Technical Data of WEC:

W T N 2 2 6

40 m Hub height

Wind Technik Nord

Enger Straße 13
D-25917 ENGE-SANDE
Tel.

1. General

Nominal Output:	200 kW
Rotor shaft arrangement:	horizontal
Effect limitation:	Stall
Hub height:	40 m
Survival windspeed:	60 m/s
Calculated lifetime:	25 years

2. Power Data

(10min-mean windspeed in hub height)

Cut in windspeed:	4 m/s
Rated windspeed:	13 m/s
Cut out windspeed:	25 m/s
Max. shaft power:	250 kW
Specific output:	471 W/m²

3. Rotor

Diameter:	26 m
Swept area:	531 m²
Number of blades:	3
Kind of hub:	rigid
Arrangement of rotor:	upwind
Rotor speed:	38 rpm
Lamda:	5,5
Blade pitch angle:	-0,5 °
Konus angle:	0 °
Nacelle angle:	4 °

4. Blade

Type:	LM 12 HHT
Material:	Polyester
Length of blade:	11,5 m
Chord root/tip:	1,5 m/0,565 m

5. Gear

Type:	helical spur gear
Ratio:	1 : 25,3
Stages:	3

6. Yaw system

Kind (activ/passiv):	activ
Actuation:	electrical
Yaw speed:	1,5 ° / s
Absorbation system:	Friction safety clutch

7. Generator

Kind:	asynchronous
Rated output:	200 kW
Rated speed:	1000 / min
Voltage:	400 V
Frequency:	50 Hz
Protection:	IP 55
Insulation:	Class F
Weight:	1790 kg

8. Tower

Kind:	Tubular
Material:	Steel
Length:	38,7 m
Safety ladder:	yes

9. Control system:

Kind of output control:	Stall regulation
Operating system:	Computer
Remote control system:	yes
	via GSM
Automatically start:	
- after loss of grid:	yes
- after cut out wind:	yes

10. Brakes

Aerodynamic brakes:	yes
- Activation:	hydraulic
Mechanical brakes:	yes
- Arrangement:	behind gearbox
- Brake type:	Disc brake
- Activation:	mechanical

11. Nacelle

Frame:	hot dip galvanised
Cover:	hot dip galvanised
Sensors:	Anemometer
	Windvane

12. Masses

Rotor (with hub):	3.900 kg
Nacelle (without Rotor):	11.500 kg
Tower:	22.200 kg
Total without foundation:	37.600 kg