

CERTIFIED SOLAR COLLECTOR

SOLAR COLLECTOR
CERTIFICATION AND RATING



SRCC OG-100

SUPPLIER:

Lochinvar Corporation
300 Maddox Simpson Pkwy
Lebanon, TN 37090
USA

MODEL:

SCH130

COLLECTOR TYPE: Lochinvar/TiSun
Glazed Flat-Plate

CERTIFICATION#: 2010061D

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)	179.2	135.5	92.2	A (-9 °F)	169.8	128.5	87.3
B (5 °C)	163.1	119.5	76.1	B (9 °F)	154.6	113.2	72.1
C (20 °C)	138.0	95.3	52.8	C (36 °F)	130.8	90.3	50.1
D (50 °C)	88.9	50.3	14.2	D (90 °F)	84.3	47.7	13.4
E (80 °C)	43.5	12.0	0.0	E (144 °F)	41.2	11.3	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:	12.100 m ²	130.24 ft ²	Net Aperture Area:	10.86 m ²	116.89 ft ²
Dry Weight:	278.0 kg	613. lb	Fluid Capacity:	10.8 liter	2.9 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	$\eta = 0.731 - 3.35460 (P)/I - 0.01236 (P)^2/I$	0.737	-4.087 W/m ² .°C
I P	$\eta = 0.731 - 0.59091 (P)/I - 0.00121 (P)^2/I$	0.737	0.720 Btu/hr.ft ² .°F

Incident Angle Modifier [(S)=1/cosθ - 1, 0°<θ<=60°]	Model Tested:	2007052A
Kα = 1	Test Fluid:	Water
Kα = 1	Test Flow Rate:	1.3 ml/s.m ² 0.0020 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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