

VIRA 50 K

Wind Turbine Technical Specifications

Vira-50K-AP (Active Pitch Control)



VIRA-50K-AP TECHNICAL SPECIFICATIONS

Performance

Turbine Power / Performance	:	50.000 W - 10 m/sec.
The nominal power of wind speed	:	9 m/sn - Active pitch control
Production beginning of the wind speed	:	2,7 - 3,5 m/sec.
Wind speed resistance	:	50 m/sec.

Rotor

Number of blades	:	3
Diameter of blades	:	14 m (13,8 - 16)
Blade materials	:	Vacuum epoxy reinforced steel
Rotor position	:	Windward
Blade profile	:	NACA
Blade tip velocity	:	85 m/sec. ~
To reach nominal transfer of power	:	50 Rpm ~ (40 - 65)
Blade sweep area	:	153 m ²
Return control (YAV)	:	Active - Motor

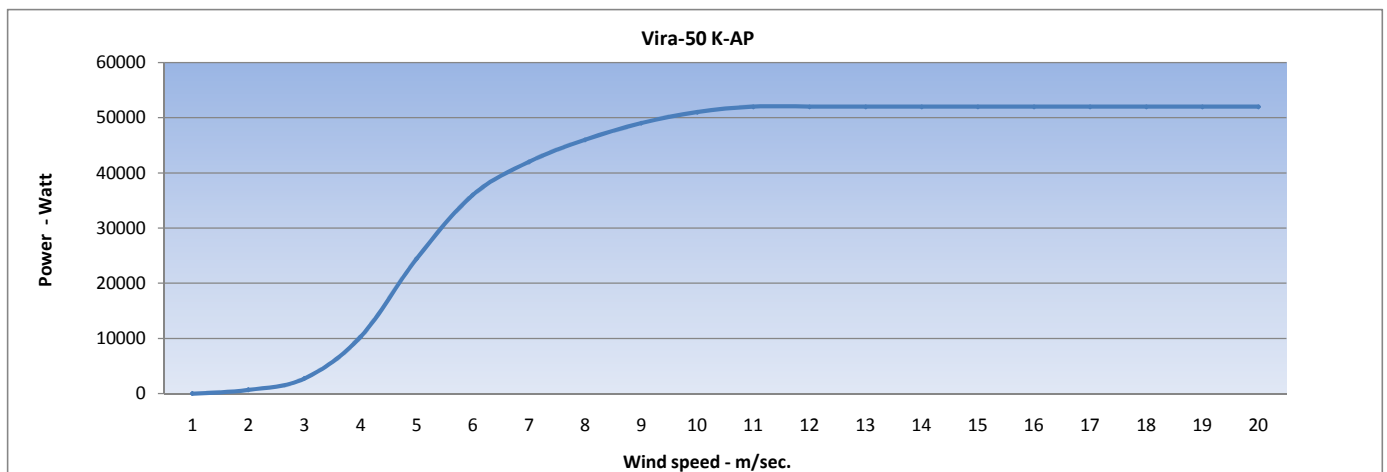
Generator

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

Tower

Tower type	:	Stand alone cylindrical steel.
Tower height	:	20 - 25 m.
Foundation	:	Fiber and/or Steel reinforced concrete (75 m ³)
Assembly / Disassembly	:	Special lifting apparatus

Performance	:	50.000 W - 10 m/sec.
Operating Temperature	:	Standard (- 4 / + 122) Fahrenheit / (-22 / + 122) Fahrenheit optional.
Noise Level	:	< 60 Decibel - 100 m
Turbine Weight	:	4345 Kgs. / 9579 Lbs.
Grid Connection	:	AC - Inverter - 50 Hz. - 60 Hz. Or, Without inverter 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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