Published by and copyright © 2008: Siemens AG Energy Sector Freyeslebenstrasse 1 91058 Erlangen, Germany

Siemens Power Generation, Inc. 4400 Alafaya Trail Orlando, FL 32826-2399, USA

For more information, contact our Customer Support Center Phone: +49 180/524 70 00 Fax: +49 180/524 24 71 (Subject to charges, e.g.: 0,12 €/min.) e-mail: support.energy@siemens.com www.siemens.com/lenergy-support

All rights reserved. Subject to change without prior notice. Printed on paper treated with chlorine-free bleach.

Trademarks mentioned in this document are the property of Siemens AG, its affiliates, or their respective owners.

The information in this document contains general descriptions of the technical options available, which may not apply in all cases. The required technical options should therefore be specified in the contract.



Siemens Air-Cooled Generators SGen-1000A Series Efficient and Reliable

165 MVA to 350 MVA

Answers for energy.



Air-cooled generators

Siemens offers in its Siemens Generator (SGen™) product line advanced air-cooled, two-pole generators, called SGen-1000A series, with ratings between 165 and 350 MVA for steam and gas turbines. This generator product line brings together all of the experience gained in the manufacturing of more than 9,000 generators over the past 100 years, with a combined total of more than 700 GW of installed capacity.

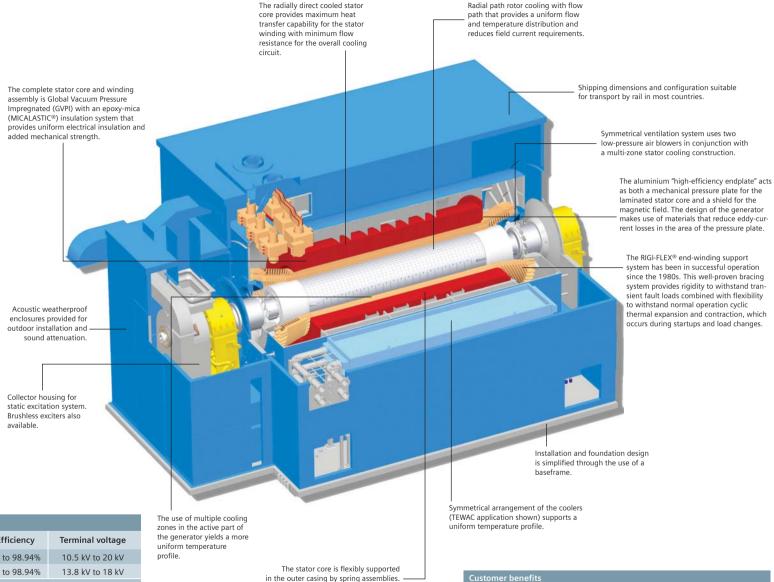
Siemens generator design principles, which have been validated both in the manufacturing process and in continuous generator operation, have been further improved by applying the patents and experience that came to us through acquisition of Westinghouse's Power Generation Business Unit, with the objective of increasing the benefits to plant operations.

Consistent improvements in the design of these generators have enabled efficiencies up to and more than 98.94% to be achieved at rated load, setting a new record among air-cooled generators worldwide.

The proven modular system makes it possible to produce a wide range of generators by using rotors with different diameters as well as different active body lengths.

The same active generator components are used in both the air-cooled and hydrogen-cooled generators. This means that customers who choose air-cooled generators benefit from the manufacturing and operational advances made with respect to hydrogen-cooled generators.

A design requiring low maintenance in connection with our worldwide service network guarantees the highest availability.



This prevents vibration at double rotational

frequency from impacting the outer casing

and thus the foundation tabletop.

■ Highest efficiency among air-cooled turbo-generators

■ Simplified installation through use of a baseframe

Suitable for outdoor installation

Uniform temperature profile for decades of reliable service

Design based on field-proven generator component designs

■ Transport dimensions suitable for rail transport in most countries

Technical data Model Frequency Power factor Apparent power Efficiency 50 Hz SGen5-1000A 0.85 165 MVA to 350 MVA up to 98.94% 60 Hz SGen6-1000A 0.85 165 MVA to 310 MVA up to 98.94%

Coolant: Air-, OAC (Open Air-Cooled) or TEWAC (Totally Enclosed Water to Air-Cooled)

Design: In accordance with IEC and ANSI standards

Thermal classification: Class F insulation system

Type of enclosure: IP55 (IEC34-5); suitable for outdoor installation

Excitation: Static or brushless

Transport dimensions: Suitable for rail transport in most countries