

SIEBREAK-VCB™ metal-enclosed switchgear

Metal-enclosed, load-interrupter switchgear up to 1,200 A and 15 kV

Description

Siemens type SIEBREAK-VCB™ load-interrupter switchgear is a modular assembly of switches, fixed-mounted vacuum circuit breakers, and bus assemblies that are fully integrated both mechanically and electrically to provide the highest level of medium-voltage circuit protection.

Features and benefits:

- 5 kV and 15 kV voltage classes
- 600 A and 1,200 A continuous current
- Siemens overcurrent protection relay
- Indoor type 1 enclosure
- Single and duplex switch types
- Large 8" x 18" (203 mm x 457 mm) viewing window
- Hinged, grounded metal barrier in front of switch blades
- 11-gauge doors, covers, and barriers

- Silver-plated copper bus
- Provisions for key interlocking
- Mechanical door and switch interlock
- Upper and lower ventilation louvers
- Glass-polyester bus supports
- Non-corrosive nameplate
- Space heater with thermostat (optional)
- NEMA CC1 hole patterns for cable termination
- Current transformers (CTs) - one per phase.

Standards

The equipment meets or exceeds applicable standards from ANSI, IEEE, CSA, EEMAC, and NEMA.

Applications:

- Standalone bay
- Transformer primary
- Lineups.

Arc-flash mitigation

Suitable for application as a virtual secondary main circuit breaker, to allow reduction in arc-flash incident energy in the low-voltage switchgear for faults on the main bus (with no main circuit breaker) or faults on the line side of a main circuit breaker.

Standard outdoor features:

- Long-life space heaters (half-voltage)
- Bottom cover plate
- Externally removable filters
- 6" (152 mm) formed steel base.

Optional:

- UL or C-UL Listing
- Indoor type 2 drip-proof enclosure
- Indoor type 12 dust-resistant enclosure
- Outdoor non-walk-in type 3R enclosure
- High-track resistance bus supports
- Auxiliary switches (2 NO-2 NC)
- Mimic bus
- Ground studs (ball stud) type
- Screens and filters (indoor)
- Tin-plated copper bus
- Second set of CTs.

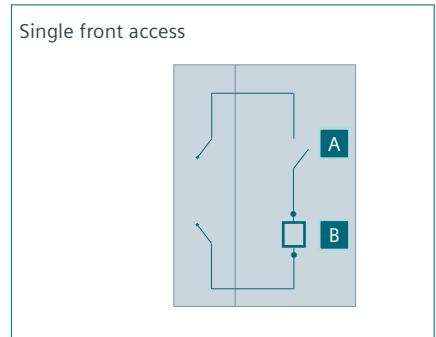
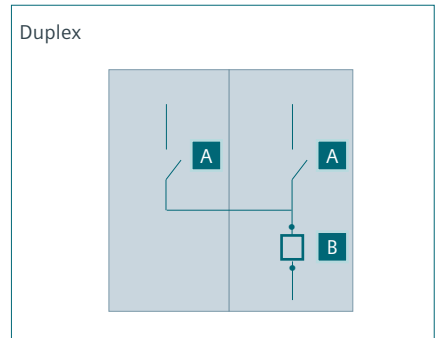
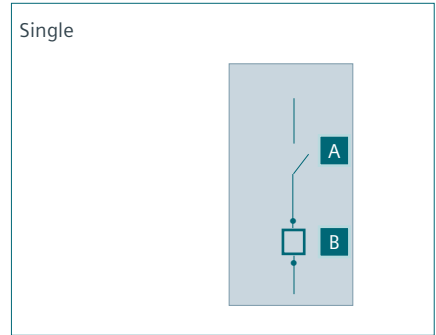
Modular configurations to mount:

- Surge arresters
- Instrument transformers
- Control power transformers
- Power meters.

SIEBREAK switchgear assembly ratings					
System design voltage	Dielectric withstand voltage		Main bus ¹ continuous current	Short-circuit current unfused	Fault-closing current unfused symmetrical
	Power frequency	Impluse			
kV	kV rms	kV peak	A rms	kA sym	kA rms
5.0	19	60	600	25	39
			1,200	38	59
			2,000		
15.0	36	95	600	25	39
			1,200	38	59
			2,000		

Type SBVCB vacuum circuit breaker ratings							
System design voltage	Dielectric withstand voltage		Continuous current	Short-circuit current unfused	Circuit breaker type	Closing and latching current ³	
	Power frequency	Impluse				kA sym	kA rms
kV	kV rms	kV peak	A rms	kA sym			
5.0	19	60	600 1,200	25 38 ³	05-SBVCB-25-0600-65	25	39
					05-SBVCB-25-1200-65		
					05-SBVCB-40-0600-104		
					05-SBVCB-40-1200-104		
15.0	36	95	600 1,200	25 38 ³	15-SBVCB-25-0600-65	25	39
					15-SBVCB-25-1200-65		
					15-SBVCB-40-0600-104		
					15-SBVCB-40-1200-104		

Standard configuration	Single	Duplex	Lineup
Types 1, 2, 12, and 3R enclosure	•	•	•
36" (914 mm) wide types 1, 2, 12, and 3R	•		
72" (1,829 mm) wide		•	
60" (1,524 mm) wide for front-access design	•		•
2.62" (67 mm) width transition to dry-type transformer for type 3R outdoor	•	•	
18" (457 mm) width transition to liquid-filled transformer	•	•	
92" (2,337 mm) height types 1 enclosure	•	•	•
105" (2,667 mm) height type 3R enclosure	•	•	•
62" (1,575 mm) depth optional for type 1 enclosure ^{1,3}	•		
72" (1,829 mm) depth standard for types 1, 2, 12, and 3R (optional) ¹	•	•	•
56" (1,422 mm) depth for front-access design	•		•



Item	Description
A	600 A or 1,200 A interrupter switch
B	Fixed-mounted vacuum circuit breaker

- Footnotes:**
1. Main bus is not provided on single-unit arrangements.
 2. Short-circuit current and closing and latching current are limited to the capabilities of the load-interrupter switch.
 3. For transformer primary connection only with limited auxiliary devices. Consult factory for details.

Published by Siemens Industry, Inc. 2019.

Siemens Industry, Inc.
7000 Siemens Road
Wendell, North Carolina 27591

For more information, including service or parts, please contact our Customer Support Center.
Phone: +1 (800) 347-6659

www.usa.siemens.com/siebreak

Article No. EMMS-T40084-02-4AUS

Printed in U.S.A.

© 2019 Siemens Industry, Inc.

© 2019 Siemens Industry, Inc.

The technical data presented in this document is based on an actual case or on as-designed parameters, and therefore should not be relied upon for any specific application and does not constitute a performance guarantee for any projects. Actual results are dependent on variable conditions. Accordingly, Siemens does not make representations, warranties, or assurances as to the accuracy, currency or completeness of the content contained herein. If requested, we will provide specific technical data or specifications with respect to any customer's particular applications. Our company is constantly involved in engineering and development. For that reason, we reserve the right to modify, at any time, the technology and product specifications contained herein.