Appendix A

Turbine Model Datasheets
ENERCON 3 MW PLATFORM

THE NEW 3 MW SERIES

ENERCON 3 MW PLATFORM

E-138 EP3
3,500 kW / IEC/EN IIIA

E-126 EP3
3,500 kW / IEC/EN IIA

www.enercon.de
**PERFORMANCE INCREASE IN 3 MW CLASS**

The E-126 EP3 and the E-138 EP3 are two 3.5 MW WECs for wind classes IIA and IIIA which have evolved from the 3 MW platform. Thanks to a significant increase in output and efficiency, they provide a convincing overall performance in this high-volume segment. An annual yield of 14.5 million kWh is forecast for the E-126 EP3 (HH 135 m) at typical wind class IIA locations (8.0 m/s). For the E-138 EP3 (HH 131 m) – a completely new type of WEC in the 3 MW platform portfolio, which up until now did not include a low-wind converter – an annual yield of more than 13.2 million kWh is estimated at typical wind class IIIA locations (7.0 m/s).

**ROTOR BLADE**
- New rotor blade design for shorter production times and improved transportation
- Flatback profile optimised for production and transportation
- Trailing edge serrations for minimum noise emission
- Use of Impact Absorption Layer technology (IAL) for durable erosion protection

**HUB**
- Separate main bearing unit for a more compact design
- Optimised for maintenance thanks to easy hub access
- Integration of electrical components protected in the hub

**GENERATOR**
- Generator division for optimised logistics
- Short production times thanks to use of pre-fabricated aluminium form-wound coils
- Fully enclosed for optimum protection against external influences

**MACHINE HOUSE**
- Compact design optimised for transportation

*The above information is without obligation. The information on the official data sheets apply (available from ENERCON Sales).*

**E-126 EP3**
- **Rated power:** 3,500 kW
- **Rotor diameter:** 127 m
- **Hub height (m):** 86 / 116 / 135
- **Wind class (IEC):** IEC/EN IIA
- **Rotational speed:** variable; 4.4 - 11.8 rpm
- **Cut-out wind speed:** 24 - 30 m/s

**E-138 EP3**
- **Rated power:** 3,500 kW
- **Rotor diameter:** 138.6 m
- **Hub height (m):** 81 / 111 / 131 / 160
- **Wind class (IEC):** IEC/EN IIIA
- **Rotational speed:** variable, 4.4 - 10.8 rpm
- **Cut-out wind speed:** 22 - 28 m/s
THE ENERCON 4 MW PLATFORM

E-141 EP4 4.2 MW

Smart. Efficient. Silent.

enercon.de/e141-ep4
E-141 EP4_ 4.2 MW

New ENERCON specialist in 4 MW platform for inland sites
With their new E-141 EP4 / 4 200 kW turbine, ENERCON is offering a customized solution in the 4 MW segment for low wind inland sites. Tall towers and a larger rotor diameter allow for increased annual revenue and low sound power levels.

Technical details
- Rated power: 4 200 kW
- Rotor diameter: 141 m
- Hub height: 129 / 159 m
- Wind class (IEC): IEC/EN IIIA
- Rotational speed: variable, 4 - 10.6 rpm
- Cut-out wind speed: 28 - 34 m/s

Nacelle
- Modular nacelle design to reduce production, transport and assembly time
- Use of premium quality cast components
- Simplified logistics due to the use of standard containers

Generator
- Maximum running smoothness, minimised sound emission and maximum efficiency
- 2-part generator design optimized for production and logistics
- Advanced cooling concept with 35% less energy loss in cooling system
- No use of rare earth elements

Rotor blade
- Innovative aerodynamic design for maximum yield in the low wind range
- Significant reduction of sound emissions by using Trailing Edge Serrations (TES)
- 2-part blade design optimized for production and logistics
- Significant increase in yield at cold climate sites
- Excellent lightning protection system
- Yield optimized flat-back profile
- Minimal structural loads