

Solar thermal

Collectors and systems of heat production from solar energy

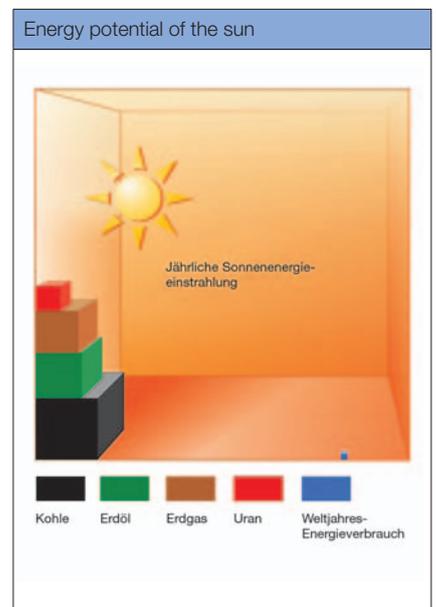
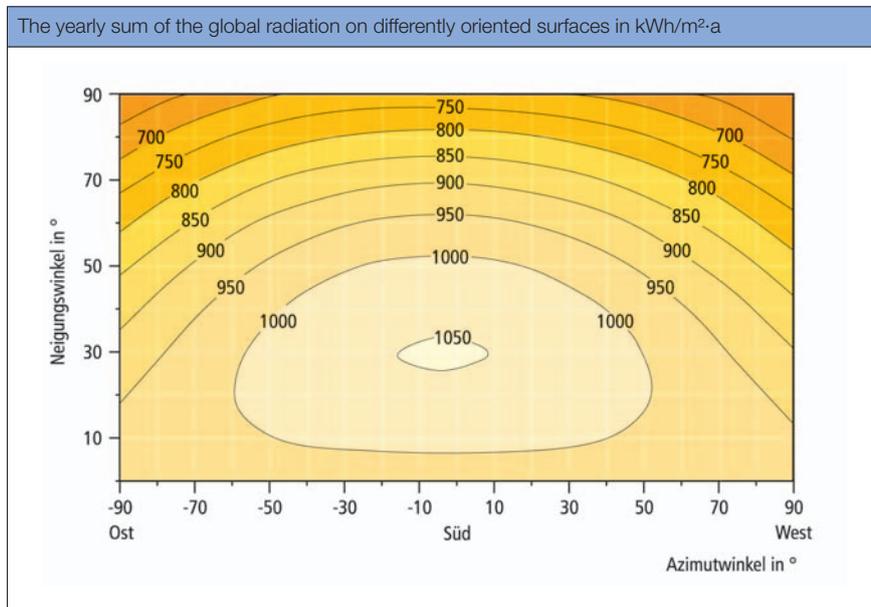


Regenerative Energie- und
Montagesysteme GmbH



Solar energy - gigantic source of energy - free of charge for you

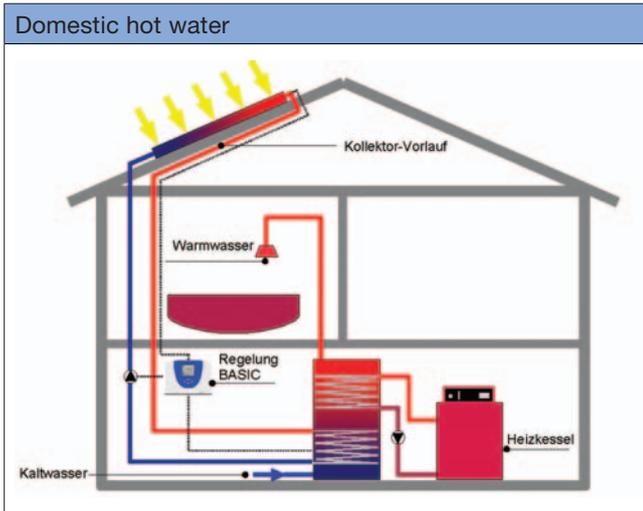
In many regions of the earth the yearly global sun radiation amount is higher than 1000 kWh/m². This corresponds approximately to the energy content of 100 l of oil, that the sun makes available free of charge. With the modern solar installation of REM, you can utilize part of this energy and reduce your energy costs.



Heat from solar energy represents one of the cleanest sources of energy. Within the first 12 to 16 months sun collectors are already generating the same amount of energy which was needed for their production. With a life span of more than 20 years the REM collectors avoid the emission of the greenhouse gas CO₂. Use this chance now to make your contribution towards clean energy production and preserve a clean and healthy environment for the next generation.

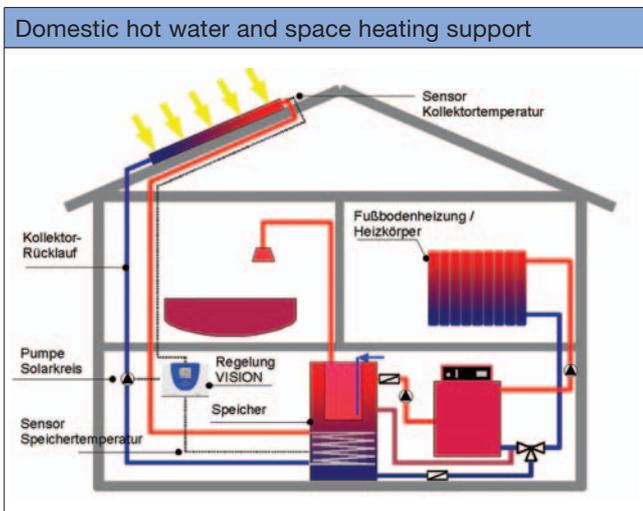


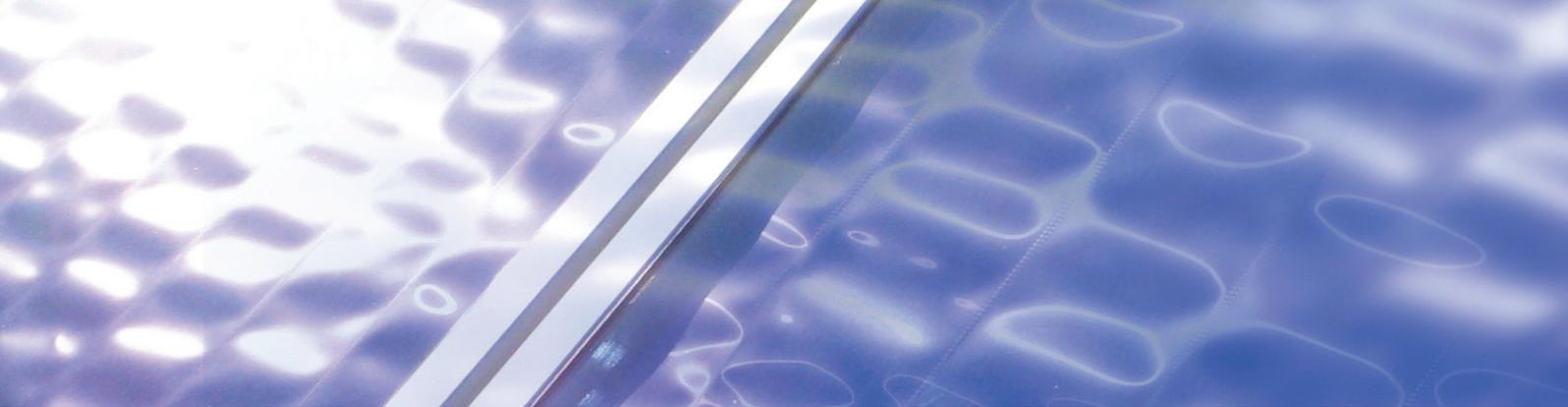
How a solar system works?



The special coated absorber surface picks up the solar radiation. The solar fluid is heated up and transfers the energy through an insulated pipe system to the hot water storage tank. The pump will only be activated by the electronic control system when the temperature inside the collector is higher than the temperature inside the tank. If additional energy is required through periods of overcast weather either electricity or a conventional boiler can be used.

If space heating is used an even higher efficiency will be achieved. For this purpose a larger storage tank is needed. Especially during transitional periods of spring and autumn the consumption of fossil fuel can be reduced. Depending on the energy consumption of the building savings of up to 50% can be attained.





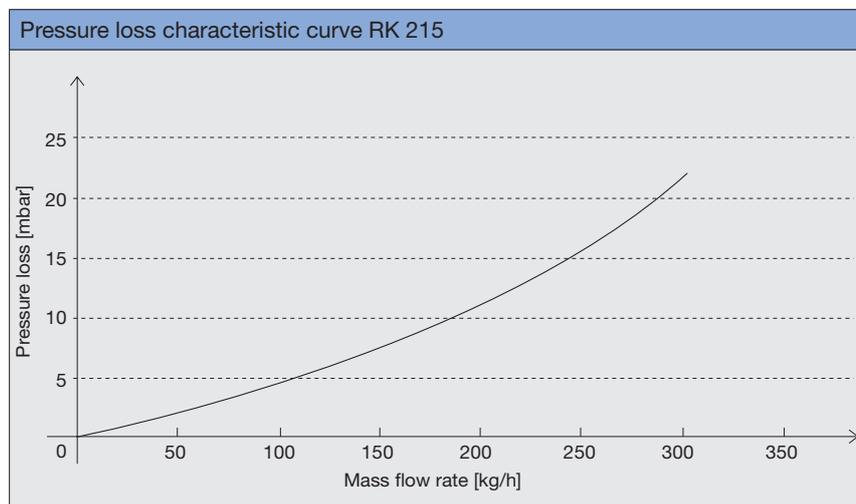
The collector

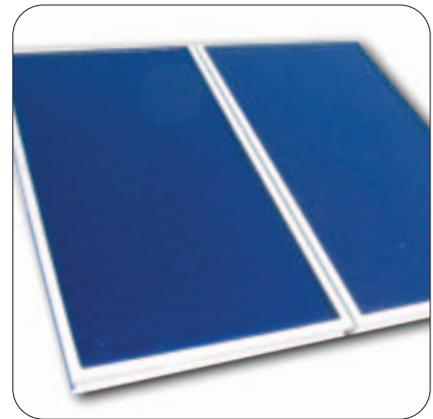
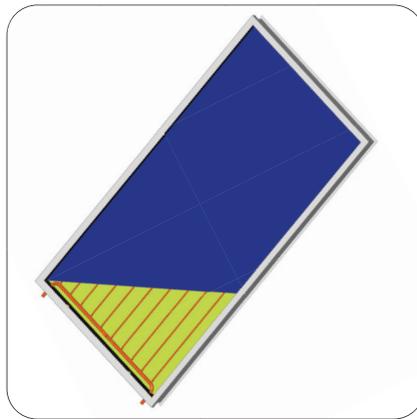
REM produces sun collectors exclusively in Germany and fulfil the highest standards of quality. The collectors are suitable for the use in hot water installations as well as for space heating support. Through constant supervision of the material used and the manufacturing process REM solar collectors guarantee the highest energy production during their long lifetime. The operational reliability of the special 4mm hail proofed security glass will not be influenced by weather or environment and even withstands heavy storms.

The double-walled aluminium frame and surrounding sealing of the glass with vulcanised edges made from EPDM guarantee tightness and stability on the roof. Moreover REM solar collectors are produced environmental friendly and can be easily recycled after their long operating time.

Constructive characteristics:	
Construction	Frame collector
Frame material	Aluminium profile double walled
Frame surface	Silver anodised
Absorber coating	Blue, high selective
Absorber material	Copper
Absorber construction	Harp
Number of harp tubes	10
Connection Absorber/Pipe	Laser welded
Isolation material	Rock wool
Covering	Solar security glass 4mm
Glass structure	clear
Connections	2 x Cu 18 mm

Indications techniques:		RK 215	RK 250
Length	mm	2010	2330
Width	mm	1770	1070
Height	mm	90	90
Collector surface area	m ²	2,15	2,50
Apertur area	m ²	1,90	2,22
mass	kg	40	45
Fluid content	l	1.1	1.2
max. pressure	bar	10	10

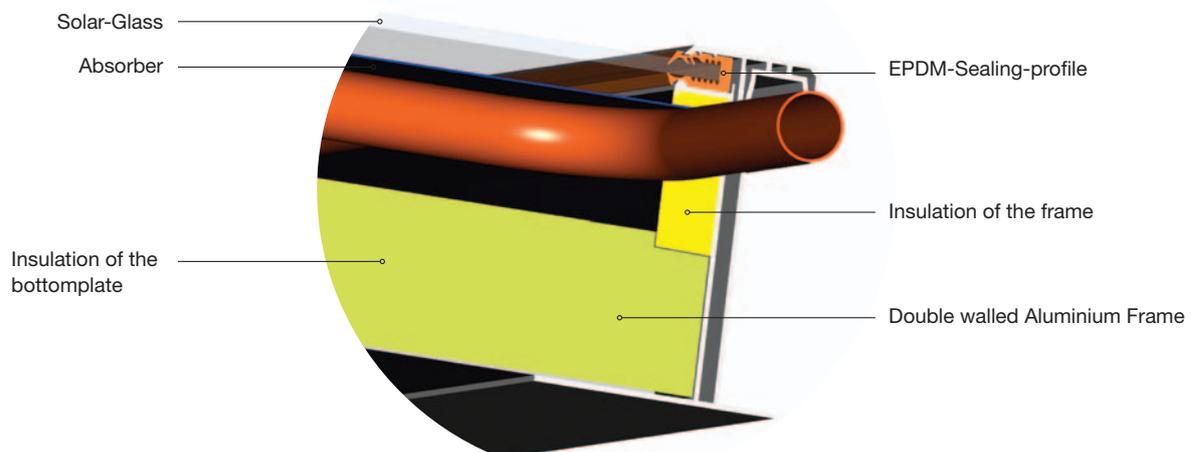




General description:

- Mounting system made from aluminium and stainless steel
- Various possibilities to mount the collectors on the roof
- 6 collectors mounted in a row
- Made in Germany
- Proofed according to EN 12975
- Applicable for Domestic hot water and heating support

Collector details:





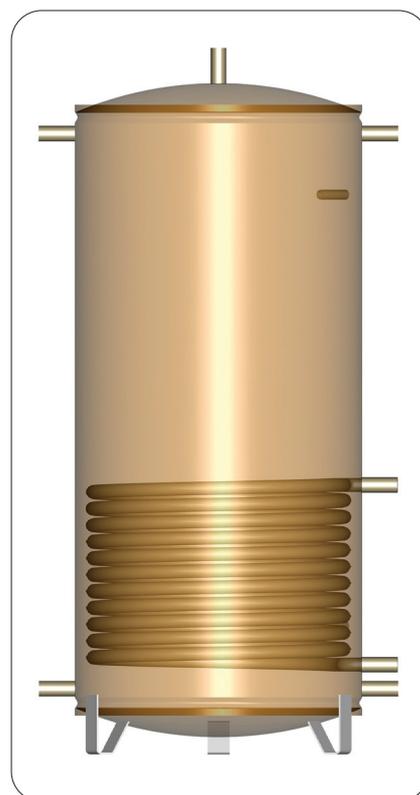
The complete REM-package

Optimal aligned accessory components provide an easy installation and handling. The reliable function of the complete system will give you great pleasure with saving energy for many Years. REM offers the adequate electronic control for many applications. From a simple domestic hot water system through to a complex Installation with solar space heating support and pool heating, REM provides you with the appropriate solution, compact and easy to use.



Tank systems

Die REM hot water tanks cover a good range of applications. The enamelled RTS solar tanks provide the highest warm water comfort using two integrated heat exchangers. The CFC-free Insulation reduces the heat loss to a minimum. In the field of buffers there are tanks either with, or without heat exchangers available. They are especially suitable for upgrading an existing heating system with solar heating support, or in combination with boilers which are fired with solid fuel or pellets. Solar tanks combining domestic hot water and heating support complete the REM product range.





System components

A circulation pump ensures the heat transfer from the collector to the hot water tank. A one-way valve, integrated in the pipe system, prevents circulation caused by convection. The circulation pump is especially designed for the use in solar systems. The easy removable insulating-elements and the integrated wall mount ensure a easy and quick installation of pump fittings even in constricted areas.



Connections

Metallic sealing are carried out for all connections within the solar circuit. Therefore ensuring no leakages even at high temperatures and high pressure.



Heat transfer fluid

Die REM heat transfer fluid is especially developed for the use with Solar-systems. With this non toxic medium the energy is transported from the collector to the tank. The special additives avoid pipe corrosion and prevent the fluid from freezing at temperatures as low as 27°C.



Mounting system

The REM mounting system offers you the right solution for different types of roofs. REM uses exclusively aluminium and stainless steel for the mounting system. This guarantees high stability and a long lifetime.



Supplied through:



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