



CERTIFIED SOLAR COLLECTOR

SUPPLIER:
 Matrix Energy
 296 Labrosse
 Pointe Claire, Quebec
 Canada H9R 5L8
 Matrixenergy.com

BRAND: MatrixAir
MODEL: DT
COLLECTOR TYPE: Air Transpired
CERTIFICATION #: 2011-123A
Original Certification: July 2, 2012
Expiration Date: June 12, 2022

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. All sizes of this collector model are certified. This document must be reproduced in its entirety.

COLLECTOR THERMAL EFFICIENCY and TEMPERATURE RISE (K at 926 W/m ²) (based on aperture area)									
Wind Speed	0.0 m/s (0.0 mph)		0.9 m/s (2.0 mph)		1.6 m/s (3.6 mph)		3.0 m/s (6.7 mph)		
	Air Flow Rate	η	ΔT	η	ΔT	η	ΔT	η	ΔT
	1.2 scmm/m ² (4.0 scfm/ft ²)	0.67	24.3	0.53	19.8	0.40	14.5	0.21	7.9
	2.1 scmm/m ² (7.0 scfm/ft ²)	0.79	16.5	0.69	15.0	0.64	13.3	0.35	7.7
	3.4 scmm/m ² (11.0 scfm/ft ²)	0.85	11.7	0.74	10.2	0.73	9.7	0.54	7.6
	4.3 scmm/m ² (14.0 scfm/ft ²)	0.88	9.3	0.75	8.7	0.73	8.0	0.65	5.8

TESTED COLLECTOR SPECIFICATIONS					
Gross Area:	1.908 m ²	20.54 ft ²	Dry Weight:	Not measured	
Net Aperture Area:	1.748 m ²	18.82 ft ²	Leakage Rate:	Not measured	
Absorber Area:	1.748 m ²	18.82 ft ²	Test Pressure:	Not conducted	

ADDITIONAL INFORMATION

SOLAR COLLECTOR CONSTRUCTION DETAILS OF THE TESTED COLLECTOR					
Gross Length:	3.058 m	Gross Width:	0.624 m	Gross Depth:	0.54 m

COLLECTOR MATERIALS					
Outer Cover:	None	Enclosure back:	Steel	Back Insulation:	Fiber
Inner Cover:	None	Enclosure side:	Steel	Side Insulation:	Fiber
Absorber Description:	Perforated plate	Flow Pattern:	Plate		
Absorber Configuration:	Triangular	Impact Safety Rating:	0		
Absorber Coating:	Black paint	Absorptivity	0.94	Emissivity:	0.88

Test Lab:	Exova Canada, Inc.	Test Report Date:	June 12, 2010
Test Report Number:	09-08-0028	Test conducted:	Indoors
Test Fluid:	Air	Tested in accordance with:	CSA F378-87
Back insulation during test	None	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).

Jim Higgins

Technical Director

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