



ICC-SWCC™ CERTIFICATION SWCC-11-04



Small Wind Turbine Certification Program

Certification Number: SWCC-11-04
Original Certification Date: June 17, 2013
Expiration Date: June 17, 2020
Certification subject to renewal annually.

www.smallwindcertification.org (888) 422-7233 3060 Saturn St., Suite 100, Brea, CA 92821 USA
A Program of the ICC Evaluation Service (ICC-ES)

Program: This wind turbine has been evaluated and certified by the Small Wind Certification Council (ICC-SWCC™), an ISO/IEC 17065 accredited Certification Body, in accordance with the Small Wind Turbine Certification Program, as defined in *ICC-SWCC Rules for Wind Turbine Listing Reports*. This award of certification is subject to all terms and conditions of the current SWT Program Agreement and the documents incorporated therein by reference. This document must be reproduced in its entirety.

Products: Small Wind Turbines—electricity-producing wind turbines with a swept area up to 200 m²
Reference Standard: AWEA Small Wind Turbine Performance & Safety Standard (AWEA 9.1–2009)

Listee: **SD Wind Energy Ltd.** www.sd-windenergy.com
Warhead, Stewarton +44 (0)1560 486 570
Ayrshire, KA3 5LH
Scotland
United Kingdom

Model: **SD6** (240 VAC, 1-phase, 60 Hz)

Changes to the design of this wind turbine are to be approved by ICC-SWCC. If changes are made to the turbine without approval, this Certificate is not valid.

The specifications of the certified wind turbine, relevant to this Certificate, are provided on the following page.

Shawn Martin

Vice President of Technical Services, ICC-SWCC

ICC-SWCC™

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Wind Turbine Specification:

Turbine Parameters

Manufacturer	SD Wind Energy, Ltd.
Model	SD6
Power Form	240 VAC, 1-phase, 60 Hz
Rotor Diameter	5.5 m
Rotor Swept Area.....	23.7 m ²
Cut-In Wind Speed.....	2.5 m/s
Cut-Out Wind Speed	N/A
Maximum Power	6.135 kW
Maximum Voltage	600VAC, 3-phase from turbine
Maximum Current	22 ADC into inverter 23 A RMS from inverter

Turbine Ratings

AWEA Rated Annual Energy @ 5 m/s	8,950 kWh
AWEA Rated Sound Level	43.1 dB(A)
AWEA Rated Power.....	5.2 kW @ 11 m/s
Peak Power.....	6.1 kW @ 17 m/s

Design and Duration

Turbine design calculations comply with AWEA Standard 9.1 – 2009 for an IEC Class I SWT with an average wind speed (V_{ave}) of 10 m/s and reference wind speed (V_{ref}) of 50 m/s.

As a result of the particular wind distribution that occurred during the test period, it was not possible to demonstrate IEC Class I wind conditions. The turbine duration test complies with AWEA Standard 9.1 – 2009 for an IEC Class II SWT with an average wind speed (V_{ave}) of 8.5 m/s and reference wind speed (V_{ref}) of 42.5 m/s.