



CapSwitcher[®]
Capacitor Switching Device
245 kV / 362 kV

Purpose specific device provides reliable, long-life performance.

The need for quality power has never been greater. This has led to an increase in the use of capacitor banks to improve power factor. The Southern States **CapSwitcher[®]** high voltage capacitor switching device has been specifically developed to provide restrike free switching of capacitor banks. This reliable, long-life, special purpose SF₆ capacitor switch utilizes closing resistors for mitigating voltage transients and current inrush.

FEATURES

- Closing resistors minimize voltage and current transients
- Simple, cost effective, mechanical design that provides repeatability
- Long Life (10,000 operations)
- Eliminates need for inrush reactors
- Class C2 per IEEE and IEC Standards “very low probability of restrike”

SPECIFICATIONS

Maximum Voltage Ratings

245 kV / 362 kV

Capacitive Current Switch Rating

810 A

Primary Interrupting Ratings

No fault interrupting rating

Short Time Withstand Ratings

40 kA RMS Sym (1 sec)

63 kA RMS Sym (18 cycles)

Application

Single Bank or Back-to-Back

Grounded

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RATINGS	
Maximum Voltage Rating (kV)	245kV / 362 kV
Rated Power Frequency Withstand Voltage	555 kV
Rated Lightning Impulse Withstand Voltage (BIL)	1300 kV
Rated Chopped Wave Voltage (Optional)	1680 kV
Rated Power Frequency	50/60 Hz
Rated Continuous Current	810 A
Rated Short-Time Withstand Current	40 kA RMS 1 sec (63 kA 18 cy)
Rated Peak Withstand Current	40 kA rms - 104 kA peak
Rated Interrupting Time	3 cycles
Rated Duty Cycle	0 - CO
CAPACITOR SWITCHING RATINGS	
Shunt Capacitor Bank Switching Current	810 A
Back to Back Capacitor Bank Breaking Current	810 A
Peak Capacitive Inrush Current	20 kA at 4600 Hz
Resistor Value	Matched bank for optimum performance *
Environmental Ratings	Standard -30° C to +50° C
Gas Fill Pressure	96 psig NOM / 76 psig MIN

*** See Application Guide ***

Above service ratings are for the following service conditions:

- The maximum altitude is (3280 ft) 1000 m
- The maximum wind velocity should not exceed 90mph (40 m/s)
- The seismic performance is Low Performance Level as defined in IEEE 693

Higher service conditions are available and will be stated in other documents associated with the specific switcher purchase.

KEY ADVANTAGES

- Makes and breaks circuit in SF₆
- Designed and tested for restrike-free performance
- Closing resistors provide reliable and consistently repeatable transient suppression
- Multiple resistor sizes allow performance optimization
- Closing resistor eliminates need for inrush reactors
- Common gas system with pressure gauge, density switch, low pressure alarm and trip on low gas pressure contacts provides both local visual and remote status indication
- Simple, easy erection minimizes field installation time
- Straight forward mechanical design insures long life, repeatable operation
- Independent pole operation with master control enclosure