

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		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055		ASSEM. REF. NO.		COMPUTER GENERATED DRAWING
DRAWN BY	SDH	DATE	4/03	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.	736943	
PROJECT APPROVAL		ASCOTM ASCO Power Technologies, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		DRAWING N REV.	ECN NO.	238233
FINAL APPROVAL	SDH	DATE	4/03			SHEET 2 OF 10

FIELD CONNECTIONS

D

D

C

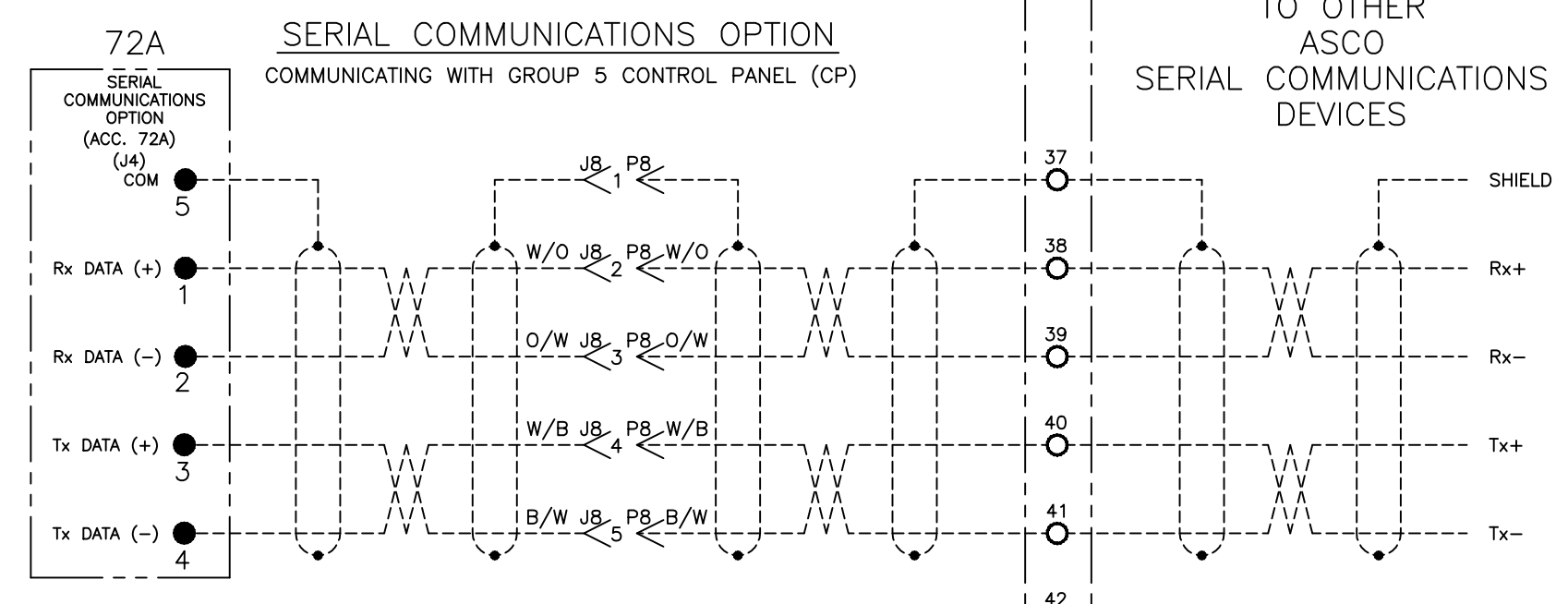
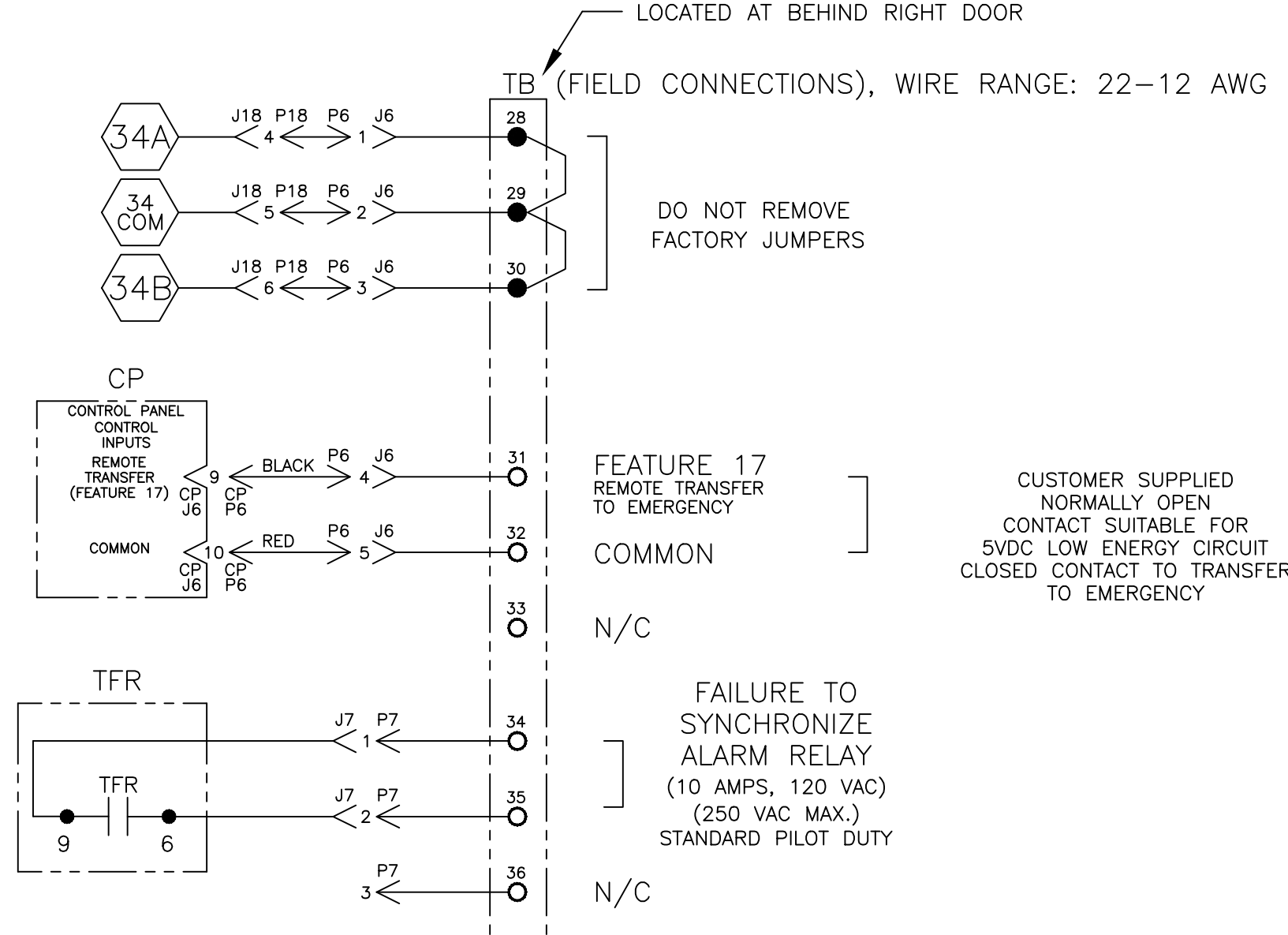
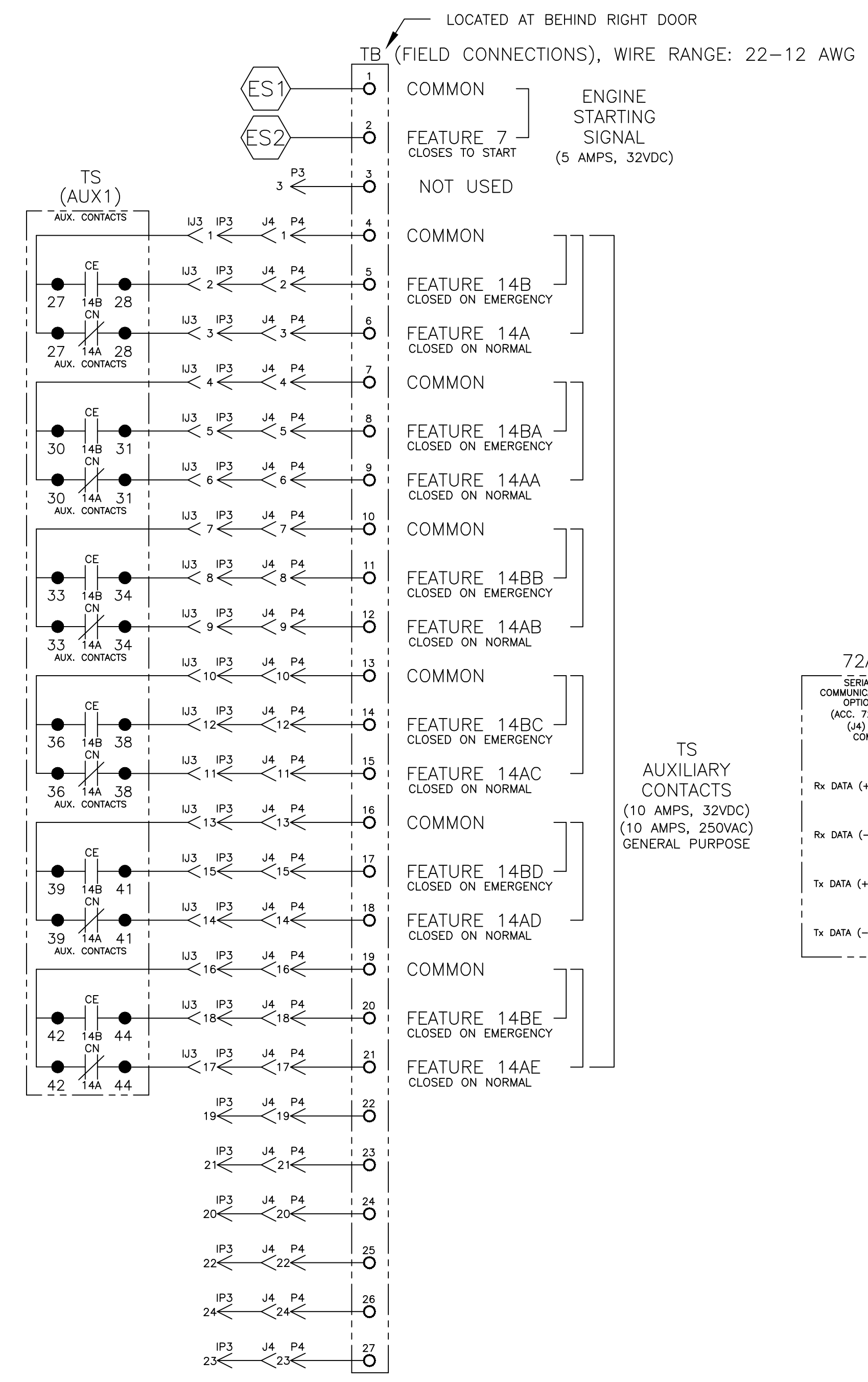
C

B

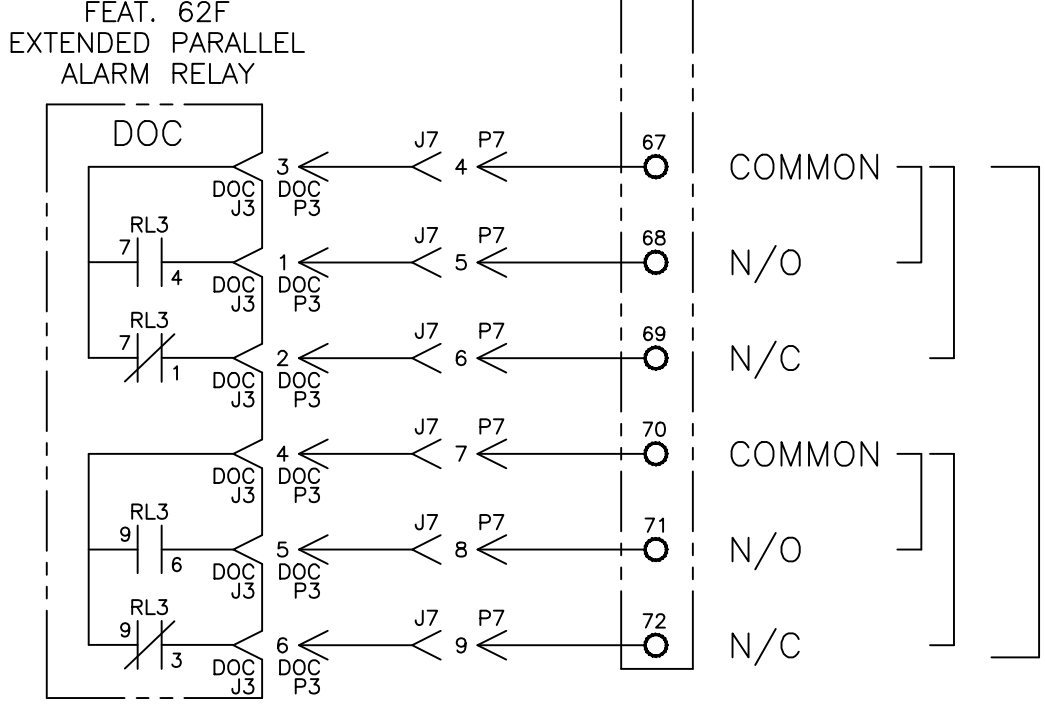
B

A

A



- 72A NOTES:
1. EARTH GROUND SHIELD AT HOST DEVICE ONLY.
 2. 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			

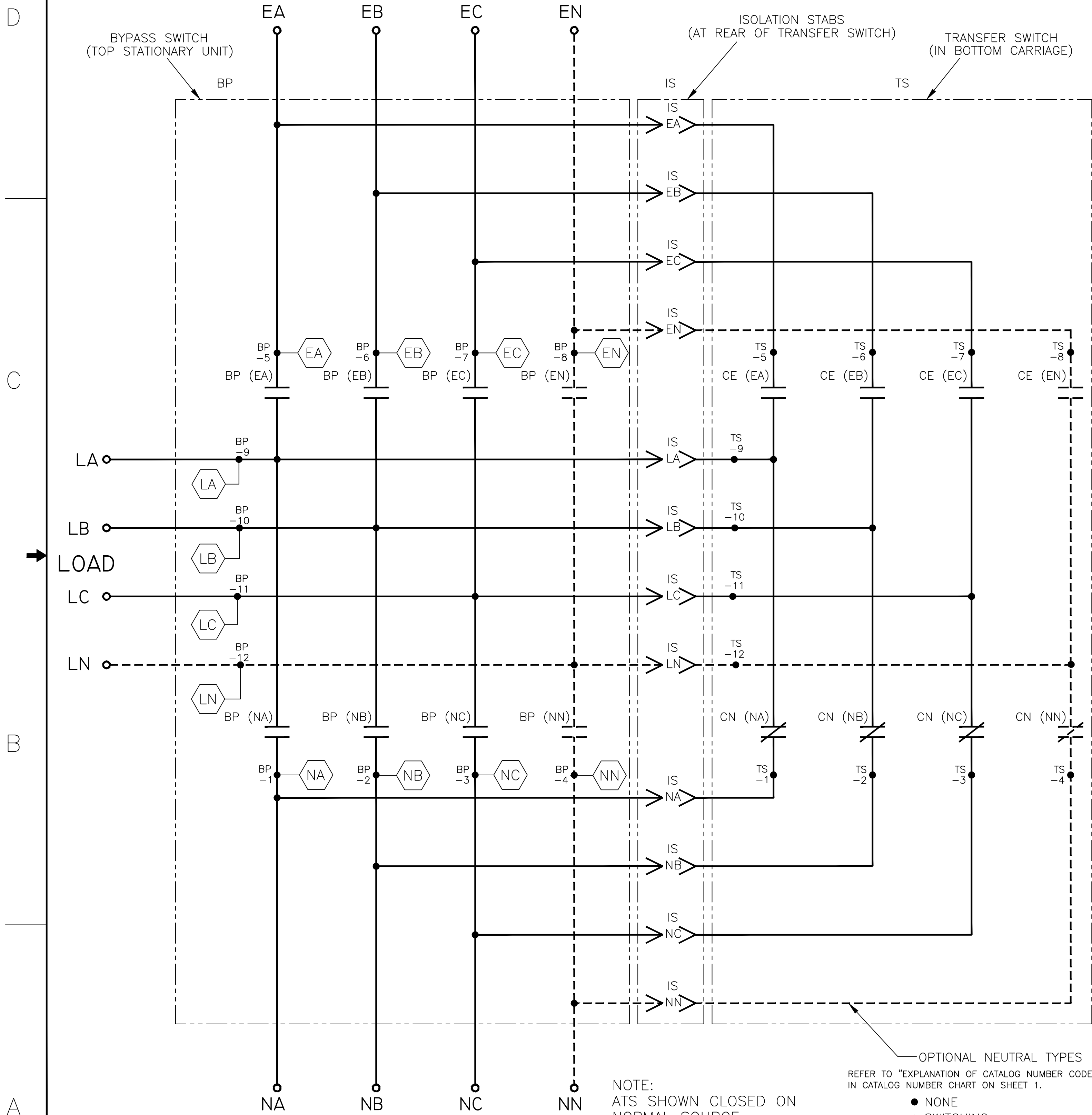
PROJECT NAME:		DIAGRAM	
7000 SERIES (H7ACTB) 3PH 600-1200 AMPS			
"H" FRAME, GROUP 5 CONTROLS			
DRAWN BY	DATE	ASSEM. REF. NO.	COMPUTER GENERATED DRAWING
SDH	4/03		SCALE NONE SIZE DS
CHECKED		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.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

MAIN POWER POLES

TS OPERATOR CIRCUIT

EMERGENCY

NORMAL

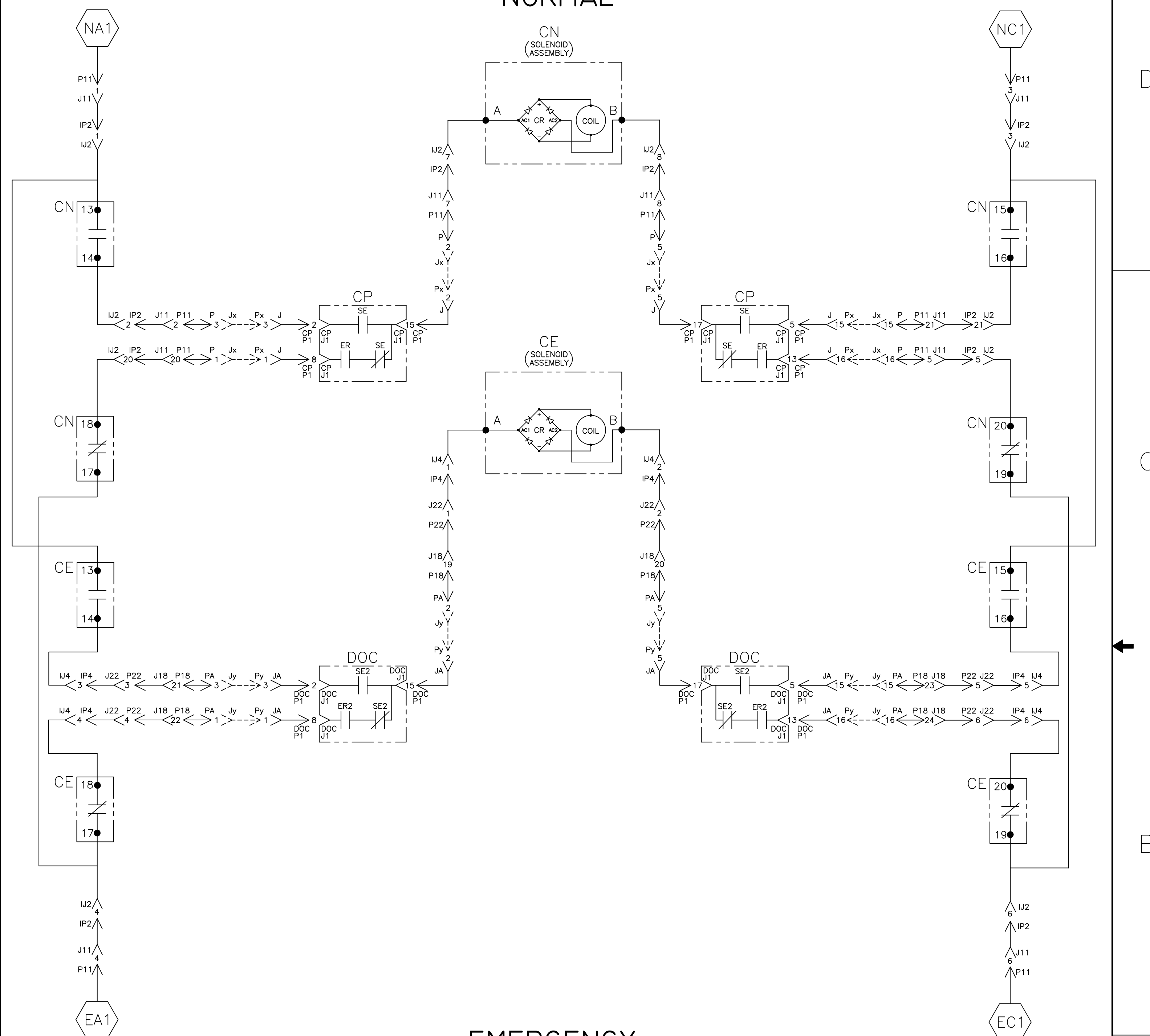


NORMAL

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



EMERGENCY

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				

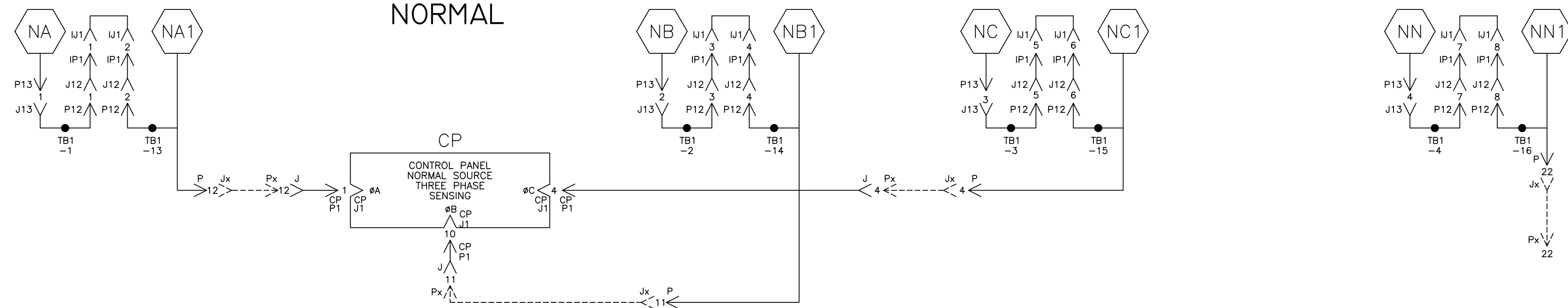
TDC (TOP DEAD CENTER) TRANSFER SWITCH TEST & ADJUSTMENT PROCEDURE SPECIFIES CONTROL CUT-OFF (CONTACT OPENING) SETTING.

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			
DRAWN BY	DATE	SCALE	NO.
SDH	4/03	1:1	736943
CHECKED	DATE	BY	APP.
PROJECT APPROVAL	DATE	SDH	4/03
FINAL APPROVAL	DATE	SDH	4/03
PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		COMPUTER GENERATED DRAWING	
ASCO POWER TECHNOLOGIES, L.P. FLOHAM PARK, NEW JERSEY 07932 U.S.A.		DRAWING NO. ECN 238233 SHEET 4 OF 10	

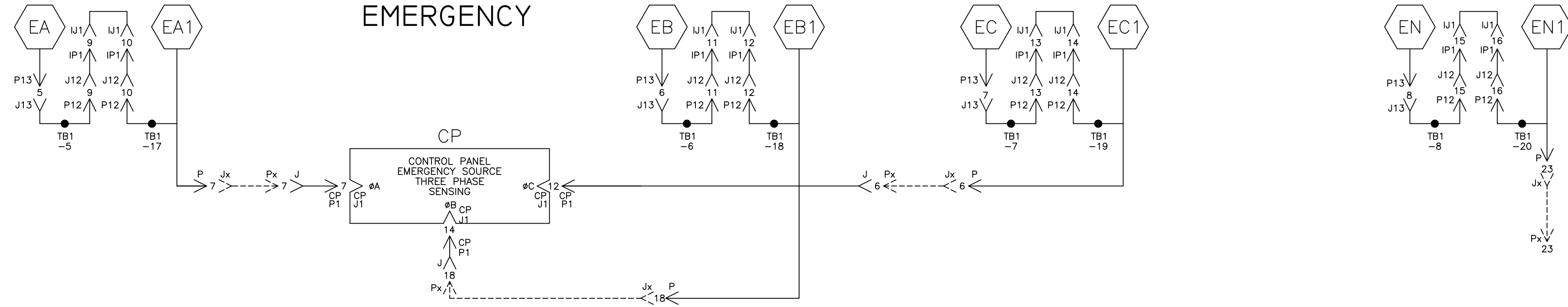
NORMAL SOURCE CIRCUITS

NORMAL



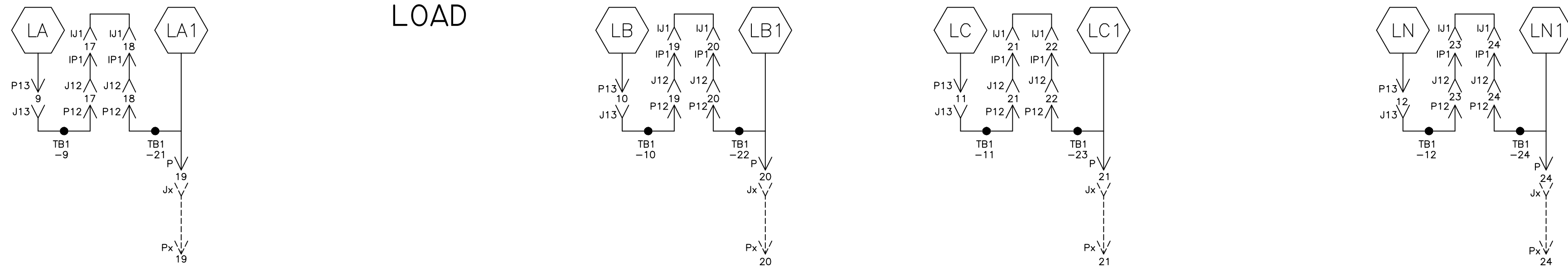
EMERGENCY SOURCE CIRCUITS

EMERGENCY



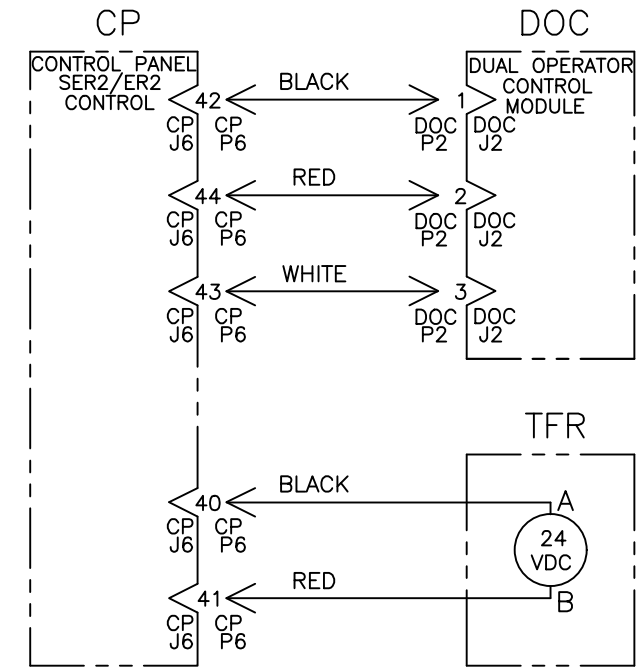
LOAD TERMINAL CIRCUITS

LOAD

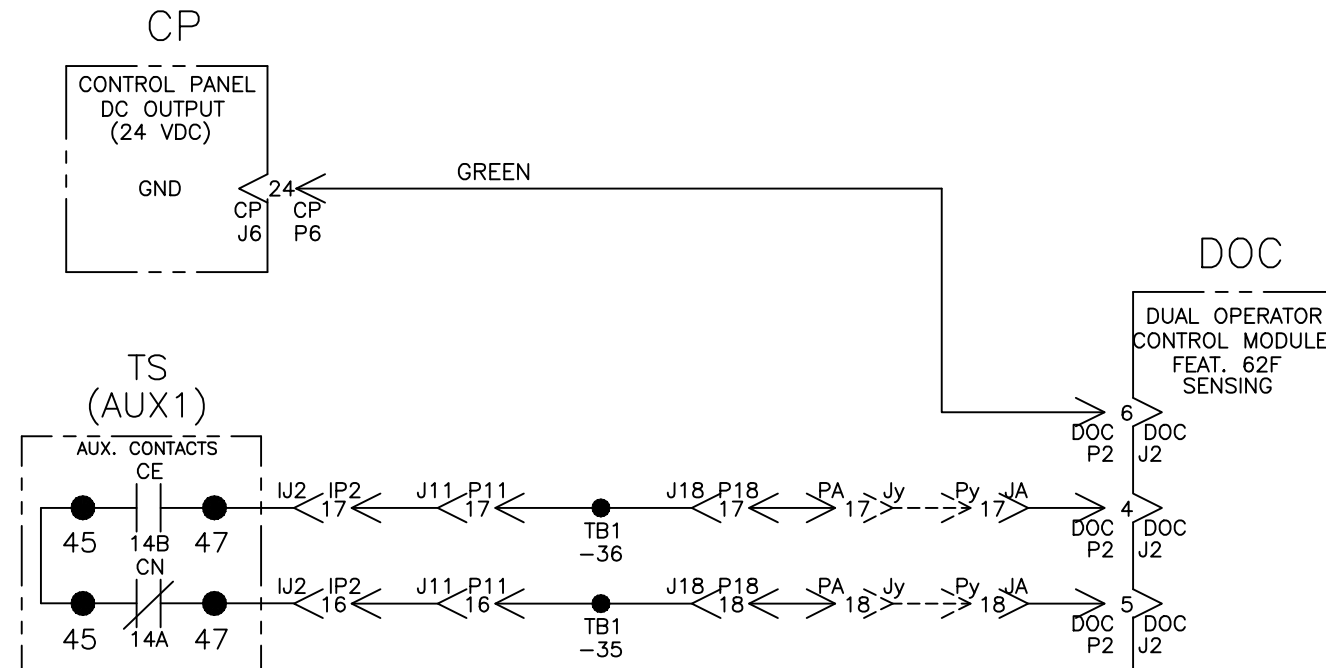


CONTROL SIGNALS & INDICATION

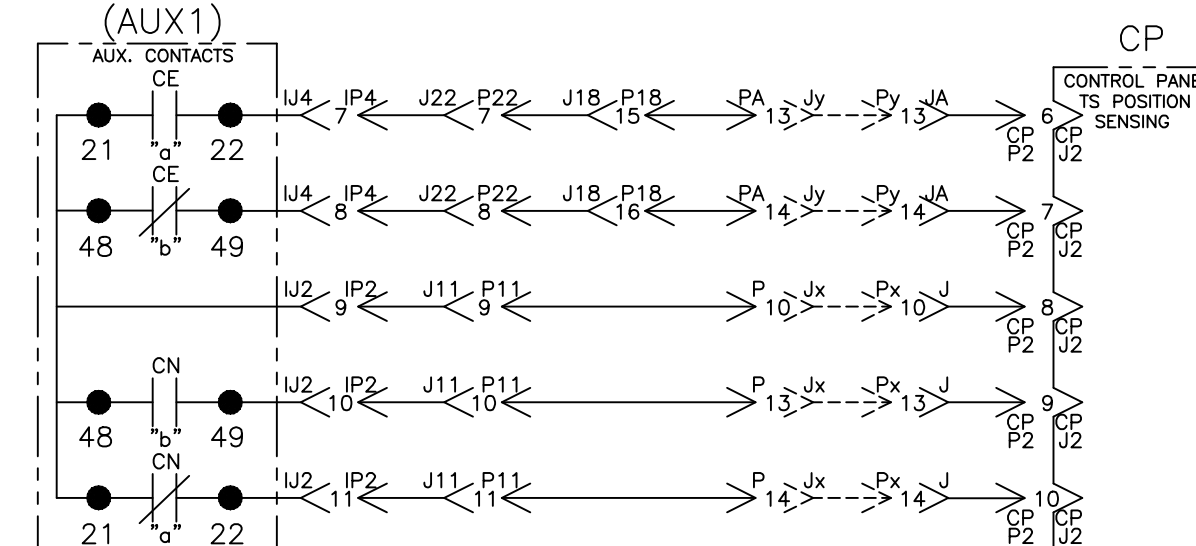
SER2/ER2 CONTROL



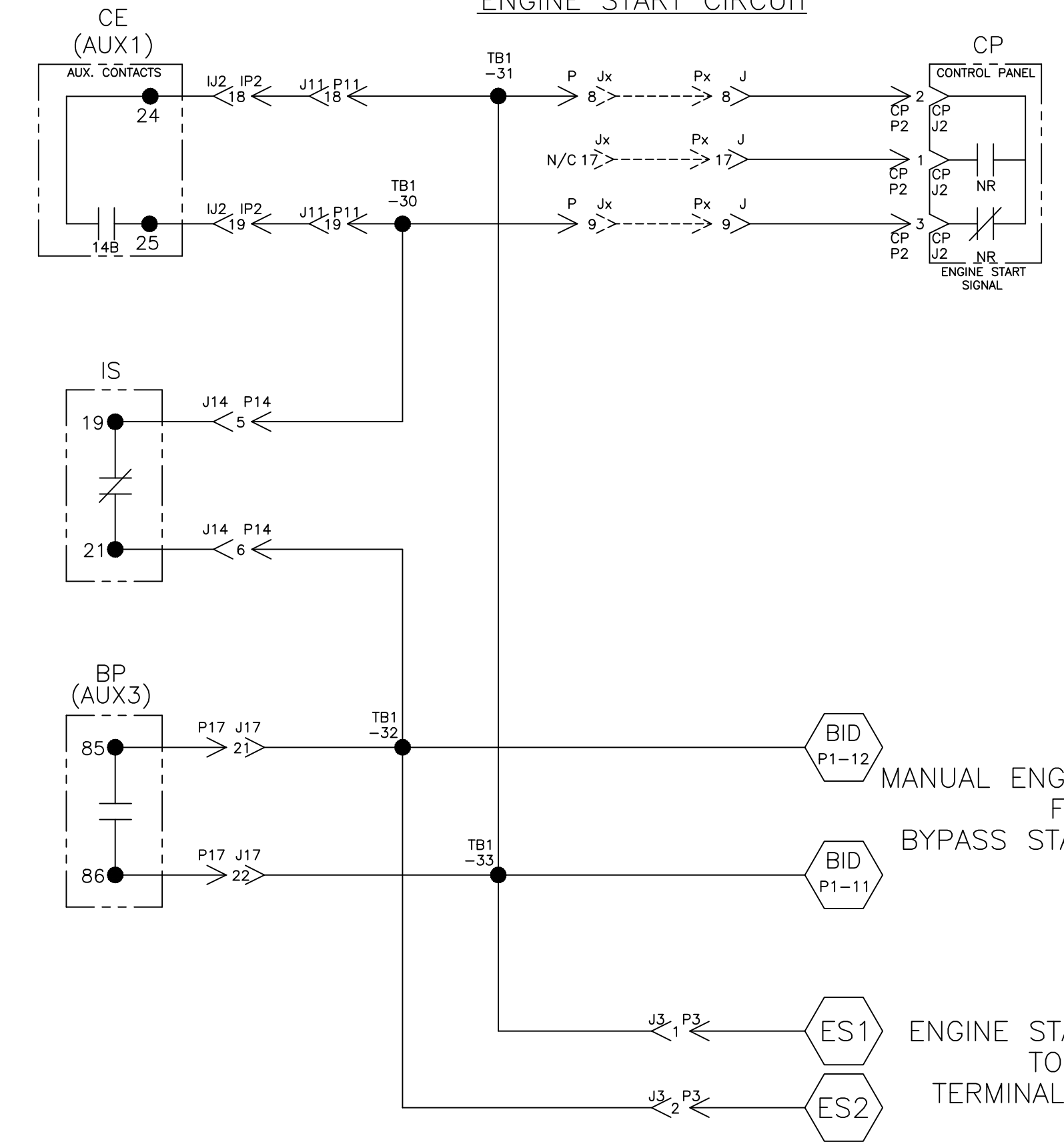
CP



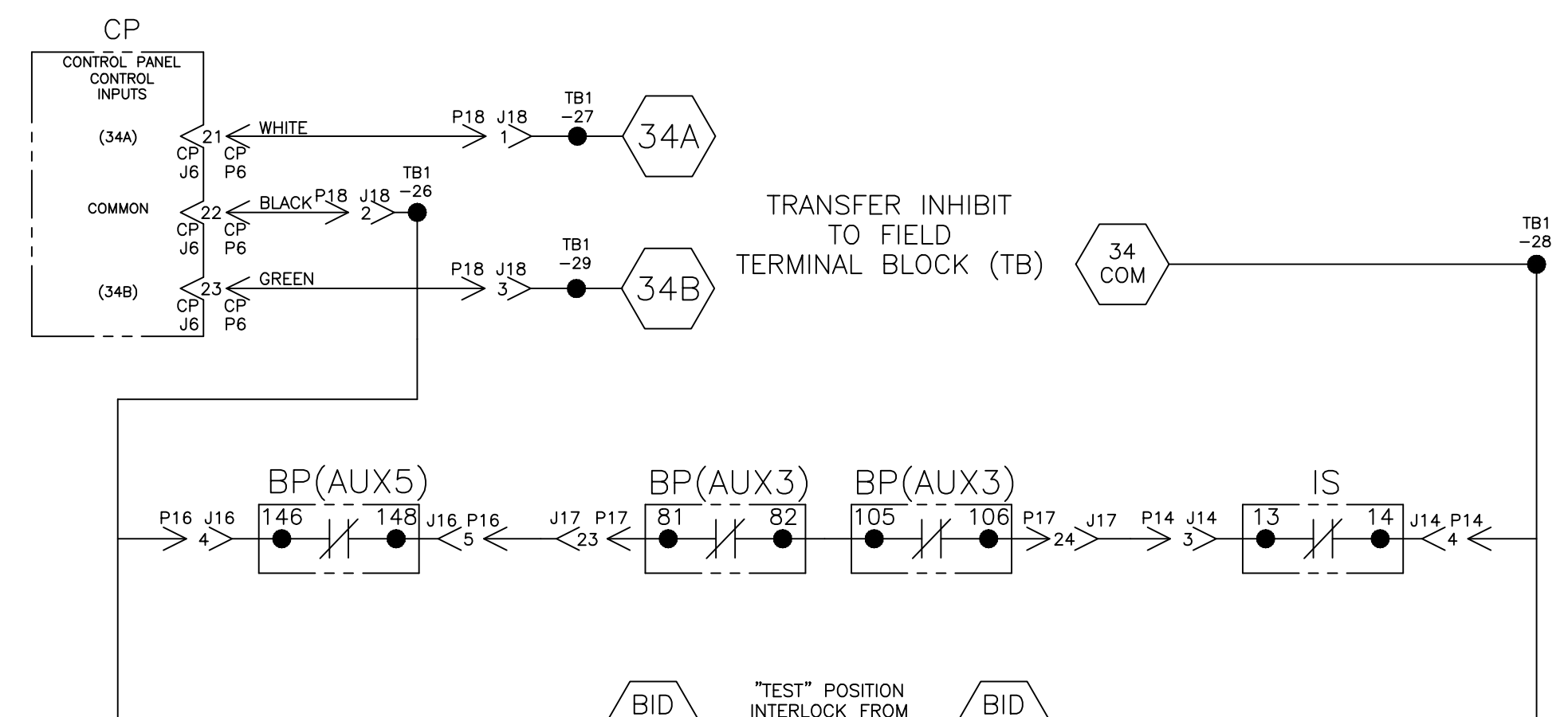
TS POSITION SENSING



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
BY	TR	DATE	07/30/12
BY	BK	DATE	04/24/12
BY	TR	DATE	04/24/12
BY	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

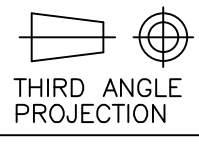
3

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				"H" FRAME, GROUP 5 CONTROLS				
DRAWN BY				BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		
CHECKED				SDH	4/03	ASSEM. REF. NO.	SCALE NONE SIZE DS	
PROJECT APPROVAL				PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			DWC. NO.	
FINAL APPROVAL				SDH	4/03	736943		DRAWING N
				ASCO ® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.			ECN NO.	SHEET
							238233	6 OF 10

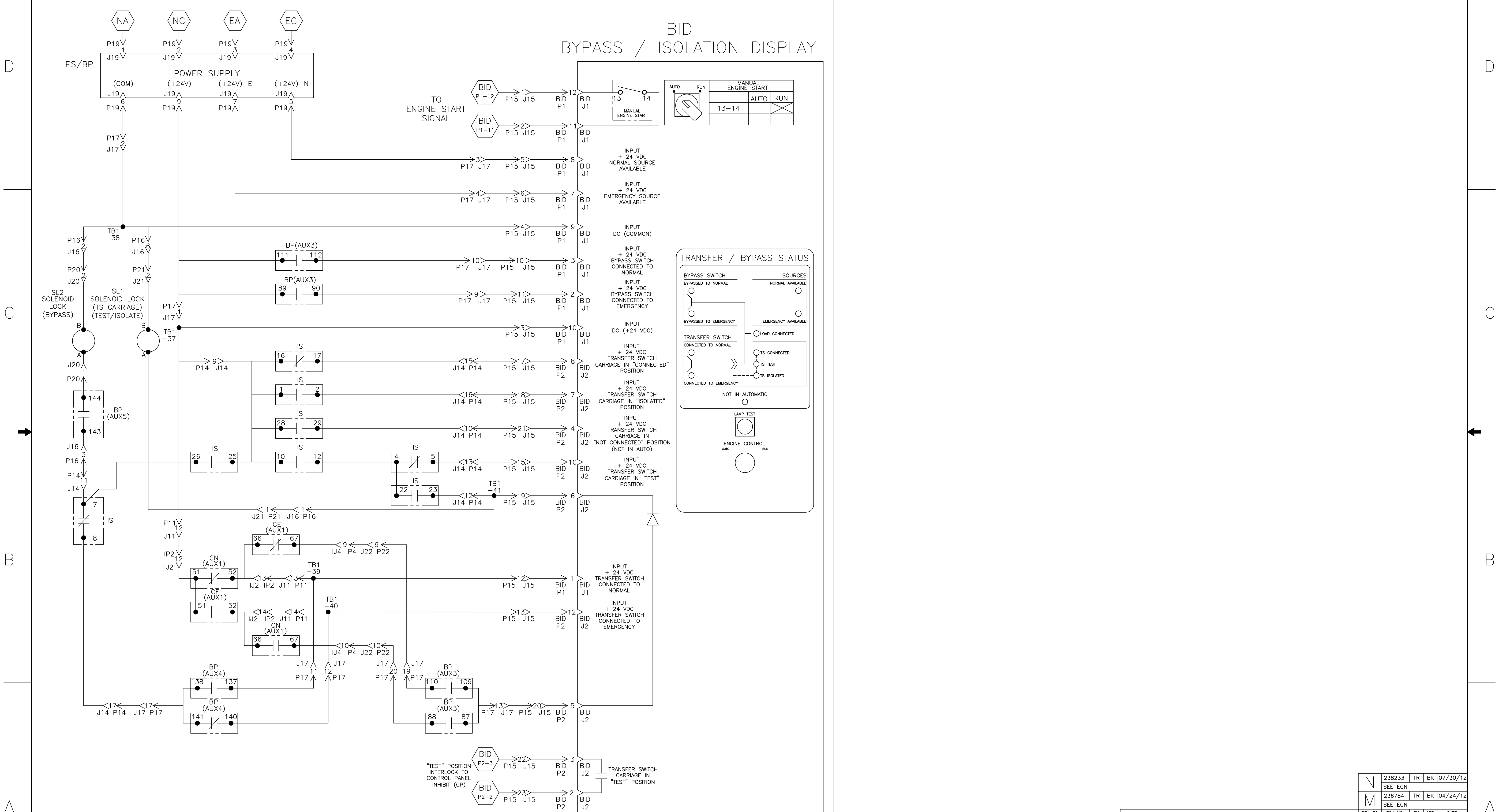


THIRD ANGLE PROJECTION

COMPUTER GENERATED DRAWING

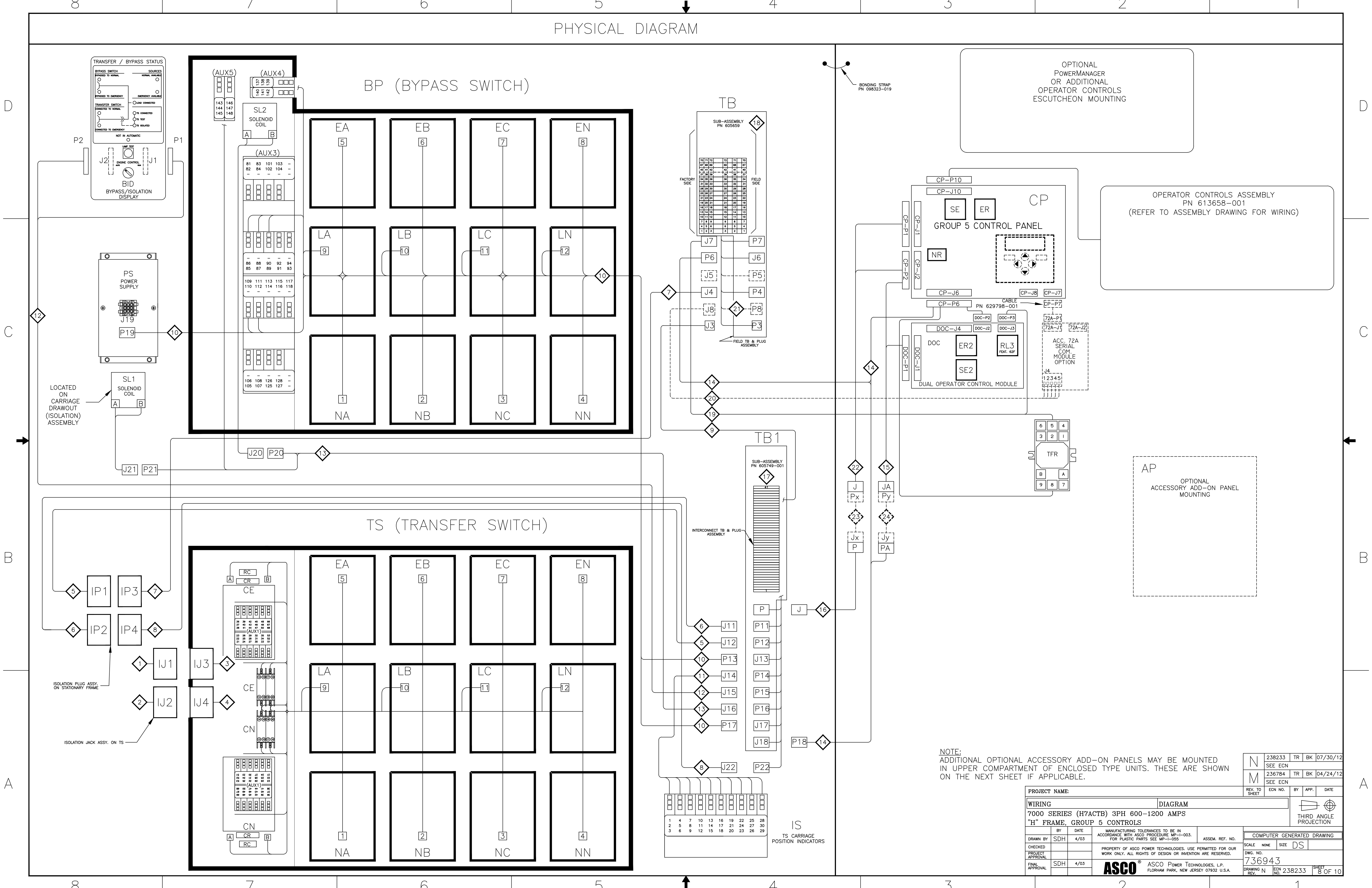
BYPASS / ISOLATION INTERLOCKING & INDICATION

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				M	236784	TR	BK 04/24/12
"H" FRAME, GROUP 5 CONTROLS				SCALE NONE 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.	
CHECKED				PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		COMPUTER GENERATED DRAWING	
PROJECT APPROVAL				DRAWING NO. 736943		SHEET 7 OF 10	
FINAL APPROVAL SDH		DATE 4/03		ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		ECN NO. 238233	

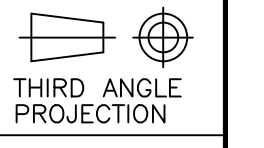
PHYSICAL DIAGRAM



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	
DRAWING N		ECON 238233	
REV. TO SHEET		SHEET 8 OF 10	

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



THIRD ANGLE PROJECTION

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

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 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 16: HARNESS LOCATOR 16 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 17: HARNESS LOCATOR 17 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 18: HARNESS LOCATOR 18 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 19: HARNESS LOCATOR 19 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 20: HARNESS LOCATOR 20 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 21: HARNESS LOCATOR 21 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 22: HARNESS LOCATOR 22 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 23: HARNESS LOCATOR 23 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 24: HARNESS LOCATOR 24 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 25: HARNESS LOCATOR 25 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 26: HARNESS LOCATOR 26 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 27: HARNESS LOCATOR 27 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 28: HARNESS LOCATOR 28 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 29: HARNESS LOCATOR 29 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 30: HARNESS LOCATOR 30 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 31: HARNESS LOCATOR 31 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 32: HARNESS LOCATOR 32 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 33: HARNESS LOCATOR 33 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 34: HARNESS LOCATOR 34 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). Lists wire numbers, descriptions, CLR, and AWG.

Table 35: HARNESS LOCATOR 35 (HARNESS 619385 (JA,CP-P2,DOC-P1) DOC). 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.).

WIRE RUN LISTING

Table 1: HARNESS LOCATOR 605749-001. Columns: WIRE No., SUB-ASSEMBLY, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 2: HARNESS LOCATOR 605749-001. Columns: WIRE No., SUB-ASSEMBLY, CLR, AWG. Lists various wire runs from TB1 to TB24, including a 'REMOVE WIRES' section.

Table 3: HARNESS LOCATOR 605659. Columns: WIRE No., SUB-ASSEMBLY, CLR, AWG. Lists various wire runs from TB1 to TB24, including a 'JUMPERS' section.

Table 4: HARNESS LOCATOR 736828-007. Columns: WIRE No., HARNESS, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 5: HARNESS LOCATOR 605454-005. Columns: WIRE No., HARNESS, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 6: HARNESS LOCATOR 605454-007. Columns: WIRE No., HARNESS, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 7: HARNESS LOCATOR 483763. Columns: WIRE No., HARNESS, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 8: HARNESS LOCATOR 309320-005. Columns: WIRE No., HARNESS, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 9: HARNESS LOCATOR 309320-005. Columns: WIRE No., HARNESS, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 10: WIRE No., ADDITIONAL WIRING, CLR, AWG. Lists various wire runs from TB1 to TB24.

Table 11: WIRE No., ADDITIONAL WIRING, CLR, AWG. Lists various wire runs from TB1 to TB24.

PROJECT NAME: WIRING DIAGRAM. 7000 SERIES (H7ACTB) 3PH 600-1200 AMPS. Includes revision table, drawing info, and ASCO logo.