Switch Reactors with confidence and certainty.

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 reduce 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 (i.e. Synchronous or zero voltage controlled operation)

SPECIFICATIONS

- **Maximum Voltage Ratings**
  - 550 kV
- **Reactor Switching Current Rating**
  - 630 A (123 kV-362 kV)
  - 440 A (550 kV)
- **Short-Time Withstand Rating**
  - 40 kA (3 Sec)
  - 63 kA (18 cycle)
- **Short-Circuit Making Current**
  - 63 kA
**RLSwitcher®**
Reactor Switching Device  
123 kV – 550 kV

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**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 for 123 kV through 245 kV designs
- Independent pole, multi-gap interrupter with spring-open, spring-close mechanisms for 362 kV and 550 kV
- 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

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**REACTOR SWITCHING RATINGS**

<table>
<thead>
<tr>
<th>Maximum Voltage Rating (kV)</th>
<th>Reactor Switching Current</th>
<th>Shunt Reactor Rating (maximum)</th>
</tr>
</thead>
<tbody>
<tr>
<td>245 kV</td>
<td>630 A</td>
<td>267 Mvar</td>
</tr>
<tr>
<td>362 kV</td>
<td>630 A</td>
<td>395 Mvar</td>
</tr>
<tr>
<td>550 kV</td>
<td>440 A</td>
<td>400 Mvar</td>
</tr>
</tbody>
</table>

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**ADDITIONAL RATINGS**

<table>
<thead>
<tr>
<th>Maximum Voltage Rating</th>
<th>245 kV</th>
<th>362 kV</th>
<th>550 kV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Continuous current Ratings</td>
<td>630 A</td>
<td>630 A</td>
<td>440 A</td>
</tr>
<tr>
<td>Power Frequency</td>
<td>60 Hz</td>
<td>60 Hz</td>
<td>60 Hz</td>
</tr>
<tr>
<td>Lightning Impulse Withstand (kV)</td>
<td>900</td>
<td>1300</td>
<td>1800</td>
</tr>
<tr>
<td>Short-Time Withstand</td>
<td>40 kA (3 sec), 63 kA (18 cycles)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Short-Circuit Making</td>
<td>63 kA</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Peak Withstand</td>
<td>164 kA</td>
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<td></td>
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<tr>
<td>Insulator Design</td>
<td>Composite</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ambient Temperature Range</td>
<td>-40 C to +50 C</td>
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<td></td>
</tr>
</tbody>
</table>

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*Consult factory for 123 - 170 kV applications*