Vertical Axis Wind Turbine KLiUX **Zebra**
Product Specifications Sheet

KLiUX energies

UNIQUE DESING

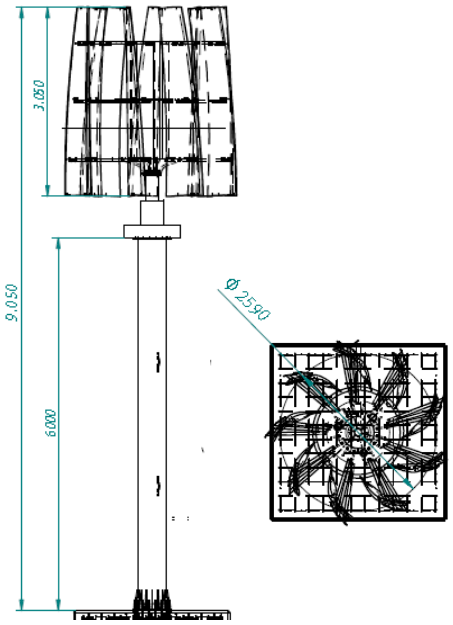
- Designed to maximize energy output in urban, residential and publicly transited areas
- Vertical-axis wind turbine with 9 blades with aerodynamic Savonius/Darreus configuration type rotor (simultaneus drag & lift) manufactured in a durable and light advanced composite material
- Internal high precision micro planetary gear box
- Low rpm Permanent Magnet Generator -PMG-
- Designed and manufactured in Spain

PRODUCT ADVANTAGES

- No startup system needed
- Minimal maintenance
- 100% Noiseless
- Aesthetic visual Integration in urban and rural locations
- Bird friendly

APPLICATIONS

- Power generation system best suited for private residences, public areas, rural tourism, sports venues, schools, universities, public parks, industrial areas, farms, water pumping stations and roads
- Front area in blades provide an excellent platform for branding and advertising



* Actual wind turbine design and measurements may be subjet to change from drawing

WIND TURBINE ASSEMBLY COMPONENTS

Three-phase Permanent Magnet Generator
High precision micro planetary gearbox
Steel mast with anti-corrosion painting protection
Wind inverter
Wind Controller
Voltage discharger/Dump Load
Communications module / Web box (optional)
Weather station & Anemomenter

WIND TURBINE DIMENSIONS AND WEIGHTS

Rotor + Generator and transmission's weight: 375,00 kg.
Rotor's swept area: 2,60m x 3,05m (7.93 m2)
Rotor's / Transmission's height: 3,05 m / 0,83m
Mast height: starting at 3 m
Mast Weight: starting at 250 kg.

WIND TURBINE YIELDS

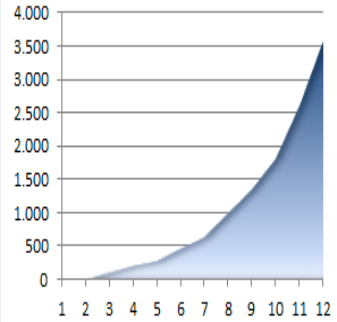
Nominal power: 2.000 W
Start up speed: 3 m/s
Maximum rotation speed: 60 RPM
RPM limited by inverter power curve and generator resistance
Noise at 10 m distance and 6m/s: 32'6 dBA
Durability: 25 years

ADDITIONAL INFORMATION

Blades' material: Expanded polyurethane
Rated output voltage: 230 Vac. (± 15%)
Certification: CE
Certifications in progress: IEC 61400-2/-11/-12,AWEA 9.1, BWEA 2009 Std.

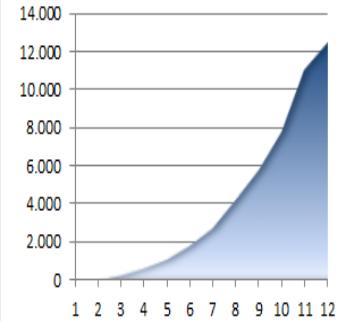
VEL. MEDIA VIENTO AVG. WIND SPEED (m/s)	POTENCIA RATED POWER (W)
1	0
2	0
3	83
4	195
5	274
6	461
7	635
8	992
9	1.350
10	1.810
11	2.600
12	3.550

CURVA DE POTENCIA
POWER CURVE



VEL. MEDIA VIENTO AVG. WIND SPEED (m/s)	ENERGÍA ANUAL ANNUAL ENERGY (KWh/yr)
1	0
2	0
3	282
4	663
5	1.096
6	1.844
7	2.762
8	4.226
9	5.738
10	7.693
11	10.920
12	12.425

CURVA DE ENERGÍA
ENERGY CURVE



Kliux Energies International · 300 N. LaSalle Street, STE 4925 - Chicago IL 60654 | T: +34 941 582042 T: +13129857717 | Email: info@kliux.com
Web: www.kliux.com www.facebook.com/KliuxEnergies @KliuxEnergies www.youtube.com/Kliux