

Installation Instructions for Meter Box Models MB75 and MB125



Specifications:

Model	Absolute Maximum Electrical Ratings
MB75	30A (7.5kW), 125/250 VAC
MB125	50A (12.5kW), 125/250 VAC

This electrical metering product is designed to indicate the power draw from an auxiliary power source, such as a generator, through a transfer switch or panel.

Cautionary Notes:

1. This installation shall be made in accordance with the National Electrical Code (NFPA 70) and all applicable local codes. This product is not to be used or installed in such a manner that would expose it to voltage, current, or power levels above the listed absolute maxima. Doing so will void the product warranty and could result in hazardous operating conditions.
2. This product is intended to be used on 125/250 VAC, 60Hz power circuits. Connection to circuits of other voltage and current will result in unacceptable measurement errors.
3. Do not install the product in a location where the ambient air temperature exceeds 40C (104°F).
4. Do not use the product with the wiring compartment cover removed or missing.
5. The installer is responsible for providing the appropriate sized conductors and overcurrent protection for wiring leading to and from the product. Overcurrent protection can be any device suitable for branch circuit protection (i.e. UL 489 circuit breakers, UL 248 fuses, etc.)

Model	Minimum Conductor Size - AWG	Overcurrent Protector Rating
MB75	10	30 A
MB125	8	50 A

The field wiring terminals have been designed for a maximum of AWG 8 wire. Do not use wire larger than AWG 8.

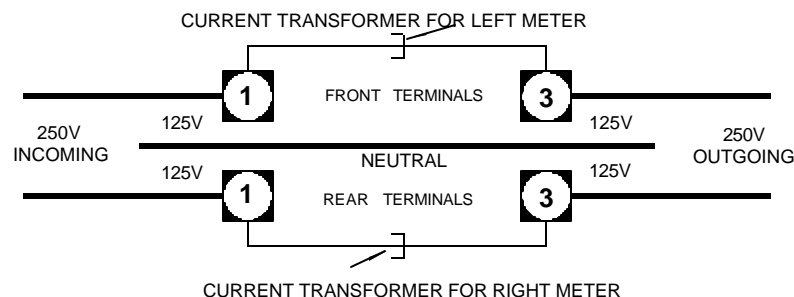
Installation:

Open door and remove mechanism. To do so, remove screw at bottom of front plate. Pull the wiring compartment cover forward with a screwdriver or other tool, and pull down to remove. Loosen screw at top center of front panel, tip mechanism forward and lift out. Screw is captive and will not fall out of plate.

Mount the enclosure to the wall by means of the openings provided.

Replace the mechanism into the enclosure. To do so, set mechanism on tabs and tip backwards. Secure into cabinet by tightening captive screw at top center of front panel.

Wiring Diagram:



Wiring: Wiring connections are to be made according to the above diagram.

1. Connect one of the hot legs from the generator to terminal 1-front.
2. Connect the other hot leg of the generator to terminal 1-rear.

3. Run the white neutral wire from the generator to the neutral connection point of the transfer switch or panel. There is no connection point in the meter box.
4. Connect the green ground wire from the generator to the green ground screw in the bottom of the cabinet.
5. Connect a wire from terminal 3-front to one of the appropriate hot leg connections at the transfer switch or panel.
6. Connect a wire from terminal 3-rear to the other hot leg connection at the transfer switch or panel.
7. Connect a green ground wire from the green ground screw in the bottom of the cabinet to the ground connection point at the transfer switch or panel.

When wiring is completed, be sure to replace the wiring compartment cover and retaining screw.

Theory of Operation:

Internal meter box wiring consists of a jumper, inserted through a current transformer, between the left front and right front terminals. The current flowing through this jumper will be shown on the left meter. In a similar manner, the current flowing between the left rear and right rear terminals will be shown on the right meter.

Alternate wiring:

The internal jumpers can be removed and the current transformers dropped down into the wiring compartment and placed so that one of the two hot legs from the generator to the transfer switch is inserted through the opening in one of the current transformers, and the other hot leg is inserted through the opening in the other current transformer. This alternative may be used if bypassing the terminal block is preferred.



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