

LTW86 1.500 kW

Type Certificate GL 2010





LTW86 1.500 kW

DESIGN DATA

Hub height	80 / 97,5 / 100 m
Rated power	1.500 kW
Tower	Steel
Cut-in wind speed	3 m/s
Cut-out wind speed	20 / 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	15,8 / 16,3 rpm
Tip speed	71 / 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

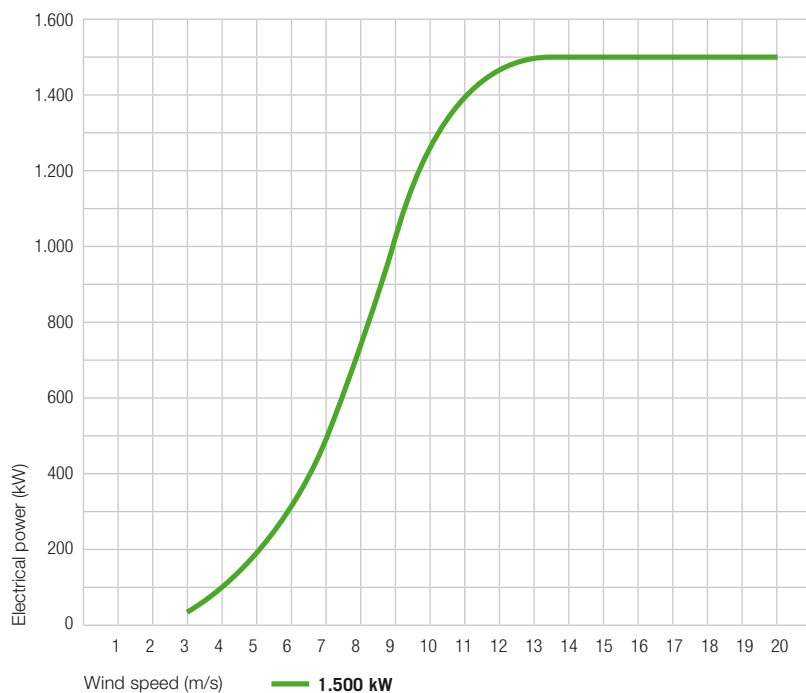
CONTROL & SAFETY SYSTEM

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	1.029
10,0	1.283
11,0	1.421
12,0	1.484
13,0	1.500
14,0	1.500
15,0	1.500
16,0	1.500
17,0	1.500
18,0 - 20,0	1.500

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

