### GEH3417 INSTALLATION INSTRUCTIONS FOR RIGHT POLE MOUNTING ONLY

# Molded Case Circuit Breakers Under voltage Release for Type: TED



**CAUTION:** Before inspecting or beginning any maintenance work on the breaker, it must be dis-connected from all voltage sources, both power and control, and breaker must be off (open).

**NOTES:** 1. Any work requiring cover removal of a sealed breaker voids UL listing. The UL label must be destroyed.

2. UVR cannot be installed in breakers code dated with this number or lower: **101** 

#### **ELECTRICAL DATA**

Cat. No. (Right Pole Only)	Rated Voltage	MA C	Current Ac
TEDUV1 S TEDUV2* S TEDUV3* S TEDUV4* S TEDUV6* S TEDUV7 S TEDUV8 S TEDUV9 S TEDUV10 S TEDUV11* S	120V Ac 240V Ac 380V Ac 480V Ac 600V Ac 12V Dc 24V Dc 48V Dc 125V Dc 250V Dc	200 100 50 18 18	18 18 18 18 18 

<sup>\*</sup> Kit includes special externally mounted resistor.

### ALL RATINGS CONSUME 2.2 WATTS EXCLUSIVE OF RESISTOR

#### **DESCRIPTION**

This device is used for automatic breaker tripping when line voltage drops below a pre determined level.

# STEP 1 BREAKER PREPARATION-FOR FIELD INSTALLATION.

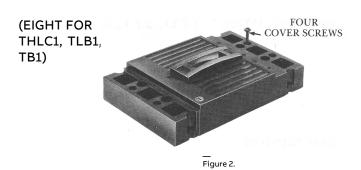
Open breaker contacts by moving handle to the breaker "OFF" position.

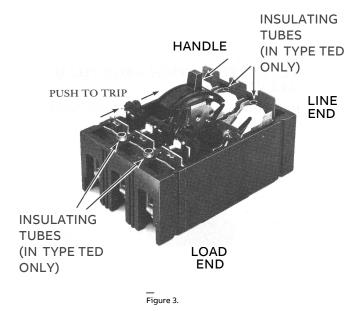


TEDUV-S Side Wired

— Figure 1. Remove breaker cover by removing cover screws as shown in Figure 2. (Care must be taken when opening the TB1 as the button shown in Figure 8 may pop out.) Tar must be removed and discarded to gain access to screw shown in Figure 2. Remove and save plastic handle.

Push trip bar towards line end to trip mechanism. (See Figure 3.)





### STEP2 MODIFYING COVER

Perform cover modification as shown in Figure 4. Remove all debris.

#### SIDE WIRING MODIFICATION

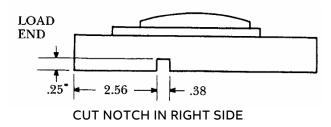


Figure 4. Side View of Breaker Cover

### STEP3 MODIFYING TWIST TO TRIP FEATURE

Assembly of the Under voltage Release in the right side of the breaker immobilizes the Twist to Trip feature. Place the enclosed label P/N 331A3044P1 over the Twist to Trip feature button as shown in figure 5. Perform inside cover modification to remove the legs of the Twist to Trip feature (trim even with the Twist to Trip Button) and avoid potential interference with the Undervoltage Release. The trip functionality previously provided by the Twist to Trip feature con be obtained through removal of control voltage to the Under voltage Release.

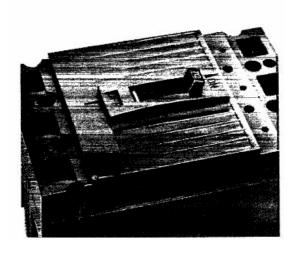


Figure 5.

## STEP4 REPLACING BARRIER

Remove barrier between right pole and mechanism pole, and replace with barrier supplied with kit. Locate projection of new barrier toward load end of breaker. (See Figure 6.)

#### BARRIER PROTECTION LOAD END

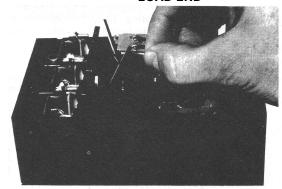


Figure 6.

## STEP5 INSTALLATION

Move the handle toward the line end of the breaker to facilitate assembly. Be sure locating tab is plugged into positioning hole in base. (See Figure 7.)

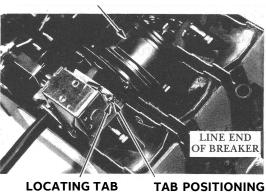
The pre-positioned coil leads should be close to the current location to fit the notch in the cover.

Be absolutely sure to reinstall in their proper location barriers or other parts accidentally removed from the breaker. Reinstall plastic breaker handle (white line towards breaker load end).

Install breaker cover making sure no wires are pinched in the process. Install cover mounting screws and apply label to breaker side.

Note that on TB1 breakers the second barrier shown in Figures 8 and 9 must be installed.

#### MOVE HANDLE TOWARDS LINE END



OCATING TAB TAB POSITIONING HOLE

Figure 7.



— Figure 8.

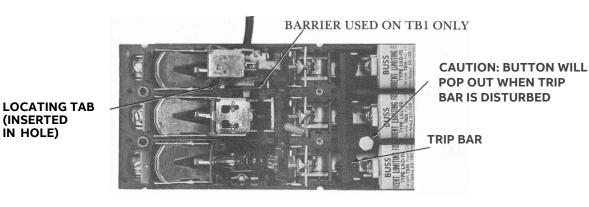


Figure 9.

### STEP 6 PERFORMANCE CHECK

(INSERTED IN HOLE)

- 1. Move breaker handle to "OFF" position to reset breaker.
- 2. With coil deenergized, move breaker handle towards "ON" position. Breaker should trip and handle should come to rest in the tripped position when released.
- 3. Apply 80% of rated voltage to coil (use dropping resistor if required). Repeat Step 1, then move handle to "ON" position. Breaker should turn "ON" and stay "ON".
- 4. Reduce coil voltage. Device should trip breaker between 35% and 70% of rated voltage.

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