

3VA Integration Panelboards & Switchboards

January 2022



3VA UL Integration into Apparatus







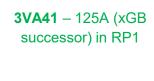
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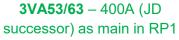
Panels / SWBD Integration











3VA52/61/62 - 150A/250A in P2 & P3

3VA41 – 125A in P2, P3, P4, & P5 Panelboards & SWBD

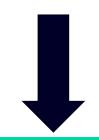


3VA53/63/54/64 - 400/600A (Single Mt.) **3VA/53/6354/64** - 400/600A (Twin Mt.) in Switchboards & remaining **Panelboards**



(January 2022) 3VAx7/8/9 - 1200-2000A Panelboards & Switchboard

3VA55/65/66 – 800-1000A

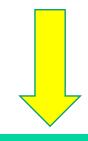


3VA52 - 250A

in P3 Twin Mounted









2021

2022/23

2018

2019

2020

3VA41 125A Breakers Launched Fall 2020

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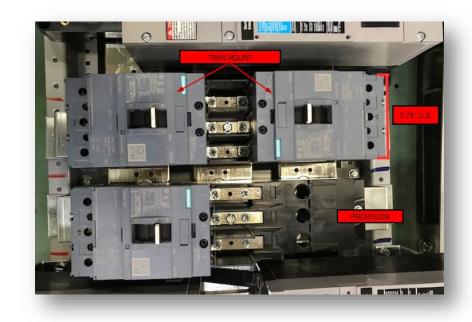
3VA41 125A

- Thermal Magnetic Trip Unit
- "Bolt-on" Panelboard breaker
- Replacement for Legacy ED, xGB, & GB2 breakers
- Available in 1P, 1P(2P), 2P or 3P construction
- Accessory "side car" no longer required, fit within breaker footprint

Features & Benefits:

- Twin mount in 3.75" of Unit Space
- Access to lugs without removing entire dead front
- New 3VA41 strap kit is reverse compatible with xGB (NGB, HGB, LGB) frames
- Available in high density configuration → fit (6) 2P breakers in 7.5" Unit Space)

3VA41 125A (UL TYPE: SEAB, MEAB, HEAB) / NGB, HGB, LGB Frames Strap Kits									
Panel Type ▼	Kit Type 🏋	*NEW* 3VA41 OR xGB Strap Kit	~	Kit Short Description	-				
P4	Distributor Kit	S3VA41T		3VA41/xGB CU STRAP KIT TWIN MT P4, SP5					
P5/SWBD	Distributor Kit	S3VA41TD		3VA41/xGB CU STRAP KIT TWIN MT P5/SWB					
P5/SWBD	Distributor Kit-HD	S3VA41TDHD		3VA41/xGB CU HIGH DENSITY STRAP P5/SWB					



3VA61 150A & 3VA52/3VA62 250A Breakers Launched in June 2019

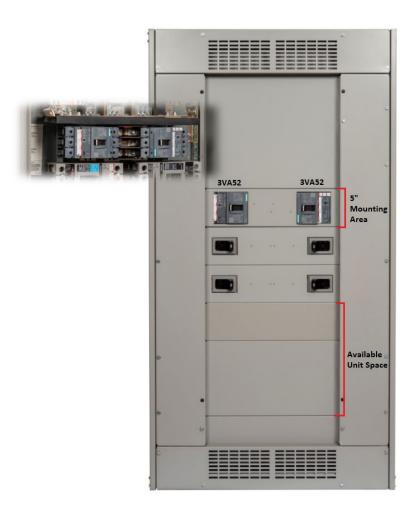
3VA61 150A & 3VA52/3VA62 250A:

- 3VA61/62 → Electronic Trip Units (ETU)
 - Replacement for 3VL DG & FG
 - Basic metering through trip unit
- 3VA52 → Thermal Magnetic Trip Units (TMTU)
 - Replacement for Sentron FD
 - Available in 2P(3P), 3P

Features & Benefits:

- Twin mount in 5" of Unit Space
- Visible & accessible trip unit through dead front
- Access to lugs without removing entire dead front
- Flexibility to mount TMTU across from ETU
- Flexibility to mount 150A across from 250A
 - o e.g., 3VA61 across from either a 3VA52 or 3VA62



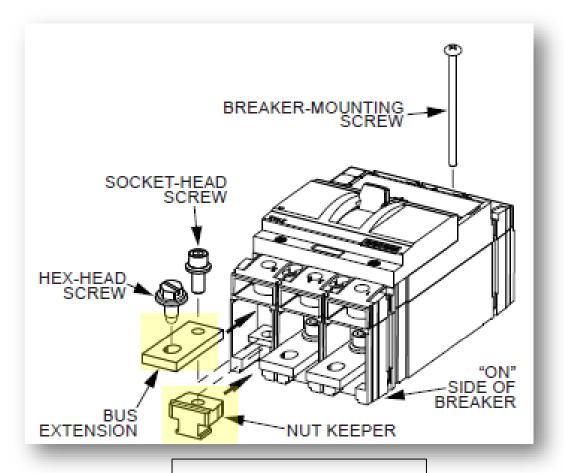


3VA61, 3VA52, & 3VA62 Strap Kits Breaker Connecting Hardware



3VA vs. Legacy Breakers:

- 3VA connecting hardware
 - Nut keepers → 3VA frame specific
 - Bus extensions → to connect to base strap
- Ease of breaker mounting
- Minimize strap kit material & labor cost
- Nut keepers allow for flexible lug offering

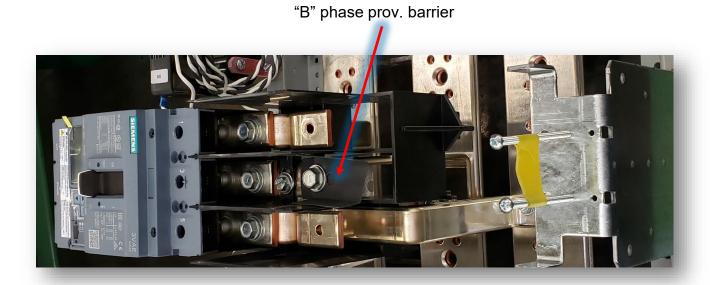


3VA 150/250A breaker

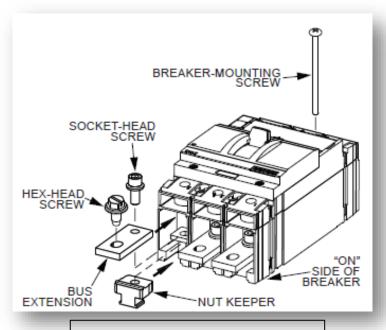
3VA52, **3VA61**, & **3VA62** Factory Installed Provisions Pre-May 2021

Original Launch (June 2019)

- Nut keepers or bus extensions sold separately
- Provision kit #S3VA52PR required, one per 3VA breaker
- Provision kit contains enough components for either (1) 3VA5 or(1) 3VA6 breaker



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3VA Provision Kit #S3VA52PR

THIS SPACE IS FOR THE FIELD ADDITION
OF SIEMENS TYPE 3VA52 (HFAS, MFAS,
CFAS), 3VA61 (MDAE, HDAE, CDAE, LDAE)
OR 3VA62 (MFAE, HFAE, CFAE, LFAE)
BREAKER, 250A MAX.
THE USE OF ANY OTHER DEVICE MAY
CAUSE DAMAGE OR PERSONAL INJURY.
BREAKER PROVISION KIT # S3VA52PR
REQUIRED TO INSTALL EACH BREAKER.
Siemens Industry, Inc.
Norcross, GA
15-A-1073-01 Rev.00

This label is affixed to the filler plate for every 3VA52, 3VA61 or 3VA62 provision that leaves the factory today (Pre May 2021)

3VA52, 3VA61, & 3VA62 Factory Installed Provisions June 2021 onwards

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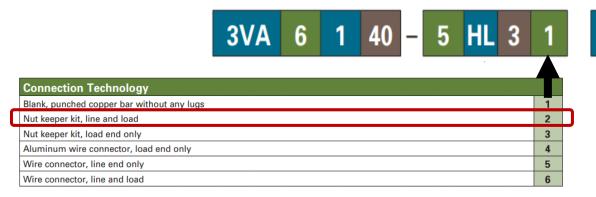
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New prov. barrier

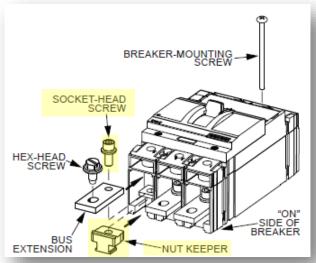
Re-launch:

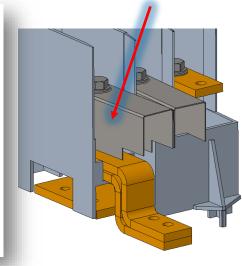
- Bus extensions integrated to main strap
- Revision to provision barrier to meet UL clearance
- Nut keepers must be purchased with breaker
- Multiple ways to order the Nut Keepers:
 - For 3VA52 breakers, order kit #3VA9233-0QA00 (kit of 3)



- For 3VA61/62 breakers, order kit #3VA9243-0QA00 (kit of 3)
- Order with breaker, nut keeper installed at factory \rightarrow "2" as the 12th digit:







Ordering Information

The catalog numbers listed here are for complete, non-interchangeable trip circuit breakers without lugs.

For factory installed nut keepers (3VA92330QA00), change the 12th digit of the catalog number to "2" (required to install a breaker in a panelboard or switchboard that has a provision). (For example, a 35KA @480VAC, 150A, 3-pole, 3VA52 with nut keepers would be catalog number 3VA5215-5ED32-0AA0).

THIS SPACE IS FOR THE FIELD ADDITION OF A SIEMENS 3VA52 (TYPE HFAS, MFAS, CFAS)
3VA61 (TYPE MDAE, HDAE, CDAE, LDAE) OR
3VA62 (TYPE MFAE, HFAE, CFAE, LFAE)
BREAKER, 250A MAX.
THE USE OF ANY OTHER DEVICE MAY CAUSE
DAMAGE OR PERSONAL INJURY, NUT KEEPER ACCESSORIES ARE REQUIRED WHEN ORDERING THE BREAKER. CONSULT SIEMENS

SALES FOR ADDITIONAL INFORMATION.
Norcross. GA 11-B-1068-01 F

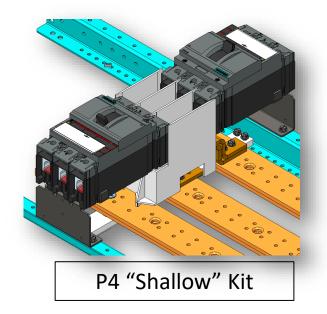
This label will be affixed to the filler plate for every 3VA52, 3VA61 or 3VA62 provision that leaves the factory starting in May 2021

3VA52, 3VA61, & 3VA62 Strap Kits

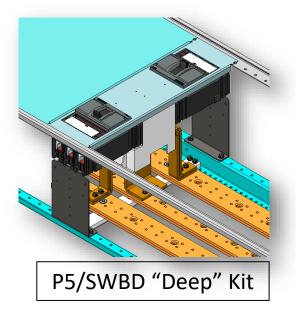


When do you need Distributor kit?

- When you have an available 5" of Unit Space in an existing Power Panel or Switchboard, order one of the following:
 - P4 → #S3VA52T, kit contains components to mount (2) 3VA breakers including nut keepers & bus extensions. No further kits required.
 - P5/SWBD → #S3VA52TD, kit contains components to mount (2) 3VA breakers including nut keepers & bus extensions. No further kits required.
- Strap kit installation instructions are available in Download Center



3VA52/61/62 150A & 250A KITS 3VA							
P4	Distributor Kit	S3VA52T					
P5/SWBD	Distributor Kit	S3VA52TD					



3VA53/63 400A & 3VA54/64 600A Single Mount Breakers Launched in May 2021

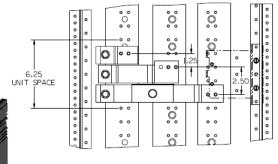
SIEMENS

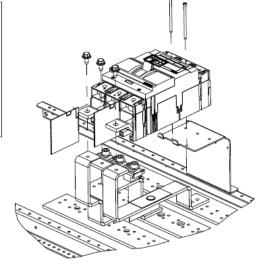
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3VA53/63 400A & 3VA54/64 600A:

- 3VA63/64 → Electronic Trip Units (ETU)
 - Replacement for 3VL JG & LG
 - Basic metering through trip unit
- 3VA53/54 → Thermal Magnetic Trip Units (TMTU)
 - Replacement for Sentron JD & LD
 - Available in 2P(3P), 3P







Features & Benefits:

- Single mount in 6.25" of Unit Space
- Improved footprint for TMTU breakers (prev. 8.75" required)
- Main or Branch horizontal mount applications
- Trip unit is visible & accessible through dead front
- Strap kits →
 - Factory assemblies offer both AL & CU assemblies
 - Distributor kits are CU only

3VA53/63 (SIN	NGLE) 400A	NEW 3VA KIT CATALOG #
P4	Distributor Kit	S3VA53T*
P5/SWBD	Distributor Kit	S3VA53TD*
3VA54/64 (SIN	NGLE) 600A	
P4	Distributor Kit	S3VA54T*
P5/SWBD	Distributor Kit	S3VA54TD*
3VA53/63/54/	64 (per breaker) 400A & 600A	
P4, P5/SWBD	Provision Kit	S3VA53PR*

^{*} Now available

3VA53/63 400A & 3VA54/64 600A <u>Twin</u> Mount Breakers Launched November 2021 COMPAS release!

3VA53/63 400A & 3VA54/64 600A:

- 3VA63/64 → Electronic Trip Units (ETU)
 - Replacement for 3VL JG & LG
 - Basic metering through trip unit
- 3VA53/54 → Thermal Magnetic Trip Units (TMTU)
 - Replacement for Sentron JD & LD
 - Available in 2P(3P), 3P

Features & Benefits:

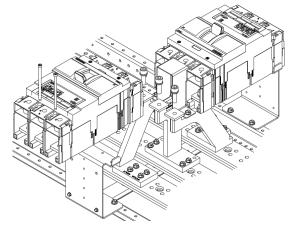
- Twin mount in 6.25" of Unit Space
 - 600A requires 46"W section
- Improved footprint for TMTU breakers (prev. 8.75" required)
- Trip unit is visible & accessible through dead front
- Strap kits → Factory & Distributor assemblies CU only

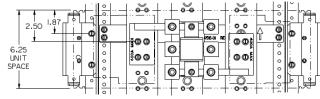






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3VA53/63 (TW	IN) 400A	NEW 3VA KIT CATALOG #				
P5/SWBD	Distributor Kit	S3VA53T2D*				
P5/SWBD	Bus Kit (OEM)	KS3VA53T2DB*				
3VA54/64 (Twi	in) 600A					
P5/SWBD	Distributor Kit	S3VA54T2D*				
P5/SWBD	Bus Kit (OEM)	KS3VA54T2DB*				

*Not yet released

3VA53/63 400A & 3VA54/64 600A Twin Mount Breakers Minimum Wire Bending Requirements per NEC



As a minimum, wire bending space (as required per NEC Tables 312.6(A) and 312.6(B)) for this product is based on wire or cable sizes (pér NEC Table 310.16).

400A 3VA53 (Type MJAS, HJAS, CJAS) and

400A 3VA63 (Type MJAE, HJAE, CJAE, LJAE) or 600A 3VA54 (Type MLAS, HLAS, CLAS) and 600A 3VA64 (Type MLAE, HLAE, CLAE, LLAE):

Mount Type:	Single				Dual				
With SEM3:	No			Yes		No		Yes	
Enclosure Width:	32"	38"	46"	38"	46"	38"	46"	38"	46"
(2) 500 kcmil	>	>	>		*		>		
(1) 500 kcmil	<	<	<	**	<	\	<		<
(2) 250 kcmil	>	\	>	**	\	>	>		/

✓ Applicable for 400A & 600A

★ 600A CT only

Not applicable

★★ 400A CT only

3VA55/65 800A & 3VA66 1000A Single Mount Breakers Coming soon in the <u>January 2022 COMPAS Release!</u>

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3VA55/65 800A & 3VA64 1000A:

- 3VA65/66 → Electronic Trip Units (ETU)
 - Replacement for 3VL MG & NG 1000A Trip
 - Basic metering through trip unit
- 3VA55 → Thermal Magnetic Trip Units (TMTU)
 - Replacement for Sentron MD
 - Available in 2P(3P), 3P

Features & Benefits:

- Single mount in 8.75" of Unit Space
- Improved footprint for TMTU breakers (prev. 10.00" unit space required)
- Common strap kit between 3VA55, 3VA65 & 3VA66 breakers
- New 3VA66 1000A frame offers footprint & price savings vs. 1200AF/1000AT N
 frame breaker

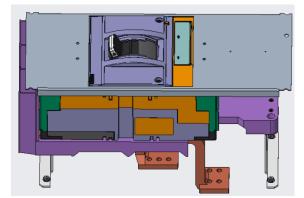
 3VA55/65 3VA66 800A & 1000A

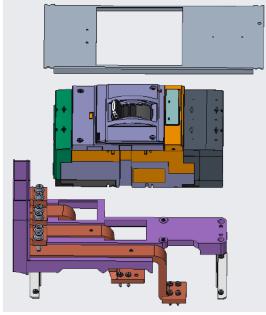
 New

P5/SWBD

/A55/65, 3VA66 800A & 1000A	New 3VA kits	Description
	S3VA55T*	3VA55/65/66 800/1000A CU STRAP KIT P4
ı	KS3VA55TB*	3VA55/65/66 800/1000A CU OEM BUS KIT P4
/SWBD	S3VA55TD*	3VA55/65/66 800/1000A CU STRP KT P5/SWBD

KS3VA55TDB*





3VA55/65/66 800/1000A CU OEM BUS P5/SWBD

*Not yet released

3VA55 & 3VA65 800A and 3VA66 1000A breakers Minimum Wire Bending Requirements per NEC



As a minimum, wire bending space (as required per NEC Tables 312.6(A) and 312.6(B)) for this product is based on wire or cable sizes (per NEC Table 310.16).

800A MAX 3VA55 (Type MMAS, HMAS, CMAS) or 800A MAX 3VA65 (Type MMAE, HMAE, CMAE) or 1000A MAX 3VA66 (Type MMNAE, HMNAE, CMNAE):

* NO	Maximum		Enclosure Conductor Restrictions						ons	
RESTRICTIONS	Conductor		32" Wide		38" Wide		46" Wide			
Siemens	Oty Size			Size		Size	Non-	SEM3 (800A)		
Lug	Qty.	(kcmil)	Qty.	(kcmil)	Qty. (kcmil)		SEM3	Qty.	Size (kcmil)	
3VA9573-0J.23	2	600		*	* *		*	*		
3VA9673-0J.32	3	400		*	*		*	*		
3VA9673-0J.24	2	750	1	750	*		*	1	750	
2)// 0072 0124	2	750	NI-4	اممسمالم	2	750	AL.	2	600-700	
3VA9673-0J.34	3	750	INOI	allowed	2 750		*	1	750	
3VA9673-0J.43	4	500	3	300-500	*		*	3	300-500	
21/40672 01 44	4	600	Not	allowed	3 600		AL.	3	300-500	
3VA9673-0J.44	4	600	NOU	alloweu			*	2	600	

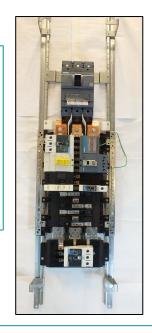
Launched Projects Key Benefits Recap





P1 Lighting Panels

- Main & Sub-feed 3VA41, 3VA52, 3VA61, 3VA62, 3VA53, 3VA63
- Branch 3VA41
- First ETU available as a Main
- Main & Branch kits allow mixing of 3VA41 & xGB



P2 Lighting Panels

- 3VA41 Branch allow mixing with xGB
- 3VA52/61/62 Main/Branch
- Trip unit accessible thru cover
- Horizontal Main in Unit Space
- Eliminate need for Subfeed 250A breaker: single mount in unit space

P3 Lighting Panels

- Same as P2
- 800A Main Breaker ETU/TMTU
- New 30"W vented encl.
- >6 large frame branch (>250A)



P4/P5 Power Panels & Switchboard Distribution

- 3VA41 125A Branch
 - New strap kit is reverse compatible with xGB
- 3VA61 150A, 3VA52/62 250A Branch:
 - Twin Mount TMTU across from ETU
 - Improved access to TU & Lugs
- 3VA53, 3VA63 400A & 3VA54, 3VA64 600A Mains or Branches
 - Single Mount
 - Improved footprint for TMTU
 - Twin Mount releasing November 2021



3VA Call to Action



- Configure and quote with 3VA Breakers
 - More competitive pricing vs. legacy frames
 - Footprint & Features
 - Availability, Legacy frames are ramping down
- Enhancements will continue with 3VA products in Panelboards & Switchboards
 - Up to 1000A main/branch in Power Panel & SWBD Distribution (January 2022)
 - Individual Mount Switchboard applications (2022/3)
 - 3VA Large Frame Integration 1200-2000A (Q1 2023)
- SpeedFax →
 - Section 7 MCCB for latest breaker information
 - Section 11 & 13 PBSB in progress
- Be on the lookout for new product announcements via SMU, Compas GO Announcement section, SRC & DRC

Contact info



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Switchboards

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