

Power Supply Assembly and Installation Instructions

1 Overview

The PRO32E1PS and PW6K2E2PS power supply and battery charger is compatible with the PW3000, PW5000, PW6000, PRO2200, and PRO3200 systems. For ordering purposes please use the PW6K2E2PS for the PW3000, PW5000, and PW6000 systems and PRO32E1PS for PRO2200, and PRO3200 systems.

This power supply will convert AC input voltage into a 13.8VDC output with 4.0 amps maximum of continuous current. The power supply accepts an input voltage of 85VAC to 265VAC at 50Hz/60Hz. The power supply provides AC fail and low battery supervision when connected to PW3000, PW5000, PW6000, PRO2200, and PRO3200 I/O PFL (Power Fail) and auxiliary inputs.

2 Specifications

- 4.0 amp maximum continuous output current at 13.8VDC with overload protection.
- Filtered and electronically regulated outputs.
- Built-in charger for sealed lead acid batteries with a maximum charge current of 250mA.
- Automatic switch over to stand-by battery, if present, upon AC power failure.
- Reverse battery polarity with a non-replaceable fuse.
- Low battery supervision when connected to a low battery input on the panel.
- AC fail supervision when connected to PWR fail on panel.
- Short circuit/overload/overvoltage protection.
- 0° C to 49° C operating temperature range.
- UL 60950 listed.
- CE compliant.



Warning

- Power Supply shall be installed in accordance with the National Electric Code, as well as all applicable local regulations.
- Before installation, turn off the extra circuit breaker that supplies power to the system. Do not re-apply power until installation is complete.
- To reduce the risk of electric shock, do not expose the unit to rain, liquids, or excessive moisture.

- No user-serviceable parts. Installation and servicing should only be performed by qualified personnel.
- Route all power-limited (low voltage) wiring at least 1/4" (6.35 mm) away from any non-power limited wiring. **NOTE:** The wires going from the battery to the power supply are **non-power-limited**. All the wires that go from the power supply to the other components in the enclosure (except the battery) are **power-limited**.
- Backup battery 12V, 7 AH sealed lead-acid maintenance-free battery, 712BNP or equivalent.

3 List of Contents

- Power Supply Assembly (1)
- Cable Assembly 12VDC Power and Battery connections (1)
- Cable Assembly AC and Battery Fail connections (1)
- Cable Assembly AC Power Inlet and LED Power Indicator (1)
- Cable Assembly Ground Plate to Chassis (1)
- Power Supply Mounting Plate (4 keyholes) (1)
- Machine Screw 8-32x5/16" Ground Wire to Plate (1)
- Kep Nut 8-32 Ground Wire to Plate (1)
- Machine Screw M3x0.5, 6mm Power Supply to Mounting Plate (4)
- Installation Instructions (1)
- IEC Power Cord (1)

4 Cable Assembly Connections

The power supply has three pin connectors (CN1, CN2, and CN3) to which you need to connect three cable assemblies, as shown below:

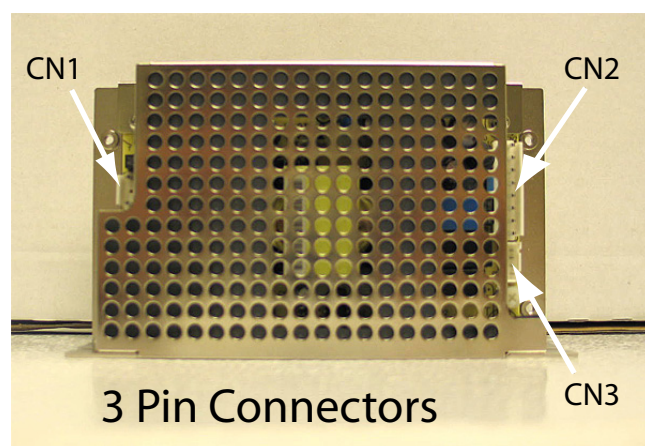


Figure 1: Power Supply Pin Connectors

Here are the three cable assemblies that connect to these pin connectors:

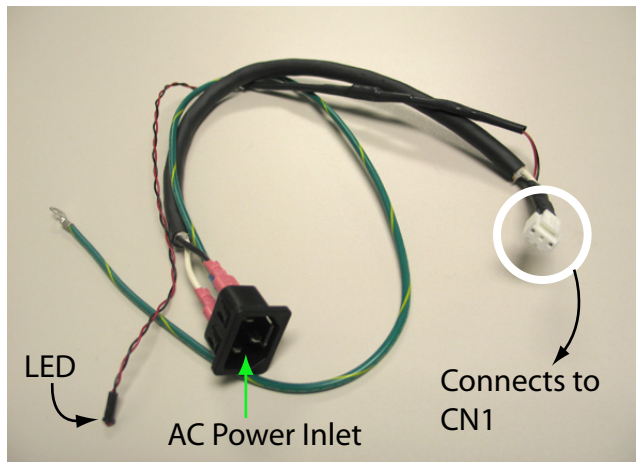


Figure 2: AC Power Inlet and LED Indicator Cable Assembly

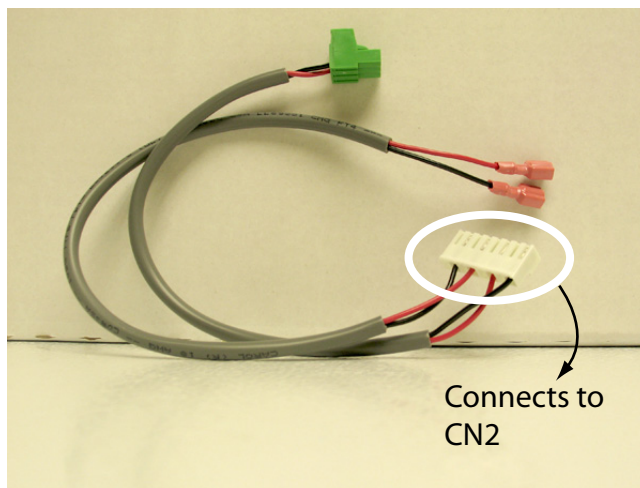


Figure 3: 12VDC Power and Battery Cable Assembly

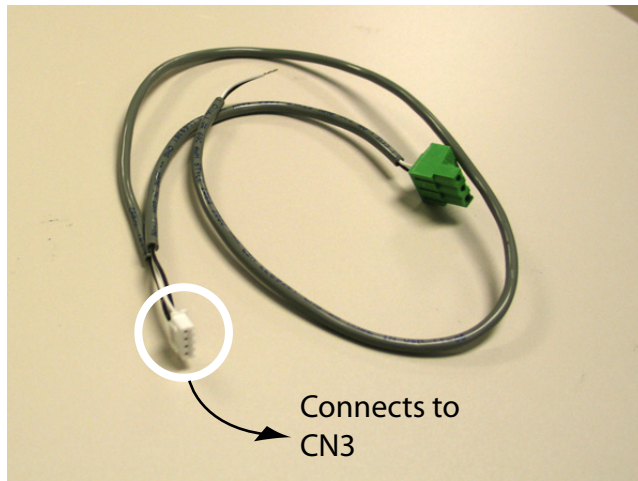


Figure 4: AC and Battery Fail Cable Assembly

After connecting the three cable assemblies to the pin connectors CN1, CN2, and CN3, the fully connected power supply should look like the below photo (Figure 5 on page 5) when viewed from the front, inside the metal cabinet:

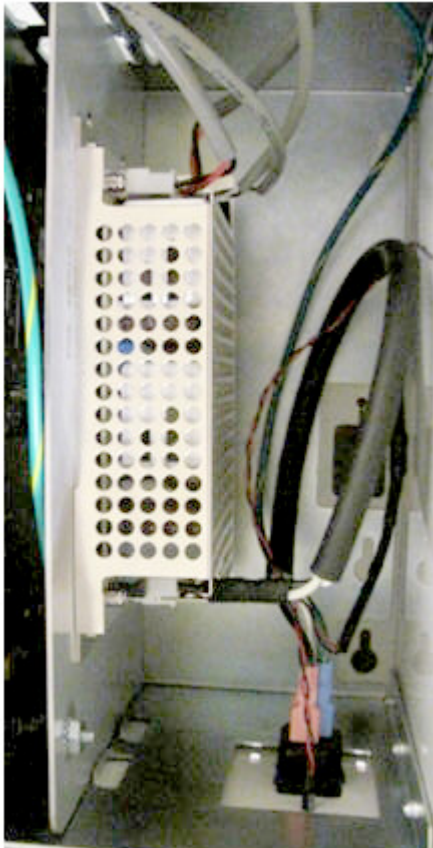


Figure 5: Fully Connected Power Supply, Front View

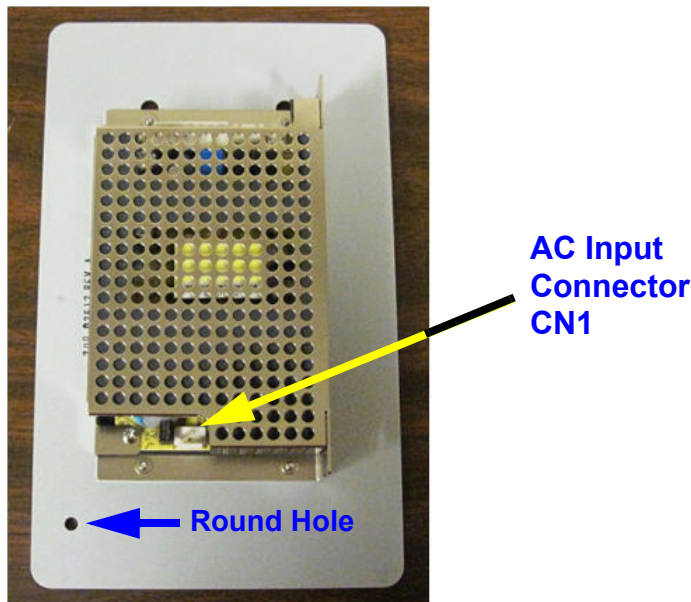
5 Installation Instructions

1. Use this power supply only with Honeywell PW3000, PW5000, PW6000, PRO2200, and PRO3200 series access control and proprietary alarm units.
2. Secure enclosure in the desired location, using appropriately sized fasteners.
3. Unpack the power supply and metal plate. Do not discard the packing materials until installation and checkout are successfully completed.
4. Remove metal plate from packaging.

5. Turn the power supply over on its backside and install the four mounting screws (that come with the kit) only a few turns in.

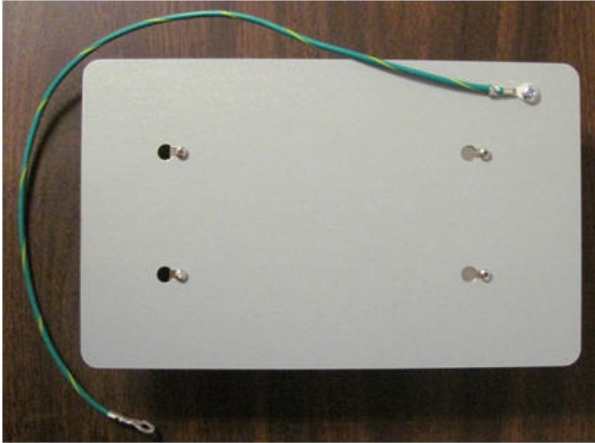


6. Position the power supply over the 4 keyholes on the metal plate making sure that the round hole (see the below figure) is in the bottom left corner as shown and the power supply is positioned with the AC input terminals (CN1) facing downward.

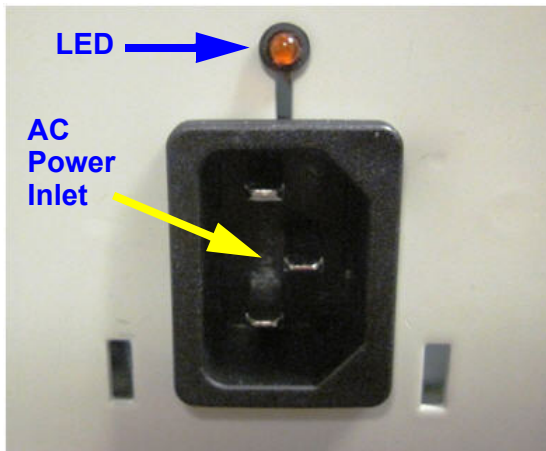


7. Slide the power supply down in the keyholes until they bottom out. Then, tighten the four mounting screws to secure the power supply to the metal plate.

8. Using the provided #8x32 screw and locknut, secure the provided ground wire (GREEN with YELLOW stripe) to the back of the metal plate as shown below:



9. Take the input power cord with LED and insert the LED into the panel enclosure as shown below.
Note: LED MUST be installed BEFORE the power inlet.
10. Once the LED is installed and fully seated, install the AC power inlet into the panel. See the photo below:.



11. Connect the AC power inlet and LED indicator cable to the power supply by pushing and inserting the cable connector to the pin connector **CN1**:

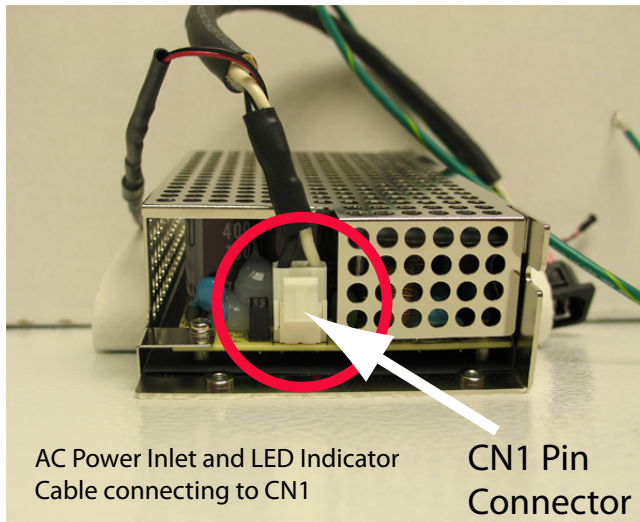


Figure 6: AC Power Inlet and LED Indicator Cable Assembly Connecting to CN1 Pin Connector



Warning: Do not connect power at this time!

12. Connect the 12VDC output and battery output cable to the power supply by pushing and inserting the cable connector to the pin connector **CN2**:

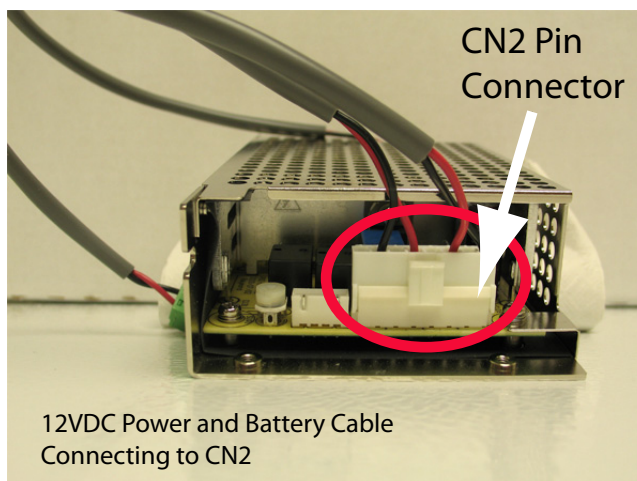
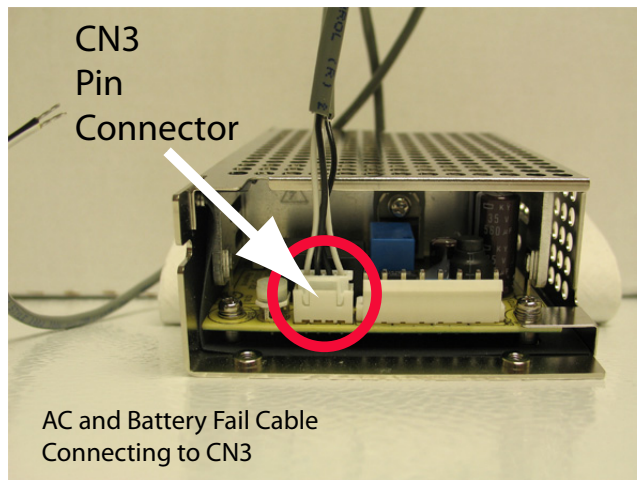
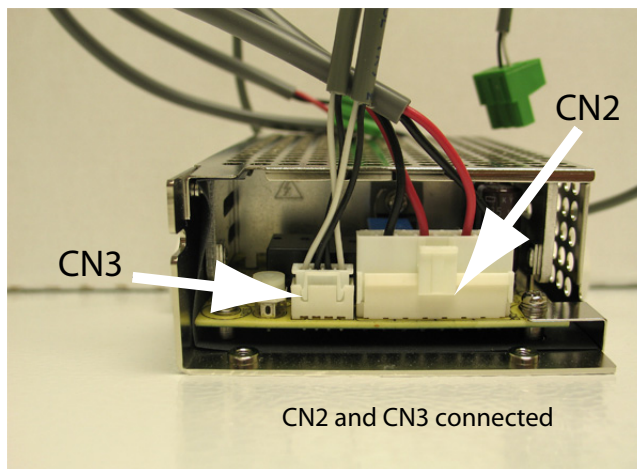


Figure 7: 12VDC Power and Battery Cable Assembly Connecting to CN2 Pin Connector

13. Connect the AC and battery fail cable to the power supply by pushing and inserting the cable connector to the pin connector **CN3**:



This is how the pin connectors CN2 and CN3 should look like after attaching both cables:



14. Slide the power supply and metal plate assembly into the metal enclosure, noting the orientation of the ground wire towards you:



15. Secure the ground wires (GREEN with YELLOW stripe) from the mounting plate and AC Power Inlet Cable to one of the grounding lugs inside the mounting enclosure, as shown on the left.

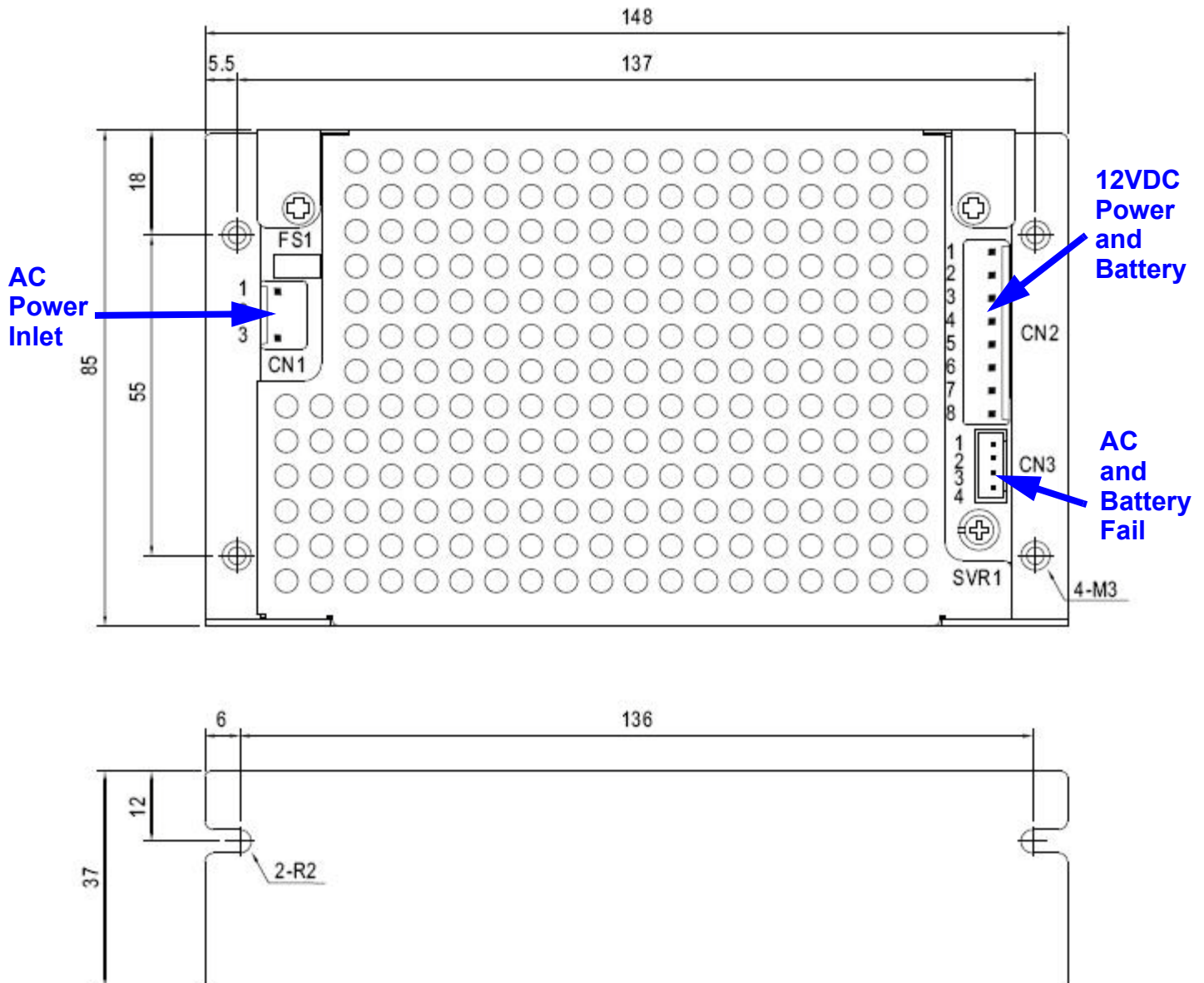


16. Connect the 12VDC power output from the power supply to the controller input, noting proper polarity.
17. Connect the battery leads to an appropriately-sized battery for the application.
18. Connect the low battery wires to the appropriate panel input.
19. Connect the AC power fail wires to the appropriate panel input.
20. Connect the supplied power cable into the power inlet on the outside of the enclosure.
21. Check all power supply wiring to ensure it is installed properly.
22. Power on the system by plugging the supply AC power cord into the appropriate AC source.
23. Check to make sure that your system is powered up correctly.
24. Check to make sure that the red LED located near the AC power inlet is illuminated.
25. Route all power-limited wiring at least 0.25" (6.35 mm) away from any non-power-limited wiring.

NOTE: The wires going from the battery to the power supply are **non-power-limited**. All the wires that go from the power supply to the other components in the enclosure (except the battery) are **power-limited**.

26. Secure and lock the cabinet door to prevent access by unauthorized persons.

6 Connector Layout and Cabling Information



Pin No	Pin Assignment	Wire Color
1	AC Neutral	Black
2	No Connect	N/A
3	AC Line/Live	White

Table 1: Cable Assembly AC Power Inlet and LED Power Indicator Connections, CN1

Pin No	Pin Assignment	Wire Color
1	-V	Black
2	No Connect	-
3	+V	Red
4	No Connect	-
5	Bat +	Red (Fast On Connector)
6	No Connect	-
7	Bat -	Black (Fast On Connector)
8	No Connect	-

Table 2: Cable Assembly 12VDC Power and Battery Connections, CN2

Pin No	Pin Assignment	Wire Color	Contact State
1	AC Fail	White	Open AC OK
2	AC Fail	Black	Open AC OK
3	Battery Fail	Black	Open Batt OK
4	Battery Fail	White	Open Batt OK

Table 3: Cable Assembly AC and Battery Fail Connections, CN3