

BDFB / BDCBB Digital Metering Panel

Model 007-0003-0002 Installation Guide

1.1 Installation

! ALERT

ALERT! You can replace the standard panel with the metering panel while the power is on. If the BDFB / BDCBB is powered up, take care to prevent loose wires and cables from falling into the interior of the BDFB / BDCBB. Objects that fall into the interior can cause damage and/or breakers/fuses to trip/blow. Use no metallic tools within BDFB / BDCBB while the power is on.

Shunts should already be installed. If not, see *BDFB / BDCBB Shunt Kit Installation Instructions* (Telect Part No. 124393).

1. Detach the standard panel (four sets of screws and washers) from the BDFB / BDCBB. (See Figure 2.) Discard screws and washers.
2. Disconnect the six connectors (four CB ribbon cables and two twisted pairs of power cables) from the board on the rear of the standard panel. If applicable, also disconnect the optional alarm wires, as shown in the inset in Figure 2.

If shunts are installed, also disconnect the two additional connectors on the two twisted pairs from the shunts.

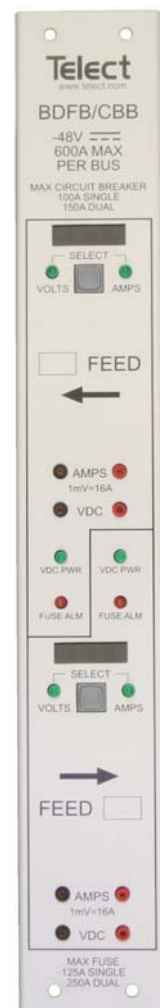
3. On the rear of the digital metering panel, preset the jumpers on the alarm board to match the amperage of the installed shunts. (See Figure 3.)

In other words, before cabling and installing the metering panel, you must configure the jumpers to match the current capacity of shunts installed in the BDFB / BDCBB. This ensures that the digital readouts will be calibrated to the installed shunts.

4. Connect the twisted pairs, ribbon cables, and alarm wires to the alarm board on the metering panel, as shown in Figure 4.)

NOTE: When installing connectors, make sure you connect the A input bus to the "A PWR" connector on the alarm board, B input bus to "B PWR", Shunt A to the "A SHUNT", and Shunt B to "B SHUNT". **DON'T CROSS-CONNECT SHUNTS AND POWER** on the alarm board. (See the Caution in Figure 4.)

5. Double-check connections to the alarm board.
6. Secure the meter panel to BDFB / BDCBB using the screws and washers provided with metering panel. (See Figure 5.)



**Figure 1 -
Model 007-
0003-0002**

1.2 Operation

To operate the metering panel,

1. Press SELECT to toggle between AMPS and VOLTS on the display. The LED next to the switch will light to indicate Amperes vs Volts.
2. Use standard .080-in. meter probes at the panel test points. Connect the RED test point (-48Vdc) to meter RED (voltage) and BLK test point (RTN) to meter BLK (common). For amperage, multiply the meter reading by the value below the AMPS test points on the panel: each mV on the meter represents 8A, 12A, 16A, or 20A, depending on the rated value of the shunt (400A, 600A, 800A or 1000A, respectively).

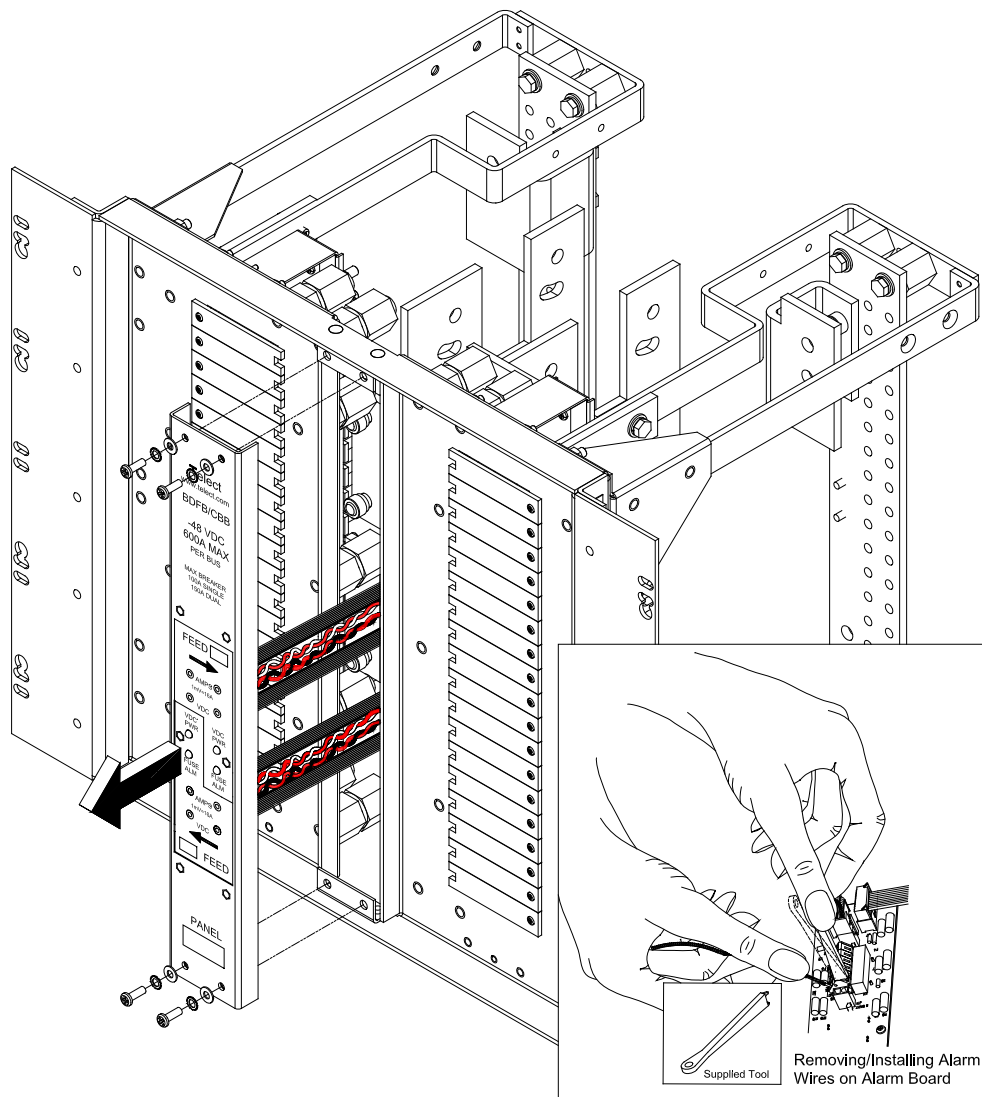


Figure 2 - Removing Standard Panel (With Shunt Previously Installed)

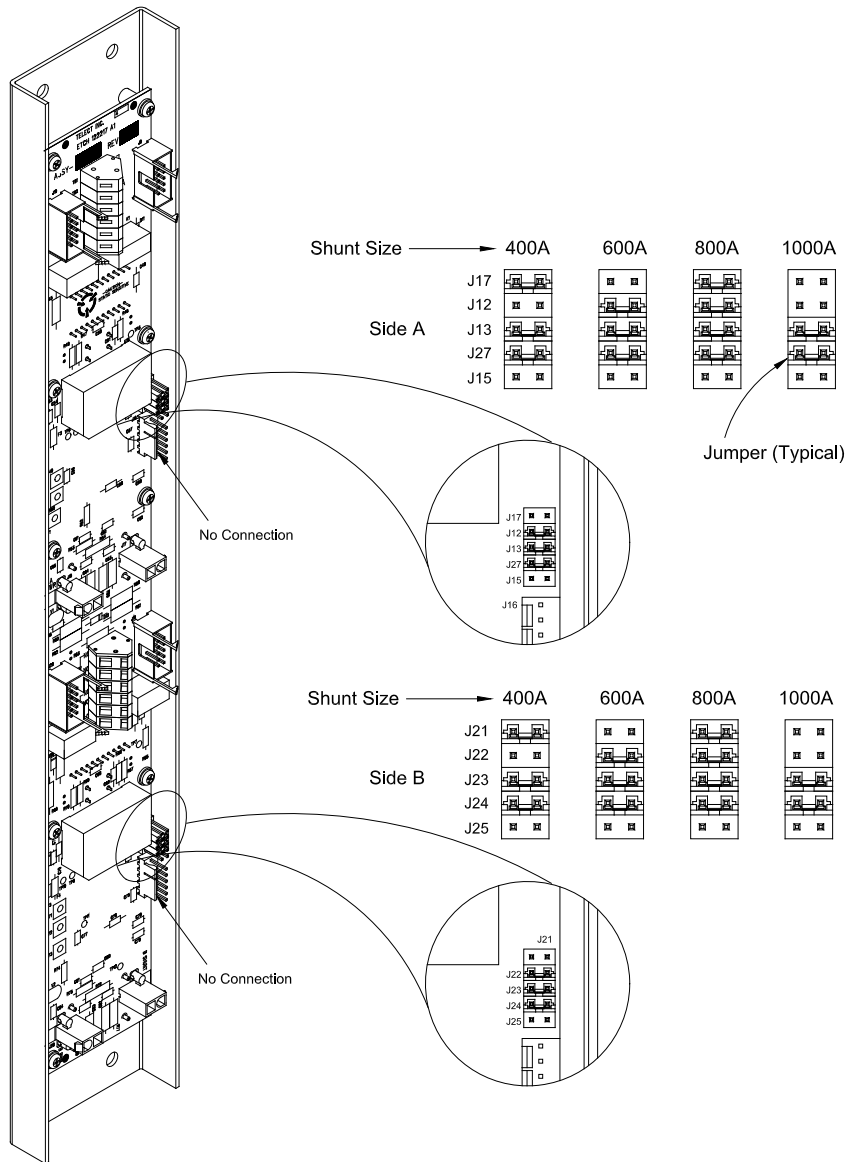


Figure 3 - Jumper Settings for Shunt Size

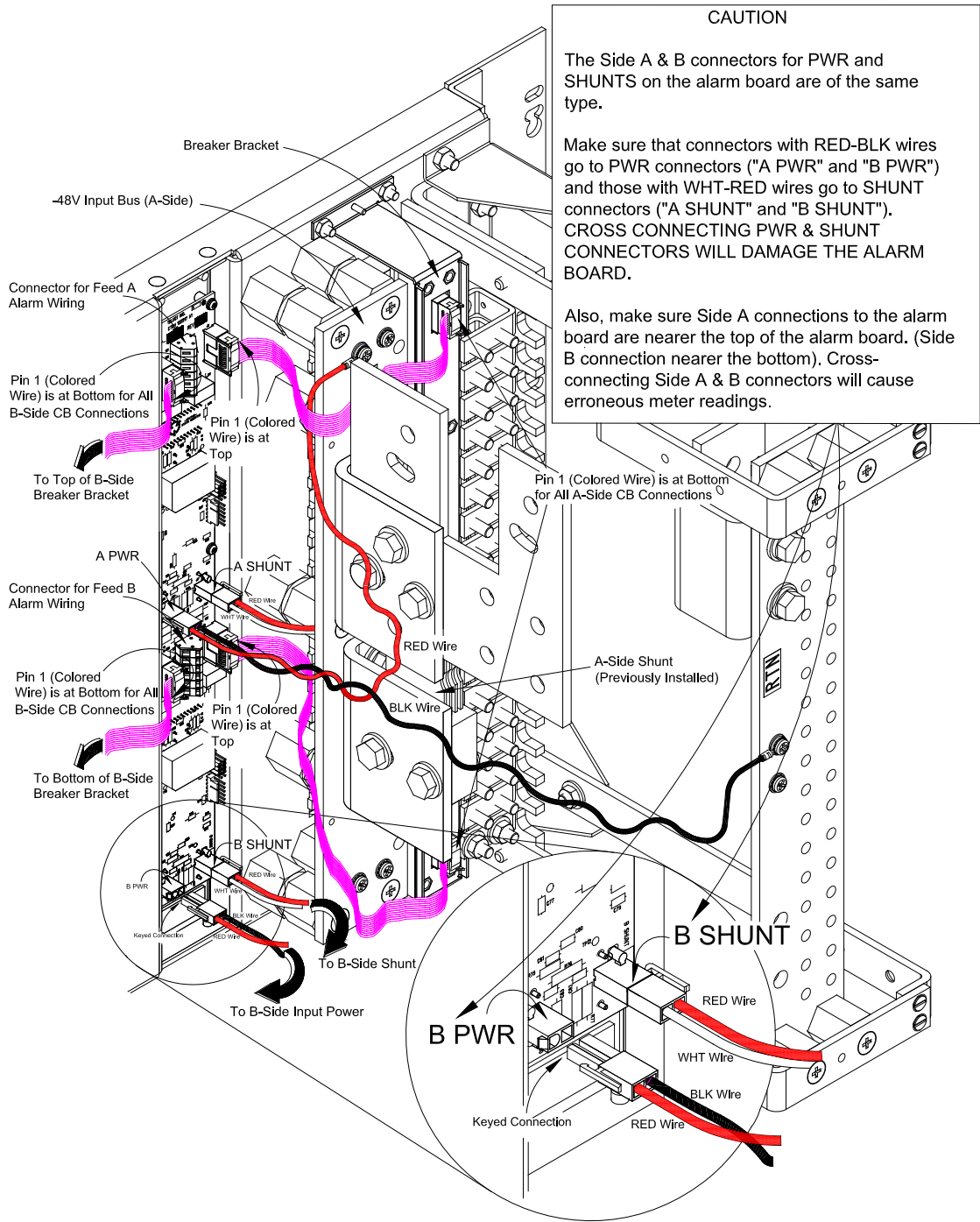


Figure 4 - Electrical Interconnections Involving Metering Panel, Power, Circuit Breakers & Shunts

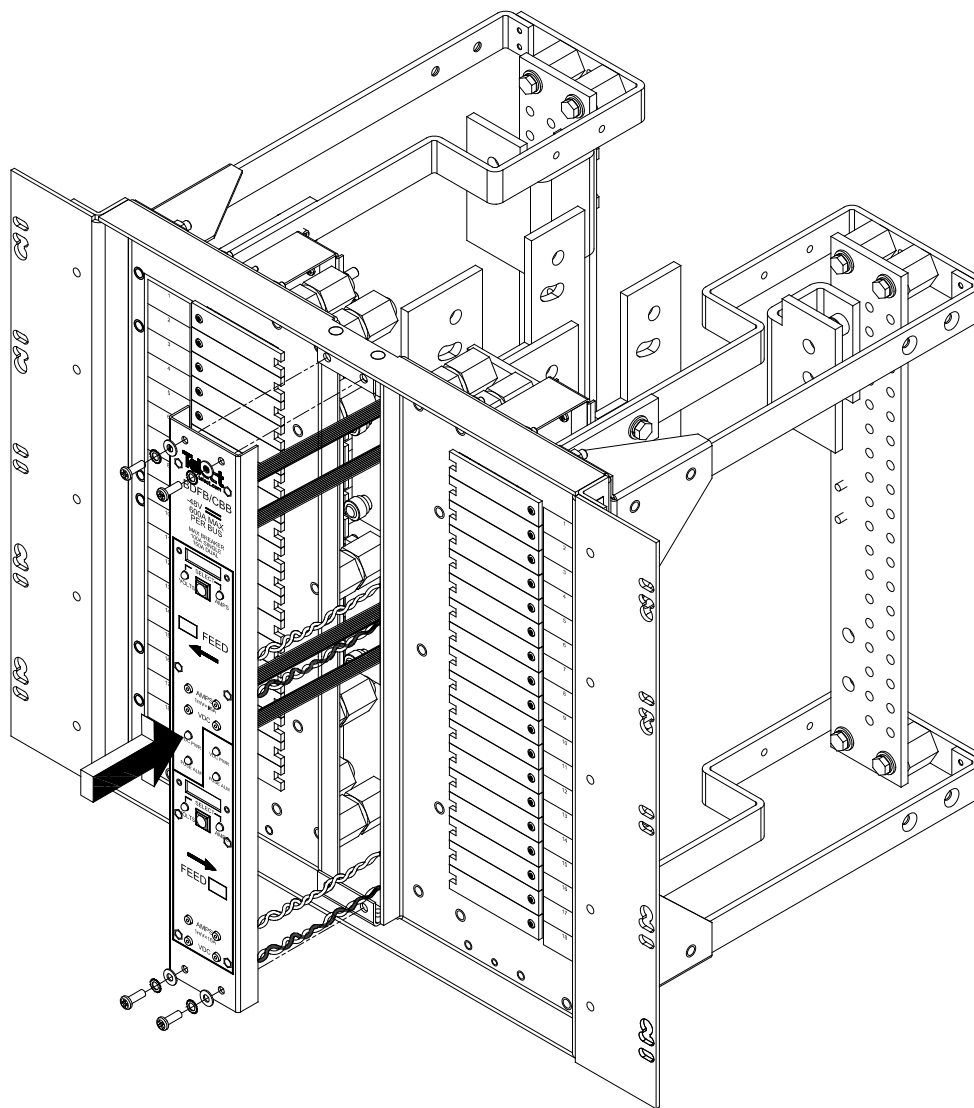


Figure 5 - Installing Metering Panel

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