INSTALLING THE BREAKER:

- 18. Refer to Figure 12 and orient the prepared breaker such that the "ON"-side (with Bus Extensions) fits onto the top of the straps and the "OFF"-side sits properly on the Breaker Mounting Bracket (Item 8).
- 19. Fasten the breaker to the Breaker Mounting Bracket (Item 8) with two #8-32 screws (part of Item 18). (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.)
- 20. Align the Bus Extension (part of Item 18) holes with the holes in the Straps (Items 1, 2, 3, 4, 5 and 6) and fasten with one 5/16"-18 screw (part of Item 18) per phase.



21. 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:

22. If this kit is installed in a panelboard with a neutral, refer to Figure 13a and install the Panelboard Branch Neutral Lug Assembly (Item 16). 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.



23. If this kit is installed in a switchboard with a neutral, refer to Figure 13b and install the Switchboard Branch Neutral Lug Assembly (Item 17). It can be mounted as shown or on any available hole of the branch neutral, depending on cable feed location.

24. 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 DEADFRONT: NOTE: Provision Filler Plate Assembly (Item 19) is not part of kits KS3VA54T or KS3VA54TD. Skip Step 25.

25. If a provision is in place, refer to Figure 14a and install the Provision Filler Plate Assembly (Item 19) in the appropriate Cover Plate (Item 9) 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.



26. If a breaker is in place, refer to Figure 14b and position the Cover Plate (Item 9) over the 6.25" unit space and fasten with four 1/4"-20 screws (Item 10) onto the deadfront rails, one at each corner.



27. Mark the I.D. cards (Item 14) as desired and place onto the rear of Card Holder (Item 13), with the marking facing out. Attach this subassembly to the Cover Plate (Item 9) by aligning and pushing the Card Holder pins (Item 13) into the appropriate pair of holes in the Cover Plate (Item 9).

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 S3VA54T / S3VA54TD* for Single-Mount 3VA54 / 3VA64 Breaker

> For factory-installed provisions, verify that the strap kit contains bus extensions. (See Figure 11 on page 3 for reference.) If bus extensions are not included, kit S3VA53PR is required. one kit per breaker. Consult Siemens Sales for more details.

★ This instruction sheet can also be used as reference for these two Panel Builder kits: KS3VA54T & KS3VA54TD

These two kits will ship with all the same components as kits S3VA54T & S3VA54TD except for: nut keepers & provision filler plate assemblies

Nut keepers must be purchased with the breaker. Order options are: **3VA9473-0QA00** (kit of 3) for 3VA53/63 breakers: or factory-installed on the breaker by using a "2" as the 12th character in the breaker order: (Ex.: 3VA53405EC320AA0)

Additionally, when installing a factory-installed provision, nut keepers must be purchased with the breaker

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	Item numbers above re



Installation Instructions



Installation Instructions

The following instructions are for the installation of a Siemens 3VA branch breaker kit for 600A MAX 3VA54 (MLAS HLAS, CLAŠ) or 600A MAX 3VA64 (MLAE, HLAE, CLAE, LLAE) breakers in Distribution Switchboards or Type P4 (shallow) / or Type P5 (deep) Panelboards. The parts provided in this kit are for connections to a 3-phase, 3 or 4-wire system. This kit requires 6.25" 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 order the appropriate breaker for the specific application.



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 6.25" 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 Figure 4. 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:

(reier	to bollom of page 1 for KS3VA341 or I	<u> </u>	VA54TD
ITEM	DESCRIPTION	QTY	TORQUE
1	A/C-phase Strap, Short, Top *	1	N/A
2	A/C-phase Strap, Short, Bottom *	1	N/A
3	B-phase Strap, Top *	1	N/A
4	B-phase Strap, Bottom *	1	N/A
5	A/C-phase Strap, Long, Top *	1	N/A
6	A/C-phase Strap, Long, Bottom *	1	N/A
7	Long Strap Barrier *	1	N/A
8	Breaker Mounting Bracket *	1	N/A
9	Cover Plate	1	N/A
10	1/4"-20 x 7/16" SHWHSW	4	72 lb-in
11	1/4"-20 x 1/2" SHWHSW	2	72 lb-in
12	Strap-section Bus Hardware Kit	1	***
13	Card Holder	1	N/A
14	Circuit I.D. Card	1	N/A
15	Plastic Tree Rivet	3	N/A
16	Panelboard Branch Neutral Lug Assy.	2	N/A
17	Switchboard Branch Neutral Lug Assy. **	2	N/A
18	Breaker Provision Kit	1	N/A
19	9 Provision Filler Plate Assembly		N/A
20	Phase Barrier Assembly *	1	N/A
* Dee	* Deep or shallow components, based on kit ** Deep kits only		
*** 50 lb-in for Aluminum bus; 72 lb-in for Copper bus			



- 7. Refer to Figure 4 to position the B-phase Strap Set (Items 3 and 4) vertically centered in the unit space, with the three-hole end sitting on the B-phase bus. Loosely attach the B-phase Strap Set (Items 3 and 4) to the B-phase bus with two 1/4"-20 screws (from Item 12), following the instructions that are supplied with the Strap-section Bus Hardware Kit (Item 12).
- 8. Position and loosely secure the other two strap sets (Items 1, 2, 5 and 6) on either side of the B-phase Strap Set (Items 3 and 4) in a similar fashion.
- 9. Keeping components aligned, tighten all screws to the torque values specified on the back of the deadfront (or the table on this page).



10. Refer to Figures 5a and 5b, and attach the Strap Barrier (Item 7) to the Long Strap Set (Items 5 and 6). For the P4 application, the Strap Barrier (Item 7) must be wrapped around the straps as shown; for P5'/ SB applications, place the Strap Barrier (Item 7) onto the straps as shown. Complete by inserting a Plastic Tree Rivet (Item 15) through the barrier and into the straps.



INSTALLING THE BREAKER MOUNTING BRACKET:

11. Refer to Figure 6 and assemble the Breaker Mounting Bracket (Item 8) to the base rail with two 1/4"-20 x 7/16 Screws (Item 10). Figure 6



INSTALLING THE PROVISION PHASE BARRIER:

Phase Barrier Assembly MUST be in place for provisions or until breaker is mounted. If breaker is available, skip to "BREAKER PREPARATION" section.

12. Refer to Figure 7a and 7b and assemble the Phase Barrier (from Item 20) to the Phase Bracket (from Item 20) using two Plastic Tree Rivets (Item 15), as shown.



13. Refer to Figures 8a and 8b and assemble the Phase Barrier Assembly (Item 20) to the base rail opposite the Breaker Mounting Bracket (Item 8) using two 1/4"-20 x 7/16" Screws (Item 10). The Phase Barrier should properly separate the three phases, as shown below. Note: For P4 panels, the Phase Barrier Flap should be folded such that it sits on top of the long strap.





14. 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:

(refer to pg. 1 for more details about Notes 1 and 2 and refer to Figure 11)

NOTE #1: Nut keepers are NOT components of kits KS3VA54T or KS3VA54TD. NOTE #2: If breakers are ordered and received with

the nut keepers pre-installed, then:

a) May require Nut Keeper removal on the "OFF" end prior to breaker lug installation.

- b) Leave the Nut Keepers on the "ON" (1,3,5) side, and skip to step 16.
- 15. Slide a Nut Keeper (part of Item 18) under each phase of the breaker stabs on the "ON" side of the breaker. They "click" into place when properly inserted.
- 16. Place Bus Extension (part of Item 18) on top of each phase of the breaker stabs and loosely secure with a 3/8"x16 Socket Head SEMS Screw (part of Item 18). Note that the anti-rotation features on the bottom of each Bus Extension nestle over the breaker stab.
- 17. Refer to Figures 10 and 11 and locate the Phase Barriers that ship with the breaker and cut in half along the score line down the middle. Orient each half as shown, and slide into the "ON" end of two breaker slots until they lock into place.

