

Warhead, Stewarton Ayrshire, KA3 5LH Scotland United Kingdom

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

#### CONDITIONS:

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.

- 1. The turbine listed in this ICC-SWCC certification has been evaluationed to the AWEA 9.1-2009 standard and has been found to comply in accordance with the ICC-SRCC Rules for Wind Turbine Listing Reports. It is valid between the date of issuance and expriation and is subject to annual renewal Certification validity should be confirmed on the ICC-SWCC website at www.smallwindcertification.org
- 2. Performance ratings are provided in accordance with the methodologies and conditions established by the *AWEA 9.1* standard. Actual results will vary based on the specific usage, installation and local environmental conditions.
- The certified turbine must be installed in accordance with the manufacturer's published installation instruction and applicable codes. Certification does not address the turbine tower, foundation or the electrical safety.
- 4. Wind turbine manufactured by SD Wind in Scotland, United Kingdom under a quality control program subject to periodic evaluation in accordance with the requirements of ICC-SWCC.



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# ICC-SWCC™ CERTIFICATION SWCC-11-04



#### 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 <sup>2</sup>
Cut-In Wind Speed	2.5 m/s
Cut-Out Wind Speed	N/A
Maximum Power	6.135 kW
Maximum Current	22 ADC into, 23 AAC from inverter
Maximum Voltage	600 VAC (3-phase) from inverter

## PERFORMANCE 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 ASSESSMENT**

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 50.0 m/s.

### DURATION TESTING AND IEC CLASSIFICATION

Turbine design and duration test comply 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. As a result of the particular wind distribution that occurred during the Duration Test period, it was not possible to demonstrate IEC Class I wind conditions.

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Vice President of Technical Services, ICC-SWCC



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