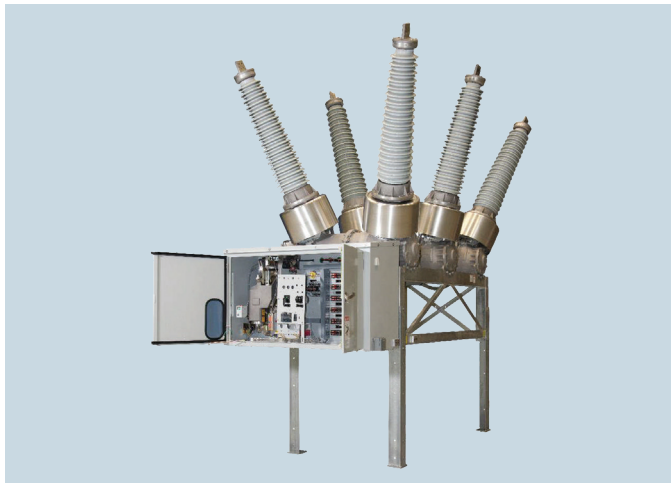


## SPS2/SPS2S 123-170 kV

Siemens Energy High Voltage  
Dead Tank SF<sub>6</sub> Circuit Breakers

[siemens-energy.com](https://www.siemens-energy.com)



### Globally standardized design

Siemens Energy SPS2/2S SF<sub>6</sub> dead tank circuit breakers utilize the time-tested FA spring-spring operating mechanism and 3AP arc assist interrupter common to the entire SPS2/2S portfolio.

With 40, 50, 63 and 80 kA designs available, none of the units require TRV capacitors to achieve their full kA capability. This offers a true long-term value by eliminating both the initial additional cost and the potential maintenance expense for replacement of failed capacitors.

Siemens Energy has delivered over quarter of a million breakers worldwide, and their portfolio and amenities keeps growing.

### Standard features

- No TRV capacitors necessary for 40, 50, 63 or 80 kA rated breakers
- Reduced costs with SEI's dependable arc-assist interrupters and reliable spring-spring operator
- Ships fully assembled and factory tested
- No in-field adjustments, virtually no maintenance and 12 year inspection

### Application-based customizations

- Independent pole operation (IPO) and phase synchronizing device (PSD) for reliable point-on-wave switching
- High seismic designs (per IEEE 693)
- -30° C operation requires no tank heaters; tank heaters for operation below -50° C
- Composite bushings
- Frame-mounted forklift rails allowing for safe installation without the need for a crane
- Common frame

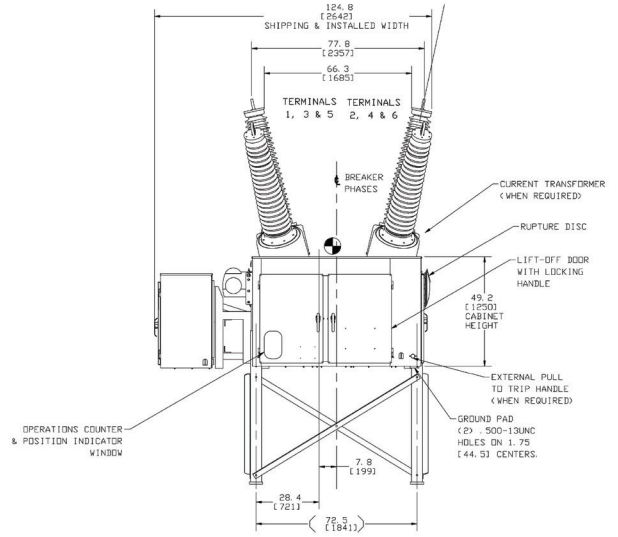
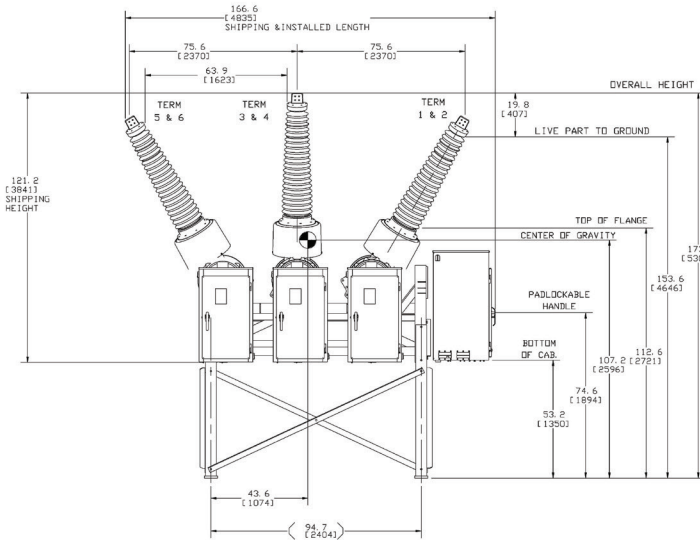
Breakers Ratings

Type	Nominal kv class	Rates max kv	Rated voltage range factor (k)	Low freq (kv, rms)	Impulse (kv, crest)	Rated continuous current (amps, rms)	Rated short circuit current at rated (kA)	Interrupting time (cycles)	Maximum symmetrical Interrupting capability (kA)	3-sec short time current carrying capability (kA)	Closing and latching capability
SPS2-123-20	115	123	1.0	260	550	1200-4000	20	3	20	20	54
SPS2-123-31.5	115	123	1.0	260	550	1200-4000	31.5	3	31.5	31.5	85
SPS2-123-40	115	123	1.0	260	550	1200-4000	40	3	40	40	108
SPS2-123-50	115	123	1.0	260	550	1200-4000	50	3	50	50	135
SPS2-123-63	115	123	1.0	260	550	1200-4000	63	3	63	63	170
SPS2-123-80	115	123	1.0	260	550	1200-5000	80	3	80	80	216
SPS2-145-20	138	145	1.0	310	650	1200-4000	20	3	20	20	54
SPS2-145-31.5	138	145	1.0	310	650	1200-4000	31.5	3	31.5	31.5	85
SPS2-145-40	138	145	1.0	310	650	1200-4000	40	3	40	40	108
SPS2-145-50	138	145	1.0	310	650	1200-4000	50	3	50	50	135
SPS2-145-63	138	145	1.0	310	650	1200-4000	63	3	63	63	170
SPS2-145-80	138	145	1.0	310	650	1200-5000	80	3	80	80	216
SPS2-170-20	161	170	1.0	365	750	1200-4000	20	3	20	20	54
SPS2-170-31.5	161	170	1.0	365	750	1200-4000	31.5	3	31.5	31.5	85
SPS2-170-40	161	170	1.0	365	750	1200-4000	40	3	40	40	108
SPS2-170-50	161	170	1.0	365	750	1200-4000	50	3	50	50	135
SPS-170-63	161	170	1.0	365	750	1200-4000	63	3	63	63	170
SPS-170-80	161	170	1.0	365	750	1200-5000	80	3	80	80	216

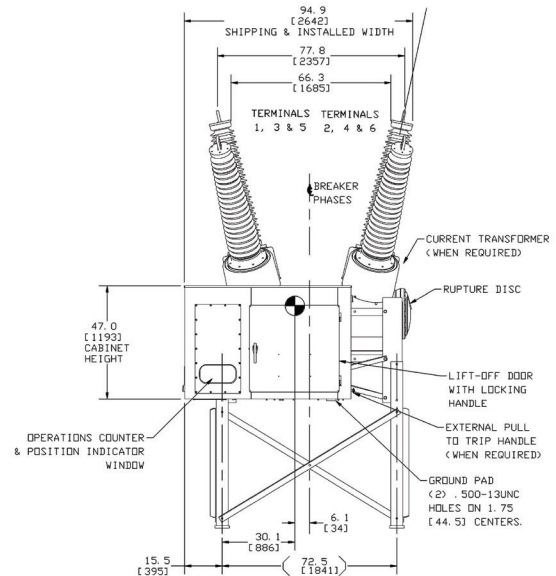
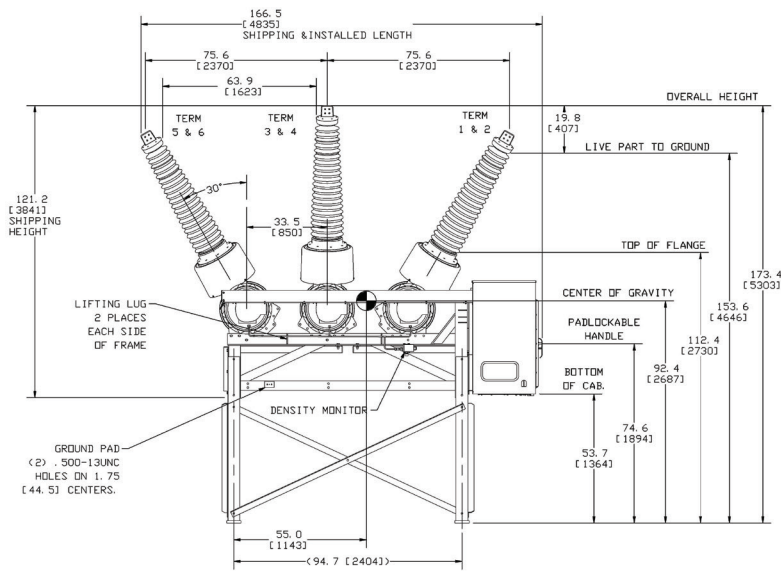
Supplementary specifications voltage

Description	Unit	SPS2/2S 123	SPS2/2S 145	SPS2/2S 170
Lightning impulse withstand voltage (BIL)	kV	550	650	750
Chopped wave (2 usec)	kV	710	838	968
Normal frequency	Hz	60	60	60
Optional frequency	Hz	50	50	50
Motor voltage	Vdc	48/125/250	48/125/250	48/125/250
	Vac	120/240	120/240	120/240
Auxiliary voltage	Vac	120/240	120/240	120/240
Trip and close coil rating	Vdc	48/125/250	48/125/250	48/125/250

## SPS2S 145 kV Dimensions



## SPS2-145, 63 kA IPO



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