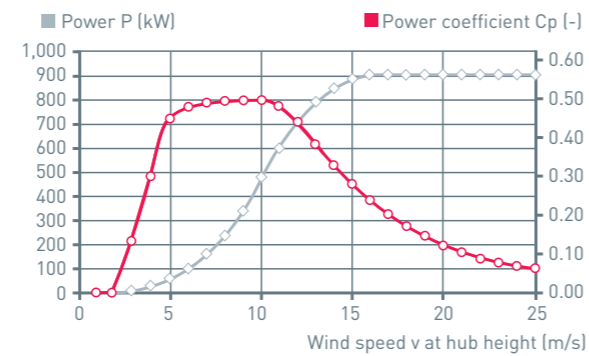




Calculated power curve



Wind (m/s)	Power P (kW)	Power-coefficient Cp (-)
1	0.0	0.00
2	0.0	0.00
3	4.0	0.16
4	20.0	0.34
5	50.0	0.43
6	96.0	0.48
7	156.0	0.49
8	238.0	0.50
9	340.0	0.50
10	466.0	0.50
11	600.0	0.48
12	710.0	0.44
13	790.0	0.39
14	850.0	0.33
15	880.0	0.28
16	905.0	0.24
17	910.0	0.20
18	910.0	0.17
19	910.0	0.14
20	910.0	0.12
21	910.0	0.11
22	910.0	0.09
23	910.0	0.08
24	910.0	0.07
25	910.0	0.06

$\rho = 1.225 \text{ kg/m}^3$

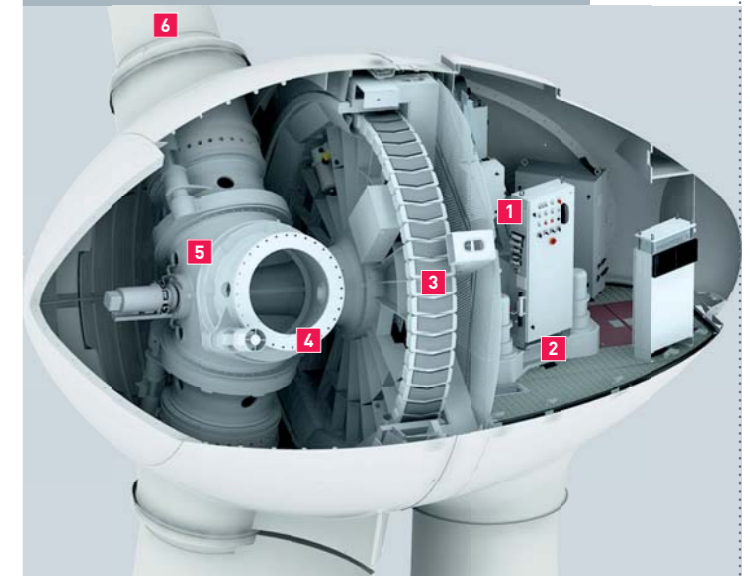
Technical specifications E-44

<b>Rated power:</b>	<b>900 kW</b>
<b>Rotor diameter:</b>	<b>44 m</b>
<b>Hub height in meter:</b>	<b>45 / 55</b>
<b>Wind zone (DIBt):</b>	<b>-</b>
<b>Wind class (IEC):</b>	<b>IEC/NVN IA</b>
<b>WEC concept:</b>	Gearless, variable speed, single blade adjustment
<b>Rotor</b>	
Type:	Upwind rotor with active pitch control
Rotational direction:	Clockwise
No. of blades:	3
Swept area:	1,521 m <sup>2</sup>
Blade material:	GRP (epoxy resin); Built-in lightning protection
Rotational speed:	Variable, 16 - 34.5 rpm
Pitch control:	ENERCON single blade pitch system; one independent pitch system per rotor blade with allocated emergency supply
<b>Drive train with generator</b>	
Main bearing:	Twin tapered roller bearing
Generator:	ENERCON direct-drive annular generator
<b>Grid feed:</b>	ENERCON inverter
<b>Brake systems:</b>	- 3 independent pitch control systems with emergency power supply - Rotor brake - Rotor lock
<b>Yaw system:</b>	Active via yaw gear, load-dependent damping
<b>Cut-out wind speed:</b>	28 - 34 m/s (with ENERCON storm control*)
<b>Remote monitoring:</b>	ENERCON SCADA

\* For more information on the ENERCON storm control feature, please see the last page.

# E-44

900 kW



- 1 Main carrier
- 2 Yaw drive
- 3 Annular generator
- 4 Blade adapter
- 5 Rotor hub
- 6 Rotor blade