The innovative SGen-2000P series combines proven Siemens technologies and is an ideal fit for your requirements in flexible or base load power plant operation. Our modular “building block” approach allows Siemens generators to share many features and components across the portfolio making them even more reliable, efficient and easy-to-maintain. The SGen-2000P series is an excellent solution for high-power applications as well as synchronous condensing applications where grid stability is needed.

Key benefits

- Hydrogen eliminated
- Low CAPEX, low OPEX
- Proven technology
- High operational flexibility
- ISO class zone-A
- Reduced complexity
- Remote operation possible

Stator: Fleet-proven design of water-cooled stator bars with hollow stainless steel conductors

Static excitation: integral to the rotor shaft, without extra bearing or coupling interface

Stator frame: robust design with simplified plant interfaces

Access points: multiple locations for easy maintenance

Coolers: flexible based on operational needs; fully integrated into generator base

Rotor: 10,000 start/stop cycles without rotor removal during operational life cycle

Simple ventilation: up to 1 bar (gauge) for extended capability and performance optimization

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Gas & steam power generation
• Flexible integration into combined cycle power plants or steam tailing applications.
• Large simple or combined cycle power plants, suitable for all duty cycles:
  – Peaker applications
  – Intermediate or base load applications
  – Cogeneration applications

Synchronous condenser
• Grid stabilizer for increasing integration of renewable power sources into the transmission system
• Ancillary services to the transmission system:
  – Reactive power compensation
  – Short circuit power
  – Added inertia to the transmission system
  – Short term overload capability

Technical specifications for the SGen-2000P generator series

<table>
<thead>
<tr>
<th>Model</th>
<th>Frequency</th>
<th>Apparent power</th>
<th>Efficiency</th>
<th>Design power factor</th>
<th>Terminal voltage</th>
<th>Design insulation class</th>
<th>Approx. weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>SGen5-2000P</td>
<td>50Hz</td>
<td>370 – 545 MVA</td>
<td>Up to 99%</td>
<td>0.80</td>
<td>Up to 20 kV</td>
<td>Class F</td>
<td>Up to 370t</td>
</tr>
<tr>
<td>SGen6-2000P</td>
<td>60Hz</td>
<td>370 – 560 MVA</td>
<td>Up to 99%</td>
<td>0.85</td>
<td>Up to 20 kV</td>
<td>Class F</td>
<td>Up to 370t</td>
</tr>
</tbody>
</table>

SGen-2000P generator series: simple installation, flexible operation and easy maintenance

Plug & play installation:
• Easy on-site assembly
• Footprint requires minimal space
• Simple foundation interface

High operational flexibility:
• Efficiency level comparable to traditional hydrogen-cooled generators
• Water-cooled stator winding; high cycling capability
• Maximized rotor life through rotor winding temperature control
• Simple operation with improved safety and no risk for oil contamination (no hydrogen)

Easy maintenance:
• Fewer spare parts needed
• Elimination of hydrogen and related equipment in output ranges traditionally reserved for H₂
• Unstaffed operation possible

For more information, please contact our Customer Support Center.
Phone: +49 180/524 70 00
Fax: +49 180/524 24 71
(Charges depending on provider)
E-mail: sales.generator.energy@siemens.com
www.siemens.com/generators
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Subject to changes and errors. The information given in this document only contains general descriptions and/or performance features which may not always specifically reflect those described, or which may undergo modification in the course of further development of the products. The requested performance features are binding only when they are expressly agreed upon in the concluded contract.