


<p>SOLAR COLLECTOR CERTIFICATION AND RATING</p>  <p>SRCC OG-100</p>	<p>CERTIFIED SOLAR COLLECTOR</p> <p>SUPPLIER: Thermo Dynamics, Ltd. 101 Frazee Avenue Dartmouth, Nova Scotia B3B 1Z4 Canada</p> <p>MODEL: G32-P</p> <p>COLLECTOR TYPE: Glazed Flat-Plate</p> <p>CERTIFICATION#: 2006005A</p>
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COLLECTOR THERMAL PERFORMANCE RATING

Megajoules Per Panel Per Day				Thousands of BTU Per Panel Per Day			
CATEGORY (Ti-Ta)	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	CATEGORY (Ti-Ta)	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
A (-5 °C)	41.8	31.6	21.4	A (-9 °F)	39.6	29.9	20.3
B (5 °C)	37.3	27.0	16.9	B (9 °F)	35.3	25.6	16.0
C (20 °C)	30.4	20.4	10.4	C (36 °F)	28.8	19.3	9.9
D (50 °C)	17.2	8.1	1.1	D (90 °F)	16.3	7.7	1.1
E (80 °C)	5.8	0.2	0.0	E (144 °F)	5.5	0.2	0.0

A- Pool Heating (Warm Climate) B- Pool Heating (Cool Climate) C- Water Heating (Warm Climate) D- Water Heating (Cool Climate) E- Air Conditioning

Original Certification Date: 12-MAR-07

COLLECTOR SPECIFICATIONS

Gross Area:	2.982 m ²	32.10 ft ²	Net Aperture Area:	2.78 m ²	29.96 ft ²
Dry Weight:	43.5 kg	96. lb	Fluid Capacity:	2.3 liter	0.6 gal
Test Pressure:	1103. KPa	160. psig			

COLLECTOR MATERIALS

Frame:	Aluminum
Cover (Outer):	Low Iron Tempered Glass
Cover (Inner):	None

Pressure Drop

Flow		AP	
ml/s	gpm	Pa	in H ₂ O
20.00	0.32	73.00	0.29
50.00	0.79	227.8	0.9
80.00	1.27	437.10	1.76

Absorber Material:	Tube - Copper / Plate - Aluminum	Insulation Side:	Fiberglass
Absorber Coating:	Moderately Selective Black Paint	Insulation Back:	Fiberglass

TECHNICAL INFORMATION

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]	Y INTERCEPT	SLOPE
S I UNITS: $\eta = 0.689 - 3.84750 (P)/I - 0.01739 (P)^2/I$	0.700	-4.934 W/m².°C
I P UNITS: $\eta = 0.689 - 0.67774 (P)/I - 0.00170 (P)^2/I$	0.700	-0.869 Btu/hr.ft².°F

Incident Angle Modifier [(S)=1/cosθ - 1, 0°<θ<=60°]	Model Tested:	G32-P
Kα = 1 -0.492 (S) -0.129 (S) ²	Test Fluid:	Water
Kα = 1 -0.36 (S) Linear Fit	Test Flow Rate:	59.6 ml/s 0.94 gpm

REMARKS:

January, 2010

Certification must be renewed annually, For current status contact:
SOLAR RATING & CERTIFICATION CORPORATION
c/o FSEC ♦ 1679 Clearlake Road ♦ Cocoa, FL 32922 ♦ (321) 638-1537 ♦ Fax (321) 638-1010

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