INSTALLING THE BREAKER:

- 11a. Orient the breaker such that the "ON"-side (with Bus Extensions, part of Item 15) fits into the Top Barrier (Item 4) and the "OFF"-side nestles between the two fins on the Breaker Mounting Bracket (Item 5).
- 11b. Fasten the breaker to the Breaker Mounting Bracket (Item 5) with two #8-32 screws (part of Item 15). (NOTE: Some breakers are packaged with a pair of Breaker-Mounting Screws. If this occurs, dispose of the pair that shipped with the breaker and use the pair from this kit.)
- 11c. Align the Bus Extension (part of Item 15) holes with the holes in the Straps (Items 1, 2 and 3) and fasten with one 5/16"-18 screw (part of Item 15) per phase.



- 11d. If installing two breakers in the same unit space, repeat the three steps above.
- 11e. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on Page 2).

INSTALLING THE NEUTRALS:

12a. If this kit is installed in a panelboard with a neutral, install the Branch Neutral Lug Assembly (Item 13). Locate on the Branch Neutral at either the top or bottom of the Z-rails. Lug can be mounted on either side of the Branch Neutral, depending on cable feed location.



12b. If this kit is installed in a switchboard with a neutral, install the Branch Neutral Lug Assembly (Item 14). It can be mounted as shown or on any available hole of the branch neutral, depending on cable feed location.



12c. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on Page 2).

DEADFRONT PREPARATION:

13a. If a provision is in place, install the Provision Filler Assembly (Item 16) in the appropriate Cover Plate (Item 6) opening. Place a screw into each of the two corner square holes and locate the filler plate onto the front of the Cover Plate, with the label facing out. Then, fasten two lock nuts onto the screws from the rear of the Cover Plate.



- 13b. Position the Cover Plate (Item 6) over the five inch unit space and fasten with four 1/4"-20 screws (Item 7) onto the deadfront rails, one at each corner.
- 13c. Mark the I.D. cards (Item 11) as desired and place onto the rear of Card Holder (Item 10), with the marking facing out. Attach this subassembly to the Cover Plate (Item 6) by aligning and pushing the pins into the appropriate pair of holes in the Cover Plate (Item 6).

FINAL PREPARATION:

 Before energizing the equipment, ensure that the deadfront, barriers and fillers are in place and secure, and that all the covers are properly installed

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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SIEMENS

Distribution Switchboard Section / Power Panel Branch Mounting Kit S3VA52T / S3VA52TD for Type 3VA52 / 61 / 62 Breaker

Hardware Key: (based
ltem # 7
Item # 9 (reference inst
Item numbers ref

Installation Instructions

on what is included in this kit)



Item # 8

ruction sheet 11-B-1009-01)

erence table on pg. 2

Installation Instructions

The following instructions are for the installation of a Siemens **3VA** branch breaker kit for **250A MAX 3VA52 (MFAS**, **HFAS**, **CFAS**), **150A MAX 3VA61 (MDAE**, **HDAE**, **CDAE**, **LDAE**) or **250A MAX 3VA62 (MFAE**, **HFAE**, **CFAE**, **LFAE**) breakers in Distribution Switchboards or Type P4 (shallow) / or Type P5 (deep) Panelboards. The parts provided in this kit are for connections to a 1-phase, 2 or 3-wire system (for the 3VA52 ONLY) or a 3-phase, 3 or 4-wire system. This kit requires 5" of 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). For systems without neutrals, disregard the neutral connection.

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.



A 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. First, lock off power supplying this equipment.

PANELBOARD PREPARATION:



- 3. This kit requires 5" of empty unit space. 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 Fig. 11. After marking the Z-rail, remove the deadfront.
- 4. If an existing branch module occupies this location, remove all of its devices, components and parts.

5. Open the shipping box and check the contents:

<u>J. U</u>	pen the shipping box and check the contents.			
ITEM	DESCRIPTION	QTY	TORQUE	
1	B-phase Strap *	1	N/A	
2	A/C-phase Strap 1 *	2	N/A	
3	A/C-phase Strap 2 *	2	N/A	
4	Top Barrier	1	N/A	
5	Breaker Mounting Bracket *	2	N/A	
6	5" Cover Plate	1	N/A	
7	1/4"-20 x 7/16" SHWHSW	8	72 lb-in	
8	1/4"-20 x 1/2" SHWHSW **	1	72 lb-in	
9	Strap-section Bus Hardware Kit	1	***	
10	Card Holder	2	N/A	
11	Circuit I.D. Card	2	N/A	
12	1Ø Top Barrier Mounting Bracket Kit **	1	N/A	
13	Panelboard Branch Neutral Lug Assy.	2	N/A	
14	Switchboard Branch Neutral Lug Assy. **	2	N/A	
15	Breaker Provision Kit	2	N/A	
16	Provision Filler Assembly	2	N/A	
17	Provision B-phase Barrier	2	N/A	
* Doop or shallow components, based on kit, ** Doop kits only				

* Deep or shallow components, based on kit ** Deep kits only *** 50 lb-in for Aluminum bus; 72 lb-in for Copper bus

SINGLE-PHASE - Start at Step 6a THREE-PHASE - Start at Step 7a

SINGLE-PHASE (1Ø) SYSTEM PREPARATION: ONLY allowable for 3VA52 breakers (MFAS, HFAS, CFAS)

For P4 (Shallow) Panelboards:

6a. Assemble the Top Barrier (Item 4) to the A/C-phase bus by lining up the two posts at the bottom of the barrier to the bus holes shown below. (Or reference Figure 11 on Page 3 for an overhead view.)



6b. Skip to Step 8a

For P5 (Deep) Panelboards or Switchboards:

6c. Fasten the pair of Top Barrier Supports (Item 12) to the A/C-phase bus, 1.25" offset from 5" unit space centerline, using four 1/4"-20 screws from the Bus Hardware Kit (Item 9).



6d. Each protruding Top Barrier Support bracket end (Item 12) will fit into a pocket on the bottom of the Top Barrier (Item 4).



6e. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on this page).

6f. Skip to Step 8a.

THREE-PHASE (3Ø) SYSTEM PREPARATION:

7a. Fasten the B-phase strap (Item 1) to the B-phase bus, vertically centered in the 5" unit space, using a pair of 1/4"-20 screws from the Bus Hardware Kit (Item 9).



7b. Skip this step for all 1Ø & non-provision 3Ø systems: Locate the Provision Barrier (Item 17) onto the side of the B-phase strap where a breaker will NOT mount. Secure it with the 5/16" screw from the Provision Barrier Assembly (Item 17).



- 7c. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on Page 2).
- 7d. Locate the Top Barrier (Item 4) into the prepared unit space by centering it in the 5" unit space. Next:

a. For P4 (Shallow) Panelboards:

The two pins on the bottom of the Top Barrier will align and insert into bus holes in the A/C bus.



b. For P5 (Deep) Panelboards or Switchboards: Fasten the Top Barrier to the B-phase strap using 1/4"-20 x 1/2" screw (Item 8).



7e. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on Page 2).

A/C-PHASE STRAP PREPARATION:

8a. Position one A/C-phase Strap 1 (Item 2) into the unit space, with the two-hole portion sitting on the A-phase bus and the single-hole portion set into the A-phase of the barrier, using the barrier as a fixture. Then set one A/C-phase Strap 2 (Item 3) on top of Strap 1 (Item 2) aligning the pair of mounting holes on each. Fasten this pair to the A-phase bus, using two screws from the Strap-section Bus Hardware Kit (Item 9) of appropriate length.



- 8b. Repeat Step 8a to attach a pair of A/C-phase straps to the C-phase bus.
- 8c. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on Page 2).

BREAKER MOUNTING BRACKET PREPARATION:

9a. Locate the Breaker Mounting Brackets (Item 5) on the Base Rails, and secure them with two pairs of 1/4"-20 x 7/16" screws (Item 7).



9b. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on Page 2).

BREAKER PREPARATION:

- 10a. Slide a Nut Keeper (part of Item 15) under each phase of the breaker stabs on the "ON" side of the breaker. They "click" into place when properly inserted.
- 10b. Place Bus Extension (part of Item 15) on top of each phase of the breaker stabs, with the smaller and rounder hole towards the breaker.
- 10c. Assemble each Bus Extension to each Nut Keeper with the 5/16"-18 x 3/4" Socket Head Cap Screw (part of Item 15). (Do not tighten until after breaker is assembled to the straps.)

