

SANY Overseas

Address: 319 Chuanda Road, Chuansha Economic Park, Pudong, Shanghai, China

Postcode: 201200

Website: http://www.sanygroup.com Consultation Hotline: (+86)21-58592902

Email: sanyservice@sany.com.cn

Materials and specifications are subject to change without further notice in accordance with constant technical innovations.

Photos may include additional equipment.

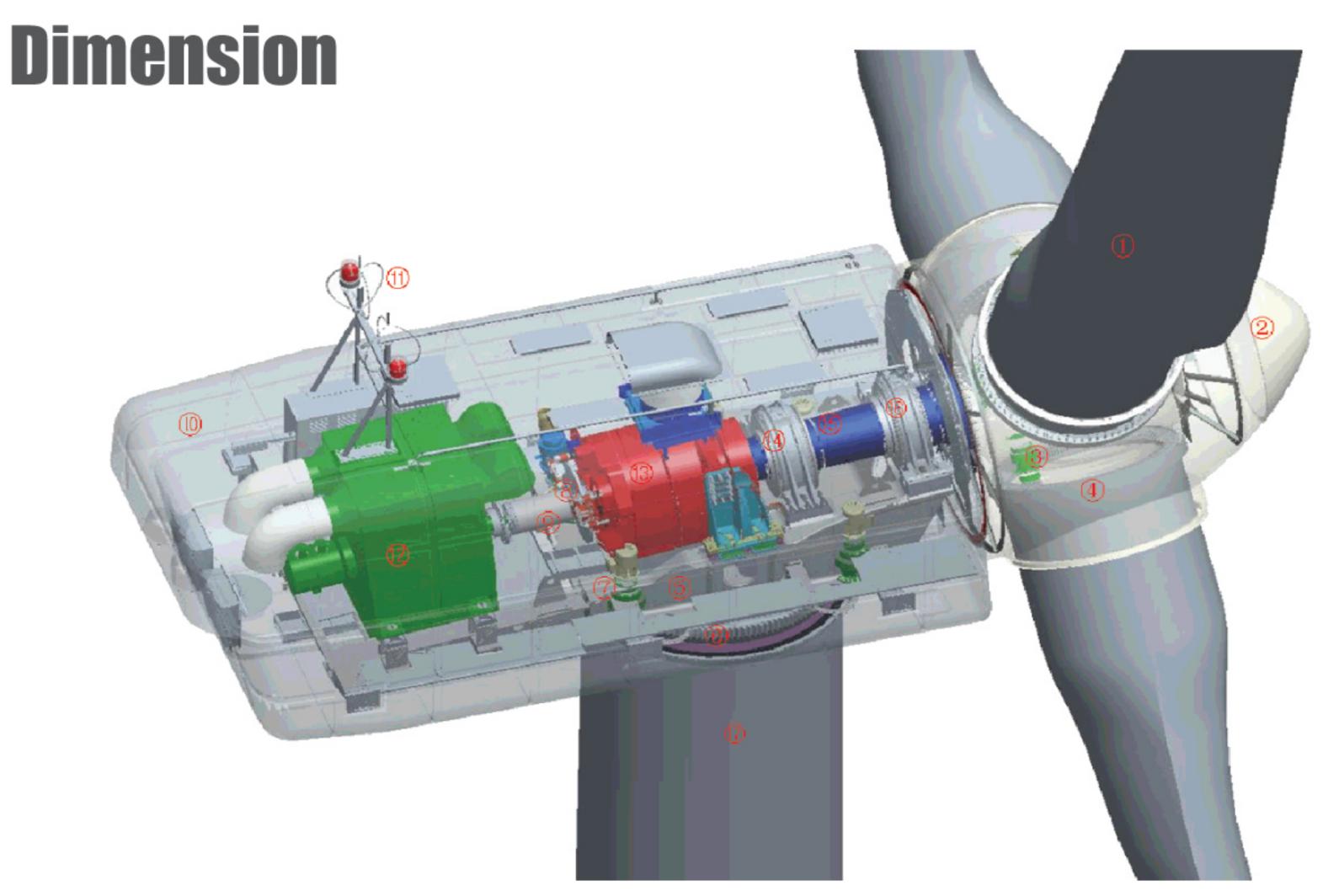
Copyright @2010 SANY Group Co.,Ltd. All rights reserved.

2.0MW Wind Turbine SE9320III-S3



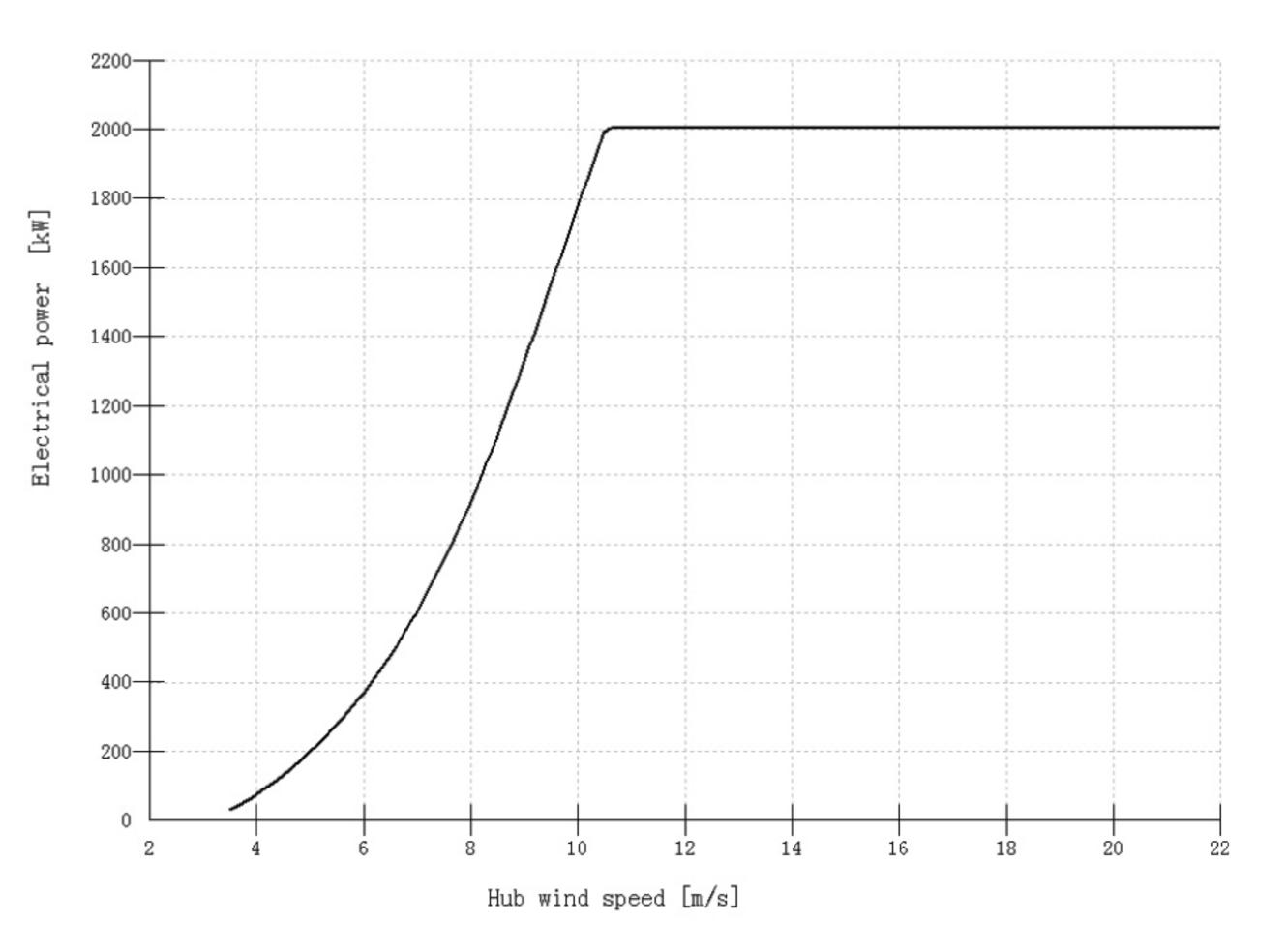
Features

- Models specially designed for marine working conditions:
- This model meets all requirements of marine wind farms. The design is based on specific marine wind conditions and other environmental factors such as salt and fog corrosion. The load calculations, component selection, structural design and control strategy are specifically developed for these harsh environments.
- High wind power utilization and generation capacity:
- Speed and pitch control technology is employed to ensure these units run on an optimal power curve, thus maintaining a high factor of wind power utilization. This efficient energy transfer allows for the enhanced generation of additional energy output for a given operating condition.
- Leading drive chain design and low maintenance cost:
- The generator utilizes mid-speed, double-fed general design with two-grade drive gear box and 12 pair poles, coupled with low speed ratio, low speed and high reliability. With support of double main bearings, the gear box bears only the torque, thus decreasing the load it sees. The use of industry standard components yield superb parts availability and lowers the overall maintenance cost.
- Grid reliability:
- Safe and rapid non-impact integration technology is used to meet the requirements for grid integration. Low voltage current flows through technologically advanced line that meets international standards and exceeds the requirement for reliability that is necessary for grid demand on large scale wind farms.
- Environmental adaptability:
- This innovative design is resistant to low temperatures and wind driven sand, as well as electrical storms, and readily adapts to low air density, enabling the units to adjust to a variety of extreme environments.
- Ability to adapt to a variety of wind farms:
- Individual settings with multiple blade lengths and several tower options are available to adapt to a variety of wind resource conditions, meeting the requirements of varying wind farms.



1-Blade 2-Wind Deflector 3-Pitch speed-reducer 4-Pitch bearing 5-Nacelle under-frame 6-Yaw bearing 7-Yaw speed reducer 8-High speed shaft brake 9-High speed shaft coupling 10-Nacelle cover 11-Wind speed vane 12-Generator 13-Gearbox 14-Rear bearing 15-Main shaft 16-Front shaft 17-Tower

Power Curve



Specifications

Rated Power	2000kW
Rated Wind Speed	12.5m/s
Cut-in Wind Speed	3.5m/s
Cut-out Wind Speed	22m/s
IEC Wind Farm Class	IEC IIIa (Offshore)
Survival Wind Speed	37.5m/s
Temperature Conditions	-20°C~+40°C
Extreme Temperature Conditions	-30°C~+50°C;
Number of Blades	3
Rotor Diameter	93m
Hub Height	70/80m
Rotor Speed	9.57~19rpm
Rotor Rated Speed	16rpm
Type of Gearbox	One-stage Planetary Gearbox with One Spur-
Transmission Ratio	35
Type of Generator	Double-fed asynchronous
Voltage	690V±10%
Rated Frequency	50Hz
Rated Rotational Speed	560rpm