

SHEET INDEX

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MANUFACTURING NOTES:

X	X	1.	ALL WIRES SHALL BE 20GA. BLACK UNLESS OTHERWISE SPECIFIED.
X		2.	Ø3 DENOTES WIRING NOT IN A CABLE, AND ROUTED IN THE MOST CONVENIENT MANNER, USING 20GA. BLACK UNLESS OTHERWISE SPECIFIED.
X		3.	Ø DENOTES LEADS TO BE RUN BY THE INSTALLER.
X		4.	Δ DENOTES LEADS RUN BY SHOP WHEN ASSOCIATED EQUIPMENT IS SHOP MOUNTED IN THE SAME BAY. OTHERWISE, LEADS ARE RUN BY THE INSTALLER.
X	X	5.	ARRANGEMENT OF TERMINALS DOES NOT NECESSARILY REFLECT THE ARRANGEMENT ON THE EQUIPMENT.
X		6.	ALL WIRING IN THIS POWER BOARD IS Ø3 WIRING UNLESS OTHERWISE SPECIFIED.

T-439100BT			
ISSUES & REVS			
DRWN	ENG. APP	REVISED	REV. APP
TEB	TEB		
ISSUE NO.	CHG. NO.	DATE	BY
1	B500050P	11-01-02	VLD
	ORIG. REL.		

ENGINEERING NOTES:

- 51. FOR THE SAKE OF CLARITY NOT ALL PANELS AND TERMINALS ARE SHOWN
- 53. CURRENT MONITORING SHUNTS FOR A & B LOADS ARE STANDARD.
- 54. RELAY ALARM CONTACTS ARE SHOWN DEENERGIZED.  
MAJOR ALARM CONTACTS ARE ENERGIZED IN THEIR NORMAL NO ALARM CONDITION AND RELEASE UPON AN ALARM CONDITION  
MINOR ALARM CONTACTS ARE DEENERGIZED IN THEIR NORMAL NO ALARM CONDITION AND ENERGIZE UPON AN ALARM CONDITION.
- 55. THE LOW VOLTAGE LOAD DISCONNECTS FEATURE OF THIS PLANT IS AN OPTIONAL FEATURE AND MUST BE SPECIFIED BY LIST NUMBER IF REQUIRED.
- 56. -48V POWER AND DISTRIBUTION IS OPTIONAL. ALSO AVAILABLE IS -48V LOW VOLTAGE LOAD DISCONNECT.
- 57. IN FIG. 3, PICONACS AND DGC PART NUMBER, THE "-XXXX" DENOTES SOFTWARE REVISION.

SUPPORTING INFORMATION

ITEM	ISSUE	DESCRIPTION	SPECIFY				REMARKS
			FIG	WRG	APP	EQUIPPED	
COL	A	B	C	D	E	F	G
1	1	RECTIFIER SHELVES 220VAC	2	W		STANDARD	
2	1	PRIMARY BUSSES	3				
3	1	SHUNT / LVLD OPTIONS	4				
4	1	LOAD DISTRIBUTION OPTIONS	5				
5	1	METER MONITOR & CONTROL	6				
6	1	RCM	7				
7	1	CONVERTER SHELF	8				
8							
9							
10							

NO.	CATEGORY
4380224PD	SYSTEM MANUAL
4650657P	TEST SPECIFICATION
6370358P-1	CABLE ASSEMBLY
6370353P-2	CABLE ASSEMBLY
6401451P	WIRING LIST
4630657P	TEST PROCEDURE

ITEM	SHEET NO.	FIG	FUSE			POTENTIAL	REMARKS
			AMP	CODE	DESIG		
COL.	A	B	C	D	E	F	G
1							
2							
3							
4							
5							
6							
7							
8							
9							
10							

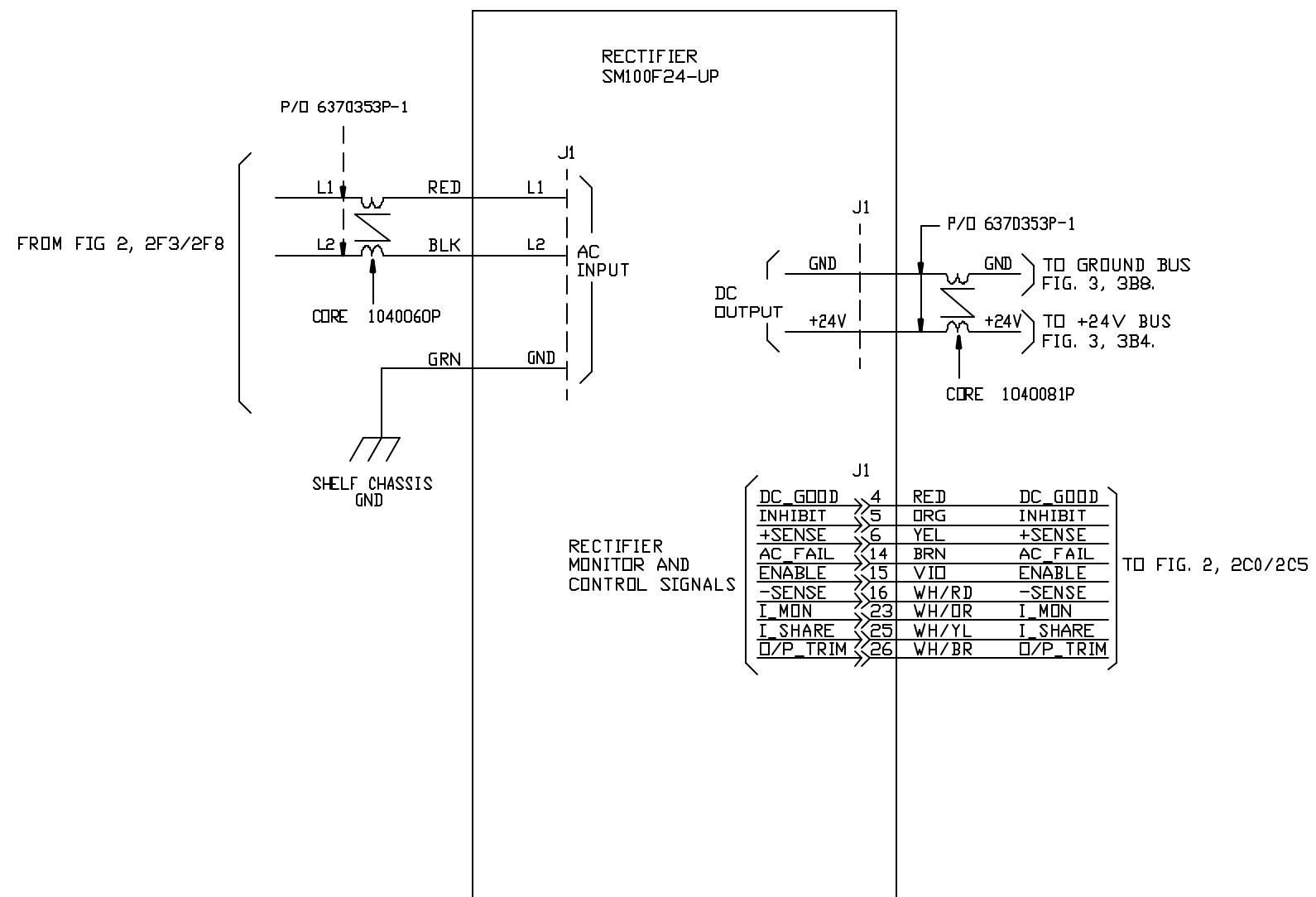
FIG.	OPT.	B SHEET
1		1
2		2
3		3
4		4
5		5
6		6, 7, 8
7		8
8		9

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POWER SYSTEM  
+24 VOLT @ 700 AMP REDUNDANT  
-48 VOLT @ 40 AMP, PEC 162LP  
**PECO II Inc.**  
Colum, Ohio, U.S.A.

ISSUE  
1  
T-439100BT  
SHEET A1

FIG. 1  
RECTIFIER NO. 1-4



ISSUE  
1

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B

SHEET B1

FIG. 2  
RECTIFIER SHELVES

RECTIFIER SHELF #1

RECTIFIER SHELF #2

COMMUNICATIONS INTERCONNECT  
P/D 6200614P  
4390994SD

COMMUNICATIONS INTERCONNECT  
P/D 6200614P  
4390994SD

RECT#1 SIGNALS		
DC_GOOD	RED	4
INHIBIT	DRG	5
+SENSE	YEL	6
AC_FAIL	BRN	14
ENABLE	VID	15
-SENSE	WH/RD	16
I_MON	WH/DR	23
I_SHARE	WH/YL	25
O/P_TRIM	WH/BR	26

RECT#1 SIGNALS		
DC_GOOD	RED	4
INHIBIT	DRG	5
+SENSE	YEL	6
AC_FAIL	BRN	14
ENABLE	VID	15
-SENSE	WH/RD	16
I_MON	WH/DR	23
I_SHARE	WH/YL	25
O/P_TRIM	WH/BR	26

P1		
NC	1	NC
INHIBIT 1	2	INHIBIT 1
CURR MON 1	3	CURR MON 1
INHIBIT 2	4	INHIBIT 2
CURR MON 2	5	CURR MON 2
INHIBIT 3	6	INHIBIT 3
CURR MON 3	7	CURR MON 3
INHIBIT 4	8	INHIBIT 4
CURR MON 4	9	CURR MON 4
CURR SHARE	10	CURR SHARE
+ SENSE	11	+ SENSE
REM ADJ 2	12	REM ADJ 2
REM ADJ 4	13	REM ADJ 4
AC GOOD 1	14	AC GOOD 1
DC GOOD 1	15	DC GOOD 1
AC GOOD 2	16	AC GOOD 2
DC GOOD 2	17	DC GOOD 2
AC GOOD 3	18	AC GOOD 3
DC GOOD 3	19	DC GOOD 3
AC GOOD 4	20	AC GOOD 4
DC GOOD 4	21	DC GOOD 4
NC	22	NC
- SENSE	23	- SENSE
REM ADJ 1	24	REM ADJ 1
REM ADJ 3	25	REM ADJ 3

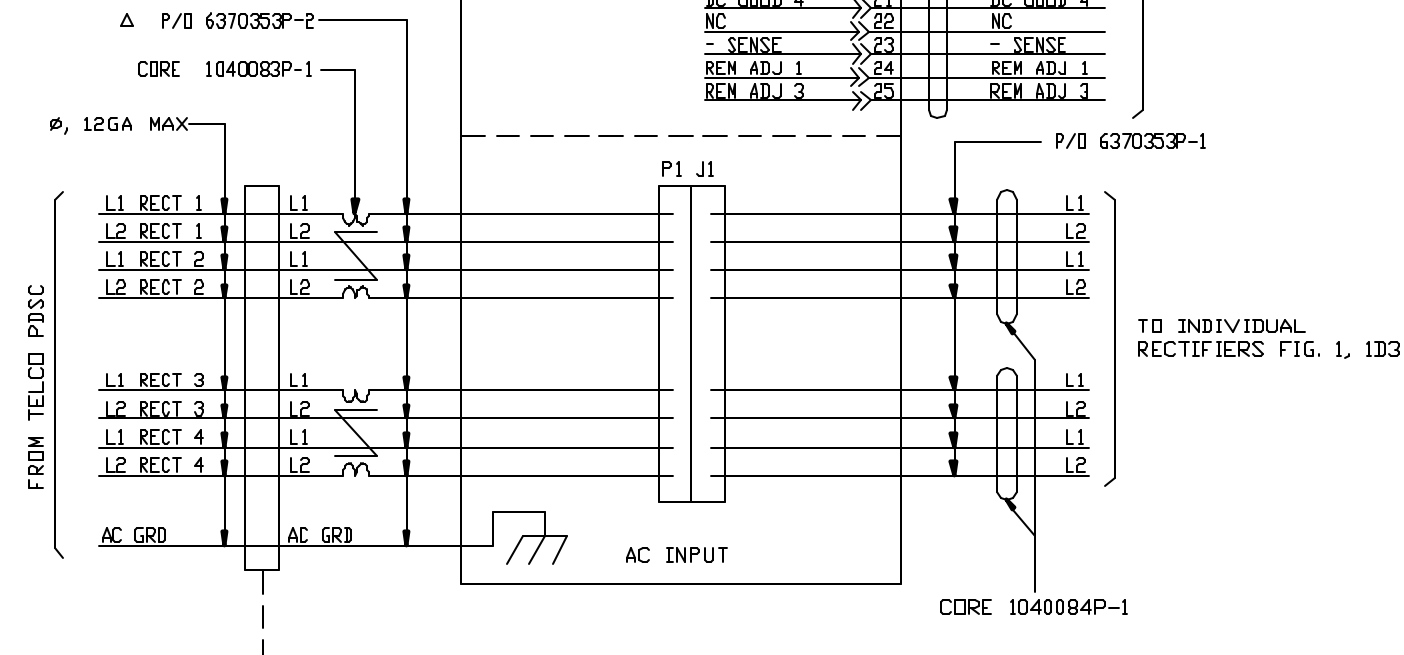
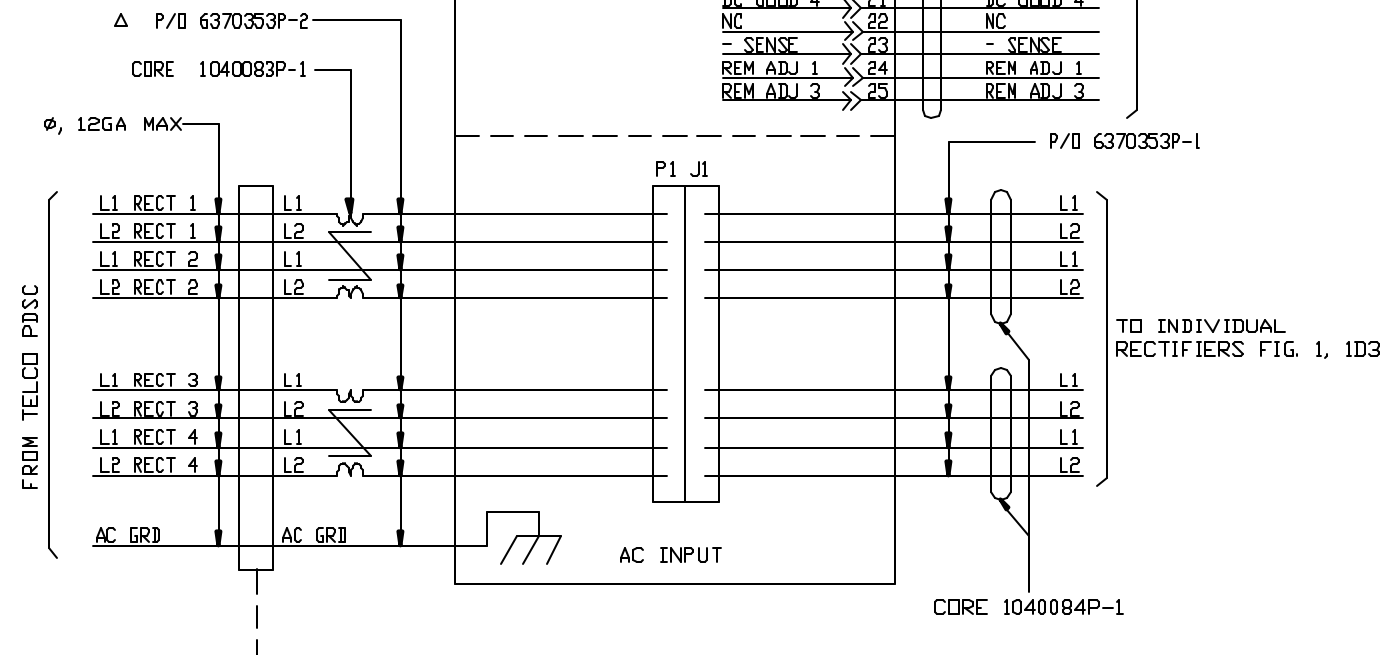
J1		
NC	1	NC
INHIBIT 1	2	INHIBIT 1
CURR MON 1	3	CURR MON 1
INHIBIT 2	4	INHIBIT 2
CURR MON 2	5	CURR MON 2
INHIBIT 3	6	INHIBIT 3
CURR MON 3	7	CURR MON 3
INHIBIT 4	8	INHIBIT 4
CURR MON 4	9	CURR MON 4
CURR SHARE	10	CURR SHARE
+ SENSE	11	+ SENSE
REM ADJ 2	12	REM ADJ 2
REM ADJ 4	13	REM ADJ 4
AC GOOD 1	14	AC GOOD 1
DC GOOD 1	15	DC GOOD 1
AC GOOD 2	16	AC GOOD 2
DC GOOD 2	17	DC GOOD 2
AC GOOD 3	18	AC GOOD 3
DC GOOD 3	19	DC GOOD 3
AC GOOD 4	20	AC GOOD 4
DC GOOD 4	21	DC GOOD 4
NC	22	NC
- SENSE	23	- SENSE
REM ADJ 1	24	REM ADJ 1
REM ADJ 3	25	REM ADJ 3

TO FIG. 1, 1E6

TO FIG. 1, 1E6

TO FIG. 7, 8B8

TO FIG. 7, 8B8



FROM TELCO PDSC

FROM TELCO PDSC

TO INDIVIDUAL RECTIFIERS FIG. 1, 1D3

TO INDIVIDUAL RECTIFIERS FIG. 1, 1D3

P/O 6310369P  
AC DISTRIBUTION BOX

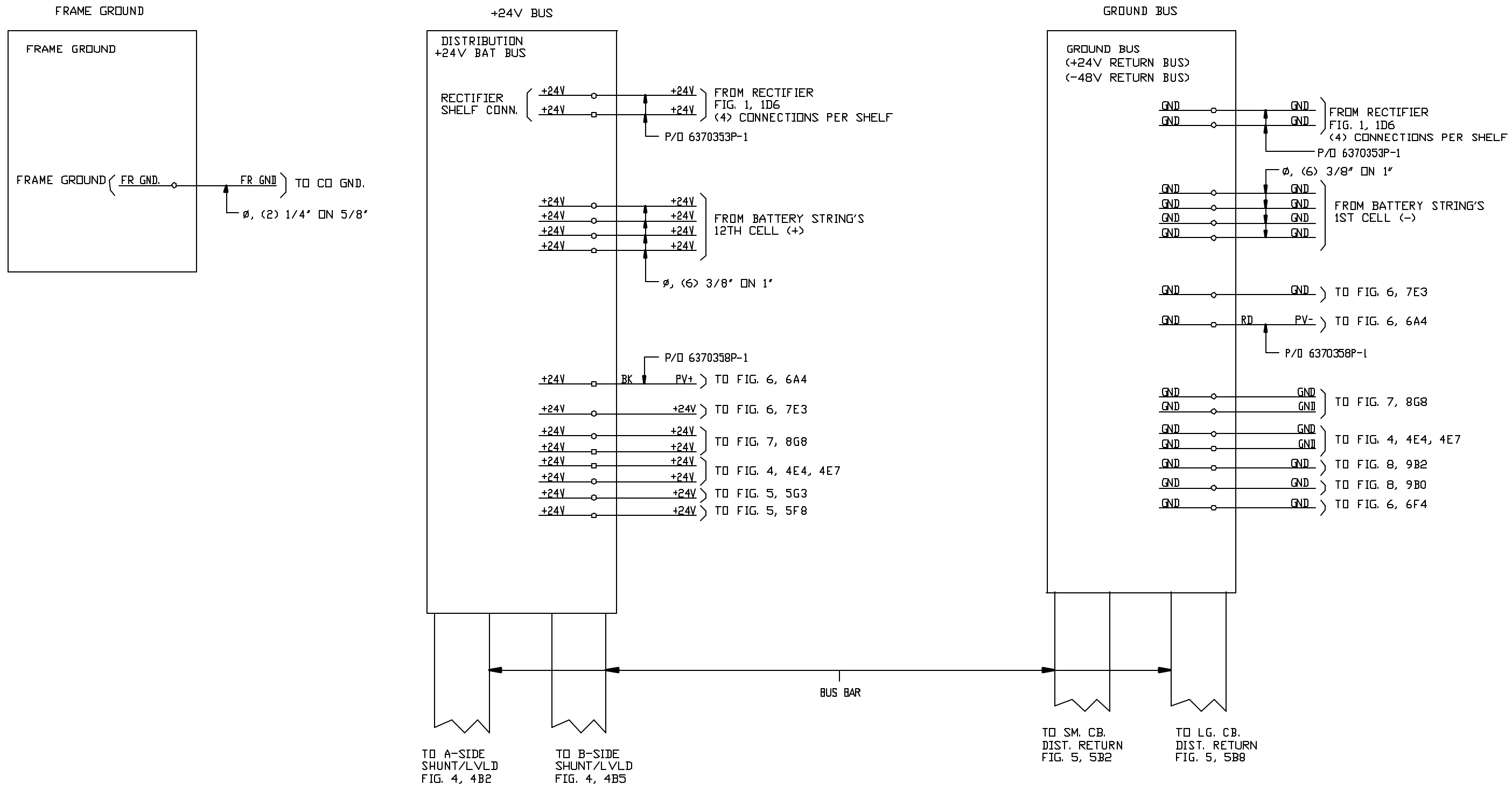
ISSUE  
1

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SHEET 82

FIG. 3  
PRIMARY BUSSES



ISSUE  
1

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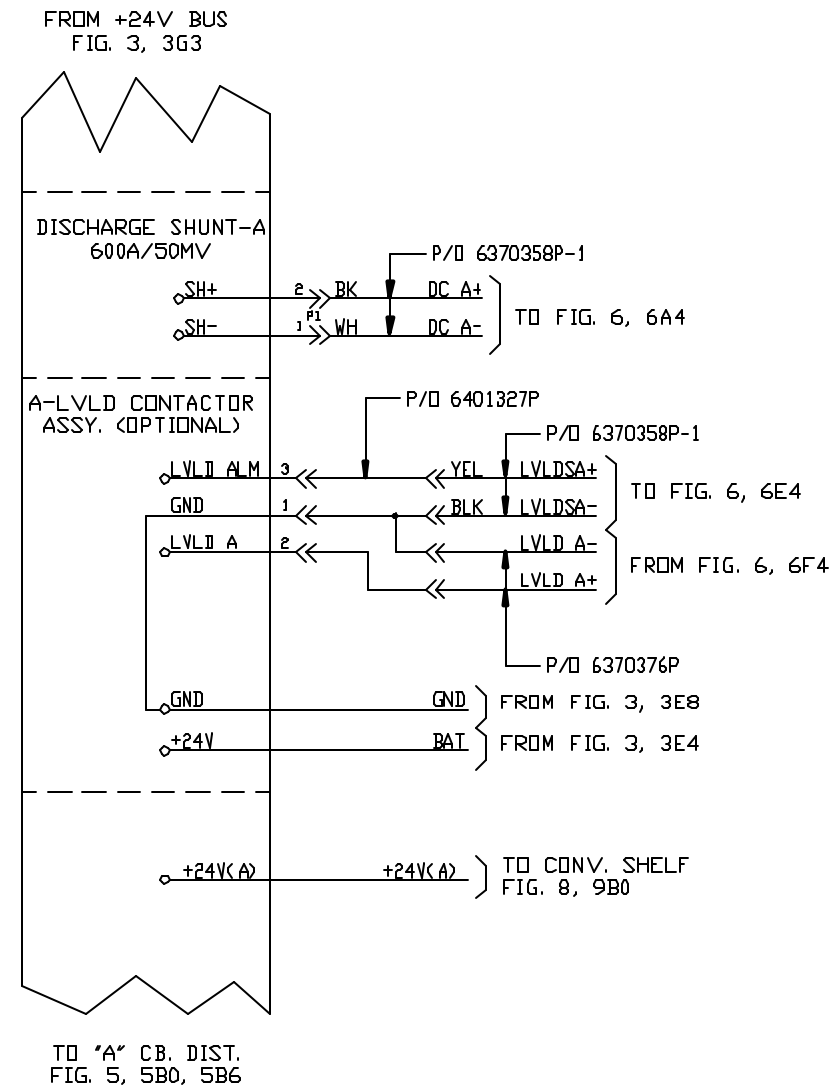
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B

SHEET 33

FIG. 4  
SHUNT / LVLD OPTIONS

"A" SIDE SHUNT / LVLD  
(LVLD DISCONNECT OPTIONAL)  
NOTE: 55



"B" SIDE SHUNT / LVLD  
(LVLD DISCONNECT OPTIONAL)  
NOTE: 55

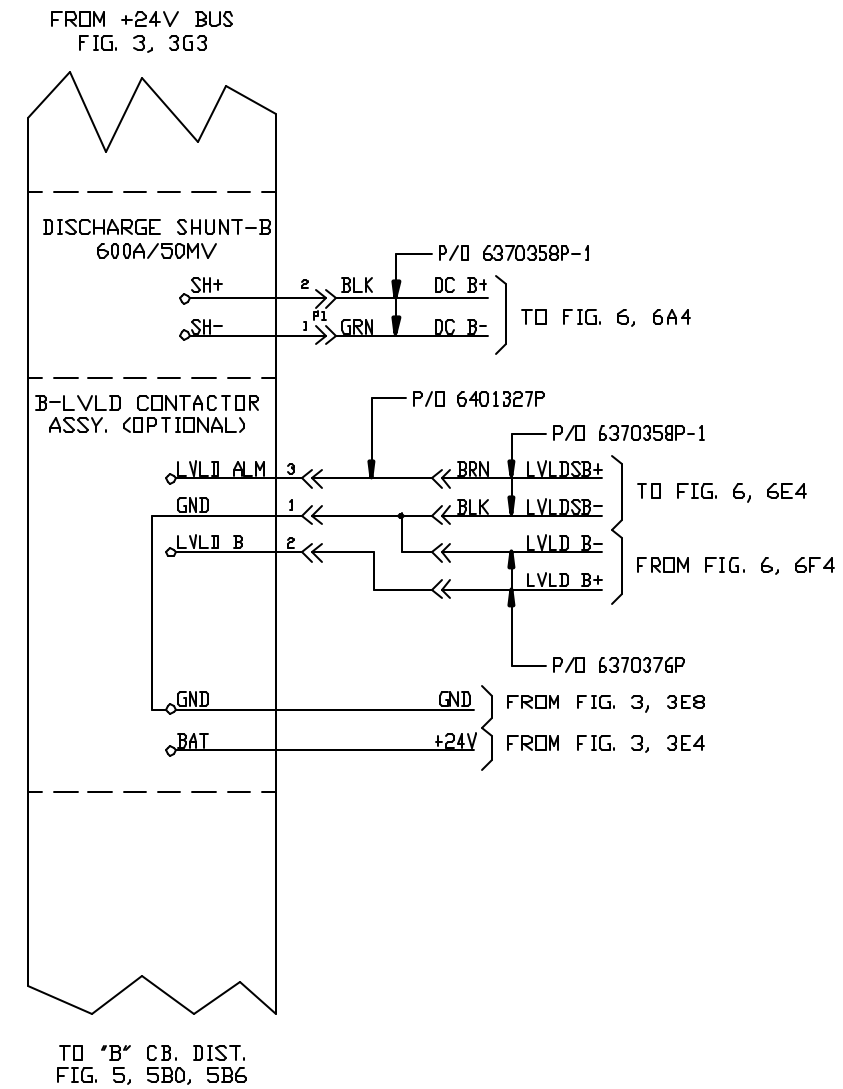
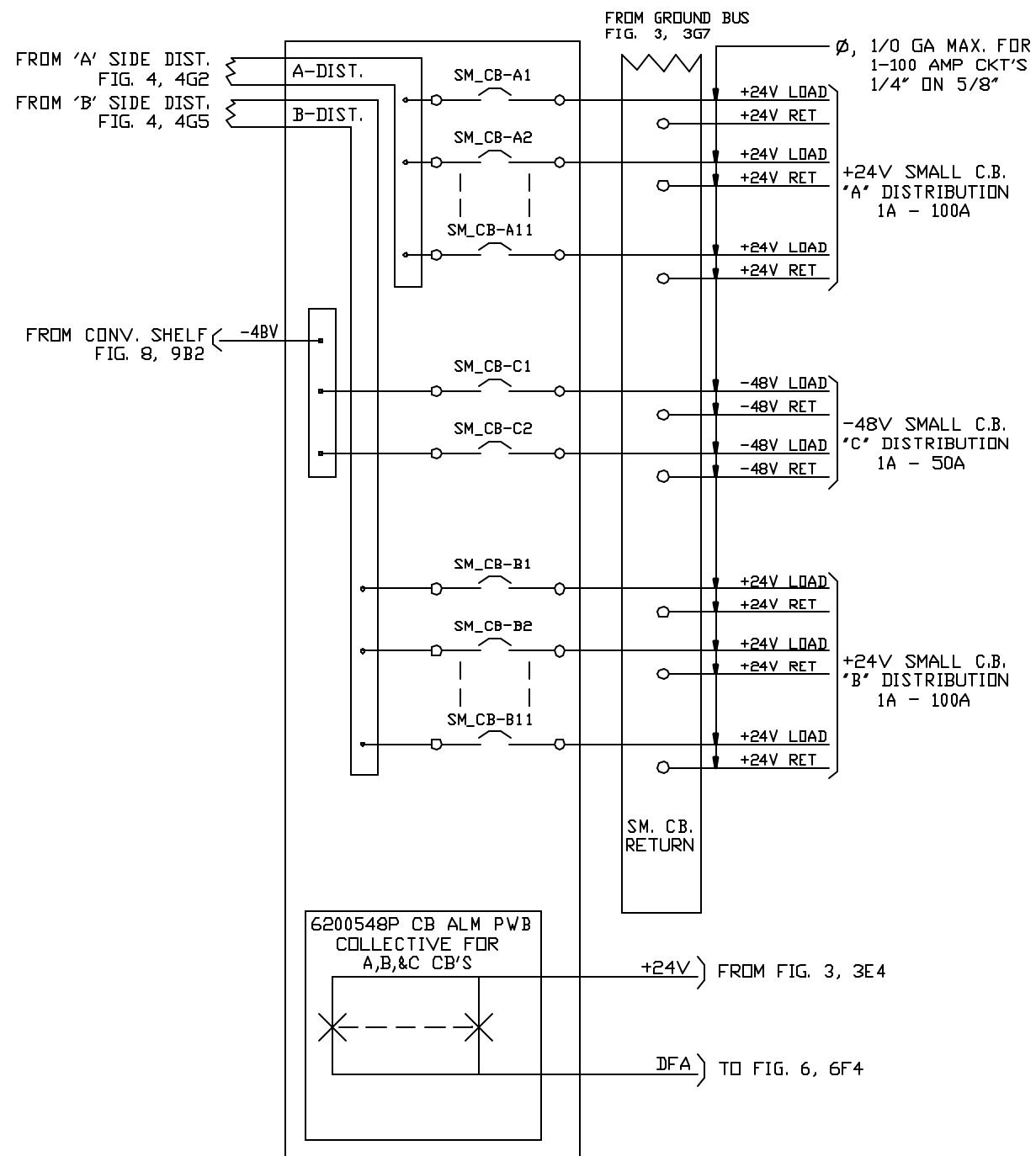
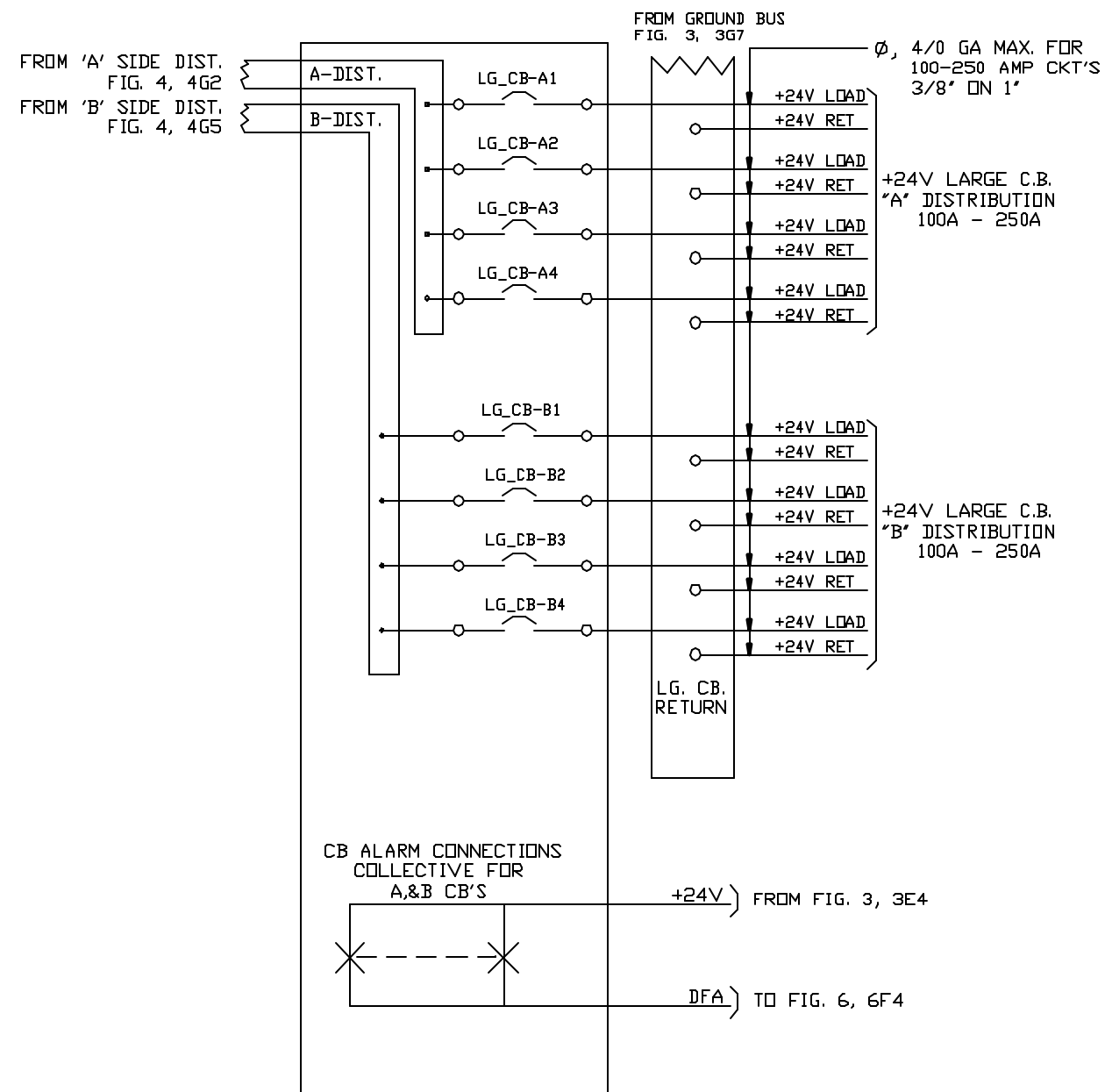


FIG. 5  
LOAD DISTRIBUTION OPTIONS

SMALL CIRCUIT  
BREAKER DISTRIBUTION



LARGE CIRCUIT  
BREAKER DISTRIBUTION



ISSUE  
1

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B

SHEET 85

FIG. 6  
METER MONITOR & CONTROL

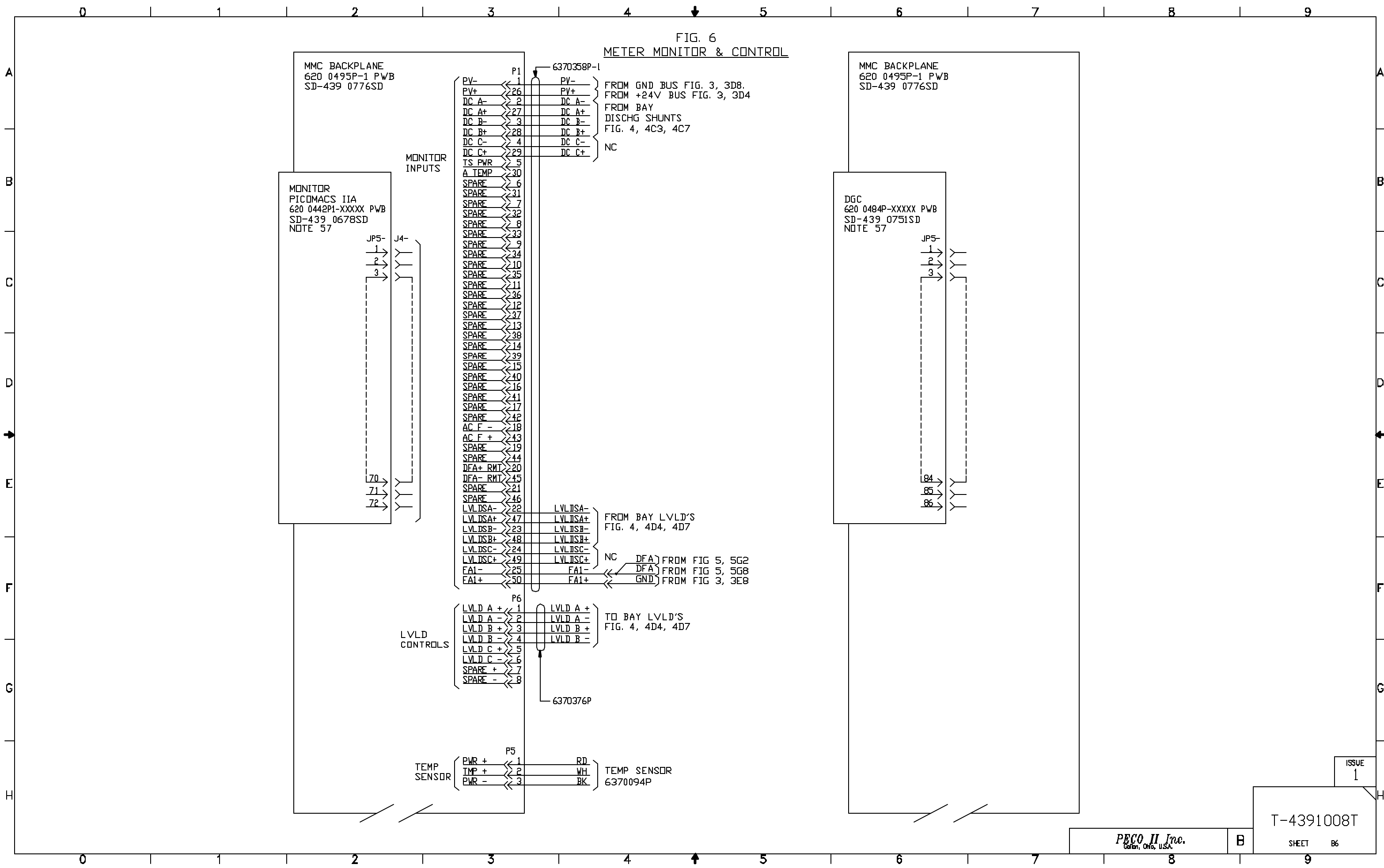
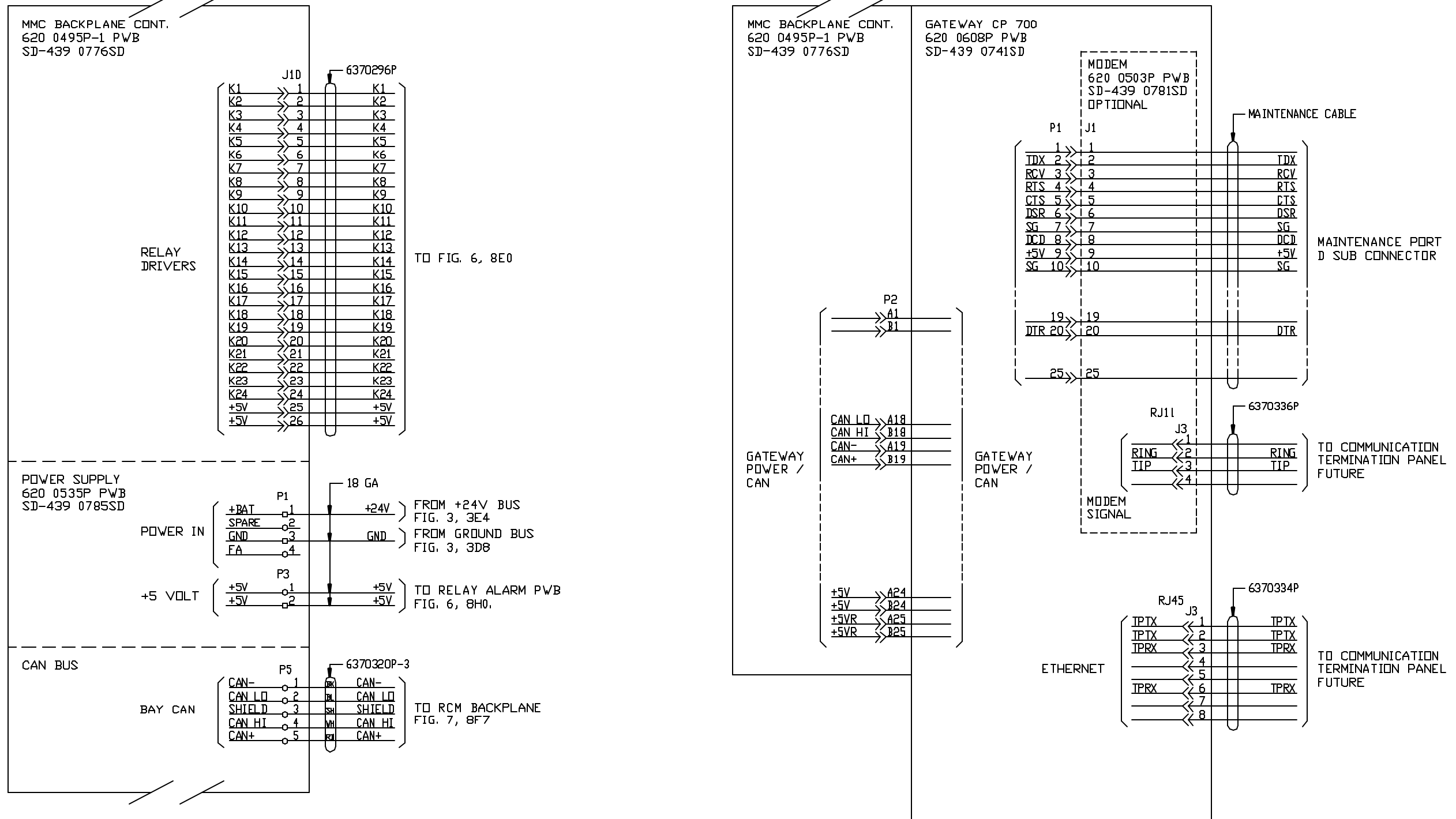


FIG. 6  
METER MONITOR & CONTROL  
(CONTINUED)

OPTIONAL



ISSUE  
1

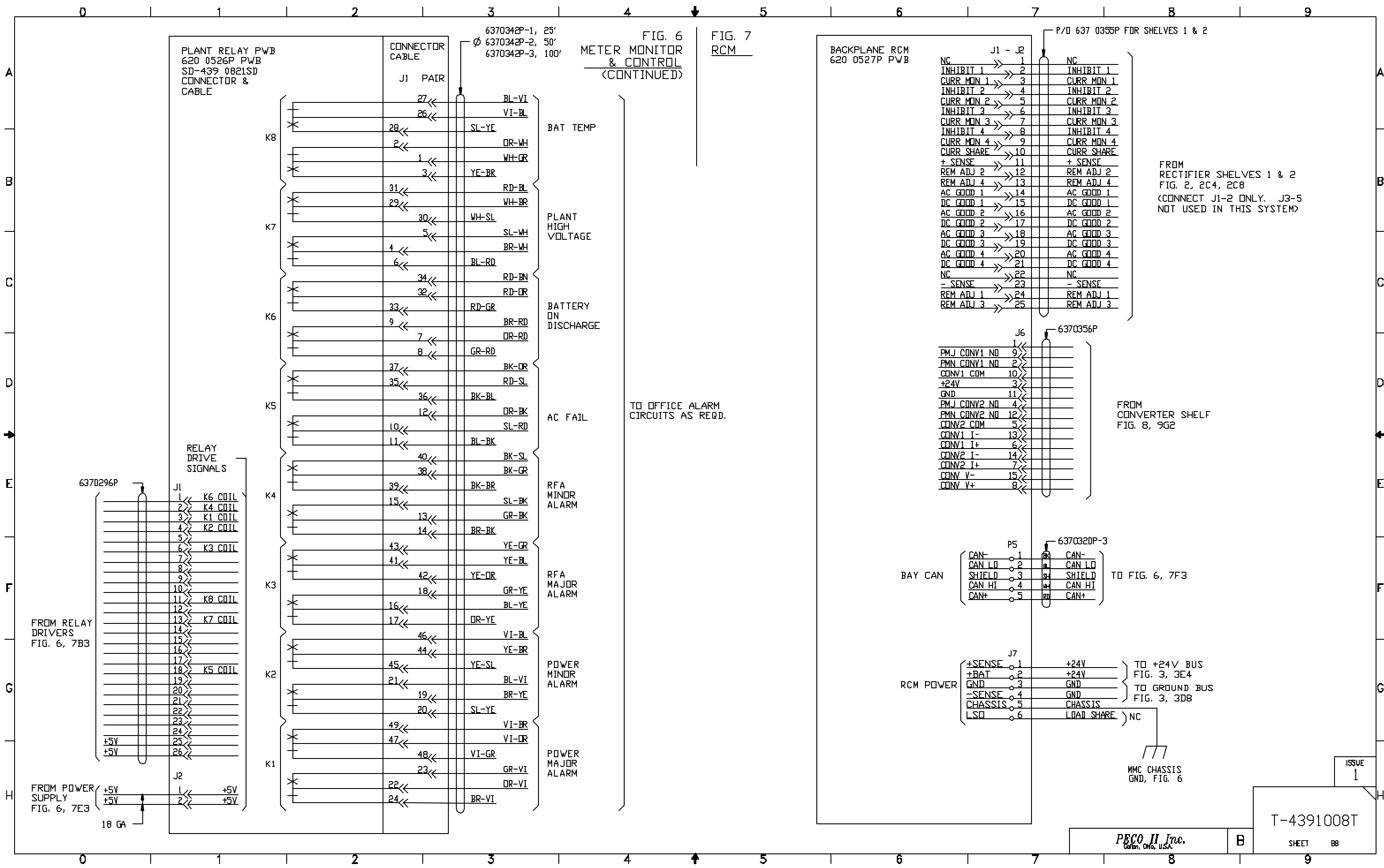
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Galien, OH, USA

B

SHEET B7





PLANT RELAY PWB  
620 0526P PWB  
SD-439 0821SD  
CONNECTOR &  
CABLE

CONNECTOR  
CABLE  
J1 PAIR

6370342P-1, 25'  
6370342P-2, 50'  
6370342P-3, 100'

FIG. 6  
METER MONITOR  
& CONTROL  
(CONTINUED)

FIG. 7  
RCM

BACKPLANE RCM  
620 0527P PWB

J1 - J2	J1	J2
NC	1	NC
INHIBIT 1	2	INHIBIT 1
CURR MON 1	3	CURR MON 1
INHIBIT 2	4	INHIBIT 2
CURR MON 2	5	CURR MON 2
INHIBIT 3	6	INHIBIT 3
CURR MON 3	7	CURR MON 3
INHIBIT 4	8	INHIBIT 4
CURR MON 4	9	CURR MON 4
CURR SHARE	10	CURR SHARE
+ SENSE	11	+ SENSE
REM ADJ 2	12	REM ADJ 2
REM ADJ 4	13	REM ADJ 4
AC GOOD 1	14	AC GOOD 1
DC GOOD 1	15	DC GOOD 1
AC GOOD 2	16	AC GOOD 2
DC GOOD 2	17	DC GOOD 2
AC GOOD 3	18	AC GOOD 3
DC GOOD 3	19	DC GOOD 3
AC GOOD 4	20	AC GOOD 4
DC GOOD 4	21	DC GOOD 4
NC	22	NC
- SENSE	23	- SENSE
REM ADJ 1	24	REM ADJ 1
REM ADJ 3	25	REM ADJ 3

FROM  
RECTIFIER SHELVES 1 & 2  
FIG. 2, 2C4, 2C8  
(CONNECT J1-2 ONLY. J3-5  
NOT USED IN THIS SYSTEM)

J6	6370356P
1	PMJ CONV1 NO
2	PMN CONV1 NO
3	CONV1 COM
4	+24V
5	GND
6	PMJ CONV2 NO
7	PMN CONV2 NO
8	CONV2 COM
9	CONV1 I-
10	CONV1 I+
11	CONV2 I-
12	CONV2 I+
13	CONV V-
14	CONV V+
15	CONV V-
16	CONV V+

FROM  
CONVERTER SHELF  
FIG. 8, 9G2

P5	6370320P-3
1	CAN-
2	CAN LO
3	SHIELD
4	CAN HI
5	CAN+

BAY CAN

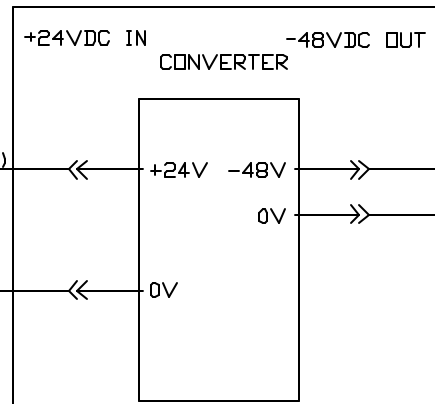
TO FIG. 6, 7F3

RCM POWER

J7	6370320P-3	Destination
1	+SENSE	+24V
2	+BAT	+24V
3	GND	GND
4	-SENSE	GND
5	CHASSIS	CHASSIS
6	LSI	LOAD SHARE

MMC CHASSIS  
GND, FIG. 6

FIG. 8  
 CONVERTER SHELF  
 (<+24VDC IN, -48VDC OUT>)



FROM 'A' SHUNT/  
 LVLD BUS  
 FIG. 4, 4F3

FROM  
 GROUND BUS  
 FIG. 3, 3E8

-48V } TO FIG. 5, 5D0  
 GND } TO FIG. 3, 3E8

SHELF INTERFACE PWB  
 6200531P

J3  
 SHUNT +    4  
 SHUNT -    3  
 -48V       1  
 GND        2

-48V  
 GND

J2

1  
 2  
 3  
 4  
 5  
 6  
 7  
 8  
 9  
 10  
 11  
 12  
 13  
 14  
 15  
 16  
 17  
 18  
 19  
 20

NC

J1

PMJ CONV1 NO 9  
 PMN CONV1 NO 2  
 CONV1 COM 10  
 +24V        3  
 GND        11  
 PMJ CONV2 NO 4  
 PMN CONV2 NO 12  
 CONV2 COM 5  
 CONV1 I-    13  
 CONV1 I+    6  
 CONV2 I-    14  
 CONV2 I+    7  
 CONV V-     15  
 CONV V+     8

6370356P

TO RCM BACKPLANE  
 FIG. 7, 8D8

ISSUE  
 1

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B

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