VENSYS

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 air-cooling system used for the generator and the VENSYS frequency converter saves on additional components, cooling agents and maintenance work.
- The blade pitch system with a toothed belt drive is lubrication-free, resistant to wear and requires little maintenance.

VENSYS 82

1.8 MW

VENSYS 82

1.8 MW

Operating data

Rated power	1.8 MW
Cut-in wind speed	3 m/s
Cut-out wind speed	22 m/s
Operating temperature	–20 °C to +40 °C
(De-rating possible from 30 °C)	

Sound power

Optimized for maximum performance	105.8 dB(A)
(Sound-reduced operating modes available)	

Rotor

Diameter	82 m
Swept area	5,281 m²
Rotational direction	Clockwise
Rated speed	18.25 rpm
Blade type	EBT 40
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

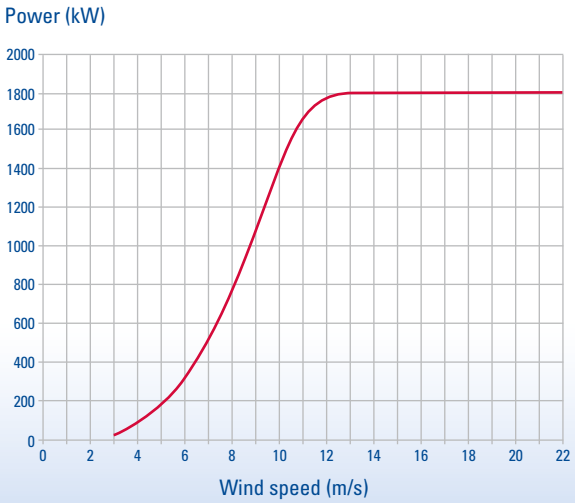
Hub heights	58.7 m | 83.7 m | 100 m
Material	Steel tube tower

Design

Hub heights	58.7 m | 83.7 m	IEC IIA
Hub height	100 m	IEC IIIA

POWER CURVE VENSYS 82

ø Wind speed [m/s]	AEP [MWh]
5.0	2,894.8
5.5	3,649.1
6.0	4,418.7
6.5	5,178.6
7.0	5,909.4
7.5	6,596.3
8.0	7,228.0
8.5	7,796.3



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