

# MSV & FSV Medium Voltage Replacement Circuit Breakers

ANSI 4.76/8.25/15kV at 250–1000 MVA, 1200-3000 Amperes



5-MSV  
(Replacement for  
Allis-Chalmers MA)

Replacement breakers provide a cost-effective way to upgrade your system capabilities while saving you from costly maintenance and lost productivity while preserving your investment in existing cubicles and cables.

Siemens provides the experience your company needs to successfully extend the life of your equipment. Our circuit breakers are manufactured using the same fixtures as the original Allis-Chalmers, Siemens-Allis breakers.

## Why Replacement Breakers?

- Increased Reliability and Performance
- Reduced Operating and Maintenance Expenditures
- Reduced Downtime, Minimal Changeover Time During Upgrade
- Preserved Investment in Existing Cubicles
- Improved Employee and Environmental Safety

## Why Siemens?

Siemens Offers the Best Vacuum Circuit Breaker in the Industry.

- Superior Performance, Longer Service Life
  - 10,000 full load operation, 10-year maintenance cycle on replacement circuit breakers with 3AH operator
- Standard Operator on All Siemens Replacement, Medium Voltage Distribution, and Outdoor Vacuum Circuit Breakers
- Extensive Replacement Breaker Experience – 750+ projects since 1983
  - Over 300,000 3AF/H series circuit breakers in service worldwide
  - Nuclear 1E Rated (350+ breakers)

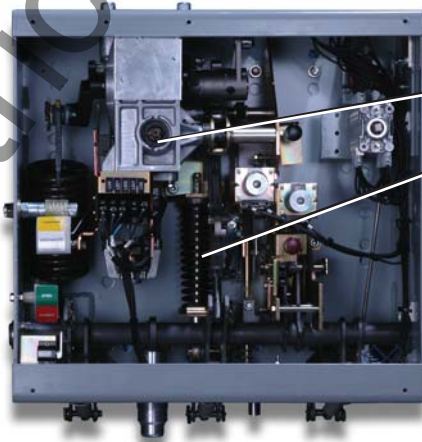
## Closed Door Racking Modification

In order to improve operator safety, Siemens offers a field modification to convert type D and F switchgear to a closed-door, remote rack design. This modification provides a cost effective solution to keep operators clear of the arc flash zone during breaker racking.

(See reverse for more information)



15-FSV  
(Replacement for  
Allis-Chalmers FA, FB, FC)



## 3AH Operator Features:

- Spring charge motor mechanism - lifetime lubricated gear box
- Operating linkage - machine parts vs. stamped metal
- Change-out of components - easily accessible
- Vacuum contact erosion indication - easily verifiable

## Siemens Type MSV & FSV Medium Voltage Vacuum Circuit Breakers For Allis-Chalmers, Siemens Allis Type MA and FA, FB, FC

The following circuit breakers are available as pre-engineered designs.

Replacement Circuit Breaker	Nominal Voltage Class	Nominal 3-Phase MVA Class	Maximum Voltage	Voltage Range Factor	Interrupting Time	Full Wave Withstand Test Voltage	Continuous Current (60 Hz)	Short Circuit Current (at max. kV)	Close and Latch Capability	Nominal Weights
	kV	MVA	kV rms		Cycles	kV Peak	Amperes	kA rms	kA rms	lbs.
			E	K				I	1.6 x KI	
5-MSV-250	4.16	250	4.76	1.24	5	60	1200, 2000	29	58	600
5-MSV-350	4.16	350	4.76	1.19	5	60	1200, 2000	41	78	1200
5-FSV-350	4.16	350	4.76	1.19	5	60	3000	41	78	1500
7-FSV-500	7.2	500	8.25	1.25	5	95	1200, 2000	33	66, 77	875
15-FSV-500	13.8	500	15.0	1.3	5	95	1200, 2000	18	37, 58	860
15-FSV-750	13.8	750	15.0	1.3	5	95	1200, 2000	28	58, 77	860
15-FSV-750	13.8	750	15.0	1.3	5	95	3,000	28	58,77	1450
15-FSV-1000	13.8	1000	15.0	1.3	5	95	1200, 2000	37	77	1200
15-FSV-1000	13.8	1000	15.0	1.3	5	95	3000	37	77	1450

### Closed Door Racking Modification

(continued from front page)

The field modification consists of a floor-mounted screw racking device and a breaker-mounted bracket to interface with the floor-mounted screw device. These additions allow end-users to either have closed-door manual racking, or closed door remote racking.

The closed door remote racking option requires the above mentioned cell and breaker additions, as well as a minor front panel modification to accept a torque-regulated motor. The motor can be moved from one cell position to the next, thus only one motor device is required.

### Contact Us

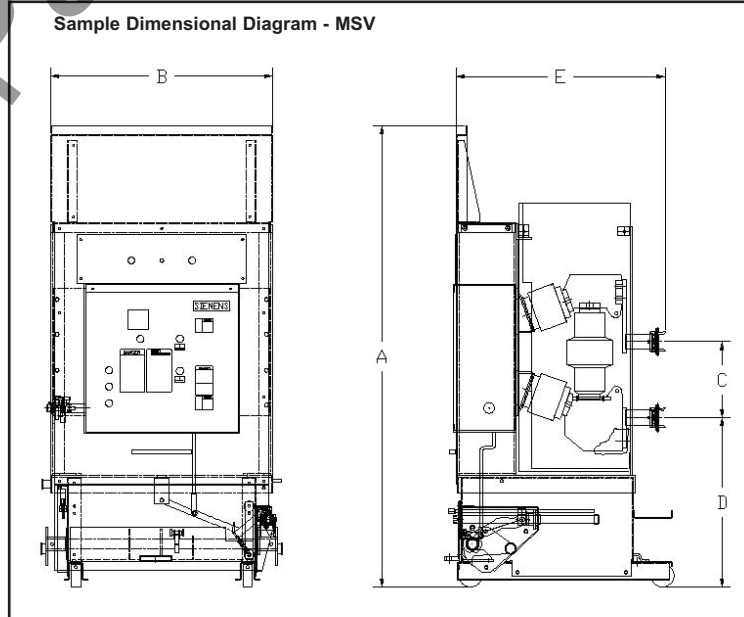
To find out more about Siemens replacement breakers, please contact your local Siemens representative or (800) 347-6659 regarding your site specific application.

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Dimensions (Inches)

	5 MSV	5 FSV	7/15 FSV
A	67.00	80.06	80.06
B	22.63	31.13	31.13
C	12.00	12.00	12.00
D	26.00	31.00	31.00
E	31.00	44.50	44.50

Sample Dimensional Diagram - MSV



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