



RLSwitcher[®]

Reactor Switching Device

An Application Specific Solution For Reactor Switching

Switching shunt reactors can impose a severe duty on the connected system, the switching device, and the shunt reactor. The low magnitude current the switching device is asked to clear, along with the high magnitude and extremely fast transient recovery voltage, establish an environment that can lead to damaging interrupter reignitions. The Southern States' ***RLSwitcher***[®], with its patented interrupter design, deliberately delays current interruption for the first couple of current zeros so that when current interruption does occur, the likelihood of a reignition is reduced and if they occur, are of a reduced magnitude.

BENEFITS

- Patented Interrupter minimizes probability and magnitude of re-ignitions
- Reduced Turn-to-Turn voltage stress on reactor windings
- Simplified design improves reliability
- Local and remote gas monitoring system
- Compact design can fit in tight spaces
- Reduced maintenance costs when compared to traditional electronically controlled switching designs (ie. Synchronous or zero voltage controlled operation)

SPECIFICATIONS

Maximum Voltage Ratings

362 kV - 550 kV

Reactor Switching Current Rating

630 A (362 kV); 440 A (550 kV)

Short-Time Withstand Rating

40 kA (3 Sec)

63 kA (18 cycle)

Short-Circuit Making Current

63 kA

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REACTOR SWITCHING RATINGS

Maximum Voltage Rating (kV)	Reactor Switching Current	Shunt Reactor Rating (maximum)
362 kV	630 A	395 Mvar

ADDITIONAL RATINGS

Maximum Voltage Rating	362 kV	550 kV
Continuous Current Ratings	630 A	440 A
Power Frequency	60 Hz	60 Hz
Lightning Impulse Withstand (BIL)	1300 kV	1800 kV
Short-Time Withstand	40 kA RMS (3 sec) 63 kA RMS (18 cycles)	
Short-Circuit Making	63 kA	
Peak Withstand	164 kA	
Insulator Design	Composite	
Ambient Temperature Range	-40°C to +50°C	

* Air core reactors may require additional capacitance. Contact the factory for application specific solutions.

KEY ADVANTAGES

- Very low probability of re-ignitions
- Re-ignitions, if they occur, are of low magnitude
- Makes and breaks circuit in SF₆
- Independent pole, multi-gap interrupter with spring-open, spring-close mechanisms
- Local visual indication of gas pressure provided by color coded temperature compensated gas gauge
- Gas system with gas density switch with low pressure alarm and low pressure lockout for remote status monitoring