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.
**Operating data**
- Rated power: 1.5 MW
- Cut-in wind speed: 3 m/s
- Cut-out wind speed: 25 m/s
- Operating temperature: -20°C to +40°C

**Sound power**
- Optimized for maximum performance: 103.5 dB(A)
- Sound-reduced operating modes available

**Rotor**
- Diameter: 70.3 m
- Swept area: 3,882 m²
- Rotational direction: Clockwise
- Rated speed: 19.0 rpm
- Blade type: EBT 34
- Power control: Pitch
- Primary braking system: Single-blade adjustment, triple redundant
- Holding brake: Hydraulic with locking bolt

**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: 65 m | 85 m
- Material: Steel tube

**Design**
- Hub heights: 65 m | 85 m
- IEC IIA
- Hub heights: 65 m
- IEC IA

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**POWER CURVE VENSYS 70**

<table>
<thead>
<tr>
<th>Wind speed (m/s)</th>
<th>AEP (MWh)</th>
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Specifications subject to change without prior notice | February 2019