

Data of the gearless E-40

Rated capacity: 600 kW
Rotor diameter: 44 m
Hub height: 46/65/78 m
(variety of towers and foundations)

Turbine concept: gearless, variable speed, variable blade pitch

Rotor with pitch control

Type: upwind rotor with active pitch control
Direction of rotation: clockwise
Number of blades: 3
Swept area: 1.521 m²
Blade material: fiberglass (reinforced epoxy)
with integral lightning protection
Rotor speed: variable, 18–34 rpm
Tip speed: 41–78 m/s
Pitch control: three synchronised blade pitch systems
with emergency supply

Generator with drive train

Hub: rigid
Main bearings: tapered roller bearings
Generator: direct-driven synchronous ENERCON ring
generator

Grid feeding: ENERCON inverter

Braking system:

- 3 independent pitch control systems
with emergency supply
- rotor brake
- rotor lock for service and maintenance

Yaw control: active through adjustment gears, load-
dependent damping

Cut-in wind speed: 2.5 m/s
Cut-out wind speed: 28–34 m/s
Remote monitoring system: ENERCON SCADA
Sound power level: 101 dB (A) (measured)

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