

SIEMENS

Switchboard/Powerpanel Kit SQRD / 6QR2 / SQR for Branch Mounting of 225A MAX QR Breakers

Installation Instructions

INSTALLING THE BRANCH NEUTRAL LUG IN A SWITCHBOARD

10. Refer to Figure 9: The branch neutral is located at the bottom of the "Z-rails" (or mirrored at the top depending upon the feed cable location). Two different neutral lug assemblies are included in the kit; be sure to install the type pictured below. The neutral lug assemblies can be mounted as shown or on any available hole of the branch neutral, depending on cable feed location. Torque all hardware as specified on the rear of the deadfront.

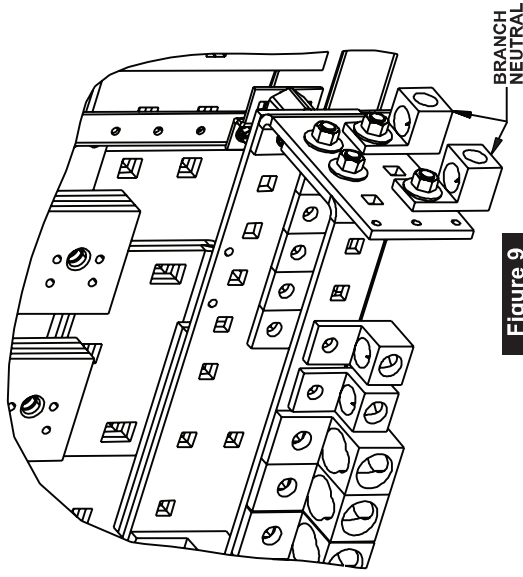


Figure 9

11. Reinstall the deadfront using the breaker cover plate supplied with this kit. Other filler plates may be required for proper fit; see filler plate kits listed on the rear of the deadfront.

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, HOR2** and **HQR2H** breakers in Switchboards or shallow/deep Panelboards. The parts provided in this kit connect QR breakers to a 3-phase, 3 or 4-wire system. This kit requires 5" of unit space. 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.



⚠ 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 all power supplying this equipment before working on it.**

2. Refer to Figure 1: Remove the cover plates and gutter covers.

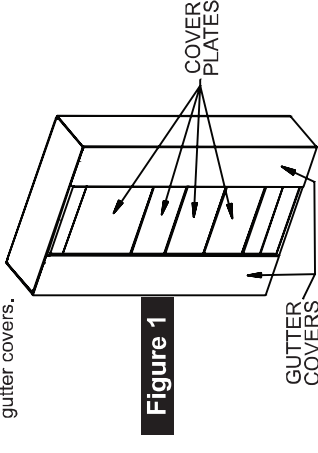


Figure 1

3. Refer to Figure 2: To mount a QR breaker, 5" of empty unit space is required. To locate the mounting position, measure from the top deadfront support to the top of the empty unit space filler on the deadfront. Transfer this dimension from the deadfront support along the Z-rail and mark. This will be the unit space as shown on Figure 4. After marking the Z-rail, remove the deadfront.

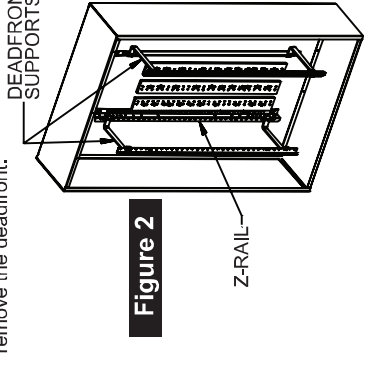


Figure 2

4. Open the shipping box and check the components against the following list:

ITEM	DESCRIPTION	QTY	TORQUE
1	Installation Instructions	1	N/A
2	A/C Strap	2	N/A
3	B Strap	1	N/A
4	Strap - Section Bus Hardware Kit *	1	N/A
5	A/C Link Bar	2	N/A
6	B Link Bar	1	N/A
7	QR Mounting Bracket	2	N/A
8	5" QR Cover Plate	1	N/A
9	Card Holder	2	N/A
10	Circuit ID Card	1	N/A
11	Neutral Lug Assembly	2	N/A
12	1/4"-20 x 3/8" Thread-forming Screw	6	72 lb-in
13	1/4"-20 x 5/8" Thread-forming Screw	12	72 lb-in
14	1/4"-20 x 2-3/4" Thread-forming Screw	4	72 lb-in

5. Refer to Figure 4: The first items to be installed are the line straps (Items 2 & 3). Locate the two 0.228" diameter holes on the B-phase of the section bus 1'-1/4" down from the top of the 5.0" unit space selected. Insert two 1/4"-20 thread-forming screws (Item 4*) through the 2 holes in the B Strap (Item 3) and then into the 0.228" diameter holes on the B-phase bus and tighten. Repeat this step to install the A-phase strap (Item 2) onto the A-phase bus. To install the C-phase strap (Item 2), locate two 0.228" diameter holes on the C-phase bus 2.50" below the mounting screws of the A-phase and B-phase straps. Insert two more of the 1/4"-20 thread-forming screws (Item 4*) through the two holes in the strap and then into the 0.228" diameter holes in the C-phase section bus. Torque all screws to the values specified on the rear of the deadfront (or in the table above).

* Refer to instruction card 11-B-1005-01 (included in Strap-Section Bus Hardware Kit) to select the correct length of screws for the application (based on the number of bus laminations).

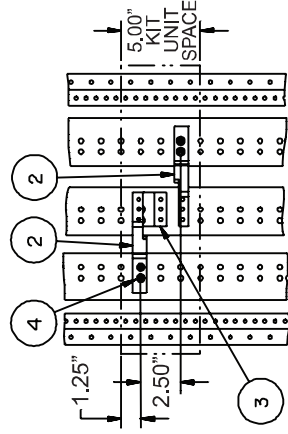


Figure 4

6. Refer to Figure 5: Mount the QR mounting brackets (Item 7) next. Locate a 0.228" diameter hole on the left Z-rail 5/8" below the mounting screws of the A-phase strap. Insert one 1/4"-20 x 3/8" screw (Item 12) through the 0.312" diameter hole in the QR mounting bracket and then into the 0.228" diameter hole in the Z-rail and tighten. Repeat the same steps to install the second QR mounting bracket onto the right hand Z-rail directly across from the first one. Torque all screws as specified on the rear of the deadfront.

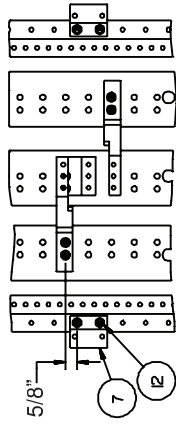


Figure 5

7. Refer to Figure 6: Install the link bars (Items 5 & 6). Insert two 1/4"-20 x 5/8" screws (Item 13) through the two 0.281" diameter holes in the B link bar (Item 6) & into the two 0.228" diameter holes in the B-phase strap and tighten. Repeat this step to mount the two A/C link bars (Item 5) to the A-phase & C-phase straps, orienting the link bars as shown so as to have 1.50" vertically between centers of the bars. Torque all screws as specified on the rear of the deadfront.

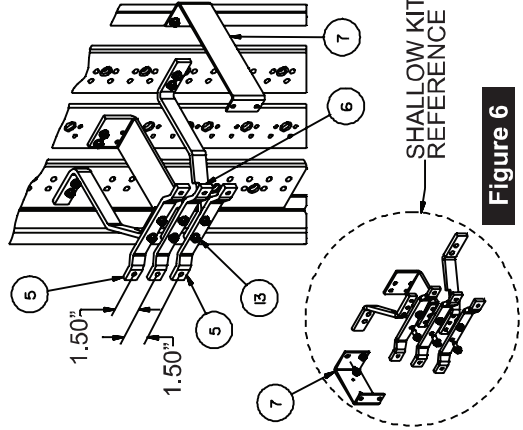


Figure 6

8. Refer to Figure 7: Install a circuit breaker by inserting one 1/4"-20 x 5/8" screw (Item 13) into each of the three contacts on the "ON" side of the breaker and into the 0.228" diameter holes at the left end of the A, B & C-phase link bars and tighten. Insert two 1/4"-20 x 2-3/4" thread-forming screws (Item 14) into the two mounting holes at the "OFF" side of the breaker and into the two 0.228" diameter holes in the QR mounting bracket and tighten. Torque all connections to the values as specified on the rear of the deadfront.

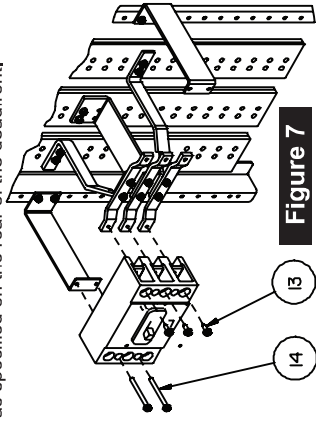


Figure 7

NOTE: If a branch neutral lug assembly is NOT required, skip to Step 11.

NOTE: Two types of neutral lug assemblies are included in this kit; be sure to install the correct one. For Switchboard applications, skip to Step 10 and use the lug assembly shown in Figure 9. For Panelboard applications, proceed to Step 9 below & use the lug assembly shown in Figure 8.

9. Refer to Figure 8: Installing the Branch Neutral Lug (Item 11) in a panelboard. The Branch Neutral is located at the bottom of the Z-trails (or mirrored at the top depending upon the cable feed location) and can be mounted on either side of the Branch Neutral depending on cable feed location. Torque all hardware as specified on the rear of the deadfront.

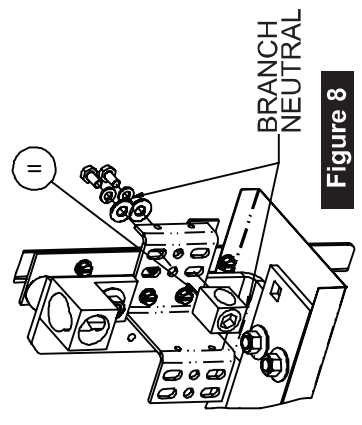


Figure 8