

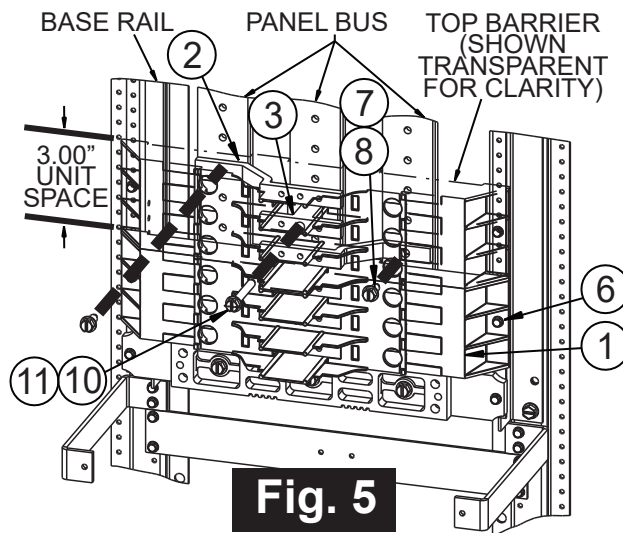


Fig. 5

BRANCH BREAKER INSTALLATION (ALL PANELS)

8. **Refer to Fig. 6**
Position each branch breaker so that the mounting notch on the load side of its case engages a mounting tab on the breaker mounting barrier (Item 1). Bring each breaker line stab into contact with its connector bus and align all breaker stab holes with the corresponding connector bus holes. Ensure that each breaker maintains engagement with the mounting barrier.
9. Fasten each breaker line stab to its connector using a #10-24 x 5/8" screw (Item 9) and tighten to the torque value specified on the back of the deadfront.

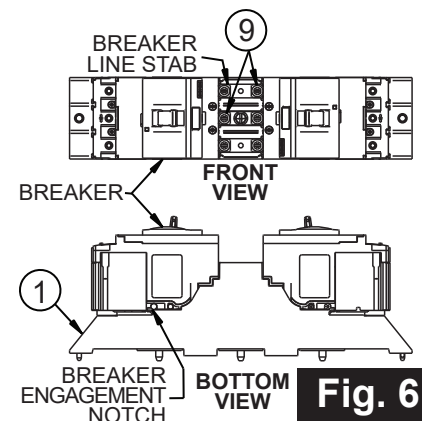


Fig. 6

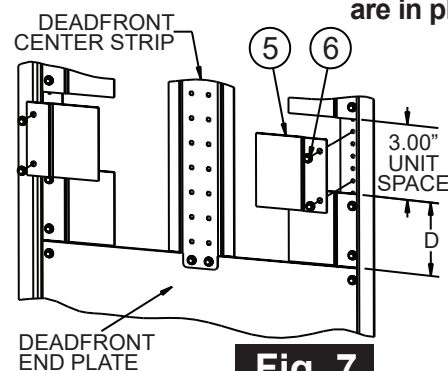


Fig. 7

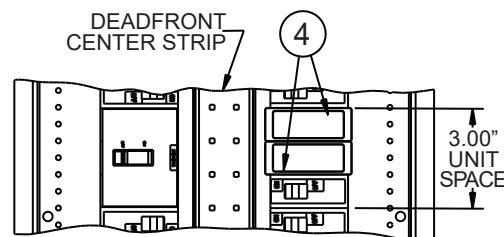


Fig. 8

DEADFRONT MODIFICATIONS AND PANEL RE-ASSEMBLY

10. Remove any full width plate covering the deadfront area for the installed kit. Remove any center strips attached to the removed plate.
11. If the installed kit does not completely fill the unit space of a removed module, a deadfront filler plate kit is required. Use **DDFP3** for 3" gaps and **DDFP6** for 6" gaps.
12. Use kit **DFK1** or **DFK07** thru **DFK21** to install the appropriate length center strip to span any open deadfront area, if needed.
13. **Refer to Fig. 7**
On P3 deadfronts only, install two deadfront adaptor plates (Item 5) on the outside edges of the kit deadfront area at the kit unit space locating dimension **D**. Fasten the plates to the deadfront with four #8-32 screws (Item 6).
14. If this panelboard was installed prior to 2021:
 - a. Remove and dispose of any old plastic 1" fillers.
 - b. Remove and replace the 4 deadfront supports.
15. Replace the deadfront using the hardware removed during disassembly.
16. **Refer to Fig. 8**
Insert 1" deadfront fillers (Item 4) into all P2 and P3 deadfront branch spaces not filled with breakers. Replace any old 1" fillers removed in step 14. (Only 1" fillers marked **DDFP1A** on the back should be used.)
17. Tighten all hardware to the specified torque values on the back of the deadfront.
18. Replace the panelboard front cover using the hardware removed during disassembly.
19. **Before energizing the panel, ensure that all connections have been properly torqued, that all circuit breaker terminal covers are secured, that the deadfront is installed and that all fillers are in place.**

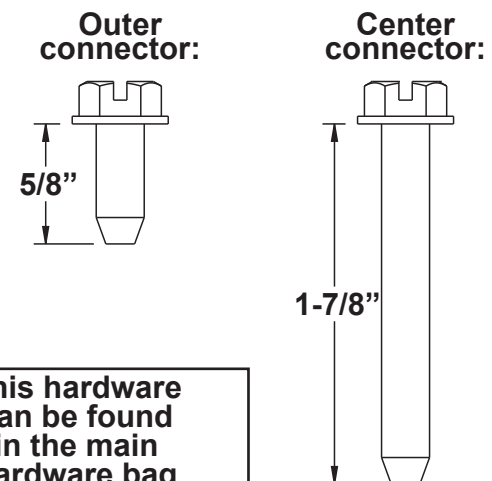
SIEMENS

BBKVA4P2P3 * Type 3VA41 or xGB Branch Breaker Mounting Kit for P2 or P3 Panelboards

Installation
Instructions

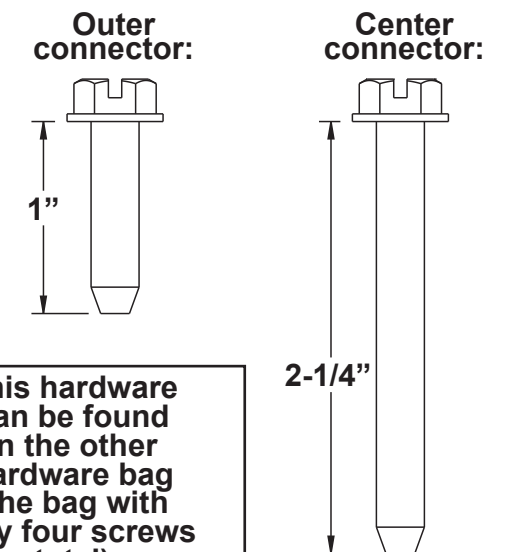
1/4"-20 Hardware per Application: (to scale; place hardware on outlines below to confirm)

**For Single Lamination Panel Bus:
(P2: 125A - 600A; P3: 250A - 400A)**



This hardware can be found in the main hardware bag (the bag with the six #8-32 washer head screws)

**For Double Lamination Panel Bus:
(P3: 600A - 800A)**



This hardware can be found in the other hardware bag (the bag with only four screws total)

* CAUTION

This kit MAY require additional kits (**PURCHASED SEPARATELY**), depending on the year this panelboard was manufactured (shown as **Date** on the rating label on the front of the deadfront):

BEFORE 2020: Panelboards REQUIRE installation of both kits below in addition to this Kit # **BBKVA4P2P3**:

- a. **DDFP1A** (1" Filler) (in quantities to fill all deadfront/filler holes; MUST replace older design 1" fillers too)
- b. **P2DFS600A** (Deadfront Support Kit) (one kit per panelboard)

AFTER 2020: This **BBKVA4P2P3** kit should be used without the need of additional kits

WITHIN 2020: If kit (**BBKVA4P2P3**):

- Is NOT listed on the kit label (on the rear of the deadfront), follow the BEFORE 2020 instructions
- Is listed on the kit label, follow the AFTER 2020 instructions

These instructions do not purport to cover all details or variations in equipment, or 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 local Siemens sales office. The contents of this Instruction manual shall not become part of or modify any prior or existing agreement, commitment or relationship. The sales contract contains the entire obligation of Siemens. The warranty contained in the contract between the parties is the sole warranty of Siemens. Any statements contained herein do not create new warranties or modify the existing warranty.

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Installation Instructions

The following instructions are for the installation of Siemens Type 3VA41 (SEAB, MEAB, HEAB) or xGB (NGB, HGB, LGB) breakers as branch devices in a Type P2 or Type P3 panelboard. The parts provided in this kit connect Type 3VA41 or xGB breakers to 1-phase or 3-phase systems. The breakers are NOT included in this kit and must be purchased separately. This kit requires 3" of branch unit space. If the unit space location for the kit is presently covered on the deadfront by a single, full-width plate, the deadfront may require modifications using kit DFK1, or DFK07 thru DFK21. Both P2 and P3 deadfronts will need a blank filler plate if this kit incompletely fills the interior unit space of any removed branch module(s). These deadfront filler kits are DFFP3 for a 3" gap and DFFP6 for a 6" gap. In P2 panelboards, use kit BNK2 if the branch neutral lugs do not have enough available sites for the breakers installed with this kit.

NOTE: Different deadfront supports and 1" fillers may be required -- see CAUTION note on page 1.



⚠ DANGER
Hazardous voltage.
Will cause death or serious injury.
Keep out.
Qualified personnel only.
Disconnect and lock off all power before working on this equipment.

1. Lock off power supplying this equipment before working on it.
2. Remove the panelboard front cover and deadfront.
3. Refer to Fig. 1
For taking unit space measurements in P2 panels, use the bus support located farthest from the main lug or device end of the panel. For P3 panels, use the neutral barriers (if present) or the bus supports (in panels without neutrals). Note that unit space starts at the inner surface of a P3 neutral barrier and 0.25" from the inner surface of a P2 or P3 bus support.

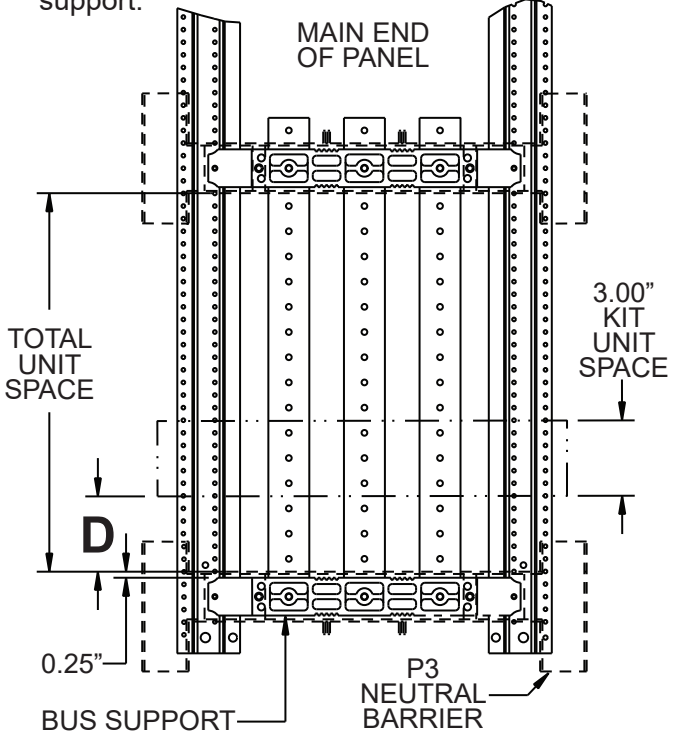


Fig. 1

4. This kit requires 3" of unit space. Determine the location where the kit is to be installed. The kit positioning dimension **D** in Fig. 1 must be a multiple of 3" (e.g.: 0", 3", 6", 9", etc.). These measurements can be taken directly from a P3 neutral barrier. For measurements taken from a P2 or P3 bus support, add 0.25" to **D** (e.g.: 0.25", 3.25", 6.25", 9.25", etc.).
5. If an existing branch module occupies the location chosen for this kit, remove all of its devices, components and parts. If it is a 6" module, the entire 6" of unit space must be cleared.

THIS KIT CONTAINS THE FOLLOWING ITEMS:

ITEM	DESCRIPTION	QTY.
1	Top Barrier	1
2	Outer Connector Bus	3
3	Center Connector Bus	1
4	1" Unit Space Deadfront Filler	6
5	P3 Panel Deadfront Adaptor Plate	2
6 *	#8-32 Self-threading Screw	6
7 *	1/4"-20 x 5/8" Self-threading Screw	3
8 **	1/4"-20 x 1" Self-threading Screw	3
9 *	#10-24 Self-threading Screw	6
10 **	1/4"-20 x 2-1/4" Self-threading Screw	1
11 *	1/4"-20 x 1-7/8" Self-threading Screw	1

* These screws will be in the main hardware bag.
** These screws are in a separate hardware bag, and are ONLY for use in double-laminated panel bus.

- NOTES:**
- a. Separate instructions are provided for kit installation for each system and panel type.
 - b. Each application uses some, but not all of the above listed parts.
 - c. Instructions for breaker installation and panel re-assembly are located on page 4.

INSTALLATION IN P2 1-PHASE PANELS:

6. Refer to Fig. 2
Position the Top Barrier (Item 1) so that it fills the 3" unit space for the kit and fasten it to the Base Rails using two #8-32 screws (Item 6). Install the three Outer Connectors (Item 2) within the mounting barrier, alternating between the left and right Panel Bus. The left-right-left connector pattern shown in Fig. 2 may be reversed if necessary to continue a connector pattern already in place in the panel. Fasten the connectors to the panel bus with three 1/4"-20 x 5/8" screws (Item 7).
7. Tighten all screws to the torque values specified on the back of the deadfront.

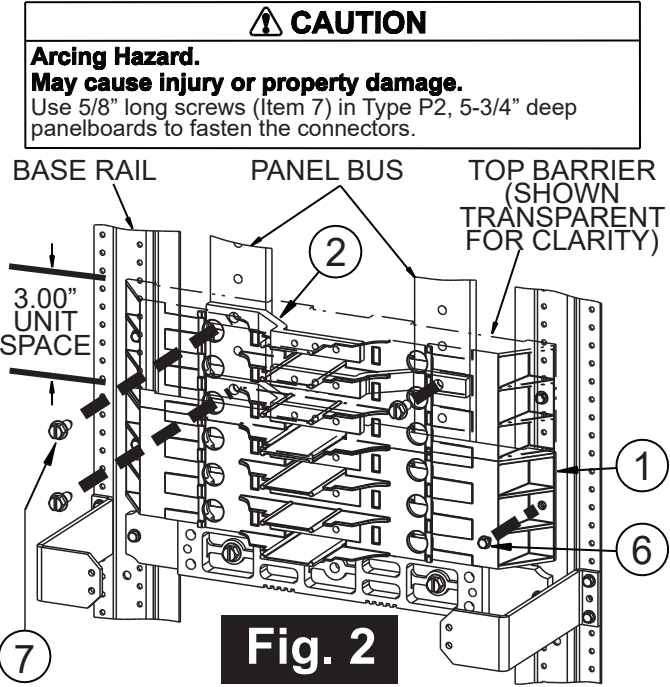


Fig. 2

INSTALLATION IN P2 3-PHASE PANELS:

6. Refer to Fig. 3:
Position the breaker mounting barrier (Item 1) so that it fills the 3" unit space for the kit and fasten it to the base rails using two #8-32 screws (Item 6). Install the two outer connectors (Item 2) and the center connector (Item 3) within the mounting barrier, as shown. Fasten the outer connectors to the panel bus with two 1/4"-20 x 5/8" screws (Item 7) and center connector with one 1/4"-20 x 1-7/8" screw (Item 11).

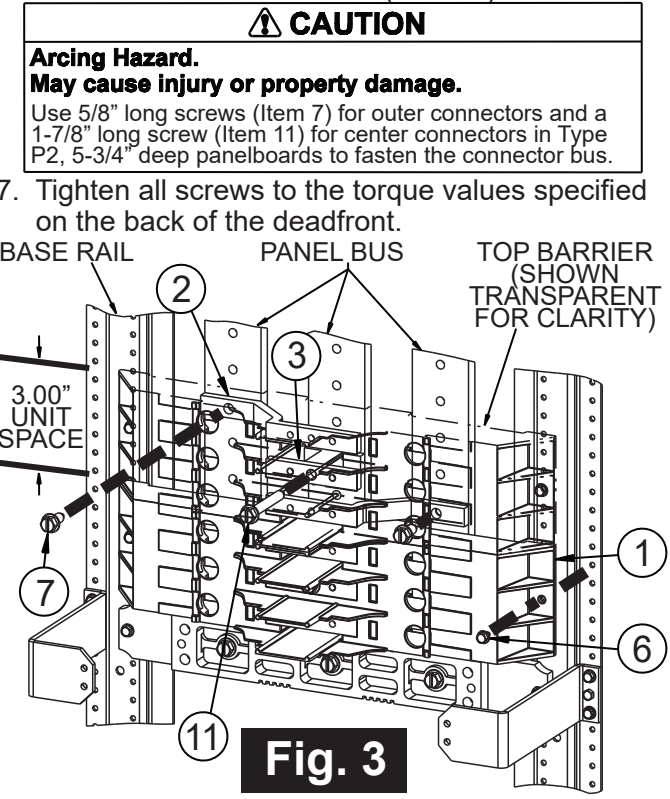


Fig. 3

INSTALLATION IN P3 1-PHASE PANELS

6. Refer to Fig. 4:
Position the breaker mounting barrier (Item 1) so that it fills the 3" unit space for the kit and fasten it to the base rails using two #8-32 screws (Item 6). Install the phase connectors (Item 2) within the mounting barrier, alternating between the left and right panel bus. The left-right-left connector pattern shown in Fig. 4 may be reversed if necessary to continue a connector pattern already in place in the panel. Fasten the connectors to the panel bus with the proper 1/4"-20 screws (Items 7 or 8).

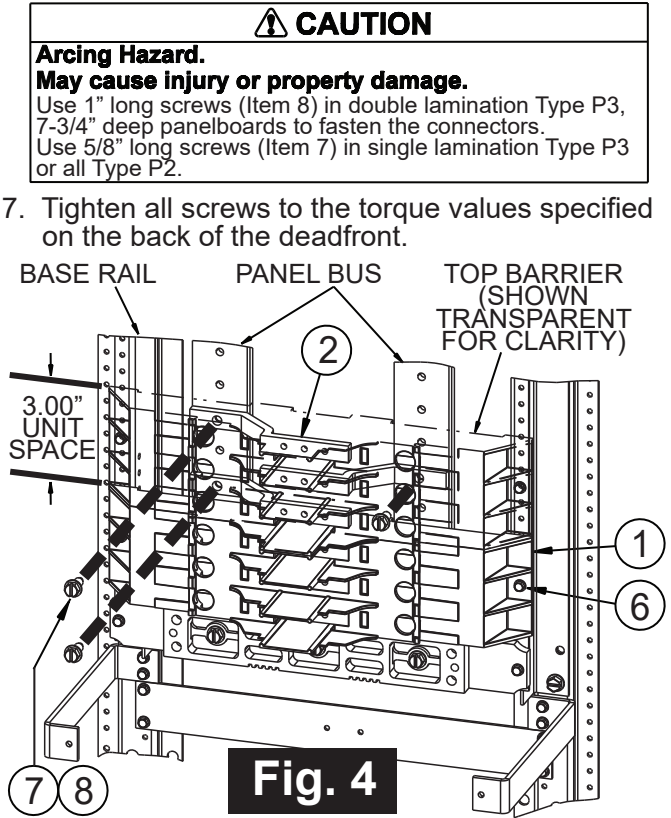


Fig. 4

INSTALLATION IN P3 3-PHASE PANELS

6. Refer to Fig. 5 (on next page):
Position the breaker mounting barrier (Item 1) so that it fills the 3" unit space for the kit and fasten it to the base rails using two #8-32 screws (Item 6). Install the two outer connectors (Item 2) and the center connector (Item 3) within the mounting barrier, as shown. Fasten the connectors to the panel bus with the proper 1/4"-20 screws (Items 7 and 11 or 8 and 10).

⚠ CAUTION
Arcing Hazard.
May cause injury or property damage.
For double lamination Type P3, use 1" long screws (Item 8) for the outer connectors and the 2-1/4" long screw (Item 10) for the center connector.
For all other applications, use 5/8" long screws (Item 7) for the outer connectors and the 1-7/8" long screw (Item 11) for the center connector.

7. Tighten all screws to the torque values specified on the back of the deadfront.

(continued on next page)