



## CERTIFIED SOLAR COLLECTOR

**SUPPLIER:**  
 Aéronergie, Inc.  
 2000 André-C Hamel  
 Drummondville, Québec J2C8B1 Canada  
 www.aeronergie.com

**BRAND:** Aéronergie  
**MODEL:** UnitAir  
**COLLECTOR TYPE:** Air Transpired  
**CERTIFICATION #:** 10001797  
**Original Certification:** March 17, 2013  
**Expiration Date:** March 11, 2023

The solar collector listed below has been evaluated by the Solar Rating & Certification Corporation™ (SRCC™), an ANSI 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 the 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 EFFICIENCY and TEMPERATURE RISE (K at 910 W/m <sup>2</sup> ) (based on aperture area)									
Air Flow Rate	Wind Speed	0.0 m/s (0.0 mph)		0.8 m/s (1.8 mph)		1.9 m/s (4.3 mph)		3.8 m/s (8.5 mph)	
		η	Δ T	η	Δ T	η	Δ T	η	Δ T
1.2 scmm/m <sup>2</sup> (4 scfm/ft <sup>2</sup> )				0.56	19.8	0.45	15.9	0.29	10.4
2.1 scmm/m <sup>2</sup> (7 scfm/ft <sup>2</sup> )				0.69	14.1	0.58	12.0	0.44	9.2
3.1 scmm/m <sup>2</sup> (10 scfm/ft <sup>2</sup> )				0.74	10.8	0.65	9.4	0.53	7.7

TESTED COLLECTOR SPECIFICATIONS					
Gross Area:	4.497 m <sup>2</sup>	48.41 ft <sup>2</sup>	Dry Weight:	Not measured	
Net Aperture Area:	4.497 m <sup>2</sup>	48.41 ft <sup>2</sup>	Leakage Rate:	Not measured	
Absorber Area:	4.497 m <sup>2</sup>	48.41 ft <sup>2</sup>	Test Pressure:	-0.44 kPa	

### ADDITIONAL INFORMATION

SOLAR COLLECTOR CONSTRUCTION DETAILS OF THE TESTED COLLECTOR					
Gross Length:	2.444 m	Gross Width:	1.840 m	Gross Depth:	0.185 m

COLLECTOR MATERIALS					
Outer Cover:	None	Enclosure back:	Wood	Back Insulation:	Fiber
Inner Cover:	None	Enclosure side:	Steel	Side Insulation:	Fiber
Absorber Description:	Steel Plate		Flow Pattern:	Plate	
Absorber Configuration:	Corrugated, Perforated		Impact Safety Rating:	0	
Absorber Coating:	Black Paint		Absorptivity, Emissivity:	Not measured	

Test Lab:	Exova Canada, Inc.	Test Report Date:	August 09, 2011
Test Report Number:	1 0-06-S0009RV1	Test conducted:	Indoors
Test Fluid:	Air	Tested in accordance with:	CSA F378-87
Back insulation during test	Foam	Back losses included in efficiency:	Yes

**Remarks:**

1. Performance is unreliable if the collector is used at a pressure drop of less than 25 Pa because wind influences the performance unpredictably
2. Wind impact on efficiency should not be extrapolated to large-scale systems because the ratio of wind-blown edge loss to gain across the surface area is diminished for large vs. small collectors (arrays).

*Shawn Martin*

Technical Director, ICC-SRCC

