

## Results of Annual Simulation

Installed Collector Power:	3.84 kW	
Collector Surface Area Irradiation:	4.82 MWh	1,323.17 kWh/m <sup>2</sup>
Energy Produced by Collectors:	2,022.88 kWh	555.74 kWh/m <sup>2</sup>
Energy Produced by Collector Loop:	1,885.23 kWh	517.92 kWh/m <sup>2</sup>
DHW Heating Energy Supply:	2347.45 kWh	
Solar Contribution to DHW:	1885.23 kWh	
Energy from Auxiliary Heating:	970.83 kWh	

<b>Natural Gas (H) Savings:</b>	<b>8,701,050,980.0</b>	<b>m<sup>3</sup></b>
<b>CO2 Emissions Avoided:</b>	<b>490.74</b>	<b>kg</b>
<b>DHW Solar Fraction:</b>	<b>66.0</b>	<b>%</b>
<b>Fractional Energy Savings (prEN 12976):</b>	<b>66.1</b>	<b>%</b>
<b>System Efficiency:</b>	<b>39.1</b>	<b>%</b>

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## Basic Data

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### Climate File

Location:	Dublin
Weather Data Record:	DUBLIN
Global Radiation Annual Total:	1117.82 kWh
Latitude:	53.43 °
Longitude:	6.25 °

### Domestic Hot Water

Average Daily Consumption:	160 l
Desired Temperature:	45 °C
Load Profile:	1 Hour Per Day
Cold Water Temperature:	February:7 °C / August:12 °C

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## System Components

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### Collector Loop

Manufacturer:	Ecologics
Type:	20 x 47mm Evacuated Tube
Number:	2.00
Total Gross Surface Area:	5.48 m <sup>2</sup>
Total Active Solar Surface Area:	3.64 m <sup>2</sup>
Inclination (Tilt Angle):	35 °
Azimuth:	0 °


### Bivalent (Twin Coil) DHW Tank

Manufacturer:	T*SOL Database
Type:	DHW Tank - 200
Volume:	200 l


### Auxiliary Heating

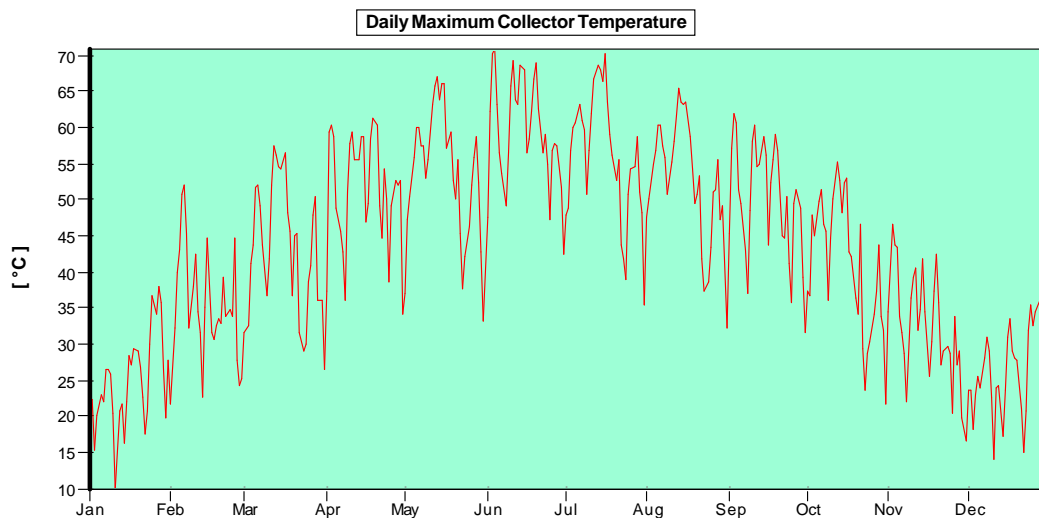
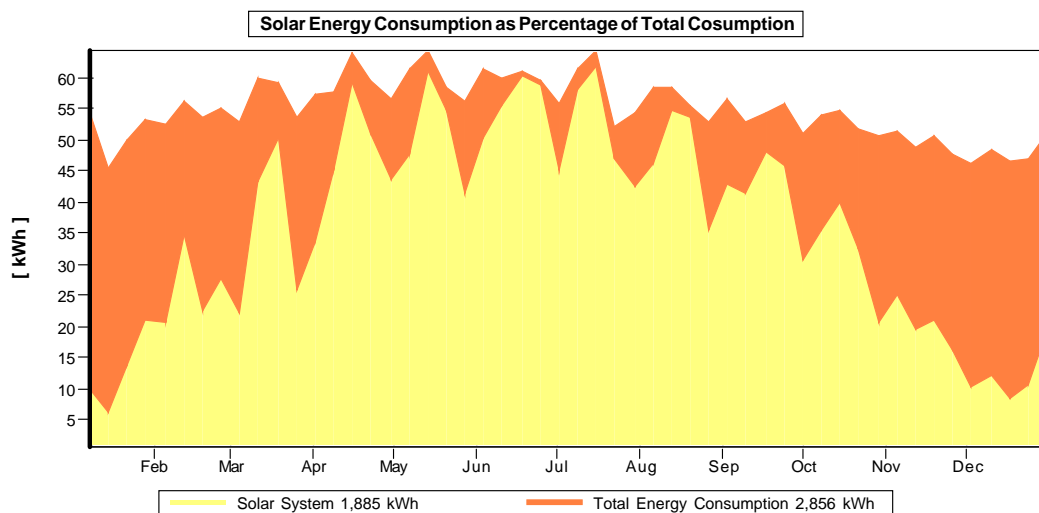
Manufacturer:	T*SOL Database
Type:	Gas Condensing Boiler - 9
Nominal Output:	9 kW

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 Original T\*SOL Database

 With Test Report

 Solar Keymark



These calculations were carried out by T\*SQL Pro 4.4 - the Simulation Programme for Solar Thermal Heating Systems. The results are determined by a mathematical model calculation with variable time steps of up to 6 minutes. Actual yields can deviate from these values due to fluctuations in the weather, consumption and other factors. The Schematic System Diagram above does not represent and cannot replace a full technical drawing of the solar system.