

GEH4610 INSTALLATION INSTRUCTIONS

Molded Case Circuit Breakers

Plug-In Base for SE150, E150, TB1, SF250 and F225 Circuit Breakers

DESCRIPTION

The plug-in base mounts to either line or load end of the circuit breaker. The studs are available from the factory in a horizontal or vertical position in respect to the base, Figure 1.

To permit close ganging of breakers, bases PD-1 and PD-2 can be interchangeable - line to load - to maintain proper clearance.

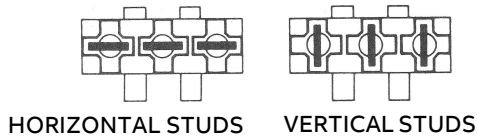


Figure 1

KIT CONTENTS

1. Plug-in base for line or load end of breaker.
2. Breaker mounting screws.
3. Male plugs and hardware for line or load end of breaker.

MOUNTING INSTRUCTIONS

1. Remove lugs from breaker.

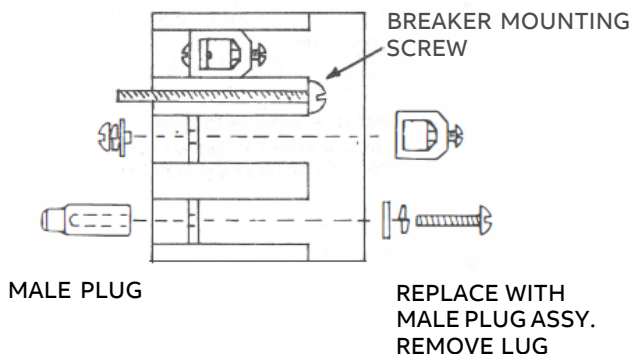


Figure 2

2. Apply grease (provided in hardware kit) to internal contacts of both line and load Plug - In Bases. Replace each lug with male plug, mounting Type TE with #10-32 x 5/8" long screw or Type TF with 1/4 - 20 x 1" long screw provided. Use flat and lock washer as shown in Figure 2. Torque screws 27-32 in-lb for TE and 40-50 in-lb for TF.

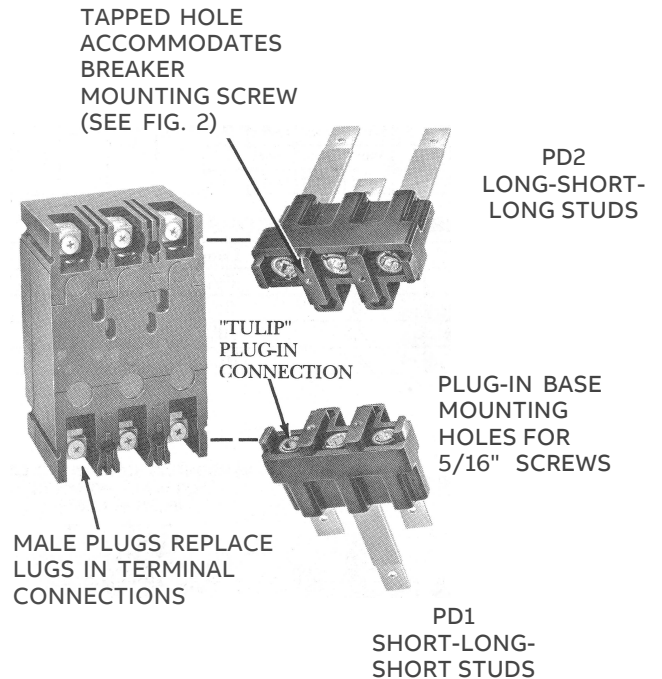


Figure 3. Male plug-in connections on breaker mate with plug-in bases (shown with horizontal studs)

3. Mount plug-in base with (2) 5/16" bolts, (not supplied) to proper support, using the dimensions shown in the table and drawing (reverse side of this sheet) for location of bolt holes.*
4. With breaker in OFF position, install breaker by aligning male plugs with tulip connection and pressing firmly in place.
5. Secure breaker to plug-in base with screws and washers provided in mounting kit.

NOTE: DIMENSIONS ARE IN INCHES

NOTE:

SE150 and E150 circuit breakers - use 8-32 by 3" long round head screws.

TB1 circuit breakers - use 8-32 by 3" long round head screws for line end and 8-32 by 2 1/4" long for load end. SF250 and F225 circuit breakers - use 10-32 by 3 7/8" long round head screws.

If mounting screws other than those provided are used, threads must be Class 2 and free of burrs and deformation.

*Optional mounting plates, available for all frame sizes and used for dead-front panel construction, can also be used as "templates" in mounting plug-in bases.

PLUG-IN BASE OUTLINE DIMENSIONS

		Breaker Type			Stud Assembly																		
		E150	A	B	C	Pole	Amp	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	
Vertical Studs	TE12PC1	Omit	Long	Short	2	150	7/8	4 ⁹ /64	4 ⁵ /32	6 ²⁷ /32	3/4	None	1 ³ /16	13/16	9/32	1/8	8-32 Tap	*2 ⁵ /8	*6 ¹ /4	*5 ¹ /4	*4 ⁷ /8		
	TE12PC2	Short	Long	Omit	2																		
	TE13PC1	Short	Long	Short	3																		
	TE13PC2	Long	Short	Long	3																		
Horizontal Studs	TE12PD1	Omit	Long	Short	2																		
	TE12PD2	Short	Long	Omit	2																		
	TE13PD1	Short	Long	Short	3																		
	TE13PD2	Long	Short	Long	3																		

		F225	A	B	C	Pole	Amp	D	E	F	G	H	J	K	L	M	N	P	R	S	T	U	
Vertical Studs	TF22PC1	Short	Omit	Short	2	225/ 250	1	5 ¹ /2	4 ²¹ /32	6 ²⁷ /32	1/2	13/16	1 ¹³ /16	1	9/16	1/4	10-32 Tap	5 ³ /4	9 ³ /4	8 ³ /8	7 ³ /4		
	TF22PC2	Long	Omit	Long	2																		
	TF23PC1	Short	Long	Short	3																		
	TF23PC2	Long	Short	Long	3																		
Horizontal Studs	TF22PD1	Short	Omit	Short	2																		
	TF22PD2	Long	Omit	Long	2																		
	TF23PD1	Short	Long	Short	3																		
	TF23PD2	Long	Short	Long	3																		

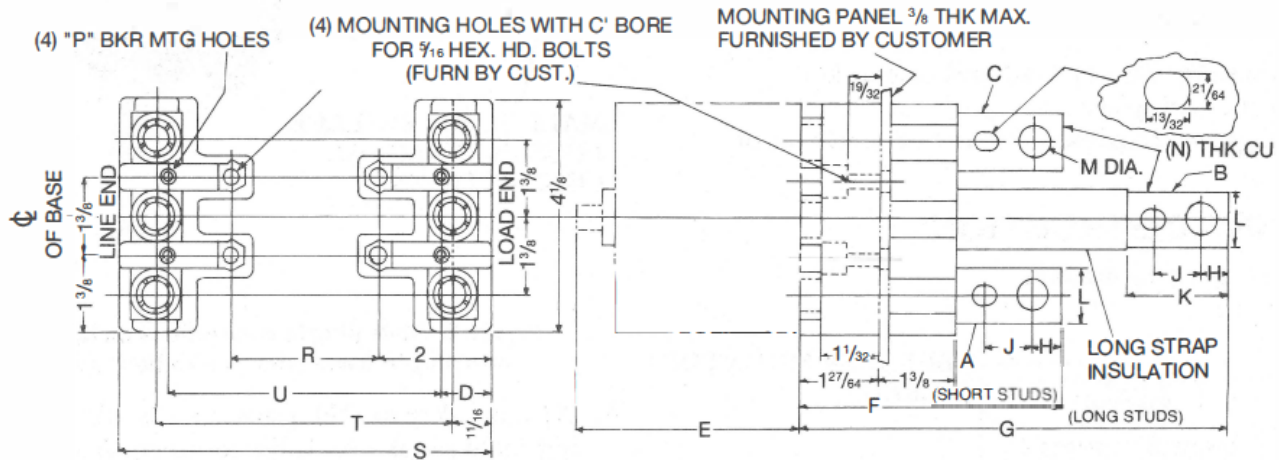
DIMENSIONS ARE IN INCHES

CIRCUIT BREAKER DIMENSIONS

Type	Pole	Long	Wide
E150	2	6 ⁵ /16	2 ³ /4
SE150,E150	3	6 ⁵ /16	4 ¹ /8
SF250,F225	2,3	10 ¹ /8	4 ¹ /8
TB1	2,3	10 ⁵ /16	4 ¹ /8

*FOR TB1 ONLY:

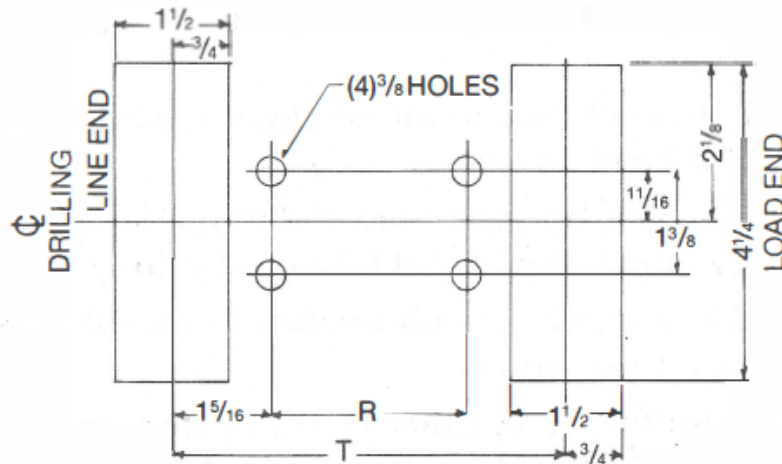
R	S	T	U
6 ⁵ /8	10 ⁵ /8	9 ¹ /4	8 ²⁹ /32



DRILLING PLAN FOR MOUNTING PANEL

3-POLE AS SHOWN.
 2-POLE E150 LEFT POLE OMITTED.
 2-POLE SE150, F225, SF250 & TB1 CENTER POLE OMITTED.

NOTE: HORIZONTAL STUDS AS SHOWN. FOR VERTICAL STUDS, ROTATE CUSTUDS 90°, OTHERWISE SAME AS HORIZONTAL.



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.