

A large, close-up photograph of a white wind turbine nacelle and hub, showing the three blades attached. The background is a light blue grid pattern.

TECHNICAL DATA

PRODUCT BENEFITS

- ▼ Dispensing with a gearbox means lower repair and maintenance costs and a higher yield.
- ▼ High-quality permanent magnets prevent electrical excitation losses, which additionally increases the energy yield.
- ▼ The generator cooling system with air-to-air heat exchangers is fully encapsulated, protecting it from salty air, humidity, dust and dirt.
- ▼ The blade pitch system with a toothed belt drive is resistant to wear and requires little maintenance.

VENSYS 121

2.5 MW

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2.5 MW



Operating data

Rated power	2.5 MW
Cut-in wind speed	3 m/s
Cut-out wind speed	22 m/s
Operating temperature	-20 °C bis +40 °C

Sound power

Optimized for maximum performance	108,1 dB(A)
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(Sound-reduced operating modes available)

Rotor

Diameter	121,5 m
Swept area	11.594 m ²
Rotational direction	Clockwise
Rated speed	13.5 rpm
Blade type	Sinoma 59.5
Power control	Pitch
Primary braking system	Single-blade adjustment, triple redundant

Generator

Type	Synchronous generator with permanent magnet excitation
Construction type	Direct drive

Yaw system

Construction principle	Geared electric motors
Braking system	Hydraulic brake calipers

Converter

Type	IGBT full power converter
Frequency	50 Hz / 60 Hz

Tower

Hub heights	90 m
Material	Steel tube

Design

All hub heights	IEC IIIA
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POWER CURVE VENSYS 121

Wind speed m/s	AEP [MWh] VENSYS 121 - Sinoma 59.5
5.0	5.375,5
5.5	6.584,6
6.0	7.764,7
6.5	8.885,2
7.0	9.926,8
7.5	10.887,0

Power (kW)

