



RLSwitcher[®]

Reactor Switching Device
72 kV – 170 kV

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

72 kV - 170 kV

Reactor Switching Current Rating

630 A

Short-Time Withstand Rating

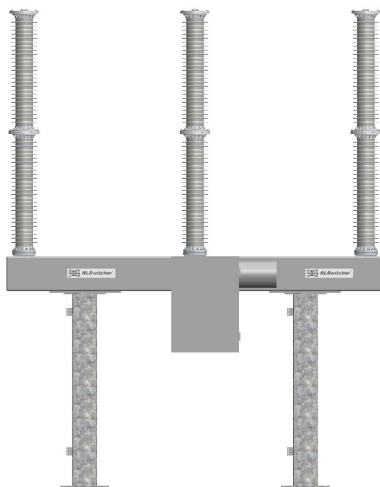
40 kA (3 Sec); 63 kA (0.3 Sec)

Short-Circuit Making Current

63 kA

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REACTOR SWITCHING RATINGS

Maximum Voltage Rating (kV)*	Reactor Switching Current	Shunt Reactor Rating (maximum)
72 kV	630 A	67 Mvar
123 kV	630 A	135 Mvar
145 kV	630 A	158 Mvar

ADDITIONAL RATINGS

Maximum Voltage Rating*	72 kV	123 kV	145 kV
Continuous Current Ratings	630 A		
Power Frequency	60 Hz		
Lightning Impulse Withstand (BIL)	350 kV	550 kV	650 kV
Short-Time Withstand	40 kA RMS (3 sec) 63 kA RMS (0.3 sec)		
Short-Circuit Making	63 kA		
Peak Withstand	164 kA		
Insulator Design	Composite		

* 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
- Single mechanism spring-open, spring-close
- 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