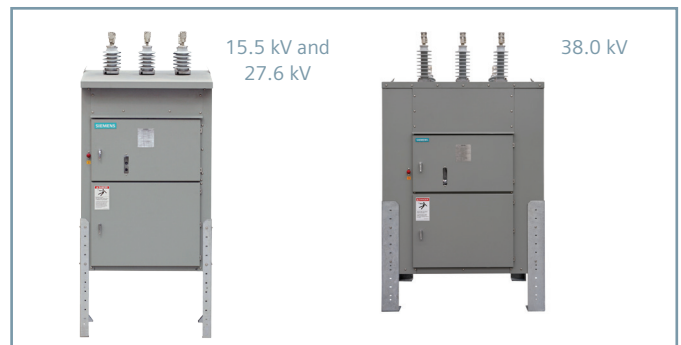


Distribution circuit breakers

Type SDV6, 15.5 kV, 27.6 kV and 38 kV, non-arc-resistant, stored-energy operator

Features and benefits

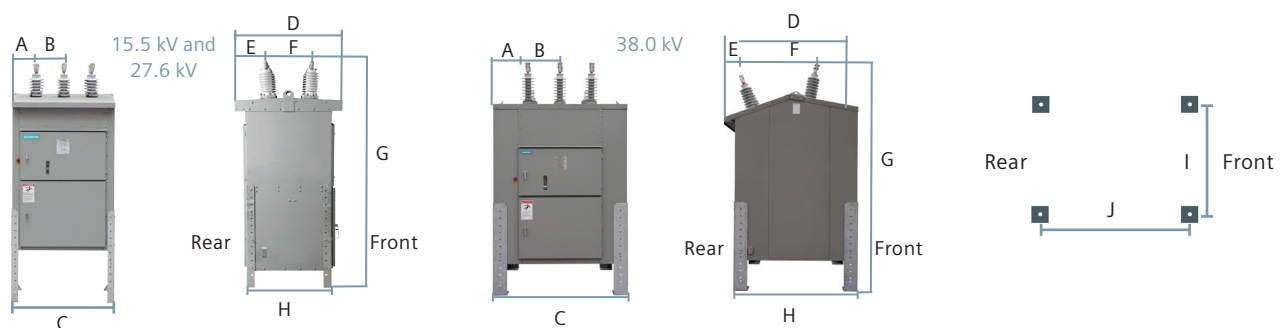
- Reliable performance – time proven operating mechanism
- Time-proven type 3AH3 operator derived from operators introduced in 1977 (over 600,000 produced)
- Common operator for all ratings
- Extended capacitor switching (optional)
- Tested for out-of-phase switching ratings (ANSI/IEEE C37.09-1999)
- Large relay and control compartment
- Stainless steel exterior hardware
- Porcelain dry-type bushings with extended creep
- Highly reliable vacuum interrupters - MTTF over 57,000 years
- Pair with Siemens protective relays to match any typical application
- Moderate and high seismic qualification (Zones 1-4) available
- Meets or exceeds the latest ANSI, IEEE and NEMA standards
- ANSI/IEEE "rain tested" enclosure (C37.20.2-1999)
- Circuit breaker shipped completely assembled and ready to install.



Control voltages, ANSI/IEEE C37.06						
Nominal	Range		Close coil A	Trip coil A	Spring charging motor	
	Close	Trip			A run (average)	Charging seconds
48 Vdc	36-56	28-56	2.1	11.4/30	8	10
125 Vdc	90-140	70-140	1.0	5.4/7.4	4	10
250 Vdc	180-280	140-280	0.5	2.1/4.2	2	10
120 Vac	104-127	104-127	0.9	----	6	10
240 Vac	208-254	208-254	0.4	----	3	10

Technical ratings										
Circuit breaker type SDV6	Rated maximum voltage	Rated withstand voltages		Rated short-circuit and short-time current	Rated interrupting time ¹	Rated continuous current	Rated transient recovery voltage ²		Rated permissible tripping delay time Y	Rated closing and latching current
		Lightning impulse (BIL)	Power frequency				u _c TRV peak value	t ₃ time to voltage u _c		
	kV, rms	kV ³	kV	kA, rms	ms/cycles	A, rms	kV	µs	sec	kA, peak
15.5-20	15.5	110/142	50	20	50/3	1,200, 2,000	29.2	32	2	52
15.5-25	15.5	110/142	50	25	50/3	1,200, 2,000	29.2	32	2	65
15.5-31.5	15.5	110/142	50	31.5	50/3	1,200, 2,000, 3,000	29.2	32	2	82
15.5-40	15.5	110/142	50	40	50/3	1,200, 2,000, 3,000	29.2	32	2	104
27.6-20	27.6	150/194	60	20	50/3	1,200, 2,000	52.1	45	2	52
27.6-25	27.6	150/194	60	25	50/3	1,200, 2,000	52.1	45	2	65
38.0-20	38.0	200/258	80	20	50/3	1,200, 2,000	71.7	59	2	52
38.0-25	38.0	200/258	80	25	50/3	1,200, 2,000	71.7	59	2	65
38.0-31.5	38.0	200/258	80	31.5	50/3	1,200, 2,000	71.7	59	2	82
38.0-40	38.0	200/258	80	40	50/3	1,200, 2,000	71.7	59	2	104

Dimensions in inches (mm)											
Rating	A	B	C	D	E	F	G Minimum-Maximum	H	I	J	
15.5 kV, 1,200 A-2,000 A	10.8 (274)	13.0 (330)	51.0 (1,295)	58.5 (1,486)	28.2 (716)	15.9 (404)	105.8-129.4 (2,687-3,287)	44.1 (1,120)	39.9 (1,013)	44.0 (1,118)	
15.5 kV, 3,000 A	12.2 (310)	15.7 (399)	59.3 (1,506)	63.7 (1,618)	28.2 (716)	21.3 (541)	105.8-129.4 (2,687-3,287)	44.1 (1,120)	39.9 (1,013)	52.3 (1,328)	
27.6 kV, 1,200 A-2,000 A	12.2 (310)	15.7 (399)	59.3 (1,506)	58.5 (1,486)	28.2 (716)	15.9 (404)	106.3-129.9 (2,700-3,299)	44.1 (1,120)	39.9 (1,013)	52.3 (1,328)	
38.0 kV, 1,200 A, 2,000 A	17.7 (450)	19.7 (500)	75.2 (1,910)	78.5 (1,994)	45.2 (1,148)	24.3 (617)	122.0-145.6 (3,099-3,698)	71.5 (1,816)	63.5 (1,613)	67.2 (1,707)	



Footnotes:

- ¹ 83 ms/five-cycle optional for stored-energy operator.
- ² TRV values are in accordance with ANSI/IEEE C37.06-2009 TRV peak value u_c roughly equal to historic E₂ value in ANSI/IEEE C37.06-2000. Value t₃, time to voltage u_c is approximately 1/1.138 times T₂ value in ANSI/IEEE C37.06-2000.

- ³ First value is full-wave impulse withstand circuit breaker open or closed. Second value is chopped-wave impulse withstand, applicable only with circuit breaker closed.

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract.

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<http://www.energy.siemens.com/us/en/power-distribution/outdoor-vacuum-distribution-circuit-breakers.htm>