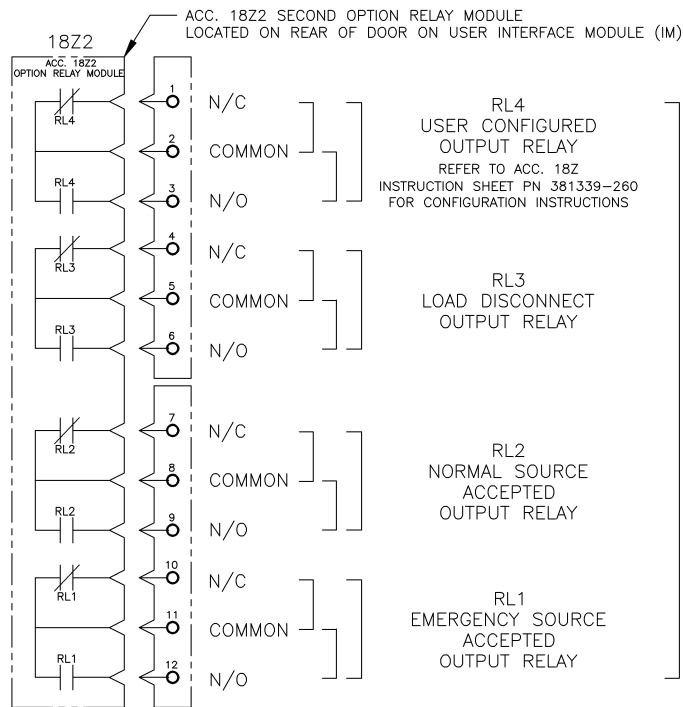
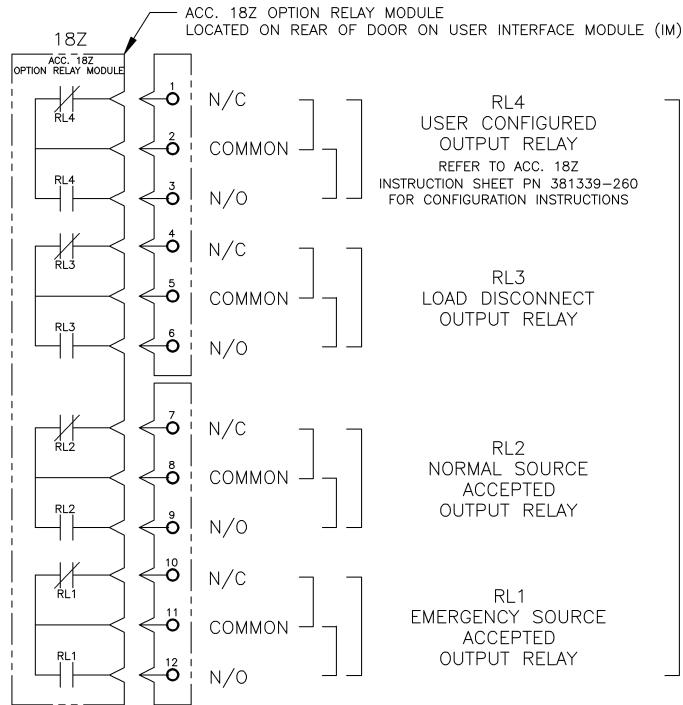
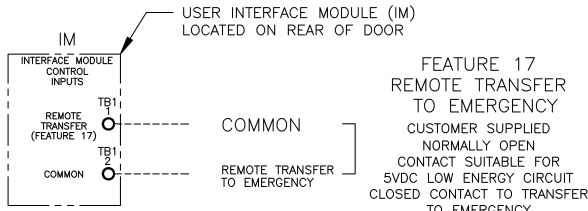
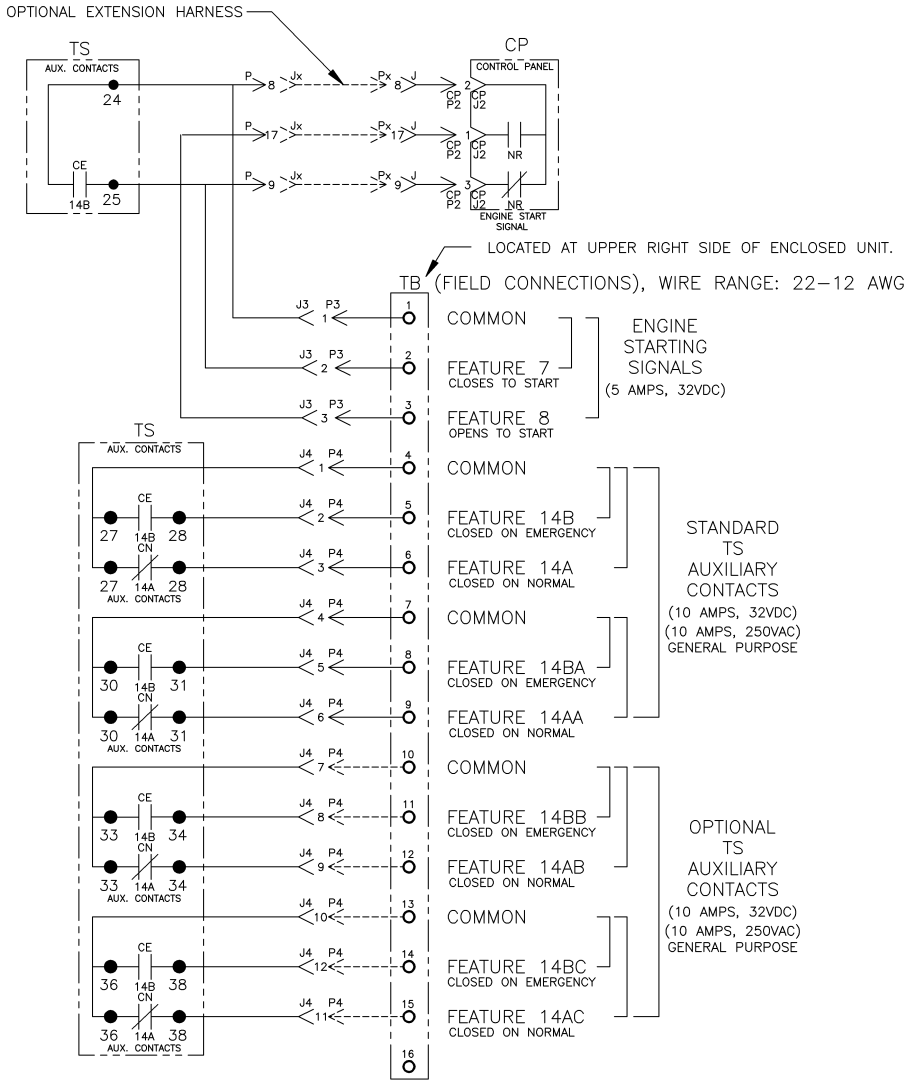


FIELD CONNECTIONS



PROJECT NAME:		CHANGE LETTER	ECN NO.	BY	APP.	DATE
WIRING DIAGRAM						
4000 SERIES (J4ADTS/J4NDTS)		SUBSIDIARY DISTRIBUTION				
GROUP 5 CONTROLS		THIRD ANGLE PROJECTION				
DRAWN BY	JPB	DATE	7/26/05	COMPUTER GENERATED DRAWING		
CHECKED	JPB	DATE	7/26/05	SCALE	1:1	ACAD
DRAFTING APPROVAL				SIZE	DWG. NO.	FILE
FINAL APPROVAL	JPB	DATE	7/26/05	DS781125		
ASCO POWER TECHNOLOGIES, L.P.		CHANGE LETTER	B	ECN NO.	205825	SHEET 2 OF 6
FLORHAM PARK, NEW JERSEY 07932 U.S.A.						

D

C

B

A

D

C

B

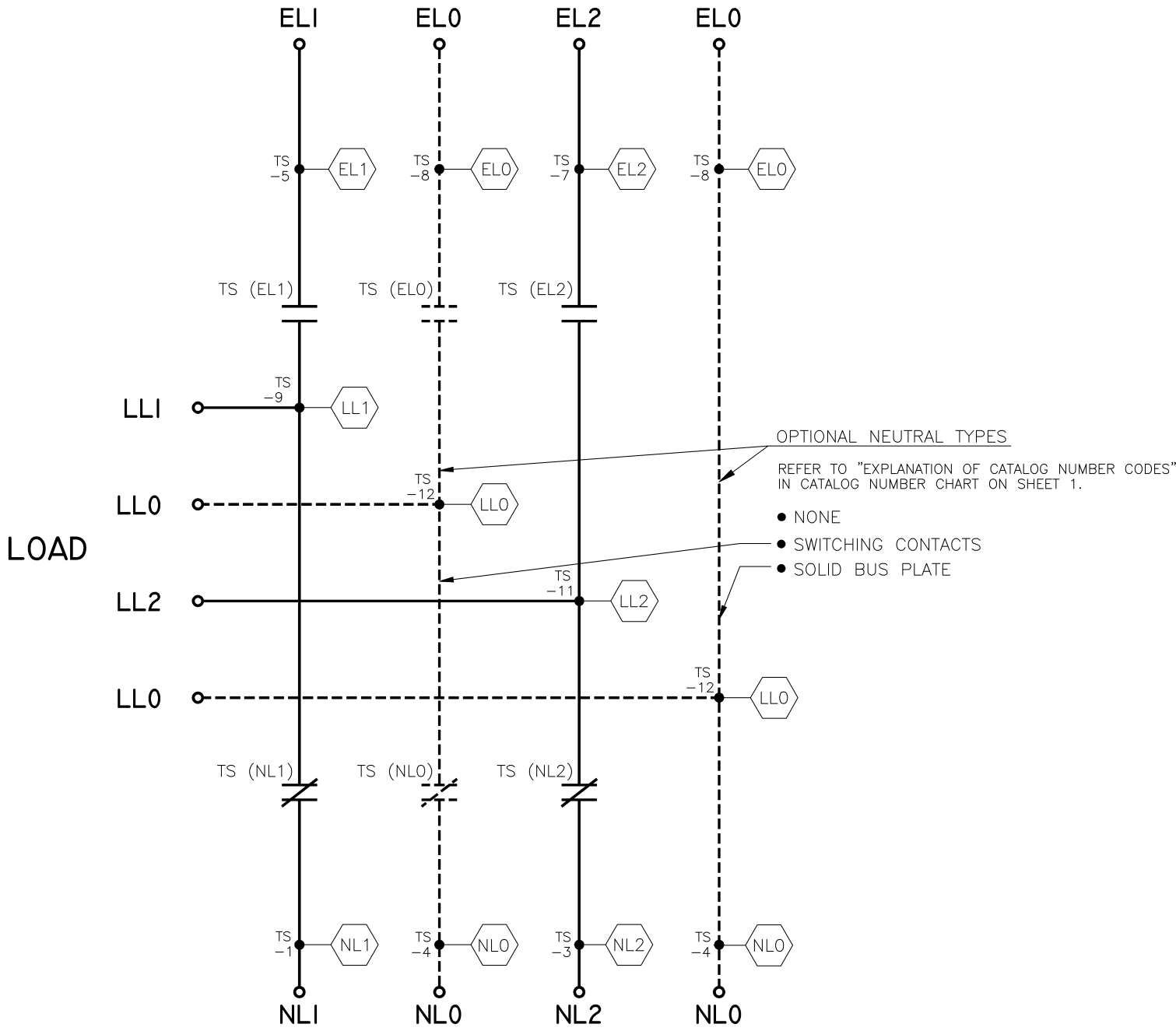
A

MAIN POWER POLES

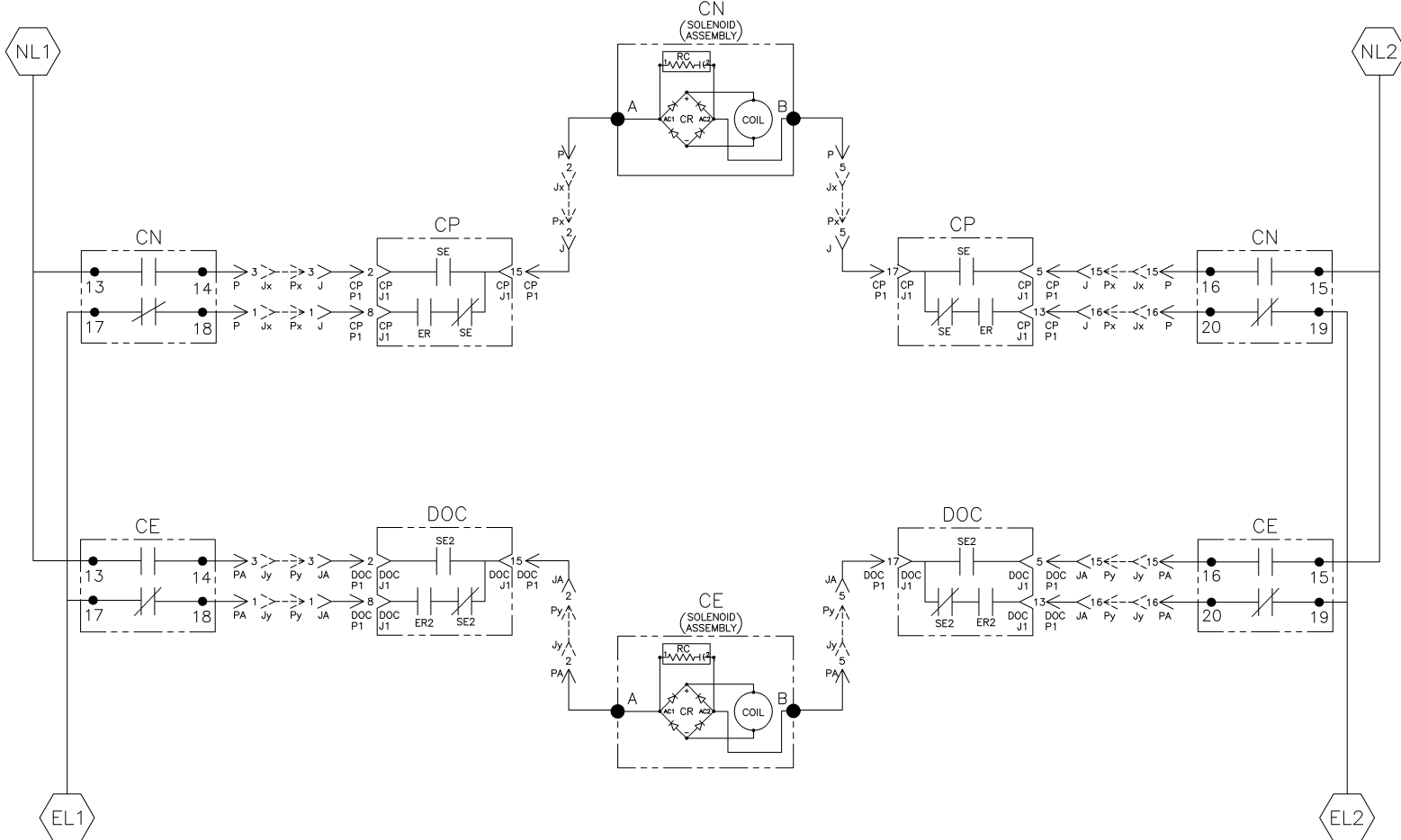
TS OPERATOR CIRCUIT

EMERGENCY

NORMAL



NOTE:
ATS SHOWN CLOSED ON NORMAL SOURCE.



EMERGENCY

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

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

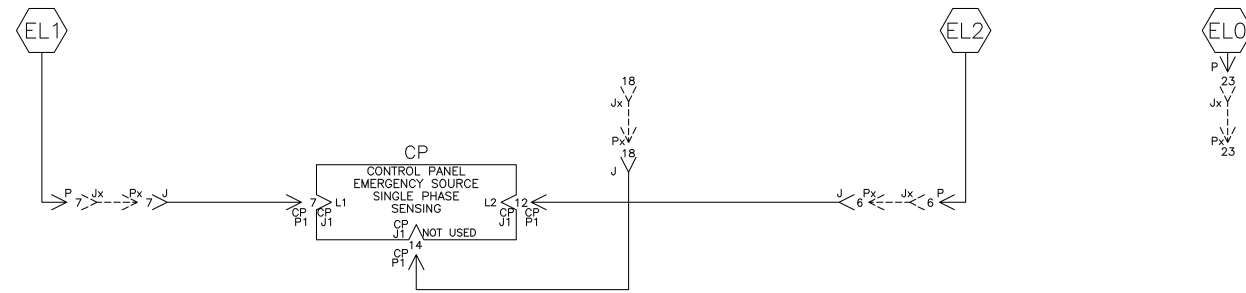
TDC (TOP DEAD CENTER)
TRANSFER SWITCH TEST & ADJUSTMENT PROCEDURE
SPECIFIES CONTROL CUT-OFF (CONTACT OPENING)
SETTING.

PROJECT NAME:		WIRING DIAGRAM		4000 SERIES (J4ADTS/J4NDTS) GROUP 5 CONTROLS	
DRAWN BY	JPB	DATE	7/26/05	MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005	ASSEM. REF. NO.
CHECKED	JPB	DATE	7/26/05	PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.	SCALE
DRAFTING APPROVAL					1:1 ACAD FILE
FINAL APPROVAL	JPB	DATE	7/26/05	ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.	SIZE DWG. NO. DS781125
CHANGE LETTER		ECN NO.	205825	BY	DATE
SUBSIDIARY DISTRIBUTION		COMPUTER GENERATED DRAWING			
AE	AN	AM	AL	AL	
CH	AV	AA	FS	AR	
AG	AP	AC	AS		
CHANGE LETTER		ECN NO.	205825	SHEET	3 OF 6

EMERGENCY SOURCE CIRCUITS

ADDITIONAL CIRCUITS

EMERGENCY



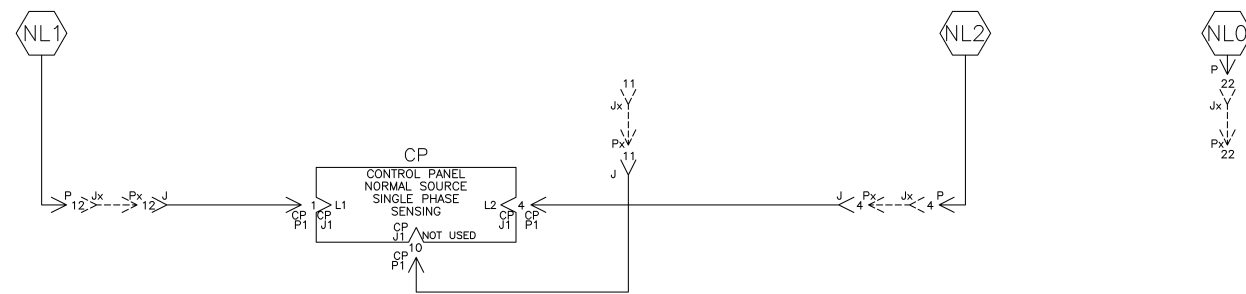
LOAD TERMINAL CIRCUITS

LOAD

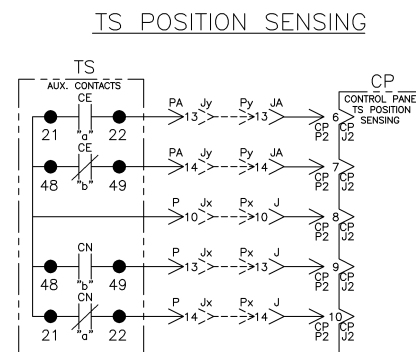
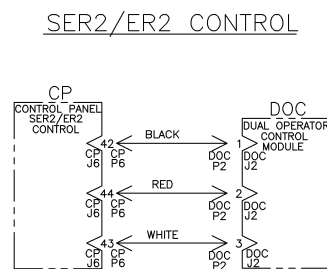


NORMAL SOURCE CIRCUITS

NORMAL



CONTROL CIRCUITS



PROJECT NAME:						CHANGE LETTER		ECN NO.		BY		APP.		DATE	
WIRING DIAGRAM 4000 SERIES (J4DTS/J4NDTS) GROUP 5 CONTROLS								SUBSIDIARY DISTRIBUTION							
						THIRD ANGLE PROJECTION		AC		AN		AM		AJ	
								CH		AH		AA		PS	
								AP		AV		AS		AR	
DRAWN BY		JPB		7/26/05		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055						ASSEM. REF. NO.			
CHECKED		JPB		7/26/05		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.									
DRAFTING APPROVAL															
FINAL APPROVAL		JPB		7/26/05											
						ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.									
						SCALE		1:1		ACAD		FILE			
						SIZE		DWG. NO.							
						DS		B		CON 205825		SHEET 4 OF 6			



TS (TRANSFER SWITCH)
VIEW FROM INSIDE FRONT

OPTIONAL
POWERMANAGER
OR ADDITIONAL
OPERATOR CONTROLS
ESCUTCHEON MOUNTING

The diagram shows the IM USER INTERFACE MODULE connected to two modules: 1822 and 18Z. Both modules have an OPTIONAL RELAY MODULE and an ACC. (Access) section.

1822 MODULE:

- OPTIONAL RELAY MODULE: 1, 2, 3, 4, 5, 6
- ACC. 1822: 1, 2, 3, 4, 5, 6
- Relay Module Label: TB2
- ACC. Label: TB1

18Z MODULE:

- OPTIONAL RELAY MODULE: 1, 2, 3, 4, 5, 6
- ACC. 18Z: 1, 2, 3, 4, 5, 6
- Relay Module Label: TB2
- ACC. Label: TB1

IM USER INTERFACE MODULE:

- IM-J10
- IM-P10

Arrows indicate connections from the IM-J10 and IM-P10 terminals to the TB1 terminals of the 1822 and 18Z modules.

USER INTERFACE
MODULE FIELD
TERMINATIONS

ACC. 18Z & 18Z2
FIELD
TERMINATIONS

GROUP 5 CONTROL PANEL


The diagram illustrates the Dual Operator Control Module. At the top, a box labeled CP-P6 is connected to a box labeled DOC-P2. Below DOC-P2, there are three boxes labeled DOC-J4, DOC-J2, and DOC-J3. To the left of these boxes is a vertical label DOC. Below DOC-J4 are two boxes labeled ER2 and SE2. To the right of DOC-J2 and DOC-J3 is a box labeled RL3 with the text FEAT.62F below it. On the far left, a vertical label DOC-1 is shown. At the bottom, the text DUAL OPERATOR CONTROL MODULE is written.

AP

OPTIONAL
ACCESSORY ADD-ON PANE
MOUNTING

DOOR HINGE

BONDING STRAP
PN 098323-019

PROJECT NAME:				CHANGE LETTER				ECN NO.		BY		APP.		DATE			
<div>WIRING</div> <div>DIAGRAM</div>				<div></div> <div>THIRD ANGLE PROJECTION</div>				SUBSIDIARY				DISTRIBUTION					
4000 SERIES (J4ADTS/J4NDTS)								AE		AJ		AM		AL			
GROUP 5 CONTROLS								AG		AP		AC		AS			
DRAWN BY		JPB		7/26/05		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055.						ASSEM. REF. NO.					
CHECKED		JPB		7/26/05		PROPERTY OF ASCO POWER TECHNOLOGIES, USE PERMITTED FOR YOUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.						COMPUTER GENERATED DRAWING					
DRAFTING APPROVAL						SCALE 1:1						ACAD		FILE			
FINAL APPROVAL		JPB		7/26/05		SIZE DWG. NO.						DS 781125					
						ASCO [®] ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.						CHANGE LETTER NO.		205825		SHEET 1 OF 6	

WIRE RUN LISTING

WIRE No.	HARNESS 619510-061 (P,PA,J3,J4) MAIN TS	CLR	AWG
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		
DEAD END WIRES			
11	P-11,TS-2		
18	P-18,TS-6		
20	P-20,TS-10		
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		

WIRE No.	HARNESS 483763 (J,CP-P1,CP-P2) CONTROL PANEL	CLR	AWG
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		
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		
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		
124	JA-18		
125	JA-19		
126	JA-20		
127	JA-21		
128	JA-22		
129	JA-23		
130	JA-24		

WIRE No.	HARNESS 309320-005 OPTIONAL 8 IN. EXTENSION HARNESS	CLR	AWG
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		
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		
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
134	CP-P6-42,DOC-P2-1	BLK	22 (4 COND)
135	CP-P6-43,DOC-P2-3	WHT	
136	CP-P6-44,DOC-P2-2	RED	

PROJECT NAME:		B		205825	JPB	JPB	9/8/05
DRAWING		A		205768	JPB	JPB	8/31/05
4000 SERIES (J4ADTS/J4NDTS) GROUP 5 CONTROLS		—		205265	JPB	JPB	7/26/05
THIRD ANGLE PROJECTION		CHANGE LETTER		ECN NO.	BY	APP.	DATE
DRAWN BY JPB 7/26/05		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		ASSEM. REF. NO.		SUBSIDIARY DISTRIBUTION	
CHECKED JPB 7/26/05		PROPERTY OF ASCO POWER TECHNOLOGIES. USE PERMITTED FOR OUR WORK ONLY. ALL RIGHTS OF DESIGN OR INVENTION ARE RESERVED.		SCALE 1:1		ACAD FILE	
DRAFTING APPROVAL JPB 7/26/05		ASCO		DWG. NO. DS781125		SHEET 6 OF 6	
FINAL APPROVAL		ASCOT		ECN NO. 205825		SHEET 6 OF 6	