CERTIFIED SOLAR COLLECTOR

SUPPLIER:
Next Generation Energy
75 Waneka Parkway
Lafayette, CO 80026
www.ngeus.com

BRAND: Sun Bandit
MODEL: SBES 200/400/600/800 Collector
COLLECTOR TYPE: PV Water Heating
CERTIFICATION #: 10001952
Original Certification: May 15, 2015
Expiration Date: February 13, 2025

In Accordance with: **SRCC Standard 100-2014-07**

The solar collector listed below has been evaluated by the Solar Rating & Certification Corporation™ (ICC-SRCC™), an ISO/IEC 17065 accredited and EPA-recognized Certification Body, in accordance with SRCC OG-100, Operating Guidelines and Minimum Standards for Certifying Solar Collectors, and has been certified by ICC-SRCC. This award of certification is subject to all terms and conditions of the Program Agreement and the documents incorporated therein by reference. This document must be reproduced in its entirety.

COLLECTOR THERMAL PERFORMANCE RATING

Kilowatt-hours (thermal) Per Collector Per Day				Thousands of Btu Per Collector Per Day			
Climate →	High Radiation (6.3 kWh/m^2.day)	Medium Radiation (4.7 kWh/m^2.day)	Low Radiation (3.1 kWh/m^2.day)	Climate →	High Radiation (2000 Btu/ft^2.day)	Medium Radiation (1500 Btu/ft^2.day)	Low Radiation (1000 Btu/ft^2.day)
Ambient 10°C	6.3	4.9	3.3	Ambient 50°F	21.4	16.8	11.2
Ambient 20°C	6.1	4.8	3.2	Ambient 68°F	21.0	16.2	10.8
Ambient 30°C	6.0	4.6	3.1	Ambient 86°F	20.4	15.7	10.4

Collector Description: PV modules connected to an inverter powering an AC heating element

PV ARRAY SPECIFICATIONS	
Number of Modules: 4	Nominal Output per Module (STC): 280 W
Any PV module is acceptable that meets all of the following conditions:	
P_{max} >= 280 W	Array output is within inverter operating limits

INVERTER SPECIFICATIONS	
Manufacturer: Next Generation Energy	Brand: Sun Bandit
Model: AC Micro-Grid Inverter	Number of Inverters: 2
Input Power (STC): 360 - 620 W	MPPT range: 22 V to 45 V
Operating Range: 16 V to 45 V	Maximum Input DC: 55 V
Maximum Input: 21 A	

HEATING ELEMENT SPECIFICATIONS	
Heating Element Power: 3000 W at 20 - 150 V AC	Number of Elements: 1

Test Lab: Exova Canada, Inc.	Test Report Date: February 13, 2015
Tested in accordance with: SRCC TM-1	Test conducted: Indoors

Remarks: Ratings are based on the output of new PV modules. They do not account for degradation of the PV output over time.

Shawn Martin

Technical Director, ICC-SRCC

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