

## TECHNICAL DATA

### PRODUCT BENEFITS

- ▼ We dispense with a gearbox, which does not only reduce repair and maintenance costs. Even more important is a distinctly higher yield, especially in the partial-load range.
- ▼ The generator cooling system with air-to-air heat exchangers is fully encapsulated, protecting it from salty air, humidity, dust and dirt.
- ▼ High-quality permanent magnets prevent electrical excitation losses, additionally increasing the energy yield.
- ▼ The blade pitch system with a toothed belt drive is lubrication-free, resistant to wear and requires little maintenance.

# VENSYS *136*

**3.5 MW**

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3.5 MW



## Operating data

Rated power	3.5 MW
Cut-in wind speed	3 m/s
Cut-out wind speed	22 m/s
Operating temperature	-20 °C to +40 °C

## Sound power

Optimized for maximum performance	105.5 dB(A)
(Sound-reduced operating modes available)	

## Rotor

Diameter	136.6 m
Swept area	14,655 m <sup>2</sup>
Rotational direction	Clockwise
Rated speed	10.7 rpm
Blade type	LM 66.9
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	81,7 m   97,2 m	Steel tube tower
	131,7 m   161,2 m	Hybrid tower (concrete / steel)

## Wind class

IEC IIIA

## POWER CURVE VENSYS 136

Ø Wind speed [m/s]	AEP [MWh] VENSYS 136 - LM 66.9
5.0	7,210.9
5.5	8,869.0
6.0	10,497.6
6.5	12,053.2
7.0	13,506.7
7.5	14,839.1

