

LTW86 1.000 kW





LTW86 1.000 kW

DESIGN DATA

| | |
|--------------------|--------------------|
| Hub height | 80 / 97,5 / 100 m |
| Rated power | 1.000 kW |
| Tower | Steel |
| Cut-in wind speed | 3 m/s |
| Cut-out wind speed | 25 m/s |
| Yaw control system | Active, electrical |
| Wind class | IIIA/IIIB |

ROTOR

| | |
|-------------------------------|----------------------|
| Number of blades | 3 |
| Rotor diameter | 86,3 m |
| Swept area | 5.849 m ² |
| Rotational speed | 16,3 rpm |
| Tip speed | 74 m/s |
| Blade material | GFRP-UP |
| Power and rotor speed control | Active pitch control |

GENERATOR

| | |
|------------------|---|
| Type | Permanent Magnet Direct Drive Synchronous Machine |
| Stator Winding | Modular coils with tooth concentrated winding, exchangeable |
| Rotor Topology | Modular Permanent Magnets with flux concentration, exchangeable |
| Speed Range | Variable Low Speed Machine |
| Protection class | IP55 |

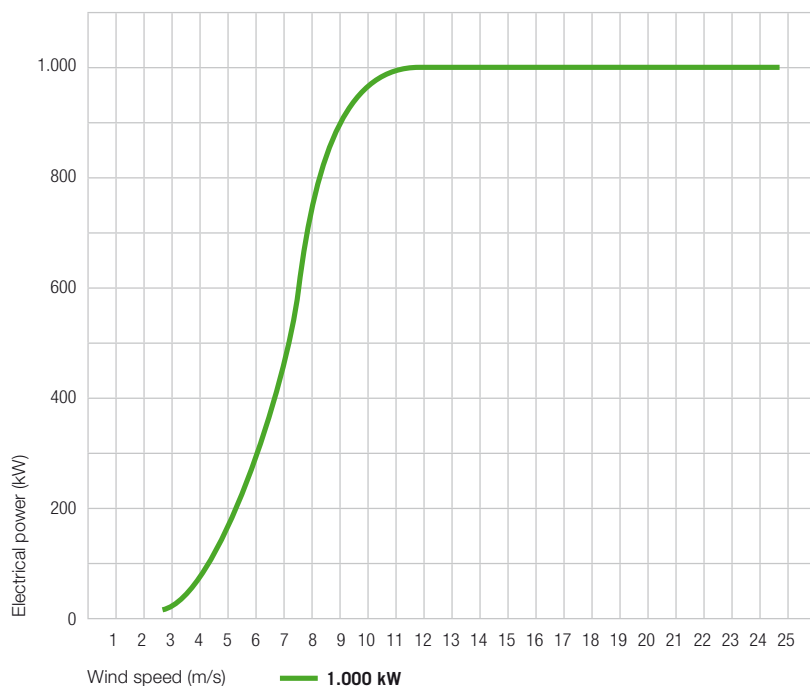
CONTROL & SAFETY SYSTEM

| | |
|----------------|--|
| Main brake | Aerodynamic, independent pitch control |
| Service brake | Electrical |
| Rotor lock | Hydraulic |
| Remote control | Leitwind - SCADA |

POWER ELECTRONIC

| | |
|---|---|
| Converter type | 4Q full power - 3 phase IGBT |
| Converter rated voltage and frequency (grid-side) | 690 V ±10%, 50-60 Hz ±5% |
| Converter power factor (grid-side) | 0,95 ind - 1 - 0,95 cap for reactive power compensation control, grid voltage control capability |
| Cooling | Air cooled rotor and water cooled stator |
| Power quality and Grid codes | High quality output power in accordance with major grid code requirements. Integration into various grid systems worldwide. In compliance with: - Grid codes CEI 0-16, TERNA, e-on (incl. LVRT) - Power quality measurements according to IEC 61400-21 - Emission limits IEC 61800-3 |
| Arrangement | Multiple converter |

Power curve



| Wind speed (m/s) | Electrical power (kW) |
|------------------|-----------------------|
| 3,0 | 20 |
| 4,0 | 69 |
| 5,0 | 173 |
| 6,0 | 314 |
| 7,0 | 512 |
| 8,0 | 762 |
| 9,0 | 922 |
| 10,0 | 986 |
| 11,0 | 1.000 |
| 12,0 | 1.000 |
| 13,0 | 1.000 |
| 14,0 | 1.000 |
| 15,0 | 1.000 |
| 16,0 | 1.000 |
| 17,0 | 1.000 |
| 18,0 - 25,0 | 1.000 |

Information, specifications and/or pictures subject to change without notice.

www.leitwind.com

ITALY

LEITWIND AG / SPA - Brennerstraße 34 / Via Brennero, 34
39049 Sterzing / Vipiteno (BZ) - Italy
Ph: +39 0472 722 111 - E-mail: info@leitwind.com

