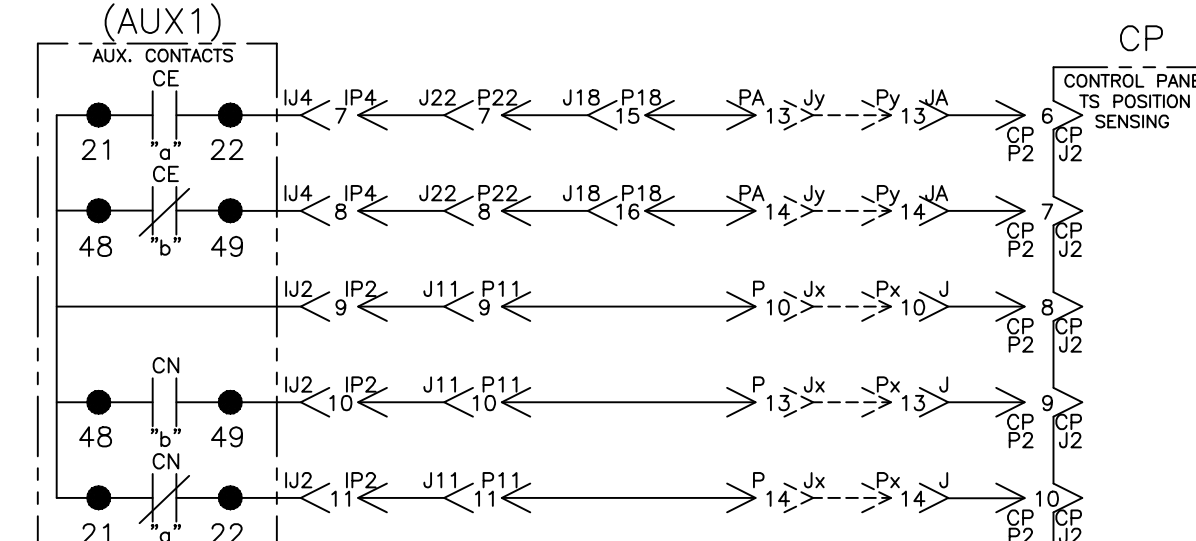
#### SER2/ER2 CONTROL



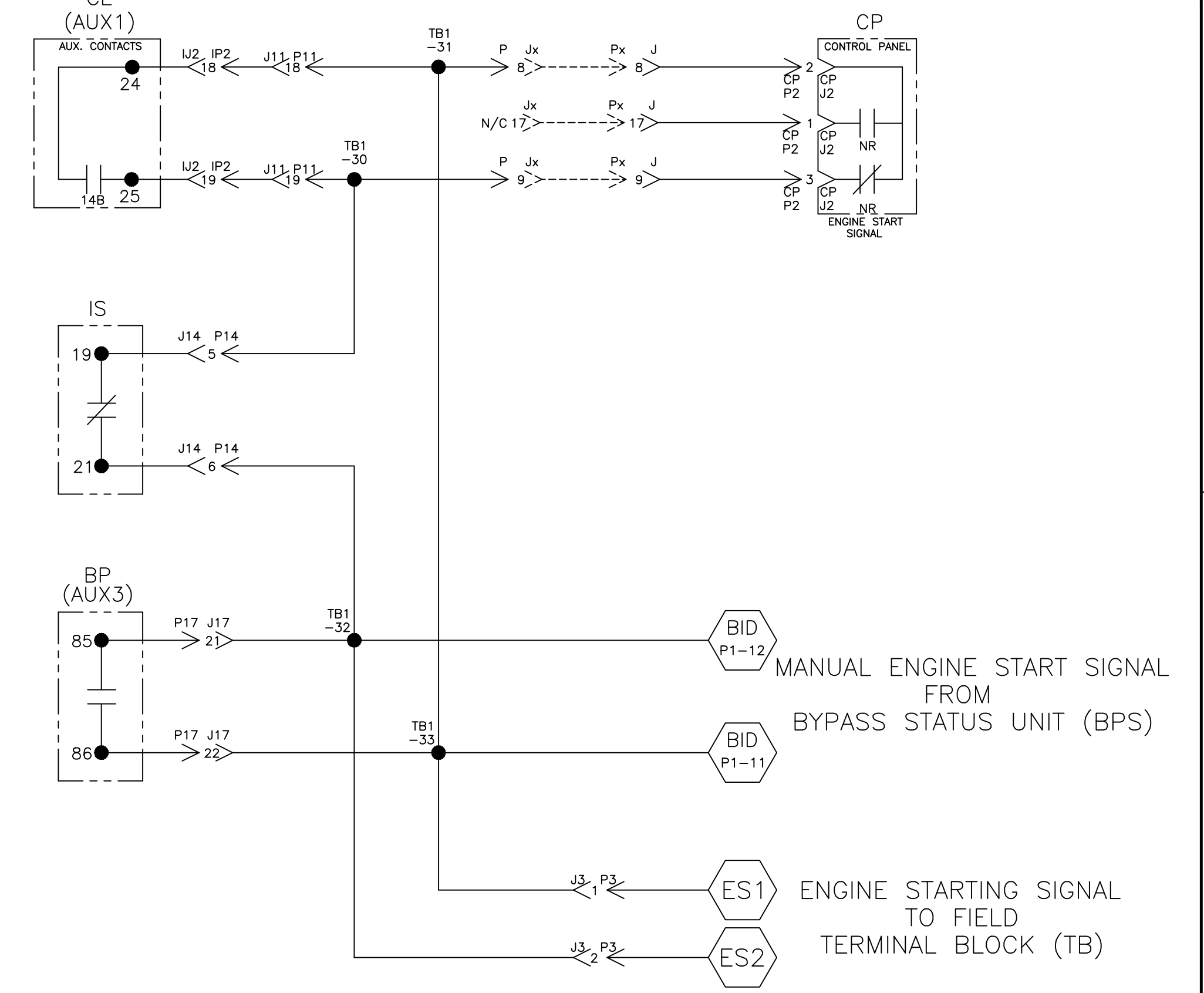
#### CP



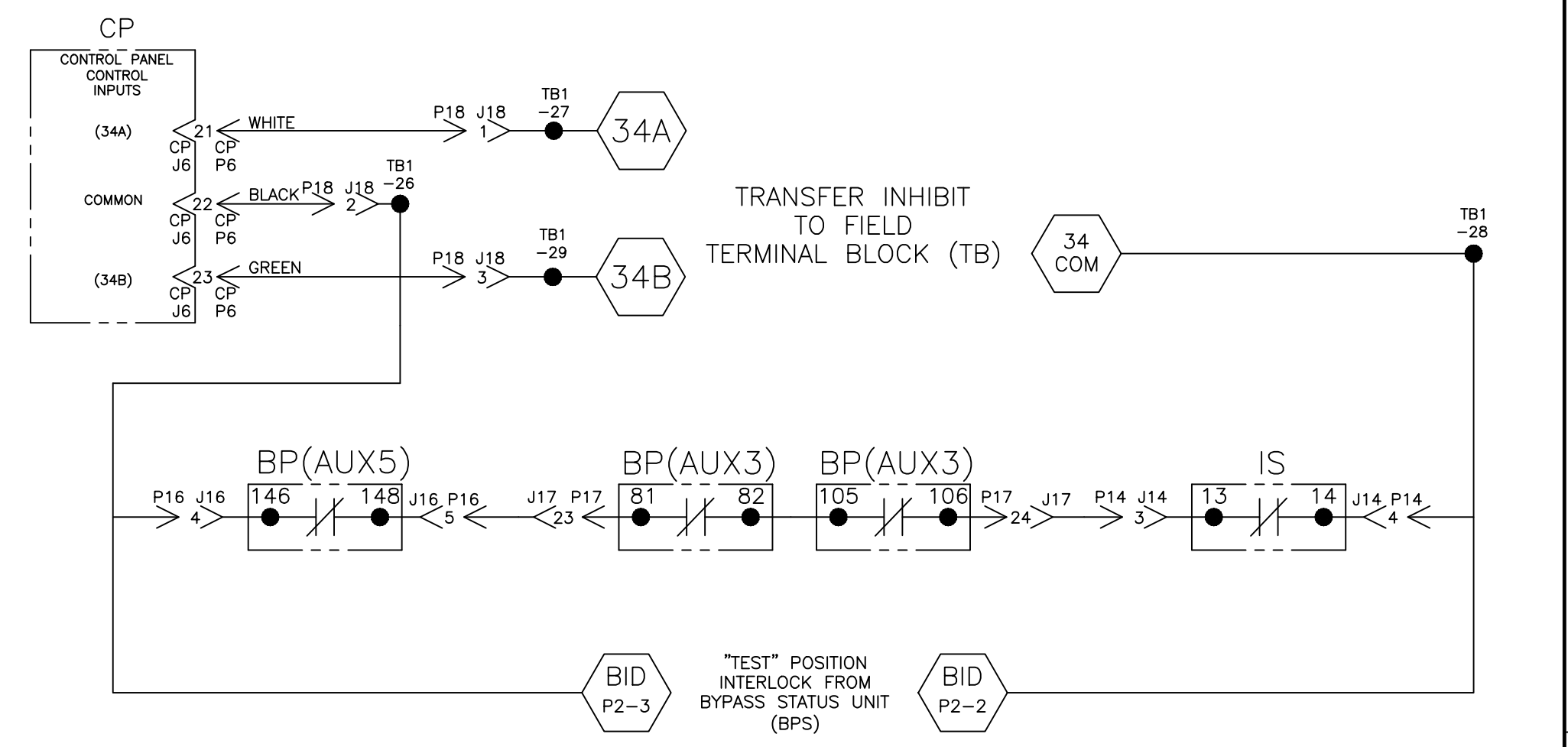
#### TS POSITION SENSING



### ENGINE START CIRCUIT



### CONTROL PANEL/BYPASS-ISOLATION INTERLOCKS



PROJECT NAME:		DIAGRAM	
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS			
"H" FRAME, GROUP 5 CONTROLS			
DRAWN BY	SDH	DATE	4/03
CHECKED		DATE	
PROJECT APPROVAL		DATE	
FINAL APPROVAL	SDH	DATE	4/03
REV. TO SHEET	N	ECN NO.	238233
TR	BK	DATE	07/30/12
TR	BK	DATE	04/24/12
SCALE	NONE	SIZE	DS
DWG. NO.	736943		
DRAWING N	REV.	ECN NO.	238233
			SHEET 5 OF 10

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

ADDITIONAL CIRCUITS

D

D

C

C

B

B

A

A

8

7

6

5

4

3

2

1



8

7

6

5

4

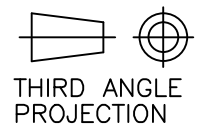
3

2

1

N	238233	TR	BK	07/30/12
	SEE ECN			
M	236784	TR	BK	04/24/12
	SEE ECN			

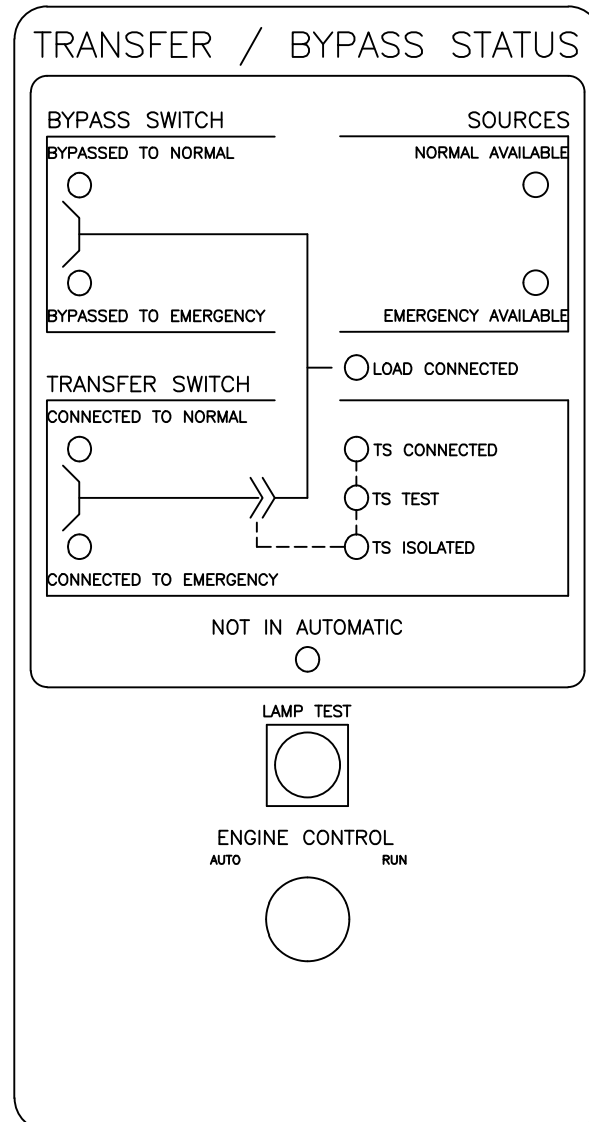
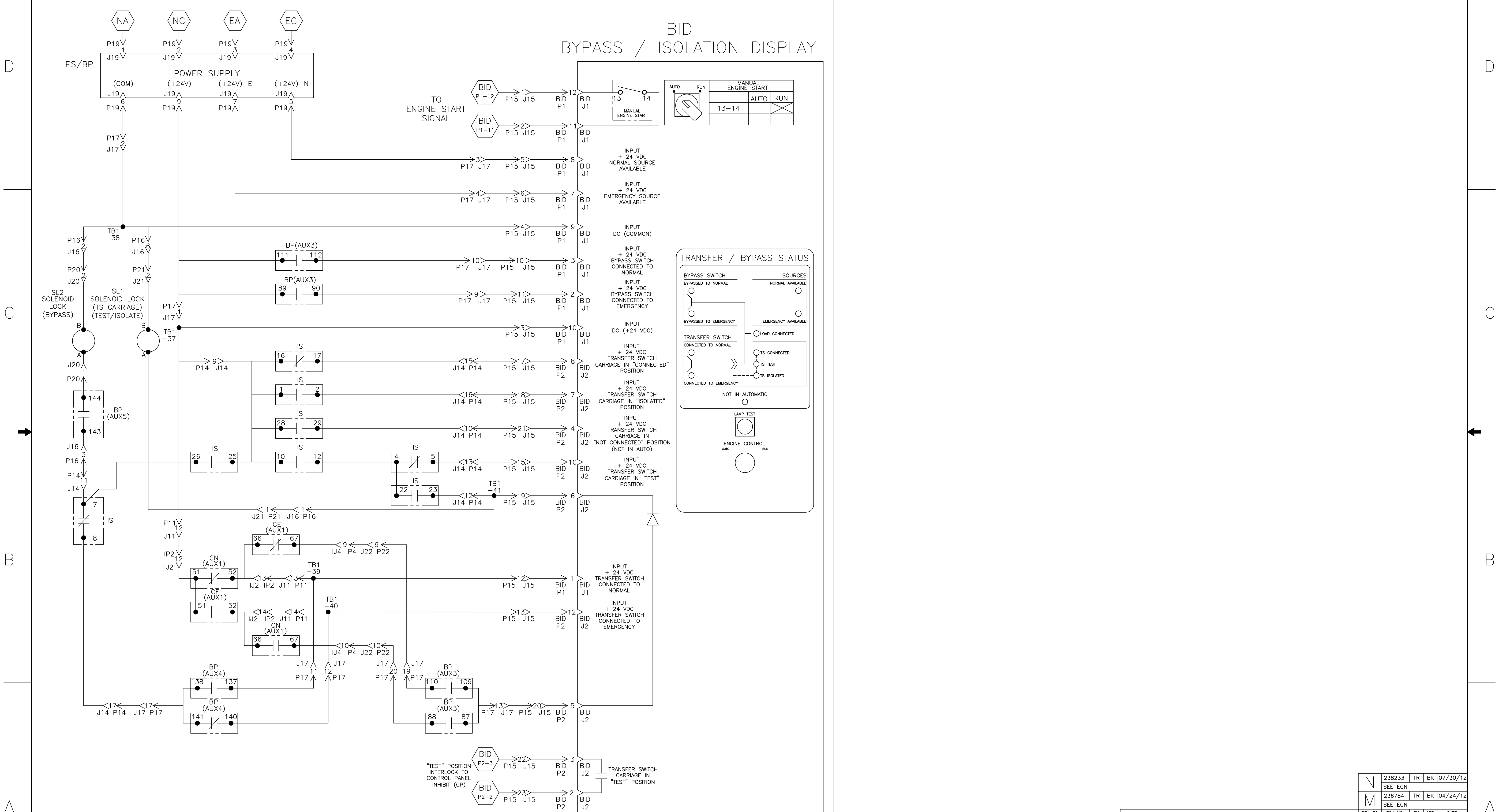
PROJECT NAME:				REV. TO SHEET	ECN NO.	BY	APP.	DATE
WIRING DIAGRAM								
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS				ASSEMBLY REF. NO.		COMPUTER GENERATED DRAWING		
"H" FRAME, GROUP 5 CONTROLS				SCALE NONE		SIZE DS		
DRAWN BY	SDH	DATE	4/03	PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.				
CHECKED				DWC. NO.		736943		
PROJECT APPROVAL				DRAWING N		ECN NO. 238233		
FINAL APPROVAL	SDH	DATE	4/03	REV.		SHEET 6 OF 10		
<b>ASCO</b> ® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.								



THIRD ANGLE PROJECTION

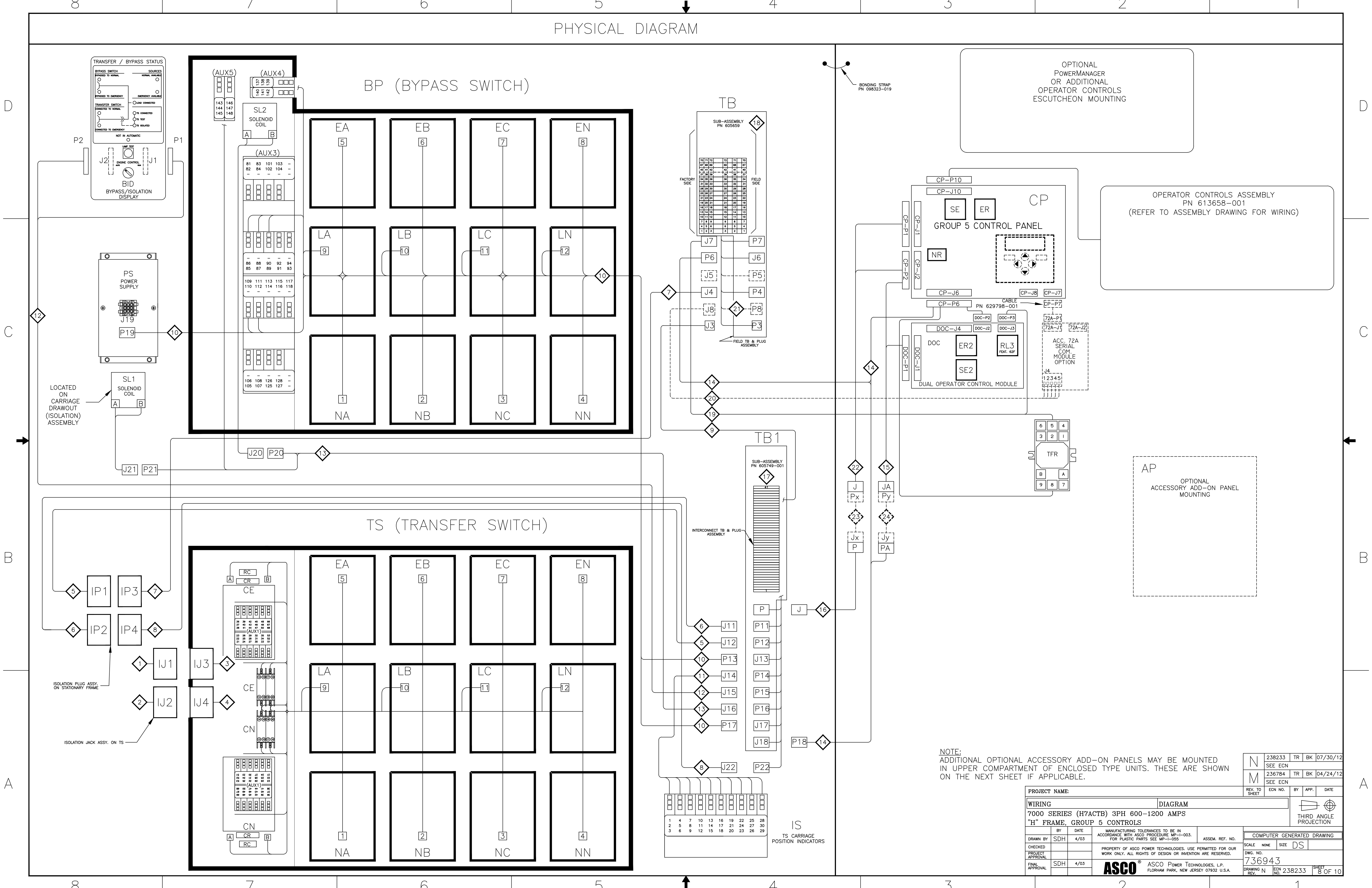
BYPASS / ISOLATION INTERLOCKING & INDICATION

BID  
BYPASS / ISOLATION DISPLAY



PROJECT NAME:		REV. TO SHEET		ECN NO.	BY	APP.	DATE
WIRING		DIAGRAM		N	238233	TR	BK 07/30/12
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS		SEE ECN		M	236784	TR	BK 04/24/12
"H" FRAME, GROUP 5 CONTROLS		SEE ECN		THIRD ANGLE PROJECTION			
DRAWN BY	SDH	DATE	4/03	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		ASSEM. REF. NO.	COMPUTER GENERATED DRAWING
CHECKED				PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		SCALE	NO
PROJECT APPROVAL				736943		SIZE	DS
FINAL APPROVAL	SDH	DATE	4/03	ASCO® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		DWG. NO.	736943
				DRAWING N	ECN NO.	238233	SHEET 7 OF 10

PHYSICAL DIAGRAM



NOTE:  
ADDITIONAL OPTIONAL ACCESSORY ADD-ON PANELS MAY BE MOUNTED IN UPPER COMPARTMENT OF ENCLOSED TYPE UNITS. THESE ARE SHOWN ON THE NEXT SHEET IF APPLICABLE.

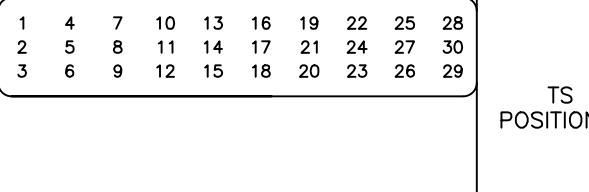
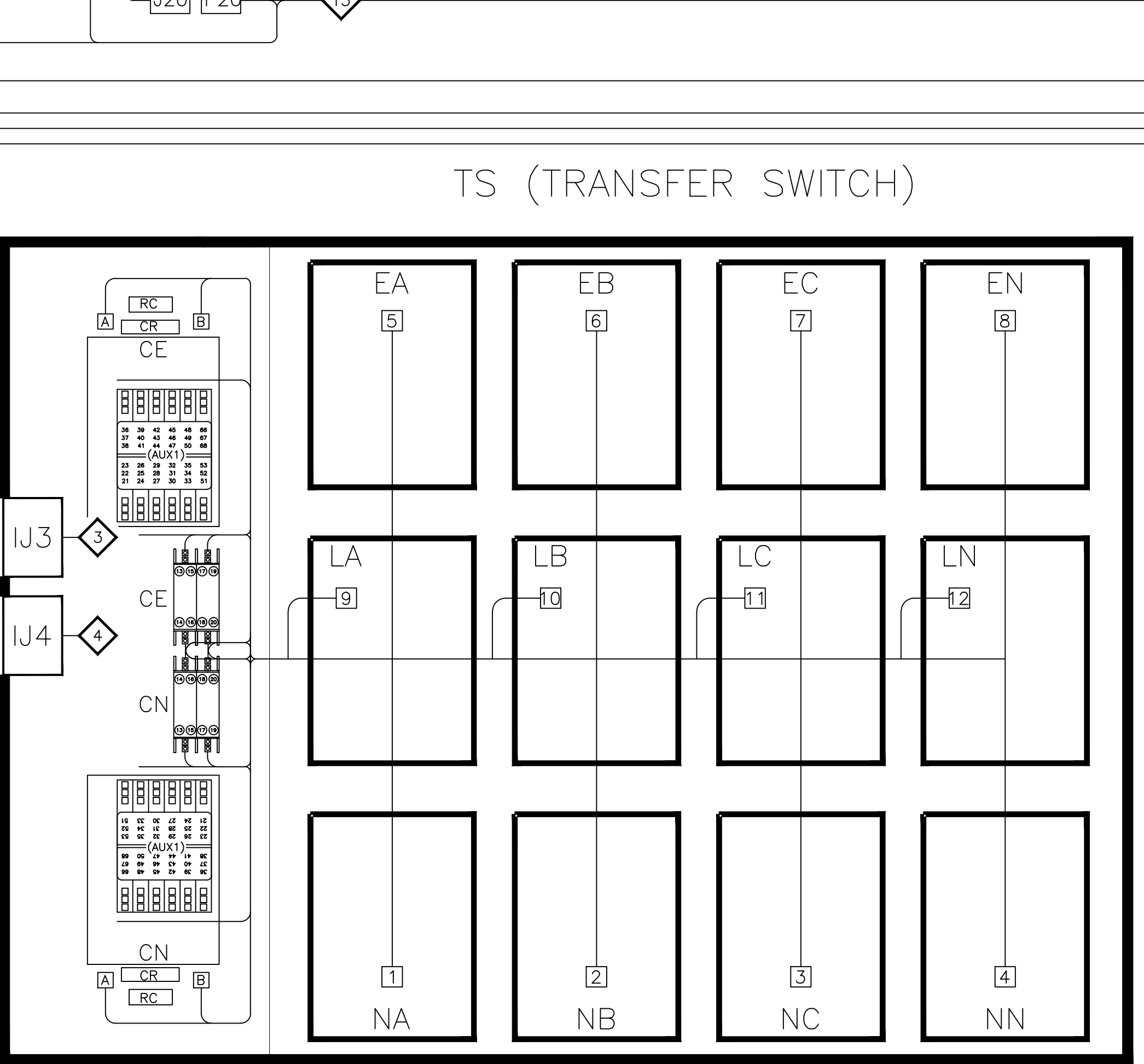
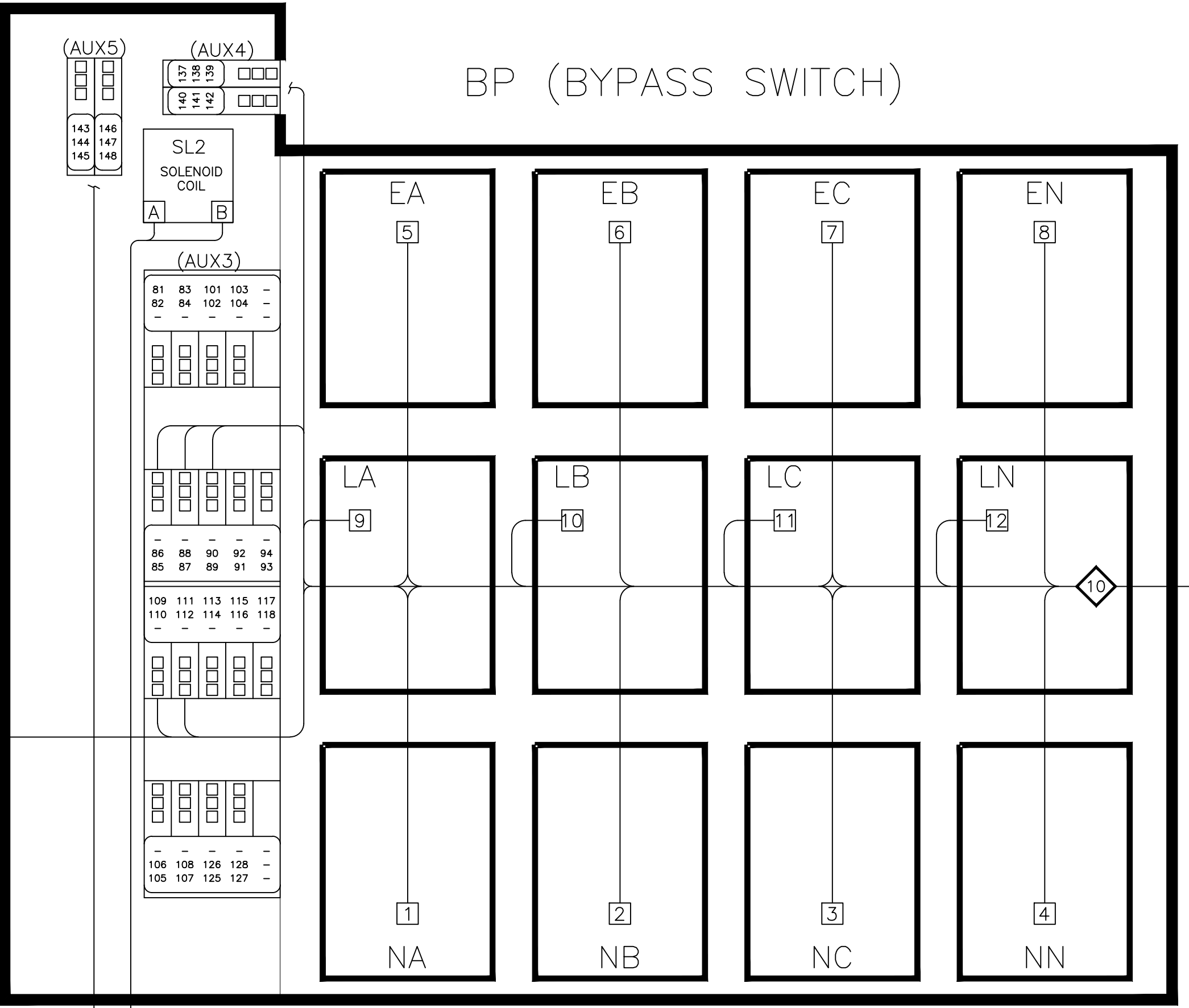
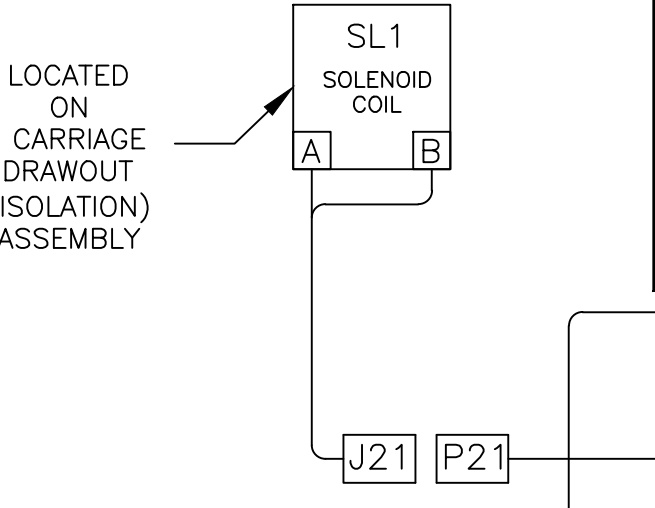
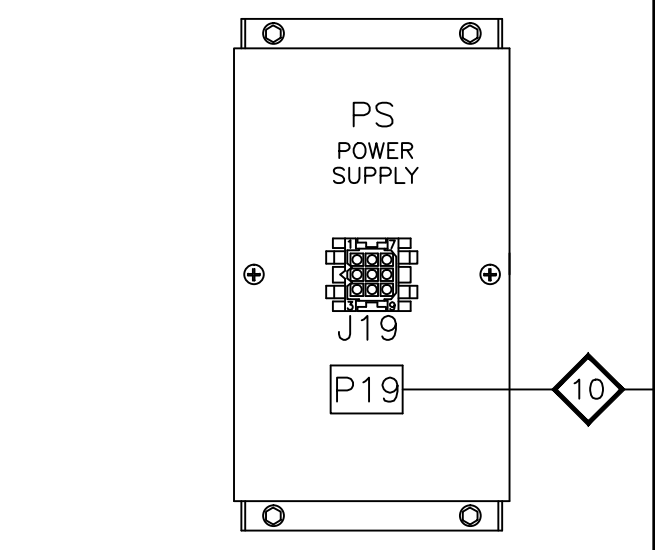
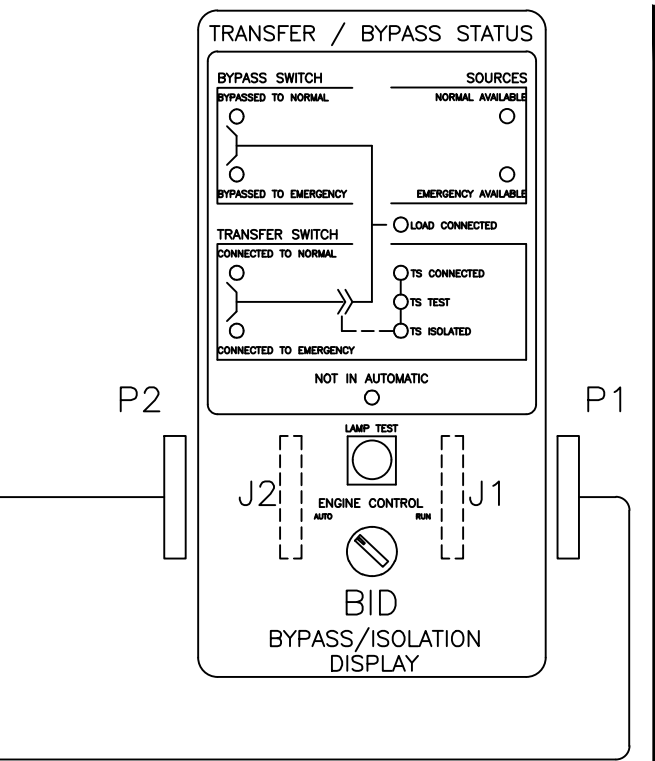
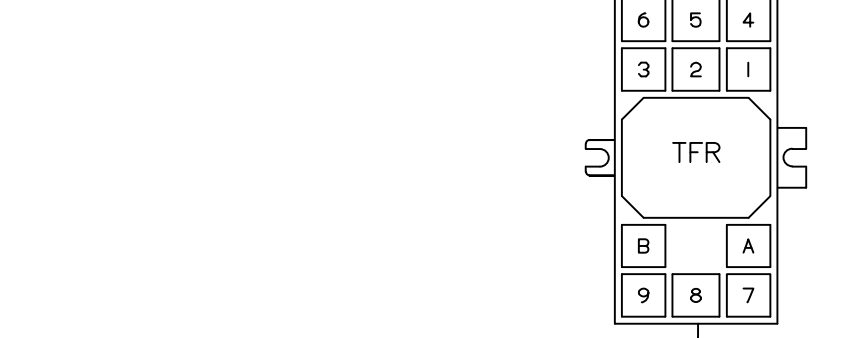
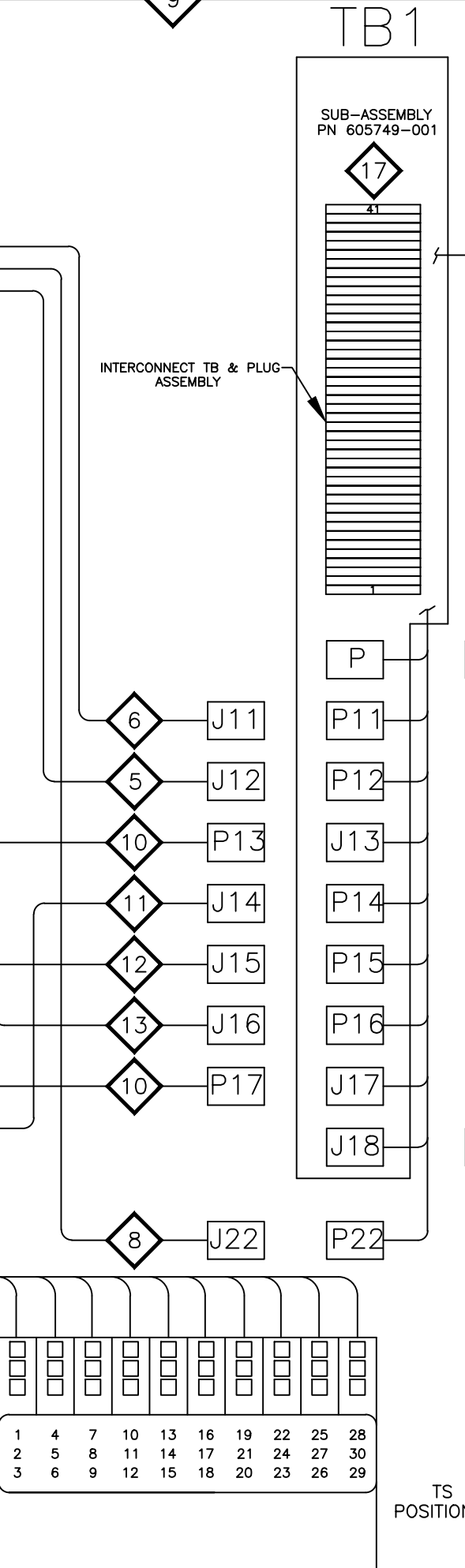
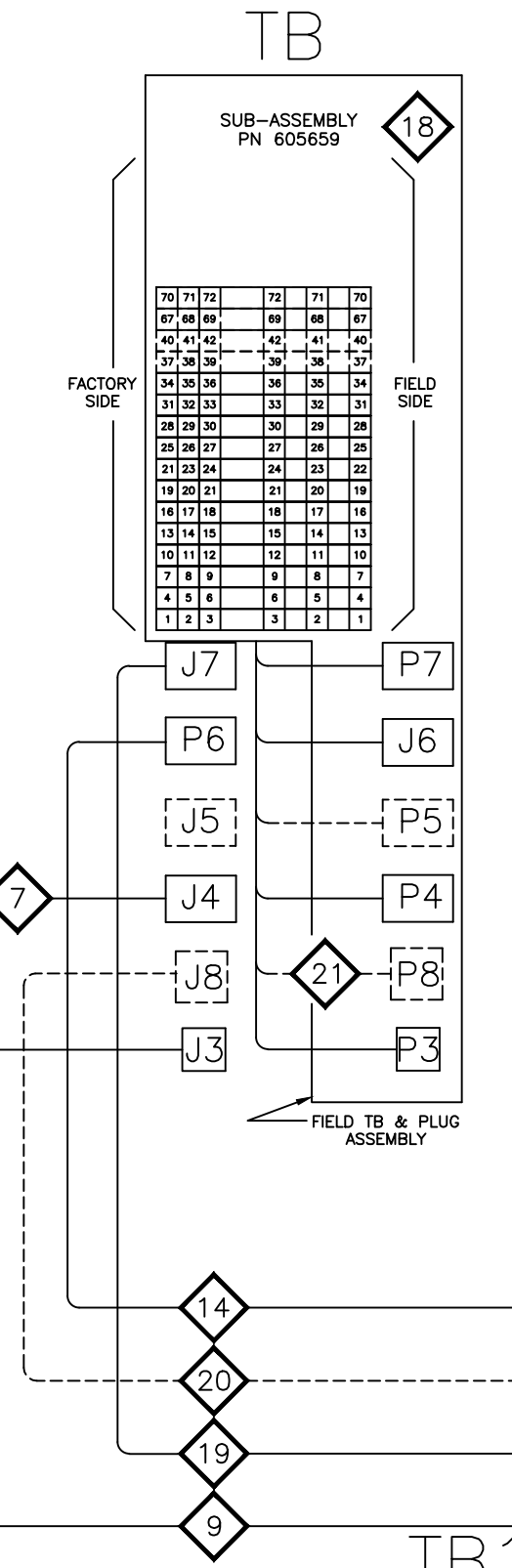
PROJECT NAME:		WIRING DIAGRAM	
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS "H" FRAME, GROUP 5 CONTROLS			
BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.	ASSEM. REF. NO.
SDH	4/03		
CHECKED		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE
PROJECT APPROVAL			SIZE DS
FINAL APPROVAL	SDH	4/03	736943
DRAWN BY		COMPUTER GENERATED DRAWING	
SDH		SCALE NONE	
DATE		SIZE DS	
4/03		736943	
REV. TO SHEET		DRAWING N	
N		ECN NO. 238233	
M		REV. 8 OF 10	

REV. TO SHEET	ECN NO.	BY	APP.	DATE
N	238233	TR	BK	07/30/12
SEE ECN				
M	236784	TR	BK	04/24/12
SEE ECN				

OPERATOR CONTROLS ASSEMBLY  
PN 613658-001  
(REFER TO ASSEMBLY DRAWING FOR WIRING)

OPTIONAL POWERMANAGER OR ADDITIONAL OPERATOR CONTROLS ESCUTCHEON MOUNTING

AP  
OPTIONAL ACCESSORY ADD-ON PANEL MOUNTING





WIRE RUN LISTING

Table 1: HARNESS LOCATOR 1 (HARNESS 605674-001 (J1) TS). Lists wire numbers, descriptions, CLR, and AWG.

Table 2: HARNESS LOCATOR 2 (HARNESS 736828-001-A (J2) TS). Lists wire numbers, descriptions, CLR, and AWG.

Table 3: HARNESS LOCATOR 3 (HARNESS 736828-002-A (J3) TS). Lists wire numbers, descriptions, CLR, and AWG.

Table 4: HARNESS LOCATOR 4 (HARNESS 605674-006 (IP3,J4) STATIONARY FRAME). Lists wire numbers, descriptions, CLR, and AWG.

Table 5: HARNESS LOCATOR 5 (HARNESS 605674-006-A (IP1,J12) STATIONARY FRAME). Lists wire numbers, descriptions, CLR, and AWG.

Table 6: HARNESS LOCATOR 6 (HARNESS 605674-006-A (IP2,J11) STATIONARY FRAME). Lists wire numbers, descriptions, CLR, and AWG.

Table 7: HARNESS LOCATOR 7 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 8: HARNESS LOCATOR 8 (HARNESS 605674-006-B (IP4,J22) STATIONARY FRAME). Lists wire numbers, descriptions, CLR, and AWG.

Table 9: HARNESS LOCATOR 9 (HARNESS 736828-005 (J16, P20, P21) BP/IS INTERLOCKS). Lists wire numbers, descriptions, CLR, and AWG.

Table 10: HARNESS LOCATOR 10 (HARNESS 736828-004-A (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 11: HARNESS LOCATOR 11 (HARNESS 309320-006 (P,J) CONTROL PANEL EXTENSION). Lists wire numbers, descriptions, CLR, and AWG.

Table 12: HARNESS LOCATOR 12 (HARNESS 736828-006 (J14,IS) ISOLATION AUX. CONTACTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 13: HARNESS LOCATOR 13 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 14: HARNESS LOCATOR 14 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 15: HARNESS LOCATOR 15 (HARNESS 605674-006-B (IP4,J22) STATIONARY FRAME). Lists wire numbers, descriptions, CLR, and AWG.

Table 16: HARNESS LOCATOR 16 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 17: HARNESS LOCATOR 17 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 18: HARNESS LOCATOR 18 (HARNESS 736828-006 (J14,IS) ISOLATION AUX. CONTACTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 19: HARNESS LOCATOR 19 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 20: HARNESS LOCATOR 20 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 21: HARNESS LOCATOR 21 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 22: HARNESS LOCATOR 22 (HARNESS 736828-003 (P13, P17, P19, BP) BP). Lists wire numbers, descriptions, CLR, and AWG.

Table 23: HARNESS LOCATOR 23 (HARNESS 736828-005 (J16, P20, P21) BP/IS INTERLOCKS). Lists wire numbers, descriptions, CLR, and AWG.

Table 24: HARNESS LOCATOR 24 (HARNESS 736828-004-A (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 25: HARNESS LOCATOR 25 (HARNESS 309320-006 (P,J) CONTROL PANEL EXTENSION). Lists wire numbers, descriptions, CLR, and AWG.

Table 26: HARNESS LOCATOR 26 (HARNESS 736828-006 (J14,IS) ISOLATION AUX. CONTACTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 27: HARNESS LOCATOR 27 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 28: HARNESS LOCATOR 28 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 29: HARNESS LOCATOR 29 (HARNESS 736828-003 (P13, P17, P19, BP) BP). Lists wire numbers, descriptions, CLR, and AWG.

Table 30: HARNESS LOCATOR 30 (HARNESS 736828-005 (J16, P20, P21) BP/IS INTERLOCKS). Lists wire numbers, descriptions, CLR, and AWG.

Table 31: HARNESS LOCATOR 31 (HARNESS 736828-004-A (PA,P6,P18,CP-P6,DOC-P2,TFR) INTERNAL CONTROL & FIELD INPUTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 32: HARNESS LOCATOR 32 (HARNESS 309320-006 (P,J) CONTROL PANEL EXTENSION). Lists wire numbers, descriptions, CLR, and AWG.

Table 33: HARNESS LOCATOR 33 (HARNESS 736828-006 (J14,IS) ISOLATION AUX. CONTACTS). Lists wire numbers, descriptions, CLR, and AWG.

Table 34: HARNESS LOCATOR 34 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 35: HARNESS LOCATOR 35 (HARNESS 605674-007-A (J3,TB1) ENGINE START). Lists wire numbers, descriptions, CLR, and AWG.

Table 36: HARNESS LOCATOR 36 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 37: HARNESS LOCATOR 37 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 38: HARNESS LOCATOR 38 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 39: HARNESS LOCATOR 39 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 40: HARNESS LOCATOR 40 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 41: HARNESS LOCATOR 41 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 42: HARNESS LOCATOR 42 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Project information block including project name, drawing number (736943), date (4/03), and manufacturer (ASCO Power Technologies, L.P.).

