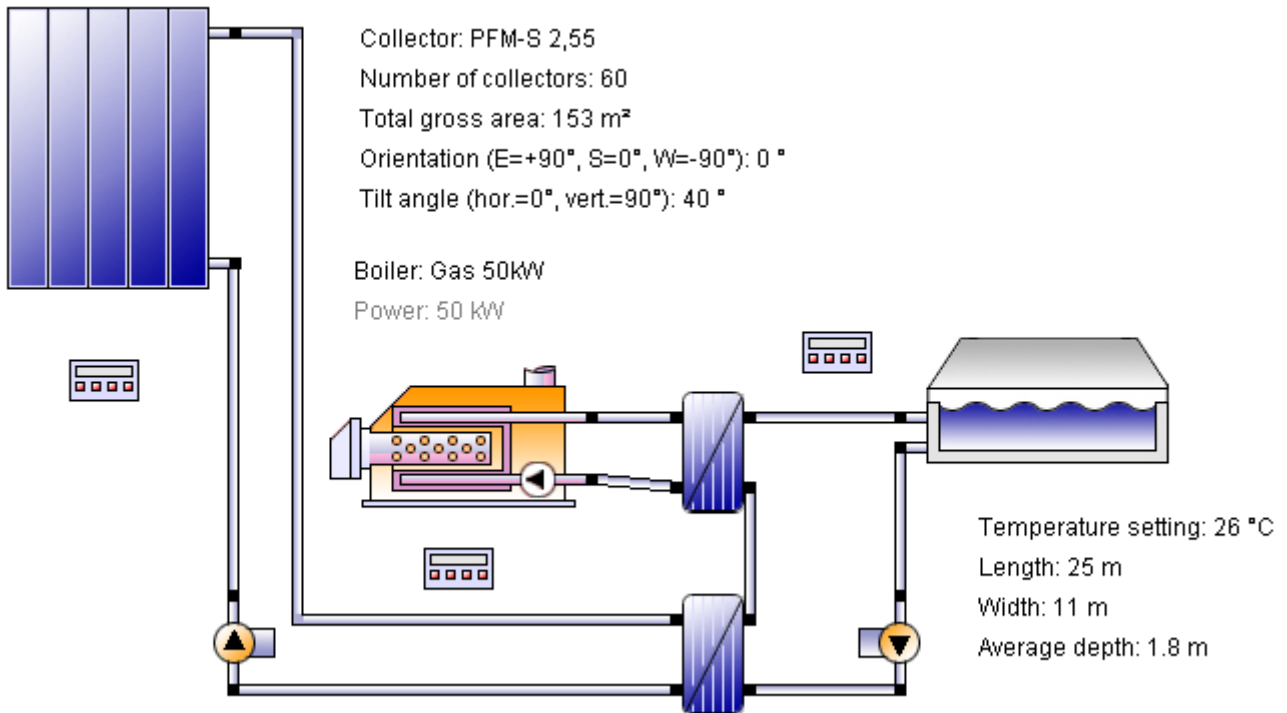


Short Report

Swimmingpool Almati_RR

14b: Schwimmbad (Solarthermie, Nachheizung)



This report has been created by:

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Location of the system

Kazakhstan
ALMATY
Longitude: 76.92°
Latitude: 43.32°
Elevation: 976 m

Short Report

System overview (annual values)

Total fuel and/or electricity consumption of the system [Etot]	37,603.5 kWh
Comfort demand	Energy demand covered

Overview solar thermal energy (annual values)

Collector area	153 m ²
Solar fraction total	78.1%
Total annual field yield	117,222.6 kWh
Collector field yield relating to gross area	766.2 kWh/m ² /Year
Collector field yield relating to aperture area	808.3 kWh/m ² /Year
Max. fuel savings	12.404,5 m ³ (gas): [Erdgas H]
Max. energy savings	130.247,3 kWh
Max. reduction in CO2 emissions	30.163,7 kg

Meteorological data-Overview

Average outdoor temperature	9.6 °C
Global irradiation, annual sum	1,262.4 kWh/m ²
Diffuse irradiation, annual sum	613.2 kWh/m ²

Component overview (annual values)

Boiler	Gas 50kW	
Power	kW	50
Total efficiency	%	88.4
Fuel and electricity consumption [Eaux]	kWh	37,150.4

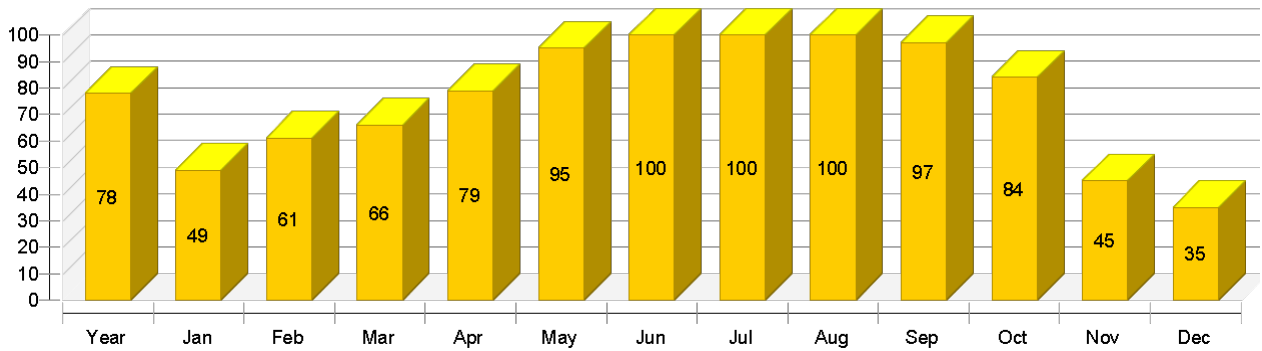
Collector	PFM-S 2,55	
Total gross area	m ²	153
Total aperture area	m ²	145.02
Tilt angle (hor.=0°, vert.=90°)	°	40
Orientation (E=+90°, S=0°, W=-90°)	°	0
Collector field yield [Qsol]	kWh	117,222.6
Irradiation onto collector area [Esol]	kWh	211,725.2

Short Report

Pool	Indoor pool	
Pool type		Indoor pool
Length	m	25
Width	m	11
Energy from/to the system [Quse]	kWh	149,059.3

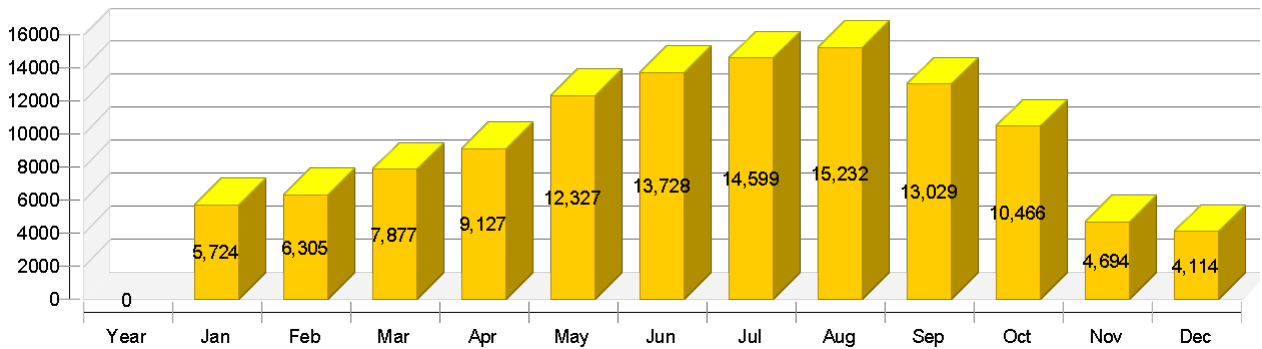
Solar fraction: fraction of solar energy to system [SFn]

%



Solar thermal energy to the system [Qsol]

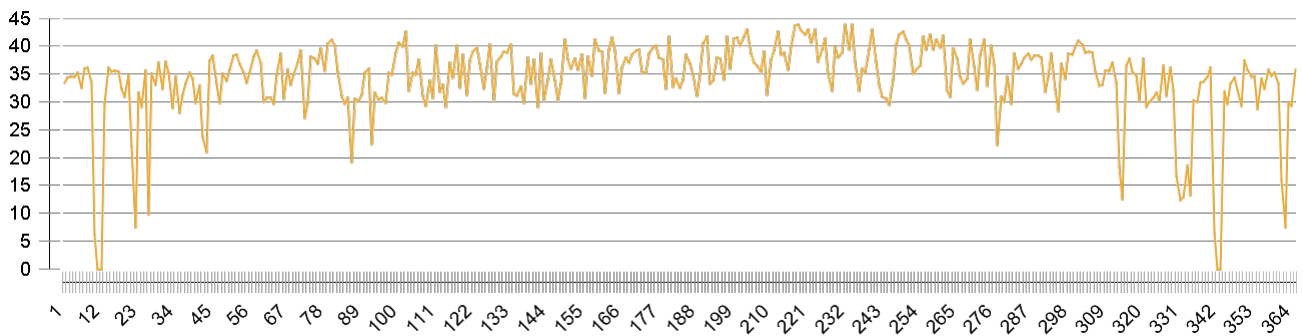
kWh



Short Report

Collector

Daily maximum temperature [°C]



Pool

Temperature [°C] - Daily average

