REVISIONS			
REVISION LEVEL	DESCRIPTION	REV. BY REV. DATE	APPROVED BY APPROVED DATE
4	SEE ECN 12737	KEL 12/15/99	MCM 12/20/99

ENGINEERING NOTES:

51. PANEL MOUNTS IN 23" RACKS.

52. THE PANEL WILL ACCOMMODATE A MAXIMUM OF TWENTY 10-70 AMP CIRCUIT BREAKERS. THE PANEL CURRENT SHOULD NOT EXCEED 550 AMPS TOTAL. IN PANELS WITH AMMETER SHUNTS, THE TOTAL PANEL CURRENT MUST NOT EXCEED THE SHUNT RATING. CIRCUIT BREAKERS HAVE CENTER TRIPPED HANDLE AND RED INDICATOR FLAG.

53. ACCESS TO INTERIOR VIA A HINGED FRONT PANEL. CIRCUIT BREAKERS AND ALL WIRING ARE INSTALLED FROM THE FRONT. BOTTOM AND SIDES ARE CLOSED, CABLES ENTER THROUGH REAR ENTRANCE HOLES.

54. A "CIRCUIT BREAKER TRIPPED" ALARM IS PROVIDED FOR BREAKERS THAT HAVE A LOAD CONNECTED. BREAKERS WITH NO LOAD CONNECTED WILL NOT GIVE AN ALARM IN THE TRIPPED OR OFF POSITION. THE ALARM CONSISTS OF A RED LED, ONE SET OF FORM "C" RELAY CONTACTS, AND A SIGNAL FOR AN ALARM PANEL. RELAY CONTACTS ARE RATED 2 AMPS AT 28 VDC, 1 AMP AT 60 VDC AND 1/2 AMP AT 120 VDC RESISTIVE.

55. AMMETER SHUNTS, IF EQUIPPED, ARE NORMALLY RATED 400A. OTHER VALUES MAY BE SPECIFIED.

56. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIRECT CONNECTION TO RATELCO VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLTING LUGGED CABLES. INPUT LUGS ARE NOT PROVIDED, BUT MAY BE ORDERED SEPARATELY FROM ED 991-0002-00.

57. IT IS POSSIBLE TO INSTALL OR REMOVE A BREAKER FROM THE PANEL WHILE IT IS ENERGIZED, USING THE FOLLOWING INSTRUCTIONS:

CAUTION

CIRCUIT BREAKERS CLIP ONTO A COPPER BUS BAR. INJURY TO PERSONNEL AND DAMAGE TO EQUIPMENT CAN RESULT IF IMPROPER TECHNIQUES ARE USED TO REMOVE OR INSTALL BREAKERS. FOLLOW THE INSTRUCTIONS BELOW CAREFULLY.

A. TO INSTALL A NEW BREAKER:

1) REMOVE A COVER PLATE FROM THE FRONT PANEL.
2) TURN OFF THE NEW BREAKER AND SNAP IT ONTO THE BUS BAR, MAKING THE LOWER CONNECTION FIRST AND THEN THE UPPER CONNECTION. BE SURE BREAKER IS SEATED PROPERLY.
3) ROUTE THE LOAD CABLE THROUGH A REAR PANEL HOLE AND CONNECT TO THE WIRE LUG PROVIDED IN THE BREAKER BODY ALONG WITH THE FLAT BLADED END OF THE ORANGE ALARM WIRE. CONNECT THE PUSH-ON END OF THE WIRE TO THE ALARM BOARD, USING ANY AVAILABLE CONNECTION.
4) SECURELY TIE THE CABLE TO THE CLAMPING BRACKET LOCATED BELOW BREAKERS.

B. TO REMOVE AN EXISTING BREAKER:

1) TURN OFF THE BREAKER AND REMOVE THE LOAD CABLE AND ORANGE ALARM WIRE.
2) USING A SCREWDRIVER IN THE CIRCUIT BREAKER CASING SLOT DIRECTLY ABOVE THE BREAKER HANDLE, PULL THE TOP CLIP OF THE BREAKER FREE; THEN GRIP THE BREAKER BODY AND PULL THE LOWER CLIP FREE.

58. CIRCUIT BREAKERS ARE NOT SUPPLIED, BUT MAY BE ORDERED SEPARATELY. EACH KIT CONTAINS ONE CIRCUIT BREAKER AND AN ORANGE ALARM WIRE. ORDER PER ED 991-0009-00.

59. C&D'S STANDARD PAINT COLOR IS ANSI 61 GRAY.

SHEET INDEX NOTE:

THE ISSUE OF SHEET 1 REFLECTS THE LATEST ISSUE OF THE DRAWING SET. WHEN THE DRAWING SET IS REVISED, ONLY THE ISSUE NUMBERS OF MODIFIED SHEETS ARE CHANGED. THE ISSUE NUMBERS OF UNMODIFIED SHEETS ARE NOT CHANGED.

SHEET INDEX

SH NO	1	2	3				
ISSUE	4	1	2				

MANUFACTURING NOTES:

101. APPLY CRAMOLIN 81Rh TO ALL CIRCUIT BREAKER CONNECTIONS ALONG THE TOP OF THE BUS BAR.

102. ANTI-OXIDATION COATING WILL BE APPLIED BETWEEN ALL LAYERS OF LAMINATED COPPER BUS STRUCTURE. A COMPOUND SUCH AS CRAMOLIN 81Rh WILL BE APPLIED TO ALL JOINTED FLAT SURFACES PER MANUFACTURER'S INSTRUCTIONS.

103. ON PANELS THAT INCLUDE THE OPTIONAL METERING SHUNT, ENSURE THAT THE SENSING SCREWS ARE ACCESSIBLE THROUGH THE HOLES PROVIDED IN THE ENCLOSURE SIDE.

DC VOLTAGE	CURRENT SHUNT (NOTE 55)	MODEL NUMBER	CIRCUIT BOARD
-12V		111B-2906-01	301-2767-11
-12V	400A	111B-2906-05	301-2767-11
+12V		111B-2906-11	301-2767-31
+12V	400A	111B-2906-13	301-2767-31
-24V		111B-2906-02	301-2767-12
-24V	400A	111B-2906-06	301-2767-12
+24V		111B-2906-12	301-2767-32
+24V	400A	111B-2906-14	301-2767-32
-48V		111B-2906-04	301-2767-14
-48V	400A	111B-2906-08	301-2767-14

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES
± TOLERANCES ON:

FRACTIONS	DECIMALS XX	DECIMALS XXX	ANGLES
±1/32	0.020	0.010	±1°

MATERIAL:

BLANK SIZE:

FINISH:

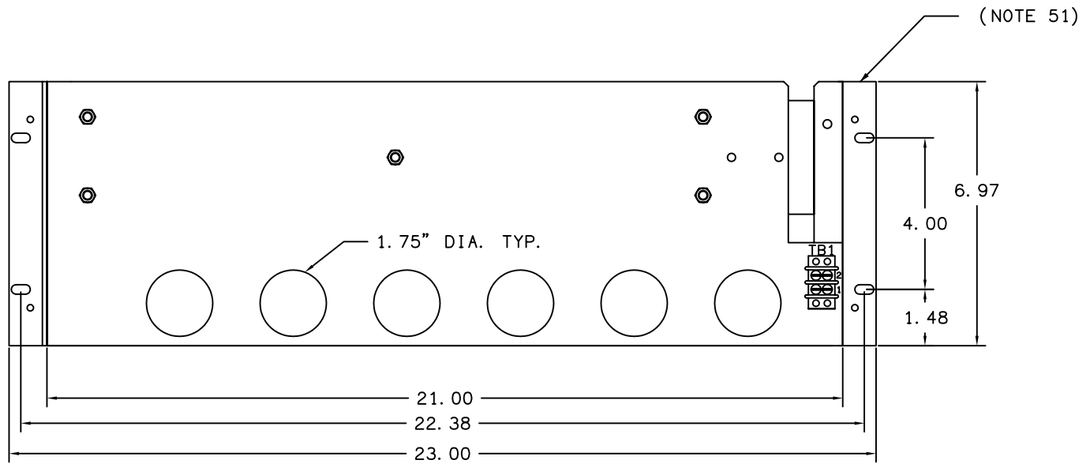
DISTRIBUTION CODE: 9R

APPROVALS	DATE
DRAWN SAN	06/30/87
CHECKED BW	06/30/87
APPROVED	
APPROVED	

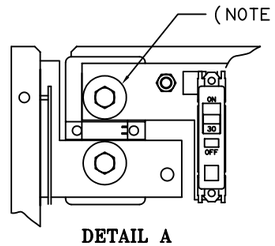
C&D TECHNOLOGIES, INC.
Power Solutions

CIRCUIT BREAKER PANEL 1-20 Q01 BREAKERS 550 AMP CAPACITY

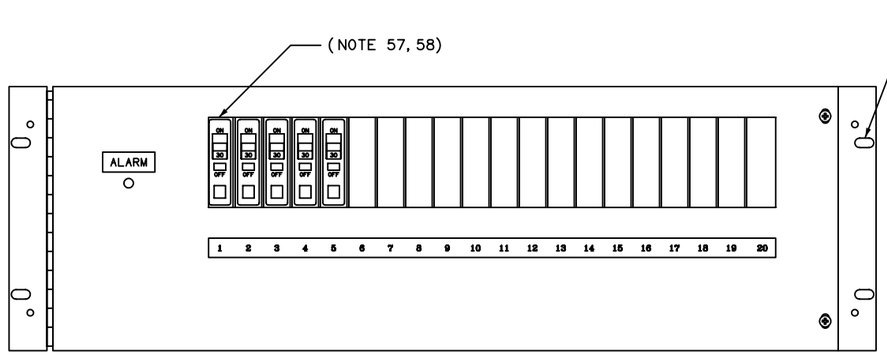
SIZE	RATING	DOC TYPE / NUMBER	REVISION
B	STANDARD	PN 111B-2906-	4
SCALE: NONE		SHEET: 1 OF 3	FILE NAME: PN111B-2906_SHT_1_ISS_4



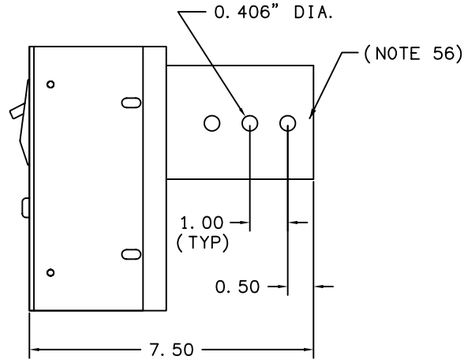
REAR VIEW



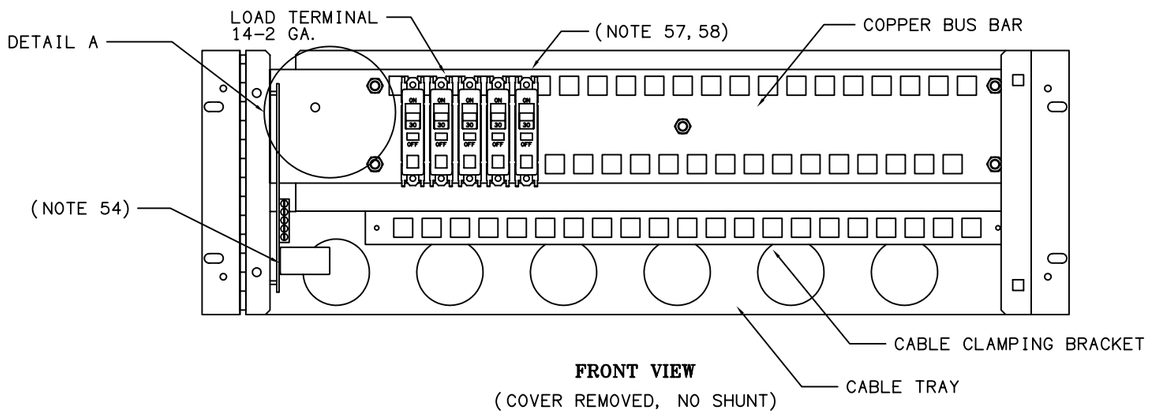
DETAIL A
(WITH SHUNT)



FRONT VIEW
(COVER CLOSED)



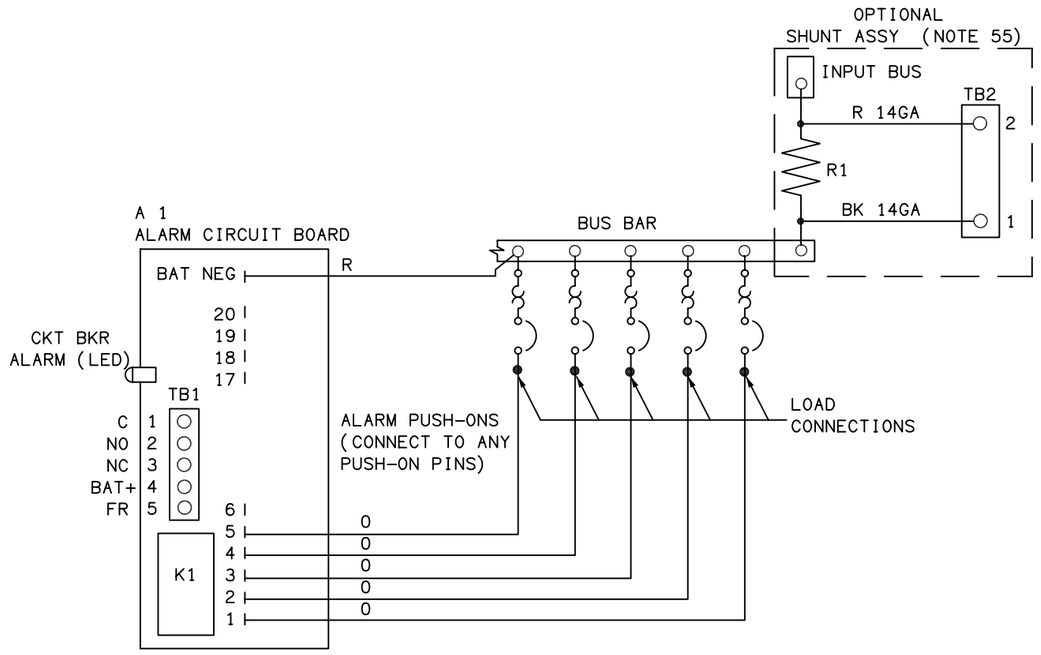
RIGHT SIDE VIEW



FRONT VIEW
(COVER REMOVED, NO SHUNT)

SIZE	DOC TYPE / NUMBER	ISSUE
B	PN 111B-2906	1

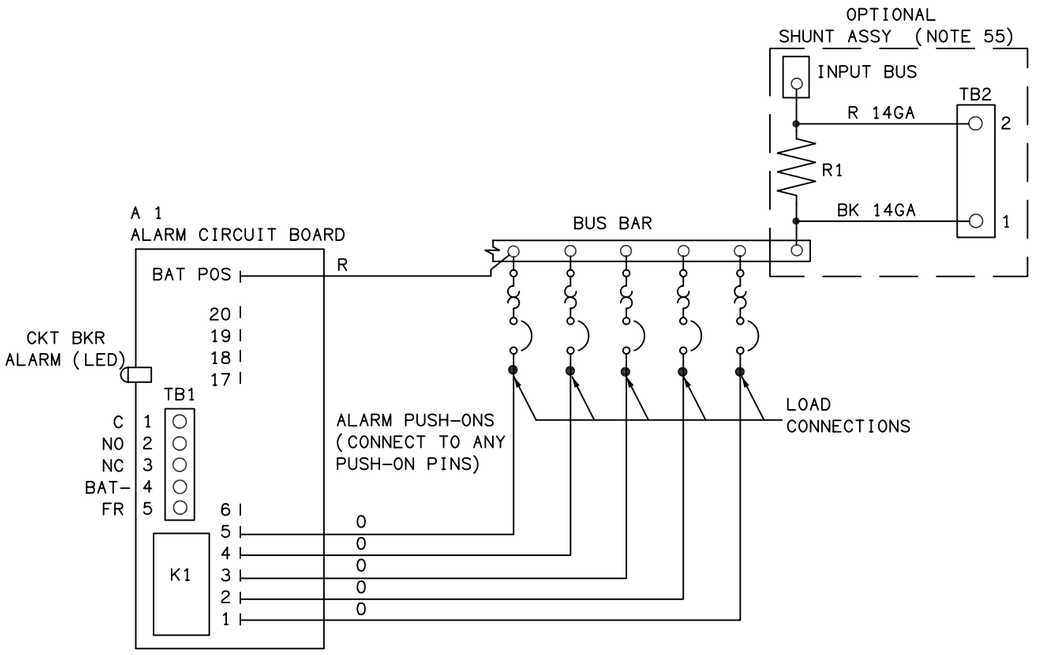
SCALE:	SHEET:	FILE NAME:
N/A	2 OF 3	PN111B-2906_SHT_2_ISS_1



SCHEMATIC DIAGRAM

POSITIVE GROUND

(111B-2906-01, -02, -04, -05, -06 OR -08)



SCHEMATIC DIAGRAM

NEGATIVE GROUND

(111B-2906-11, -12, -13 OR -14)

SIZE	DOC TYPE / NUMBER	ISSUE
B	PN 111B-2906	2

SCALE:	SHEET:	FILE NAME:
N/A	3 OF 3	PN111B-2906_SHT_3_ISS_2