

SCHEMATIC		ISSUE													
SD-83102-01	PREL	1 MOD	2 MOD												
WIRING DIAGRAM		ISSUE													
AUTO CHG	SH NO.														
TKY	M	A1	1	2	3	4	5	6	7	8	9	10	11	12	13
		B1	1	2	2	2	2	2	2	2	2	2	2	2	2
		B2	1	2	3	3	3	3	3	3	3	3	3	3	3
		B3	1	2	2	2	2	2	2	2	2	2	2	2	2
		B4	1	2	2	4	5	5	7	8	8	8	8	12	12
		B5	1	2	3	4	4	4	6	7	7	7	7	7	7
		B6	1	2	3	3	3	3	3	3	3	3	3	3	3
		B7	1	2	3	3	3	3	3	3	3	3	3	3	3
		B8				4	4	4	7	8	8	8	8	12	12
		D1	1	2	2	2	2	2	6	7	7	7	10	10	10
		D2							6	6	6	6	6	6	6

76 - MODIFICATION OF SD-83102-01 CONSIST OF MAKING CHANGES PER LDI SD-83102-01 ISSUE 10, 2A, 8 2B

63 - IF IN THE FUTURE ANY 1337B INDUCTOR, (L1) OR (L2) PER SHEET B5, FIG. 1, 'D' OPTION REQUIRES FIELD REPLACEMENT, BOTH (L1) & (L2) MUST BE REPLACED WITH 1337A INDUCTORS SINCE 1337B INDUCTORS HAVE BEEN MANUFACTURE DISCONTINUED. FOR EACH UNIT, ORDER TWO (2) 1337A INDUCTORS (COMCODE 104154042), TWO (2) CAPACITORS, (C1) 37F3349 (COMCODE 405450222) AND ONE (1) WIRE SET WKB (COMCODE 845808232). INSTALL AS PER 'E' OPTION IN SHEET B5 FIG. 1, SHEET B5 FIG. C & FIG. D. IF (F3) FUSE HAS BEEN REPLACED WITH 70G FUSE PER NOTE 62, IT IS NOT NECESSARY TO CHANGE THE FUSE.

60 - IF 3245C TRANSFORMER (T3) PER SHEET B6 FIG. A 'ZB' OPTION REQUIRES FIELD REPLACEMENT, IT IS NECESSARY TO ORDER A (T3) TRANSFORMER FIELD REPLACEMENT KIT. REFER TO J85503C-1 DRAWING FOR ORDERING INFORMATION SEE ENGINEERING NOTE 59.

61 - IF 3245D TRANSFORMER (T3) PER SHEET B7 FIG. B 'X' OPTION REQUIRES FIELD REPLACEMENT, IT IS NECESSARY TO ORDER A (T3) TRANSFORMER FIELD REPLACEMENT KIT. REFER TO J85503C-1 DRAWING FOR ORDERING INFORMATION SEE ENGINEERING NOTE 60.

62 - ALL UNITS IN THE FIELD WHICH CONTAIN 1337B INDUCTORS (L1) & (L2) PER SHEET B5 FIG. 1, 'D' OPTION MUST BE MODIFIED PER CN C100030J AS FOLLOWS:

- A. REPLACE 70A FUSE (F3) WITH 70G FUSE PER SHEET B1, FIG. 1, 'D' OPTION.
  - B. REPLACE DESIGNATION PIN KS-14174 L-1 WITH KS-14174 L-7.
  - C. COVER STAMPINGS 1/2 AMP ON CONTROL PANEL 845368152 WITH LABEL 84671718.
- USE 70G FUSE FOR FUTURE REPLACEMENTS ON THESE UNITS. FOR THE UNITS WHICH CONTAIN 1337A INDUCTORS (L1 & L2) PER SHEET B5, FIG. 1, 'E' OPTION, (F3) FUSE REMAINS TO BE 70A - 1/2 AMP FUSE PER SHEET B1, FIG. 'E' OPTION.

ENGINEERING NOTES  
51 - SEE SHEET INDEX FOR DRAWING FROM WHICH THIS DRAWING IS MADE.

52 - CONNECTING DRAWINGS:  
LINEAGE 2000 (T/M) BAT PLANT T-82603-J1

53 - EQUIPMENT ARRANGEMENT  
J85503C-1  
ED-83113-30

54 - SPECIFY FIGURES & OPTIONS AS FOLLOWS:

FIG	OPTION	COMMERCIAL AC INPUT
1	A	HA 208V AC
		1B 240V AC
	B	480V AC

55 - SEE J85503C-1, NOTE 52 FOR OPTIONS REQUIRED IN FIG 2

56 - SPECIFY FIG 3 & 4B WHEN EN CELL CHARGING IS REQUIRED.

57 - RECTIFIERS IN THE FIELD PER T-83102-30 FIG. A '2A' OPTION WITH (T3) 3245A TRANSFORMER, MUST BE MODIFIED TO REPLACE THE TRANSFORMER WITH 3245F CODE, PER '2N' OPTION.

58 - RECTIFIERS IN THE FIELD PER T-83102-30 FIG. B 'B' OPTION WITH (T3) 3243B TRANSFORMER, MUST BE MODIFIED TO REPLACE THE TRANSFORMER WITH 3245G CODE PER '2M' OPTION.

59 - IF 531A (DS1) & DS2) OR 531B (DS3) LIGHT EMITTING DIODE PER SHEET B1 FIG. 1 'Z' OPTION REQUIRES FIELD REPLACEMENT, ORDER WP-90184, L5 FOR DS1 & DS2 OR WP-90184, L6 FOR DS3 PER 'ZS' OPTION. IT IS ALSO NECESSARY TO ORDER ONE KS-21320, L110 SLEEVE FOR EACH DIODE PER 'ZS' OPTION BECAUSE THE OLD LED SOCKET KS-21320 CAN NOT ACCOMMODATE THE NEW LED.

(CONT'D)

SHB3, AT CBI CKT BKR, TERM 9 READ 'R' TERM 9 'BR' READ 'S' DESIG. P/O WIRE SET ETC. & MATING TERMS ADDED. AT GRD BUS BAR, AT E13 TERM, TERM READ '997837103'. SH. B6, LOC. 4B, TERMS Z1 & Z2 REF TO [S-BL] [Y-BL] ADDED. CHG'D PER RI. B1, B2 & B3.  
4-11-89 CL M

IN NOTE 52, T-82603-31 READ T-82603-30. IN FIG H1 CA ASSY H-285-226, L-5 READ H-285-224, L-45.  
4-2V-89 CL M

ON SH. A1, ENGR NOTES 57 & 58 ADDED. ON SH. B6, FIG. A 'Z' OPT ADDED AT TRANS (T3). ON SH. B7, FIG. B 'ZM' OPT ADDED AT TRANS (T3).  
8-27-89 CL A

ON SH. A1, ADDED ENGR NOTES 59, 60 & 61 IN FIG 1, SH. B1, 2R APP WAS NOT SO DESIG, ZS APP ADDED. IN FIG 1, SH. B4 AT (Q1), (Q2), (Q3) & (Q4) OLD SCR CODE LINED OUT NEW CODE ADDED. IN FIG. A, SH. B6 & FIG. B, SH. B7 AT LOC. 37 & 44 CHG 'CIX3' TO 'X3C'. FIG. C & D, SH. B8 ZG OPTION, 'AAS' LINED OUT AT C1-C12.  
DJ POINT ISSUE 11.1  
PDI CODE J85503C-1 #012  
3-28-89 CL M

MAC JCW RMH 12

ON SH. A1, ADDED ENGR NOTES 62 & 63 ON SH. B1, AT LOC. 11, E APP WAS NOT SO DESIGNATED, D APP ADDED.  
PDI CODE: J85503C-1 #013  
4-4-91 CL AC

MAC JCW RMH 13

MANUFACTURING NOTES CONVENTIONS

- X- SPLICE
  - TERMINAL LUG
  - DIVISION OF GENERAL WIRING VIEWS
  - CONNECTION FURNISHED AS PART OF APPARATUS
  - ⊙ SCREW CONNECTION
  - Δ LEADS NOT INCLUDED IN LOCAL CABLE BUT RUN BY SHOP.
- ALL WIRING TO BE 03 SURFACE WIRING. 22 GAUGE STRANDED KS-22247, L-4 COLORED GREEN UNLESS OTHERWISE SPECIFIED.
  - LC A WIRES IN LOCAL CABLE TO BE 22 GAUGE STRANDED KS-22247, L-4 UNLESS OTHERWISE SPECIFIED.
  - NONRECORD OPTIONAL WIRING.
  - B1 - TERMINAL NEAREST MOUNTING PANEL
  - PT - LEADS FURNISHED WITH COMPONENT.
  - LEADS SHOWN TERMINATED IN COMPONENTS WITHOUT TERMINALS ARE FURNISHED WITH COMPONENTS.
  - P - PAIR
  - P1 - PAIR MADE BY TWISTING 2 SINGLE WIRES RESPECTIVELY TOGETHER NOT LESS THAN ONE TURN PER 1/4 INCH.
  - MATING OF PRINTED WIRING BOARD PLUGS & CONNECTORS SHALL NOT BE MADE UNTIL SHOP WIRING IS COMPLETED AS TRANSIENT VOLTAGES MAY BE DEVELOPED WHICH MAY DAMAGE PWB COMPONENTS.
  - INFORMATION IN BRACKETS [ ] IS FOR RECORD ONLY.
  - LP - WIRES TO BE LOOPED AND NOT CUT WHEN OPTIONAL WIRING OR COMPONENT IS NOT FURNISHED.
  - NO WIRES ON THIS DRAWING ARE TO BE RUN BY THE INSTALLER EXCEPT WIRING ON SHEETS WITH PREFIX D.

NDD 85503K2 3-1-85

IN FIG 1, 845782665 CA ASSY WAS SHOWN AS LC B. THRU OUT DWG CHG'S MADE TO AGREE WITH MANUFACTURED PRODUCT. FIG 2 ADDED.  
5-3-85 CLASS "AD"

IN FIGS A & B, (R4) RES AT (T3) TRNSF BETWEEN TERMS A1 & B1 ADDED. IN FIG 1 ON SH. B5, (C21) & (C22) CAPS ADDED. IN FIG 1 ON SH. B2 CODE OF (CM2) CKT MODULE READ 208A.  
CN 3822 MJ 3-18-86 CLASS A

FIG C WAS PART OF FIG 1, FIG D & SHEET B8 ADDED. IN FIG 1, E OPT WAS NOT SO DESIG OPT ADDED. ON SH. B4 IN FIG 1 RES R5, R6, R7 & R8 ADDED. ON SH. B7 IN FIG B (R4) RES 30,100 OHM READ 2,16,000 OHM IN SERIES.  
CN 3822 SNJ 12-9-86 CLASS AC

ON SH. B4 IN FIG 1 RES (R5) READ (R6). ON SH. B7 IN FIG B, 2 RES (R4) 16,000 OHM (R4) 30,100 OHM IN SERIES READ CN 3822 SNJ 12-9-86 CLASS AC

FIG 1 ADDED. FIG. H4 WAS PART OF FIG 1, FIG. H5 & NOTE 56 ADDED.  
NDD01509NJ-8 5-22-87 CLASS B

IN FIGS C & D ON SHEET B8 AT (C1) TO (C12) 10GA WRG BET (C1) (L2) & (C3); (C4), (C5) & (C6); (C7), (C8) & (C9); (C10), (C11) & (C12) CAPS RMV'D. 10 GA WRG FROM (L1) & (L2) INDRS WERE SHOWN TO (C1), (C4) & (C9), (C12) CAPS RESP, PAINTED TERMS, AND 10GA WRG FROM NON PAINTED TERMS OF (C1), (C4) & (C9), (C12) CAPS WERE SHOWN TO THE HEATSINK OF THE (C2) & (C3) DIODES RESP. THIS CHG PROVIDES WRG FROM EACH OF THE ABOVE CAPS TO THE INDR & DIODE HEATSINK.  
CN 3824 NJ 6-29-87 CLASS A

IN FIG 1 SHEET B2 & FIG A & B SHEETS B6 & B7 C1 WRG WAS NOT SO DESIG L1 WRG ADDED. ON SHEETS B6 & B7 FIGS A & B AT (K1) REL OLD REL CODE LINED OUT, NEW CODE ADDED. FIRST TERM LUGS TERMS L1, L2 & L3 WERE NOT SHOWN & AT TERM 11, 12 & 13 TERM LUGS WERE NOT SHOWN. IN FIG 1 ON SHEET B5, 2C APP WRG ADDED. ON SHEET B4, 3D APP WAS NOT SO DESIG, ZE APP ADDED. AT (LW4) FIRING CNT, 2H WRG & CAP ASSY ADDED. IN FIGS C & D, SHEET B8 2F APP WAS NOT SO DESIG, ZG ADDED & ON SHEET A1 IN NOTE 76 "CHGS PER LDI SD-83102-01 ISS 10, 2A OR 2B" READ "CHGS PER LDI SD-83102-01 ISS 2B"  
NDD85503K19 1-29-89 CLASS A

SH. A1, TITLE BOX, DIST CODE READ "4899". SH. B2, AT FR. GRD TERM, REF 10GA STRANDED READ "R GA STRANDED"  
(CONT'D)

20	ZI	ZJ	ZK	ZL	ZM	ZN	ZO	ZP	ZQ	ZR	ZS	ZT	ZU	ZV	ZW	ZX	ZY	ZZ

10	Y	Z	AA	AB	AC	AD	AE	AF	AG	AH	AI	AJ	AK	AL	AM	AN	AO	AP	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	BC	BD	BE	BF	BG	BH	BI	BJ	BK	BL	BM	BN	BO	BP	BQ	BR	BS	BT	BU	BV	BW	BX	BY	BZ	CA	CB	CC	CD	CE	CF	CG	CH	CI	CJ	CK	CL	CM	CN	CO	CP	CQ	CR	CS	CT	CU	CV	CW	CX	CY	CZ	DA	DB	DC	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY	DD	DE	DF	DG	DH	DI	DJ	DK	DL	DM	DN	DO	DP	DQ	DR	DS	DT	DU	DV	DW	DX	DY
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SCHEMATIC FIGURES AND OPTIONS AGREE WITH SIMILARLY DESIGNATED WIRING DIAGRAM FIGURES AND OPTIONS EXCEPT AS SHOWN ABOVE. WE ASSIGNED FIGURES AND OPTIONS ARE PREFIXED WITH LETTER H AND HAVE NO SCHEMATIC EQUIV UNLESS SHOWN ABOVE. ITEMS IN ( ) PARENTHESES ARE FOR INFORMATION ONLY AND ARE NOT TO BE RECORDED ON JOB WIRING LIST DRAWINGS.

TABLE C - SD T DWG CROSS REFERENCE TABLE

LINE	FIG	OPT	FIG WRG	APP	REMARKS	FIG	OPT	COMMERCIAL AC INPUT
1	SD-83102-01		T-83102-30			1	A	208V AC
2						1	B	480V AC

12	1	ZR OR ZS APP	ZR	ZS	ZR
		2F OR 2G APP	2F	2G	2F
		A OR B APP	A	B	A
		2A OR 2B APP	2A	2B	2A
		2H WRG 3 APP	NONE	2H	2A
		2D OR 2E APP	2D	2E	2D
		2G WRG 3 APP	NONE	2C	
		3 OR H 2I OR 2J WRG	2I	2J	2I
		FIG 3	NONE	3	
		FIG HA OR HB	HA	HA, HB	

CHANGE ON ISSUE	SPECIFY DO NOT SPECIFY	THIS OPTION WAS FURNISHED	SEE NOTE	STD	A & M	NO

TABLE B - RECORD OF FIGURES COMPONENTS AND WIRING CHANGE

AT&T - PROPRIETARY  
USE PURSUANT TO COMPANY INSTRUCTIONS

POWER SYSTEMS RECTIFIER  
208/240 OR 480 VOLT 60HZ INPUT  
-40V, 400 AMPERE OUTPUT

STANDARD  
11 SHEETS  
DIST CODE 8M10

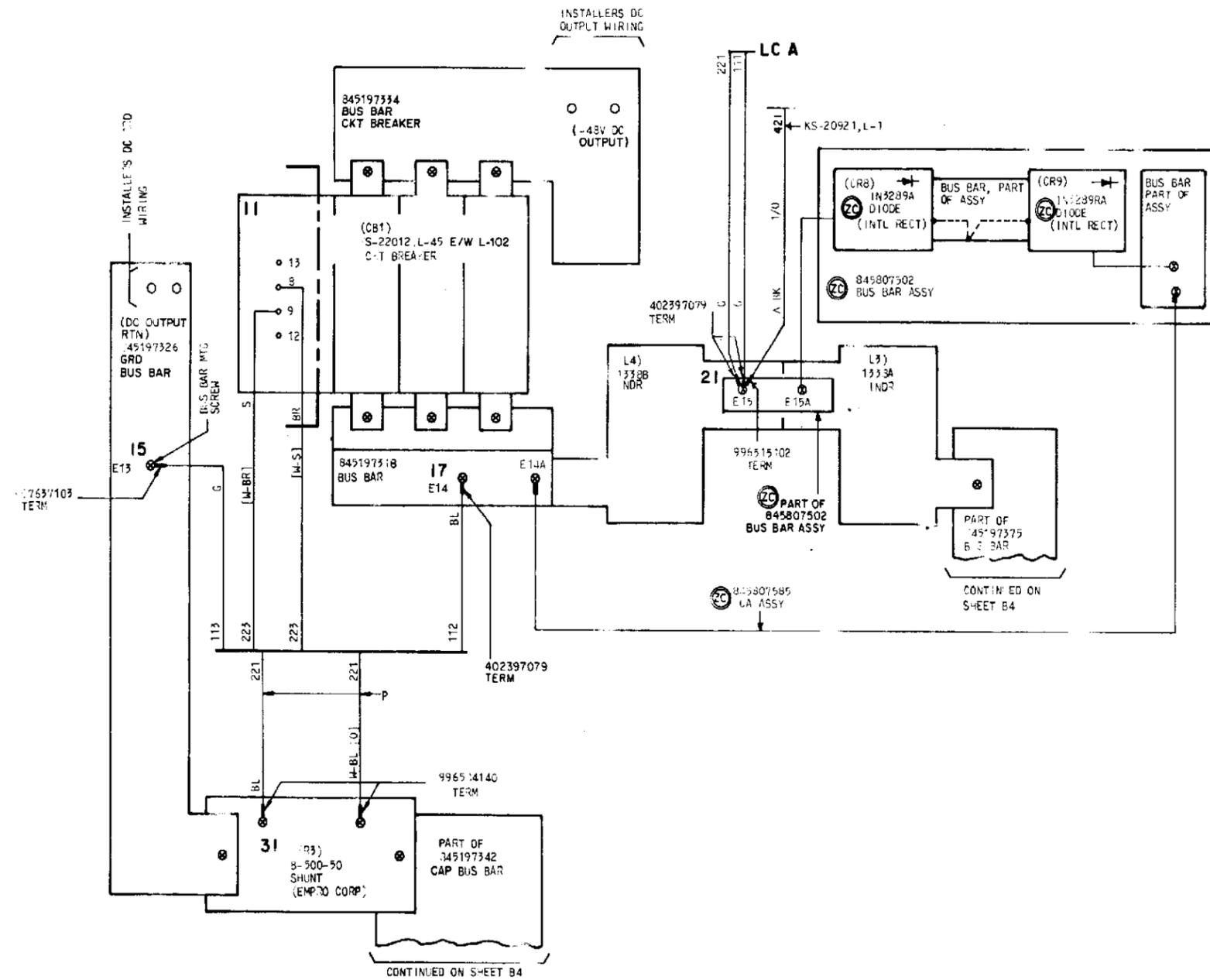
DWG NO. 13  
ISSUE 13

AT&T NJ T-83102-30 SHEET A1





FIG 1 CONF D,



SEE PROPRIETARY NOTICE ON SHEET A1

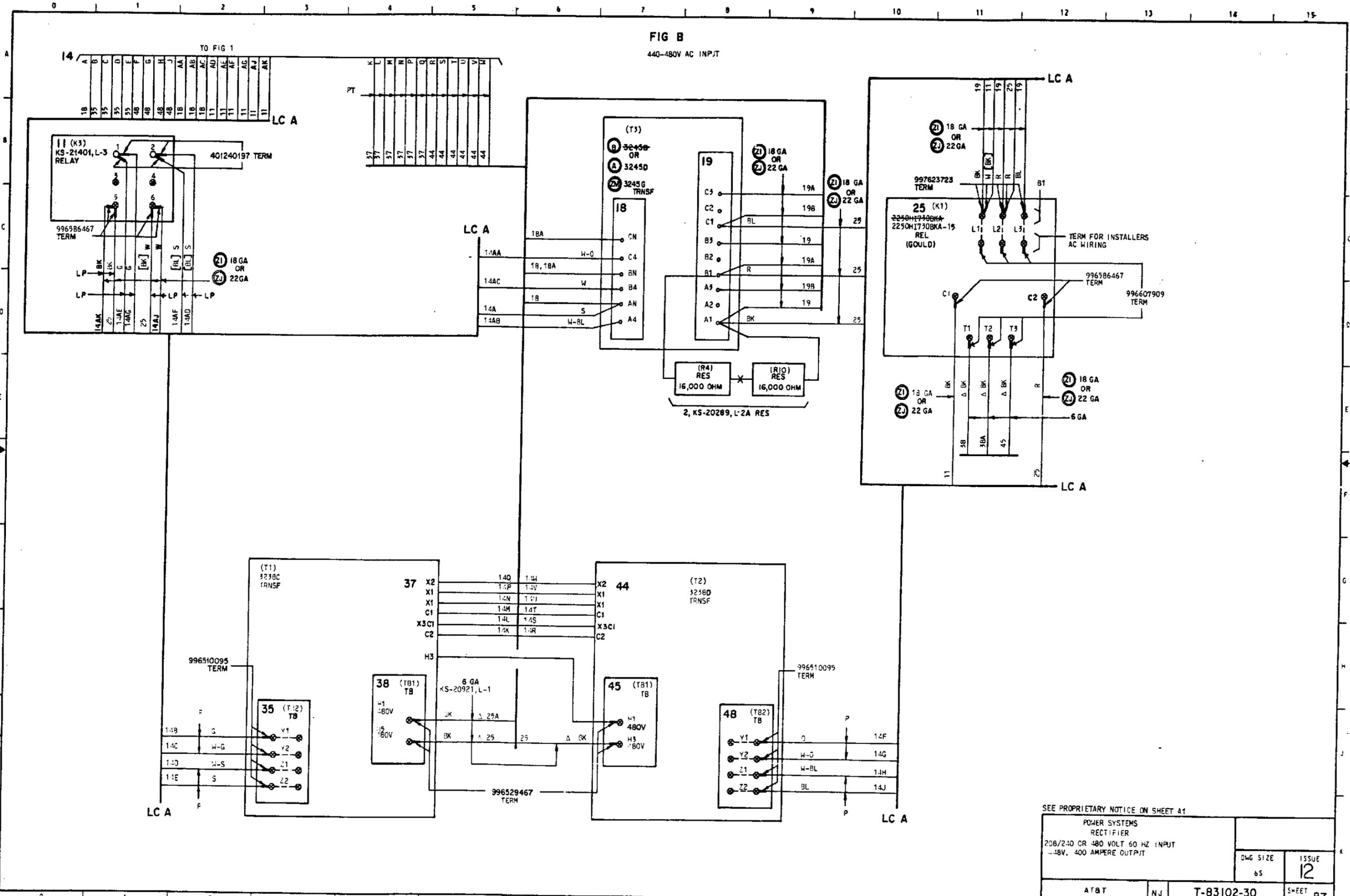
POWER SYSTEMS RECTIFIER 208/240 OR 480 VOLT 60 HZ INPUT -48V, 400 AMPERE OUTPUT		DWG SIZE 65	ISSUE 8
AT&T TECHNOLOGIES, INC. NJ	T-83102-30	SHEET <b>B3</b>	



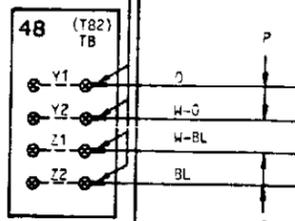
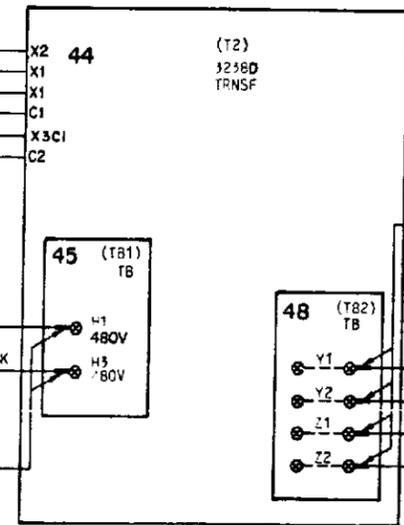
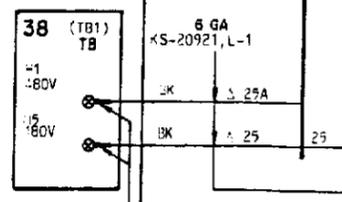
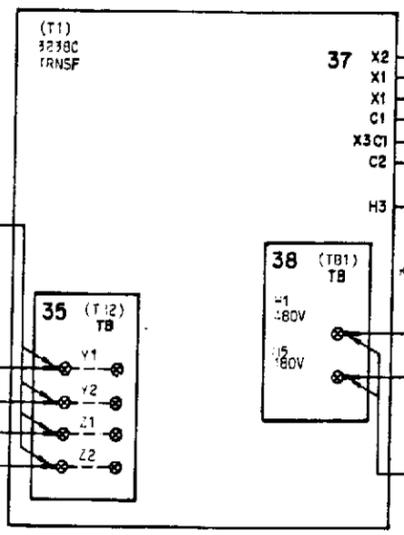
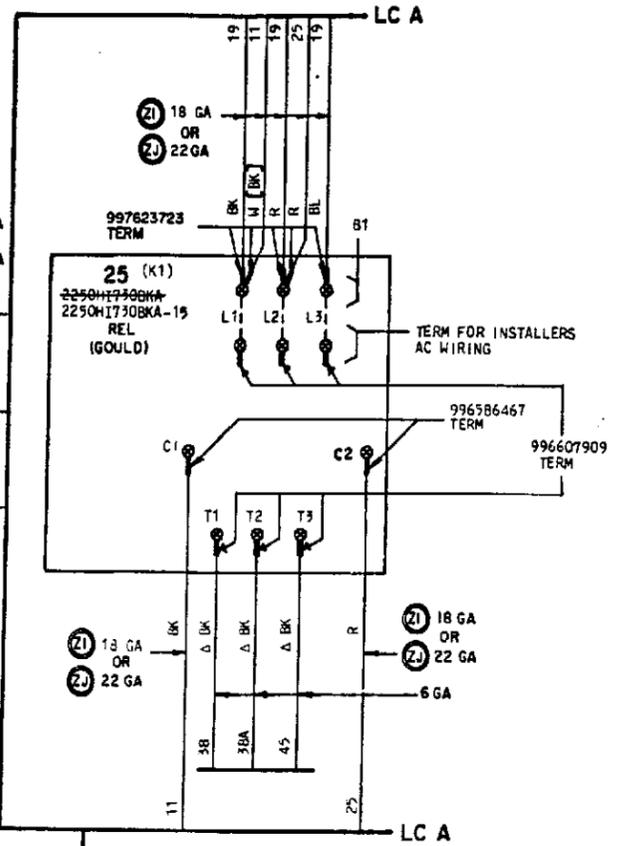
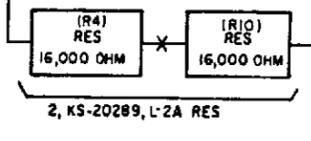
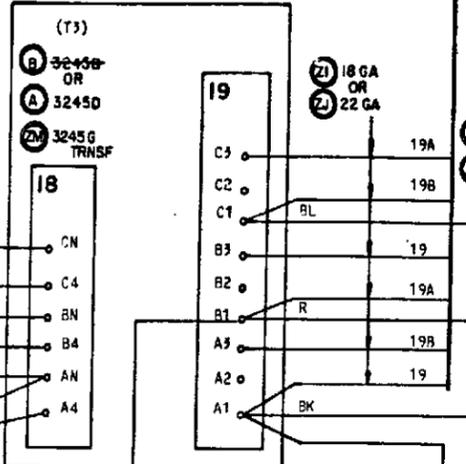
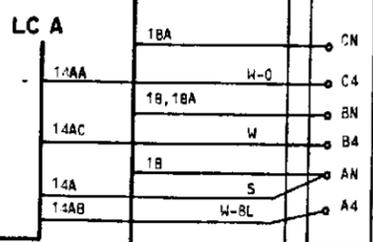
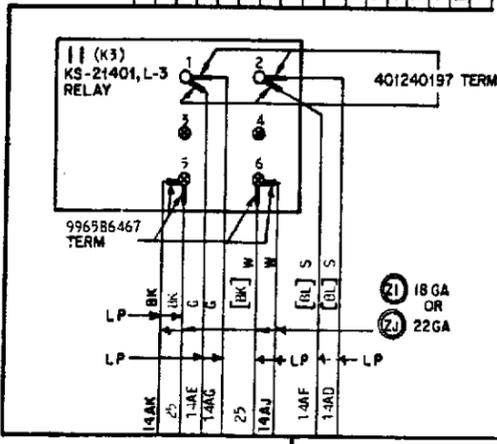
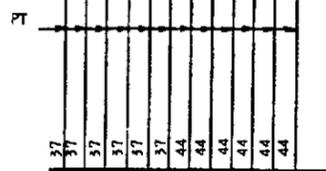
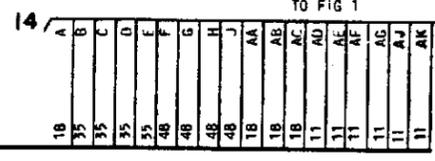




FIG B  
440-480V AC INPJT



TO FIG 1



T-83102-30  
SHEET  
B7

SEE PROPRIETARY NOTICE ON SHEET 41

POWER SYSTEMS RECTIFIER		DWG SIZE	ISSUE
208/240 OR 480 VOLT 60 HZ INPUT -48V, 400 AMPERE OUTPUT		65	12
AT&T	NJ	T-83102-30	SHEET B7

FIG C  
208-240V AC INPUT  
TO FIG 1

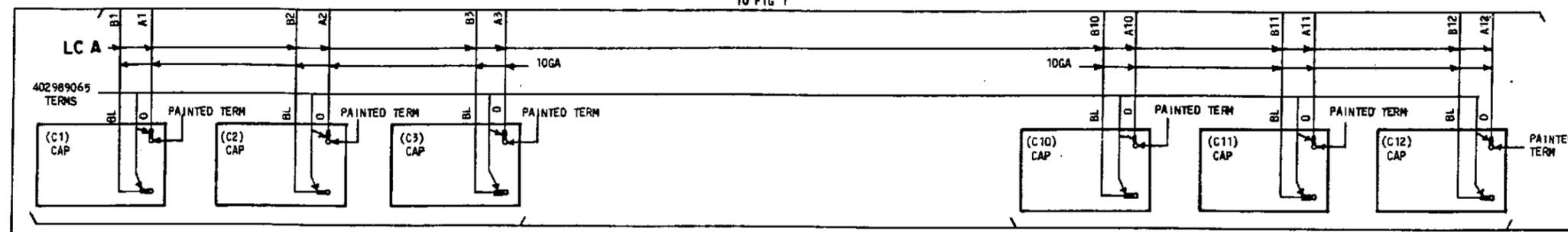
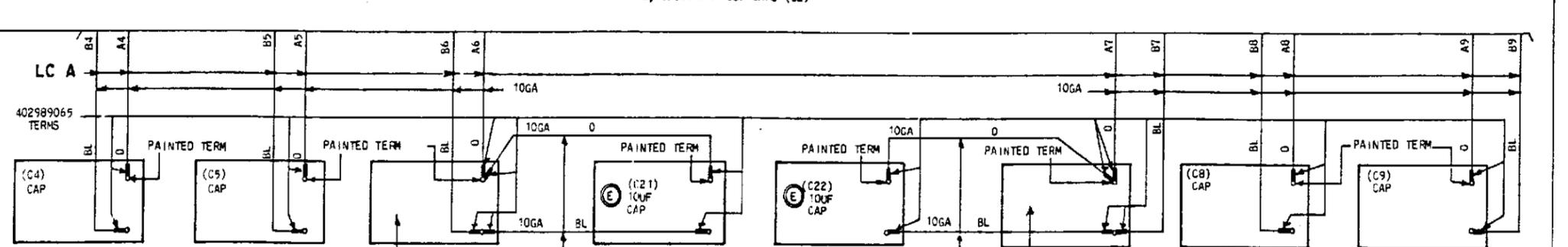
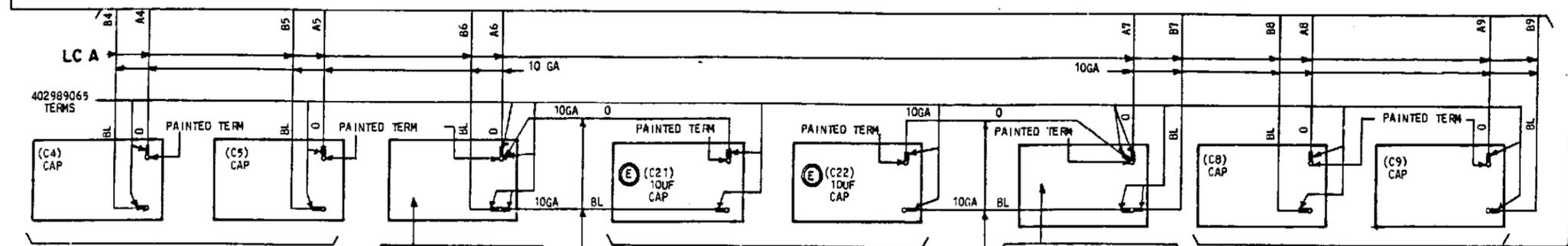
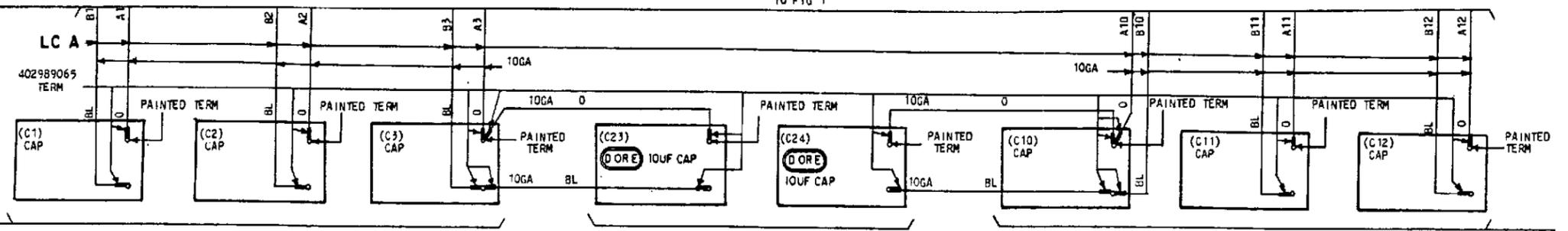


FIG D  
440-480V AC INPUT  
TO FIG 1



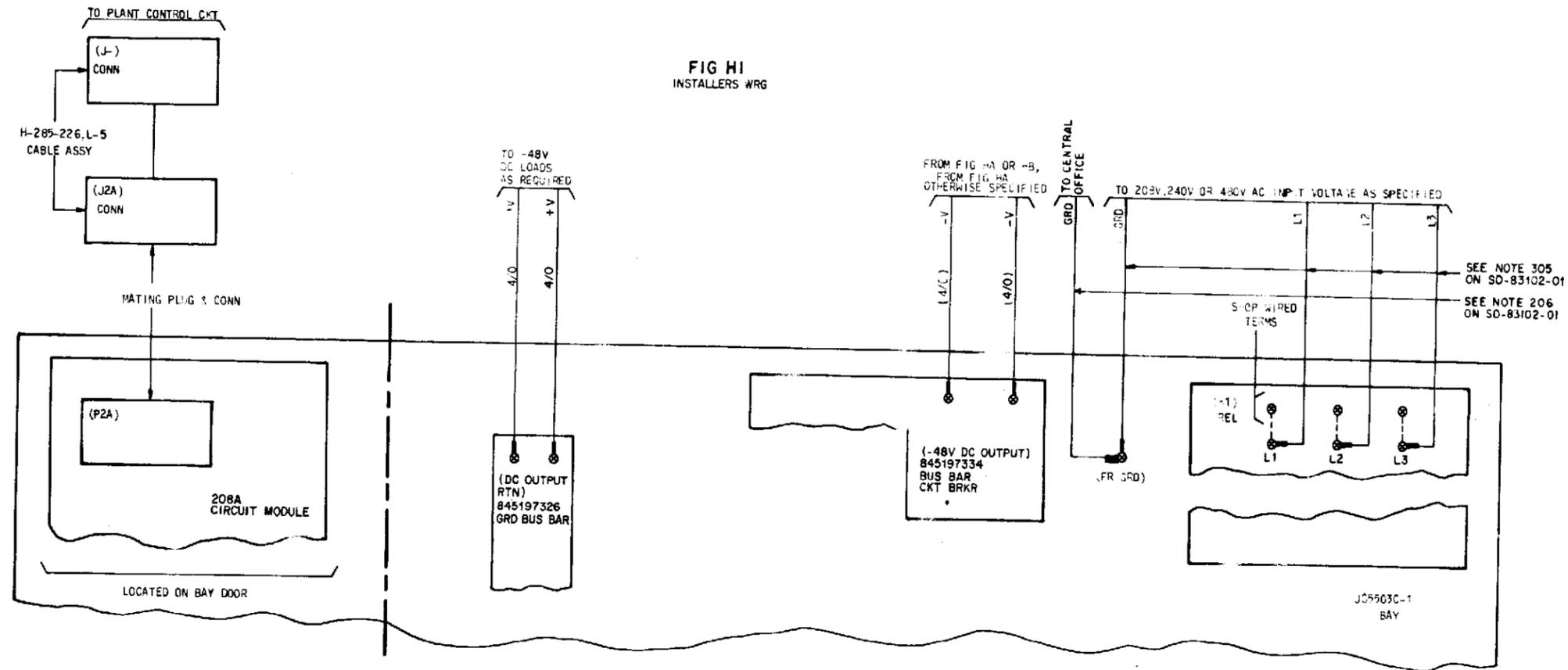
- (ZF) 2, 97F5349FA 40UF OR 2, 97F5349AAG 40UF CAPS (GE)
- (ZG) 2, 97F5349AAG 40UF CAPS (GE)
- (E,ZF) 97F5349FA 40UF
- (C6) (ZG) 97F5349AAG 40UF OR (C6) (D) 97F5336FA 10UF CAP (GE)
- (E) 2, 97F5336FA 10UF CAPS (GE)
- (E,ZF) 97F5349FA 40UF
- (C7) (ZG) 97F5349AAG 40UF OR (C7) (D) 97F5336FA 10UF CAP (GE)
- (ZF) 8, 97F5349FA 40UF OR (ZG) 8, 97F5349AAG 40UF CAPS (GE)

- (ZF) 5, 97F5349FA 40UF OR (ZG) 5, 97F5349AAG 40UF CAPS (GE)
- (E,ZF) 97F5349FA 40UF
- (C6) (ZG) 97F5349AAG 40UF OR (C6) (D) 97F5336FA 10UF CAP (GE)
- (E) 2, 97F5336FA 10UF CAPS (GE)
- (E,ZF) 97F5349FA 40UF
- (C7) (ZG) 97F5349AAG 40UF OR (C7) (D) 97F5336FA 10UF CAP (GE)
- (ZF) 5, 97F5349FA 40UF OR (ZG) 5, 97F5349AAG 40UF CAPS (GE)

T-83102-30  
SHEET 88

AT&T TECHNOLOGIES, INC-PROPRIETARY  
USE PURSUANT TO COMPANY INSTRUCTIONS

POWER SYSTEMS RECTIFIER 208/240 OR 480 VOLT 60HZ INPUT -48V, 400 AMPERE OUTPUT		DWG SIZE 65	ISSUE 12
AT&T	T-83102-30	SHEET 88	



SEE PROPRIETARY NOTICE ON SHEET A1

POWER SYSTEMS RECTIFIER 208/240 OR 480 VOLT 60HZ INPUT -48V, 400 AMPERE OUTPUT		DWG SIZE 65	ISSUE 10
AT&T TECHNOLOGIES, INC.	NJ	T-83102-30	SHEET D1

FIG HA

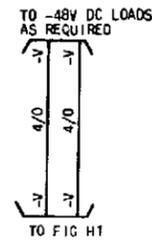
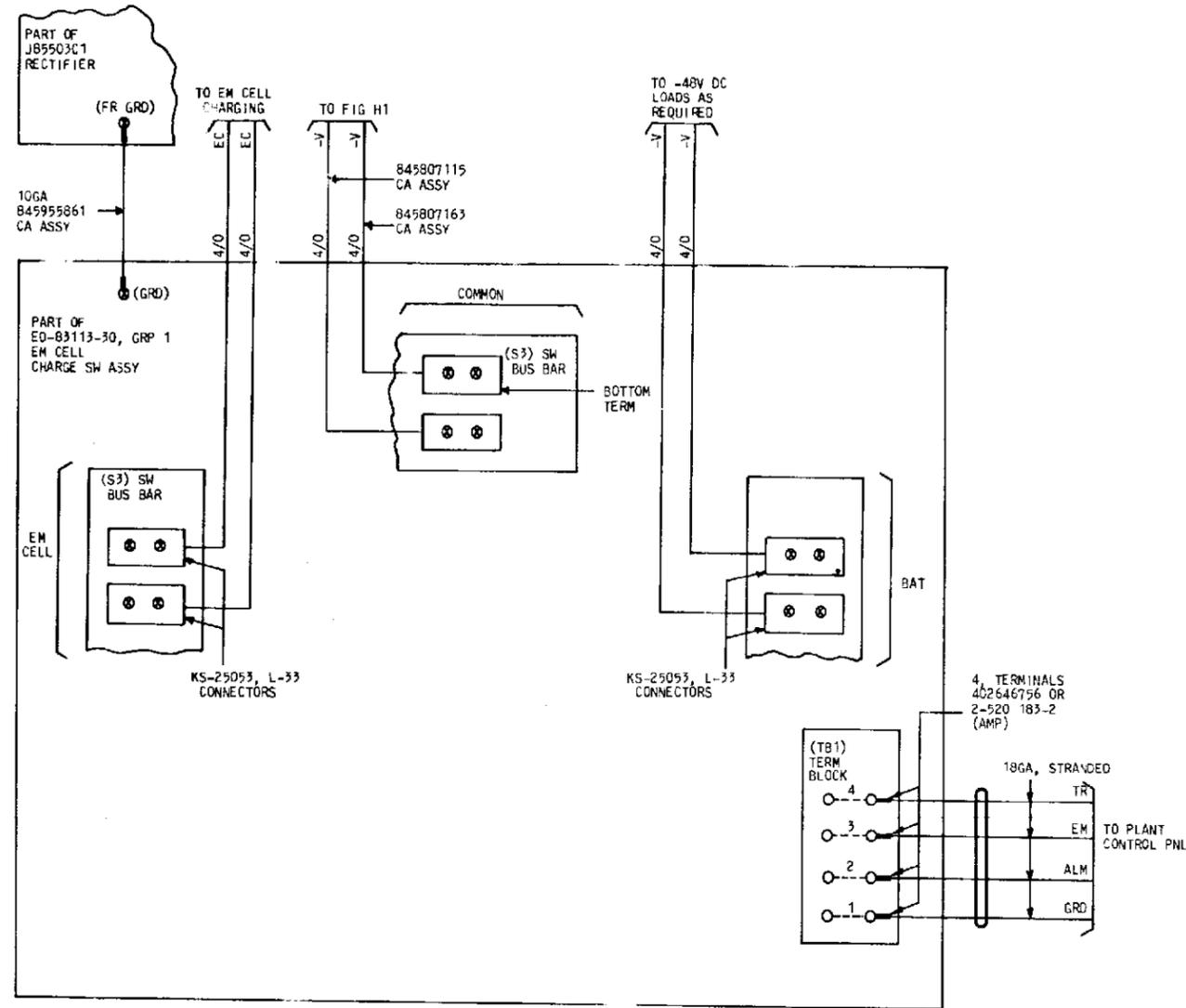


FIG HB



AT&T TECHNOLOGIES, INC-PROPRIETARY  
USE PURSUANT TO COMPANY INSTRUCTIONS

POWER SYSTEMS RECTIFIER 208/240 OR 480 VOLT 60HZ INPUT -48V, 400 AMPERE OUTPUT	DWG SIZE	ISSUE
	65	6
AT&T TECHNOLOGIES, INC.	T-83102-30	SHEET D2