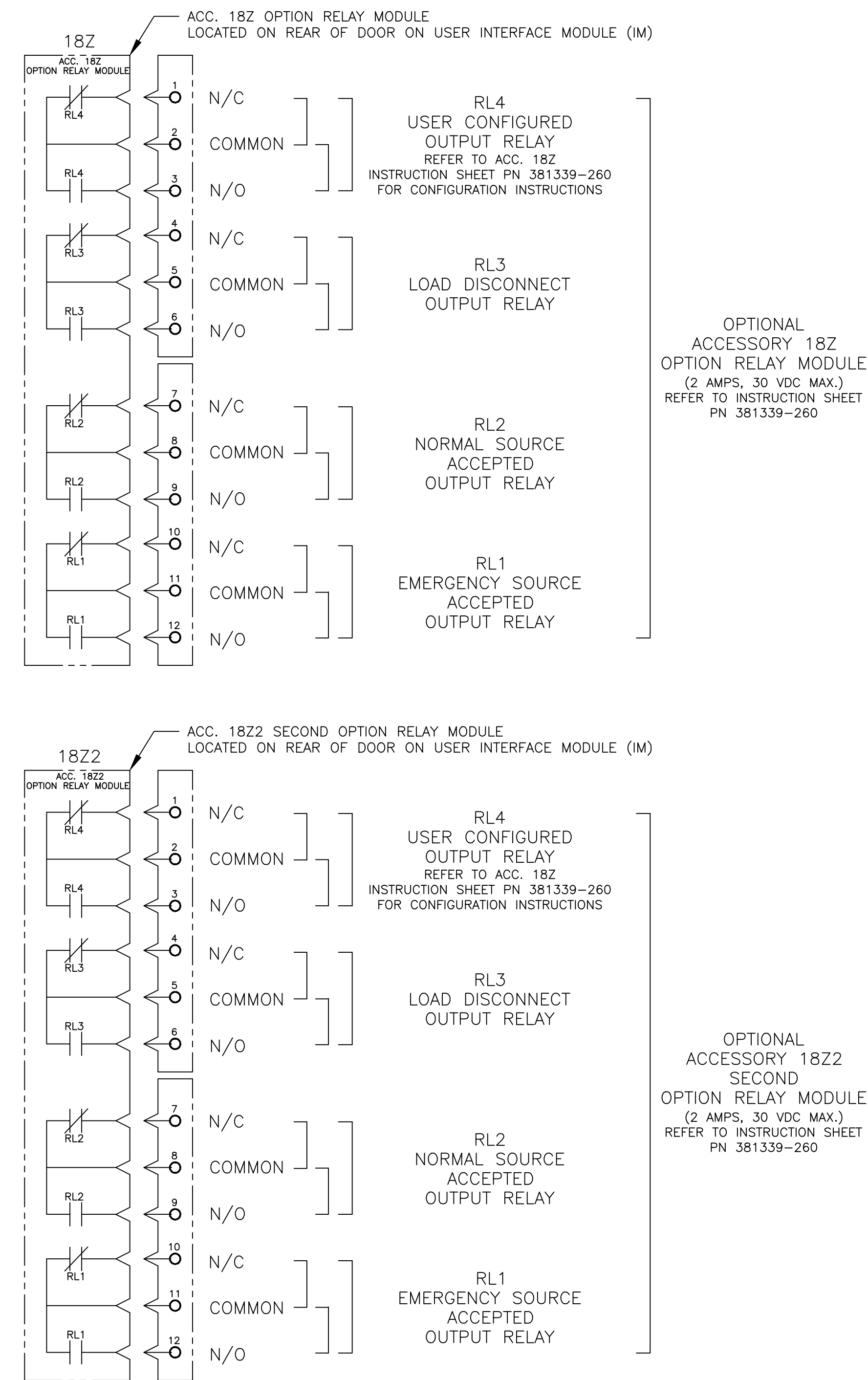
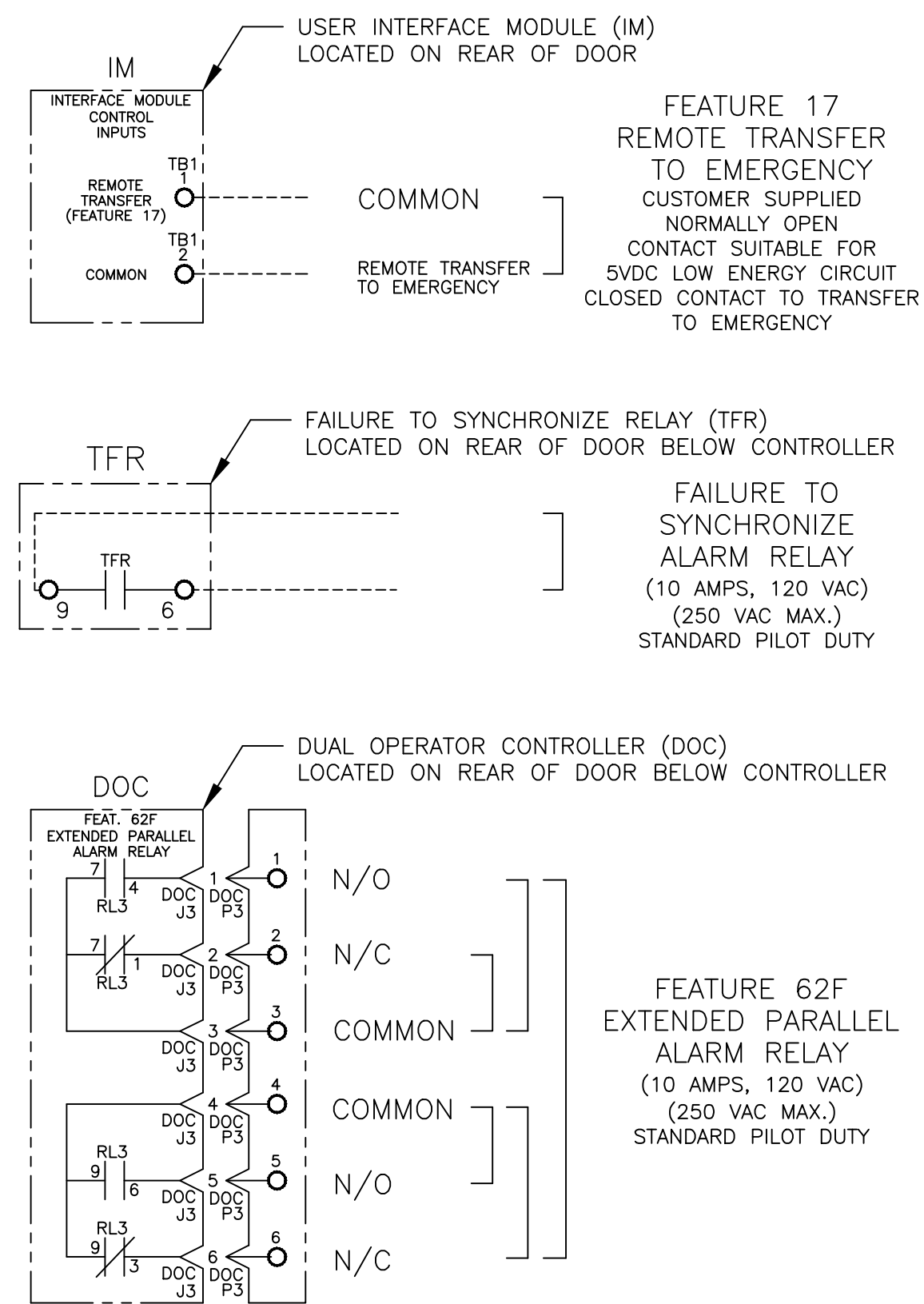
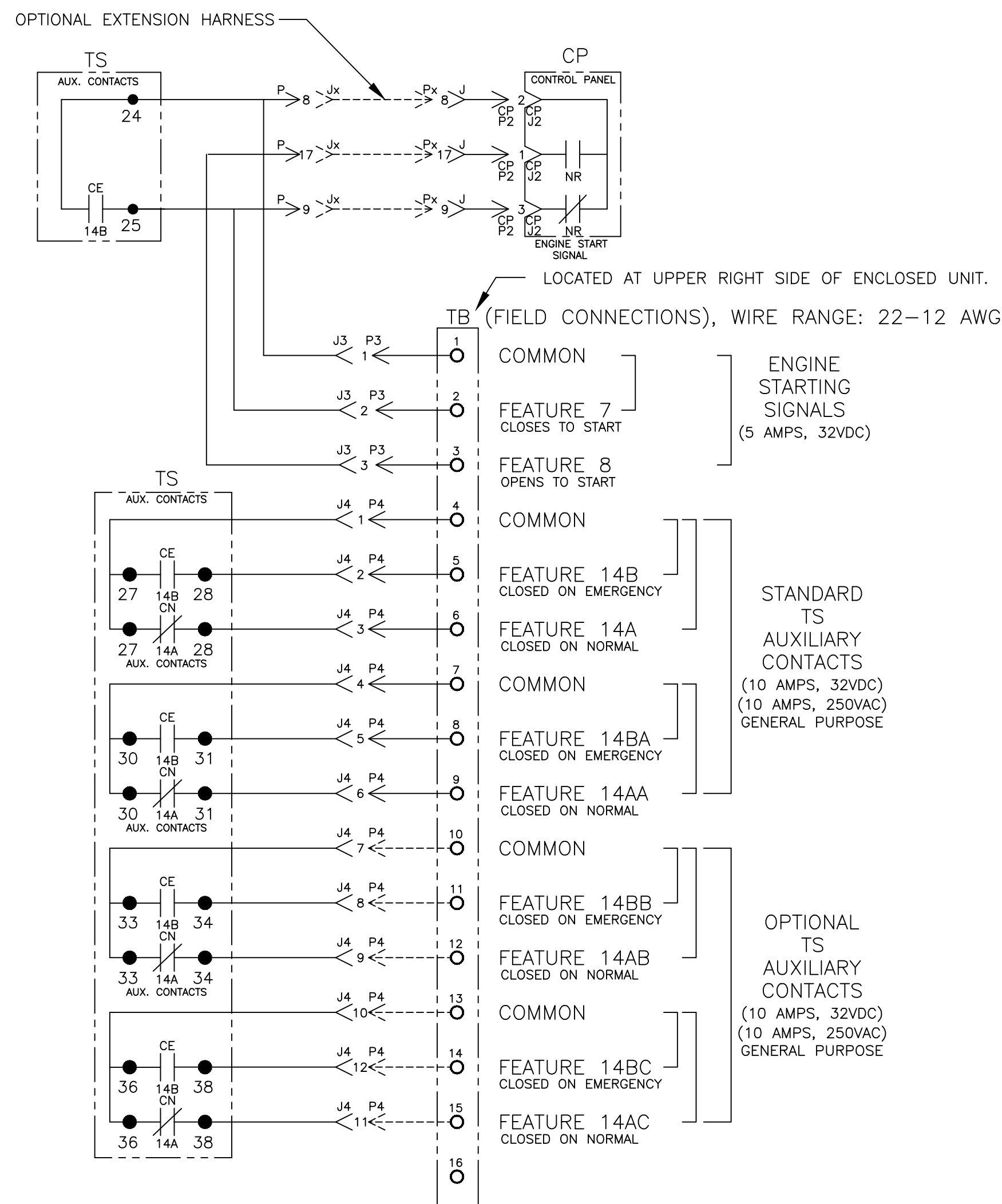
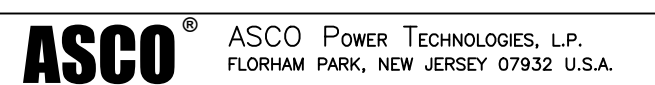


FIELD CONNECTIONS



C	236871	TR	BK	04/30/12
	SEE ECN			
B	205825	JPB	JPB	9/8/05
	SEE ECN			
A	205768	JPB	JPB	8/31/05
	SEE ECN			
-	205265	JPB	JPB	7/26/05
	ISSUE			

PROJECT NAME:		REV. TO SHEET	ECN NO.	BY	APP.	DATE
WIRING DIAGRAM						
4000 SERIES (J4A/NCTS)3PH 150-600 AMPS "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.	COMPUTER GENERATED DRAWING	
CHECKED	DATE	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		SCALE	NO.	SIZE DS
PROJECT APPROVAL						
FINAL APPROVAL	DATE	DRAWING C		ECN NO.	SHEET	
		781128		236871	2 OF 6	

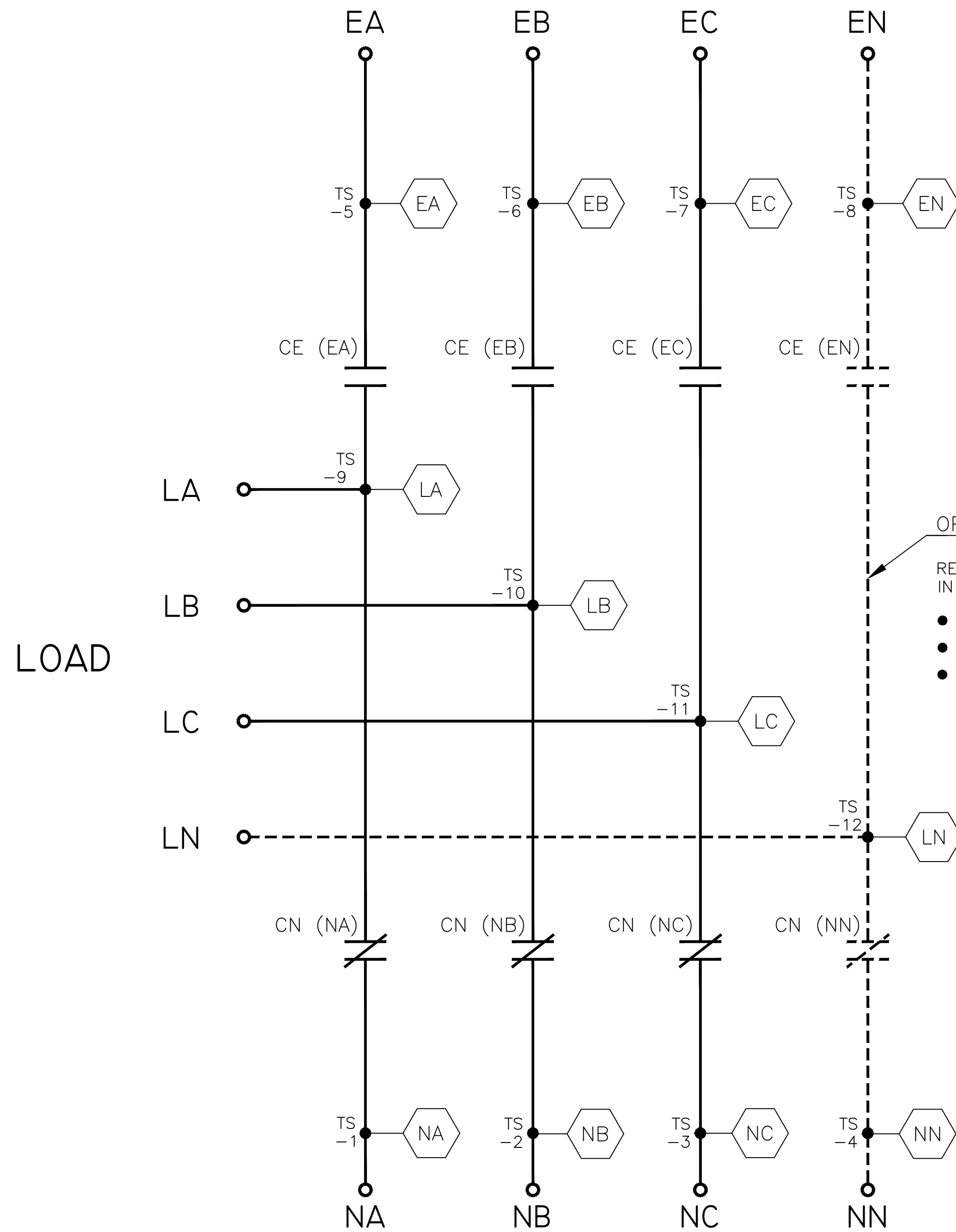


MAIN POWER POLES

TS OPERATOR CIRCUIT

EMERGENCY

NORMAL



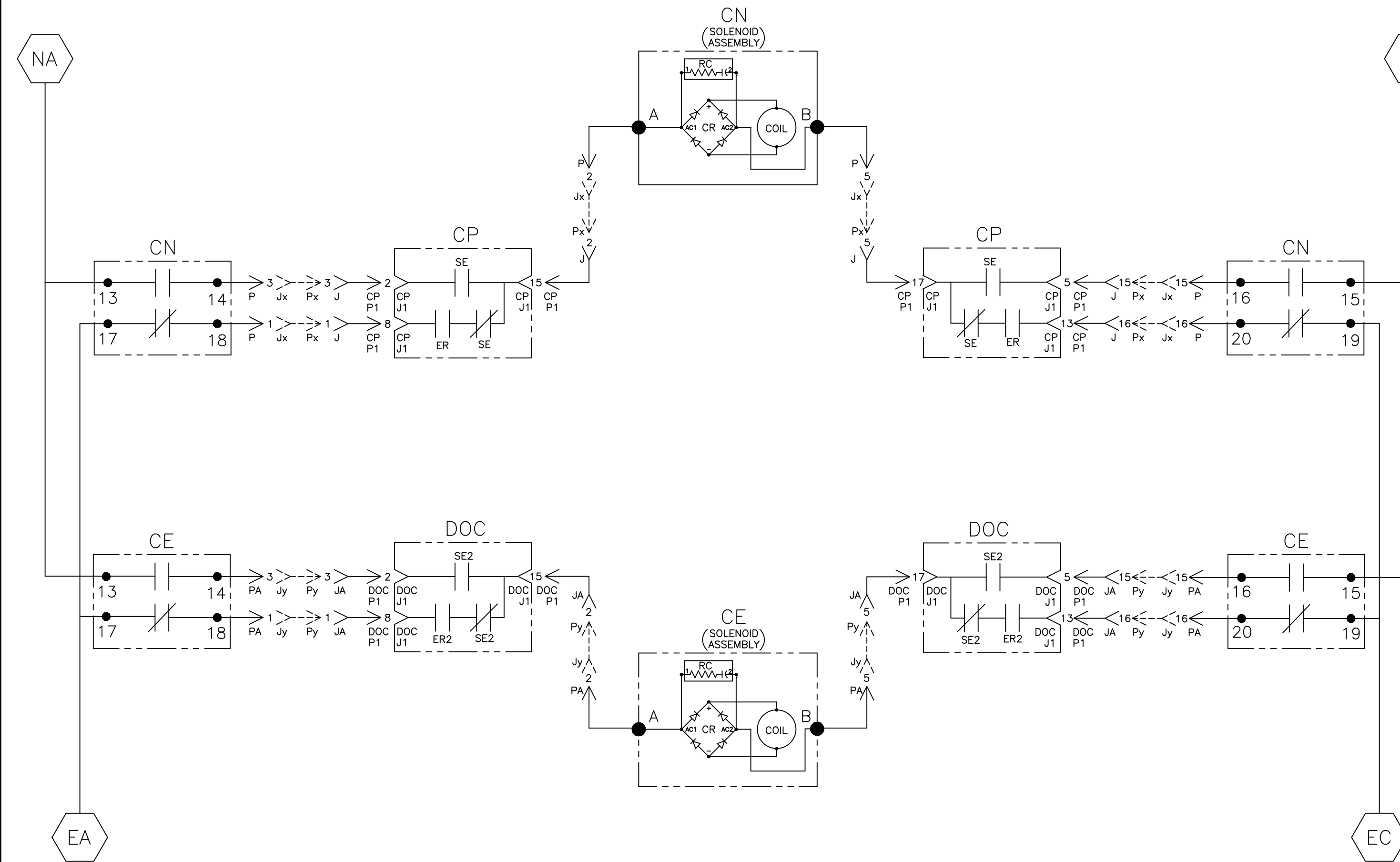
OPTIONAL NEUTRAL TYPES
 REFER TO "EXPLANATION OF CATALOG NUMBER CODES" IN CATALOG NUMBER CHART ON SHEET 1.

- NONE
- SWITCHING
- SOLID BUS PLATE

NOTE:
 ATS SHOWN CLOSED ON NORMAL SOURCE.

NORMAL

EMERGENCY

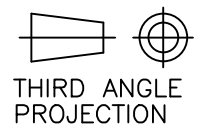


CN CONTROL CONTACTS		SOLENOID POSITION	
CN	CLOSED BEFORE NORMAL TDC*	>	<
13-14			
15-16			
17-18			
19-20			

CE CONTROL CONTACTS		SOLENOID POSITION	
CE	OPEN BEFORE TDC*	>	<
13-14			
15-16			
17-18			
19-20			

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

PROJECT NAME:		REV. TO SHEET	ECN NO.	BY	APP.	DATE
WIRING DIAGRAM		236871 TR BK 04/30/12		JPB		9/8/05
4000 SERIES (J4A/NCTS)3PH 150-600 AMPS		205825 JPB JPB 9/8/05		JPB		8/31/05
"J" FRAME, GROUP 5 CONTROLS		205768 JPB JPB 8/31/05		JPB		7/26/05
MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		205265 JPB JPB 7/26/05		JPB		7/26/05
PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		SCALE: NO. SIZE DS		COMPUTER GENERATED DRAWING		
DRAWN BY: JPB 7/26/05		781128		DRAWING C		3 OF 6
CHECKED BY: JPB 7/26/05		ASCO POWER TECHNOLOGIES, L.P.		ECN NO. 236871		
PROJECT APPROVAL: JPB 7/26/05		FLORHAM PARK, NEW JERSEY 07932 U.S.A.		REV. C		
FINAL APPROVAL: JPB 7/26/05		ASCO		REV. C		

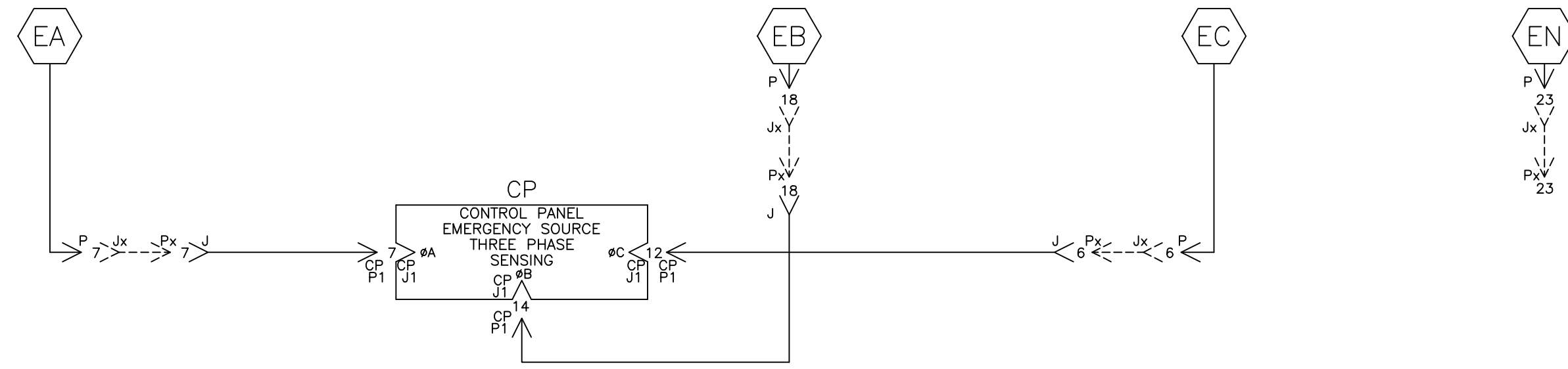


THIRD ANGLE PROJECTION

EMERGENCY SOURCE CIRCUITS

ADDITIONAL CIRCUITS

EMERGENCY



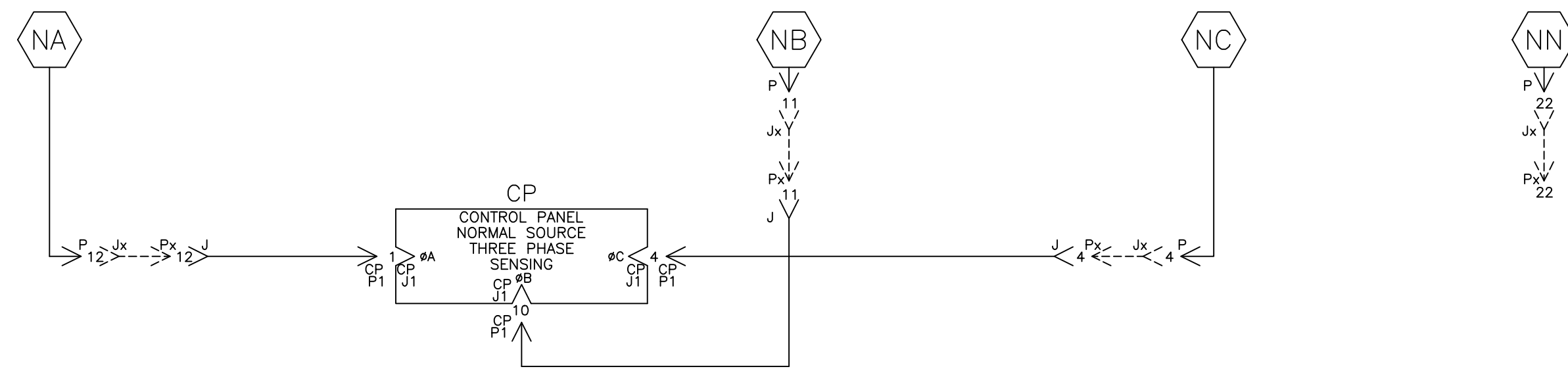
LOAD TERMINAL CIRCUITS

LOAD



NORMAL SOURCE CIRCUITS

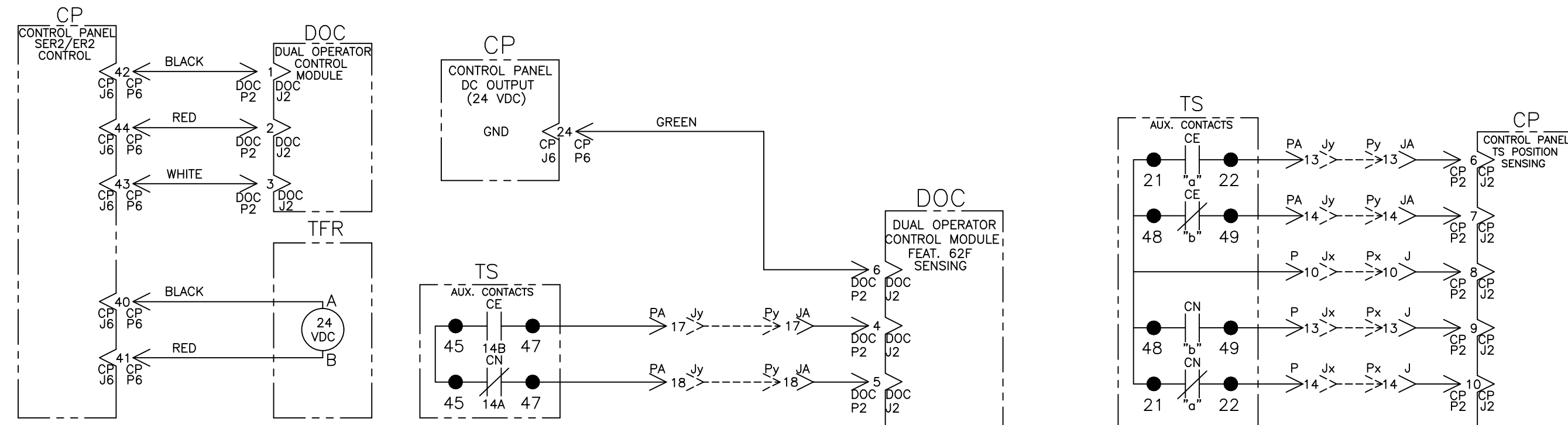
NORMAL



CONTROL CIRCUITS

SER2/ER2 CONTROL

TS POSITION SENSING



C	236871	TR	BK	04/30/12
B	205825	JPB	JPB	9/8/05
A	205768	JPB	JPB	8/31/05
-	205265	JPB	JPB	7/26/05
-	ISSUE			

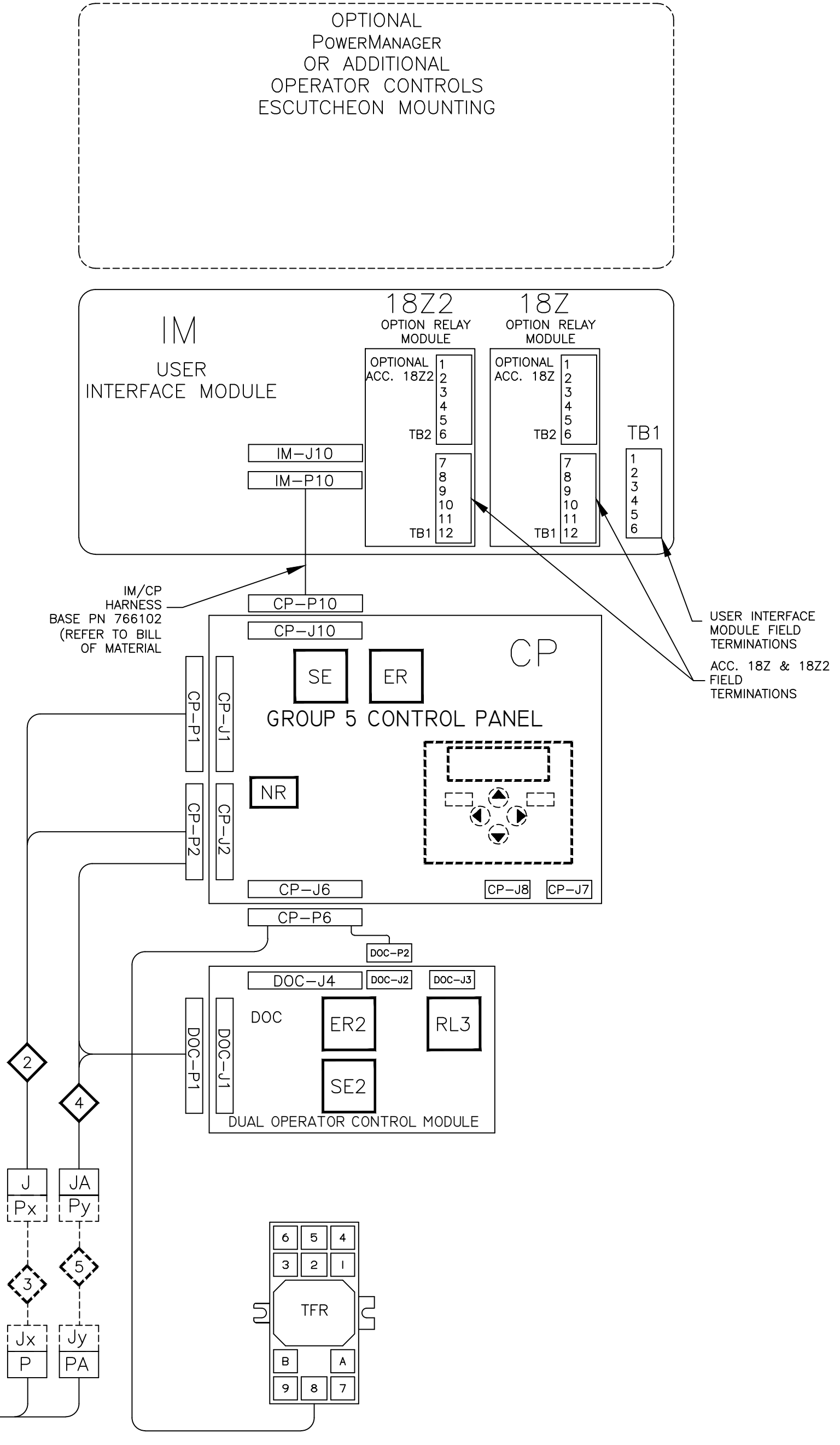
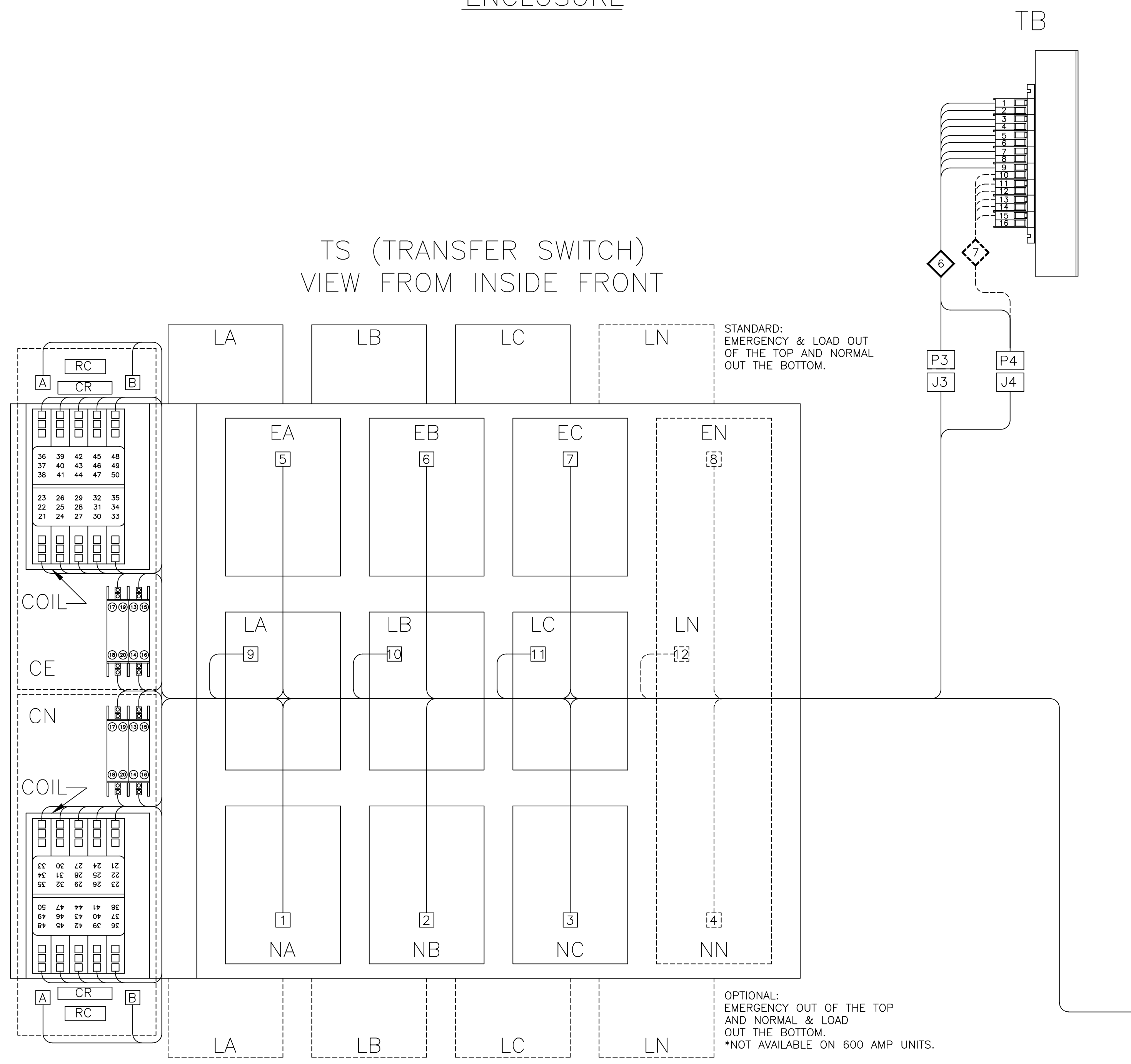
PROJECT NAME:		DIAGRAM		REV. TO SHEET	ECN NO.	BY	APP.	DATE
WIRING		4000 SERIES (J4A/NCTS)3PH 150-600 AMPS		ASSEM. REF. NO.		COMPUTER GENERATED DRAWING		
DRAWN BY: JPB		DATE: 7/26/05		SCALE: NONE		SIZE: DS		
CHECKED BY: JPB		DATE: 7/26/05		DWC. NO.		781128		
PROJECT APPROVAL:		PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		DRAWING C		ECON. 236871		
FINAL APPROVAL:		ASCO Power Technologies, L.P.		DRAWING C		SHEET 4 OF 6		

PHYSICAL DIAGRAM

ENCLOSURE

DOOR (INSIDE)

TS (TRANSFER SWITCH)
VIEW FROM INSIDE FRONT



DOOR HINGE

BONDING STRAP
PN 098323-019

C	236871	TR	BK	04/30/12
SEE ECN				
B	205825	JPB	JPB	9/8/05
SEE ECN				
A	205768	JPB	JPB	8/31/05
SEE ECN				
-	205265	JPB	JPB	7/26/05
ISSUE				

PROJECT NAME:		WIRING		DIAGRAM	
4000 SERIES (J4A/NCTS)3PH 150-600 AMPS "J" 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.	SCALE
DRAWN BY	7/26/05	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.			SIZE DS
CHECKED	7/26/05	DRAWING NO. 781128		ECN NO. 236871	SHEET 5 OF 6
PROJECT APPROVAL		ASCO® ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.			
FINAL APPROVAL	7/26/05				

WIRE RUN LISTING

1 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	HARNESS 619510-061 (P,PA,J3,J4) MAIN TS			
1	P-1,CN-18			18
2	P-2,CN-A			
3	P-3,CN-14			
4	P-4,TS-3			
4	TS-3,CE-15			
4	CE-15,CN-15			
5	P-5,CN-B			
6	P-6,TS-7			
6	TS-7,CE-19			
6	CE-19,CN-19			
7	P-7,TS-5			
7	TS-5,CE-17			
7	CE-17,CN-17			
8	P-8,CE-24			
8	CE-24,J3-1			
9	P-9,CE-25			
9	CE-25,J3-2			
10	P-10,CE-21			
10	CE-21,CN-21			
10	CN-21,CN-48			
10	CE-48,CN-48			
11	P-11,TS-2			
12	P-12,TS-1			
12	TS-1,CE-13			
12	CE-13,CN-13			
13	P-13,CN-49			
14	P-14,CN-22			
15	P-15,CN-16			
16	P-16,CN-20			
17	P-17,J3-3			
18	P-18,TS-6			
19	P-19,TS-9			
20	P-20,TS-10			
21	P-21,TS-11			
22	P-22,TS-4			
23	P-23,TS-8			
24	P-24,TS-12			
25	J4-1,CE-27			
25	CE-27,CN-27			
26	J4-2,CE-28			
27	J4-3,CN-28			
28	J4-4,CE-30			
28	CE-30,CN-30			
29	J4-5,CE-31			
30	J4-6,CN-31			
31	J4-7,CE-33			
31	CE-33,CN-33			
32	J4-8,CE-34			
33	J4-9,CN-34			
34	J4-10,CE-36			
34	CE-36,CN-36			
35	J4-11,CN-38			
36	J4-12,CE-38			
37	J4-13,CE-39			
37	CE-39,CN-39			
38	J4-14,CN-41			
39	J4-15,CE-41			
40	J4-16,CE-42			
40	CE-42,CN-42			
41	J4-17,CN-44			
42	J4-18,CE-44			
43	J4-19,CE-45			
43	CE-45,CN-45			
107	PA-1,CE-18			
108	PA-2,CE-A			
109	PA-3,CE-14			
111	PA-5,CE-B			
119	PA-13,CE-22			
120	PA-14,CE-49			
121	PA-15,CE-16			
122	PA-16,CE-20			
123	PA-17,CE-47			
124	PA-18,CN-47			
ADD WIRES				
97	J3-4			
44	J4-20			
45	J4-21			
46	J4-22			
47	J4-23			
48	J4-24			
110	PA-4			
112	PA-6			
113	PA-7			
114	PA-8			
115	PA-9			
116	PA-10			
117	PA-11			
118	PA-12			
125	PA-19			
126	PA-20			
127	PA-21			
128	PA-22			
129	PA-23			
130	PA-24			

2 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	HARNESS 483763 (J,CP-P1,CP-P2) CONTROL PANEL			
1	J-1,CP-P1-8			16
2	J-2,CP-P1-15			
3	J-3,CP-P1-2			
4	J-4,CP-P1-4			
5	J-5,CP-P1-17			
6	J-6,CP-P1-12			
7	J-7,CP-P1-7			
8	J-8,CP-P2-2			
9	J-9,CP-P2-3			
10	J-10,CP-P2-8			
11	J-11,CP-P1-10			
12	J-12,CP-P1-1			
13	J-13,CP-P2-9			
14	J-14,CP-P2-10			
15	J-15,CP-P1-5			
16	J-16,CP-P1-13			
17	J-17,CP-P2-1			
18	J-18,CP-P1-14			
ADD WIRES				
19	J-19			
20	J-20			
21	J-21			
22	J-22			
23	J-23			
24	J-24			

3 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	HARNESS 309320-005 OPTIONAL 8" EXTENSION HARNESS			
1	Jx-1,Px-1			16
2	Jx-2,Px-2			
3	Jx-3,Px-3			
4	Jx-4,Px-4			
5	Jx-5,Px-5			
6	Jx-6,Px-6			
7	Jx-7,Px-7			
8	Jx-8,Px-8			
9	Jx-9,Px-9			
10	Jx-10,Px-10			
11	Jx-11,Px-11			
12	Jx-12,Px-12			
13	Jx-13,Px-13			
14	Jx-14,Px-14			
15	Jx-15,Px-15			
16	Jx-16,Px-16			
17	Jx-17,Px-17			
18	Jx-18,Px-18			
19	Jx-19,Px-19			
20	Jx-20,Px-20			
21	Jx-21,Px-21			
22	Jx-22,Px-22			
23	Jx-23,Px-23			
24	Jx-24,Px-24			
ADD WIRES				
97	J3-4			
44	J4-20			
45	J4-21			
46	J4-22			
47	J4-23			
48	J4-24			

4 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	HARNESS 619385 (JA,CP-P2,DOC-P1) CONTROL MODULE			
107	JA-1,DOC-P1-8			16
108	JA-2,DOC-P1-15			
109	JA-3,DOC-P1-2			
111	JA-5,DOC-P1-17			
119	JA-13,CP-P2-6			
120	JA-14,CP-P2-7			
121	JA-15,DOC-P1-5			
122	JA-16,DOC-P1-13			
ADD WIRES				
110	JA-4			
112	JA-6			
113	JA-7			
114	JA-8			
115	JA-9			
116	JA-10			
117	JA-11			
118	JA-12			
123	JA-17,DOC-P2-4			
124	JA-18,DOC-P2-5			
125	JA-19			
126	JA-20			
127	JA-21			
128	JA-22			
129	JA-23			
130	JA-24			

5 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	HARNESS 309320-005 OPTIONAL 8 IN. EXTENSION HARNESS			
107	Jy-1,Py-1			16
108	Jy-2,Py-2			
109	Jy-3,Py-3			
110	Jy-4,Py-4			
111	Jy-5,Py-5			
112	Jy-6,Py-6			
113	Jy-7,Py-7			
114	Jy-8,Py-8			
115	Jy-9,Py-9			
116	Jy-10,Py-10			
117	Jy-11,Py-11			
118	Jy-12,Py-12			
119	Jy-13,Py-13			
120	Jy-14,Py-14			
121	Jy-15,Py-15			
122	Jy-16,Py-16			
123	Jy-17,Py-17			
124	Jy-18,Py-18			
125	Jy-19,Py-19			
126	Jy-20,Py-20			
127	Jy-21,Py-21			
128	Jy-22,Py-22			
129	Jy-23,Py-23			
130	Jy-24,Py-24			

6 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	HARNESS 781442 (P3,P4,TB) FIELD TERMINATIONS			
8	P3-1,TB-1			16
9	P3-2,TB-2			
17	P3-3,TB-3			
25	P4-1,TB-4			
26	P4-2,TB-5			
27	P4-3,TB-6			
28	P4-4,TB-7			
29	P4-5,TB-8			
30	P4-6,TB-9			
ADD WIRES				
200	P3-4			
201	P4-13			
202	P4-14			
203	P4-15			
204	P4-16			
205	P4-17			
206	P4-18			
207	P4-19			
208	P4-20			
209	P4-21			
210	P4-22			
211	P4-23			
201	P4-24			

7 ← HARNESS LOCATOR		BOX CHECKED IF HARNESS IS MODIFIED	CLR	AWG
WIRE No.	OPTIONAL HARNESS (P4,TB) ADDITIONAL FIELD TERMINATIONS			
31	P4-7,TB-10			16
32	P4-8,TB-11			
33	P4-9,TB-12			
34	P4-10,TB-13			
35	P4-11,TB-15			
36	P4-12,TB-14			

WIRE No.	ADDITIONAL WIRING	CLR	AWG
132	CP-P6-40,TFR-A	BLK	22
133	CP-P6-41,TFR-B	RED	(2 COND)
134	CP-P6-42,DOC-P2-1	BLK	
135	CP-P6-43,DOC-P2-3	WHT	22
136	CP-P6-44,DOC-P2-2	RED	(4 COND)
137	CP-P6-24,DOC-P2-6	GRN	

C	236871	TR	BK	04/30/12
B	205825	JPB	JPB	9/8/05
A	205768	JPB	JPB	8/31/05
-	205265	JPB	JPB	7/26/05
				ISSUE

PROJECT NAME:		DIAGRAM	
4000 SERIES (J4A/NCTS)3PH 150-600 AMPS "J" FRAME, GROUP 5 CONTROLS			
BY	DATE	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-I-003. FOR PLASTIC PARTS SEE MP-I-005	ASSEM. REF. NO.
DRAWN BY	JPB	7/26/05	
CHECKED	JPB	7/26/05	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.
PROJECT APPROVAL	JPB	7/26/05	
FINAL APPROVAL	JPB	7/26/05	
SCALE	NONE	SIZE	DS
COMPUTER GENERATED DRAWING		DWG. NO. 781128	
DRAWING C		ECON NO. 236871	
REV. 6 OF 6		SHEET 6 OF 6	

