

SBW low-voltage replacement circuit breakers

Replacement solutions for Siemens SB circuit breakers utilizing WL technology

Low-voltage replacement circuit breakers provide a cost-effective way to upgrade to current technology while increasing equipment reliability and minimizing downtime.

Siemens SBW circuit breakers utilize the reliable and flexible Siemens WL circuit breaker as the core operating mechanism and main contacts. Primaries and fingers are then redesigned to connect directly to the existing bus.

Why Siemens SBW Replacement Circuit Breakers?

- Maintain UL 489 and UL 891 ratings
- Primary current carrying path designed to utilize the original bus
- Utilizes the durable, market proven technology of Siemens WL type circuit breakers as the operating mechanism and main contacts
- Increased reliability and functionality with newer technology while maintaining investment in existing switchgear.

Robust Feature Set

- Graphical Display
- Dynamic Arc Sentry (DAS) Maintenance Mode
- Parameterization by communication or menu/keypad
- Wide range of parameter set points
- Remote operation and metering via Modbus/Profibus Communication
- Visible, ready-to-close indicator
- Customizable interlocking, and mechanical trip indication
- Available Remote Racking System
- Sm@rt Gear package options available.

Dynamic Arc Sentry (DAS)

Utilizes dual trip unit parameters that allow the operator to switch back and forth from a normal operating mode to a maintenance mode that allows personnel to operate in a lower category arc flash hazard zone. DAS can be operated via remote communication or direct control switch.

For each retrofitted breaker compartment, new breaker compartment panels are provided that incorporate the new cutout required for the WL breaker.



SBW 1200A Drawout

Standard Safety Options



Remote Racking



Sm@rt Gear Architecture



Push Button Control

Circuit Breaker Ratings and Type

Example: Breaker Ratings		Breaker Type								
Frame Size		FS3			FS2			FS1		
Siemens Type		SBW-5000			SBW-2000			SBW-1200		
Continuous Current (A)		5000			2000			1200		
Interruption Class			L	С	S	L	С	S	Н	L
RMS Interrupting Rating (kA)	240VAC	N/A	150	150	85	100	150	65	100	N/A
	480VAC	N/A	100	150	65	100	150	65	100	N/A
	600VAC	N/A	85	100	50	65	100	42	50	N/A
Rated Max. Volts (VAC)		600			600			600		
Short Time Current (kA RMS)		85-100			85-100			25		
Applicable Rating Plug Range		800-5000			200-2000			200-1200		
Mechanical Make Time (ms)		35			35			35		
Mechanical Break Time (ms)		34			34			34		
Electric Close Make Time (ms)		50			50			50		
Electric Trip Break Time (ms)		40			40			40		
Electric Trip and Reclose Interval (ms)		80			80			80		
Mechanical Duty Cycles (no maint.)		5000			5000-10000			7500		
Electrical Duty Cycles (no maint.)		2000			4000			7500		
Ambient Operating Temperature (°C)		-25-40			-25-40			-25-40		

Three Design Philosophies:

• Fixed Mount

Bus adapters are used to redirect the existing bus to match up to new primary stabs of the SBW.



• Drawout – 1200A and below

Direct replacement, with new breaker doors supplied.





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• Drawout – 2000A and above

Retro-fill replacement, SB cradle and circuit breaker removed and new WL cradle and circuit breaker installed. Bus adapters used to connect WL cradle with original bus.