

CERTIFIED SOLAR COLLECTOR

SOLAR COLLECTOR
CERTIFICATION AND RATING



SRCC OG-100

SUPPLIER:

Lochinvar Corporation
300 Maddox Simpson Pkwy
Lebanon, TN 37090
USA

MODEL:

SCH065

COLLECTOR TYPE: Lochinvar/TiSun
Glazed Flat-Plate

CERTIFICATION#: 2010061B

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)	89.7	67.9	46.2	A (-9 °F)	85.1	64.3	43.7
B (5 °C)	81.7	59.8	38.1	B (9 °F)	77.4	56.7	36.1
C (20 °C)	69.1	47.7	26.4	C (36 °F)	65.5	45.2	25.0
D (50 °C)	44.5	25.1	7.0	D (90 °F)	42.1	23.8	6.7
E (80 °C)	21.7	5.9	0.0	E (144 °F)	20.6	5.6	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: 30-AUG-10

COLLECTOR SPECIFICATIONS

Gross Area:	6.100 m ²	65.66 ft ²	Net Aperture Area:	5.43 m ²	58.45 ft ²
Dry Weight:	140.0 kg	309. lb	Fluid Capacity:	5.4 liter	1.4 gal
Test Pressure:	1103. KPa	160. psg			

COLLECTOR MATERIALS

Frame:	Aluminum
Cover (Outer):	Low Iron Tempered Glass
Cover (Inner):	None
Absorber Material:	Tube - Copper / Plate - Aluminum Sheet
Absorber Coating:	Selective Vapor Deposition

Pressure Drop

Flow		ΔP	
ml/s	gpm	Pa	in H ₂ O

Insulation Side: Mineral Wool
Insulation Back: Rigid Foam

TECHNICAL INFORMATION

Efficiency Equation [NOTE: Based on gross area and (P)=Ti-Taj]		Y INTERCEPT	SLOPE
S I	$\eta = -3.33970 (P)/I - 0.01229 (P)^2/I$	0.732	-4.068 W/m².°C
UNITS:	0.726		
I P	$\eta = -0.58829 (P)/I - 0.00120 (P)^2/I$	0.732	-
UNITS:	0.726		0.717 Btu/hr.ft².°F

Incident Angle Modifier [(S)=1/cosθ - 1, 0°<θ<=60°]	Model Tested:	2007052A
Kα = 1	Test Fluid:	Water
Kα = 1	Test Flow Rate:	2.6 ml/s.m ² 0.0039 gpm/ft ²

REMARKS:

September, 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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