

# SINGLE PHASE WIRING FOR ASCO® 7000 SERIES MANUALLY OPERATED TRANSFER SWITCH TYPE E7MTS RATED 4000 AMPERES

## FEATURES, OPERATION, & NOTES

### SIGNALS & AUXILIARIES

A. FEATURE 14A & 14B – TRANSFER SWITCH AUXILIARY POSITION INDICATING CONTACTS. ONE (1) FORM A CONTACTS TO INDICATE CONNECTION OF THE TRANSFER SWITCH TO NORMAL (14A) AND ONE (1) FORM A CONTACTS TO INDICATE CONNECTION OF THE TRANSFER SWITCH TO EMERGENCY (14B). CONTACTS CONNECTED TO THE FIELD CONNECTIONS TERMINAL BLOCK (TB). CONTACTS RATED 10 AMPS, 32 VDC, 250 VAC.

### INDICATORS

B. FEATURES 9A & 9B – TRANSFER SWITCH POSITION INDICATORS.  
 FEATURE 9A: TRANSFER SWITCH CLOSED ON NORMAL (GREEN LED)  
 FEATURE 9B: TRANSFER SWITCH CLOSED ON EMERGENCY (RED LED)

C. FEATURES 9C & 9D – SOURCE ACCEPTANCE INDICATORS.  
 FEATURE 9C: NORMAL SOURCE AVAILABLE (GREEN LED)  
 FEATURE 9D: EMERGENCY SOURCE AVAILABLE (RED LED)

### OPERATION

**4000 AMPS**  
 ROTATE CLOCKWISE 360°. HANDLE DOES NOT INDICATE SWITCH POSITION. OBSERVE INDICATING LIGHTS FOR TRANSFER SWITCH POSITION.

**CAUTION:**  
 OPERATE SWITCH ONLY WITH THE ENCLOSURE DOOR CLOSED.

### GENERAL NOTES

- SWITCH SHOWN DE-ENERGIZED AND CONNECTED TO THE NORMAL SOURCE.
- DEVICE SYMBOLS AND DESIGNATIONS ARE IN ACCORDANCE WITH NEMA PUBLICATION ICS 1-1983, PART 1-101A.
- ALL WIRING IS #16 AWG, TINNED, STRANDED COPPER UNLESS OTHERWISE INDICATED.
- ON TERMINAL BLOCKS INDICATES AVAILABLE FIELD CONNECTION POINT.
- ON TERMINAL BLOCKS INDICATES FACTORY CONNECTION POINT.
- CONTROL AND ACCESSORY WIRING IS ROUTED IN ACCORDANCE WITH ASCO ASSEMBLY PROCEDURE GS451261.
- AN OPERATOR'S MANUAL IS FURNISHED WITH EACH TRANSFER SWITCH. REFER TO THIS PUBLICATION PRIOR TO INSTALLATION AND OPERATION OF THE UNIT.

BASE CATALOG NUMBER				CATALOG NUMBER SUFFIXES				EXPLANATION OF CATALOG NUMBER CODES						
CATALOG TYPE	NEUTRAL TYPE	PHASE POLES	AMPS	VOLT CODE	CONTROLLER	OPTIONAL ACCESSORY	ENCLOSURE CODE	NEUTRAL TYPE		VOLTAGE CODES		ENCLOSURE CODES		
								CODE	DESCRIPTION	CODE	NOMINAL VOLTAGE	CODE	TYPE	DESCRIPTION
E7MTS	A B C	1	4000	BLANK		X	C E F G H J K L M N P Q	BLANK	NONE	BLANK	BLANK	BLANK	1	OPEN TYPE (NO ENCLOSURE)
								A	SOLID			C	2	GENERAL PURPOSE, INDOOR
								B	SWITCHING			E	3R	INDOOR, WATER & DUST RESISTANT
								C	OVERLAPPING			F	4	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
												G	4	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
												H	4X	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
												J	4X	INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
												K	7	TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
												L	12	TYPE 4 PLUS CORROSION RESISTANCE (FIBERGLASS)
												M	3R	EXPLOSION PROOF
												N	4	INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT
												P	4	(SECURE ENCLOSURES)
												Q	12	OUTDOOR, RAINPROOF, SLEET & ICE RESISTANT
	BLANK FOR NONE				BLANK FOR 7MTS	BLANK FOR NONE	BLANK FOR OPEN TYPE							INDOOR/OUTDOOR, WATERTIGHT & DUSTTIGHT
														TYPE 4 PLUS CORROSION RESISTANCE (STAINLESS STEEL)
														INDOOR, INDUSTRIAL ENVIRONMENTS, OILTIGHT & DUSTTIGHT

CATALOG NUMBER \_\_\_\_\_  
 BY \_\_\_\_\_  
 DATE \_\_\_\_\_

FORM REV B

PROJECT NAME: \_\_\_\_\_

WIRING DIAGRAM  
 7000 SERIES (7MTS)  
 MANUALLY OPERATED TS

THIRD ANGLE PROJECTION

MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-055. ASSEM. REF. NO. \_\_\_\_\_

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

CHANGE LETTER	ECN NO.	BY	APP.	DATE
B	208696	KH	WK	5/12/06
A	207401	TR	WK	01/26/06
—	203565	AE	WK	03/03/05

ISSUE

SUBSIDIARY DISTRIBUTION

AE	<input type="checkbox"/>	AN	<input type="checkbox"/>	AM	<input type="checkbox"/>	AJ	<input type="checkbox"/>	AL	<input type="checkbox"/>
CH	<input type="checkbox"/>	AV	<input type="checkbox"/>	AA	<input type="checkbox"/>	PS	<input type="checkbox"/>	AR	<input type="checkbox"/>
AG	<input type="checkbox"/>	AP	<input type="checkbox"/>	AC	<input type="checkbox"/>	AS	<input type="checkbox"/>		<input type="checkbox"/>

COMPUTER GENERATED DRAWING

SCALE 1:1 ACAD FILE

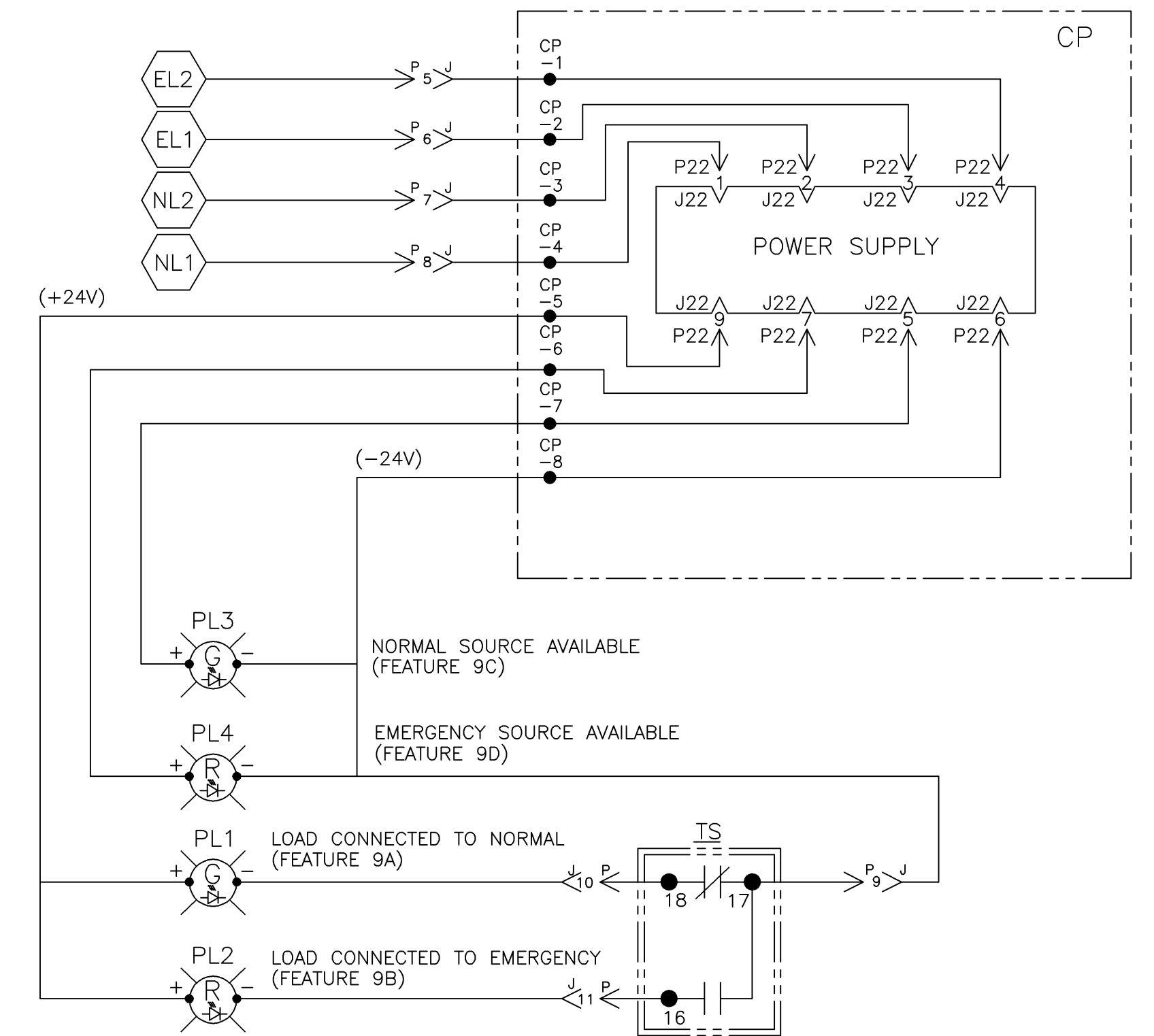
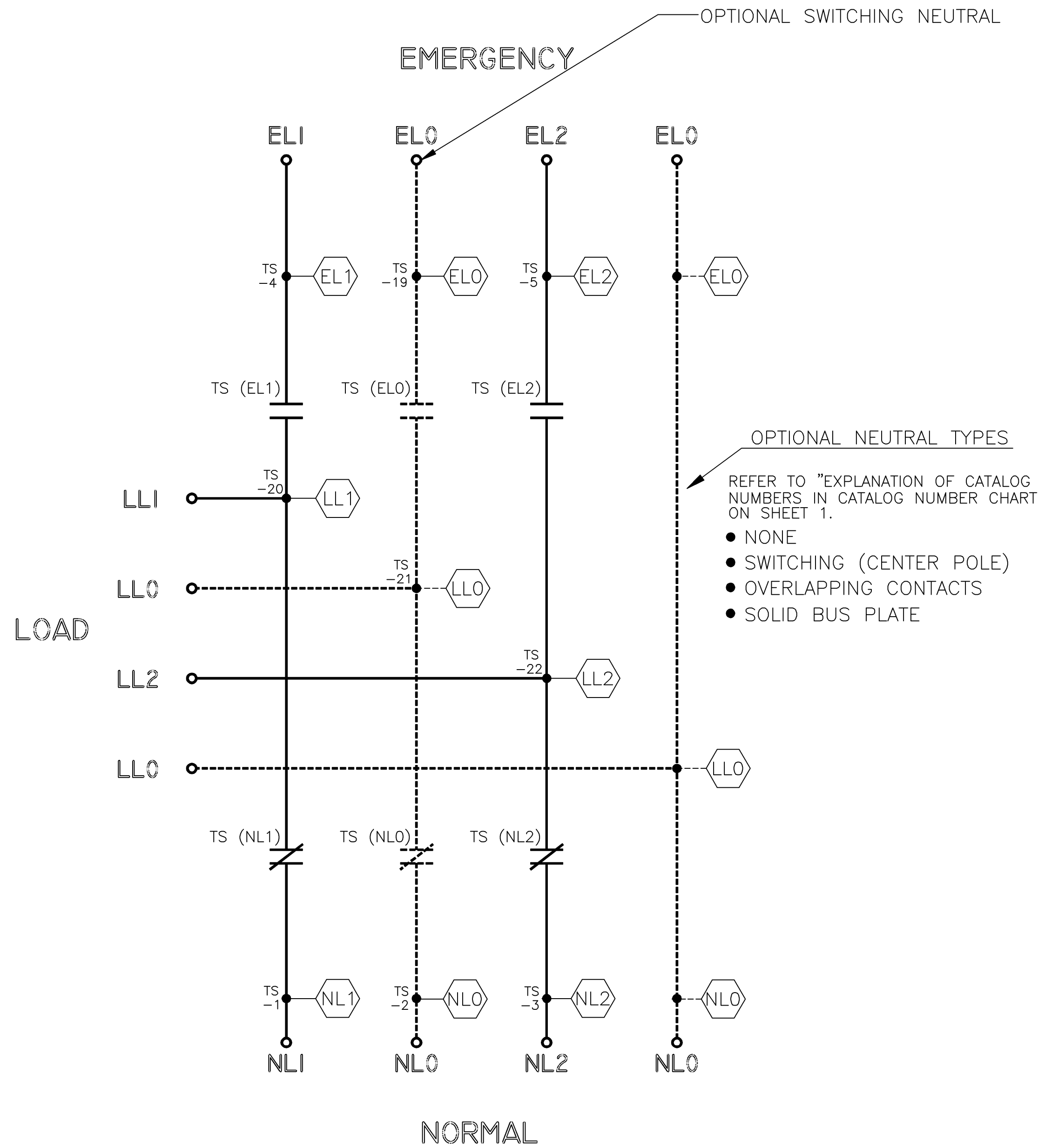
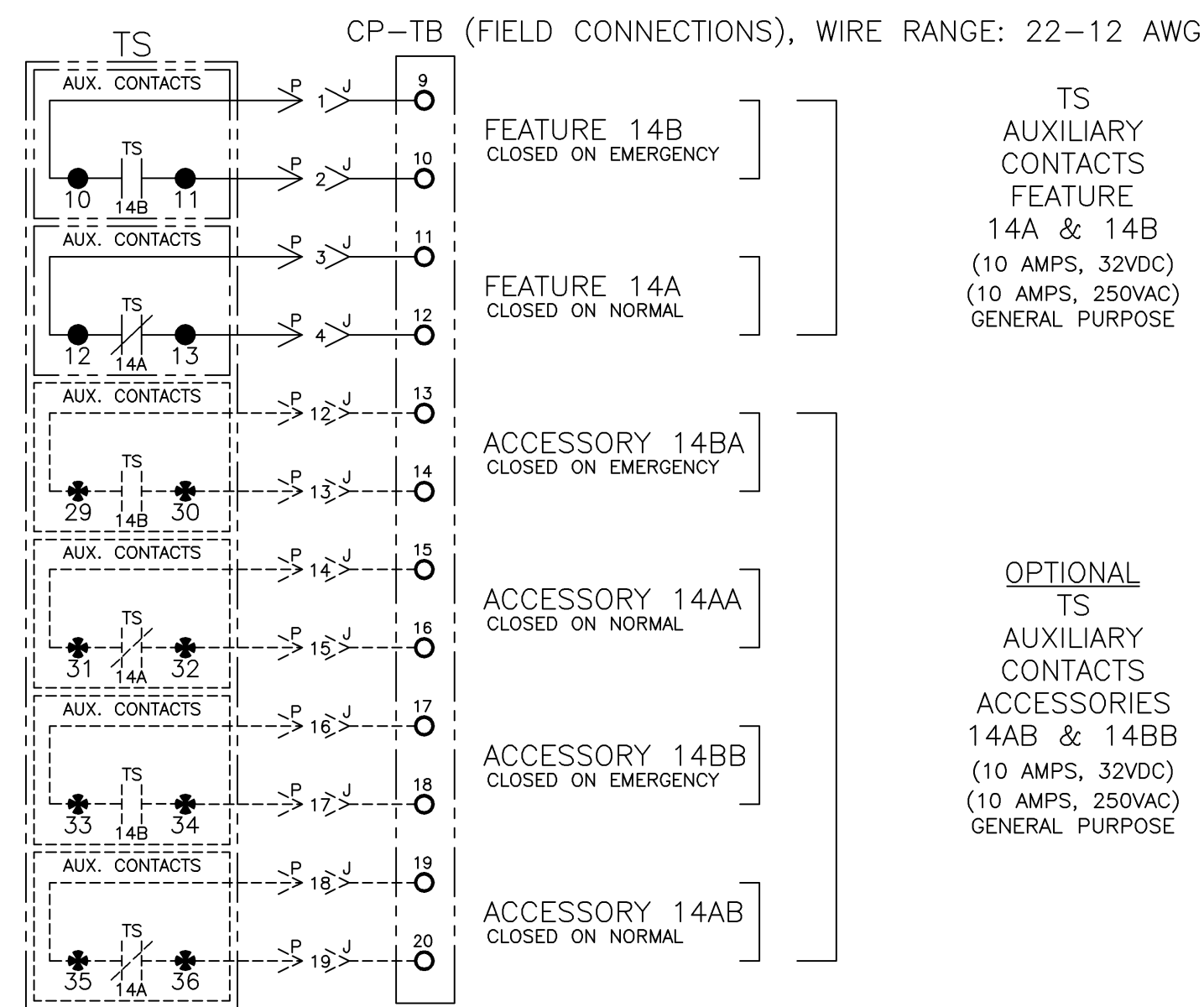
SIZE DWG. NO. DS773380-001

CHANGE LETTER ECN NO. 208696 SHEET 1 OF 3

FIELD CONNECTIONS

MAIN POWER POLES

CIRCUIT



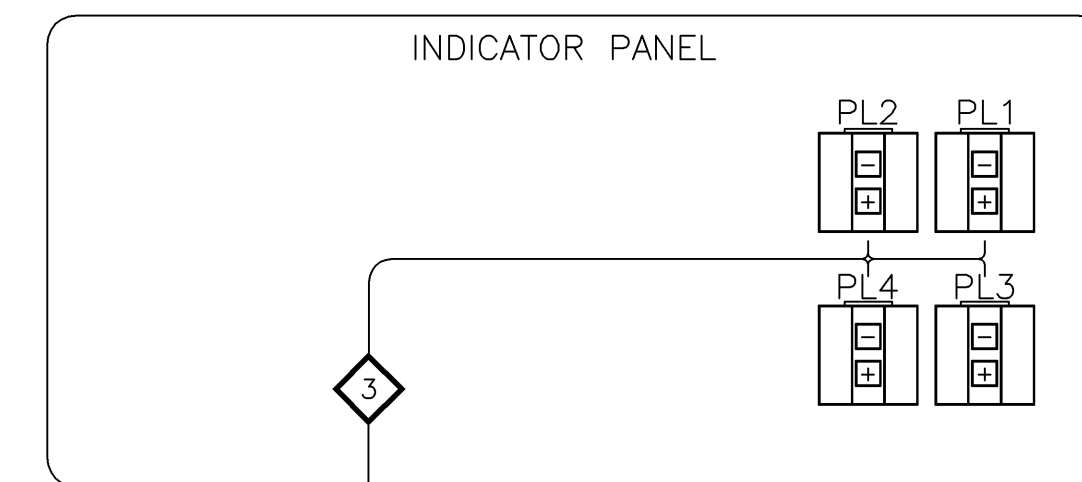
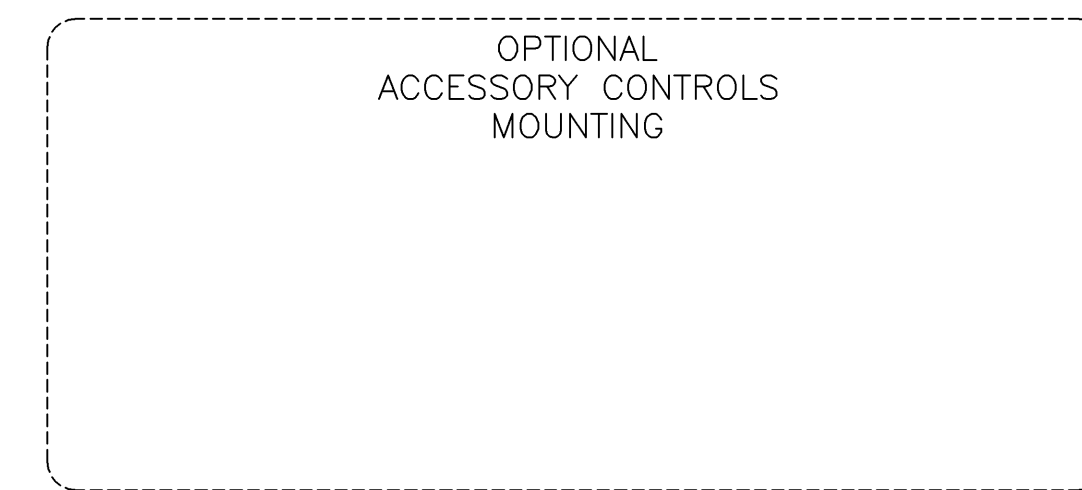
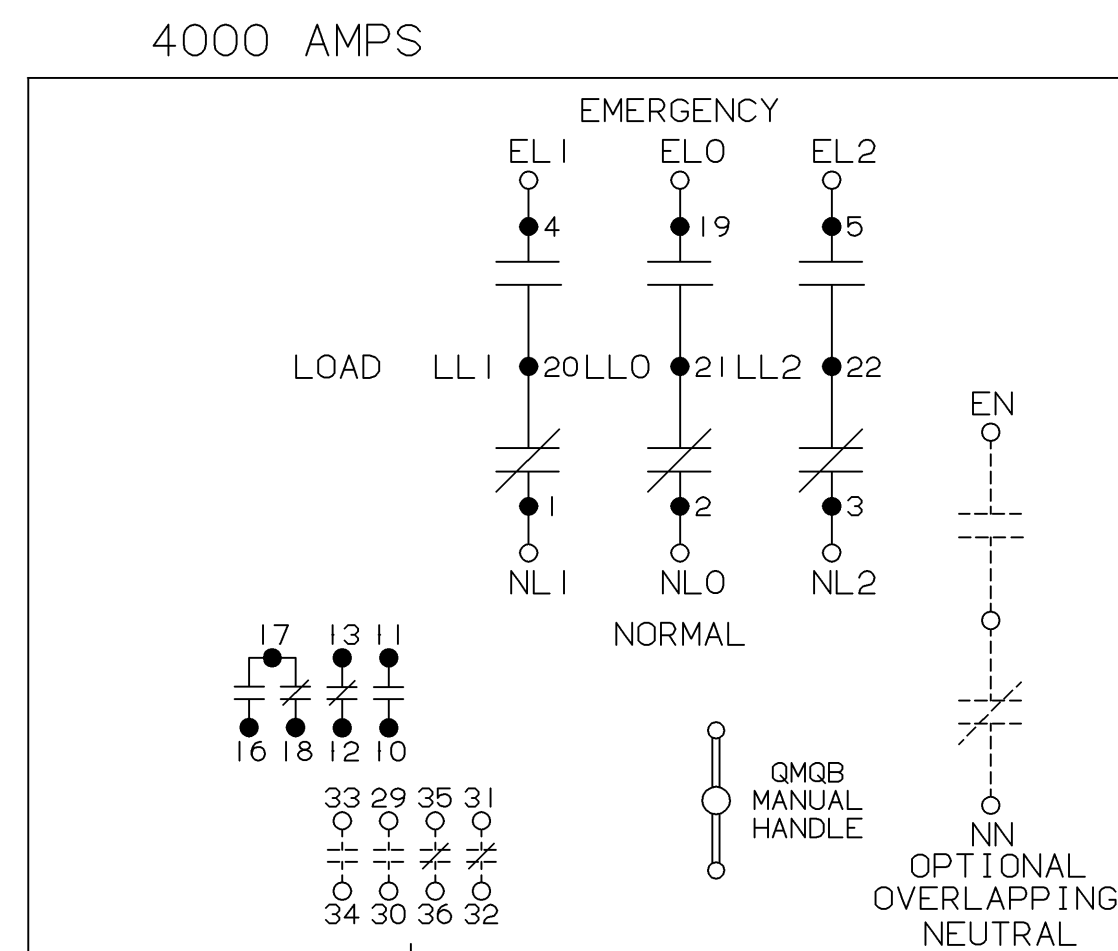
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SEE ECN				
A	207401	TR	WK	01/26/06
SEE ECN				
-	203565	AE	WK	03/03/05
ISSUE				

PROJECT NAME:		DIAGRAM		THIRD ANGLE PROJECTION	
DRAWING APPROVAL		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-1-003. FOR PLASTIC PARTS SEE MP-1-005.		ASSEMBLY REF. NO.	
DRAWN BY: DJB		DATE: 03/03/05		SCALE: 1:1	
CHECKED BY: BK		DATE: 03/03/05		ACAD FILE	
DRAFTING APPROVAL: WK		DATE: 03/03/05		SIZE: DWG. NO.	
FINAL APPROVAL:		ASCO POWER TECHNOLOGIES, L.P.		SHEET NO. 2 OF 3	
ASCO		FLORHAM PARK, NEW JERSEY 07932 U.S.A.		CHANGE LETTER	

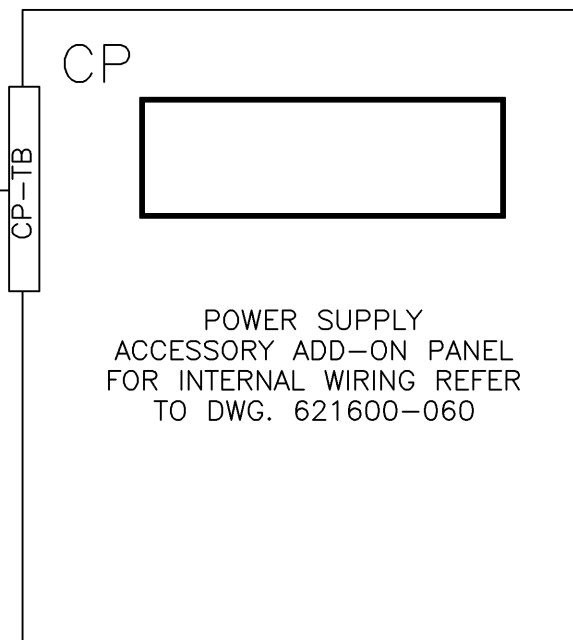
PHYSICAL DIAGRAM

ENCLOSURE

DOOR (INSIDE)



BONDING STRAP  
PN 098323-019



POWER SUPPLY  
ACCESSORY ADD-ON PANEL  
FOR INTERNAL WIRING REFER  
TO DWG. 621600-060

OPERATOR CONTROLS

ID	DESCRIPTION
PL1	TS CONNECTED TO NORMAL (GREEN)
PL2	TS CONNECTED TO EMERGENCY (RED)
PL3	NORMAL SOURCE AVAILABLE (GREEN)
PL4	EMERGENCY SOURCE AVAILABLE (RED)

1 ← HARNESS LOCATOR

WIRE No.	WIRING (P,TS,TB)	CLR	AWG
1	P-1,TS-10		16
2	P-2,TS-11		
3	P-3,TS-12		
4	P-4,TS-13		
5	P-5,TS-5		
6	P-6,TS-4		
7	P-7,TS-3		
8	P-8,TS-1		
9	P-9,TS-17		
10	P-10,TS-18		
11	P-11,TS-16		

2 ← HARNESS LOCATOR

WIRE No.	OPTIONAL ACC. 14AB,14BB WIRING (P,TS)	CLR	AWG
15	P-12,TS-29		16
16	P-13,TS-30		
17	P-14,TS-31		
18	P-15,TS-32		
19	P-16,TS-33		
20	P-17,TS-34		
21	P-18,TS-35		
22	P-19,TS-36		

3 ← HARNESS LOCATOR

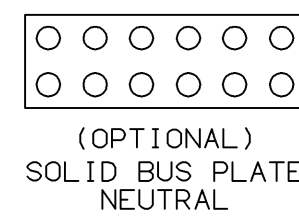
WIRE No.	WIRING (J,TB)	CLR	AWG
1	J-1,CP-TB-9		16
2	J-2,CP-TB-10		
3	J-3,CP-TB-11		
4	J-4,CP-TB-12		
5	J-5,CP-1		
6	J-6,CP-2		
7	J-7,CP-3		
8	J-8,CP-4		
9	J-9,PL4(-)		
10	J-10,PL1(-)		
11	J-11,PL2(-)		

4 ← HARNESS LOCATOR

WIRE No.	OPTIONAL ACC. 14AB,14BB WIRING (J,TB)	CLR	AWG
15	J-12,CP-TB-13		16
16	J-13,CP-TB-14		
17	J-14,CP-TB-15		
18	J-15,CP-TB-16		
19	J-16,CP-TB-17		
20	J-17,CP-TB-18		
21	J-18,CP-TB-19		
22	J-19,CP-TB-20		

5 ← HARNESS LOCATOR

WIRE No.	WIRING (INDICATORS)	CLR	AWG
12	CP-5,PL2(+)		16
13	CP-6,PL4(+)		
14	CP-7,PL3(+)		
9	CP-8,PL3(-)		
12	PL1(+),PL2(+)	BLK	22
9	PL4(-),PL3(-)	BLK	



\*NOTE: PHYSICAL DIAGRAM MAY VARY  
DEPENDING ON ENCLOSURE TYPE

PROJECT NAME:		WIRING DIAGRAM		THIRD ANGLE PROJECTION	
DRAWN BY: DJB 03/03/05		CHECKED BY: BK 03/03/05		DRAFTING APPROVAL: WK 03/03/05	
BY DATE		MANUFACTURING TOLERANCES TO BE IN ACCORDANCE WITH ASCO PROCEDURE MP-I-003. FOR PLASTIC PARTS SEE MP-I-055		ASSEM. REF. NO.	
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ASCO POWER TECHNOLOGIES, L.P. FLORHAM PARK, NEW JERSEY 07932 U.S.A.		SIZE: DWG. NO. DS773380-001		SHEET 3 OF 3	