


SOLAR COLLECTOR CERTIFICATION AND RATING  SRCC OG-100	CERTIFIED SOLAR COLLECTOR SUPPLIER: Viessmann Manufacturing Company (US) Inc. 45 Access Road Warwick, RI 02886 USA MODEL: 300-T, SP3 -3m2 COLLECTOR TYPE: Tubular CERTIFICATION#: 2005020B
--	--

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)	45.6	34.3	23.1	A (-9 °F)	43.2	32.5	21.9
B (5 °C)	44.0	32.8	21.6	B (9 °F)	41.7	31.1	20.4
C (20 °C)	41.5	30.3	19.0	C (36 °F)	39.3	28.7	18.0
D (50 °C)	36.5	25.3	14.2	D (90 °F)	34.6	24.0	13.5
E (80 °C)	31.1	20.0	9.6	E (144 °F)	29.5	18.9	9.1

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: 09-AUG-06

COLLECTOR SPECIFICATIONS

Gross Area:	4.287 m ²	46.15 ft ²	Net Aperature Area: 3.76 m ² 40.47 ft ²
Dry Weight:	68.0 kg	150. lb	Fluid Capacity: 1.8 liter 0.5 gal
Test Pressure:	130. KPa	19. psg	

COLLECTOR MATERIALS

Frame:	Aluminum
Cover (Outer):	Glass Vacuum Tube
Cover (Inner):	None

Pressure Drop

Flow		ΔP	
ml/s	gpm	Pa	in H ₂ O

Absorber Material:	Tube - Copper / Plate - Copper fin
Absorber Coating:	Sputtered cermet

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:	$\eta = 0.508$	$-0.91560 (P)/I$	$-0.00300 (P)^2/I$	0.509	-1.095 W/m².°C
I P UNITS:	$\eta = 0.508$	$-0.16128 (P)/I$	$-0.00029 (P)^2/I$	0.509	-0.193 Btu/hr.ft².°F
Incident Angle Modifier [(S)=1/cosθ - 1, 0°<θ<=60°]			Model Tested:	Vitosol 300T-SP3 2m2	
Kα = 1	0.519 (S)	$-0.743 (S)^2$	Test Fluid:	Propylene Glycol & Water	
Kα = 1	-0.26 (S)	Linear Fit	Test Flow Rate:	0 ml/s 0.00 gpm	

REMARKS: Collector tested with long axis of tubes oriented north-south. IAM perpendicular to the tubes is listed above.
IAM parallel to the tubes = 1.0 - 0.31(S)

March, 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

[Return to Search](#)