

# VIRA 150 K

## Wind Turbine Technical Specifications

- *Vira-150K-AP ( Active Pitch Control )*



### VIRA-150K-AP TECHNICAL SPECIFICATIONS

#### Performance

Turbine Power / Performance : 150.000 W - 12 m/sec.  
 The nominal power of wind speed : 12 m/sn - Active pitch control  
 Production beginning of the wind spee : 2,9 - 3,5 m/sec.  
 Wind speed resistance : 50 m/sec.

#### Rotor

Number of blades : 3  
 Diameter of blades : 24 m. ( 24 - 26 )  
 Blade materials : Vacuum epoxy reinforced steel  
 Rotor position : Windward  
 Blade profile : NACA  
 Blade tip velocity : 61 m/sn ~  
 To reach nominal transfer of power : 45 d/dk ~ 25 - 60  
 Blade sweep area : 452 m<sup>2</sup>  
 Return control ( YAV ) : Active - Motor

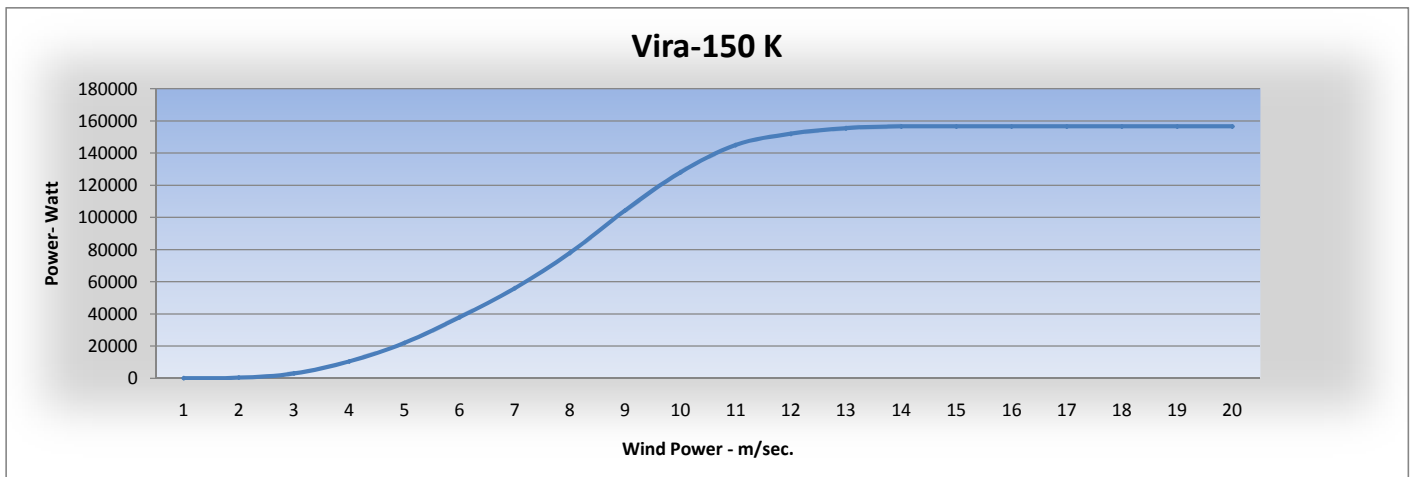
#### Generator

Generator type : Synchronous alternator / Asynchronous alternator  
 Output voltage : 80 - 500 VAC / 380 VAC  
 Frequency : 20 - 65 Hz / 50 Hz

#### Tower

Tower type : Stand alone cylindrical steel.  
 Tower height : 35 - 40 m.  
 Foundation : Fiber and/or Steel reinforced concrete (384 m<sup>3</sup>)  
 Assembly / Disassembly : Crane

**Performance** : 150.000 W - 12 m/sec.  
**Operating Temperature** : Standard ( - 4 / + 122 ) Fahrenheit / ( -22 / + 122 ) Fahrenheit optional.  
**Noise Level** : < 70 Decibel - 100 m  
**Turbine Weight** : 7150 kg. + P 1620 kg. = 8770 kg. / 19300 Libre  
**Grid Connection** : AC - Inverter - 50 Hz. - 60 Hz. Or, Without Invertor Asynchronous Connection.  
**Control System** : Microprocessor-controlled fully automatic software - minimal user intervention. With single-button control.  
**Safety** : Risk limits can be fully programmed for anemometer, blade speed, electric current and voltage monitoring.  
**Grid Connection Options** : Capable of working with "Net Metering", back-Up battery systems, generators & solar energy systems.  
**Data Recording Option** : Optional working performance recording capability.



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