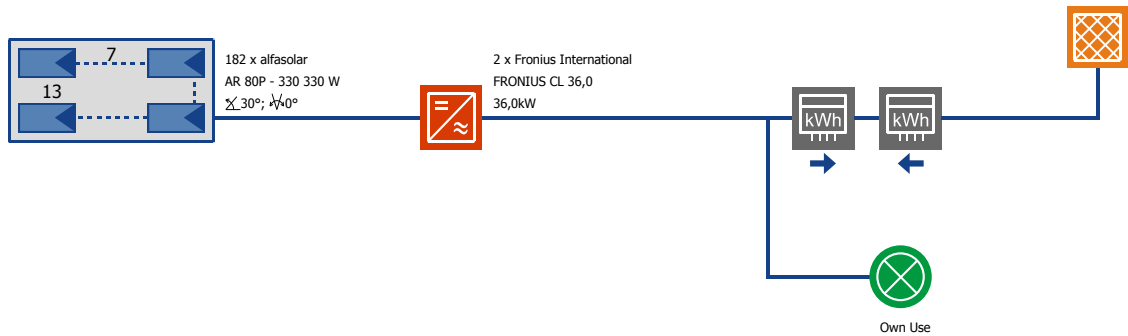


Please enter under Options-> Settings



Project Name: \_Solar System Design \_6.2.2017.\_Variant Reference: \_System Variant\_



Location:	Kutina
Climate Data Record:	Kutina (1986-2017)
PV Output:	60,06 kWp
Gross/Active PV Surface Area:	384,89 / 385,26 m <sup>2</sup>

PV Array Irradiation:	664.155 kWh
Energy Produced by PV Array (AC):	83.650 kWh
Energy to Grid:	83.649,7 kWh
Direct Use of PV Energy:	0 kWh
Energy from Grid:	201,7 kWh

System Efficiency:	12,6 %
Performance Ratio:	80,6 %
Inverter Efficiency:	94,3 %
PV Array Efficiency:	13,3 %
Specific Annual Yield:	1.389 kWh/kWp
CO2 Emissions Avoided:	73.990 kg/a

The results are determined by a mathematical model calculation. The actual yields of the photovoltaic system can deviate from these values due to fluctuations in the weather, the efficiency of modules and inverters, and other factors. The System Diagram above does not represent and cannot replace a full technical drawing of the solar system.

### System in Grid Connected Operation

Location:	Kutina	PV Output:	60,06 kWp
Climate Data Record:	Kutina	Gross/Active PV Surface Area:	384,9 m <sup>2</sup> / 385,3 m <sup>2</sup>
Number of Arrays:	1		

### Array 1: Array Name

Output:	60,06 kW	Ground Reflection:	20,0 %
Gross/Active Solar Surface Area:	384,9 m <sup>2</sup> / 385,3 m <sup>2</sup>	Output Losses due to...	
<b>PV Module</b>	182 x	deviation from AM 1.5:	1,0 %
Manufacturer:	alfasolar	deviation from Manufacturer's Specification:	2,0 %
Model:	AR 80P - 330	in Diodes:	0,5 %
Nominal Output:	330 W	due to Pollution:	0,0 %
Power Rating Deviation:	0 %	<b>Inverter</b>	2 x
Efficiency (STC):	15,6 %	Manufacturer:	Fronius International
No. of Modules in Series:	7	Model:	FRONIUS CL 36,0
MPP Voltage (STC):	283 V	Output:	36,00 kW
Orientation:	0,0 °	European Efficiency:	95,3 %
Inclination:	30,0 °	No. of MPP Trackers:	1
Mount:	with Ventilation	MPP Tracking:	230 V To 500 V
Shade:	No		

### Individual Appliances Total Consumption: 0 kWh

Individual Appliance 1	Model: User-Independent Appl.	0 kWh
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### Simulation Results for Total System

Irradiation onto Horizontal:	579.934 kWh	Own Use:	201,7 kWh
PV Array Irradiation:	664.155 kWh	Energy Produced by PV Array:	88.462 kWh
Irradiation minus Reflection:	641.654 kWh	Solar Fraction:	0,0 %
Energy from Inverter (AC):	83.650 kWh	System Efficiency:	12,6 %
Energy to Grid:	83.650 kWh	Performance Ratio:	80,6 %
Consumption Requirement:	0 kWh	Final Yield:	3,8 h/d
Direct Use of PV Energy:	0 kWh	Specific Annual Yield:	1.389 kWh/kWp
Energy from Grid:	202 kWh	Array Efficiency:	13,3 %

### Solar Energy Consumption as Percentage of Total Consumption

