

WindRotor WRE.060

Product Information Sheet

General

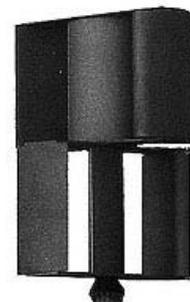
The Ropatec WindRotor is a vertically driven wind rotor which demonstrates special product characteristics through its unique construction. The system could be described as a hybrid solution, building upon the Savonius and Darrieus principles. The WindRotor WRE.060 can be delivered with the MSP-Controller, an innovative CPU controlled charge regulator (48V) with incorporated SMD DC/AC inverter with 4500VA continuous output.

Benefits

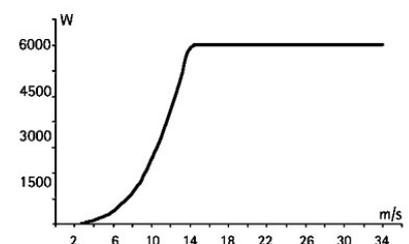
- Cut in wind speed at 2 m/s (in every position)
- Independent from the wind direction
- Maintenance free
- Truly noiseless even at high wind velocities
- No cut off wind speed
- Aerodynamically auto regulated rpm's
- Nominal output at wind speeds of 14 m/s and higher
- No electromagnetic field built-up
- Storm suitability up to 56 m/s, practical experience up to 75 m/s
- Very reliable, long product life
- Expandable to a hybrid system including photovoltaic modules and/or gen-sets

Technical data		
WindRotor	Rated output on axis (at 14 m/s)	6000 W
	Cut-in wind speed	2 m/s
	Rated wind speed	14 m/s
	Rotor speed control	Aerodynamically auto regulated
	Over speed control	Not required
	Maximum rotation/minute	90 rpm at 14 m/s
	Cut-off wind speed	none
	Rotor weight	700 kg
	Rotor blade type	Vertical Axis Wind Turbine (VAWT)
	Rotor diameter	3,3 m
	Swept area	14,52 m ² (3,3 m x 4,4 m)
	Gear box type	No gear box – direct driven
	Brake system	Not required
Generator	Generator type	Permanent excited multi-pole
	Electrical transmission	Brush less
MSP-Controller	Battery charger	48 VDC
	Output MSP on-grid	2x 215VAC/ 230 VAC / 50Hz – 60
Limited Warranties	Product workmanship	2 years
	Rated output (at 14 m/s)	15 years
Typical performance sea level, Weibull K 2, mast 10 m, anemometer 10m	Average wind 5 m/s	Annual energy output 3051 kwh
	Average wind 7 m/s	Annual energy output 7608 kwh
	Average wind 9 m/s	Annual energy output 12861 kwh
	Average wind 11 m/s	Annual energy output 17469 kwh

WindRotor Model WRE.060



WRE.060.MSP Potency curve



mechanical output on axis - energy production depends on the configuration of the system

*) on sea level

2) usable energy production depends on the configuration of the system. A typical situation is the WindRotor with a battery charger and batteries. Due to losses in wiring, battery charger and batteries the efficiency can differ from 65% to 80%.

Due to product improvement the specifications in this product information sheet are subject to change without notice.

All data about the annual energy output are based on assumptions and may differ depending on the actual location of the WindRotor.

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