


SOLAR COLLECTOR CERTIFICATION AND RATING  SRCC OG-100	CERTIFIED SOLAR COLLECTOR SUPPLIER: Apricus Inc. 965 West Main Street Branford, CT06405 USA MODEL: AP-30 COLLECTOR TYPE: Tubular CERTIFICATION#: 2007033A
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COLLECTOR THERMAL PERFORMANCE RATING

Megajoules Per Panel Per Day				Thousands of BTU Per Panel Per Day			
CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY	CATEGORY	CLEAR DAY	MILDLY CLOUDY	CLOUDY DAY
A (-5 °C)	48.7	36.7	24.8	A (-9 °F)	46.1	34.8	23.5
B (5 °C)	46.5	34.5	22.5	B (9 °F)	44.0	32.7	21.4
C (20 °C)	42.9	30.9	19.0	C (36 °F)	40.6	29.3	18.0
D (50 °C)	36.0	24.2	12.4	D (90 °F)	34.2	23.0	11.8
E (80 °C)	28.6	16.8	6.2	E (144 °F)	27.1	16.8	6.2

Original Certification Date: 24-AUG-09

COLLECTOR SPECIFICATIONS

Gross Area:	4.158 m ²	44.76 ft ²	Net Aperature Area: 2.99 m ²	32.21 ft ²
Dry Weight:	96.2 kg	212. lb	Fluid Capacity:	1 liter 0.3 gal
Test Pressure:	1103. KPa	160. psg		

COLLECTOR MATERIALS

Frame:	Stainless Steel
Cover (Outer):	Glass Vacuum Tube
Cover (Inner):	None

Pressure Drop

Flow		ΔP	
ml/s	gpm	PA	in H ₂ O
20.00	0.32	105.00	0.42
50.00	0.79	524.0	2.1
80.00	1.27	1257.00	5.05

Absorber Material:	Tube - Copper / Plate - Aluminum
Absorber Coating:	Aluminum Nitride

Insulation Side:	Vacuum
Insulation Back:	Vacuum

TECHNICAL INFORMATION

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]				Y INTERCEPT	SLOPE
S I UNITS:	$\eta = 0.456$	$-1.35090 (P)/I$	$-0.00381 (P)^2/I$	0.458	-1.58 W/m².°C
I P UNITS:	$\eta = 0.456$	$-0.23796 (P)/I$	$-0.00037 (P)^2/I$	0.458	-0.30 Btu/hr.ft².°F
Incident Angle Modifier [(S)=1/cosθ - 1, 0°<θ<=60°]			Model Tested:	100-2007-033A	
Kα = 1	1.306 (S)	-1.034 (S) ²	Test Fluid:	Water	
Kα = 1	0.23 (S)	Linear Fit	Test Flow Rate:	83 ml/s 1.32 gpm	

REMARKS: Tested with long axis of tubes oriented north-south. IAM perpendicular to the tubes is listed above. IAM parallel to the tubes = 1.0 - 0.09(S)

December, 2009
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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