

**ENGINEERING NOTES:**

- 51. SELECT FUSE PANEL FROM TABLE A.
- 52. EACH DEADFRONT FUSEHOLDER REQUIRES ONE MAIN AND ONE ALARM FUSE. MAIN FUSES ARE TYPE TPL, 61 TO 600 AMPS. THE RECOMMENDED TYPE 70 ALARM FUSE IS 0.5 AMPS. FUSES ARE NOT INCLUDED BUT MAY BE ORDERED SEPARATELY PER EQUIPMENT DRAWING ED991-0009-00.
- 53. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIRECT CONNECTION TO VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLTING LUGGED CABLES. INPUT LUGS ARE NOT PROVIDED BUT MAY BE ORDERED SEPARATELY.
- 54. THE OUTPUT COPPER BUS BAR IS DESIGNED FOR BOTH, BELL STANDARD LUGS, 1" CENTER TO CENTER SPACING WITH 3/8" HARDWARE AND NEMA STANDARD LUGS, 1-3/4" CENTER TO CENTER SPACING WITH 1/2" HARDWARE.
- 55. A FUSE ALARM SIGNAL CAN BE EXTENDED TO A SEPARATE ALARM SYSTEM. CONNECT THE ALARM LEAD TO THE "FA-OUT" TERMINAL ON XA1 IN POSITIVE GROUND SYSTEMS OR TO THE "FA+OUT" TERMINAL IN NEGATIVE SYSTEMS. FUSE ALARM SIGNALS CONNECT "BAT" TO THE ALARM CONNECTION WHEN A FUSE CLEARS. A FUSE ALARM ASSEMBLY EQUIPPED WITH AN ALARM RELAY IS AVAILABLE. ORDER PER EQUIPMENT DRAWING ED991-0009-00.
- 56. AMMETER SHUNTS ARE NORMALLY 600 AMPS 50mV; HOWEVER, OTHER CURRENT RATINGS MAY BE SPECIFIED. PANEL CURRENT MUST NOT EXCEED 600 AMPS.
- 57. STANDARD PAINT COLOR IS ANSI 61 GRAY.
- 58. NON FA VERSIONS DO NOT INCLUDE A1.
- 59. NON SHUNTED VERSIONS DO NOT INCLUDE R1.
- 60. BUBBLE REFERENCE DESIGNATORS REFER TO CALLOUT TABLE LINE NUMBER.
- 62. FUSE PANELS ARE DESIGNED FOR MOUNTING IN A 19" RACK. FOR MOUNTING MOUNTING IN A 23" RACK, ORDER 2 EA, 208-4070-02 ADAPTER BRACKETS.

**MANUFACTURING NOTES:**

- 101. 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 CONDUCTIVE SURFACES PER THE MANUFACTURER'S INSTRUCTIONS.
- 103. MOUNT WIRE LUG BETWEEN BUS BAR AND LARGE MOUNTING WASHER.
- 104. REPLACE BOLTS SUPPLIED WITH SHUNT WITH P/N 210-8128-00. USE WASHERS SUPPLIED WITH SHUNT.
- 105. ALL WIRES ARE 20 GA UNLESS OTHERWISE NOTED.
- 106. SECURE ALL BUSSES AT A 45° ANGLE, AS SHOWN.
- 107. INSTALL DUMMY FUSE, P/N 276-0001-00, IN XF2.


TABLE A				
PART NUMBER	VOLTAGE	SHUNT	FUSE ALARM	RATING
111B-3068-00	±12VDC			MD
111B-3068-01	+24, -48VDC		YES	STD
111B-3068-10	±12VDC	600A		MD
111B-3068-11	+24, -48VDC	600A	YES	STD

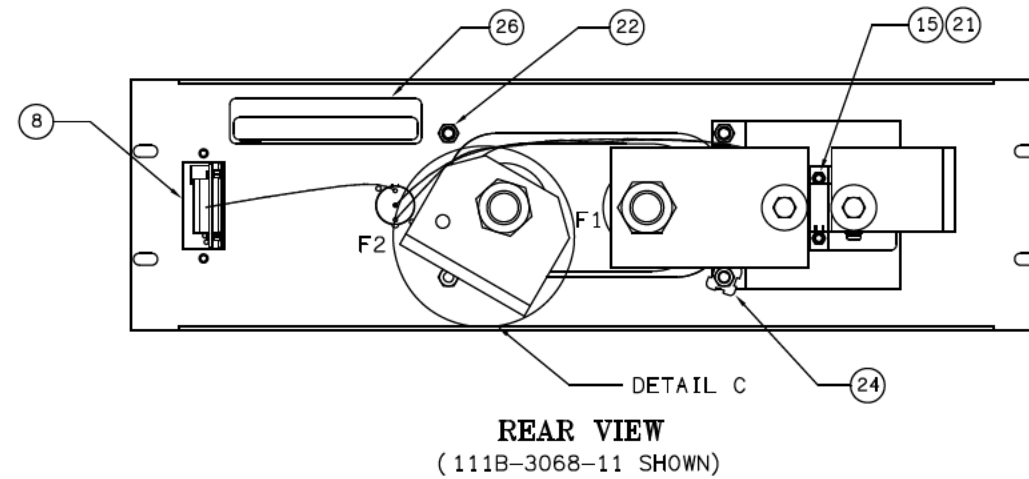
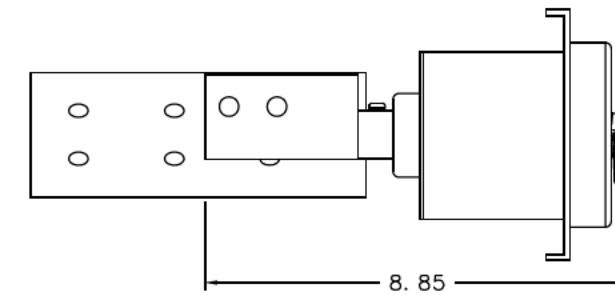
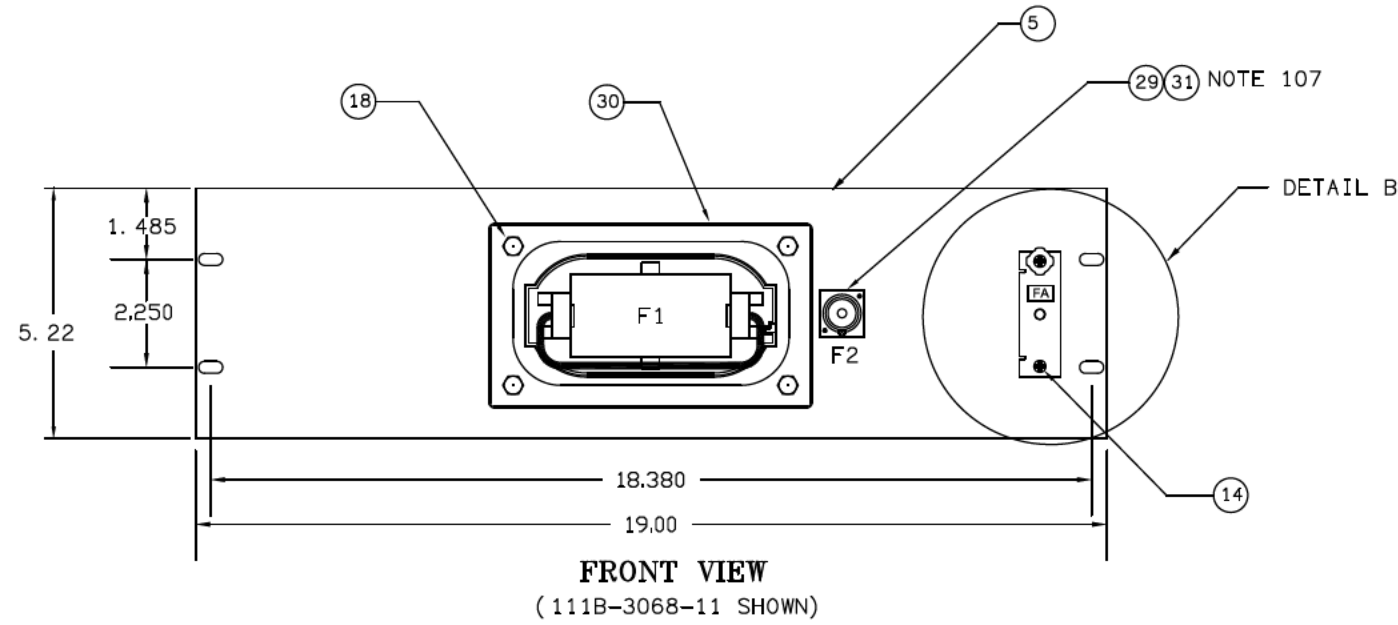
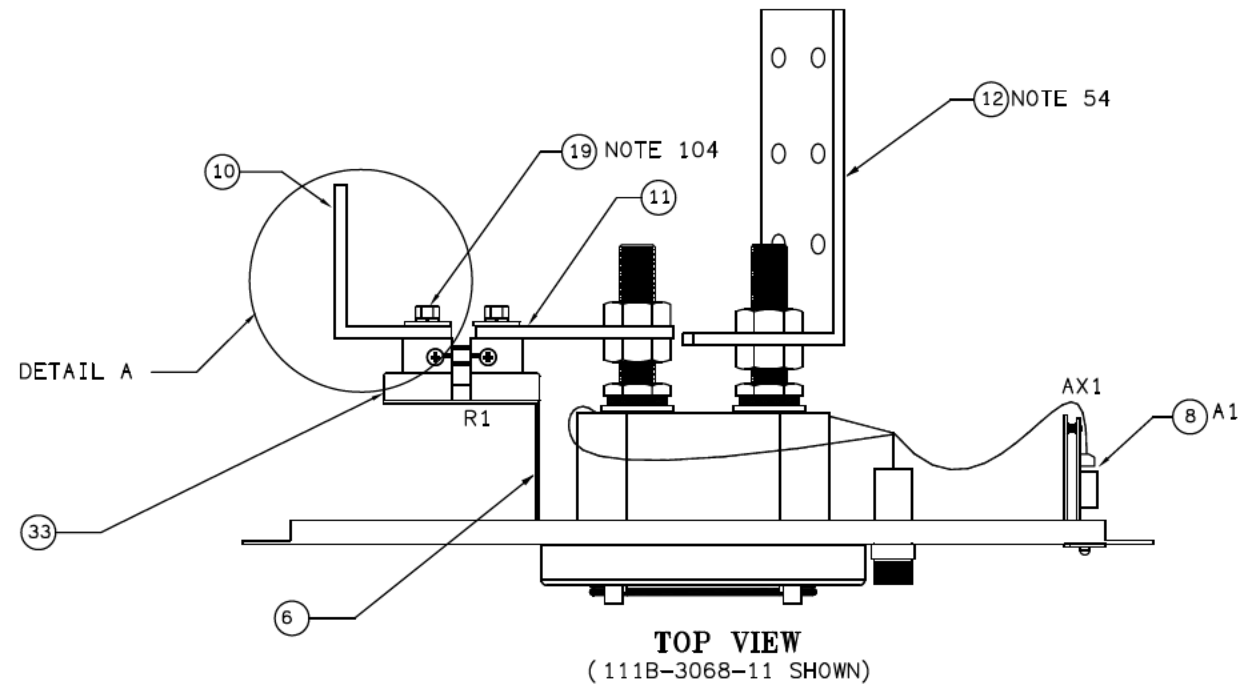
**SHEET INDEX NOTE:**

THE ISSUE OF SHEET # 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**

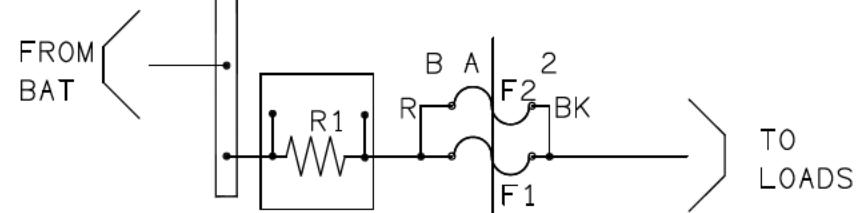
SHEET NUMBER	ISSUE NUMBER							
	1	2	3	4	5	6	7	8
S1	1	2	3	4	5	6		
S2		1	2	2	3	4		
S3		1	2	3	4	5		
S4		1	2	2	3	4		

ISSUES			
ISSUE #	DESCRIPTION	ISS. BY ISS. DATE	APP. BY APP. DATE
5	SEE ECN AD0121	GH 02-19-04	DMB 03-04-04
6	SEE ECN 20063. UPDATED FORMAT LOGO FROM: C&D TO: UNIPOWER	KEL 02/02/15	DBW 2/6/15
UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES ± TOLERANCES ON:		APPROVALS	DATE
HOLES	+0.004 -0.002	DRAWN PKD	11-17-86
FRACTIONS	±1/32	CHECKED BW	02-26-87
DECIMALS (xx)	±0.020	APPROVED JW	11-07-95
DECIMALS (xxx)	±0.010	APPROVED	
ANGLES	±1/2°		
SQUARE CORNERS AND ANGLES ARE 90° UNLESS OTHERWISE SPECIFIED.			
WORKMANSHIP: PER SPEC ENG032			
MATERIAL:			
FINISH:			
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 <b>UNIPOWER</b> Powering Technology			
FUSE PANEL 1 x 61-600 AMP TPL 5.25 x 19"			
SIZE <b>B</b>	DOC TYPE / NUMBER PN 111B-3068	ISSUE 6	
SCALE: NONE	SHEET: 1 OF 4	FILE NAME: PN111B-3068_SHT_1_ISS_6	



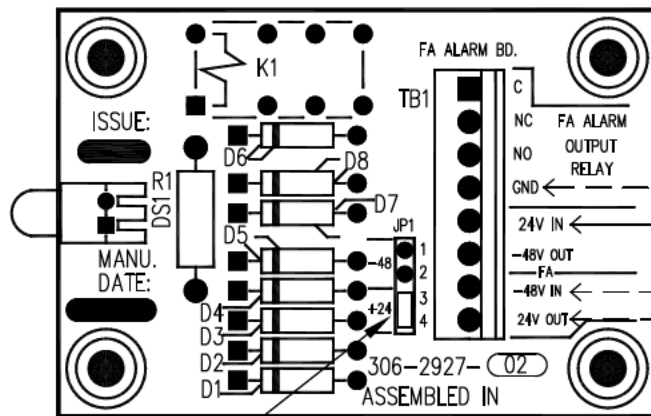
<b>PROPRIETARY INFORMATION</b> NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.		
SIZE <b>B</b>	DOC TYPE / NUMBER PN 111B-3068	ISSUE 4
SCALE: NONE	SHEET: 2 OF 4	FILE NAME: PN111B-3068_SHT_2_ISS_4

INPUT BUS BAR



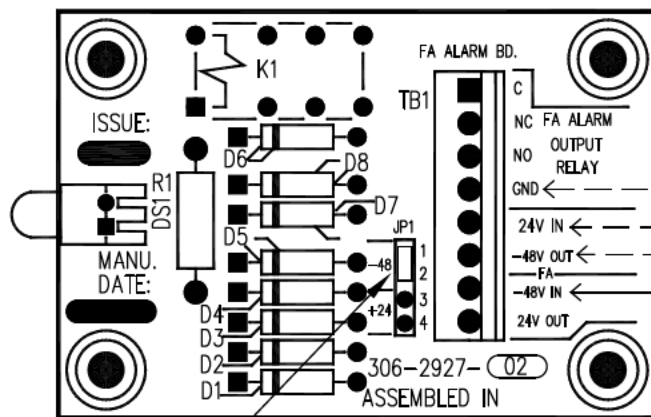
+24VDC OR -48VDC  
FUSE ALARM SIGNAL

WIRING DETAIL FOR +24V



FROM SYSTEM GND—RETURN  
+24VDC FUSE ALARM SIGNAL  
FROM CIRCUIT BREAKERS  
+24VDC SIGNAL FROM ANOTHER PANEL  
+24V OUTPUT TO EXTERNAL MONITOR

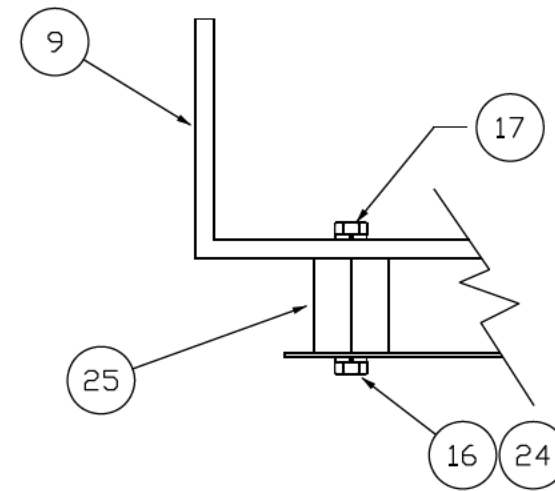
WIRING DETAIL FOR -48V



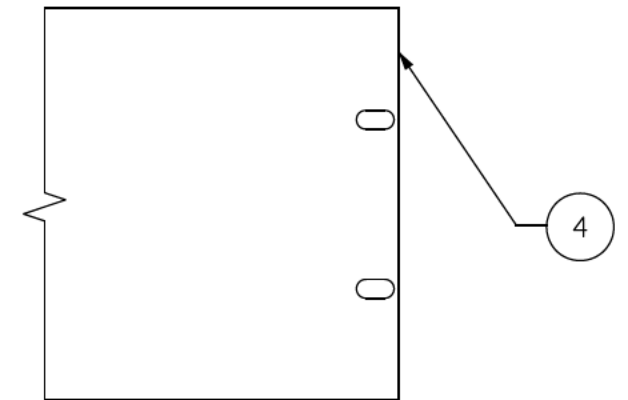
FROM SYSTEM GND—RETURN  
-48VDC SIGNAL FROM ANOTHER PANEL  
-48V OUTPUT TO EXTERNAL MONITOR  
-48VDC FUSE ALARM SIGNAL  
FROM CIRCUIT BREAKERS

SCHEMATIC DIAGRAM

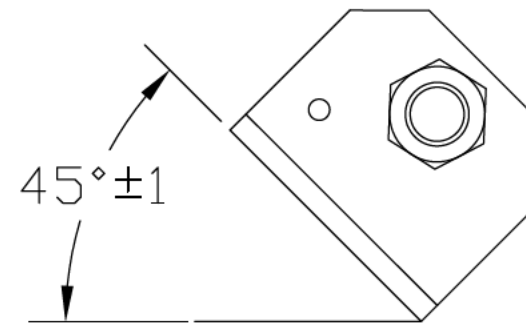
NOTES 85, 105



111B-3068-00,01  
W/O SHUNT  
DETAIL A



111B-3068-00,10  
W/O FUSE ALARM  
DETAIL B



111B-3068-00,01,10,11  
NOTE 106  
DETAIL C

<p align="center"><b>PROPRIETARY INFORMATION</b> NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.</p>		
<p>SIZE <b>B</b></p>	<p>DOC TYPE / NUMBER PN 111B-3068</p>	<p>ISSUE 5</p>
<p>SCALE: NONE</p>	<p>SHEET: 3 OF 4</p>	<p>FILE NAME: PN111B-3068_SHT_3_ISS_5</p>

### CALLOUT LIST 111B-3068-

LINE #	NOTES	DESCRIPTION	PART NUMBERS	QUANTITY	QUANTITY	QUANTITY	QUANTITY
				-00	-01	-10	-11
1		20 GA: BLACK; 10 INCHES	051-2000-10	1	1	1	1
		20 GA: RED; 10 INCHES	051-2022-10	1	1	1	1
		20 GA: ORANGE; 9 INCHES	051-2033-09	-	-	1	1
5		1 X 600A FUSE PANEL, 19"	202-3536-02	1	-	1	-
		FUSE PNL: 1-400/600A W/FA, 5.25 x 19"	202-3536-04	-	1	-	1
		SHUNT BRACKET	208-4090-01	1	1	1	1
10		ASSY: ALARM BOARD, BKT, LABEL, FOR FA	385.5152.00	-	1	-	1
		BUS BAR: INPUT 1 X 600A FP W/O SHUNT 19"	209-3203-19	1	1	-	-
		BUS BAR, ADPT: 600A FUSE SHUNT TO BUS BAR 19"	209-3203-18	-	-	1	1
		BUS BAR: 400/600A FUSEHOLDER TO SHUNT	209-3208-00	-	-	1	1
15		BUS BAR: LUG ADAPTER, 600A	209-4385-00	1	1	1	1
		SCREW: STL, SEMS, P/HD PHIL, 6-32 x 1/2"	210-1450-01	-	2	-	2
		SCREW: STL, SEMS, P/HD PHIL, 8-32 x 5/8"	210-1580-01	-	-	2	2
		SCREW: STL, HEX HD, 1/4-20 x 3/8"	210-7003-00	1	1	-	-
		SCREW: STL, HEX HD, 1/4-20 x 1/2"	210-7004-00	1	1	-	-
		SCREW: HEX HD, 1/4-20 x 1 1/4 FULL THREAD	210-7009-00	4	4	4	4
20		BOLT HEX SIL. BRONZE: 3/8-16 x 3/4	210-8128-00	-	-	2	2
		NUT, HEX STL: 8-32, ZINC KEPS	211-0485-00	-	-	2	2
		NUT, HEX STL: 1/4-20, ZINC KEPS	211-0501-00	4	4	4	4
25		LOCKWASHER, STL SHKPF: #4 INTERNAL T00TH	212-0492-00	-	2	-	2
		LOCKWASHER, SHKPF: 1/4 INTERNAL	212-0500-00	1	1	-	-
		SPACER: HEATSINK, HEX FIBREGLASS, 1.25"	213-1410-00	1	1	-	-
		LABEL, NOMENCLATURE: GENERAL MISC, 0.9" x 4"	225-3094-09	1	1	1	1
30		FUSE HOLDER: SINGLE-70 COMPLETE	275-0500-01	1	1	1	1
		FUSE HOLDER: 600A DEADFRONT	275-1606-00	1	1	1	1
		FUSE "DUMMY": .25" x 1.25", TYPE 70	276-0001-00	1	1	1	1
	RES, SHUNT: METER, 600A 50mV	695-1093-03	-	-	1	1	

<b>PROPRIETARY INFORMATION</b>		
NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.		
SIZE	DOC TYPE / NUMBER	ISSUE
<b>B</b>	PN 111B-3068	4
SCALE:	SHEET:	FILE NAME:
NONE	4 OF 4	PN111B-3068_SHT_4_ISS_4