

We make turbines simple

What is Zenia 30?

The ZA30 is an upwind type, with 3 blades, gearbox and an asynchronous generator, which is based on the same technology and methodology that used in MW turbines, such as Siemens and Vestas.



For whom is Zenia 30 developed?

Zenia 30 is a product to provide you a maximum independence from the power grid at competitive effort. Mainly focused on self-consumption Zenia 30 provides also interesting business solutions if combined with multiple power sources and storages through its inverter.

What makes Zenia 30 special?

Zenia 30's design enables a big yield and shrinks logistics to a minimum. In Denmark, where Zenia's history begins, an annual yield of up to 100.000 kWh is calculated for perfect coastal spots. Transport and turbine erection are simple. All components suit into a 20ft container and due to a hydraulic tower foot, a crane is not required for erection. After that it is plug'n'play.

Where is Zenia 30 produced?

The production of the ZA30 wind turbine is located in Rostock, Germany.

How can I make a Zenia 30 project feasible?

Zenia Deutschland GmbH & Co. KG offers you not only a wind turbine but anything else you need. That can be logistics, permission management as well as aftersales services and maintenance during operation. As our philosophy is to strengthen your independence, we enable your team of electricians to run and maintain the Zenia 30.

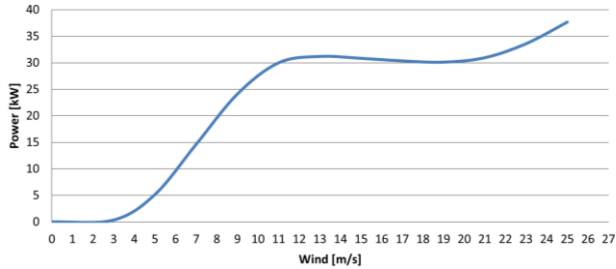
Are you interested in hearing about your ability to produce your own power and lock in your electricity prices for years to come? If yes, please contact one of our local representatives to hear about your specific options for a very good business and environmentally sound investment.

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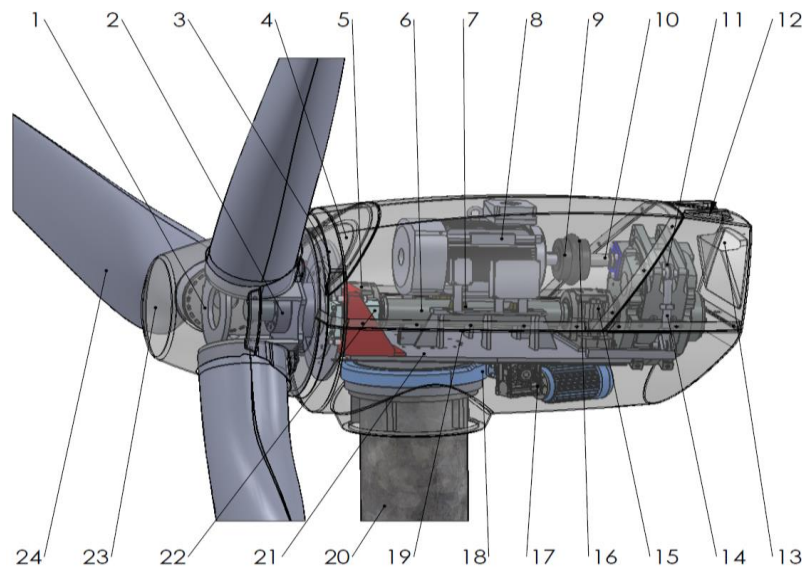
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Sales Power Curve



The calculated power curve data are valid for standard conditions of 15°C, and 1.225 kg/m³ air density.

The calculated curve data are preliminary



Nacelle Arrangement

1	Hub	7	Rubber Feets	13	Air Outlet	19	Hydraulic Unit
2	Shrink Disk	8	Generator	14	Arm Torque	20	Tower
3	Disk Brake	9	Coupling	15	Rear Bearing	21	Nacelle
4	Air Intake	10	Secondary Shaft	16	Flexible Tyre		Bedplate
5	Front Bearing	11	Gear Box	17	Yaw Motor	22	Brake Caliper
6	Main Shaft	12	Meteorological Sensors	18	Yaw Worm Drive	23	Spinner
						24	Blade

Technical Specifications

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*We make turbines simple***Rotor**

Type 3-bladed, horizontal axis
Position Upwind
Diameter 13 m
Swept area 120m²
Speed range 60-75 rpm
Rotor tilt 4 degrees

Blade

Type Self-supporting
Blade length 6.2 m
Material Glass-reinforced plastic (GRP)
Surface color White, RAL 9003

Aerodynamic brake

Activation Passive, centrifugally

Load-Supporting Parts

Hub Nodular
2 SKF bearings Spherical roller bearing
Main shaft Alloy steel
Nacelle bed plate Steel

Transmission system

Coupling hub - Locking Unit Disc (Stüwe)
Coupling gearbox - Shrink disc
Coupling shaft - Fenaflex with Flexible
Tyre
Gearbox ratio 1:25

Mechanical brake

Type Hydraulic disc brake - Fail Safe
Position Slow speed shaft
Number of calipers 2

Generator

Type Asynchronous
Nominal power 30 kW
Protection IP 100

Grid Terminals (LV)

Nominal power 30 kW
Voltage 3x400 V
Frequency 50 Hz or 60 Hz

Weights (approximately)

Rotor 450 kg
Nacelle 1500 kg

Controller

Type Microprocessor
SCADA system WPS via modem
Controller designation TMC3
Controller manufacturer Orbital A/S

Tower

Galvanized Tube Tower, 3 sections
Hub height 18 m
Color Light grey, RAL 7035

Operational data

Cut-in wind speed 3-4 m/s
Rated power at 11-12 m/s
Cut-out wind speed 25 m/s

Yaw system

Type Active
Electric sealed worm drive
Yaw brake passive friction brake