



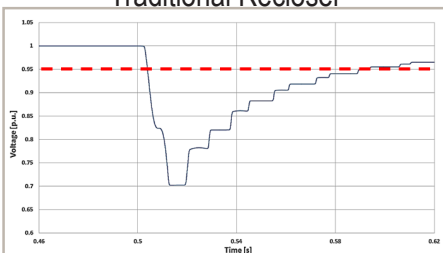
TranSwitcher®

Renewable Intertie Switcher
15.5 kV – 38 kV

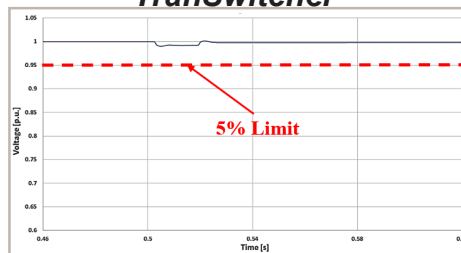
Reduce inrush current, voltage drop, and increase system reliability with the Southern States **TranSwitcher®**

To address the growing penetration of renewables, distribution level utilities are increasingly setting limits on system voltage sags and rapid voltage change (RVC) events as part of their interconnection agreements with developers, EPCs, and other consulting firms. Particularly evident on weak circuits, high inrush currents can often occur as DER transformers are switched in and out. If frequent, this can have not only an impact on system reliability, but also the useful life of the utility's DER transformers. The Southern States **TranSwitcher®**, via its use of closing resistors, is designed specifically to comply with IEEE 1547 standards for interconnections, protecting and extending the life of these transformers as well as minimizing the impact of frequent switching on system voltage. The charts below illustrate a comparison of inrush voltages between a traditional recloser and the Southern States **TranSwitcher®** - both accounting for the presence of residual flux within the transformer.

Traditional Recloser



TranSwitcher®



SPECIFICATIONS

Maximum Voltage Ratings

15.5 kV – 38 kV

Rated Current

630 A

Optional Fault Interrupting Ratings

12.5 kA / 16 kA

Rated Frequency

50 / 60 Hz

TranSwitcher[®]
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15.5 kV – 38 kV



RATINGS

Maximum Voltage (kV)	15.5	27	38
Continuous Current (A)	630		
Rated Frequency (Hz)	50 / 60		
Basic Impulse Level (kV)	110	125	170
Load Break (A)	630		
Optional Symmetrical Interrupting Current (kA)	16	12.5	16
Asymmetric Peak Making Current (kA)	40	32.5	40
Line Charging Current (A)	2	5	
Cable Charging Current (A)	10	25	40
60 Hertz Withstand Voltage (kV):			
<i>Dry, one minute</i>	50	60	70
<i>Wet, ten seconds</i>	45	50	60
Creepage Distances (mm / in):			
<i>Terminal to Terminal</i>	673 / 26.5	876 / 34.5	1160 / 45.7
<i>Lower Terminal to Ground</i>	679 / 26.7	938 / 36.8	1500 / 59.0
<i>IEC Pollution Class Terminal to Ground</i>	Very Heavy		
Mechanical Life (Close / Open Operations)	10,000		
Ambient Temperature (°C)	-30 to +50*		

*For temperatures outside range, please consult factory

KEY FEATURES & ADVANTAGES

- Resistor insertion on closing eliminates power quality issues caused by high inrush currents and extends life of the transformer
- Allows for safe, trouble-free daily switching of DER transformers
- Reduction of no-load losses increases overall revenue
- Solid insulation - hydrophobic cycloaliphatic epoxy (HCEP)
- Long-life vacuum interrupters
- Magnetic actuators on each phase
- 304 stainless steel tank
- Highly-visible trip/lockout handle & position indicator
- Pad-mount design available - *consult factory*
- 5 year warranty assures worry-free operations

Applications

- Solar farm / distributed generation site tie-switch
- Transformer switching
- Battery farm interconnection
- Statcom transformer interconnection