

# M5000

## Technical data

### General

Rated power	5,000 kW
Cut-in wind speed	4 m/s
Rated wind speed	12,5 m/s
Cut-out wind speed	25 m/s
Design life time	20 years
Type class	GL-TK 1 offshore

### Rotor

Rotor diameter	116 m
Number of blades	3
Rotor area	10,568 m <sup>2</sup>
Speed range	4.5–14.8 min <sup>-1</sup> ± 10 %
Rated speed	14.8 min <sup>-1</sup>
Tilt angle	5°
Cone angle	-2°

### Pitch system

Principle	electrical single pitch
Power control	blade angle and rotor speed control

### Tower

Type	tubular steel tower
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### Gearbox

Type	step-planetary gear, helical
Rated power	5,590 kW
Rated torque	3,600 kNm
Ratio	1:10

### Generator and Converter

Generator type	synchronous, permanent magnet
Rated power generator	5,260 kW
Rated voltage	3,300 V
Speed range	45.1–148.5 min <sup>-1</sup>
Cooling	water cooled
Protection class	IP 54
Converter type	4-quadrant-converter
Power factor (grid)	0.9 inductive–0.9 capacitive

### Masses

Blade	16.5 t
Hub	62.0 t
Nacelle	233.0 t

