

CIRCUIT BREAKER PANEL PRODUCT MANUAL FOR P/N 111-2917 P/N 111-3765 P/N 111-3762 P/N 111-3766 P/N 111-3763 P/N 111-3768 P/N 111-3764 P/N 111-3769

UNIPOWER, LLC 65 Industrial Park Rd Dunlap, TN 37327 Phone: +1-954-346-2442 Toll Free: 1-800-440-3504 Web site – www.unipowerco.com

RECEIVING INSTRUCTIONS & GENERAL EQUIPMENT INFORMATION

Please Note: For your protection, the following information and the product manual should be read and thoroughly understood before unpacking, installing, or using the equipment.

UNIPOWER, LLC presents all equipment to the delivering carrier securely packed and in perfect condition. Upon acceptance of the package from us, the delivering carrier assumed responsibility for its safe arrival to you. Once you receive the equipment, it is your responsibility to document any damage the carrier may have inflicted, and to file your claim promptly and accurately.

1. <u>PACKAGE INSPECTION</u>

- **1.1** Examine the shipping crate or carton for any visible damage: punctures, dents, and any other signs of possible internal damage.
- **1.2** Describe any damage or shortage on the receiving documents, and have the carrier sign their full name.
- **1.3** If your receiving freight bill notes that a Tip-N-Tell is attached to your freight, locate it. If the Tip-N-Tell arrow has turned even partially blue, this means the freight has been tipped in transport. Make sure the carrier notes this on your receipt before you sign for the freight.

2. <u>EQUIPMENT INSPECTION</u>

2.1 Within fifteen days, open the crate and inspect the contents for damages. While unpacking, be careful not to discard any equipment, parts, or manuals. If any damage is detected, call the delivering carrier to determine appropriate action. They may require an inspection.

*SAVE ALL SHIPPING MATERIAL FOR THE INSPECTOR TO SEE!

- 2.2 After the inspection has been made, call UNIPOWER, LLC. We will determine if the equipment should be returned to our plant for repair, or if some other method would be more expeditious. If it is determined that the equipment should be returned to UNIPOWER, LLC, ask the delivering carrier to send the packages back to UNIPOWER, LLC at the delivering carrier's expense.
- **2.3** If repair is necessary, we will invoice you for the repair so that you may submit the bill to the delivering carrier with your claim form.

2.4 It is your responsibility to file a claim with the delivering carrier. Failure to properly file a claim for shipping damages may void warranty service for any physical damages later reported for repair.

3. <u>HANDLING</u>

Equipment can be universally heavy or top-heavy. Use adequate humanpower or equipment for handling. Until the equipment is securely mounted, be careful to prevent the equipment from being accidentally tipped over.

4. <u>NAMEPLATE</u>

Each piece of UNIPOWER, LLC equipment is identified by a part number on the nameplate. Please refer to this number in all correspondence with UNIPOWER, LLC.

5. <u>INITIAL SETTINGS</u>

All equipment is shipped from our production area *fully checked and adjusted*. Do not make any adjustments until you have referred to the technical reference or product manual.

6. <u>SPARE PARTS</u>

To minimize downtime during installation or operation, we suggest you purchase spare fuses, circuit boards and other recommended components as listed on the Recommended Spare Parts List in the back of the product manual. If nothing else, we strongly recommend stocking spare fuses for all systems.

PRODUCT SUPPORT

Product support can be obtained using the following addresses and telephone numbers.

Manufacturing facility: UNIPOWER, LLC 65 Industrial Park Rd Dunlap, TN 37327 United States

Phone: +1-954-346-2442 Toll Free: 1-800-440-3504 Web site – www.unipowerco.com

When contacting UNIPOWER, please be prepared to provide:

- 1. The product model number, spec number, S build number, and serial number see the equipment nameplate on the front panel
- 2. Your company's name and address
- 3. Your name and title
- 4. The reason for the contact
- 5. If there is a problem with product operation:
 - Is the problem intermittent or continuous?
 - What revision is the firmware?
 - What actions were being performed prior to the appearance of the problem?
 - What actions have been taken since the problem occurred?

REVISION HISTORY

REV	DESCRIPTION	CK'D & APPR'D BY / DATE
9	See PCO# 45463	CJM / 9/19/19
10	See ECN 46140	JPR 1/3/24

PROPRIETARY AND CONFIDENTIAL

The information contained in this product manual is the sole property of UNIPOWER, LLC. Reproduction of the manual or any portion of the manual without the written permission of UNIPOWER, LLC is prohibited.

© Copyright UNIPOWER, LLC 2015

DISCLAIMER

Data, descriptions, and specifications presented herein are subject to revision by UNIPOWER, LLC without notice. While such information is believed to be accurate as indicated herein, UNIPOWER, LLC makes no warranty and hereby disclaims all warranties, express or implied, with regard to the accuracy or completeness of such information. Further, because the product(s) featured herein may be used under conditions beyond its control, UNIPOWER, LLC hereby disclaims and excludes all warranties, express, implied, or statutory, including any warranty of merchantability, any warranty of fitness for a particular purpose, and any implied warranties otherwise arising from course of dealing or usage of trade. The user is solely responsible for determining the suitability of the product(s) featured herein for user's intended purpose and in user's specific application.

Throughout the remainder of this manual, "UNIPOWER" will mean "UNIPOWER, LLC."

PERSONNEL REQUIREMENTS

Installation, setup, operation, and servicing of this equipment should be performed by qualified persons thoroughly familiar with this Product Manual and Applicable Local and National Codes. A copy of this manual is included with the equipment shipment.

TABLE OF CONTENTS

1.	INSTALLATION	.1
	1.1 MOUNTING	
	1.2 WIRING	1
	OPERATION	
	2.1 INSPECTION	• •
		• 1

*Associated drawings at end of manual.

1. INSTALLATION

1.1 MOUNTING

Install panel in a rack or box enclosure using 12 - 24 hardware. Panel can be mounted in a 19" or 23" rack or enclosure.

1.2 WIRING

Connect a properly sized cable to the bus bar using the holes provided.

For panels equipped with the current shunts, do the following:

- 1) Confirm that the rating of the shunt matches the requirements for the monitoring circuits (i.e., 600 Amps at 50 mV).
- 2) Connect 14 AWG wires to the terminal block (TB2) located on the rear of the panel, and to the meter panel. Ensure that proper polarity is observed.

2. OPERATION

2.1 INSPECTION

The circuit breaker panel should be inspected periodically for:

- Loose or overheated connections
- Burned or overheated parts
- Accumulation of dirt

*WARNING: Excess load breaker capacity may result in improper operation and hazard to equipment and personnel.

ED991-5001-B1	ssue 3			2	. ↓	3			4		
	•				·				ISSUES]
ENG	INEERING NOTES	:			MANUFACTURING N	OTES:	ISSUE (DESCRIPTION		ISS. BY ISS. DATE	
51. S	ELECT CIRCUIT BREAKEF	R PANEL PER TABLE A. TABLE A			101. INSULATE BUS WITH 3/4 (032-0001-00).	4" FIBERGLASS SLEEVING	6 SI	EE PCO# 44479		WD 7/11/17	A
60 53. P	ITEMMODEL1111-2917-002111-2917-102111-2917-11MMETER SHUNTS, IF EQU0 AMPS. OTHER VALUES IANELS ARE EQUIPPED W0 EXTERNAL ALARM SYST	250 YES (NC 250 YES (NC JIPPED, ARE NORMALL MAY BE SPECIFIED.	TE 53) MD TE 53) STD TE 53) STD TE 53) STD LY RATED AT S FOR CONNECTION		102. REPLACE BOLT SUPPLI BRONZE BOLT (210-8128-	ED WITH SHUNT WITH 3/8-16 X 3/4" 00).					
TH Wi	OSES ONLY WHEN THE B E SWITCH CLOSES BOTH HEN THE BREAKER HAND SELECT THE PAINT CC IE. 111-2917-, COLOR IE. 111-2917-, COLOR TABL	WHEN A BREAKER TH LE IS IN THE "OFF" PO LOR FROM TABLE E A = ANSI 61 GRA B = BEIGE FINISH	RIPS, AND ALSO SITION. 3: AY FINISH					LESS OTHERWISE	APPROVALS	DATE	в
	COLOR	DESIGNATOR					± TC HOLES FRACTIONS		DRAWN SAN CHECKED	10/27/89	 ◀
тс нс	ANSI 61 GRAY BEIGE HE INPUT COPPER BUS B THE UNIPOWER VERTIC, DLES ARE PROVIDED FOR E NOT PROVIDED, BUT M	AL BUS BAR SYSTEMS BOLTING LUGGED CA	5. FOR OTHER SYSTEMS, ABLES. INPUT LUGS				WORKMAN	$\begin{array}{c} (\text{XXX}) & \pm 0.010 \\ & \pm 1/2^{\bullet} \\ \hline \\ \text{DRNERS AND ANGLES ARE } \\ \text{NSHIP:} \\ \text{IC ENG032} \\ \end{array}$	APPROVED 90° UNLESS OTHERWISE SPECIFIED.		c
99	1-0002-00.							O BE COPIED, USED, TH	ARY INFORMATION RANSMITTED, OR DISCLOSED ISSION FROM UNIPOWER, LLO		-
- () 	SHEET INDEX NO THE ISSUE OF SHEET OF THE DRAWING SET. REVISED, ONLY THE IS ARE CHANGED. THE IS ARE NOT CHANGED.	I REFLECTS THE LA WHEN THE DRAWIN SUE NUMBERS OF N	IG SET IS MODIFIED SHEETS		SHEET INDEX SH NO 1 2 3 ISSUE 6 5 2		SIZE SCALE: N/A	CIRCUIT E 2-250 AI) DOC TYPE / N PN 11 SHEET:	1-2917 File NAME:	L T ISSUE 6	D

•

3

3

4

4

2

2

1

1

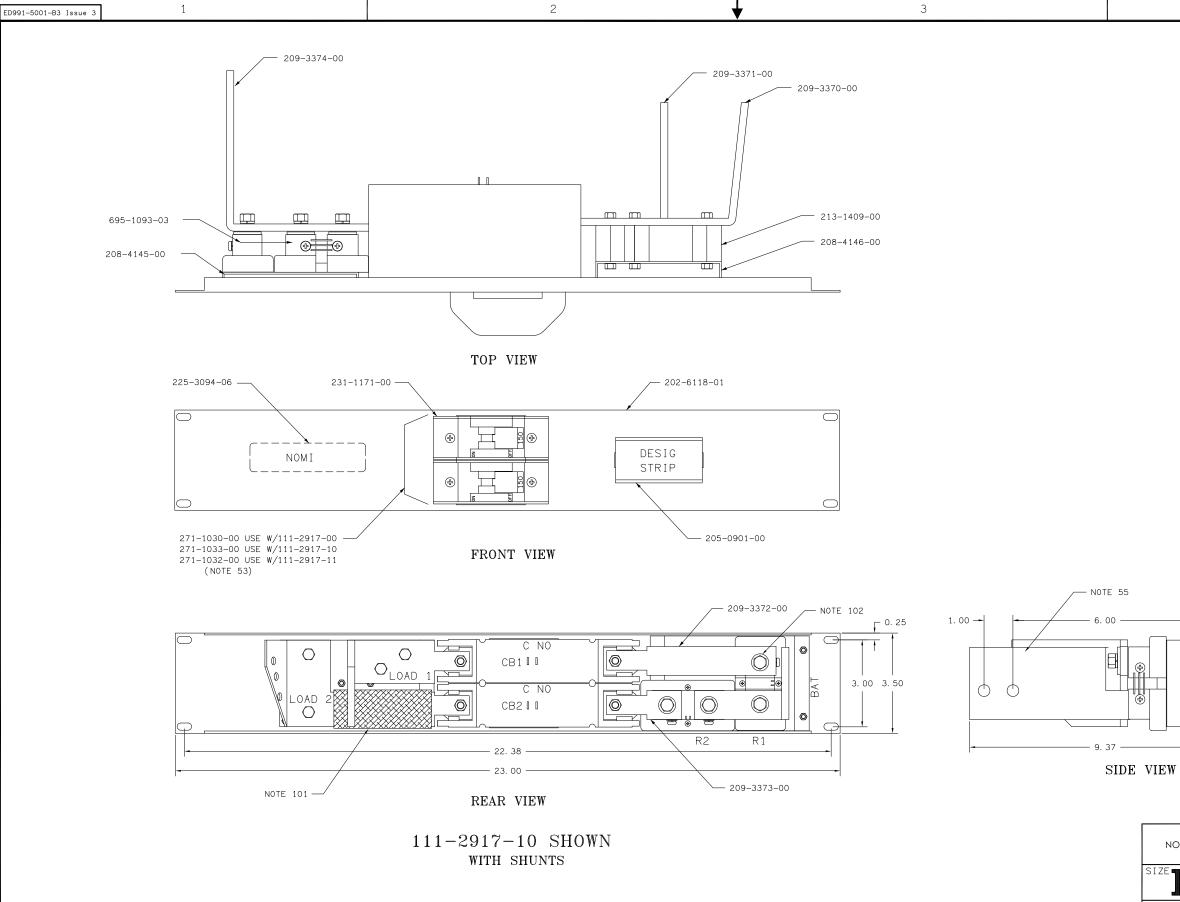
А

В

►

С

D



В

-

С

D

2

З

	PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.						
SIZE B		DOC TYPE / NUMBER ISSUE PN 111-2917 5					
scale: N/A	E: SHEET: FILE NAME: 2 OF 3 PN111-2917_SHT_2_ISS_5						

R

ED991-5001-B3 Issue 3

Α

В

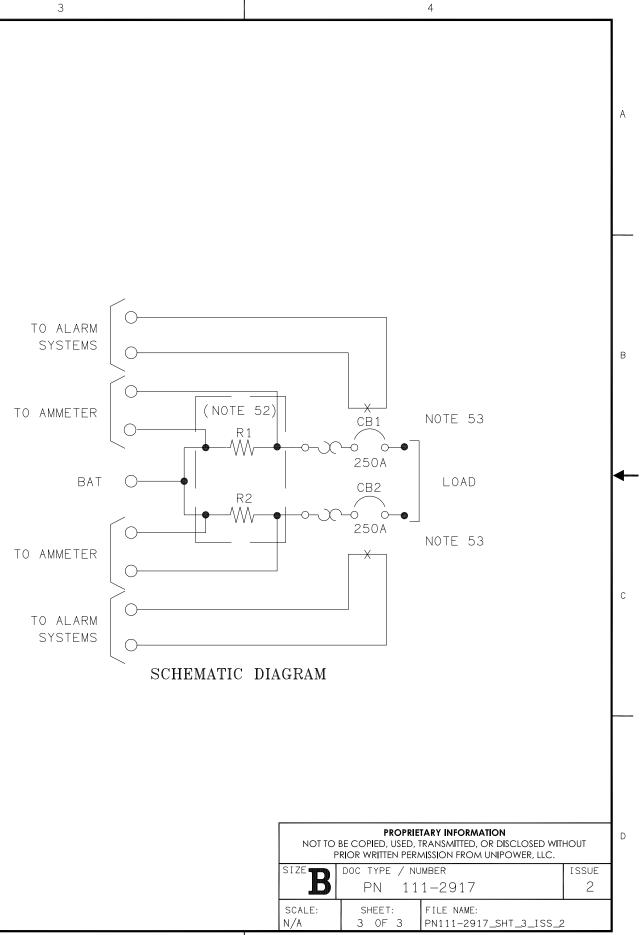
С

D

1

STOCK LIST

			QUAN	ITITY
LINE #	DESCRIPTION	PART NUMBERS	-10	-11
1	CIRCUIT BREAKER PANEL E/W 2-GJI W/ SHUNTS	202-6118-01	1	1
	COVER: PROTECTIVE COVER FOR GJI BREAKER	202-6141-01	2	2
	MULTI ROW DESIGNATION STRIP	205-0901-007	1	1
	BRACKET: GJI INPUT BRACKET FOR SHUNT	208-4145-00	1	1
5	BRACKET: GJI OUTPUT BRACKET	208-4146-00	1	1
	BUS BAR: GJI ANGLED OUTPUT BUS, LONG	209-3370-00	1	1
	BUS BAR: GJI ANGLED OUTPUT BUS, SHORT	209-3371-00	1	1
	BUS BAR: SHUNT TO GJI BREAKER, LONG	209-3372-00	1	1
	BUS BAR: SHUNT TO GJI BREAKER, SHORT	209-3373-00	1	1
10	BUS BAR: GJI INPUT BUS	209-3374-00	1	1
	SCREW: SS, HEX HEAD. 1/4-20 X 1"	210-1282-00	4	4
	SCREW: STL, SEMS, P/HD PHIL, 8-32 X 5/8"	210-1580-01	4	4
	SCREW: STL, HEX HEAD, 1/4-20 X 3/8"	210-7003-00	4	4
	SCREW: STL, SEMS, HEX HEAD, 1/4-20 X 5/8"	210-7004-40	4	4
15	BOLT, HEX, SIL, BRONZE: 3/8–16 X 3/4"	210-8128-00	4	4
	NUT, HEX STL: 8–32, ZINC, KEPS	211-0485-00	12	12
	NUT, HEX SS: 1/4-20	211-0531-00	4	4
	LOCKWASHER, SHKPF: 1/4 INTERNAL	212-0500-00	4	4
	LOCKWASHER: DISH, STL, SHKPF, #8	212-0503-00	2	2
20	WASHER, FLAT BRASS, 3/8"	212-2035-00	4	4
	WASHER, FLAT SS: 1/4"	212-2516-00	8	8
	WASHER, BELLEVILLE, SS: 1/4 X .500"	212-5754-00	8	8
	SPACER: HEATSINK, HEX FIBERGLASS, 1" GLASTIC	213-1409-00	4	4
	CB1P: 250A, 125VDC, ALARM SWITCH, GJI	271-1033-00	2	
25	CB1P: 250A, AUX SWITCH, GJI-H2-U-250-125-2	271-1032-00		2
	RES, SHUNT: METER, 600A 50MV	695-1093-03	2	2



2

2

З

				ISSUES		
		ISSUE #	DESCRIPTION		ISS. BY ISS. DATE	
ENGINEERING NOTES:	MANUFACTURING NOTES:	7	SEE PCO# 44479		WD 7/11/17	1
 51. AMMETER SHUNTS ARE NORMALLY 600 AMPS, 50M HOWEVER, OTHER CURRENT RATINGS MAY BE SPEC 52. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIF CONNECTION TO UNIPOWER VERTICAL BUS BAR SY FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR ING ING LUGGED CABLES. INPUT LUGS ARE NOT PROV 	TIED. LAMINATED COPPER BUS STRUCTURE. A COMPOUND SUCH AS CRAMOLIN 81Rh WILL BE APPLIED TO ALL JOINTED FLAT SURFACES PER THE CT MANUFACTURER'S INSTRUCTIONS. TEMS. DLT- 102. MOUNT WIRE LUG BETWEEN BUS BAR AND LARGE MOUNTING WASHER.					- A
BUT MAY BE ORDERED SEPERATELY PER DRAWING ED991-0002-00.	103. REPLACE BOLTS SUPPLIED WITH SHUNT WITH P/N 210-8128-00, AS SHOWN. USE WASHERS SUPPLIED WITH SHUNT.					
53. UNIPOWER'S STANDARD PAINT IS ANSI 61 GRAY.						
54. PANELS NOT EQUIPPPED WITH A SHUNT, DO NOT II SEE TABLE A.	CLUDE R1.					
 55. AN ALARM SIGNAL MAY BE EXTENDED TO AN EXTE SYSTEM. DURING AN ALARM, A CLOSURE TO BATTH IS PROVIDED ON THE APPROPRIATE ALARM TERMIN 1) NEGATIVE GRD SYSTEMS, FA+OUT. 2) POSITIVE GRD SYSTEMS, FA-OUT. 	Y					в
 AN ALARM IS ACTIVATED ONLY BY ELECTRICAL TRI A BREAKER IN PANELS EQUIPPED WITH AN ALARM (REFER TO TABLE A). 						
57. AN ALARM IS ACTIVATED BY EITHER ELECTRICAL O		SP	INLESS OTHERWISE ECIFIED DIMENSIONS ARE IN INCHES	APPROVALS DRAWN	DATE	┨┫
TRIPPING OF A BREAKER IN PANELS EQUIPPED WIT AUXILARY SWITCH, (REFER TO TABLE A).	AN	± HOLES	ARE IN INCHES TOLERANCES ON: +0.004	MWY CHECKED	10/30/89	
		FRACTION	-0.002 is ±1/32	APPROVED		
		DECIMALS	s (xx) ±0.020	МСМ	2/5/04	4
		ANGLES	±1/2*	APPROVED		
		WORKM	ANSHIP:	90° UNLESS OTHERWISE SPECIFIED.		-
	TABLE A	PER SF	PEC ENG032			C
VOLTAG	PANEL SHUNT RTG. & P/N CIRCUIT BRKR & P/N ALARM TYPE RATING NOTES					
+24	111-3762-00 N/A 600A, 160VDC ALARM STD 54,55,56 111-3762-10 600A 695-1093-03 (1) 271-1044-00 SWITCH STD 51,55,56	FINISH:				
OR - 48	111-3762-20 N/A (1/ 2/1 1014 00 STD 54,55,56 111-3762-01 N/A 600A, 160VDC AUXILARY STD 54,55,57 111-3762-11 600A 695-1093-03 (1) 271-1043-00 SWITCH STD 51,55,57	NOT	TO BE COPIED, USED, TR	ARY INFORMATION RANSMITTED, OR DISCLOSED WI ISSION FROM UNIPOWER, LLC.	THOUT	
SHEET INDEX NOTE:	111-3762-11 600A 695-1093-03 (1) 271-1043-00 SWITCH STD 51,55,57 111-3762-21 N/A (1) 271-1043-00 SWITCH STD 54,55,57					
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 ISSUE NUMBER NUMBER 1 2 3 4 5 6 7 8 1 1 2 3 4 5 6 7 8 1 1 2 3 4 5 6 7 8		600A, GJ	IP, HEINEMANN		
	2 1 2 3 4 4 5 5 3 1 1 2 3 4 5 5	SIZE SCALE N/A	WITH F DOC TYPE / N PN 11	REAKER PANEL USE ALARM 1—3762 FILE NAME: PN111-3762_SHT_1_ISS_	ISSUE 7	D
1	2 3			4		_

4

2

ED991-5001-B1 Issue 3

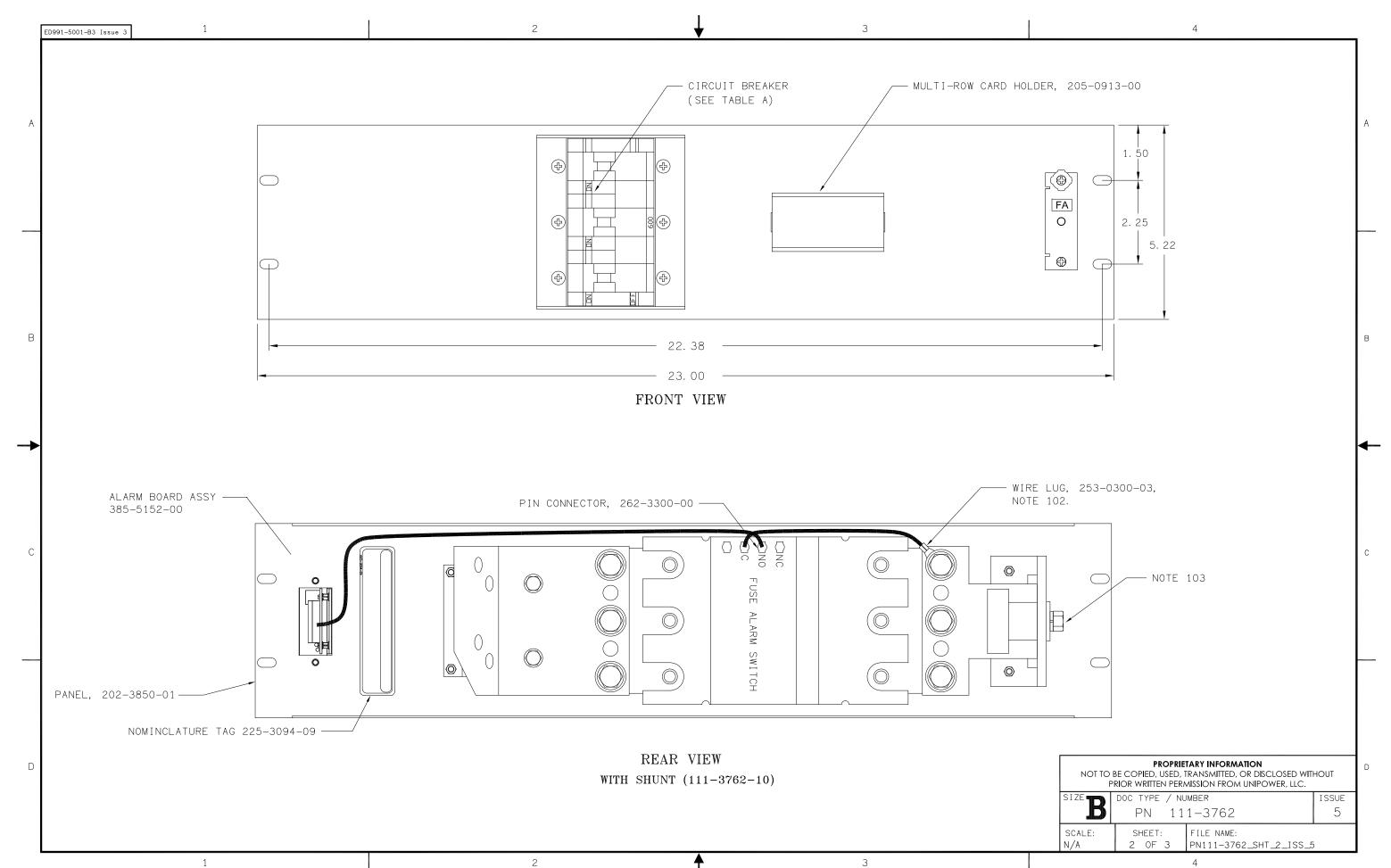
А

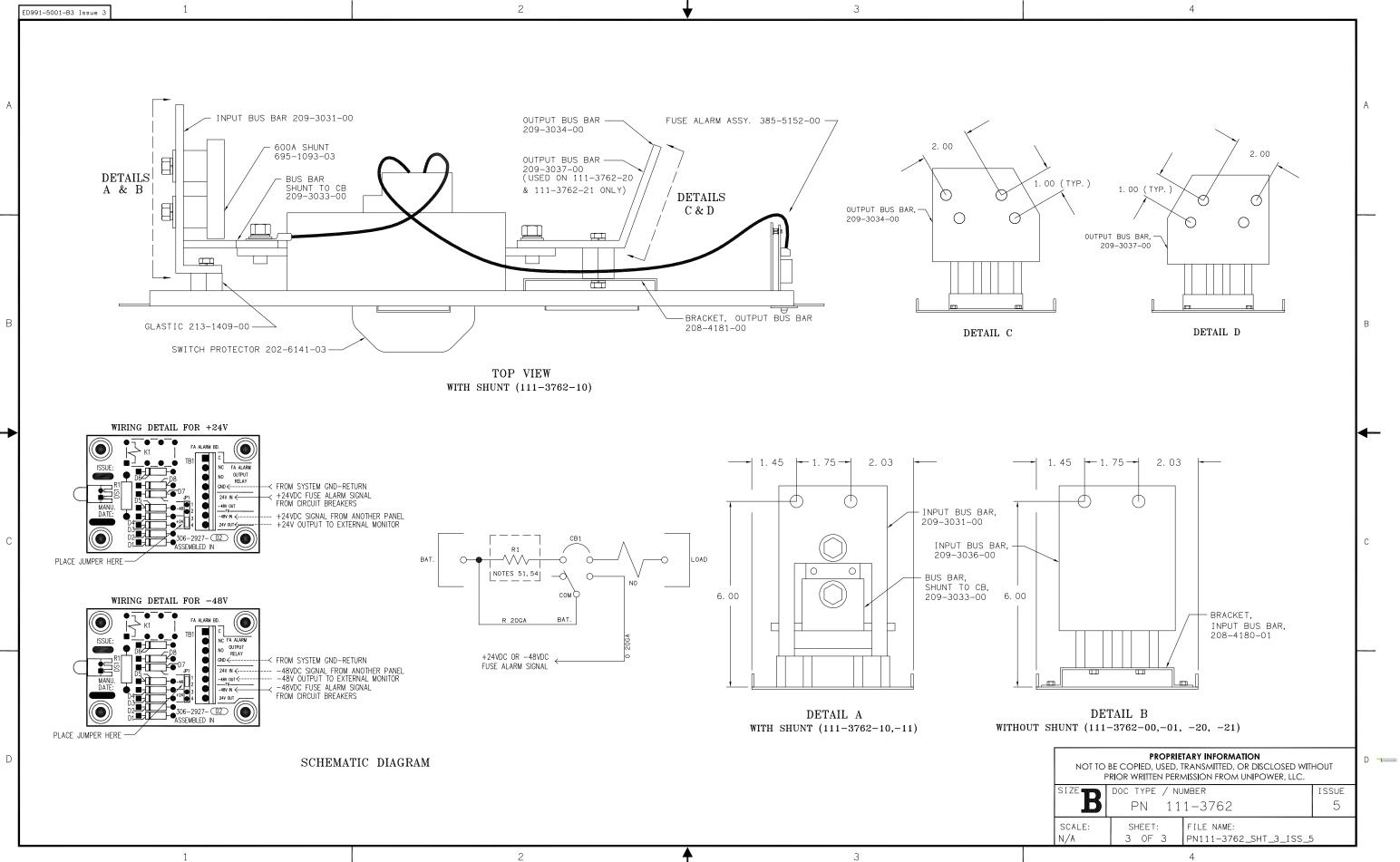
в

->

С

D





З

	ISSUE	DESCRIPTION		ISS. BY	
MANUFACTURING NOTES:	#			ISS. DATE WD	ł
 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 SURFACES PER THE MANUFACTURER'S INSTRUCTIONS. 102. MOUNT WIRE LUG BETWEEN BUS BAR AND LARGE MOUNTING WASHER. 103. REPLACE BOLTS SUPPLIED WITH SHUNT WITH P/N 210-8128-00, 	0	SEE PCO# 44479		7/11/17	- A
AS SHOWN. USE WASHERS SUPPLIED WITH SHUNT.					
					в
		UNLESS OTHERWISE PECIFIED DIMENSIONS	APPROVALS	DATE	
	±	ARE IN INCHES TOLERANCES ON:	DRAWN MWY	10/30/89	┫
LE A	ANGLES	$\begin{array}{c} \text{LS (XX)} & \pm 0.020 \\ \text{LS (XXX)} & \pm 0.010 \\ \text{LS (XXX)} & \pm 1/2^{*} \end{array}$	CHECKED SS APPROVED MCM APPROVED 90° UNLESS OTHERWISE SPECIFIEI	12/14/89 2/19/04	
		MANSHIP: SPEC ENG032			с
JIT BRKR & P/N ALARM TYPE RATING NOTES 0A, 160VDC ALARM STD 54,55,56 271-1040-01 SWITCH STD 51,55,56 0A, 160VDC AUXILARY STD 54,55,57 271-1040-00 SWITCH STD 51,55,57	FINISH				
	NO	T TO BE COPIED, USED, T	ARY INFORMATION RANSMITTED, OR DISCLOSE MISSION FROM UNIPOWER, I		ŀ
		CIRCUIT E WITH	IP, HEINEMAN BREAKER PANE FUSE ALARM	L	D
	SIZE SCAL	.E: SHEET:	1-3763 File NAME:	ISSUE 6	
▲ 3	N/A	1 OF 3	PN111-3763_SHT_1_	100_0	1

ISSUES

3

ENGINEERING NOTES:

1

- 51. AMMETER SHUNTS ARE NORMALLY 600 AMPS, 50MV. HOWEVER, OTHER CURRENT RATINGS MAY BE SPECIFIED.
- 52. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIRECT CONNECTION TO UNIPOWER VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLT-ING LUGGED CABLES. INPUT LUGS ARE NOT PROVIDED. BUT MAY BE ORDERED SEPERATELY PER DRAWING ED991-0002-00.
- 53. UNIPOWER'S STANDARD PAINT IS ANSI 61 GRAY.
- 54. PANELS NOT EQUIPPPED WITH A SHUNT, DO NOT INCLUDE R1. SEE TABLE A.
- 55. AN ALARM SIGNAL MAY BE EXTENDED TO AN EXTERNAL ALARM SYSTEM. DURING AN ALARM, A CLOSURE TO BATTERY IS PROVIDED ON THE APPROPRIATE ALARM TERMINAL: 1) NEGATIVE GRD SYSTEMS, FA+OUT. 2) POSITIVE GRD SYSTEMS, FA-OUT.
- 56. AN ALARM IS ACTIVATED ONLY BY ELECTRICAL TRIPPING OF A BREAKER IN PANELS EQUIPPED WITH AN ALARM SWITCH, (REFER TO TABLE A).
- 57. AN ALARM IS ACTIVATED BY EITHER ELECTRICAL OR MECHANICAL TRIPPING OF A BREAKER IN PANELS EQUIPPED WITH AN AUXILARY SWITCH, (REFER TO TABLE A).

TABLE A

VOLTAGE	PANEL	SHUNT RTG. & P/N	CIRCUIT BRKR & P/N	ALARM TYPE	RATING	NOTES
	111-3763-00	N/A	400A, 160VDC	ALARM	STD	54,55,56
+24	111-3763-10	400A 695-1091-03	(1) 271-1040-01	SWITCH	STD	51,55,56
-48	111-3763-01	N/A	400A, 160VDC	AUXILARY	STD	54,55,57
	111-3763-11	400A 695-1091-03	(1) 271-1040-00	SWITCH	STD	51,55,57

SHEET INDEX NOTE:

THE ISSUE OF SHEET **R**EFLECTS 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.

1

SHEET INDEX SHEET ISSUE NUMBER NUMBER 1 2 3 4 5 6 7 8 1 2 3 4 5 6 1 2 1 2 3 4 5 5 3 1 1 2 3 4 4

2

2

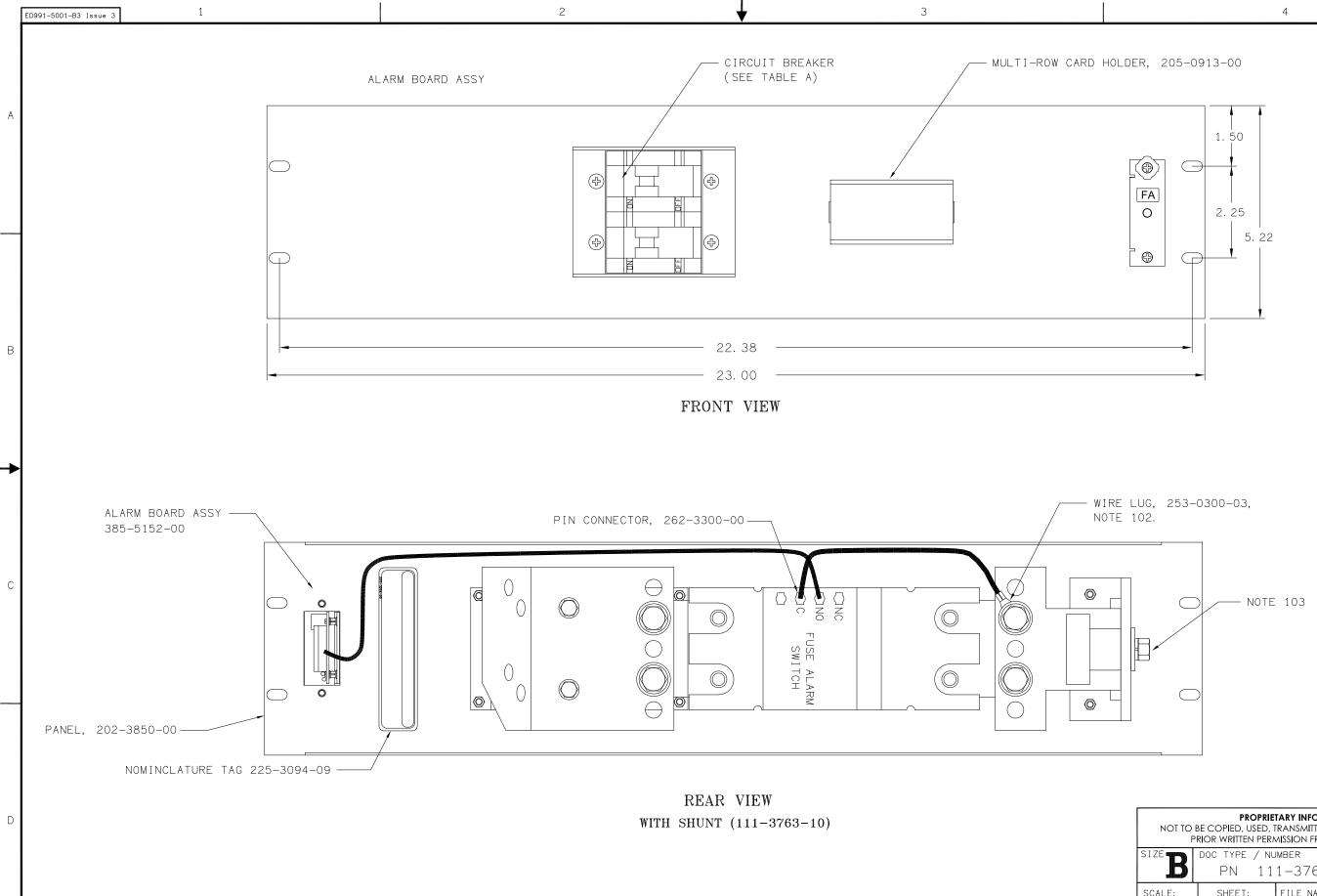
А

В

С

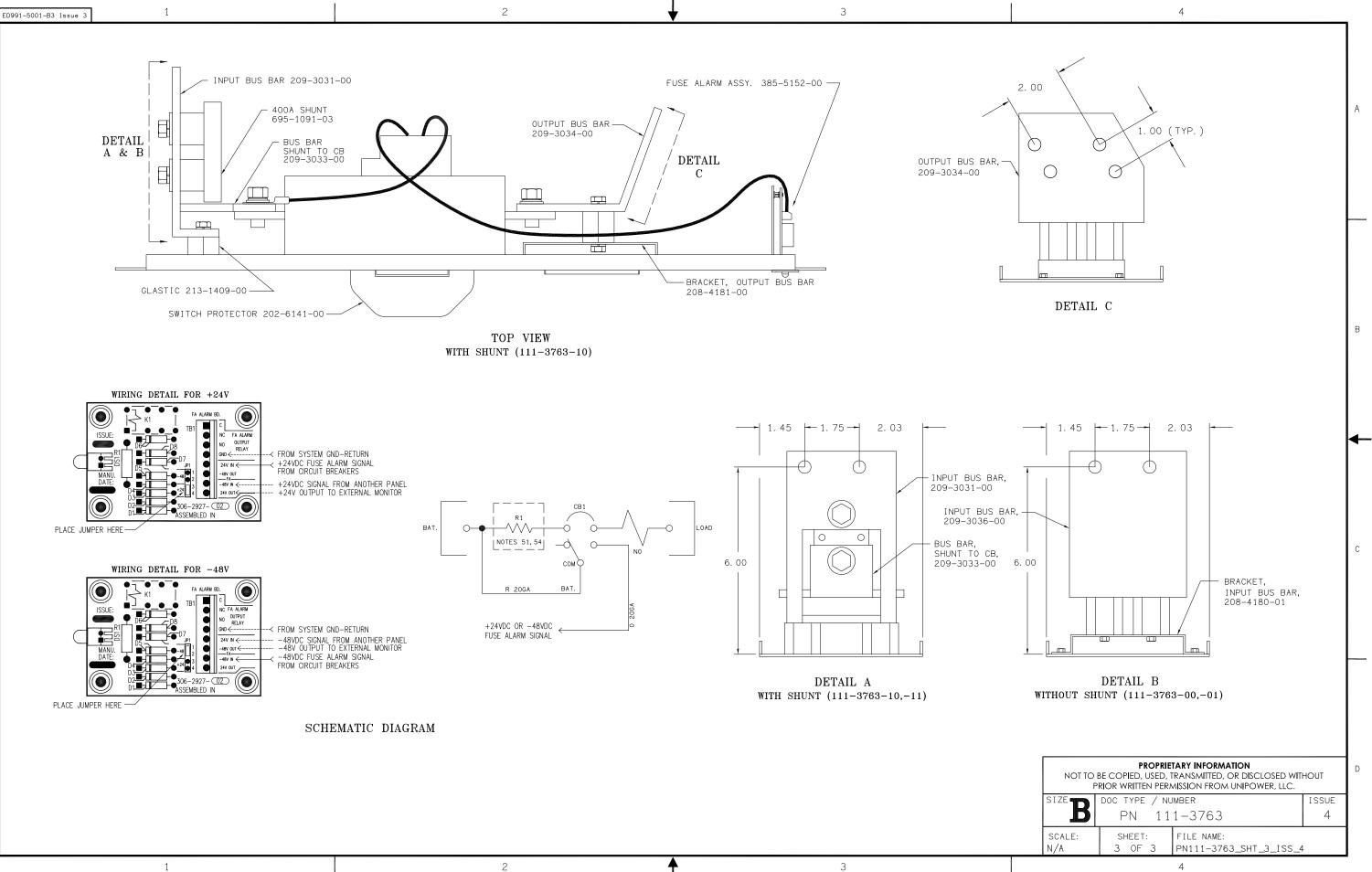
D

ED991-5001-B1 Issue 3





PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.					
SIZE B	DOC TYPE / NU PN 11	MBER 1–3763	issue 5		
SCALE: N/A	SHEET: 2 OF 3				



В

-

С

D

ENGINEERING NOTES:

ED991-5001-B1 Issue 3

В

С

D

1

- 51. NORMAL SHUNT RATINGS ARE DETERMINED BY TABLE "A". HOWEVER, OTHER CURRENT RATINGS MAY BE SPECIFIED.
 - 52. THE INPUT COPPER BAR IS DESIGNED FOR DIRECT CONNECTION TO UNIPOWER VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLT-ING LUGGED CABLES. INPUT LUGS ARE NOT PROVIDED, BUT MAY BE ORDERED SEPARTELY.
- 53. UNIPOWER'S STANDARD PAINT IS ANSI 61 GRAY.
- 54. PANELS NOT EQUIPPED WITH A SHUNT, (TABLE A), DO NOT INCLUDE R1 OR R2.

1

MANUFACTURING NOTES:

- 101. A COMPOUND SUCH AS CRAMOLIN 81Rh WILL BE APPLIED TO ALL JOINTED FLAT CONDUCTIVE SURFACES PER THE MANUFACTURER'S INSTRUCTIONS.
- 102. MOUNT WIRE LUG BETWEEN BUS BAR AND LARGE MOUNTING WASHER.

3

- 103. REPLACE BOLTS SUPPLIED WITH SHUNT WITH 3/8" x 16 x 3/4" BOLTS, (210-8128-00). USE WASHERS SUPPLIED WITH SHUNT.
- 104. ALL WIRES ARE 20 GA UNLESS OTHERWISE NOTED.

TABLE A

REF. RTG.	PANEL	E/W SHUNT	SHUNT RTG. & P/N	RATING	CIRCUIT BRKR & P/N
100A	111-3764-00	NO	N/A	STD	100A, 125VDC
TUUA	111-3764-10	YES	200A 695-1080-03	STD	(2) 271–1011–00
125A	111-3764-05	NO	N/A	SPL	125A, 125VDC
TZSA	111-3764-15	YES	200A 695-1080-03	SPL	(2) 271–1016–00
	111-3764-01	NO	N/A	STD	
150A	111-3764-11	YES	200A 695-1080-03	STD	150A, 125VDC
	111-3764-21	YES	600A 695-1093-03	STD	(2) 271-1018-00
175 4	111-3764-02	NO	N/A	STD	175A, 125VDC
175A	111-3764-12	YES	200A 695-1080-03	STD	(2) 271–1025–00
200A	111-3764-06	NO	N/A	STD	200A, 125VDC
200A	111-3764-16	YES	600A 695-1093-03	STD	(2) 271–1023–10
225 4	111-3764-03	NO	N/A	STD	225A, 125VDC
225A	111-3764-13	YES	600A 695-1093-03	STD	(2) 271–1026–01
250A	111-3764-04	NO	N/A	STD	250A, 125VDC
230A	111-3764-14	YES	600A 695-1093-03	STD	(2) 271–1033–00

2

2

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.

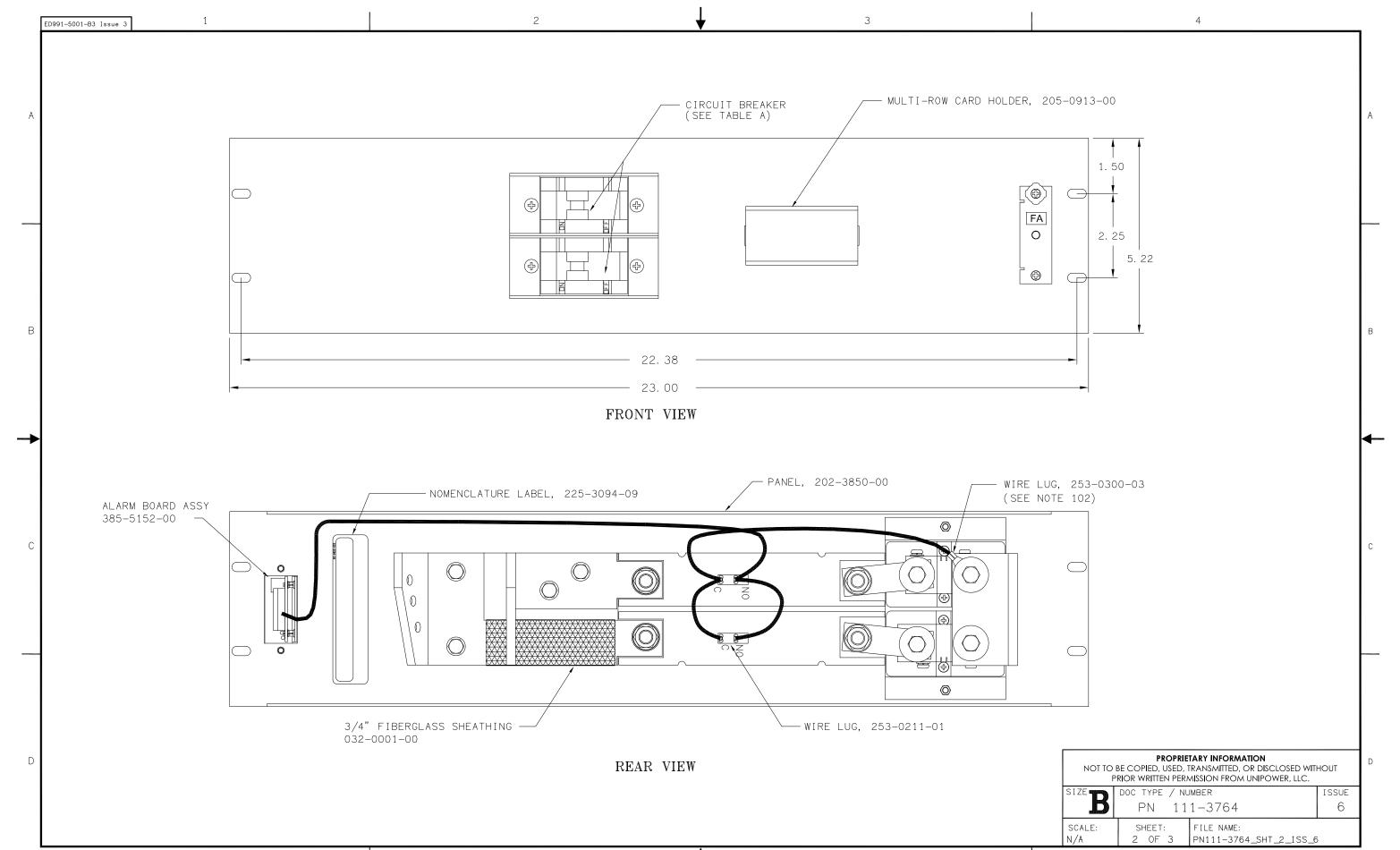
SHEET INDEX										
SHEET		ISSUE NUMBER								
NUMBER	8	9	10	11	12	13	14	15	16	
1	8	9	10	11						
2	5	5	6	6						
3	2	2	3	3						

		ISSUES		
ISSUE	DESCRIPTION		ISS. BY	
#			ISS. DATE	
11 5	SEE PCO# 44479		WD 7/11/17	
				A
				В
	NLESS OTHERWISE CIFIED DIMENSIONS	APPROVALS	DATE	
	ARE IN INCHES OLERANCES ON:	DRAWN	10 /70 /80	┱
HOLES	+0.004	MWY CHECKED	10/30/89	
FRACTIONS	-0.002 5 ±1/32	APPROVED		-
DECIMALS		МСМ	4/1/04	
DECIMALS	$(xxx) \pm 0.010 \pm 1/2$	APPROVED		
SQUARE C		0° UNLESS OTHERWISE SPECIFIED.		
WORKMA	ANSHIP: EC ENG032			с
MATERIA FINISH:				
NOT T	O BE COPIED, USED, TR	RY INFORMATION ANSMITTED, OR DISCLOSED N SSION FROM UNIPOWER, LLC		
	-			
(X(100-255A) CIRCUIT BRE	RING TECHNO , GJ1, HEINEMA AKER PANEL WI H & FUSE ALA	ANN, TH	D
) A	X(100-255A) CIRCUIT BRE/ ALARM SWITC	RING TECHNO , GJ1, HEINEMA AKER PANEL WI H & FUSE ALA	ANN, TH .RM	D

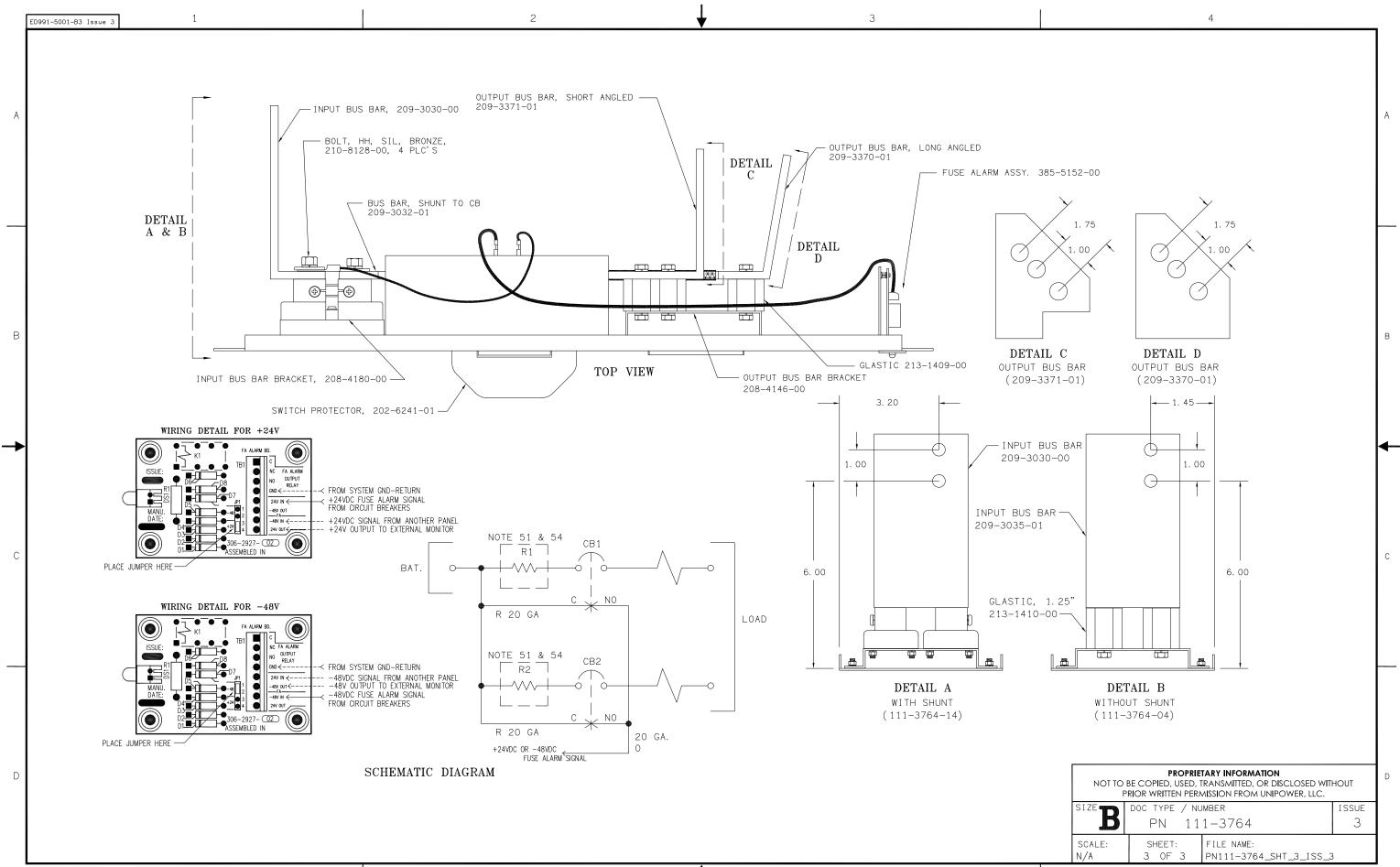
4

3

Ē



З



З

в

С

D

ENGINEERING NOTES:

51. AMMETER SHUNTS ARE NORMALLY 600 AMPS, 50MV. HOWEVER, OTHER CURRENT RATINGS MAY BE SPECIFIED. PANELS NOT SPECIFIED WITH A SHUNT (TABLE "A") DO NOT INCLUDE R1.

1

- 52. THIS PANEL WILL ACCOMMODATE A MAXIMUM OF 24 5–100 AMP CIRCUIT BREAKERS OR 4, 125 AMP CIRCUIT BREAKERS. TOTAL PANEL AMPERAGE MUST NOT EXCEED 500 AMPS. ORDER CIRCUIT BREAKERS PER ED991–0009–00.
- 53. UNIPOWER'S STANDARD PAINT IS ANSI 61 GRAY.
- 54. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIRECT CONNECTION TO UNIPOWER VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLT-ING LUGGED CABLES.
- 55. TO COVER OPEN CIRCUIT BREAKER POSITIONS, ORDER BLANK COVERS, 213.3923.00, PER CIRCUIT BREAKER POSITION.
- 56. BUBBLE REFERENCE DESIGNATORS REFER TO CALLOUT TABLE LINE NUMBER.
- 57. PROVIDE ADEQUATE SPACE ABOVE THE CIRCUIT BREAKER PANEL FOR TURNING DISTRIBUTION CABLES. USE OF A ONE SPACE BLANK PANEL IS HIGHLY RECOMMENDED. ORDER BLANK 202–3245–00.

MANUFACTURING NOTES:

2

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 SURFACES PER MANUFACTURER'S INSTRUCTIONS.

3

- 102. MOUNT WIRE LUG BETWEEN BUS BAR AND 1/4" FLAT WASHER.
- 103. THE REMAINING EXCESS OF ALARM WIRE MUST BE WOUND UP AND TIED TO THE BUS BAR WITH A TIE WRAP. THIS WIRE WILL BE USED FOR ADDITIONAL CIRCUIT BREAKERS.
- 104. WHEN CONNECTING ADDITIONAL CIRCUIT BREAKERS, THE ALARM CONNECTION FROM THE BREAKER (NO) TO THE FA SIGNAL "IN" IS COMPLETED BY DAISY CHAINING EACH CIRCUIT BREAKER WITH PUSH-ON.
- 105. THE ALARM WIRE LENGTH IS 52" LONG TO ALLOW FOR 24 CIRCUIT BREAKERS. (WHEN CIRCUIT BREAKERS ARE ADDED, A 2" LENGTH MUST BE CUT FROM THE REMAINING WIRE FOR EACH BREAKER. THIS 2" LENGTH MUST THEN BE JOINED WITH THE REMAINING ALARM WIRE BY A CRIMP TYPE PUSH-ON.) IF CRIMPING TOOLS ARE NOT AVAILABLE, THE PUSH-ON MAY BE SOLDERED.
- 106. LUGS AND PUSH-ONS ARE USED FOR CONNECTING EACH ALARM CONTACT (C) OF THE CIRCUIT BREAKER TO THE BUS BAR. EACH CONNECTION FROM THE ALARM CONTACT TO THE BUS BAR IS COMPLETED SEPARATELY.
- 107. WHEN A SHUNT IS REQUIRED, REPLACE ITS' BOLTS AS SHOWN IN DETAIL B. USE BRASS WASHERS SUPPLIED WITH THE SHUNT.

TABLE A						
PANEL	E/W SHUNT					
111-3765-00	NO					
111-3765-10	YES					

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.

1

SHEET INDEX							
SH NO	1	2	3				
ISSUE	9	7	7				

		ISSUES		
ISSUE DESC #	RIPTION			ISS. BY ISS. DA
9 SEE F	°CO# 44479			WD 7/11/1
UNLESS	OTHERWISE	APPROVALS		DATE
ARE I	DIMENSIONS N INCHES ANCES ON:	DRAWN MWY		/30/8
HOLES	+0.004 -0.002	CHECKED		
FRACTIONS	±1/32	SS APPROVED	<u> </u>	/2/90
DECIMALS (XX) DECIMALS (XXX)	±0.020 ±0.010	МСМ	2,	/5/04
ANGLES	±0.010 ±1/2*	APPROVED		
SQUARE CORNER	S AND ANGLES ARE	90° UNLESS OTHERWISE SPECIFIE	D.	
WORKMANSHI PER SPEC EI				
MATERIAL:				
FINISH:				
	COPIED, USED, TI	ARY INFORMATION RANSMITTED, OR DISCLOSI MISSION FROM UNIPOWER,		OUT
		IIII OWER,		
				Þ
		RING TECHI		

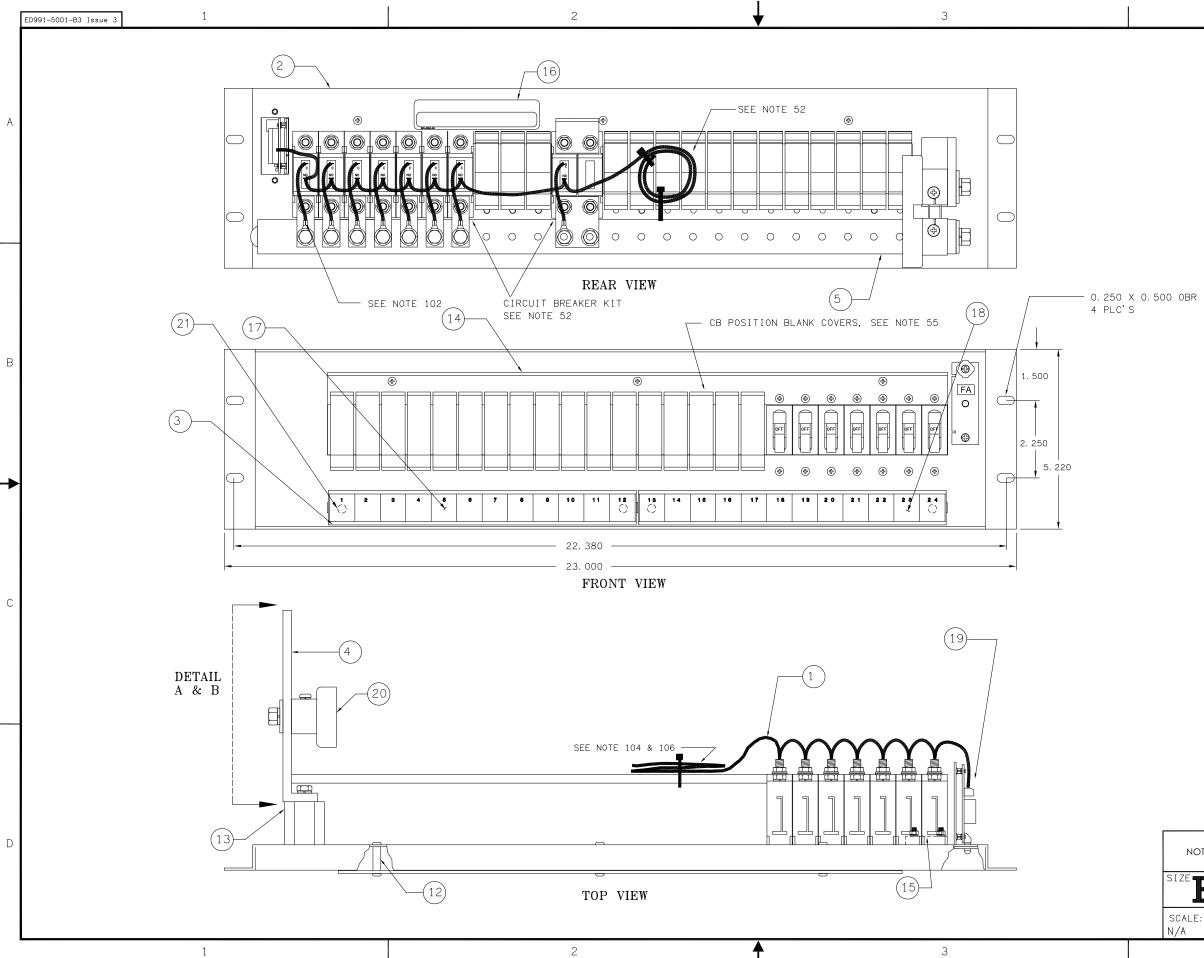
4

А

С

24V/NEG GND & -48V/POS GND AM1 5-125 AMP, CKT BKR PNL W/ALM SWITCH & FUSE ALARM					
	DOC TYPE / NUMBER ISSUE				
Ы	PN 111-3765 9				
SCALE: N/A	SHEET: FILE NAME: 1 OF 3 PN111-3765_SHT_1_ISS_9				
				•	

2



PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.					
SIZE B	DOC TYPE / NU PN 11	issue 7			
SCALE: N/A	SHEET: 2 OF 3	FILE NAME: PN111-3765_SHT_2_ISS_7	7		

D

1

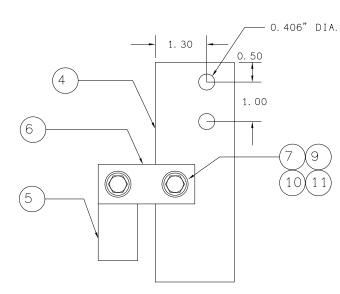
2

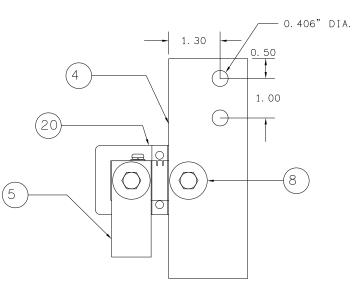
3

Α NOTE 51 INPUT BUS CB1 +24 R1 OR — BAT. 0- \cap \cap -48 0- NO 9 съ LOADS 18 GA. R TO AMMETER CB24 -0 О 0-• N0 9 С 0 • 18 GA. R GА 18 +24VDC OR -48VDC ← FUSE ALARM SIGNAL ← В WIRING DETAIL FOR +24V FA ALARM BD. ISSU FA ALARM OUTPUT RELAY 0 NO < FROM SYSTEM GND-RETURN</pre> GND ←-- \rightarrow - +24VDC FUSE ALARM SIGNAL FROM CIRCUIT BREAKERS 24V IN ← Ļс. -48V OUT 0 MANU DATE: +24VDC SIGNAL FROM ANOTHER PANEL +24V OUTPUT TO EXTERNAL MONITOR -48V IN ←-- \bigcirc PLACE JUMPER HERE С WIRING DETAIL FOR -48V FA ALARM BD. NC FA ALARM ISSU 0 OUTPUT RELAY GND ←---✓ FROM SYSTEM GND-RETURN - - 48VDC SIGNAL FROM ANOTHER PANEL
 - 48V OUTPUT TO EXTERNAL MONITOR
 - 48VDC FUSE ALARM SIGNAL FROM CIRCUIT BREAKERS 24V IN <----<u>ت</u> -48V OUT <----MANI -0-48 DATE -48V IN < 4V OUT , $(\bigcirc$



1





DETAIL Α WITHOUT SHUNT 111-3765-00

CALLOUT TABLE

			QUAN	ITITY
LINE #	DESCRIPTION	PART NUMBERS	-00	-10
1	CUT WIRE: 18 GAUGE ORANGE	051-1833-52	1	1
	PANEL: CIRCUIT BREAKER AM1 POS GRD	202-3851-00	1	1
	CARD HOLDER: 1" X 9" AM1 CKT BKR PNL	208-2990-007	2	2
	BUS BAR: CKT BKR PNL AM1, INPUT, POS GRD	209-3040-00	1	1
5	BUS BAR: CKT BKR PNL AM1, SHUNT TO CB	209-3041-00	1	1
	COMB DIST PNL: BUS, SHUNT BYPASS, 200/400A	209-4245-01	2	
	SCREW: SS, HEX HD, 3/8-16 X 1 1/4"	210-1293-00	2	
	BOLT, HEX, SIL, BRONZE: 3/8-16 X 3/4"	210-8128-00		2
	NUT, HEX SS: 3/8-16	211-0533-00	2	
10	WASHER, FLAT SS: 5/16" X 3/4" X .125"	212-2518-00	4	
	WASHER, BELLEVILLE, SS: 1/2" X .900"	212-5758-00	2	
	STANDOFF: SWIVEL, F/F, 6-32 X 3/4 X 1/4 OD	213-1317-00	3	3
	SPACER: HEATSINK, HEX FIBERGLASS, 1.25"GLASTIC	213-1410-00	1	1
	SHIELD: AM1 CKT BKR PANEL, COVER	213-3200-00	1	1
15	INSULATOR: CKT BKR AM1, BUS SUPPORT	213-3635-00	1	1
	LABEL: NOMENCLATURE: GENERAL MISC, 0.9"	225-3094-09	1	1
	LABEL: 1"X 9"1–12, FOR AM1 CKT BKR PNL	225-3107-01	1	1
	LABEL: 1"X 9"13–24, FOR AM1 CKT BKR PNL	225-3108-01	1	1
	ASSY: ALARM BOARD, BKT, LABEL, FOR FA	385-5152-00	1	1
20	RES, SHUNT: METER, 600A 50MV	695-1093-03		1
	SCREW: ROLL/THD, 10 - 24 X 3/8	210-6200-00	4	4
25				

2

3

А

В

◀—

С

D

DETAIL В WITH SHUNT 111-3765-10

PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.				
SIZE B	DOC TYPE / NUMBERISSUEPN111-37657			
scale: N/A	SHEET: 3 OF 3	FILE NAME: PN111-3765_SHT_3_ISS_7		

ED991-5001-B1 Issue 3

2

2

ENGINEERING NOTES:

1

- 51. AMMETER SHUNTS ARE NORMALLY 600 AMPS, 50MV. HOWEVER, OTHER CURRENT RATINGS MAY BE SPECIFIED. PANELS NOT SPECIFIED WITH A SHUNT (TABLE "A") DO NOT INCLUDE R1.
- 52. THIS PANEL WILL ACCOMMODATE A MAXIMUM OF 24 5–100 AMP CIRCUIT BREAKERS. TOTAL PANEL AMPERAGE MUST NOT EXCEED 500 AMPS. ORDER CIRCUIT BREAKERS PER ED991–0009–00.
- 53. UNIPOWER'S STANDARD PAINT IS ANSI 61 GRAY.
- 54. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIRECT CONNECTION TO UNIPOWER VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLT-ING LUGGED CABLES.
- 55. TO COVER OPEN CIRCUIT BREAKER POSITIONS, ORDER BLANK COVERS, 213.3923.00, PER CIRCUIT BREAKER POSITION.
- 56. BUBBLE REFERENCE DESIGNATORS REFER TO CALLOUT TABLE LINE NUMBER.
- 57. PROVIDE ADEQUATE SPACE ABOVE THE CIRCUIT BREAKER PANEL FOR TURNING DISTRIBUTION CABLES. USE OF A ONE SPACE BLANK PANEL IS HIGHLY RECOMMENDED. ORDER BLANK 202–3245–00.

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 SURFACES PER MANUFACTURER'S INSTRUCTIONS.

3

- 102. MOUNT WIRE LUG BETWEEN BUS BAR AND 1/4" FLAT WASHER.
- 103. THE REMAINING EXCESS OF ALARM WIRE MUST BE WOUND UP AND TIED TO THE BUS BAR WITH A TIE WRAP. THIS WIRE WILL BE USED FOR ADDITIONAL CIRCUIT BREAKERS.
- 104. WHEN CONNECTING ADDITIONAL CIRCUIT BREAKERS, THE ALARM CONNECTION FROM THE BREAKER (NO) TO THE FA SIGNAL "IN" IS COMPLETED BY DAISY CHAINING EACH CIRCUIT BREAKER WITH PUSH-ON.
- 105. THE ALARM WIRE LENGTH IS 52" LONG TO ALLOW FOR 24 CIRCUIT BREAKERS. (WHEN CIRCUIT BREAKERS ARE ADDED, A 2" LENGTH MUST BE CUT FROM THE REMAINING WIRE FOR EACH BREAKER. THIS 2" LENGTH MUST THEN BE JOINED WITH THE REMAINING ALARM WIRE BY A CRIMP TYPE PUSH-ON.) IF CRIMPING TOOLS ARE NOT AVAILABLE, THE PUSH-ON MAY BE SOLDERED.
- 106. LUGS AND PUSH-ONS ARE USED FOR CONNECTING EACH ALARM CONTACT (C) OF THE CIRCUIT BREAKER TO THE BUS BAR. EACH CONNECTION FROM THE ALARM CONTACT TO THE BUS BAR IS COMPLETED SEPARATELY.
- 107. WHEN A SHUNT IS REQUIRED, REPLACE ITS' BOLTS AS SHOWN IN DETAIL B. USE BRASS WASHERS SUPPLIED WITH THE SHUNT.

TABLE A					
PANEL	E/W SHUNT				
111-3766-00	NO				
111-3766-10	YES				

		ISSUES		
ISSUE DESCRI	PTION			ISS. BY ISS. DATE
	0# 44479			WD 7/11/17
UNLESS O SPECIFIED D ARE IN	DIMENSIONS	APPROVALS		DATE
	CES ON:	DRAWN MWY	10,	/30/89
HOLES	+0.004 -0.002	CHECKED SS	2	/2/99
FRACTIONS DECIMALS (XX)	±1/32 ±0.020	APPROVED MCM	2/	/19/04
DECIMALS (XXX)	±0.010	APPROVED		
ANGLES SQUARE CORNERS	$\pm 1/2^{\circ}$	90° UNLESS OTHERWISE SPECIFIED.		
WORKMANSHIP:				
PER SPEC ENG MATERIAL:	032			
FINISH:				
	OPIED, USED, T	TARY INFORMATION RANSMITTED, OR DISCLOSED ' MISSION FROM UNIPOWER, LLC		UT
NEG AM1 W/AI	GRD, PC 5-100 / _M SWIT)S 24V/48V PL/ AMP, CKT BKR CH & FUSE ALA	ANT PNL ARM	- -
	DOC TYPE / N			ISSUE
ЧЧ		11-3766		9
				·

FILE NAME:

4

PN111-3766_SHT_1_ISS_9

SHEET: 1 OF 3

SCALE:

N/A

4

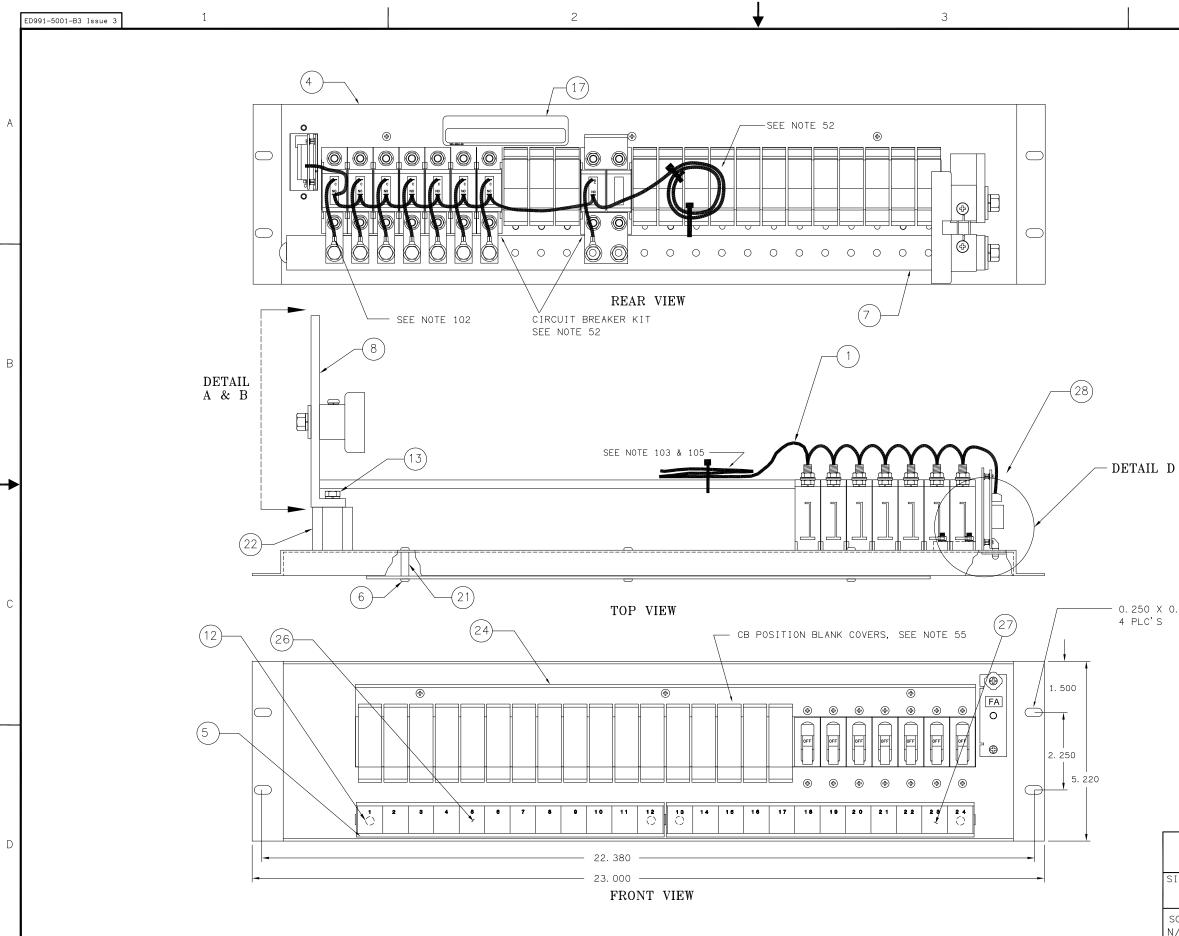
ISSUES

SHEET INDEX NOTE:

D

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							
SH NO	1	2	3				
ISSUE	9	7	7				



1

4 0.250 X 0.500 OBR PROPRIETARY INFORMATION D NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC. SIZE **B** DOC TYPE / NUMBER ISSUE 7 PN 111-3766 SCALE: SHEET: FILE NAME:

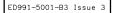
N/A

3

2 OF 3

4

PN111-3766_SHT_2_ISS_7



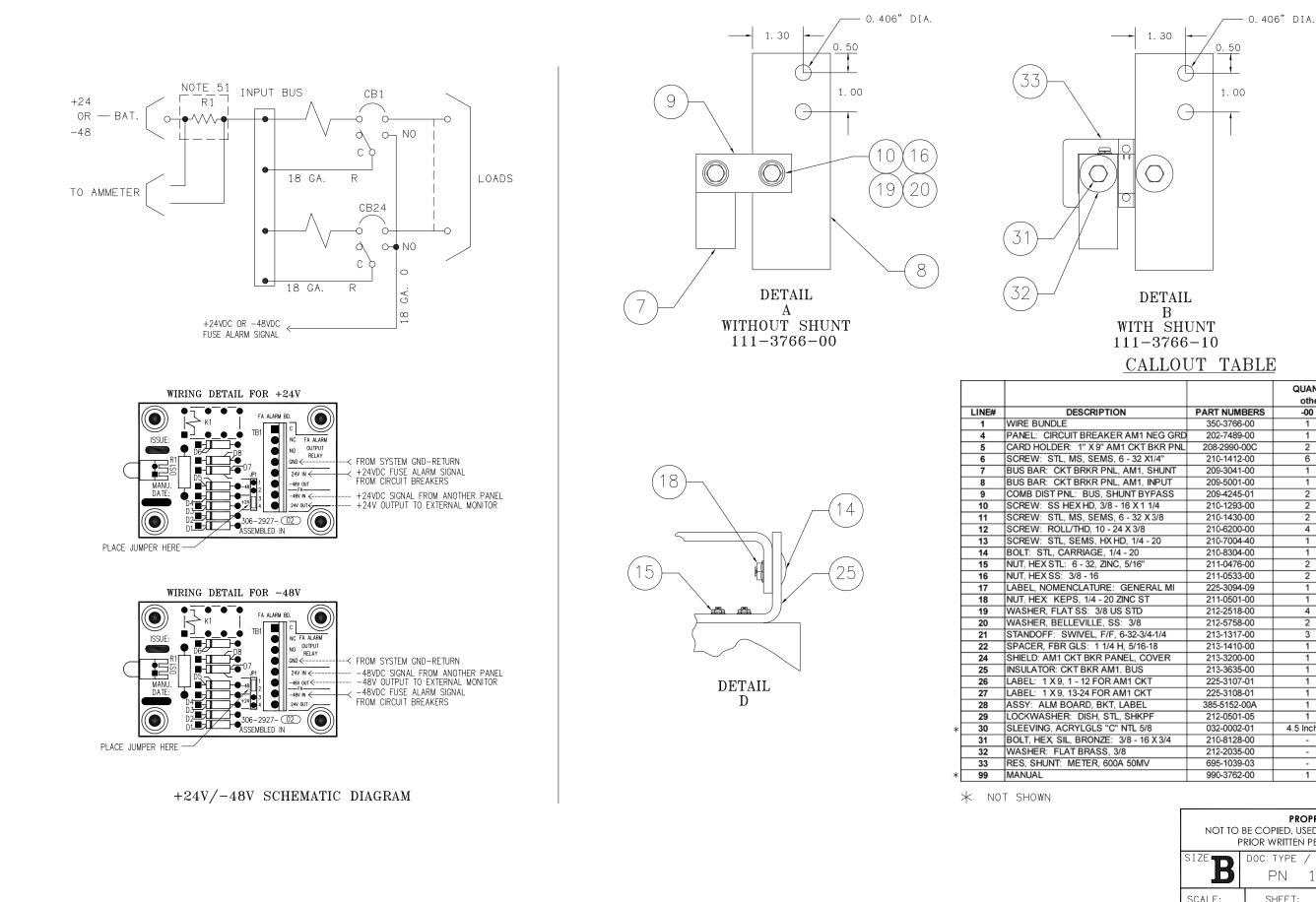
В

 \rightarrow

С

D

1



1

2

ALLOUT	TABLE

		QUANTITY (each unless otherwise specified)		
	PART NUMBERS	-00	-10	
	350-3766-00	1	1	
1 NEG GRD	202-7489-00	1	1	
T BKR PNL	208-2990-00C	2	2	
2 X1/4"	210-1412-00	6	6	
1, SHUNT	209-3041-00	1	1	
1, INPUT	209-5001-00	1	1	
BYPASS	209-4245-01	2	-	
1 1/4	210-1293-00	2	-	
2 X 3/8	210-1430-00	2	2	
/8	210-6200-00	4	4	
4 - 20	210-7004-40	1	1	
)	210-8304-00	1	1	
6"	211-0476-00	2	2	
	211-0533-00	2	-	
IERAL MI	225-3094-09	1	1	
ST	211-0501-00	1	1	
D	212-2518-00	4	-	
3	212-5758-00	2	-	
-3/4-1/4	213-1317-00	3	3	
16-18	213-1410-00	1	1	
COVER	213-3200-00	1	1	
S	213-3635-00	1	1	
CKT	225-3107-01	1	1	
кт	225-3108-01	1	1	
EL	385-5152-00A	1	1	
KPF	212-0501-05	1	1	
5/8	032-0002-01	4.5 Inches	4.5 Inches	
16 X 3/4	210-8128-00	-	2	
	212-2035-00	-	2	
MV	695-1039-03	-	1	
	990-3762-00	1	1	

PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.					
^{SIZE} B	· · · ·	doc type / number PN 111-3766			
SCALE: N/A	SHEET: 3 OF 3				
4					

А

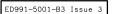
В

◀—

С

D

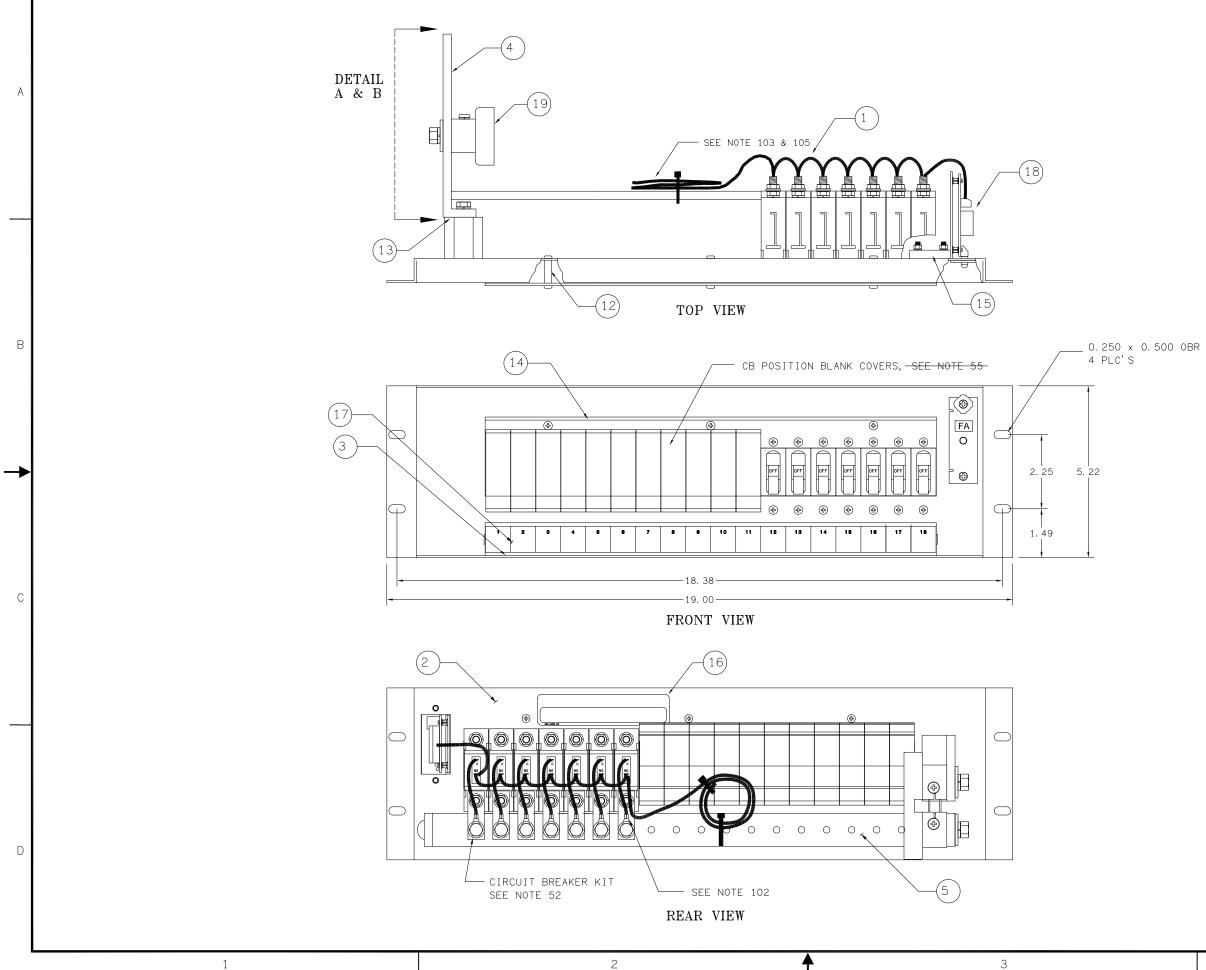
	ED991-5001-B1 Issue 3	2 3		4			
				ISSU	IES		I
	ENGINEERING NOTES:	MANUFACTURING NOTES:	ISSUE #	DESCRIPTION		iss. By ss. date	l
А	51. AMMETER SHUNTS ARE NORMALLY 600 AMPS, 50MV. HOWEVER, OTHER CURRENT RATINGS MAY BE SPECIFIED. PANELS NOT SPECIFIED WITH A SHUNT (TABLE "A") DO NOT INCLUDE R1.	101. ANTI-OXIDATION 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 SURFACES PER MANUFACTURER'S INSTRUCTIONS.	7	SEE PCO# 44479		WD 7/11/17	А
	52. THIS PANEL WILL ACCOMMODATE A MAXIMUM OF 18 5-100 AMP CIRCUIT BREAKERS. TOTAL PANEL AMPERAGE MUST NOT EXCEED 500 AMPS. ORDER CIRCUIT BREAKERS PER ED991-0009-00.	 102. MOUNT WIRE LUG BETWEEN BUS BAR AND 1/4" FLAT WASHER. 103. THE REMAINING EXCESS OF ALARM WIRE MUST BE WOUND UP AND TIED TO THE BUS BAR WITH A TIE WRAP. THIS WIRE WILL BE USED FOR ADDITIONAL CIRCUIT BREAKERS. 					
	 53. UNIPOWER'S STANDARD PAINT COLOR IS ANSI 61 GRAY. 54. THE INPUT COPPER BUS BAR IS DESIGNED FOR DIRECT CONNECTION TO UNIPOWER VERTICAL BUS BAR SYSTEMS. FOR OTHER SYSTEMS, HOLES ARE PROVIDED FOR BOLT- ING MURICIPALIES AND FOR BOLT- 	104. WHEN CONNECTING ADDITIONAL CIRCUIT BREAKERS, THE ALARM CONNECTION FROM THE BREAKER (NO) TO THE FA SIGNAL "IN" IS COMPLETED BY DAISY CHAINING EACH CIRCUIT BREAKER WITH PUSH-ON.					
в	ING LUGGED CABLES. 55. TO COVER OPEN CIRCUIT BREAKER POSITIONS, ORDER -BLANK COVERS, P/N 213-3923-00, PER CIRCUIT BREAKER -POSITION. 56. BUBBLE REFERENCE DESIGNATORS REFER TO CALLOUT	105. THE ALARM WIRE LENGTH IS 40" LONG TO ALLOW FOR 18 CIRCUIT BREAKERS. (WHEN CIRCUIT BREAKERS ARE ADDED, A 2" LENGTH MUST BE CUT FROM THE REMAINING WIRE FOR EACH BREAKER. THIS 2" LENGTH MUST THEN BE JOINED WITH THE REMAINING ALARM WIRE BY A CRIMP TYPE PUSH-ON.) IF CRIMPING TOOLS ARE NOT AVAILABLE, THE PUSH-ON MAY BE SOLDERED.					В
►	 50. BOBBLE REFERENCE DESIGNATORS REFER TO CALLOUT TABLE LINE NUMBER. 57. PROVIDE ADEQUATE SPACE ABOVE THE CIRCUIT BREAKER PANEL FOR TURNING DISTRIBUTION CABLES. USE OF A ONE SPACE BLANK PANEL IS HIGHLY RECOMMENDED. ORDER BLANK PANEL P/N 202-3245-00. 	 106. LUGS AND PUSH-ONS ARE USED FOR CONNECTING EACH ALARM CONTACT (C) OF THE CIRCUIT BREAKER TO THE BUS BAR. EACH CONNECTION FROM THE ALARM CONTACT TO THE BUS BAR IS COMPLETED SEPARATELY. 107. WHEN A SHUNT IS REQUIRED, REPLACE ITS' BOLTS AS SHOWN IN DETAIL B. USE BRASS WASHERS SUPPLIED WITH THE SHUNT. 	± HOLES FRACTIO	PECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON: +0.004 -0.002 JW DNS ±1/32 APPRC	N 2/2 KED 3/1 DVED	ATE 27/95 0/95	←
с	TABLE A PANEL E/W SHUNT 111-3768-00 NO 111-3768-01 NO 111-3768-10 YES 111-3768-20 NO 111-3768-21 YES		DECIMA ANGLES SQUARE WORK PER S MATEI	CORNERS AND ANGLES ARE 90' UNLESS MANSHIP: SPEC ENG032 RIAL:	DVED S OTHERWISE SPECIFIED. DRMATION TED, OR DISCLOSED WITHOUT	0/95	C
D	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 7 6 6	1 SIZE SCAL	9" POS GRN, NEG AM1 50-100 AMF W/ALARM SWITCH B DOC TYPE / NUMBER PN 111-370 E: SHEET: FILE N	p, CKT BKR PNI 1 & FUSE ALAR 68	gy NT L	D
	1	2 3		4			



Α

1

3



PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.				D
SIZE	doc type / number PN 111-3768		issue 6	
SCALE: N/A	SHEET: 2 OF 3	FILE NAME: PN111-3768_SHT_2_ISS_6	3	

4

А

В

◀—

С

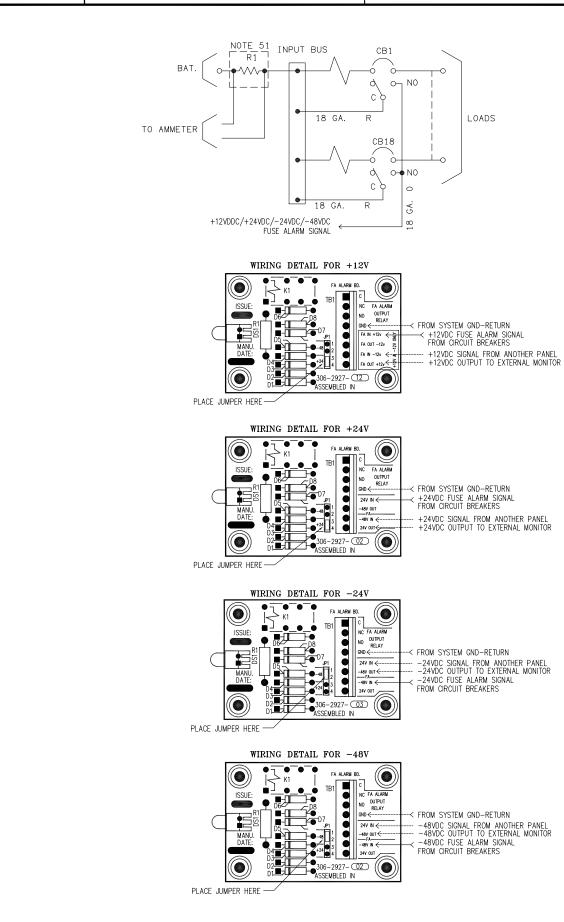
В

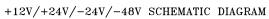
 \rightarrow

С

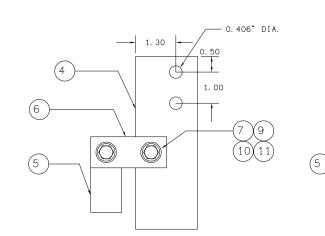
D

1





1



DETAIL					
А					
WITHOUT SHUNT					
111 - 3768 - 00					
111 - 3768 - 01					
111 - 3768 - 20					



(O)

CALLOUT TABLE

(4

(19)-

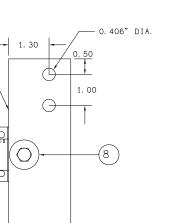
			1AUQ	NTITY
LINE #	DESCRIPTION	PART NUMBERS	-00, -01, -20	-10, -11, -21
1	CUT WIRE: 18 GAUGE ORANGE	051-1833-52	1	1
	PANEL: CIRCUIT BREAKER AM1 POS GRD, 19"	202-3852-00	1	1
	CARD HOLDER: 1" X 13.76" AM1 CKT BKR PNL	213. 3725. 1367	1	1
	BUS BAR: CKT BKR PNL AM1, INPUT, POS GRD	209-3040-00	1	1
5	BUS BAR: CKT BKR PNL AM1, SHUNT TO CB	209-3043-00	1	1
	COMB DIST PNL: BUS, SHUNT BYPASS, 200/400A	209-4245-01	2	
	SCREW: SS, HEX HD, 3/8-16 X 1 1/4"	210-1293-00	2	
	BOLT, HEX, SIL, BRONZE: 3/8-16 X 3/4"	210-8128-00		2
	NUT, HEX SS: 3/8-16	211-0533-00	2	
10	WASHER, FLAT SS: 5/16" X 3/4" X .125"	212-2518-00	4	
	WASHER, BELLEVILLE, SS: 1/2" X .900"	212-5758-00	2	
	STANDOFF: SWIVEL, F/F, 6-32 X 3/4 X 1/4 OD	213-1317-00	3	3
	SPACER: HEATSINK, HEX FIBERGLASS, 1. 25" GLASTIC	213-1410-00	1	1
	SHIELD: AM1 CKT BKR PANEL, COVER 19"	213-3201-00	1	1
15	INSULATOR: CKT BKR AM1, BUS SUPPORT	213-3635-00	1	1
	LABEL: NOMENCLATURE: GENERAL MISC, 0.9"	225-3094-09	1	1
	LABEL: 1" X 13.75" 1-18, FOR AM1 CKT BKR PNL	225-3107-03	1	1
	ASSY: ALARM BOARD, BKT, LABEL, FOR FA	See Table 2	1	1
19	RES, SHUNT: METER, 600A 50MV	695-1093-03		1

TABLE 2

Panel Part#	Alarm Board Kit#
111. 3768. 00A	385. 5152. 00A
111. 3768. 01A	385. 5152. 11A
111. 3768. 10A	385. 5152. 00A
111. 3768. 11A	385. 5152. 11A
111. 3768. 20A	385. 5152. 10A
111. 3768. 21A	385.5152.10A

2

3



DETAIL B WITH SHUNT 111-3768-10 111-3768-11 111-3768-21

PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.				D	
SIZE	3	doc type / number PN 111-3768		issue 6	
SCALE: N/A		SHEET: 3 OF 3	FILE NAME: PN111-3768_SHT_3_ISS_6		

4

А

В

━

С

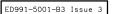
D991-5001-B1 Issue 3			2	\		3			4		
							ISSUE	ESCRIPTION	ISSUES	221	BY
ENGINEERING NOTES:			MAN	UFACTURING 1	NOTES:		#	ESCRIPTION			DATE
 AMMETER SHUNTS ARE NOR HOWEVER, OTHER CURRENT PANELS NOT SPECIFIED WIT DO NOT INCLUDE R1. THIS PANEL WILL ACCOMMO 	RATINGS MAY BE SPECI TH A SHUNT (TABLE "A")			OF LAMINATED C CRAMOLIN 81Rh PER MANUFACTUI	COPPER BUS STRUC WILL BE APPLIED TO IRER'S INSTRUCTIONS	PPLIED BETWEEN ALL LAYERS TURE. A COMPOUND SUCH AS O ALL JOINTED FLAT SURFACES S. R AND 1/4" FLAT WASHER.	4 St	E PCO# 44479			VD 1/17 A
5-100 AMP CIRCUIT BREAK AMPERAGE MUST NOT EXCE CIRCUIT BREAKERS PER ED	EED 500 AMPS. ORDER		103.	TIED TO THE BUS		MIRE MUST BE WOUND UP AND WRAP. THIS WIRE WILL BE USED					
53. UNIPOWER'S STANDARD PAIR	NT COLOR IS ANSI 61 GR	AY.	104	WHEN CONNECTIN	IG ADDITIONAL CIRCI	UIT BREAKERS, THE ALARM					
54. THE INPUT COPPER BUS BA CONNECTION TO UNIPOWER FOR OTHER SYSTEMS, HOLE ING LUGGED CABLES.	VERTICAL BUS BAR SYS	TEMS.		CONNECTION FRO COMPLETED BY D PUSH-ON.	OM THE BREAKER (N DAISY CHAINING EAG	NO) TO THE FA SIGNAL "IN" IS CH CIRCUIT BREAKER WITH					
55. TO COVER OPEN CIRCUIT B BLANK COVERS, P/N 213-3 POSITION.	3923-00, PER CIRCUIT BI	REAKER	105.	BREAKERS. (WHE BE CUT FROM TH LENGTH MUST TH A CRIMP TYPE P	IN CIRCUIT BREAKER HE REMAINING WIRE HEN BE JOINED WITH	NG TO ALLOW FOR 18 CIRCUIT RS ARE ADDED, A 2" LENGTH MUST FOR EACH BREAKER. THIS 2" H THE REMAINING ALARM WIRE BY ING TOOLS ARE NOT AVAILABLE,					в
56. BUBBLE REFERENCE DESIGN TABLE LINE NUMBER.	IATORS REFER TO CALLO	JT	106.			R CONNECTING EACH ALARM CONTA	.CT				
57. PROVIDE ADEQUATE SPACE PANEL FOR TURNING DISTR ONE SPACE BLANK PANEL	RIBUTION CABLES. USE OF	A		(C) OF THE CIRC FROM THE ALARM	CUIT BREAKER TO THE M CONTACT TO THE	HE BUS BAR. EACH CONNECTION BUS BAR IS COMPLETED SEPARAT	ELY. UNL	ess otherwise Fied Dimensions Re in Inches Lerances on:	APPROVALS DRAWN MRB	DATE 3/3/9	— ←
BLANK PANEL P/N 202-32	245-00.		107.			CE ITS' BOLTS AS SHOWN IN PPLIED WITH THE SHUNT.	HOLES FRACTIONS	+0.004 -0.002 ±1/32	CHECKED JW APPROVED	3/10/	95
							DECIMALS () DECIMALS () ANGLES	(xx) ± 0.010 $\pm 1/2^{\circ}$	NMS APPROVED	3/10/9	95
							SQUARE CO WORKMAN PER SPEC MATERIAL	SHIP: ENG032	ie 90° unless otherwise specif	ied.	c
TABLE A	A /w shunt						FINISH:	PROPRI	ETARY INFORMATION		
111-3769-00 111-3769-10	NO YES								, TRANSMITTED, OR DISCLO RMISSION FROM UNIPOWER		┢
									NIPOV ERING TECH	NOLOG	Y
SHEET INDEX NOT THE ISSUE OF SHEET 1 OF THE DRAWING SET. V	REFLECTS THE LATEST IS			SH NO 1 2			AI W/	M1 5-100 ALARM SW	POS 24V/48\ AMP, CKT BKF VITCH & FUSE	r pnl Alarm	D
REVISED, ONLY THE ISSU ARE CHANGED. THE ISSU ARE NOT CHANGED.	JE NUMBERS OF MODIFIED UE NUMBERS OF UNMODIF			ISSUE 4 3	3 3		SIZE B	DOC TYPE / PN 1 SHEET:	NUMBER 111-3769 File NAME:	ISSU 2	4
			0	A		7	N/A	1 OF 3	PN111-3769_SHT_1	_ISS_4	
1			2	Ŧ		3	1		4		

ED991-5001-B1 Issue 3

►

С

D



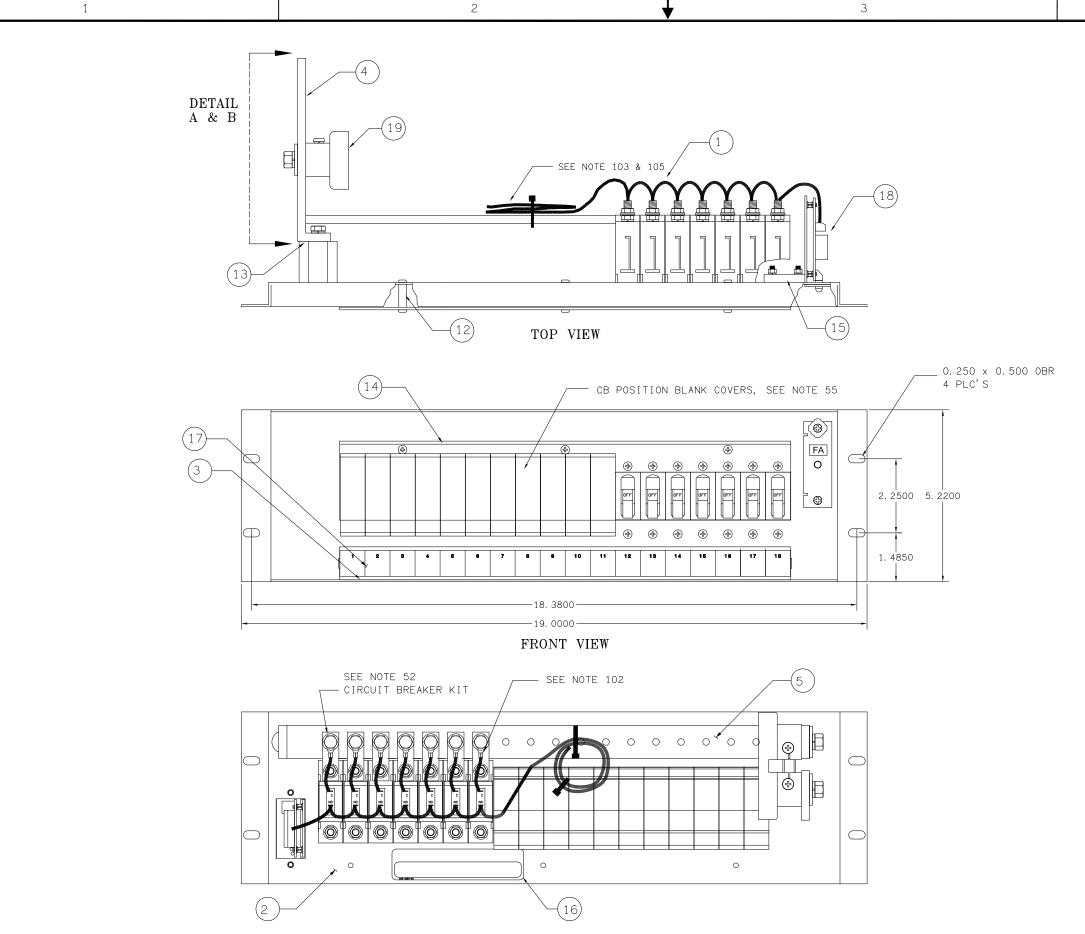
В

 \rightarrow

С

D

1



REAR VIEW

3

2

PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.				D
^{SIZE} B	doc type / NL PN 11	issue 3		
scale: N/A	SHEET: 2 OF 3	FILE NAME: PN111-3769_SHT_2_ISS_3		

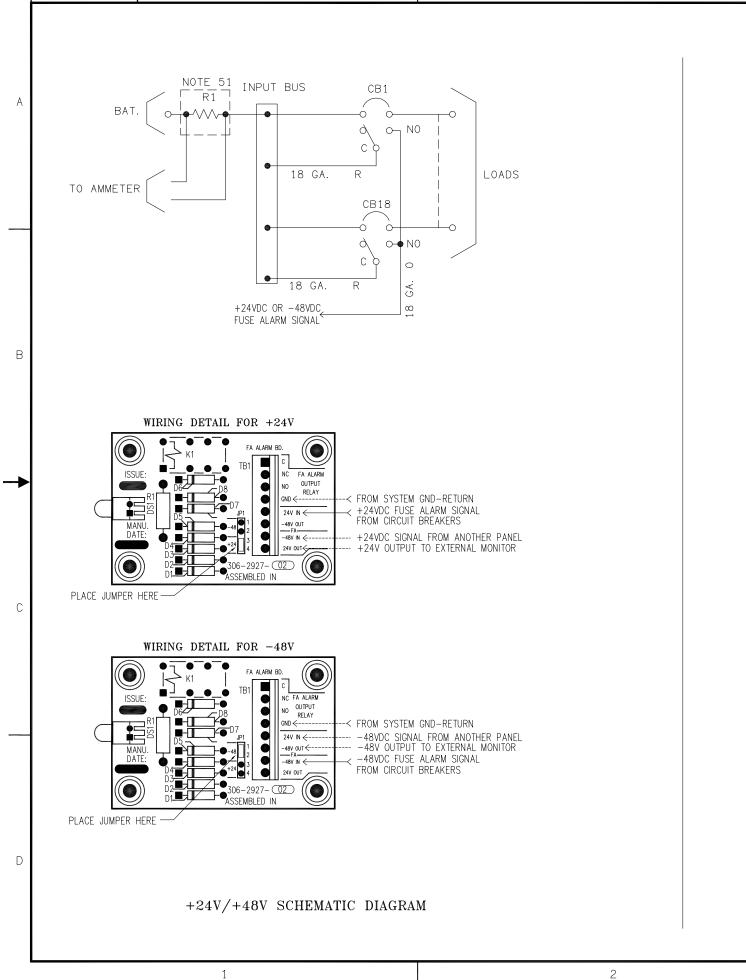
4

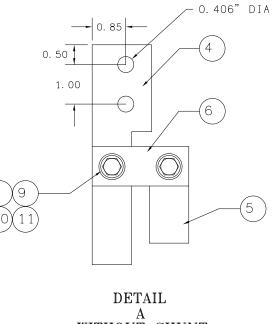
А

В

◀—

С



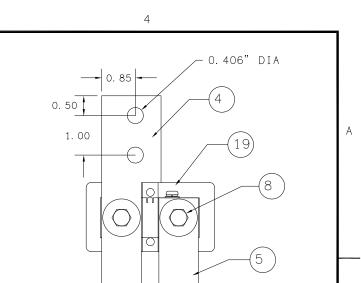


WITHOUT SHUNT 111-3769-00

3

CALLOUT TABLE

			QUAN	TITY
LINE #	DESCRIPTION	PART NUMBERS	-00	-10
1	CUT WIRE: 18 GAUGE ORANGE	051-1833-52	1	1
	PANEL: CIRCUIT BREAKER AM1 NEG GRD, 19"	202-3852-01	1	1
	CARD HOLDER: 1" X 13.76" AM1 CKT BKR PNL	208-2991-00	1	1
	BUS BAR: CKT BKR PNL AM1, INPUT, NEG GRD	209-3042-00	1	1
5	BUS BAR: CKT BKR PNL AM1, SHUNT TO CB	209-3043-00	1	1
	COMB DIST PNL: BUS, SHUNT BYPASS, 200/400A	209-4245-01	2	
	SCREW: SS, HEX HD, 3/8-16 X 1 1/4"	210-1293-00	2	
	BOLT, HEX, SIL, BRONZE: 3/8-16 X 3/4"	210-8128-00		2
	NUT, HEX SS: 3/8-16	211-0533-00	2	
10	WASHER, FLAT SS: 5/16" X 3/4" X .125"	212-2518-00	4	
	WASHER, BELLEVILLE, SS: 1/2" X .900"	212-5758-00	4	
	STANDOFF: SWIVEL, F/F, 6-32 X 3/4 X 1/4 OD	213-1317-00	3	3
	SPACER: HEATSINK, HEX FIBERGLASS, 1.25" GLASTIC	213-1410-00	1	1
	SHIELD: AM1 CKT BKR PANEL, COVER 19"	213-3201-00	1	1
15	INSULATOR: CKT BKR AM1, BUS SUPPORT	213-3635-00	1	1
	LABEL: NOMENCLATURE: GENERAL MISC, 0.9"	225-3094-09	1	1
	LABEL: 1" X 13.75" 1–18, FOR AM1 CKT BKR PNL	225-3107-03	1	1
	ASSY: ALARM BOARD, BKT, LABEL, FOR FA	385-5152-00	1	1
	RES, SHUNT: METER, 600A 50MV	695-1093-03		1
20				



DETAIL В WITH SHUNT 111-3769-10

В

С

D

PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.					
SIZE B	DOC TYPE / NUMBER ISS PN 111-3769				
SCALE: N/A	SHEET: FILE NAME: 3 OF 3 PN111-3769_SHT_3_ISS_3				