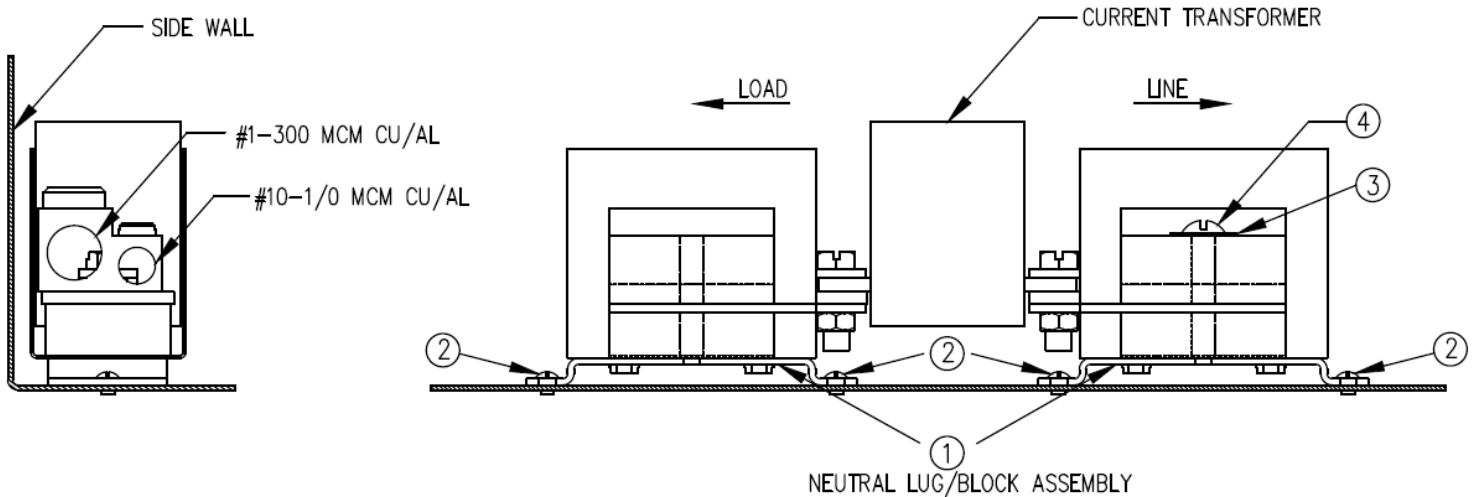


GEH3478 Installation Instructions

## Molded Case Circuit Breaker Enclosures

ABB Enclosure Neutral and Ground Fault Current Transformer  
Catalog Nos.: TNIA-250EGF



### Application

For use with Record Plus Circuit Breaker Enclosures type FE250\*. This kit is for installing the enclosure neutral and ground fault current transformer required for the circuit breaker ground fault protection feature.

**NOTE:** Ground Fault Current Transformer is purchased separately.



**WARNING:** Danger of electrical shock or injury. Turn OFF power ahead of the enclosure working inside the equipment or removing any component. Equipment is to be installed and maintained by properly trained and qualified personnel only.

1	Neutral Lug/Block Assembly	2	2
2	#8-32 Screw	4	2
3	Bonding Screw Card	1	3
4	¼-20 x 1 5/8" Screw	1	3

### Installation

- 1. Confirm the contents of the kit:** The kit contains parts to make the neutral connection for circuit breaker enclosures with ground fault protection. In the following instructions and figures, the numbers in brackets refer to the item numbers shown in the table.
- 2. Locate the neutral mounting holes in the back of the enclosure to the side of the breaker:** Place the two identical neutral block assemblies (1) so that the side with the protruding straps face each other and mount to the enclosure back wall with the #8-32 screws (2). Torque to 20-25 in-lbs.
- 3. Assemble the ground fault current transformer:** Position the ground fault current transformer over the straps of the two neutral lug/block assemblies. **IMPORTANT:** Be sure the ground fault current transformer is mounted in the

### Kit Contents

Item No.	Description	Qty	Step
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correct orientation. Refer to the CT for the line and load side markings. Secure the CT in place with hardware provided with the current transformer. (Omit the anti-turn bracket.) Torque to 221 in-lb.

**For Service Equipment Applications:**  
Proceed to Step 4.

**For Non-Service Equipment Applications:**  
Skip step 4 and proceed to Step 5.

**4. Install bonding screw:** Position the bonding screw card (3) over the line side lug. Insert the ¼-20 x 1 5/8" screw through the card and the hole in the neutral, and thread into the tapped hole in the box. Torque to 50 in-lbs.

**CAUTION:** Bond neutral only on the line side of the ground fault current transformer. If neutral becomes grounded on the load side, partial or complete desensitization of ground fault detection circuitry will result.

**5. Wire neutral lugs:** Secure neutral wires and torque per the table below.

Lug Screw	Torque (in-lbs)	
	Min.	Max.
Slotted (#10-1/0 MCM CU/AL)	45	50
3/8" Hex (#1-300 MCM CU/AL)	300	375

**6. Wire ground fault current transformer** to the molded case circuit breaker per the CT and breaker instructions. Be careful to keep control wires away from moving mechanism parts. Accidental shorting or grounding of control wires may cause breaker to trip.

**For Reference:**

Device Description	Amp Rating	Ground fault Current Transformer Cat. No
TNIA250GGF	25	FEGS0025
	60	FEGS0060
	125	FEGS0125
	150	FEGS0150
	250	FEGS0250

**Important:** For rainproof enclosures, remove white vinyl tabs from back of enclosure before affixing neutral to box.

These instructions do not cover all details or variations in equipment nor do they provide for every possible contingency that may be met in connection with installation, operation, or maintenance. Should further information be desired or should particular problems arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to the ABB Company.