

EN

Set Vertical wind turbine H-type RX-HV50K 50 kW 380V, grid-tie controller FKJ-GT 50 kW 380 V



Vertical wind turbine 50 kW H Type

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1. Higher Efficiency: H-type turbines have a higher efficiency compared to traditional wind turbines because of their unique blade design. Their blades are longer and curved, which enables them to capture more wind energy.

2. Better Performance in Low Wind Speeds: H-type turbines have better performance in low wind speeds compared to traditional turbines, which means they can generate electricity even in wind speeds as low as 3 meters per second. 3. Reduced Noise Pollution: The unique blade design of H-type turbines reduces the amount of noise they produce, making them more suitable for residential areas.

4. Lower Maintenance Costs: H-type turbines have fewer moving parts compared to traditional turbines, which means they require less maintenance and have a longer lifespan.

Model	RX-HV50K
Rated Power	50KW
Max Power	55KW
Blades Length	10M
Wheel Diameter	5.0M
Generator type	Maglev coreless
Rated Voltage	380V
Start Up Speed	2.5m/s
Rated Wind Speed	11m/s
Cut in wind speed	3.0m/s
Survival Wind	50m/c
Speed	30m/s
Blades Quantity	5 pcs Include three boost drum
Blades Material	Aluminium alloy
Working	
Temperature	-40 C~+40 C
Protection Level	IP54
Working	
environment	\leqslant 90%
humidness	
Altitude	≤4500m
Install Height	2~12m
Overload	
Protection	Electromagnetic Brake
Gross Weight	1500kg





Real Photos

The data sheet is just for your refer

We can customize more specification for you

On grid Wind Turbine Controller

Functional description



On grid Wind Turbine Controller

FKJ-GT (Grid-tie) model Product Characteristics

◆ The product is manufactured according the JB/T6939.1-2004 industrial standard and GB/T 19115.1-2003 national standard also with users' technical requirements.

◆ Big LCD display. The images tell working state visually. Various data show: real-time wind turbine voltage current solar panel voltage current DC

output voltage, current,total power generation(The main board is with button battery,in case of power failure, history data can be saved for 30 days)

◆ Two sets of control systems: PWM constant voltage system and three-phase dump load system.

◆ PWM constant voltage control is 120% of the rated power of the wind turbine. In case exceeding of PWM's capacity, the three-phase dump load will automatically start immediately. After 10-20 minutes, the three-phase dump load will stop and the wind turbine will re-start to resume power supply to ensure the safe running of the overall wind turbine generation system.

• When the strong or super-strong wind conditions, the controller can conduct constant voltage output to ensure the inverter safety running.

• When the condition of disconnected grid-connected inverter, the controller can conduct constant voltage output and wait for inverter resumption.

◆ When the grid is cut off, the three-phase dump load of the controller will automatically start to work and the inverter will stop output to grid. When the grid resuming, the controller stops three-phase dump load and the inverter will resume power supply.

• The inside of the controller is equipped with surge protector. Contain the over voltage into the wind turbine

under the bearable voltage of the equipment or system. On another way, to conduct the strong lightening current into the earth directly to avoid any damage of equipment.

◆ The controller is equipped with emergency stop switch; in case of emergency, press down the emergency stop button in the front panel to cut off all power supply of the controller and the wind turbine will immediately brake (three-phase dump load).

◆ The controller is equipped with manual three-phase dump load switch. To using this switch, the wind turbine will brake (three-phase dump load).

X Adopt Modbus Communication protocol. Convenient to carry out the secondary development.

X Adjusting the technical specification via RS485 is available.Convenient to adjust the different wind turbines for professional customers.

X Support WIFI and GPRS.Customers can monitor the real-time working state of the on grid wind power system via PC and mobile and query history working sate.Both Android and OS are compatible in Mobile.

※ Can increase the solar panel control system according to customer requirements.

※ For the different wind turbine, the controller can be equipped with mechanical yawing, rotate tail control, furled empennage, mechanical brake,

hydraulic brake, electromagnetism brake and other brake functions.

Product photo





CONTROLLER

Dump load

Project case







Technical Parameters

Technical Parameters of the On Grid Wind Turbine Controller 15KW-30KW

Туре	FKJ-GT50KW	FKJ-GT100KW	
Wind turbine rated power	50KW	100KW	
Wind turbine Max. power	100KW	200KW	
Wind turbine rated voltage	AC380V-400V	AC380V-400V	
Function	Rectifier,control, DC output		
Automatic protection function	Over voltage protection, network electric cut off protection, regulated supply output, arrester		
Manual function	Manual brake, reset, emergency switch , Yaw control, change OARS		
Display mode	LCD		
Display content	Wind turbine voltage, current, power; Solar voltage, current, power; DC output voltage, DC output current, DC output power, total power.		
PWM constant voltage1	≥550dc	≥550dc	
PWM constant voltage2		≥550dc	
Wind turbine deflection 45° (adjustable)	≥550dc	≥550dc	
wind turbine 3-phase dump load voltage1	575±5Vdc	575±5Vdc	
wind turbine 3-phase dump load voltage2	580±5Vdc	580±5Vdc	
wind turbine 3-phase dump load voltage3		580±5Vdc	
Wind turbine deflection 90° (adjustable)	580±5Vdc	580±5Vdc	
Time-lapse of the wind turbine 3-phase dump load2	⁹ 12-20 min	12-20 min	
PWM dump load fuse	63A	80A	
Fuse of DC output	80A	100A	
Wind speed (adjustable)	≥2m/s		
Wind direction (adjustable)	0-360°		
Work environment temperature	-30-60°C		
Relative humidity	<90% No condensation		
Noise (1m)	<40dB		
Degree of protection	IP20(Indoor) IP65 (Outdoors)		
Cooling method	Forced air cooling		
*Communication interface (optional)	RS485/USB/GPRS/WIFI/Ethernet		

*Temperature compensation(optional)	-4mv/°C/2V,-35°C~+80°C,Accuracy:±1°C			
Size of the controller (mm)	600*550*1220mm			
Weight of the controller	80KG			
Size of the dump load (mm)	690*450*530	720*500*1300	720*500*1300	
Weight of the dump load	41Kg	70Kg	80Kg	

*Above parameter only for reference

1. Could be custom made to user specifications.

2, Could have solar power control subject to user demand.



APP is intelligent terminal for hybrid wind solar power, PV power station monitoring and management person. It helps users to master power station running status at anytime and anywhere, realize remote data monitoring of hybrid wind solar power and PV power station, ensure convenient management and monitoring timeliness. System displays hybrid wind solar power station and PV power station running data by visual table, includes power station power generation, benefit, CO2 emission reduction benefit, equipment running status, equipment real-time data, history data query, power generation comparison, equipment performance comparison. As fashion and intelligent application, it can let user demonstrate his hybrid wind solarpower station and PV power station at any occasion, user has intuitive feeling, enhance user confidence.

- Various data output interface, support Android, iphone, ipad, windows, macOS
- Delicate and precise data, easy to operate, download and install, Wechat binded, real-time monitoring, data synchronization
- 24-hour monitoring
- Low maintenance cost
- Power station information sharing function



Optional Parts









1.RS485 to WIFI

2.RS485 to GPRS

3.RS485 to Ethernet

4.RS485 to USB