

# EVANCE ISKRA R9000 SPECIFICATIONS

## ARCHITECTURE

### RATED POWER

Upwind, 3 bladed rotor, self regulating  
5kW @ 12m/s (26.8mph), continuous to 60m/s (134mph)  
9,012 kWh with Annual Mean Wind Speed (AMWS)  
of 5m/s (11mph) (to IEC and BWEA Standards)

### ANNUAL ENERGY YIELD

2.5 m/s (5.6 mph)

### CUT-IN WIND SPEED

None - continuous generation to survival wind speed  
60 m/s (134 mph)

### CUT-OUT WIND SPEED

Conforms to IEC 61400 to Class II - AMWS up to 8.5m/s (19mph)

### SURVIVAL WIND SPEED

### IEC TURBINE CLASS

### CONTROL SYSTEM

Patented Reactive Pitch™ Control

### ROTOR DIAMETER

5.4m (17.7 feet)

### ROTOR SPEED

200 rpm nominal, 230 rpm maximum

### BLADE TYPE

Fully optimised aerofoil ensuring maximum yield and  
minimum noise

### BLADE MATERIAL

Glass Fibre Reinforced Composite, low reflection, UV  
and anti-erosion coatings

### GENERATOR

Patented brushless direct drive air-cored high  
efficiency Permanent Magnet Alternator

### GEARBOX

None required. See generator

### EMERGENCY BRAKING

Patented Automatic ElectroBrake™  
(with manual control for servicing). No moving parts

### YAW CONTROL

Passive - Tail Vane and rotor

### TOWER HEIGHT

9m, 12m & 15m (30', 40' & 50' & US only 80')

### TOWER TYPES

Free-standing (monopole) or guyed

### TOWER TOP MASS

Approx. 300kg (660lbs) complete (Excl. Tower)

### DESIGN LONGEVITY

20 years minimum. Annual Service Inspection

### NOISE

Lp.60m = 45dB(A), BWEA Reference Sound Level  
at 8m/s and 60m distance

## Data you can rely on Conforming to International Standards

The Evance Iskra R9000 is available only through our global network of partners who are carefully selected for their reputation for high integrity and customer care. They are fully trained by us in all aspects of siting and installation and have all the required local knowledge about incentives and regulations.

If you are interested in knowing more about the Evance Iskra R9000, or to find your nearest Evance partner, please visit our website at [www.evancewind.com](http://www.evancewind.com).

Our turbines are the most efficient turbines available in their size range, and are best suited to schools, farms, rural homes, light commercial or sites where there is sufficient land and wind to generate useful amounts of free clean energy.

Please contact us or our partners to discuss what solution is most suitable for your particular application.

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## EVANCE

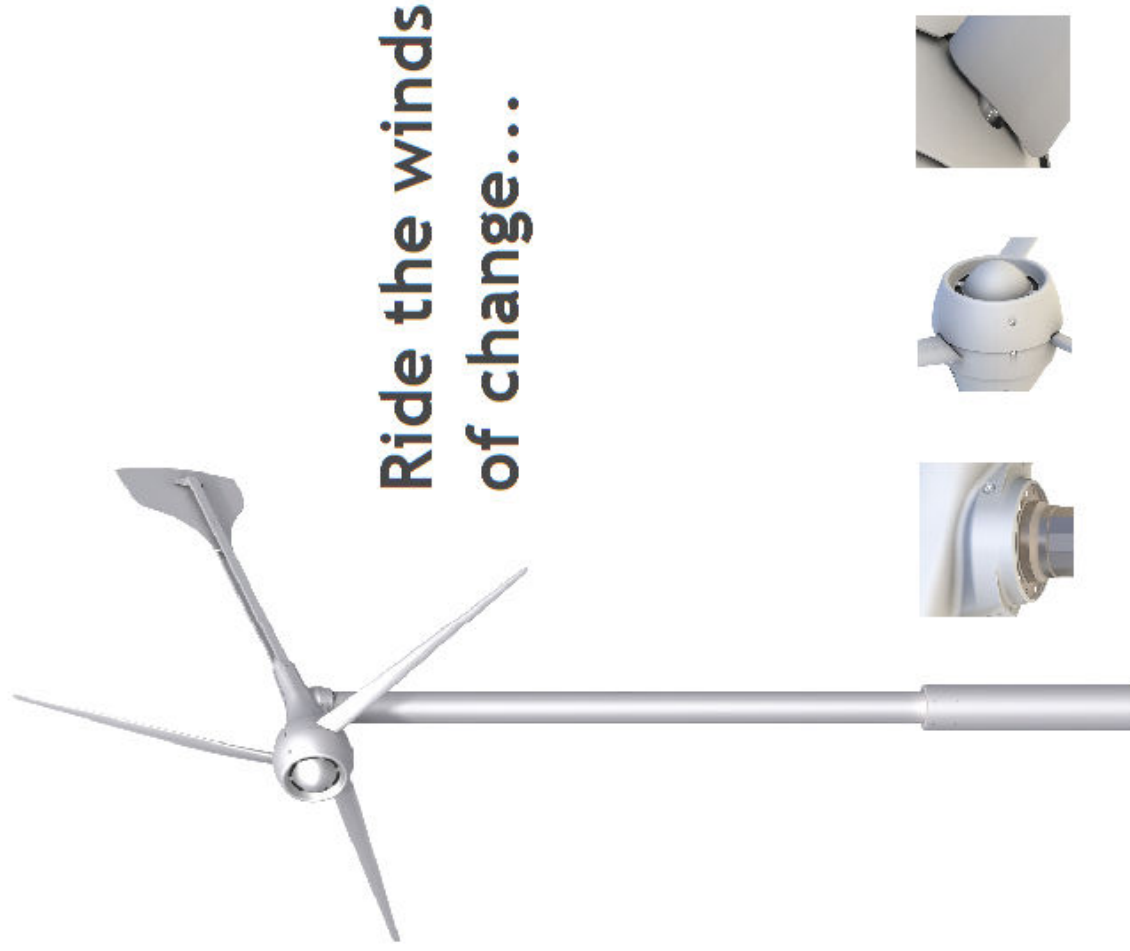
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# Ride the winds of change...

# Evance Wind Turbine Key features

## PERFORMANCE

- Class leading energy yield
- Reactive Pitch™ technology continuously optimises aerofoil positioning
- Generates from wind speed of 2.5m/s (5.6mph)
- No cut out wind speed

## DESIGN EXCELLENCE

- Blends into the environment for low visual impact
- Lower material use for high ecological performance
- Aerodynamic and contemporary
- Created from big wind technology and automotive expertise

## EFFICIENCY

- Proprietary Reactive Pitch™ technology ensures perfect positioning of the aerofoils to maximise yield
- Patented axial flux generator sets new standard of 96% efficiency
- Upwind architecture with tail vane ensures precise yaw control

## SAFETY

- Reactive Pitch™ automatically limits maximum energy. No cut out speed or intervention needed
- Brake system tower top mounted - no dependence on external systems
- ElectroBrake™ provides secondary backup safety system

## LOW MAINTENANCE

- Autonomous operation up to 60m/s (134mph)
- Direct drive - no gearbox
- Patented ElectroBrake™ - automatic with no moving parts

## QUIET OPERATION

- System engineered for minimum noise generation
- Advanced blade design for low noise aerodynamics and balance
- Direct drive - no gearbox noise

## DURABILITY

- All parts manufactured in composite, stainless steel or coated to automotive standards
- Blade erosion resistance tested to double military standards
- Designed to IEC61400-2, the international standard for wind turbines
- 5 year warranty underpinned by more than 2.5 million hours in the field

## RELIABILITY

- Reactive Pitch™ is a simple and durable mechanical system
- ElectroBrake™ has no moving parts
- Backed by manufacturer trained and certified service network
- Integrated generator eliminates complexity
- Existing installations average > 99% up time