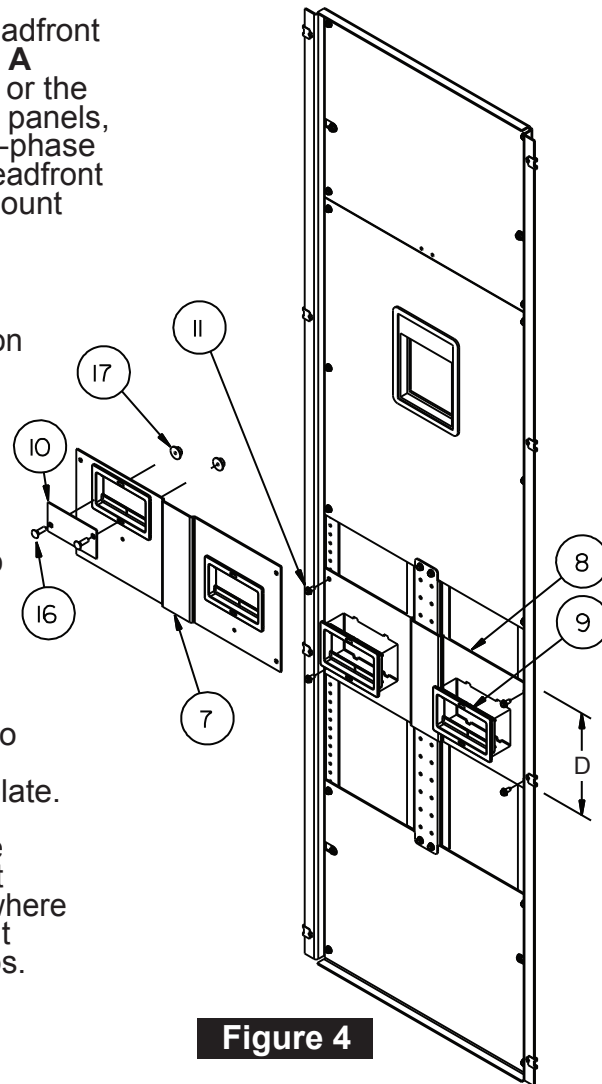


## DEADFRONT MODIFICATIONS & PANEL RE-ASSEMBLY

10. Refer to Figure 4: Identify the deadfront area that will cover the 6" kit unit space. Measure the unit space locating dimension **D** directly from the deadfront end plate (as shown).
11. Remove any full width plate covering the deadfront area for the kit unit space. Fasten the **Type A** deadfront plate (Item 7) for 1-phase panels, or the **Type B** deadfront plate (Item 8) for 3-phase panels, with four #8-32 screws (Item 11).
12. For applications where only one breaker is installed, insert the provision filler plate (Item 10) into the recess in the QR escutcheon covering the unused mounting location. Insert two carriage bolts (Item 16) into the holes in the corners of the filler. On the rear of the escutcheons, place a nut (Item 17) on the screws. Tighten the nuts to the torque values on the back of the deadfront.
13. Insert the two QR deadfront escutcheons into the plate cut-outs and snap them into place by first inserting the clips on one side of the opening and then rocking the other side into position until it firmly "clicks" into place. **NOTE:** There are notches on the deadfront plate and matching ribs on the escutcheon to ensure the correct one is used. Do **NOT** use if escutcheon will not fit into deadfront plate.
14. If the installed kit does not completely fill the unit space of removed modules, a deadfront filler plate kit is required to cover unit space where no branch components are installed. Use kit **DFFP3** for 3" gaps and kit **DFFP6** for 6" gaps.
15. Replace the deadfront using the hardware removed during disassembly.
16. Tighten all hardware to the specified torque values on the back of the deadfront.
17. Replace the panelboard front cover using the hardware removed during disassembly.



# SIEMENS

## P3 Panelboard Kit BBKQR2 for Branch Mounting of 225A MAX QR Breakers

### Installation 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.

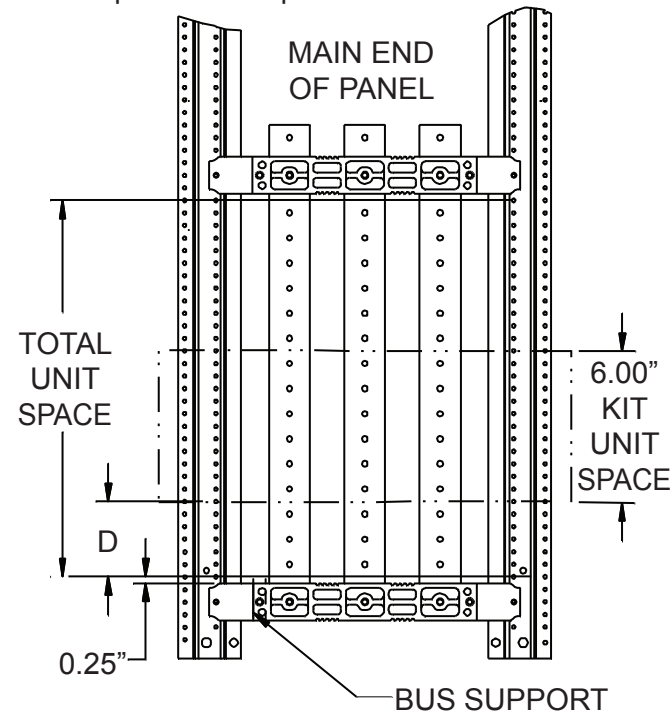
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# Installation Instructions

The following instructions are for the installation of a Siemens branch breaker kit for **225A MAX** QR2, QRH2, HQR2 and HQR2H breakers in Type P3 Panelboards. The parts provided in this kit connect a 2-pole QR breaker to a 1-phase, 2 or 3-wire system or a 2 or 3-pole QR breaker to a 3-phase, 3 or 4-wire system. This kit requires 6" of branch unit space. The deadfront will need a blank filler plate if this kit does not completely fill the unit space of any removed branch module(s). These deadfront filler kits are **DFFP3** for a 3" gap and **DFFP6** for a 6" gap. The breaker is **NOT** included with this kit and must be purchased separately. Be sure to choose the appropriate breaker for the system in use. For systems with no neutrals, disregard the neutral connection.



1. Lock off all power supplying this equipment before working on it.
2. Remove the panelboard front cover & deadfront.
3. Refer to Figure 1: This kit requires 6" of unit space. Determine the location where the kit is to be installed. The kit locating dimension **D** in Figure 1 must be a multiple of 3" (0", 3", 6", etc.). This measurement can be taken directly from a neutral barrier if present, or from a bus support in panels without a neutral. Note that 0.25" must be added to dimension D when taking measurements from the bus support (0.25", 3.25", 6.25", etc.).
4. If an existing branch module occupies the location chosen for this kit, remove all of its devices, components and parts.



**Figure 1**

**THIS KIT CONTAINS THE FOLLOWING ITEMS:**

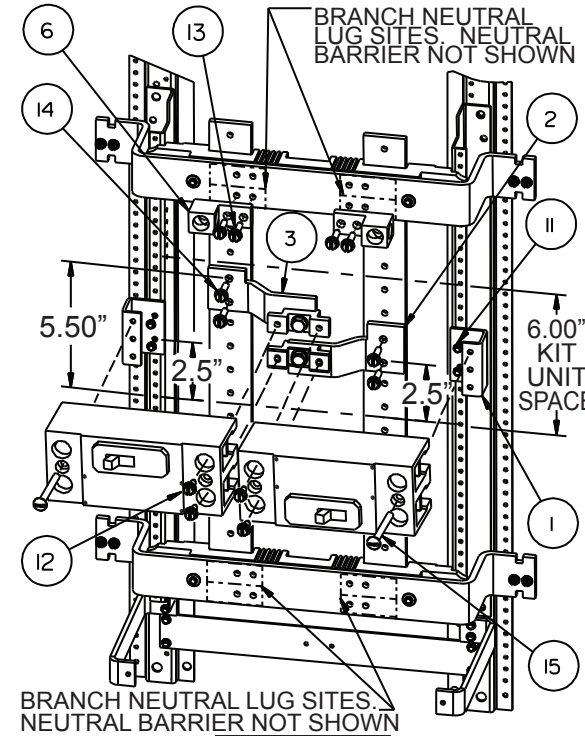
ITEM	DESCRIPTION	QTY	TORQUE
1	QR Breaker Support	2	N/A
2	QR Outer Connector Bus Type A	1	N/A
3	QR Outer Connector Bus Type B	2	N/A
4	QR Center Connector	1	N/A
5	QR Branch Barrier	1	N/A
6	Branch Neutral Lug	2	N/A
7	QR Branch Deadfront Plate Type A	1	N/A
8	QR Branch Deadfront Plate Type B	1	N/A
9	QR Breaker Deadfront Escutcheon	2	N/A
10	QR Provision Filler Plate	1	N/A
11	#8-32 x 9/32" Thread-forming Screw	8	30 lb-in
12	1/4"-20 x 5/8" Thread-forming Screw	6	72 lb-in
13	1/4"-20 x 3/4" Thread-forming Screw	4	72 lb-in
14	1/4"-20 x 1" Thread-forming Screw	6	72 lb-in
15	1/4"-20 x 2-1/2" Machine Screw	4	30 lb-in
16	#10 Carriage Bolt	2	N/A
17	Nut	2	20 lb-in

NOTE: Separate instructions are provided for kit installation for each system and panel type. Each application uses some -- but not all -- of the above listed parts. Instructions for breaker installation and panel re-assembly are located on Page 4.

**2-POLE 225A MAX QR INSTALLATION IN 1Ø PANELS:**

5. Refer to Figure 2: Fasten the breaker supports (Item 1) to the base rails in the center of the 6" kit unit space with four #8-32 screws (Item 11). Fasten the Type A outer connector (Item 2) and the Type B outer connector (Item 3) to the panel bus with four 1/4"-20 x 1" screws (Item 14).
6. Keeping the connectors aligned with each other and perpendicular to the panel bus, tighten all screws to the torque values specified on the back of the deadfront (or the table above).
7. Position each breaker with its "OFF"-side mounting hole aligned with the upper hole in the breaker support (Item 1). Bring the breaker pads into contact with the connectors. Fasten each breaker to its support with the 1/4"-20 x 2-1/2" machine screw (Item 15). Do not tighten until the bus connections are made. Fasten the breaker's pads to the connectors with two 1/4"-20 x 5/8" screws (Item 12) each.
8. If this kit is installed in a panel with a neutral, fasten the two branch neutral lugs (Item 6) to any of the eight indicated sites on the upper & lower neutral cross bus parts with four 1/4"-20 x 3/4" screws (Item 13).

9. Tighten all screws to the torque values specified on the back of the deadfront (or the table on pg. 2).



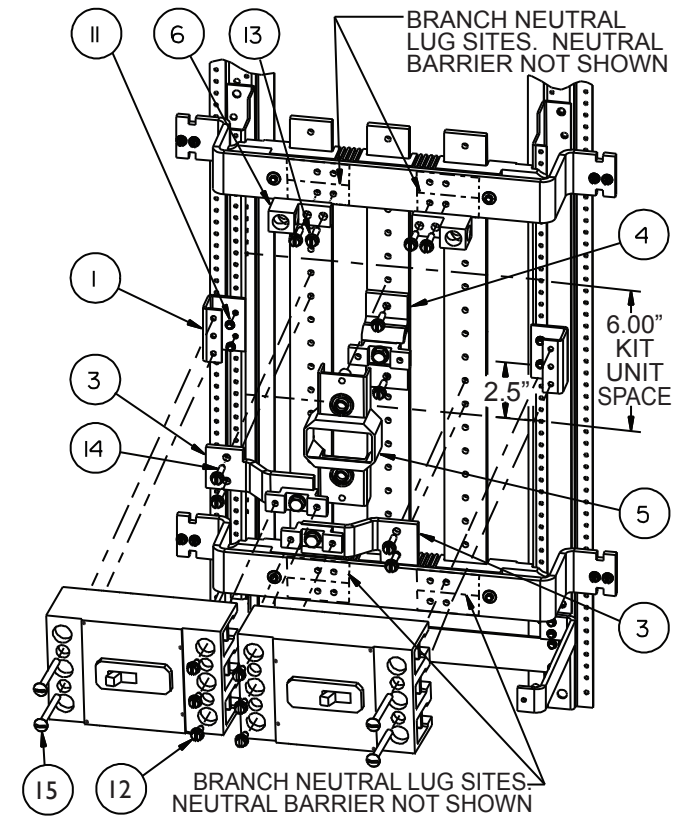
**Figure 2**

**225A MAX QR INSTALLATION IN 3Ø PANELS:**

5. Refer to Figure 3: Fasten the breaker supports (Item 1) to the base rails in the center of the 6" kit unit space with four #8-32 screws (Item 11). Fasten the center connector (Item 4) to the middle panel bus with two 1/4"-20 x 1" screws (Item 14). Tighten the screws to the torque values on the back of the deadfront. Install the QR branch barrier (Item 5), centered over the installed connector (Item 4). Insert the barrier's two mounting pins completely into the corresponding holes on the middle panel bus. Position two Type B outer connectors (Item 3) at the two ends of the barrier (Item 5) and fasten them to the outer panel bus parts with two 1/4"-20 x 1" screws (Item 14) each.
6. Keeping the connectors aligned with each other and perpendicular to the panel bus tighten all of the screws to the torque values specified on the back of the deadfront (or the table on page 2).
- 7A. TO INSTALL 3-POLE BREAKERS: Position each breaker with its two "OFF"-side mounting holes aligned with the 2 outer holes in each breaker support (Item 1). Bring the breaker pads into contact with the connectors. Fasten each breaker to its support with two 1/4"-20 x 2-1/2" machine screws (Item 15). Do not tighten until the bus connections are made. Fasten each breaker pad to the connectors with two 1/4"-20 x 5/8" screws (Item 12).

- 7B. TO INSTALL 2-POLE BREAKERS: Breakers should be placed in the lowest position on the left side of the unit space and in the highest position on the right side of the unit space so that the operating handles fall into the same positions as the 3-pole breakers shown in Figure 3. Position the left-side mounted breaker with its "OFF"-side mounting hole aligned with the lower hole in the left-side breaker support (Item 1). Bring the "ON"-side breaker pads into contact with the lower two connectors (Item 4 & lower Item 3). Position the right-side mounted breaker with its "OFF"-side mounting hole aligned with the upper hole in the right-side breaker support. Bring the "ON"-side pads into contact with the upper two connectors (Item 4 & upper Item 3). Fasten each breaker to its support with one 1/4"-20 x 2-1/2" machine screw (Item 15). Do NOT tighten until the bus connections are made. Fasten each breaker's "ON"-side pads to the connectors with two 1/4"-20 x 1" screws (Item 14) each.

8. If this kit is installed in a panel with a neutral, fasten the two branch neutral lugs (Item 6) to any of the eight indicated sites on the upper and lower neutral cross bus parts with four 1/4"-20 x 3/4" screws (Item 13).
9. Tighten all screws to the torque values specified on the back of the deadfront (or the table on page 2).



**Figure 3**