Type Certificate IEC61400-22





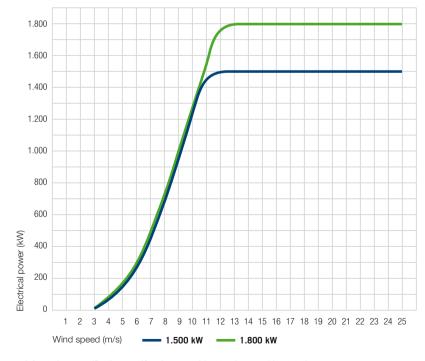
LTW80 1.500 kW / 1.800 kW

DESIGN DATA		
Hub height	60 / 65 / 80 m	
Rated power	1.500 / 1.800 kW	
Tower	Steel	
Cut-in wind speed	3 m/s	
Cut-out wind speed	25 m/s	
Yaw control system	Active, electrical	
Wind class	IA*/IIA	
ROTOR		
Number of blades	3	
Rotor diameter	80,3 m	
Swept area	5.064 m ²	
Rotational speed	17,8 rpm, variable	
Tip speed	75 m/s	
Blade material	GFRP-EP	
Power and rotor speed control	Active pitch control	
GENERATOR		
Туре	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, indipendent 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, water or air 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	

^{*}Type certificate on demand.

Power curve



Wind speed (m/s)	Electrical power (kW)	
3,0	3	2
4,0	73	59
5,0	151	145
6,0	278	263
7,0	455	440
8,0	694	677
9,0	954	946
10,0	1.222	1.256
11,0	1.478	1.554
12,0	1.500	1.775
13,0	1.500	1.800
14,0	1.500	1.800
15,0	1.500	1.800
16,0	1.500	1.800
17,0	1.500	1.800
18,0 - 25,0	1.500	1.800

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

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