

Southern States CSV Vertical Interrupter (Candlestick) Circuit Switcher

Completing our line of circuit switcher offerings Southern States introduces the CSV vertical interrupter (candlestick) circuit switcher. The CSV brings circuit breaker capabilities into the circuit switcher market, incorporating true pure puffer SF₆ interrupters, 3 cycle interrupting time, up to 40 kA interrupting capability, up to 4000 Amperes continuous current carrying capability, multi-time fault closing capability, and gas density gauge with low pressure alarm and low pressure lockout contacts for remote gas monitoring. The CSV also incorporates the user friendly capability of being able to be installed at virtually any mounting height, making it readily adaptable to a wide variety of customer installations. Further, the anchor bolt plan can also be varied from the standard 20 inch X 20 inch pattern with 1 inch diameter anchor bolts when required to fit various existing foundations, anchor bolt sizes, and anchor bolt locations, making the CSV both the most capable and the most versatile candlestick circuit switcher available in the market today.



Ratings

kV, nominal	46 kV	69 kV	115 kV	138 kV	161 kV
kV, maximum	48.3 kV	72.5 kV	123 kV	145 kV	170 kV
BIL	250 kV	350 kV	550 kV	650 kV	750 kV
Continuous Current, Amperes	1200, 1600, 2000, 3000, 4000 for all kV ratings				
Primary Fault Current Interrupting	20 kA, 25 kA, 31.5 kA, 40 kA for all kV ratings				
Interrupting Time	3 cycles for all kV ratings				
Duty Cycle	O-0.3 sec-CO-15 sec-CO for all kV ratings				
Number of Full Fault Operations	10 for all kV ratings				
Fault Closing Rating	10 time 31.5 kA or 5 time 40 kA for all kV ratings				
Ambient Temperature Range	-40°C to +50°C standard, -50°C to +50°C optional				

Applications

- Power Transformer Switching and Protection
- Capacitor Switching (Non-Transient Mitigating) and Protection
- Reactor Switching and Protection
- Bus Switching and Protection
- Line Switching and Protection
- Cable Switching and Protection

Southern States, LLC 30 Georgia Avenue Hampton, GA 30228 phone: 770-946-4562
 fax: 770-946-8106 e-mail: psdsales@southernstatesLLC.com website: www.southernstatesLLC.com

The Quality Name in High Voltage Switching

Key Advantages

- ❑ True pure puffer interrupters provide much greater contact life than arc assisted interrupters.
- ❑ Simple, easy erection minimizes field installation time required.
- ❑ Structure baseplate can have its hole locations and hole sizes varied when required to fit existing foundation locations and anchor bolt sizes. 1 ¼ inch diameter anchor bolts and 1 ½ inch anchor bolts are also available sizes when the anchor bolts are furnished by Southern States.
- ❑ Gas density switch with low pressure alarm and low pressure lockout contacts allow remote gas monitoring.
- ❑ Local visual indication of gas system by an SF₆ pressure gauge.
- ❑ Ships with minimal gas pressure for safety during transportation and in handling during installation.
- ❑ Adaptable to a wide variety of installation height requirements and foundation requirements.
- ❑ 4 hole NEMA terminal pads are readily reversible to fit specific installation requirements.
- ❑ Each unit is completely assembled and tested at the factory with only the disassembly required to meet shipment restrictions being performed (the same procedure as performed on Southern States CSH and CSH-B horizontal interrupter circuit switchers).
- ❑ Backed by Southern States 5 year warranty

Standard Features of the CSV's operating mechanism

- electric spring charging motor (either 48 VDC, 125 VDC, 250 VDC, 120 VAC, or 240 VAC)
- trip-close pistol grip switch
- close coil
- dual trip coils
- operations counter
- local-remote selector switch
- 12 spare non-adjustable auxiliary switch contacts set as 6 normally open (NO) and 6 normally closed (NC) contacts
- terminal blocks
- thermostatically controlled heater (either 120 VAC or 240 VAC)
- molded case circuit breakers for protection of motor circuit, control circuit, and heater circuit
- manual closing spring charging handle
- manual trip lever
- internal 120 VAC cabinet light with door actuated switch
- color coded, temperature compensated gas pressure gauge; fill port; temperature compensated gas density switch with low pressure alarm and low pressure lockout contact (Low pressure alarm and low pressure lockout contacts provide remote status indication of SF₆ gas pressure.)
- open-close position indicator
- view window in cabinet door
- anti-pump relay
- 120 VAC duplex receptacle with GFCI
- spring charged-discharged indicator
- position indicating lights (green=open, red=closed)

Optional Features of the CSV's operating mechanism

- knife switches (either fused in lieu of molded case circuit breakers or unfused in series with molded case circuit breakers)
- fused pullouts in lieu of molded case circuit breakers
- toggle switch for cabinet light (in lieu of door actuated switch)
- trip circuit monitoring relay
- door actuated remote blocking switch
- loss of AC relay
- loss of DC relay
- additional heater(s) and thermostat(s) for -50°C operation (standard is -40°C to +50°C, optional is -50°C to +50°C)
- others (Please contact Southern States for additional options desired, if any.)

Southern States, LLC 30 Georgia Avenue Hampton, GA 30228 phone: 770-946-4562
fax: 770-946-8106 e-mail: psdsales@southernstatesLLC.com website: www.southernstatesLLC.com

The Quality Name in High Voltage Switching