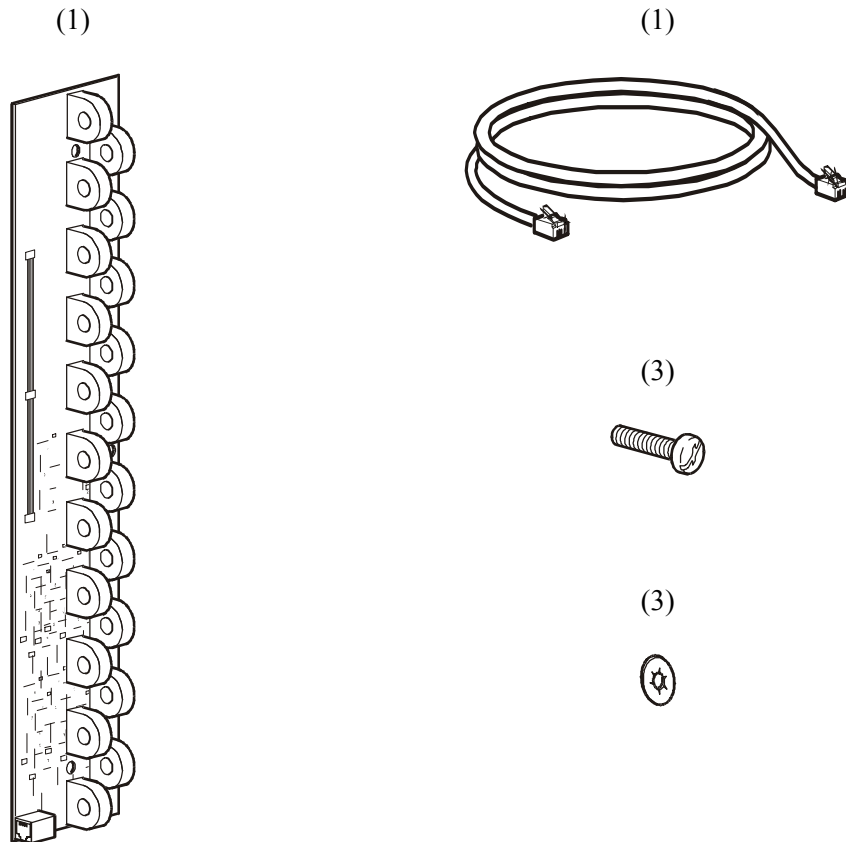


PDU Branch Current Monitoring Board Installation and Configuration

Inventory



The branch current monitoring board can be installed only in a PDU with a serial number of **XF0314** or higher.

Note

Safety



Before installing the branch current monitoring board, ensure that your system is not receiving power (Total Power Off).

Electrical
Hazard

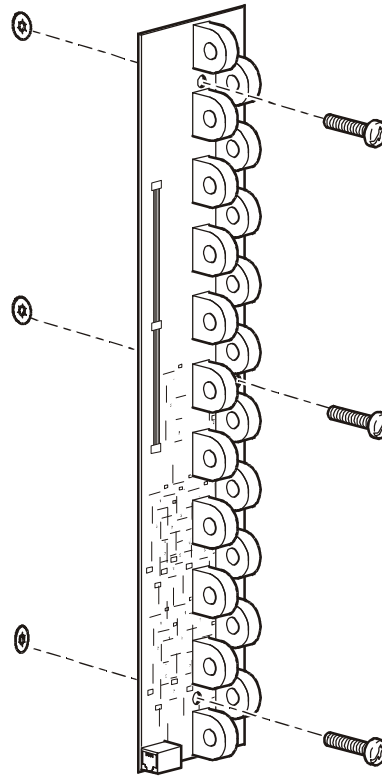
Mounting the board in the PDU

The branch current monitoring board mounts to brackets in the PDU on the right and left side of each circuit breaker panel. The illustration in step 2 on page 2 shows the mounting brackets on the upper right-hand side of the PDU circuit breaker panel.

Installation

How to mount the board in the PDU.

1. Insert the three socket-head screws into the board and attach the retainers to the screws.



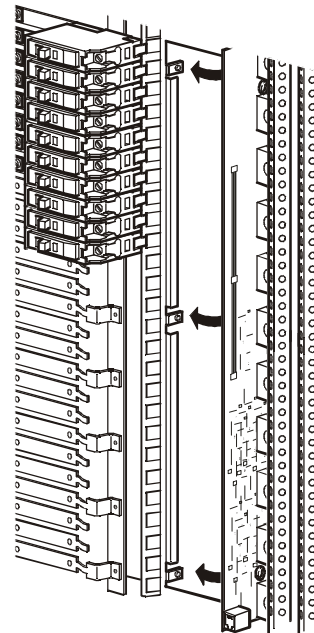
2. Attach the board to any of the four sets of mounting brackets inside the PDU.



The front of the board must face away from the PDU.

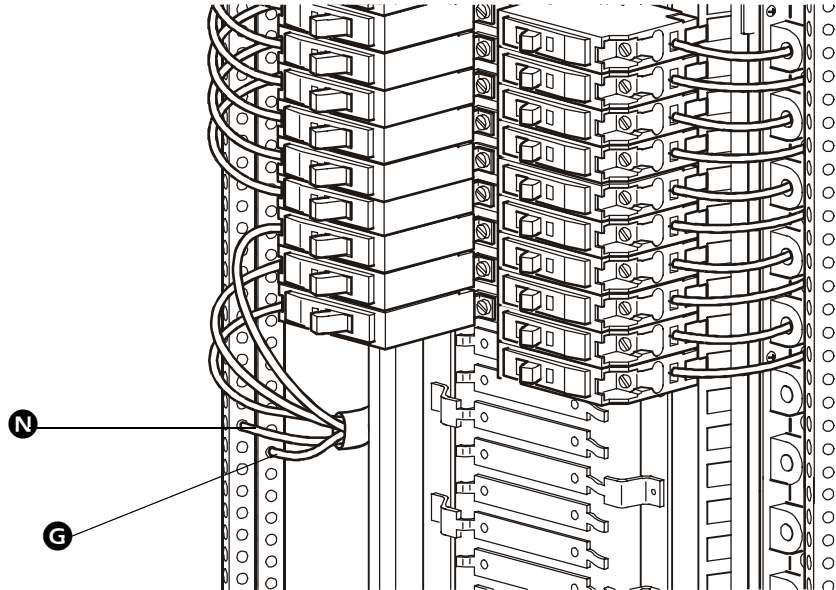
Note

3. Secure the board to the mounting brackets with a 5-mm Allen wrench, and torque 14–16 in-lb (1.7N-m).



How to route power cable wires.

1. Route the phase conductor through a current sensor. If it is a three-phase cable, route each of the L1, L2, and L3 wires through its own current sensor.
2. Connect the L1, L2, and L3 wires to single-pole breakers or to a three-pole breaker. (The illustration below shows single-pole breakers.)
3. Connect the neutral wire (N) to the closest open termination point on the Neutral Bar.
4. Connect the ground wire (G) to the closest open termination point on the Ground Bar.



How to connect the board to the monitoring unit.

1. Plug one end of the monitoring cable into the port on the board.

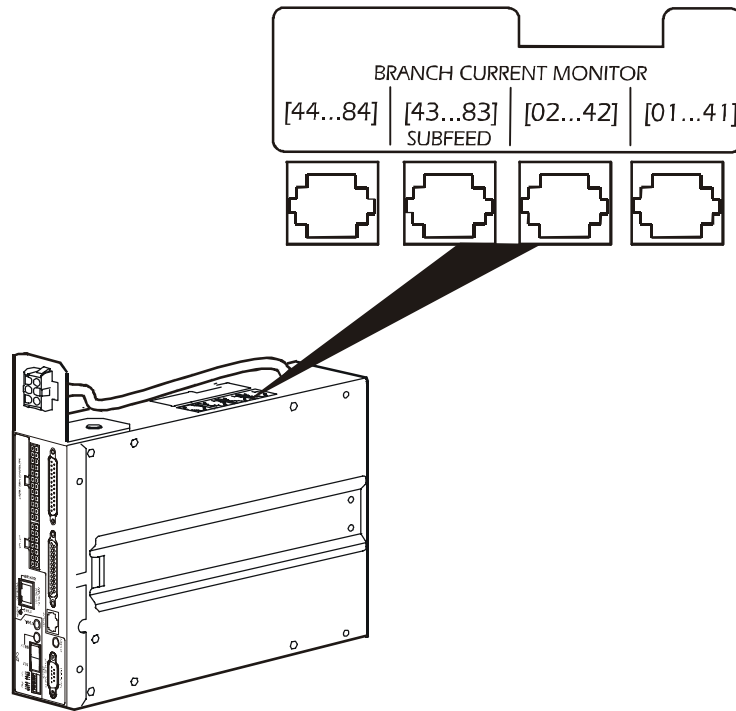


If the board is on the left side of the PDU, the port will be on the bottom of the board. If the board is on the right side of the PDU, the port will be on the top.

2. Plug the other end of the cable into a port on the PDU monitoring unit.



There are four available ports on the PDU monitoring unit to accommodate up to four boards. The ports are labeled according to their circuit breaker assignments. The following illustration shows the location of the ports on the PDU monitoring unit and the label describing the circuit breakers assigned to each port.

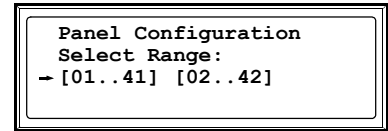


Location of Board	Circuit Breaker Numbers
Upper-left side of PDU	01...41
Upper-right side of PDU	02...42
Lower-left side of PDU	43...83
Lower-right side of PDU	44...84

Configuration

Configure the branch current monitoring parameters using either the **Panel configuration** option or **Global panel config** option on the **Panel** screen of the PDU display interface.

Panel Config. Configure the branch metering settings for each circuit breaker on the distribution panel, or configure both panels simultaneously. To configure a circuit breaker, select the range that includes the circuit breaker. The top line of selections on the screen applies to the top distribution circuit breaker panel on the PDU. The bottom line of selections applies to the bottom distribution circuit breaker panel on the PDU. The panel position numbers on the screen correspond to the numbers on the distribution panel. Odd numbers are on the left; even numbers are on the right. Once you have selected the correct range, configure the settings for each circuit breaker in the range.



Pos: The panel positions in the selected range.

Breaker: There are two configurable items:

- The circuit breaker rating, in amps
- The circuit breaker tie indicator: Define the number of tied panel positions (i.e., associated). You can associate panel positions with circuit breakers, to view the status about each circuit breaker and to receive alarm notification when any of a circuit breaker's poles are above or below the configured branch circuit limit. You can also tie together panel positions that are logically associated. For example, you can tie together panel positions for three separate circuit breakers that are connected to the same PDU power cord and that provide power to the same equipment enclosure.

To configure the values on this screen:

1. From the first column, use the arrow keys to scroll up or down to the pole position you want to configure.
2. Press the ENTER key to move to the item you want to configure in the third column (the circuit breaker rating or the circuit breaker tie indicator).
3. Scroll again to select the value you want for the circuit breaker rating or the circuit breaker tie indicator. To associate one panel position with the next position in the list, choose the + character as the tie indicator immediately following the circuit breaker rating. To indicate that the position is not associated with (tied to) the next panel position in the list, choose the] character as the tie indicator immediately following the circuit breaker rating. When you change the + or] character that follows the circuit breaker rating in one row, the + or [character before the circuit breaker rating in the next row also changes to indicate the changed association between the panel positions.

For example, this screen shows three, single-pole, 20A, tied circuit breakers occupying positions 08, 10, and 12 on the top right distribution panel.

Pos	Breaker
- 08	[20A +
10	+ 20A +
12	+ 20A]

Global Panel Config. Configures the same number of poles or circuit breaker ratings for all circuit breakers in both distribution panels simultaneously. For example, if your system uses only three-pole, 20-amp circuit breakers, choose this option, scroll to the value 3 for **Poles** and 020 for **Amp Rating**. Select **Apply Now** and **YES** to implement your changes.

Specifications

Branch Monitor Parameters	Maximum current (RMS): 95 A Maximum current (peak): 135 A Maximum crest factor: 3 Minimum current: 0.5 A Measurement accuracy: +/- 0.5 A or 5% of reading (whichever is greater) Maximum wire size: 0.35 in (8.89 mm) maximum diameter
InfraStruXure System Parameters	Branch circuit range: 20–60 A Maximum scan (refresh) time: 3 seconds Display resolution: 0.1 A

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