Roll-in replacement breakers provide a cost-effective way to upgrade to current vacuum technology while increasing equipment reliability and minimizing downtime. 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 and 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?**
- **Long operational life**
  Siemens replacement breakers have an expected life of 30,000 mechanical operations and a maintenance interval of 10 years or 10,000 mechanical operations, which far exceeds most operational requirements in industrial and utility applications.
- **Direct interchangeability**
  Siemens replacement breakers, including those that utilize our patented MOC-Saver™ design, are interchangeable with no adjustments required from cubicle to cubicle regardless of the number of MOC switch banks within the existing cubicles.
- **Extensive experience**
  Siemens has supplied thousands of medium-voltage replacement breakers from our manufacturing facility in Wendell, North Carolina, successfully completing over 750 projects since 1983. Over 350 breakers are located in nuclear 1E rated applications.

**MSV & FSV medium-voltage vacuum roll-in replacement circuit breakers**
ANSI 4.76/8.25/15 kV at 250-1,000 MVA, 1,200-3,000 amperes

**Standardized design**
Siemens utilizes the 3AH operator for our complete family of over 150 different medium-voltage replacement breaker designs, reducing spare parts and training requirements. Over 350,000 3AH series circuit breakers are in service worldwide.

---

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

Siemens 5-MSV
(replacement for Allis-Chalmers MA)

usa.siemens.com/assetservices
For Allis-Chalmers and Siemens-Allis type MA and FA, FB, FC
The following circuit breakers are available as pre-engineered designs:

<table>
<thead>
<tr>
<th>Replacement circuit breaker</th>
<th>Nominal voltage class</th>
<th>Nominal 3-phase MVA class</th>
<th>Maximum voltage</th>
<th>Voltage range factor</th>
<th>Interrupting time</th>
<th>Full wave withstand test voltage</th>
<th>Continuous current (at max kV)</th>
<th>Short circuit current (at max kV)</th>
<th>Close and latch capability</th>
<th>Nominal weights</th>
</tr>
</thead>
<tbody>
<tr>
<td>5MSV-250</td>
<td>4.16</td>
<td>250</td>
<td>4.76</td>
<td>1.254</td>
<td>5</td>
<td>60</td>
<td>1,200, 2,000</td>
<td>29</td>
<td>58</td>
<td>600</td>
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<tr>
<td>5MSV-350</td>
<td>4.16</td>
<td>350</td>
<td>4.76</td>
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<td>78</td>
<td>1,200</td>
</tr>
<tr>
<td>5FSV-350</td>
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<td>350</td>
<td>4.76</td>
<td>1.19</td>
<td>5</td>
<td>60</td>
<td>3,000</td>
<td>41</td>
<td>78</td>
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<tr>
<td>7FSV-500</td>
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<td>500</td>
<td>8.25</td>
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<tr>
<td>15FSV-500</td>
<td>13.8</td>
<td>500</td>
<td>15</td>
<td>1.3</td>
<td>5</td>
<td>95</td>
<td>1,200, 2,000</td>
<td>37</td>
<td>58</td>
<td>860</td>
</tr>
<tr>
<td>15FSV-750</td>
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<td>750</td>
<td>15</td>
<td>1.3</td>
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<td>95</td>
<td>1,200, 2,000</td>
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<td>77</td>
<td>860</td>
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<tr>
<td>15FSV-750</td>
<td>13.8</td>
<td>750</td>
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<td>58</td>
<td>77</td>
<td>1,450</td>
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<td>95</td>
<td>1,200, 2,000</td>
<td>37</td>
<td>77</td>
<td>1,200</td>
</tr>
<tr>
<td>15FSV-1000</td>
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<td>95</td>
<td>3,000</td>
<td>37</td>
<td>77</td>
<td>1,450</td>
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</table>

Dimensions (inches)

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<tr>
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<th>5MSV</th>
<th>5FSV</th>
<th>7/15FSV</th>
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<tbody>
<tr>
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<tr>
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<td>22.63</td>
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<td>31.13</td>
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<tr>
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<td>12.00</td>
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<tr>
<td>D</td>
<td>26.00</td>
<td>31.00</td>
<td>31.00</td>
</tr>
<tr>
<td>E</td>
<td>31.00</td>
<td>44.50</td>
<td>44.50</td>
</tr>
</tbody>
</table>

Sample dimensional diagram – MSV

3AH operator features:
- Spring charge motor mechanism – lifetime lubricated gear box
- Operating linkage – machine parts versus stamped metal
- Change-out of components – easily accessible
- Vacuum contact erosion indication – easily verifiable

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Wendell, NC 27591

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usa.siemens.com
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