

Results of Annual Simulation

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|-------------------------------------|--------------|-----------------------------|
| Installed Collector Power: | 2.99 kW | |
| Collector Surface Area Irradiation: | 3.51 MWh | 1,088.37 kWh/m ² |
| Energy Produced by Collectors: | 2,053.20 kWh | 635.86 kWh/m ² |
| Energy Produced by Collector Loop: | 1,792.45 kWh | 555.11 kWh/m ² |

| | |
|--------------------------------|-------------|
| DHW Heating Energy Supply: | 3.72 MWh |
| Solar Contribution to DHW: | 1792.45 kWh |
| Energy from Auxiliary Heating: | 2357.91 kWh |

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|--|----------------------------|
| Natural Gas (H) Savings: | 230.2 m³ |
| CO₂ Emissions Avoided: | 414.52 kg |
| DHW Solar Fraction: | 43.2 % |
| Fractional Energy Savings (prEN 12976): | 45.1 % |
| System Efficiency: | 51.0 % |

Basic Data

Climate File

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|--------------------------------|------------|
| Location: | DUBLIN |
| Weather Data Record: | "Dublin" |
| Global Radiation Annual Total: | 948.71 kWh |
| Latitude: | 53.43 ° |
| Longitude: | 6.23 ° |

Domestic Hot Water

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|----------------------------|------------------------------|
| Average Daily Consumption: | 250 l |
| Desired Temperature: | 45 °C |
| Load Profile: | Detached House (morning max) |
| Cold Water Temperature: | February:8 °C / August:12 °C |

System Components

Collector Loop


| | |
|----------------------------------|----------------------|
| Manufacturer: | Thermomax Ltd. |
| Type: | HP 200 - 30 |
| Number: | 1.00 |
| Total Gross Surface Area: | 4.265 m ² |
| Total Active Solar Surface Area: | 3.229 m ² |
| Inclination (Tilt Angle): | 40 ° |
| Azimuth: | 0 ° |

Bivalent (Twin Coil) DHW Tank incl. Heating Element (3 kW)


| | |
|---------------|----------------|
| Manufacturer: | T*SOL Database |
| Type: | DHW Tank - 300 |
| Volume: | 300 l |

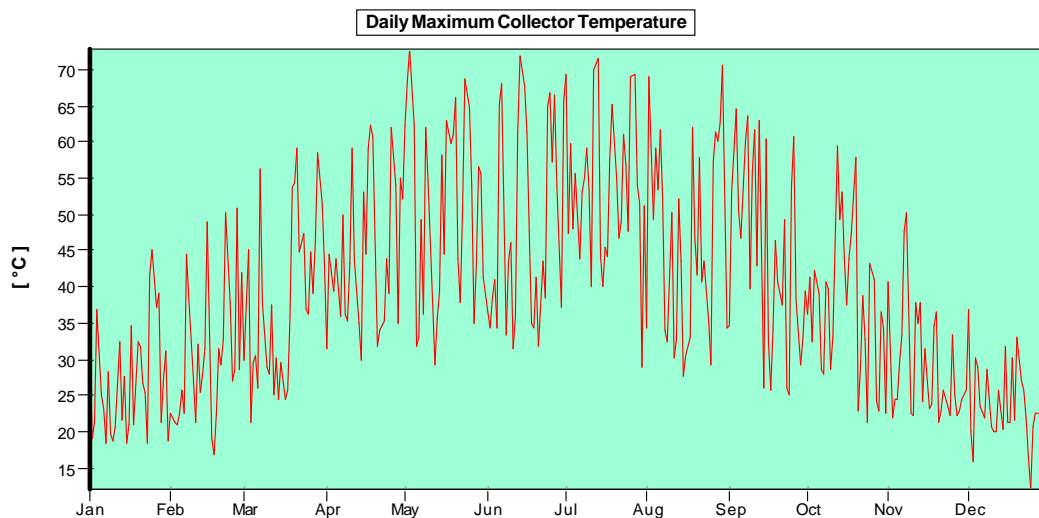
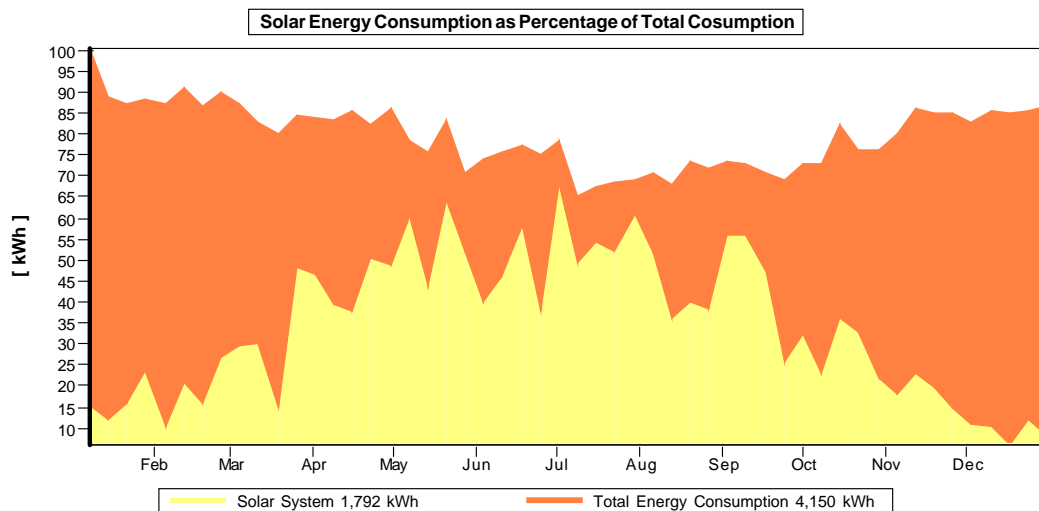
Auxiliary Heating

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

 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.