

# PRODUCT DATA SHEET

## Viking VS



HSWind ApS  
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Denmark

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## VIKING VS

# TECHNICAL SPECIFICATIONS

Viking VS is a Danish designed and Danish produced small wind turbine in order to assure a superior quality.

Viking VS is available with following options:

- Grid connection
- Stand alone
- Wind diesel



### OPERATING DATA

Nominal power	10 up to 25kW
Hub height	18 m
Total height	24.5 m
Power control	variable speed/ Stall
Active wind range	2 - 25 m/s
Cut-out wind speed	25 m/s
Survival wind	52,5 m/s
Yaw system	Active, automatic cable untwist
Operational temperature	-20C° to +40 C°

### ROTOR

Type	Stall with tip brake
Rotational direction	Clockwise
Blades	3
Rotor diameter	13 m
Swept area	133 m <sup>2</sup>
Rotor material	Fibre glass
RPM	Variable up to 65
Tip-speed	Variable up to 45 m/s

### GENERATOR

Generator	VEM Motors GmbH LEROY-SOMER
Type	K21R 200 L4 HW LS200LT
Voltage	3 x 400V + N
Frequency	50 - 60 Hz
Rated RPM	1525

### APPROVAL

Type approval according to IEC 61400-2 standard SWT Class III

### GEAR

Manufacturer	Benzler _ STM
Type	D40204-M1_ ERX 1501

### SAFETY

Brakes	Electromechanical fail safe
	MAYR 10/800.410.3
	LEROY-SOMER-54H1D

Service and maintenance is carried out while the turbine is at ground level. It is never necessary to climb the tower. Both independent brake systems are "fail safe".

### TOWER

Type	HSWind Tilt
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Viking VS is produced with tower-tilt to ease both installation and maintenance.

### CONTROL SYSTEM

Manufacturer	HSWind
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### PERFORMANCE

Annual production in Denmark | Up to 95.000 kWh

### VIKING VS - ANNUAL ENERGY PRODUCTION (KWH)

		Annual averages wind m/s			
Weibull k		4,5	5,5	6,5	7,5
2		31.000	56.000	76.500	96.000