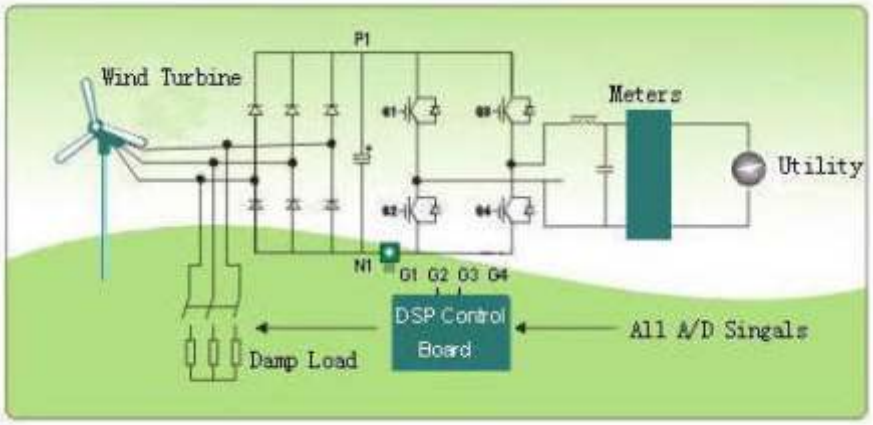
The wind turbine generators use of natural wind as power, wind vane absorbing the wind energy. The wind turbine generator enable conversion natural wind into power; wind vane absorbing the wind energy to making the wind generator rotate, and then covert the wind power into electric energy, AC being coverted into DC through rectification and manostate of the controller, the accumulator-batteries being charged and the electricity being stored. In this way DC load can be directly used or converted by external inverter into sinusoidal AC voltage of 220V/50Hz or 110V/60Hz for use in house-hold or industrial or remote power drop booster use.

Characteristics

The Wind Power Generator 32446 generating set has nine characteristics as follows:

1. Low start-up wind speed is needed. High system efficiency. Little flutter in operation. Lower noise. Small and nice looking. Easy installation and maintenance.
2. New unique technology eliminates the trouble of cable twist when in windward which often happens in traditional small wind energy conversion system (WECS).
3. The simple connecting devices facilitates easy installation, maintenance and repairs of the electricity system.
4. The blades of wind rotor are made of new type of material through new technique of precise injecion-molding and optimizing air-actuated shape and structure design, which makes the high energy coefficient of wind use and low material-consumtion for per 100w electricity under the same wind-swept area.
5. For AC generator the patent of p-m rotor magnetic circuit with special stator is adopted, which effectively reduces drag torque of the generator, makes a better match between the wind rotor and the generator, enlarges the effective windspeed scope, thus increases the annual energy output.
6. The new device of magnetic brake, designed in accordance with the characteristic of the generator itself, simplifies the structure and improves the reliabilities of the operation.
7. Strategy of microcomputer controlling is adopted for the wind-generating set. The electronic converter forms a system of rectification, stabilivolt and trouble-controlling and trouble-indicating, which solves the long-puzzling problem of incorporation of rectification and stabilivolt in the small–size wind energy conversion system (WECS). It has the alarm function to indicate troubles such as overcharge or lower-voltage of the accumulator ,etc to protect itself automatically. With the ready input terminal button for the photovoltaic battery, user can easily change it into wind-solar complementary power system.
8. The damping device not only ensures the sensitivity of following windward and the stability of the adjusting direction but also avoids the fluttering of the set to result in decreasing of generating capacity due to of the frequent change the orientation of wind.
9. A suitable sinusoidal inverter converts the DC into AC of 220V/50Hz or 110V/60Hz, suitable for the inductive loads and has the function of automatic protection against short circuit, overloads and accumulator set's over discharge and overcharge, thus prolonging the life of the accumulator battery.



Note: Specifications are subject to change.

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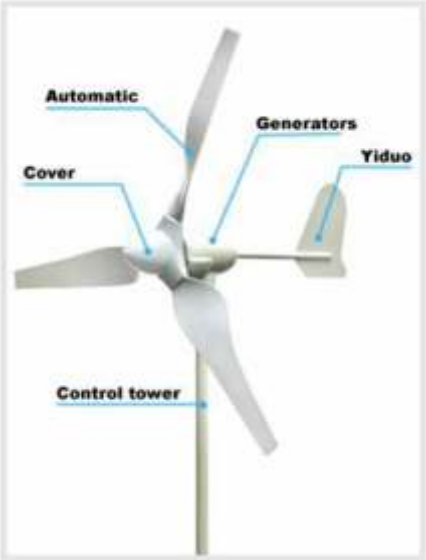
Performance parameter

(W) Power: 400
(V) Voltage grade: 36V/24V/12V
(m) Motor diameter: 1.5
(m/s) start-up wind speed: 3
(m/s) cut-in wind speed: 4
(m/s) rate wind speed: 12
(m/s) cut-off wind speed: 20
(m/s) survival wind speed: 50
Operating way: off-net independent operating



Indicating function of controller

- **Photovoltaic maximum input**: 12V DC 200W (12V) system 24V DC, 200W (24V) system 36V DC, 300W (36V) system
- **Charge indicator**: Bright light when on charge indicator of battery
- **Voltage**: Indicating five grades: under voltage, low voltage, middle-high voltage and over voltage
- **Manostate function** : 14.5V DC, (12V system) 29V DC, (24V system)
- **Over voltage protection**: 14.5V DC, (12V system) 29V DC, (24V system) 43V DC, (36V system)
- **Undervoltage protection**: 10.5V DC, (12V system) 21V DC, (24V system) 32V DC, (36V system)
- **Overload protection**: Automatic lock in 25 seconds for 100-120% overload, automatic lock in 1 second for 120-
- 200% overload, automatic lock in 0.1 second for more than 200% overload
- **Output waveform**: Pure oscillation (distortion ≤3%)
- **Charging current** : Maximum other charging current 18A. CPU controls charge

Note: Inverter is user-selective. User can select according to the output load.

Note: Specifications are subject to change.

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