

Comment: Wind generator

Now, wind generator are limited by single-speed motors, when the wind speed changes in a large range, must ensure that the fan impeller speed change range is very small, within the rated range of the motor, over speed can damage the motor, unable to generate electricity at a low speed, so the utilization rate of wind energy is extremely low.

In order to ensure that the wind wheel speed remains basically unchanged when the wind speed varies widely, and to produce enough driving force distance, so the blades are designed to be slender, make the pillar of the fan high enough, the blades is good enough, make the fan manufacturing and installation cost is very high.

Using TS variable speed motor can completely change the current situation of wind generator.

Adopt the blade of the windmill to maximize the area By the wind and improve the utilization rate of wind energy.

TS motor has a large enough power, a wide enough speed regulation range and a fine enough speed gear, by changing the operating state of the motor, always respond to the transformation of full wind speed at the scene, can facilitate and simply realize the whole-process automatic control, transport the electricity directly to the power grid.

The wind generator with TS variable speed motor is adapted to the external environment by alter running state of the motor, high efficiency, low cost, Modern wind generator cannot match or compete with them.

for instance: Rough calculation, synchronous speed of 1500 motor, the difference between rated power speed and synchronous speed is 20 revolutions, if the maximum speed of the Tian motor is 2100 rpm, at all ambient wind speed conditions, the motor should be run within the rated working condition, it requires 105 speed gears. To each additional a stage of double-rotor motor, can increase the speed gear at three times. The level 5 dual-rotor motor has 243 speed gears, enough to meet the actual needs.

With each additional a stage of double-rotor motor, can increase the power at three times, terminal single-speed motor with a power of 10KW, so the level 5 TS motor can have 2400KW, and with 243 speed gears. If that much power is not needed, The power of each unit motor can

be reduced appropriately.

The 6-stage dual-rotor motor can have 7,000 KW and 729 speed gears.

The TS variable speed motor of the level 7 dual-rotor motor can have 22,000 KW and 2,187 speed gears, and so on.

That is, at a wind speed, there can be multiple speed gears matching, The best speed gear can be selected by microcomputer automatic control, It can also adapt to a certain range of wind speed with a speed of the motor.

The fan impeller has a great moment of inertia, under the change of the wind speed, the change of the impeller rotation speed is still very slow, Under the control of microcomputer the response speed of the motor gear to cope with the change of wind speed is more than sufficient.

Using the front and rear double-barrel impeller, it can increase the strength of the impeller, increase the utilization rate of wind energy, and balance the force of the support point. Export torque with umbrella gear, The guiding mechanism of the impeller is separated from the motor system, reduce the burden of the impeller guide mechanism, the whole wind generator looks like a water tower.

The wind wheel can use steel to increase the moment of inertia and reduce the production cost.

The overall structure is assembled on site for easy transportation.