

# BATTERY DISCONNECT PANEL PRODUCT MANUAL FOR P/N 111-2916

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

PM 990-2916-00, Rev. 8

#### 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. 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, ask the delivering carrier to send the packages back to UNIPOWER 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 equipment is identified by a part number on the nameplate. Please refer to this number in all correspondence with UNIPOWER.

#### 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	CHECKED/APPROVED BY & DATE
7	See PCO 45403	CJM / 8-8-19
8	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.

ED991-5001-B1 issue 3

Α

В

С

D

1

3

### **ENGINEERING NOTES:**

- 51. PANEL CAN BE MOUNTED IN A 19 OR 23 INCH RACK BY PROPER PLACEMENT OF MOUNTING BRACKET.
- 52. EACH BREAKER IS EQUIPPED WITH AN INTERGRAL SPDT (SINGLE POLE DOUBLE THROW) AUXILIARY SWITCH OR ALARM SWITCH. USE 20 GAUGE MINIMUM FOR ALARM WIRING.
- 53. STANDARD PAINT COLOR IS ANSI 61 GRAY.

1

54. INPUT AND OUTPUT BUS BAR IS SUPPLIED WITH THE PANEL. SEE TABLE A.

## 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 INSTUCTIONS.
- 102. APPLY LABEL "BATT" TO LINE SIDE OF BREAKER AND "LOAD" TO LOAD SIDE OF BREAKER, P/N 225-2601-00.

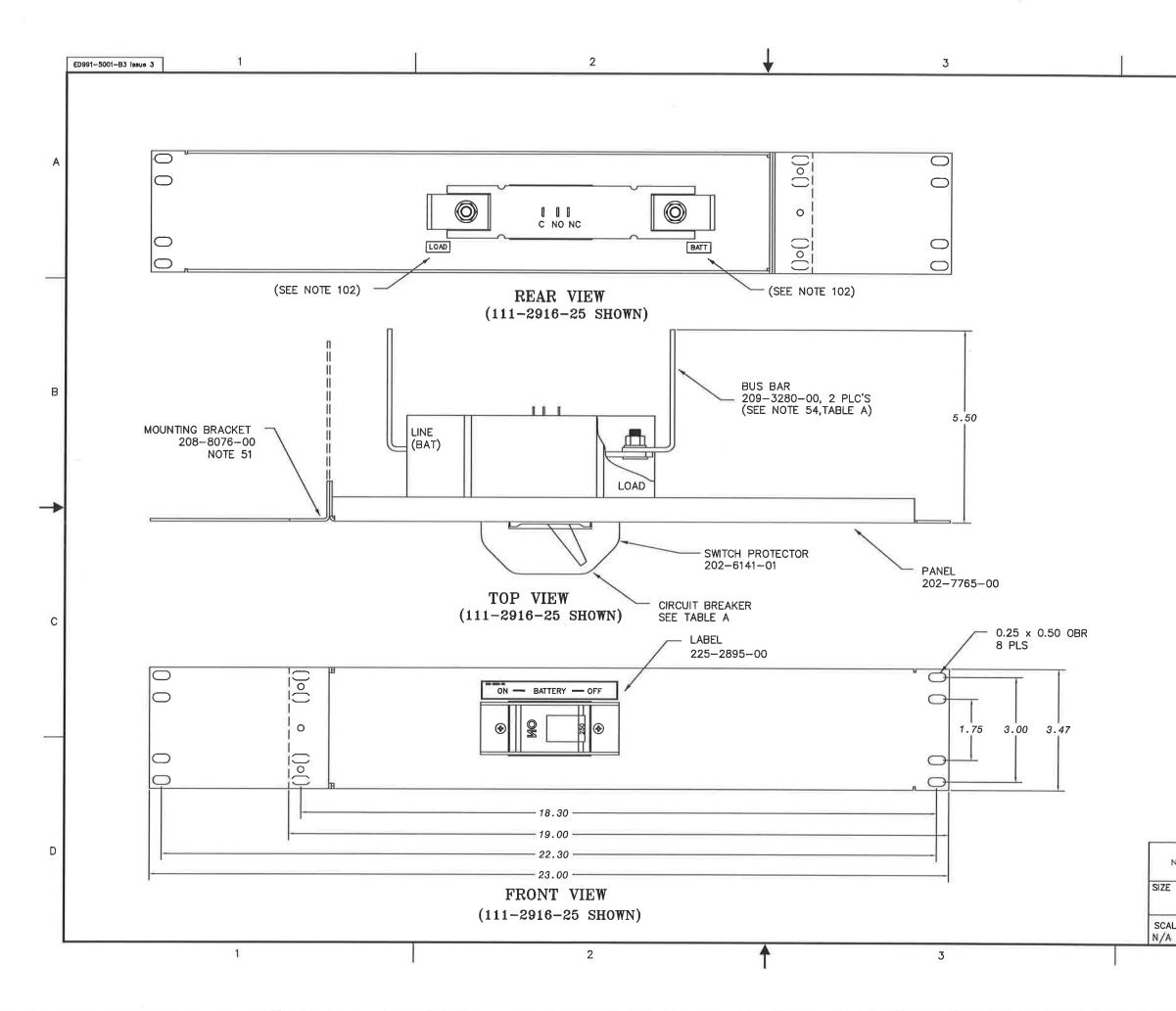
PANEL PART NUMBER	AMP RATED	BREAKER PART NUMBER	RATING	W/BUS BAR	SWITCH TYP
111-2916-05	50	271-0915-00	STD	NO	AUX SW
111-2916-10	100	271-0921-00	STD	NO	AUX SW
111-2916-15	150	271-1021-00	STD	YES	AUX SW
111-2916-20	200	271-1023-05	STD	YES	AUX SW
111-2916-25	250	271-1031-00	STD	YES	AUX SW
111-2916-11	100	271-1011-00	STD	NO	ALR SW
111-2916-16	150	271-1018-00	STD	YES	ALR SW
111-2916-21	200	271-1023-10	STD	YES	ALR SW
111-2916-26	250	271-1033-00	STD	YES	ALR SW

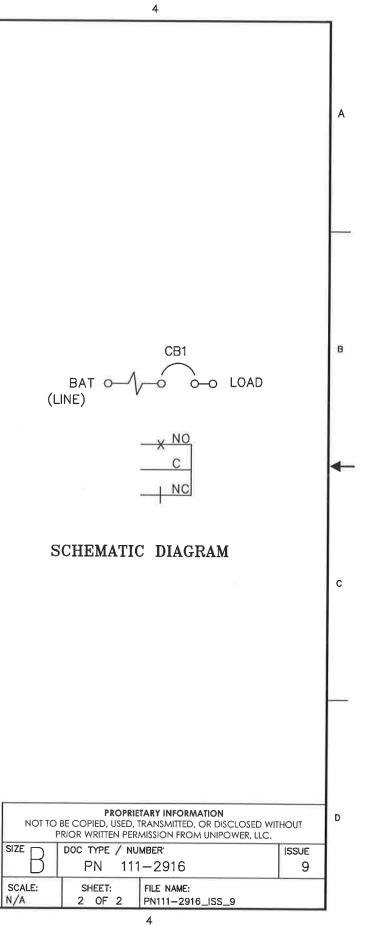
2

# TABLE A

ISSUE     DESCRIPTION     ISS. BY       #     UPDATED UNIPOWER LOGO.     WD       9     UPDATED 44417     6/12/17				
9 UPDATED UNIPOWER LOGO. WD	1			
	- A			
UNLESS OTHERWISE APPROVALS DATE				
ARE IN INCHES ± TOLERANCES ON: PKD 4/5/85				
-0.002 BW 4/7/85				
FRACTIONS         ±1/32         APPROVED           DECIMALS (XX)         ±0.020         APPROVED				
DECIMALS (XXX) ±0.010 APPROVED				
ANGLES ±1/2* SQUARE CORNERS AND ANGLES ARE 90' UNLESS OTHERWISE SPECIFIED.				
WORKMANSHIP:				
PER SPEC ENG032 MATERIAL:	С			
FINISH:				
PROPRIETARY INFORMATION NOT TO BE COPIED, USED, TRANSMITTED, OR DISCLOSED WITHOUT PRIOR WRITTEN PERMISSION FROM UNIPOWER, LLC.				
BATTERY/LOAD DISCONNECT CIRCUIT BREAKER PANEL				
SIZE DOC TYPE / NUMBER ISSUE PN 111-2916 9				
SCALE:         SHEET:         FILE NAME:           1=1         1         OF         2         PN111-2916_ISS_9				

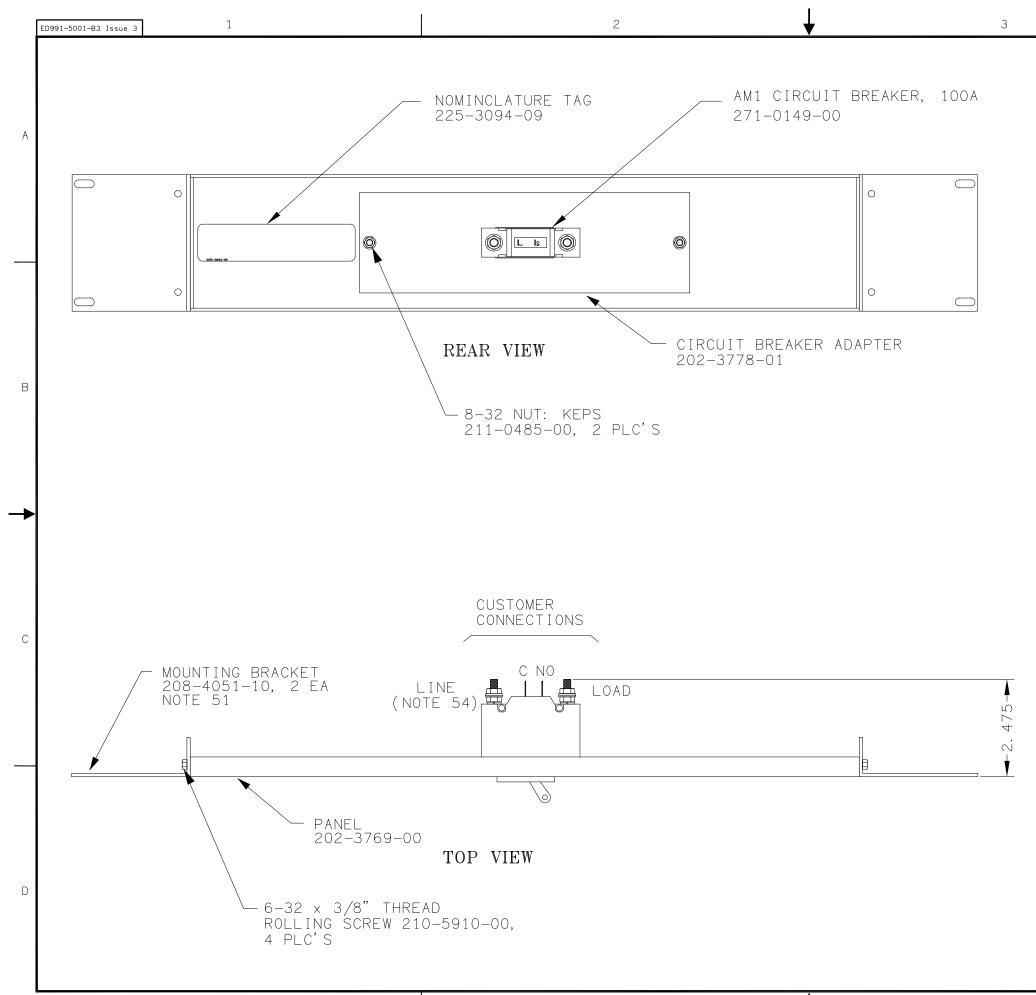
1





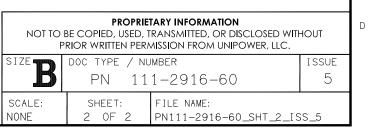
	ED991-5001-B1 Issue 3 1 2	3	
	ENGINEERING NOTES:	TABL	E A
	51. PANEL CAN BE MOUNTED IN A 19 INCH OR 23 INCH RACK BY PROPER	COLOR	DESIGNATOR
	PLACEMENT OF ADAPTOR BRACKET.	ANSI 61 GRAY BEIGE	A B
А	52. TYPE AM1 BREAKERS ARE EQUIPPED WITH AN INTEGRAL ALARM SWITCH WHICH SENDS FA SIGNALS WHEN BREAKER IS TRIPPED. IT DOES NOT ALARM IN THE "OFF" POSITION. ALARM CONNECTIONS ARE .020" x .205" TABS. USE PUSH ON, PART NUMBER 253-0311-01 OR EQUIVALENT.		
	53. SELECT THE PAINT COLOR FROM THE TABLE A IE. 111-2916-60, COLOR A = ANSI 61 GRAY FINISH IE. 111-2916-60, COLOR B = BEIGE FINISH		
	54. THIS CIRCUIT BREAKER IS POLARITY SENSITIVE. THE POSITIVE LEAD FROM THE BATTERIES MUST CONNECT TO LINE.		
	55. ALARM SWITCH COMMON MAY BE SUPPLIED EXTERNALLY, OR BY ADDING THE DASHED WIRE AS SHOWN, 20 GA MINIMUM.		
	56. INPUT AND OUTPUT CABLES SHOULD BE 4 GA MINIMUM, BREAKER STUDS ARE 1/4"-20.		
В			
	- 6-32 x 3/8" SEMS 210-1430-00, 2 PLC'S		
		- 0.250 4 EA	x 0.500 OBR
->			
		3.000 3	3.470
с			
	17.000		
	19.000		
3	23.000		
	FRONT VIEW		
D			
	SHEET INDEX         SHEET NO.       1       2          ISSUE       6       5		
	1 2	3	

					i i	
			ISSUES			
	ISSUE DESCRIPTION			ISS. BY		
	#					
	6 UPDATED UNIPOWER LOGO.			WD 6/12/17		
		SEE PCO# 44417.		0/12/17		
					A	
	1 1					
				-		
					l l	
I						
					B	
I						
I						
I						
I						
I						
I						
ł		UNLESS OTHERWISE	APPROVALS	DATE		
I		ECIFIED DIMENSIONS ARE IN INCHES		DATE	-	
l	±	TOLERANCES ON:	DRAWN SAN	3/26/87		
ſ	HOLES	+0.004	CHECKED	0120101		
ł		-0.002	JB	3/26/87		
			APPROVED			
ŀ	DECIMALS		BW	3/26/17		
F	ANGLES	±1/2°	APPROVED			
ŀ		ORNERS AND ANGLES ARE 90° U	NLESS OTHERWISE SPECIFIED.			
ŀ	WORKMA	NSHIP:				
ŀ	PER SP	EC ENG032			С	
	MATERI	AL:	5			
ŀ	FINISH	5				
I						
ſ		DOODDIETA				
	NOT		ANSMITTED, OR DISCLOSED W			
			SSION FROM UNIPOWER, LLC.			
ŀ		-				
	4					
		IBUN	IPOW			
POWERING TECHNOLOGY						
LOAD DISCONNECT						
CIRCUIT BREAKER PANEL					D	
100 AMPS						
	L	<u>רו אין כ</u>	1-2916-60	6		
ſ	SCALE	SHEET;	FILE NAME:			
	N/A	1 OF 2	PN111-2916-60 SHT 1 TS	S 6		



1

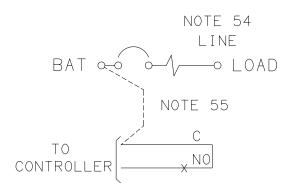
3



NOTE 54 LINE BAT a -ó ò-o LOAD NOTE 55 С ΤO V NO CONTROLLER

NEGATIVE GROUND

# POSITIVE GROUND



# SCHEMATIC DIAGRAM

В

А

С