CONDOR WIND ENERGY

Condor5

5 MW Two-Bladed Wind Turbine - Technical Data

General	Rated power (at transformer inlet)	5000 kW
	Peak power (at transformer inlet)	5680 kW
	Cut-in	3.4 m/s
	Rated wind speed	12 m/s
	Cut-out	25 m/s
	Survival wind speed	70 m/s
	Power control	Active yawing
	Primary braking system	Active yawing
	Safety braking system	Disk brake on LSS
	Design lifetime	25 years
	Type class	IEC 1A
Rotor	Rotor diameter	120 m
	Number of blades	2
	Blades connection	Rigidly mounted on hub
	Hub link to shaft	Teetering hinge
	Swept area	11310 m^2
	Rated shaft running speed	20.2 rpm
	Peak shaft running speed	22.9 rpm
	Shaft tilt angle	7 deg
	Rotor aerodynamic efficiency	0.48
Gearbox	Type	2.5 stages planetary
	Power at peak shaft running speed	6500 kW
	Rated torque	2720 kNm
	Ratio	34.81:1
Generator and converter	Generator type	Asynchronous, squirrel cage
	Rated power at peak shaft running speed	6100 kW
	Number of poles	8
	Rated voltage	3.3 kV
	Generator Cooling media	Air
	Converter type	IGBT Bi-directional Full Power
	Converter Cooling media	Water
Tower	Type	Cylindrical
	Diameter	5 m
Masses	Rotor	79 t
	Nacelle (with Helideck)	187 t
	Total	266 t