



Power Curves

Nordex N117/2400

This document is a translation from German. In case of doubt, the German text shall prevail.
Document published in electronic form. Signed original at Central Engineering/ENS.

© Nordex Energy GmbH, Bornbarch 2, D-22848 Norderstedt, Germany
All rights reserved. Observe protection notice ISO 16016.

Basis: These power curve values according to IEC 61400-12-1 are based on aerodynamic calculations by Nordex Energy GmbH.

Wind turbine data:

Rated power: 2,400 kW

Rotor diameter: 117 m

Determinations for the power curve verification:

Verification according to: IEC 61400-12-1:2005

Type of anemometer: Thies First Class (Advanced), Risø P2546A or Vector A100

Measurement of power: low voltage side, 660 VAC

Air density: normalization to the nearest air density shown in the table

Filter of turbulence: $9 \% \leq TI \leq 15 \%$

Filter of wind shear: $\alpha \leq 0.2$ (Hellman exponent)

Wind shear measurement and determination according to the requirements of MEASNET power performance measurement procedure, Version 5, December – 2009, chapter 3.3 and 3.8

Filter of temperature: $2\text{ °C} \leq \theta \leq 25\text{ °C}$

Status signal: Ready for operation without consideration of the cut-out hysteresis
(IEC 61400-12-1:2005, database B)

Power Curves Nordex N117/2400

Wind speed v_{hub} [m/s]	Power P_{el} [kW] at air density ρ [kg/m ³]					
	1.000	1.025	1.050	1.075	1.100	1.125
3.0	13	15	16	17	19	20
3.5	60	63	65	67	70	72
4.0	119	123	127	131	134	138
4.5	193	198	204	210	216	221
5.0	282	290	298	306	314	322
5.5	389	400	411	422	433	443
6.0	516	530	544	559	573	587
6.5	665	684	702	720	738	756
7.0	838	860	883	905	928	950
7.5	1029	1056	1083	1110	1137	1164
8.0	1235	1267	1299	1332	1364	1396
8.5	1449	1487	1525	1563	1601	1639
9.0	1666	1710	1754	1799	1844	1889
9.5	1864	1916	1967	2017	2058	2098
10.0	2044	2106	2151	2182	2215	2246
10.5	2206	2240	2270	2291	2319	2341
11.0	2306	2330	2351	2363	2378	2390
11.5	2367	2382	2393	2395	2398	2400
12.0	2395	2399	2400	2400	2400	2400
12.5	2400	2400	2400	2400	2400	2400
13.0	2400	2400	2400	2400	2400	2400
13.5	2400	2400	2400	2400	2400	2400
14.0	2400	2400	2400	2400	2400	2400
14.5	2400	2400	2400	2400	2400	2400
15.0	2400	2400	2400	2400	2400	2400
15.5	2400	2400	2400	2400	2400	2400
16.0	2400	2400	2400	2400	2400	2400
16.5	2400	2400	2400	2400	2400	2400
17.0	2400	2400	2400	2400	2400	2400
17.5	2400	2400	2400	2400	2400	2400
18.0	2400	2400	2400	2400	2400	2400
18.5	2400	2400	2400	2400	2400	2400
19.0	2400	2400	2400	2400	2400	2400
19.5	2400	2400	2400	2400	2400	2400
20.0	2400	2400	2400	2400	2400	2400

Power Curves Nordex N117/2400

Wind speed v_{hub} [m/s]	Power P_{el} [kW] at air density ρ [kg/m ³]						
	1.150	1.175	1.200	1.225	1.250	1.275	1.300
3.0	21	22	24	25	26	27	29
3.5	75	77	79	82	84	87	89
4.0	142	146	150	154	157	161	165
4.5	227	233	238	244	250	255	261
5.0	330	338	346	354	362	370	378
5.5	454	465	475	486	497	507	518
6.0	601	615	629	643	657	670	684
6.5	774	792	810	827	845	862	879
7.0	972	994	1016	1038	1060	1082	1103
7.5	1191	1218	1245	1272	1299	1326	1352
8.0	1428	1460	1493	1525	1557	1590	1623
8.5	1678	1716	1755	1794	1833	1866	1898
9.0	1928	1964	2001	2037	2073	2097	2121
9.5	2129	2157	2184	2211	2239	2255	2272
10.0	2268	2287	2306	2326	2345	2353	2361
10.5	2355	2365	2375	2386	2396	2397	2398
11.0	2395	2397	2398	2400	2400	2400	2400
11.5	2400	2400	2400	2400	2400	2400	2400
12.0	2400	2400	2400	2400	2400	2400	2400
12.5	2400	2400	2400	2400	2400	2400	2400
13.0	2400	2400	2400	2400	2400	2400	2400
13.5	2400	2400	2400	2400	2400	2400	2400
14.0	2400	2400	2400	2400	2400	2400	2400
14.5	2400	2400	2400	2400	2400	2400	2400
15.0	2400	2400	2400	2400	2400	2400	2400
15.5	2400	2400	2400	2400	2400	2400	2400
16.0	2400	2400	2400	2400	2400	2400	2400
16.5	2400	2400	2400	2400	2400	2400	2400
17.0	2400	2400	2400	2400	2400	2400	2400
17.5	2400	2400	2400	2400	2400	2400	2400
18.0	2400	2400	2400	2400	2400	2400	2400
18.5	2400	2400	2400	2400	2400	2400	2400
19.0	2400	2400	2400	2400	2400	2400	2400
19.5	2400	2400	2400	2400	2400	2400	2400
20.0	2400	2400	2400	2400	2400	2400	2400