



SG 5.0-145 (2.0)

Efficiency and Reliability



Advanced solution in its segment for efficiency and reduced LCoE

Continuous improvement with enhanced control system and
blade aerodynamics

Siemens
Gamesa, your
technology
partner

At Siemens Gamesa, we anticipate opportunities in an increasingly demanding market.

With over 40 years of expertise in wind technology, 148 GW installed and over 92 GW under maintenance worldwide, Siemens Gamesa has the experience and tools to deliver tailored technological solutions that support long-term profitability throughout the entire lifecycle of your project. Our team is passionate about what we do and committed to delivering products and services that precisely meet your project needs.

Beyond performance and reliability, Siemens Gamesa places sustainability at the heart of every solution. With up to 85% recyclability, a low carbon footprint of approximately 6.2 g CO₂e/kWh, and rapid energy payback, our company provides responsible, transparent, and future-oriented renewable technologies that contribute to a cleaner global energy system.

Flexible power rating to configure a uniquely tailored solution that meets site requirements

Unique tailored solution

The SG 5.0-145 (2.0) turbine, equipped with an advanced control system, optimized blade aerodynamics, and a modular structure, offers greater adaptability to sites with diverse wind conditions and logistical constraints.

Designed for medium winds, its versatility and improved efficiency position it as a benchmark solution in its segment.

Siemens Gamesa technology

SG 5.0-145 (2.0) integrates geared technology concepts with extensive track record in the market, such as the combination of a three-stage gearbox (two planetary and one parallel) and a doubly-fed induction generator. In addition to this, the inclusion of an optional premium converter allows us to comply with the demanding grid connection requirements.

The new 71-meter blades, made of fiberglass reinforced with epoxy resin and pultruded carbon technology, integrate innovative aerodynamics and the DinoTails® technology, which guarantee the best balance between high energy production and reduced noise emission levels.

Enhanced efficiency

With respect to the previous generation solutions, SG 5.0-145 (2.0) introduces a control system, which optimizes the efficiency of the wind turbine and its applicability in a wide range of sites.

It also offers flexible power rating, depending on the noise requirements, temperature and electrical properties of the project. With over 24% increase in AEP over previous turbine SG 3.4-145.

Operation and Maintenance

In close partnership with our customers, Siemens Gamesa delivers tailored maintenance plans, long-term service agreements, remote diagnostics, energy optimization, and expert troubleshooting.

Our comprehensive approach ensures maximum reliability, sustained value, and optimal performance throughout the entire lifecycle of each wind farm.

Technical specifications



SG 5.0-145 (2.0)

General details

Rated power	5.0 MW
IEC class	IIB
Flexible power rating	4.0-5.2 MW
Control	Pitch and variable speed
Standard operating temperature	Range from -20°C to 45°C (with de-rating) ⁽¹⁾
Technology	Geared + DFIG

Rotor

Diameter	145 m
Swept area	16,513 m ²

Blades

Length	71 m
Airfoils	Siemens Gamesa
Material	Fiberglass reinforced with epoxy resin

Tower

Type	Multiple technologies available
Height	90, 102.5, 127.5 m and site-specific

Gearbox

Type	3 stages
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Generator

Type	Doubly-fed induction machine
Voltage	690 V AC
Frequency	50 Hz/60 Hz
Protection class	IP 54
Power factor	0.9 CAP-0.9 IND throughout the power range ⁽²⁾

⁽¹⁾ Different versions and optional kits are available to adapt machinery to cold climate, saline or dusty environments.

⁽²⁾ Power factor at generator output terminals, on low voltage side before transformer input terminals.

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Company Siemens Gamesa
 Type/Version SG 5.0-145
 Rated power 5.000,0 kW
 Secondary generator 0,0 kW
 Rotor diameter 145,0 m
 Tower Tubular
 Grid connection 50/60 Hz

Origin country DK
 Blade type
 Generator type Variable
 Rpm, rated power 10,8 rpm
 Rpm, initial 0,0 rpm
 Hub height(s) 90,0; 90,0 m
 Maximum blade width 0,00 m
 Blade width for 90% radius 0,00 m
 Valid No
 Creator EMD
 Created 25/06/2025 15:38
 Edited 07/11/2025 17:12

Power curve: AM-8 - Calculated - AM-8 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	27,0	1,225	0,0	Pitch	User defined

Rev. 2.

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cp	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cp	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Cp	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000	0,000

Power curve: AM-6 - Calculated - AM-6 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	27,0	1,225	0,0	Pitch	User defined

Rev. 2.

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.298	3.709	4.005	4.148	4.192
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,447	0,428	0,396	0,354	0,311

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200	4.200
Cp	0,273	0,240	0,213	0,189	0,169	0,151	0,136	0,123	0,112	0,101	0,092	0,085	0,077	0,071	0,066	0,061	0,056

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Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.200	4.198	4.189	4.160	4.103	4.007	3.874	3.715	3.546	3.384	3.242	3.132	3.040	2.967	2.915
Cp	0,052	0,048	0,045	0,041	0,038	0,035	0,031	0,028	0,025	0,023	0,021	0,019	0,017	0,016	0,015

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,720	0,661	0,586	0,500	0,422

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,358	0,311	0,274	0,242	0,215	0,192	0,172	0,155	0,141	0,128	0,118	0,109	0,101	0,094	0,087	0,080	0,075

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,070	0,066	0,061	0,057	0,053	0,049	0,045	0,041	0,038	0,035	0,032	0,029	0,027	0,026	0,024

Power curve: AM-5 - Calculated - AM-5 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	27,0	1,225	0,0	Pitch	User defined
Rev. 2.									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.735	4.108	4.353	4.463
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,431	0,406	0,372	0,332

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.495	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500	4.500
Cp	0,292	0,257	0,228	0,203	0,181	0,162	0,146	0,132	0,119	0,109	0,099	0,091	0,083	0,076	0,070	0,065	0,060

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.498	4.489	4.467	4.423	4.351	4.247	4.111	3.959	3.804	3.652	3.510	3.395	3.298	3.220	3.158
Cp	0,056	0,052	0,048	0,044	0,040	0,037	0,033	0,030	0,027	0,025	0,022	0,020	0,019	0,017	0,016

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,667	0,604	0,532	0,456

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,388	0,336	0,295	0,260	0,230	0,205	0,184	0,166	0,150	0,136	0,125	0,116	0,107	0,100	0,092	0,086	0,080

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,074	0,069	0,065	0,060	0,056	0,052	0,048	0,044	0,040	0,037	0,034	0,031	0,029	0,027	0,026

Power curve: AM-4 - Calculated - AM-4 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	27,0	1,225	0,0	Pitch	User defined
Rev. 2.									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.738	4.129	4.407	4.545
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,431	0,408	0,376	0,338

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.591	4.599	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600	4.600
Cp	0,298	0,263	0,233	0,207	0,185	0,166	0,149	0,135	0,122	0,111	0,101	0,093	0,085	0,078	0,072	0,066	0,061

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.600	4.598	4.588	4.556	4.494	4.389	4.244	4.070	3.885	3.708	3.551	3.431	3.330	3.250	3.193
Cp	0,057	0,053	0,049	0,045	0,042	0,038	0,034	0,031	0,028	0,025	0,022	0,020	0,019	0,017	0,016

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,668	0,608	0,540	0,466

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Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,398	0,345	0,302	0,266	0,236	0,210	0,188	0,169	0,153	0,139	0,127	0,118	0,110	0,102	0,094	0,087	0,081

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,076	0,071	0,066	0,062	0,057	0,053	0,048	0,044	0,040	0,037	0,034	0,031	0,029	0,027	0,026

Power curve: AM-3 - Calculated - AM-3 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed	Air density	Tip angle	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	[m/s] 27,0	[kg/m3] 1,225	[°] 0,0	Pitch	User defined

Rev. 2.

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.740	4.143	4.451	4.622
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,431	0,410	0,380	0,343

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.684	4.698	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700	4.700
Cp	0,305	0,269	0,238	0,212	0,189	0,169	0,152	0,138	0,125	0,113	0,103	0,095	0,087	0,080	0,073	0,068	0,063

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.698	4.689	4.665	4.620	4.545	4.436	4.294	4.136	3.974	3.815	3.667	3.547	3.444	3.364	3.299
Cp	0,058	0,054	0,050	0,046	0,042	0,039	0,035	0,032	0,028	0,026	0,023	0,021	0,019	0,018	0,017

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,669	0,611	0,546	0,476

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,408	0,353	0,309	0,272	0,241	0,214	0,192	0,173	0,156	0,142	0,130	0,120	0,112	0,104	0,096	0,089	0,083

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,077	0,072	0,067	0,062	0,058	0,054	0,049	0,045	0,041	0,038	0,035	0,032	0,030	0,028	0,026

Power curve: AM-2 - Calculated - AM-2 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed	Air density	Tip angle	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	[m/s] 27,0	[kg/m3] 1,225	[°] 0,0	Pitch	User defined

Rev. 2.

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.742	4.154	4.487	4.690
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,432	0,411	0,383	0,348

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.773	4.796	4.799	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800	4.800
Cp	0,310	0,274	0,243	0,216	0,193	0,173	0,156	0,141	0,127	0,116	0,106	0,097	0,089	0,081	0,075	0,069	0,064

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.800	4.798	4.788	4.755	4.690	4.581	4.429	4.248	4.054	3.870	3.706	3.581	3.475	3.392	3.332
Cp	0,059	0,055	0,051	0,047	0,044	0,040	0,036	0,032	0,029	0,026	0,023	0,021	0,020	0,018	0,017

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,669	0,613	0,552	0,485

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,418	0,362	0,316	0,278	0,246	0,219	0,196	0,176	0,159	0,145	0,133	0,123	0,114	0,106	0,098	0,091	0,084

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,079	0,074	0,069	0,064	0,059	0,055	0,050	0,046	0,042	0,038	0,035	0,032	0,030	0,028	0,027

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Power curve: AM-1 - Calculated - AM-1 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed	Air density	Tip angle	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	[m/s] 27,0	[kg/m3] 1,225	[°] 0,0	Pitch	User defined
Rev. 2.									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.743	4.161	4.515	4.750
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,432	0,411	0,386	0,353

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.859	4.893	4.899	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900	4.900
Cp	0,316	0,280	0,248	0,221	0,197	0,177	0,159	0,144	0,130	0,118	0,108	0,099	0,090	0,083	0,077	0,071	0,065

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.898	4.888	4.864	4.816	4.739	4.625	4.478	4.313	4.144	3.978	3.823	3.698	3.591	3.507	3.439
Cp	0,061	0,056	0,052	0,048	0,044	0,040	0,036	0,033	0,030	0,027	0,024	0,022	0,020	0,019	0,017

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,669	0,614	0,556	0,492

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,427	0,371	0,324	0,284	0,251	0,224	0,200	0,180	0,162	0,147	0,135	0,125	0,116	0,108	0,100	0,092	0,086

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,080	0,075	0,070	0,065	0,060	0,055	0,051	0,047	0,043	0,039	0,036	0,033	0,031	0,029	0,027

Power curve: AM+1 - Calculated - AM+1 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed	Air density	Tip angle	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	No	[m/s] 27,0	[kg/m3] 1,225	[°] 0,0	Pitch	User defined
Rev. 2.									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.743	4.171	4.565	4.883
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,432	0,412	0,390	0,363

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	5.080	5.168	5.195	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200	5.200
Cp	0,330	0,296	0,263	0,234	0,209	0,187	0,169	0,152	0,138	0,126	0,114	0,105	0,096	0,088	0,081	0,075	0,069

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	5.200	5.198	5.187	5.151	5.082	4.964	4.800	4.604	4.395	4.194	4.015	3.881	3.765	3.676	3.611
Cp	0,064	0,060	0,055	0,051	0,047	0,043	0,039	0,035	0,031	0,028	0,025	0,023	0,021	0,020	0,018

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,670	0,616	0,564	0,509

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,451	0,396	0,347	0,304	0,268	0,238	0,212	0,191	0,172	0,156	0,143	0,132	0,123	0,114	0,105	0,098	0,091

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,085	0,079	0,074	0,069	0,064	0,059	0,054	0,049	0,045	0,041	0,037	0,034	0,032	0,030	0,028

Power curve: AM 0 - Calculated - Std. 106,3 dB - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed	Air density	Tip angle	Power control	CT curve type
15/04/2025 00:00	EMD	15/04/2025 00:00	16/05/2025 08:31	Yes	[m/s] 27,0	[kg/m3] 1,225	[°] 0,0	Pitch	User defined

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Rev. 2.

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.300	3.743	4.166	4.537	4.803
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,448	0,432	0,412	0,387	0,357

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.940	4.988	4.998	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000	5.000
Cp	0,321	0,285	0,253	0,225	0,201	0,180	0,162	0,146	0,133	0,121	0,110	0,101	0,092	0,085	0,078	0,072	0,067

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	4.998	4.988	4.963	4.915	4.836	4.720	4.570	4.401	4.228	4.060	3.901	3.773	3.665	3.579	3.510
Cp	0,062	0,057	0,053	0,049	0,045	0,041	0,037	0,034	0,030	0,027	0,025	0,022	0,021	0,019	0,018

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,721	0,669	0,615	0,559	0,499

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,436	0,379	0,331	0,291	0,257	0,228	0,204	0,183	0,166	0,150	0,138	0,127	0,118	0,110	0,102	0,094	0,088

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,082	0,076	0,071	0,066	0,061	0,056	0,052	0,047	0,043	0,040	0,036	0,034	0,031	0,029	0,027

Power curve: AM-7 - Calculated - AM-7 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
22/07/2025 00:00	EMD	22/07/2025 00:00	01/08/2025 15:00	No	27,0	1,225	0,0	Pitch	User defined

Rev. 2

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.966	2.392	2.846	3.291	3.669	3.896	3.978	3.998
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,462	0,458	0,446	0,423	0,385	0,340	0,297

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000	4.000
Cp	0,260	0,229	0,202	0,180	0,161	0,144	0,130	0,117	0,106	0,097	0,088	0,080	0,074	0,068	0,062	0,058	0,053

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,53	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	3.998	3.990	3.970	3.931	3.867	3.774	3.654	3.518	3.381	3.245	3.119	3.018	2.931	2.862	2.807
Cp	0,049	0,046	0,042	0,039	0,036	0,033	0,030	0,027	0,024	0,022	0,020	0,018	0,016	0,015	0,014

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,786	0,763	0,718	0,652	0,565	0,474	0,398

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,339	0,295	0,260	0,231	0,205	0,183	0,165	0,149	0,135	0,123	0,113	0,104	0,097	0,090	0,083	0,077	0,072

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,067	0,063	0,059	0,055	0,051	0,047	0,043	0,040	0,037	0,034	0,031	0,029	0,027	0,025	0,024

Power curve: AM-8 - Calculated - AM-8 - 4-2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
22/07/2025 00:00	EMD	22/07/2025 00:00	01/08/2025 15:01	No	27,0	1,225	0,0	Pitch	User defined

Rev. 2

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.968	2.387	2.757	2.947	2.995	3.000	3.000	3.000
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,461	0,461	0,444	0,400	0,345	0,297	0,256	0,223

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Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000	3,000
Cp	0,195	0,172	0,152	0,135	0,121	0,108	0,097	0,088	0,080	0,072	0,066	0,060	0,055	0,051	0,047	0,043	0,040

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	3,000	2,999	2,992	2,971	2,930	2,861	2,766	2,652	2,532	2,416	2,314	2,237	2,171	2,119	2,082
Cp	0,037	0,034	0,032	0,030	0,027	0,025	0,022	0,020	0,018	0,016	0,015	0,013	0,012	0,011	0,010

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,794	0,782	0,727	0,315	0,497	0,406	0,341	0,292

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,252	0,223	0,198	0,177	0,158	0,142	0,128	0,116	0,106	0,096	0,089	0,083	0,076	0,070	0,065	0,061	0,057

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,053	0,050	0,047	0,044	0,041	0,038	0,035	0,033	0,030	0,028	0,026	0,024	0,022	0,021	0,020

Power curve: N1 - Calculated - N1 - 07/2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
22/07/2025 00:00	EMD	22/07/2025 00:00	01/08/2025 15:01	No	27,0	1,225	0,0	Pitch	User defined
Rev. 2									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.964	2.374	2.788	3.182	3.538	3.796	3.919	3.957
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,460	0,458	0,449	0,432	0,408	0,375	0,335	0,294

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.964	3.963	3.964
Cp	0,258	0,227	0,201	0,178	0,159	0,143	0,129	0,116	0,105	0,096	0,087	0,080	0,073	0,067	0,062	0,057	0,053

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	3.964	3.964	3.964	3.963	3.960	3.952	3.934	3.904	3.860	3.801	3.730	3.655	3.585	3.521	3.468
Cp	0,049	0,045	0,042	0,039	0,037	0,034	0,032	0,030	0,028	0,026	0,024	0,022	0,020	0,019	0,017

Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,797	0,792	0,768	0,725	0,668	0,606	0,537	0,461	0,391

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,334	0,291	0,256	0,227	0,202	0,180	0,162	0,146	0,132	0,120	0,110	0,102	0,095	0,088	0,082	0,076	0,071

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,066	0,062	0,058	0,055	0,052	0,049	0,046	0,044	0,041	0,039	0,036	0,033	0,031	0,029	0,027

Power curve: N2 - Calculated - N2 - 07/2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
22/07/2025 00:00	EMD	22/07/2025 00:00	01/08/2025 15:01	No	27,0	1,225	0,0	Pitch	User defined
Rev. 2									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.588	1.962	2.360	2.756	3.127	3.454	3.677	3.772	3.797
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,458	0,460	0,456	0,444	0,424	0,398	0,364	0,322	0,282

Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800	3.800
Cp	0,247	0,217	0,192	0,171	0,153	0,137	0,123	0,111	0,101	0,092	0,084	0,076	0,070	0,064	0,059	0,055	0,051

Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Power [kW]	3.800	3.800	3.800	3.800	3.800	3.799	3.794	3.783	3.761	3.727	3.680	3.625	3.566	3.511	3.464
Cp	0,047	0,044	0,041	0,038	0,035	0,033	0,031	0,029	0,027	0,025	0,023	0,022	0,020	0,019	0,017

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Ct curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,797	0,796	0,786	0,756	0,706	0,647	0,584	0,513	0,438	0,372
Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,319	0,277	0,244	0,217	0,193	0,172	0,155	0,140	0,127	0,115	0,106	0,098	0,091	0,085	0,078	0,073	0,068
Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00		
Ct	0,063	0,059	0,056	0,053	0,050	0,048	0,045	0,043	0,040	0,038	0,035	0,033	0,031	0,029	0,027		

Power curve: N3 - Calculated - N3 - 07/2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
22/07/2025 00:00	EMD	22/07/2025 00:00	01/08/2025 15:01	No	27,0	1,225	0,0	Pitch	User defined
Rev. 2									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.252	1.583	1.931	2.275	2.604	2.914	3.203	3.433	3.562	3.607
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,451	0,456	0,453	0,439	0,419	0,395	0,369	0,339	0,304	0,268
Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.615
Cp	0,235	0,207	0,183	0,163	0,145	0,130	0,117	0,106	0,096	0,087	0,080	0,073	0,067	0,061	0,056	0,052	0,048
Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00		
Power [kW]	3.615	3.615	3.615	3.615	3.615	3.615	3.615	3.614	3.609	3.595	3.575	3.544	3.511	3.477	3.444		
Cp	0,045	0,041	0,039	0,036	0,034	0,031	0,029	0,028	0,026	0,024	0,023	0,021	0,020	0,018	0,017		
Ct curve																	
Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,796	0,788	0,754	0,698	0,636	0,576	0,522	0,467	0,407	0,349
Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,300	0,263	0,232	0,206	0,183	0,163	0,146	0,132	0,120	0,109	0,100	0,093	0,086	0,080	0,074	0,069	0,064
Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00		
Ct	0,060	0,057	0,053	0,050	0,048	0,045	0,043	0,041	0,039	0,036	0,034	0,032	0,030	0,029	0,027		

Power curve: N4 - Calculated - N4 - 07/2025

Source Manufacturer

Source date	Creator	Created	Edited	Default	Stop windSpeed [m/s]	Air density [kg/m3]	Tip angle [°]	Power control	CT curve type
22/07/2025 00:00	EMD	22/07/2025 00:00	01/08/2025 15:02	No	27,0	1,225	0,0	Pitch	User defined
Rev. 2									

Power curve

Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Power [kW]	20	94	209	353	521	723	965	1.251	1.569	1.885	2.189	2.479	2.755	3.014	3.235	3.376	3.434
Cp	0,073	0,217	0,323	0,383	0,412	0,430	0,442	0,450	0,452	0,442	0,423	0,399	0,374	0,348	0,320	0,288	0,255
Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Power [kW]	3.448	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450
Cp	0,224	0,197	0,175	0,155	0,139	0,124	0,112	0,101	0,092	0,083	0,076	0,069	0,064	0,058	0,054	0,050	0,046
Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00		
Power [kW]	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.450	3.448	3.442	3.434	3.424	3.412	3.399		
Cp	0,043	0,040	0,037	0,034	0,032	0,030	0,028	0,026	0,025	0,023	0,022	0,020	0,019	0,018	0,017		
Ct curve																	
Wind speed [m/s]	3,00	3,50	4,00	4,50	5,00	5,50	6,00	6,50	7,00	7,50	8,00	8,50	9,00	9,50	10,00	10,50	11,00
Ct	0,854	0,831	0,818	0,811	0,799	0,796	0,796	0,792	0,768	0,715	0,651	0,588	0,532	0,482	0,434	0,383	0,332
Wind speed [m/s]	11,50	12,00	12,50	13,00	13,50	14,00	14,50	15,00	15,50	16,00	16,50	17,00	17,50	18,00	18,50	19,00	19,50
Ct	0,286	0,250	0,220	0,195	0,174	0,155	0,140	0,126	0,114	0,104	0,096	0,089	0,083	0,077	0,071	0,066	0,062

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Wind speed [m/s]	20,00	20,50	21,00	21,50	22,00	22,50	23,00	23,50	24,00	24,50	25,00	25,50	26,00	26,50	27,00
Ct	0,058	0,054	0,051	0,048	0,046	0,043	0,041	0,039	0,037	0,035	0,033	0,032	0,030	0,028	0,027

HP curve comparison

Vmean	[m/s]	5	6	7	8	9	10
HP value	[MWh]	8.391	12.775	17.009	20.777	23.952	26.489
AM-8 - Calculated - AM-8 - 4-2025	[MWh]	0	0	0	0	0	0
Check value	[%]						
AM-6 - Calculated - AM-6 - 4-2025	[MWh]	8.079	12.061	15.747	18.916	21.517	23.558
Check value	[%]	4	6	8	10	11	12
AM-5 - Calculated - AM-5 - 4-2025	[MWh]	8.182	12.334	16.241	19.643	22.462	24.691
Check value	[%]	3	4	5	6	7	7
AM-4 - Calculated - AM-4 - 4-2025	[MWh]	8.211	12.416	16.394	19.873	22.767	25.062
Check value	[%]	2	3	4	5	5	6
AM-3 - Calculated - AM-3 - 4-2025	[MWh]	8.238	12.493	16.540	20.093	23.057	25.414
Check value	[%]	2	2	3	3	4	4
AM-2 - Calculated - AM-2 - 4-2025	[MWh]	8.263	12.566	16.681	20.309	23.346	25.770
Check value	[%]	2	2	2	2	3	3
AM-1 - Calculated - AM-1 - 4-2025	[MWh]	8.287	12.635	16.815	20.515	23.622	26.107
Check value	[%]	1	1	1	1	1	1
AM+1 - Calculated - AM+1 - 4-2025	[MWh]	8.345	12.820	17.185	21.099	24.418	27.097
Check value	[%]	1	0	-1	-2	-2	-2
AM 0 - Calculated - Std. 106,3 dB - 4-2025	[MWh]	8.308	12.701	16.944	20.716	23.894	26.443
Check value	[%]	1	1	0	0	0	0
AM-7 - Calculated - AM-7 - 4-2025	[MWh]	7.998	11.855	15.386	18.394	20.846	22.758
Check value	[%]	5	8	11	13	15	16
AM-8 - Calculated - AM-8 - 4-2025	[MWh]	7.380	10.481	13.151	15.327	17.044	18.344
Check value	[%]	14	22	29	36	41	44
N1 - Calculated - N1 - 07/2025	[MWh]	7.910	11.705	15.185	18.164	20.615	22.556
Check value	[%]	6	9	12	14	16	17
N2 - Calculated - N2 - 07/2025	[MWh]	7.810	11.484	14.827	17.672	20.005	21.850
Check value	[%]	7	11	15	18	20	21
N3 - Calculated - N3 - 07/2025	[MWh]	7.564	11.038	14.191	16.875	19.079	20.826
Check value	[%]	11	16	20	23	26	27
N4 - Calculated - N4 - 07/2025	[MWh]	7.346	10.648	13.637	16.180	18.268	19.925
Check value	[%]	14	20	25	28	31	33

The table shows comparison between annual energy production calculated on basis of simplified "HP-curves" which assume that all WTGs performs quite similar - only specific power loading (kW/m²) and single/dual speed or stall/pitch decides the calculated values. Productions are without wake losses.

For further details, ask at the Danish Energy Agency for project report J.nr. 51171/00-0016 or see WindPRO manual chapter 3.5.2.

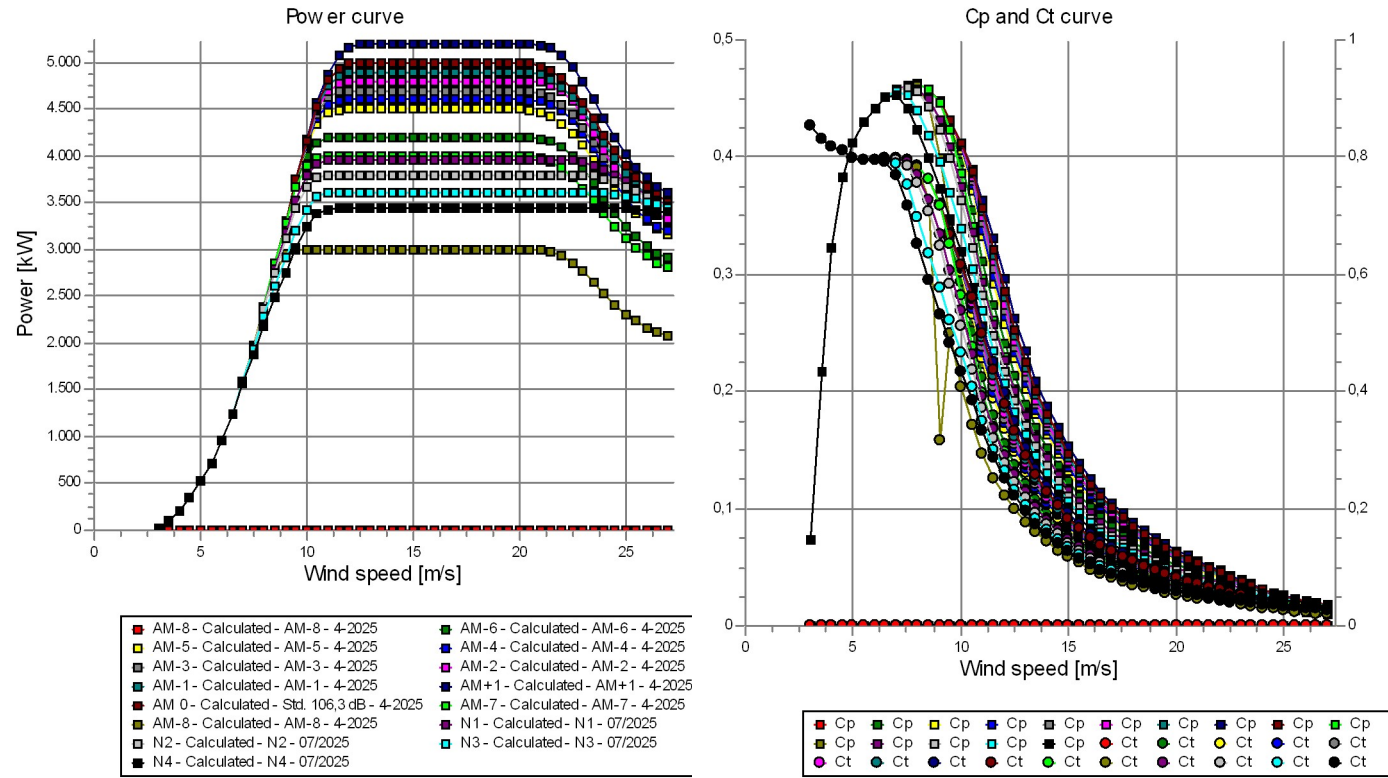
The method is refined in EMD report "20 Detailed Case Studies comparing Project Design Calculations and actual Energy Productions for Wind Energy Projects worldwide", jan 2003.

Use the table to evaluate if the given power curve is reasonable - if the check value are lower than -5%, the power curve probably is too optimistic due to uncertainty in power curve measurement.

Updated in WindPRO 2.8, Feb. 2012, see details in manual!

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Noise: AM-2 - Calculated - AM-2 - 4-2025
Source Manufacturer

Source date Creator Created Edited Default
15/04/2025 00:00 EMD 15/04/2025 00:00 16/05/2025 08:31 No

Wind speed at hub height [m/s]	Lwa,ref [dB(A)]	Wind speed dependency [dB(A)/m/s]	Pure tones	Octave data									A weighted
				63 [dB]	125 [dB]	250 [dB]	500 [dB]	1000 [dB]	2000 [dB]	4000 [dB]	8000 [dB]		
3,0	95,1		1,0	No	77,9	83,2	86,7	87,7	89,5	89,1	82,9	69,4	Yes
4,0	95,1		1,0	No	77,9	83,2	86,7	87,7	89,5	89,1	82,9	69,4	Yes
5,0	95,1		1,0	No	77,9	83,2	86,7	87,7	89,5	89,1	82,9	69,4	Yes
6,0	99,2		1,0	No	82,0	87,3	90,8	91,8	93,6	93,2	87,0	73,5	Yes
7,0	102,7		1,0	No	85,5	90,8	94,3	95,3	97,1	96,7	90,5	77,0	Yes
8,0	105,7		1,0	No	88,5	93,8	97,3	98,3	100,1	99,7	93,5	80,0	Yes
9,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
10,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
11,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
12,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
13,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
14,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
15,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
16,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
17,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
18,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
19,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
20,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
21,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
22,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
23,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
24,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
25,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
26,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes
27,0	106,3		1,0	No	89,8	94,7	97,8	98,8	100,6	100,2	94,0	80,5	Yes

Rev. 2.