VENSYS

TECHNICAL DATA

## 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.



# VENSYS 82

1.5 MW

# VENSYS 82

## 1.5 MW



### Operating data

| | |
|---|---|
| Rated power | 1.5 MW |
| Cut-in wind speed | 3 m/s |
| Cut-out wind speed | 22 m/s |
| Operating temperature | –20°C bis +40°C |

### Sound power

| | |
|---|---|
| Optimized for maximum performance | 104.4 dB(A) |

(Sound-reduced operating modes available)

### Rotor

| | |
|---|---|
| Diameter | 82.34 m |
| Swept area | 5,325 m² |
| Rotational direction | Clockwise |
| Rated speed | 17.3 rpm |
| Blade type | LM 40.3 P2, EBT 40 |
| 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 mechanism

| | |
|---|---|
| Construction principle | Geared electric motors |
| Braking system | Hydraulic brake calipers |

### Converter

| | |
|---|---|
| Type | IGBT full power converter |
| Frequency | 50 Hz / 60 Hz |

### Tower

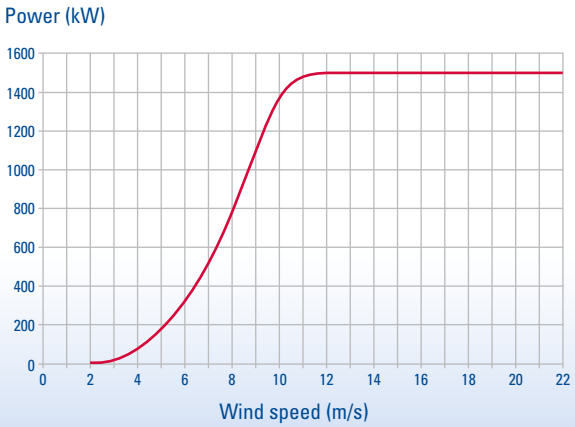
| | |
|---|---|
| Hub heights | 58 m \| 70 m \| 75 m \| 85 m \| 100 m |
| Material | Steel tube |

### Design

| | |
|---|---|
| Hub hights (m) 58 \| 100 | DIBt WZ 3; IEC IIA |
| Hub hights (m) 58 \| 80 \| 75 \| 85 \| 100 | DIBt WZ 2; IEC IIIA |

## POWER CURVE VENSYS 82

| ø Wind speed m/s | AEP [MWh] VENSYS 82 - LM 40.3 P2 |
|---|---|
| 5.0 | 2,746.4 |
| 5.5 | 3,430.2 |
| 6.0 | 4,113.2 |
| 6.5 | 4,774.8 |
| 7.0 | 5,400.1 |
| 7.5 | 5,978.9 |
| 8.0 | 6.504,0 |
| 8.5 | 6.970,5 |




**VENSYS Energy AG** · Im Langental 6 · 66539 Neunkirchen · Germany · T +49 6821 9517-0 · vertrieb@vensys.de · www.vensys.de

Specifications subject to change without prior notice