



CSH & CSH-B

Horizontal Interrupter
Circuit Switcher
38 kV – 170 kV

The most versatile and capable Horizontal Interrupter Circuit Switchers in the marketplace today.

The Southern States CSH and CSH-B circuit switchers are ideally suited for transformer protection providing up to 25 kA primary bus fault clearing capability and 4 kA transformer limited fault clearing capability. They can safely be applied on systems with 40 kA rms available fault current. All circuit making and breaking operations are accomplished in an SF₆ environment, eliminating open air arcs. Available with an optional integral air break isolation switch (Model CSH-B), the horizontal circuit switcher can be mounted in most any orientation including horizontal upright, vertical, and underhung positions.

FEATURES

- Makes and breaks circuit in SF₆ – No open air arcs
- Available with (Model CSH-B) and without (Model CSH) vertical break disconnect
- Visual dielectric indication
- Readily adaptable for mounting on existing structures
- Available with porcelain or composite interrupter housings

NOTE: For fault interrupting ratings exceeding 25 kA, see CSH2/CSH2-B catalog flyer

SPECIFICATIONS

Maximum Voltage Ratings

38 kV – 170 kV

Continuous Current Ratings

1200 A and 1600 A

Primary Bus Fault Int Rating (PBF100)
to 25 kA

Transformer Ltd Fault Int Rating (TLF)
4 kA

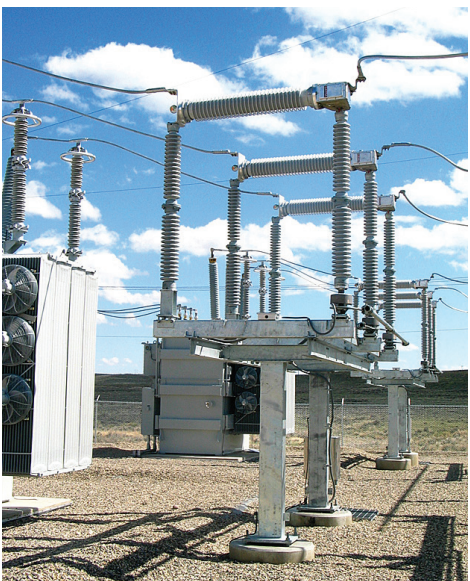
Interrupting Time

5 cycles

Fault Close Rating & Withstand Rating
40 kA

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BLADE BIL RATINGS (FOR CSH-B)

Max Voltage	38 kV	48.3 kV	72.5 kV	123 kV	145 kV	170 kV
Blade BIL	200 kV	250 kV	350 kV	550 kV	650 kV	750 kV

CSH/CSH-B 550 kV BIL INTERRUPTER ¹

	Temp Range	≤ 72.5 kV	123 kV
PBF 100s	-30°C to +50°C		20 kA
	-40°C to +50°C	25 kA	
	-50°C to +40°C	15 kA ⁵	12 kA ⁵
TLF	-40°C to +50°C	4 kA	2.9 kA ²
	-50°C to +40°C	2.5 kA ⁵	1.7 kA ⁵

Notes (550 kV BIL):

1. Ratings shown are for 1200A. For 1600A, top temp is +40°C.
2. Nameplate will include note "TLF = 4 kA @ 7.6 kV/μs TRV"
3. Ratings **do not** apply to 2000A
4. Ratings apply to both Porcelain and Composite Interrupter Housings
5. SF₆ / N₂ Gas Mixture
6. All ratings are suitable for ungrounded systems (1.5 kpp)

CSH/CSH-B 750 kV BIL INTERRUPTER ¹

	Temp Range	≤ 72.5 kV	123 kV	145 kV	170 kV ⁶
PBF 100s	-40°C to +50°C	25 kA	20 kA ³		
	-50°C to +40°C	15 kA ⁷	12 kA ⁷		
TLF	-40°C to +50°C	4 kA	2.9 kA ²	2.3 kA ²	2.7 kA ²
	-50°C to +40°C	2.5 kA ⁷	1.7 kA ⁷	1.4 kA ⁷	1.6 kA ⁷

Notes (750 kV BIL):

1. Ratings shown are for 1200A. For 1600A, top temp is +40°C.
2. Nameplate will include note "TLF = 4 kA @ 7.6 kV/μs TRV"
3. For existing installations, the 123 kV can also be rated 25 kA for -30°C to +50°C. If 25 kA is specified for a new installation, the CSH2 design should be utilized.
4. Ratings **do not** apply to 2000A
5. Ratings apply to both Porcelain and Composite Interrupter Housings
6. 170 kV ratings are for Grounded Systems (1.3 kpp)
7. SF₆ / N₂ Gas Mixture

KEY ADVANTAGES

- Makes and breaks the circuit in SF₆ gas
- 5 cycle interrupting speed minimizes system disturbances
- Puffer interrupters provide long contact life and multi-time fault close capability
- Single gap interrupters provide full BIL without the need for an integral disconnect switch or voltage grading resistors/capacitors
- Simple, easy erection minimizes field installation time required—all kV ratings ship with the insulators factory assembled and adjusted as standard
- Standard porcelain interrupter ships with minimal gas pressure for safety during transportation and in handling during installation. Can be shipped pressurized when composite housing is specified or optional shipping shield is supplied
- Adaptable to a wide variety of mounting positions, structure heights, and phase spacings
- Ideally suited to upgrade fault interrupting capability of existing horizontal circuit switcher installations (all Mfgs), reusing the existing switcher's structure and foundation