

ROTEX GasSolarUnit: Renewable and sustainable.



# ROTEX GasSolarUnit – For heating and hot water.



**ROTEX**  
The heating!

# A strong team: Sun and gas condensing technology.

## Enjoy energy savings:

Energy is becoming more and more precious and expensive. The most economical use of energy and the meaningful use of renewable energies with simultaneous increase in comfort, cosiness and safety is our goal.

In order to meet these requirements we are looking to new product solutions and system concepts.

The new GasSolarUnits by ROTEX with their integrated structure and special properties, provide the prerequisites for you to enjoy saving energy to the full:

- Utilisation of renewable energy
- Constant hot water supply
- Optimum water hygiene
- Comfortable operation
- Weather compensated

## The good heating system: regenerative, economical and comfortable

The gas condensing boiler integrated in the ROTEX GasSolarUnit is a development which has been introduced with the incorporation of the latest combustion and heat technology knowledge base. The result is simple structure, problem-free maintenance and exemplary energy efficiency.

The integration of the condensing boiler in the hot water storage tank ensures that surface losses are kept to a minimum. Cooling losses that arise in normal heating boiler / storage tank combinations do not arise in this application. Here again you will save energy.

## Gas condensing heating boiler efficiency levels up to 110%

The new design of the aluminium boiler body with a central combustion chamber and its spiral additional heating surface means the ROTEX GasSolarUnit achieves an outstanding degree of efficiency of up to 110%.

## Dreamlike dimensions for your heating: Heating and hot water in a surface area of just 0.36 m<sup>2</sup>

Whether with or without solar energy utilisation, the ROTEX GasSolarUnit is

an optimum combination of high-efficiency condensing boiler and hygienic hot water storage tank.

The uncompromising combination of these functions permits the GasSolarUnit to set completely new standards in space-saving and energy utilisation. In a space of just

0.36 m<sup>2</sup> (GSU 320) or 0.62 m<sup>2</sup> (GSU 520 S/ 530 S) the complete heating system, the hot water preparation and a solar stratified storage tank can be accommodated.

## GasSolarUnit GSU 320 the amazing room unit

We are setting completely new standards in room space utilisation and space take-up with the GSU 320. Your entire central heating system can be accommodated in a floor area of just 59 x 61 cm. Including the hot water preparation and a ca 300 litre solar storage tank. It really could not be more compact. Because of these ideal dimensions the GSU 320 can fit in any house or apartment. It supplies heating and hot water comfort that you soon will not want to live without. And you have the facility, at any time, to heat the storage tank with solar energy by adding a ROTEX Solaris system, thereby making massive energy savings in hot water preparation.

**ROTEX**  
**GasSolarUnit**

- Gas condensing boiler and hot water storage tank and solar storage tank all in one
- Energy saving with efficiency rates of up to 110%
- Compact and space saving unit
- Optimum hot water hygiene
- Integrated solar energy utilisation (optional)





# ROTEX GasSolarUnit:

## More than you would expect:

## Everything included that you may need.

### All in one unit

- Minimum energy consumption as a result of consistent condensing technology utilisation and integration of heating boiler and hot water storage tank
- Optimum water hygiene
- Space saving compact layout
- Solar energy utilisation can also be retrofitted
- Active contribution to climate change and the greenhouse effect by sizeable reduction in CO<sub>2</sub> emission
- Pleasantly quiet running
- Low cost installation by preassembly
- Simple and cost-effective maintenance
- Extensive state support for condensing boilers and solar energy installations
- Weather compensated

### This is how it works

In the GasSolarUnit a gas condensing boiler is integrated in a hot water storage tank.

The domestic hot water storage tank is filled with storage water which is not pressurised. The storage water is heated by the condensing boiler via a stainless steel corrugated pipe heat exchanger. Alternatively, the storage tank can also be heated using solar energy.

For heating the domestic hot water there is a stainless steel corrugated pipe heat exchanger over the full depth of the water on the inside of the storage tank. The large heat exchanger surface area means that correspondingly large volumes of domestic hot water can be heated in a short time period.

The storage tank is therefore always operating as a stratified storage tank. This increases the storage tank potential considerably and ensures optimum use, particularly when using solar energy utilisation.

Even without the use of solar energy utilisation, the stratified storage concept permits the preparation of even larger volumes of hot water.

The integrated condensing boiler has a fully-electronic digital control system. This provides weather-dependent control of the feed temperature. It controls the storage tank temperature and contains individually-adjustable time programs for the heating and for hot water preparation.



### In the midst, not just a spectator

The compact layout means that the required floor area and installation costs are kept to a minimum.

A floor area of just 59 x 61 cm (0.36 m<sup>2</sup>) or 79 x 79 cm (0.62 m<sup>2</sup>) can accommodate the complete gas condensing boiler with hot water storage tank and solar storage tank.

Since the unit does not need to be wall-mounted, and is entirely mounted flat on the floor, installation is child's play. Noise transmission from the unit to the building is therefore effectively prevented.



GSU 320

GSU 520S/GSU 530S/GSU 535

# Innovative down to the last detail.

## The heart: The gas condensing boiler

The aluminium boiler body of the gas condensing boiler is a true innovation.

It is flat and round and has a centrally arranged combustion chamber. The

flue gas is directed in a spiral around the burner chamber and then drawn away upwards. The condensate produced by cooling the flue

gases is collected in the boiler body and is drained from the tank via a plastic tube.

## The gas burner: variable, quiet and efficient

The high-efficiency surface burner fitted ensures optimum and toxic-free combustion. This burner operates in a fully modulating mode i.e. it matches its output directly to the demand.

The output ranges:

- 4 to 20 kW in the GSU 320
- 4 to 20 kW in the GSU 520S
- 6.5 to 30 kW in the GSU 530S
- 8 to 35 kW in the GSU 535

The burner operates extremely quietly.



GSU 320 with Alpha<sup>+</sup> 23R



GSU 320 with Theta 23R

## It thinks for you - The electronic control system

The control management of the ROTEX GasSolarUnit is performed by a fully-electronic digital control system. There are two different versions:

- Alpha<sup>+</sup> 23R
- Theta 23R

### 1. Alpha<sup>+</sup> 23R

The digital control system Alpha<sup>+</sup> 23R has a clear four digit display which is integrated in the upper section of the ROTEX GasSolarUnit.

All the fundamental functions are selected using two rotary switches. The values can be adjusted simply using push-buttons.

The Alpha<sup>+</sup> 23R has three time programs for the control of the heating circuit and the hot water preparation. The time controls are preprogrammed; one of these can be adapted to the individual wishes of the user. In addition, the Alpha<sup>+</sup> control system is prepared for controlling an additional mixed circuit.

The heating water temperature is automatically adjusted according to outside temperature. The control system itself senses winter and summer and switches the heating system on or off as required.

### 2. Theta 23R

The fully-electronic digital control system Theta 23R meets the highest of demands. The display shows values and parameters in clear text. The main operating element is a rotary switch with which the operating modes, time programs and operating parameters can be set and quickly and simply altered.

Fundamental system parameters can be viewed and adapted by the heating engineer.

The heating water temperature is automatically adjusted according to outside temperature. The control system itself senses winter and summer and switches on or off the heating system as required.

The Theta 23R has individually adaptable time programs for simple control of the heating circuit and hot water preparation. It can also be used to control an additional mixed heating circuit. This requires that only the mixer, pump and sensor are plugged into the control housing. It is also possible to connect an additional circulation pump.

The Theta 23R control system can be extended by room controllers and thermostats which conveniently control and monitor the heating system.





## Air in – flue gas out

The GasSolarUnit is operated in room air independent mode as standard. The burner draws the necessary combustion air directly from the outside through an installation shaft or a double-walled flue gas duct.

Advantages of room air independent mode:

- The boiler room does not need a ventilation opening to the outside and thus does not get cold
- Lower energy consumption.
- Dust, solvents, detergents etc. are not drawn in by the burner. This means that the room can also be used as a laundry, workshop or similar application
- Also possible in roof space siting
- Additional energy savings due to the flue pipe preheating the combustion air



## The heat stays inside

The storage tank is a twin layer structure made entirely from plastic. The space between the internal and external tank is filled with expanded foam and is extremely heat insulating. This high level of insulation ensures low overall heat losses for the ROTEX GasSolarUnit.

## Hot water, as much as you want – as often as you want

The domestic hot water is contained in a stainless steel corrugated pipe which extends in a spiral from bottom to top of the storage tank which is filled with unpressurised water. The fresh water which is drawn in is heated in the flow principle. This type of water direction creates stable, clearly defined temperature stratification.



Corrosion resistance, low tendency to calcification and, above all, optimum water hygiene characterise this type of heating. The large storage tank capacity ensures that the SolarUnit always provides sufficient hot water.

This provides the highest levels of water comfort. And when you heat the GasSolarUnit with solar energy, hot water is available practically cost-free throughout the summer – you can then **"enjoy saving energy"**.

## Water hygiene is our principle

The structure of the ROTEX GasSolar-Unit ensures that it has optimum inherent water-hygienic properties since the water to be heated is directed and heated through a piped system.

The water volume in the domestic hot water heat exchanger is just 19/24 litres, and thus amounts to only a fraction of the volume of water in normal storage tanks.

Low flow sections or sections that are

not heated properly on the hot water side are completely eliminated using the ROTEX Gas-SolarUnit. The domestic hot water is entirely contained in a piping system so that the deposits such as sediment, rust or other deposits which can arise in large volume tanks are not produced. Water that is charged first is also the

first to be removed (first in first out principle).

The outstanding hygienic advantages of this type of hot water storage tank have been confirmed in extensive tests performed at the Institute of Hygiene at the University of Tübingen.



### Keyword: Legionella

Legionella bacteria  
There are about 35 types of Legionella. At least 17 of these produce illness.

The main consequences are:  
Pontiac fever: flu-like symptoms which subside after a few days.

Legionnaire's disease: severe bacterial lung infection.  
In 15 to 20 percent of the cases the infection leads to death.

# Systematic heating.

## Systematic condensing technology

Modern condensing technology converts the fuel used into usable heat virtually without loss. This is both good for the environment and your wallet, since lower energy consumption means lower heating costs, less use of energy resources and a reduction in CO<sub>2</sub> emissions. During this process, flue gases are cooled to the extent that the steam they contain is condensed. The energy created is used as heat for heating.

## Comparison with conventional heating technology

Existing older heating systems use a lot of primary energy as a result of their low levels of efficiency.

Low temperature boilers, which are still being installed, waste valuable energy.

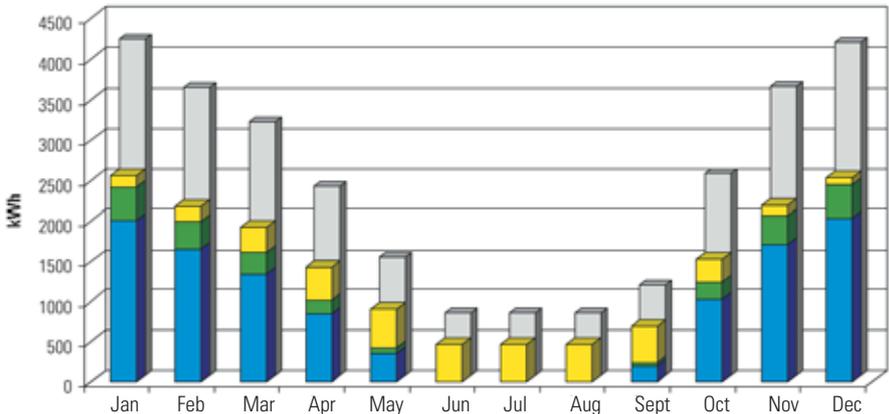
The resulting CO<sub>2</sub> emissions and energy costs are correspondingly high. Just by using a condensing boiler you can save a considerable amount of energy.

Extensive use of solar energy for heating and hot water production provides an additional renewable contribution.



If the remaining fuel is, for example, 20 % biogenic then the consumption of primary energy is reduced by approx. 64 % to just 36 % compared to a conventional existing system. The CO<sub>2</sub> emission is reduced in the same ratio.

In this example, from over 8 t CO<sub>2</sub>/year, more than 5 t CO<sub>2</sub>/year are saved.



**Monthly energy consumption of an average single family home:**

- Old system
- Condensing boiler
- Bio proportion (20 %)
- Solar energy utilisation

# Integrated solar energy utilisation for heating and hot water.

## As much sun as possible – just enough gas to meet the need.

The ROTEX GasSolarUnit (GSU 520 S/ GSU 530 S) not only uses the power of the sun for domestic hot water heating but also for supporting the heating system effectively.

If you decide not to incorporate a solar installation at this time, the solar support system of the ROTEX GasSolarUnit can easily be retrofitted.

## Use the cost-free energy of the sun without being diverted

The solar connectors ROTEX Solaris are used for solar energy utilisation. In addition you will need a control and

pump unit and a connection set. This involves removing the storage water for the ROTEX GasSolarUnit from the lowest and coldest point of the storage tank and then feeding it directly, i.e. without using a heat exchanger, to the solar

collectors. The water is heated here and then stratified back into the GasSolarUnit. This considerably increases the efficiency of the solar collectors and the entire utilisation of the installation. The entire Solaris System works at atmospheric pressure.

**ROTEX  
GasSolarUnit**

- **Gas condensing boiler and solar storage tank all in one**
- **Energy saving with efficiency levels up to 110 %**
- **Compact and space-saving unit**
- **Optimum water hygiene**

If the sunshine is insufficient, or if the GasSolarUnit does not need any more heat, the feed pump switches off and the entire Solar System drains into the storage tank. The addition of antifreeze is not necessary because if the installation is not in use, the collector surfaces are not filled with water - another environmental advantage!

## Solar heating support

A heat exchanger composed of a stainless steel corrugated pipe is connected to the bottom of the boiler body for solar heating support. This heat exchanger projects into the buffer area of the tank filled with unpressurised water. All the boiler water flows through it continuously. The heat exchanger is surrounded by a heat

insulation casing which is open at the bottom and which therefore, is in heat exchange mode with the solar zone of the storage tank. If the temperatures are above the heating return temperature in the solar zone, thermal circulation is created in the heat insulation sleeve. This leads to solar increase in the return temperature. In the transition period in particular, the heating can be effectively supported by the sun.

## ROTEX GasSolarUnit: Solar energy for hot water and heating!



## Economical and effective

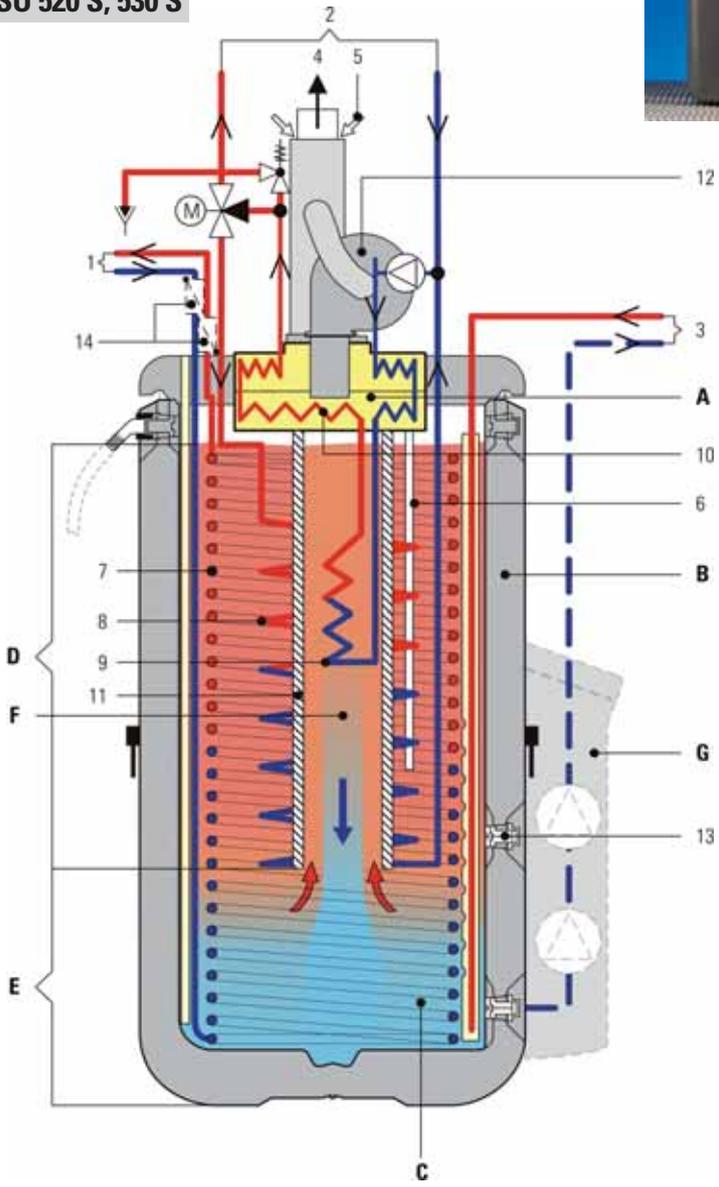
Since the system is unpressurised, the components that would otherwise be required, such as an expansion vessel, pressure relief valve and heat exchanger, are not required. This not only saves money when purchasing the installation, but also increases security of operation.

## Good for the environment

The GasSolarUnit is in all aspects beneficial for the environment:

- Lowest possible environmental loading as a result of the most up-to-date technology
- Reduction in CO<sub>2</sub> emission by:
  - modulating condensing technology
  - consistent solar energy utilisation
- Absolutely glycol-free solar circuit

**GSU 520 S, 530 S**



- |                                       |   |  |                                    |
|---------------------------------------|---|--|------------------------------------|
| A Gas condensing boiler               | 1 Domestic water                                      | 8 Storage tank charging heat exchanger (stainless steel) | 12 Fan burner                      |
| B Hot water stratified storage tank   | 2 heating applications                                | 9 Solar heating support heat exchanger (stainless steel) | 13 Non return valves (accessories) |
| C Unpressurized storage tank water    | 3 Solaris connection                                  | 10 Heating heat exchanger                                |                                    |
| D Hot water zone                      | 4 Flue gas  | 11 Heat insulation sleeve                                |                                    |
| E Solar zone                          | 5 Air supply  |  |                                    |
| F Heating support zone                | 6 Condensate drain                                    |  |                                    |
| G Control and pump unit (Accessories) | 7 Domestic hot water heat exchanger (stainless steel) |  |                                    |

**GasSolarUnit (GSU 520 S/ 530 S) – Structure and function**

The boiler body of the condensing boiler is integrated in the upper section of the storage tank.

The storage tank in the GSU 520 S/ GSU 530 S is split into two function zones: into the hot water zone (D) at the top, and the solar zone (E) at the bottom.

The domestic water heat exchanger, made of stainless steel corrugated pipe, extends over the entire depth of the storage tank. The fresh water is fed in at the lowest point of the storage tank. From here it is directed upwards in the stainless steel corrugated pipe which acts as a heat exchanger, in a spiral manner. It is continuously heated as it passes through the storage tank. This arrangement produces defined temperature stratification with the hot water preparation.

This stable temperature stratification is a significant prerequisite for highly effective utilisation of solar energy. This always removes the coldest water in the storage tank from the lowest point of the tank, transports it to the solar collectors on the roof and then feeds it back into the storage tank via a special stratifying charging system. This permits optimum energy exploitation in solar energy utilisation.

# The energy bundle for heating and hot water with solar option.



## **GSU 320 – Highest possible hot water comfort**

The GSU 320 offers the maximum output in the smallest space. It uses the total tank volume of approx. 280 l for heat storage and can thus accommodate high demands for hot water without any problems.

Here again solar energy utilisation can be used for the preparation of hot water. The GSU 320 is fitted with all the connections required for solar heating. Especially with the system for ensuring optimum temperature stratification in the storage tank.

## **GSU 535 – Hot water with no boundaries**

The GSU 535 is the ideal solution for installations for high levels of heat and hot water demand.

Several units can be combined together for this application. This adds the resulting heat output for heating and for hot water output.

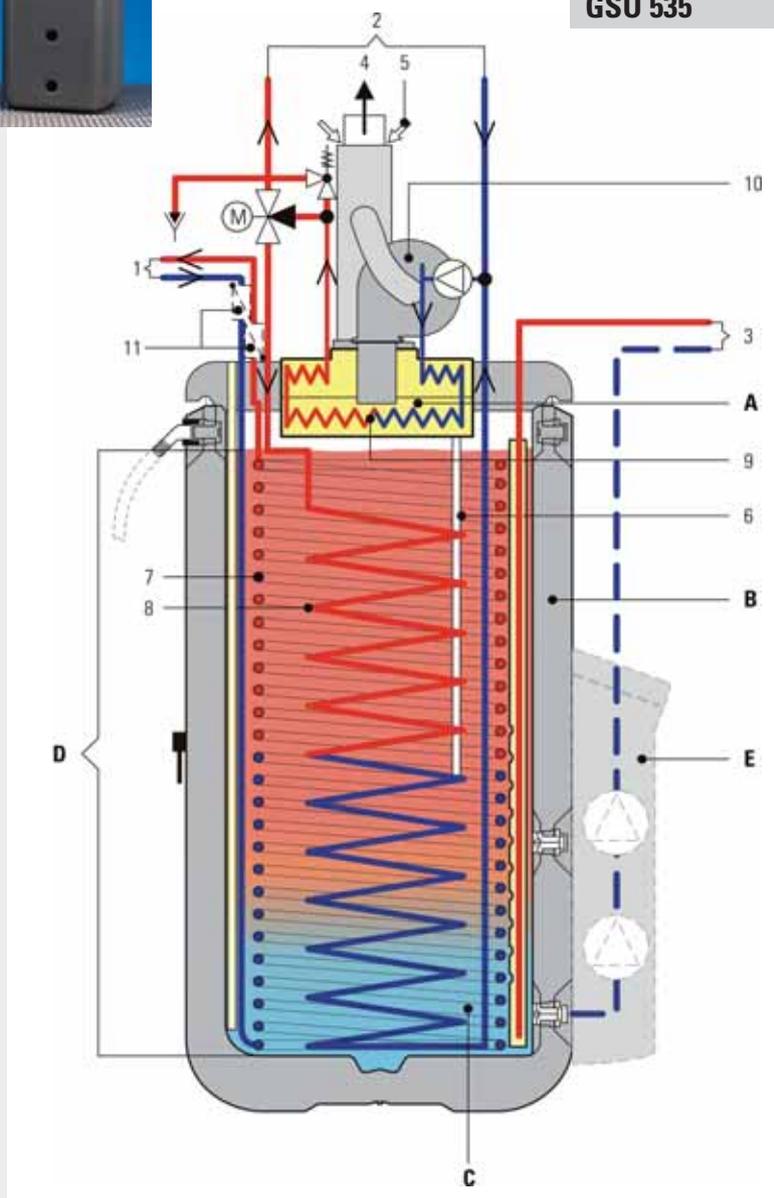
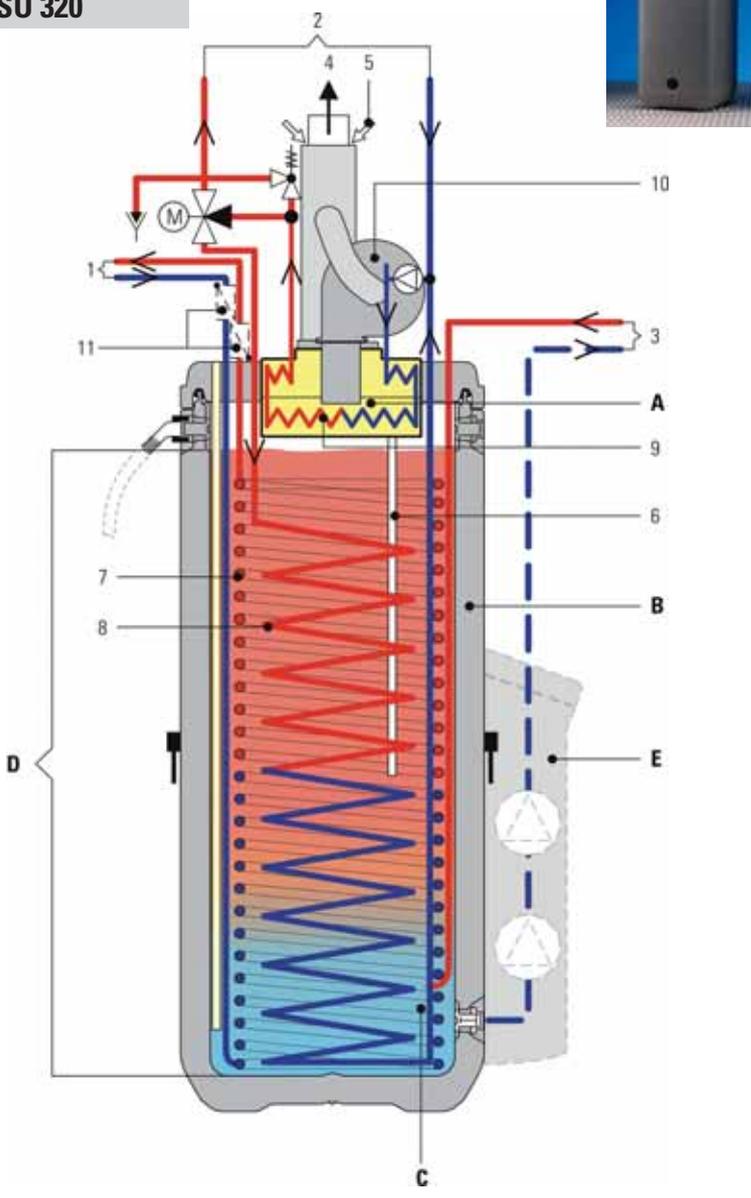
In this way, a system comprising several GSU 535 units can be the economical, efficient and water-hygienic perfect solution for hotels, old peoples homes, hospitals, sports halls or similar applications.



**GSU 320**



**GSU 535**



- |                                       |  |
|---------------------------------------|--|
| A Gas condensing boiler               | 4 Flue gas   |
| B Hot water stratified storage tank   | 5 Air supply   |
| C Pressure-free storage tank water    | 6 Condensate drain                                       |
| D Hot water zone                      | 7 Domestic hot water heat exchanger (stainless steel)    |
| E Control and pump unit (accessories) | 8 Storage tank charging heat exchanger (stainless steel) |
| 1 Domestic hot water                  | 9 Heating heat exchanger                                 |
| 2 heating applications                | 10 Fan burner  |
| 3 Solaris connection                  | 11 Non return valves (accessories)                       |

- |                                       |  |
|---------------------------------------|--|
| A Gas condensing boiler               | 4 Flue gas   |
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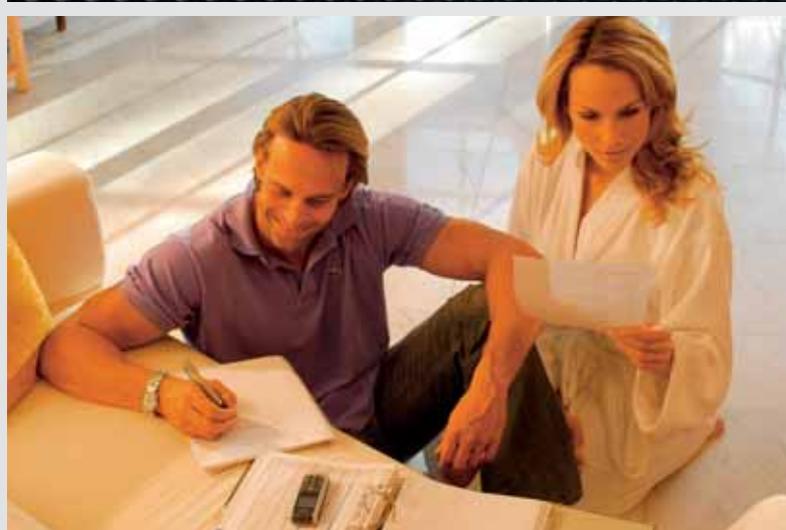
**GasSolarUnit (GSU 320/ GSU 535) – Structure and function**

The entire storage tank is used as a hot water storage tank. Thus, the charging heat exchanger, made of stainless steel corrugated pipe like the domestic hot water heat exchanger extends over the full depth of the storage tank.

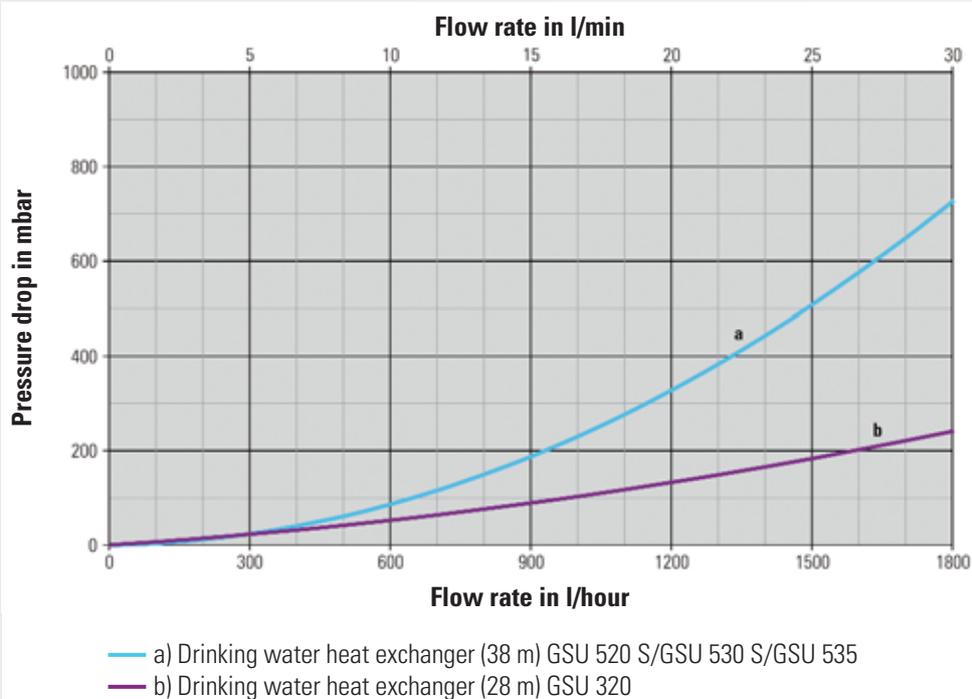
This means that the total heat capacity of ca. 300/500 litres of storage tank water is available for hot water preparation, the hot water output is thus at a maximum.

When hot water is drawn off, using the GSU 320 and GSU 535, a distinct temperature stratification is produced, and this maximises the volume of hot water that can be removed.

The large charging power rating of up to 20 or 35 kW and the rapid reaction time in heating up because of the boiler not cooling down mean that the hot water preparation and hot water comfort of the GasSolarUnit are very high.

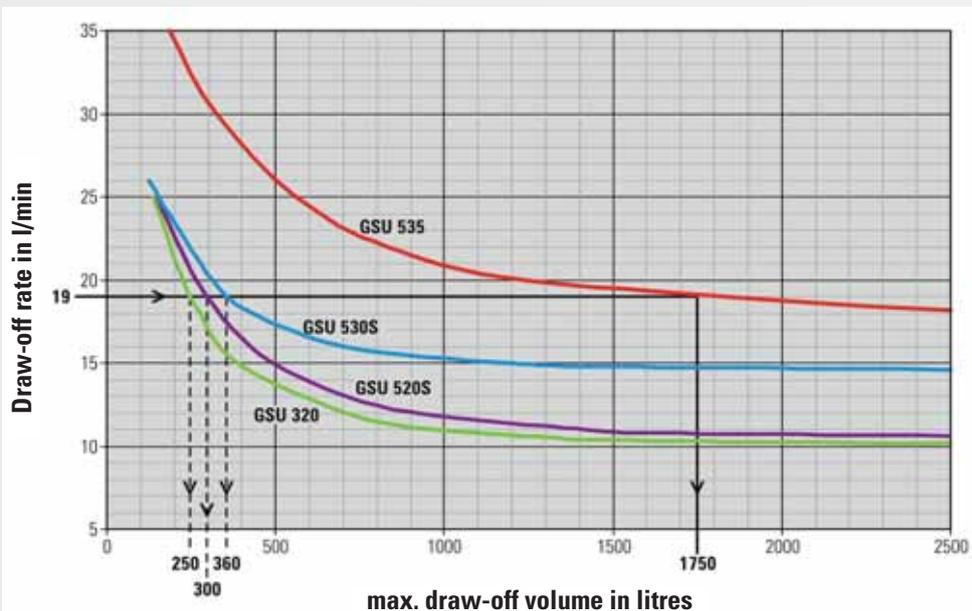


**Flow diagram  
for GSU 320,  
GSU 520 S, GSU 530 S,  
GSU 535**



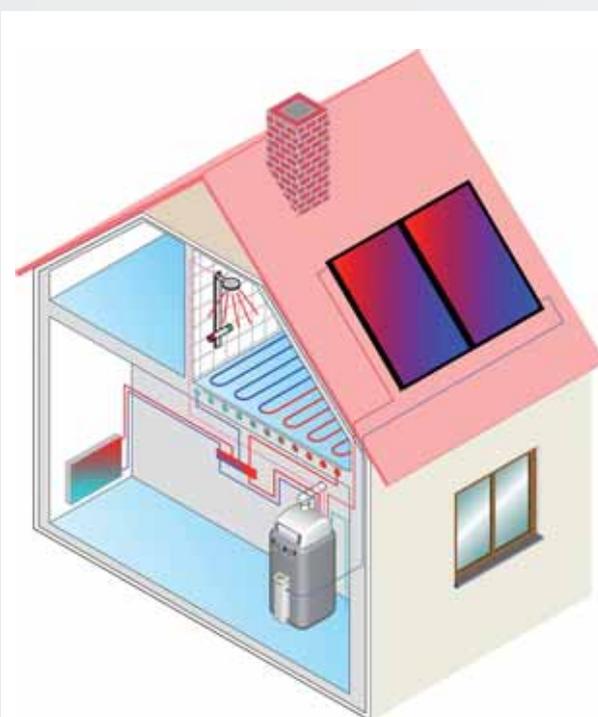
**Draw-off diagram  
for GSU 320,  
GSU 520 S, GSU 530 S,  
GSU 535**

Storage tank temperature 60 °C  
draw-off temperature 40 °C  
cold water temperature 10 °C

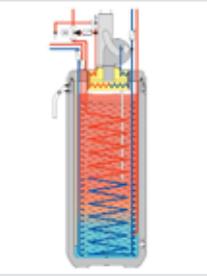
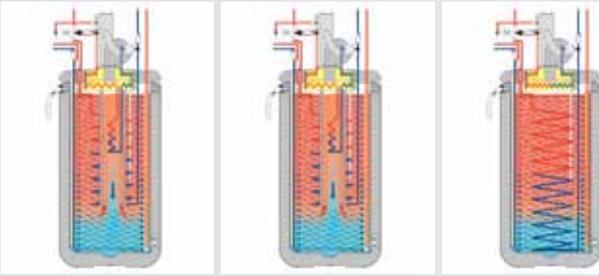


**Promotional programs**

Energy saving and utilisation of solar energy are in the interests of everyone. For this reason your commitment to the environment is promoted by a large number of programs:



**Connection drawing for the ROTEX Solaris System for hot water preparation with heating support:  
with ROTEX GasSolarUnit**

Technical data GasSolarUnit		GSU 320	GSU 520 S	GSU 530 S	GSU 535
					
<b>Basic data</b>					
Total storage capacity	Litres	300	500	500	500
Empty weight	kg	86	124	128	128
Total filled weight	kg	386	624	628	628
Dimensions (L x B x H)	cm	59.5 x 61.5 x 189	79 x 79 x 181	79 x 79 x 181	79 x 79 x 181
Max. permissible storage tank water temperature	°C	85	85	85	85
Readiness heat consumption at 60 °C	kWh/24 h	1.7	1.8	1.8	1.8
<b>Drinking water heating</b>					
Drinking water capacity	Litres	19	24.5	24.5	24.5
Maximum operating pressure	bar	6	6	6	6
Drinking water heat exchanger material		stainless steel	stainless steel	stainless steel	stainless steel
Drinking water heat exchanger surface	m <sup>2</sup>	4.1	5.5	5.5	5.5
Average specific heat capacity	W/K	1820	2470	2470	2470
<b>Storage tank charging heat exchanger</b>					
Water capacity heat exchanger	Litres	9,1	10.4	10.4	19.5
Surface area charging heat exchanger	m <sup>2</sup>	2.1	2.3	2.3	4.3
Average specific heat capacity	W/K	910	1040	1040	1950
<b>Solar heating support</b>					
Heat exchanger surface area	m <sup>2</sup>	-	0.43	0.43	—
Average specific heat capacity	W/K	-	200	200	—
<b>Thermal output data</b>					
Output characteristic value N <sub>L</sub> according to DIN 4708 <sup>1)</sup>		2.0	2.1	2.2	4.4
D value (specific water flow to EN 625 <sup>2)</sup>	l/min	27	30	31	39
Continuous output according to DIN 4708 Q <sub>n</sub>	kW	20	20	30	35
Max. draw-off rate for a period of 10 min at (T <sub>KW</sub> = 10 °C/T <sub>SP</sub> = 60 °C/T <sub>WW</sub> = 40 °C)	l/min	20	21	22	31
Hot water quantity without reheating up to 15 l/min tapping rate (T <sub>KW</sub> = 10 °C/T <sub>WW</sub> = 40 °C/T <sub>SP</sub> = 60 °C)	Liter	200	220	220	412
Hot water volume with heating up at nominal output and 15 l/min draw-off rate (T <sub>KW</sub> = 10 °C/T <sub>WW</sub> = 40 °C/T <sub>SP</sub> = 60 °C)	Litres	360	500	1180	unbegrenzt
Short-term water quantity in 10 min	Litres	200	210	215	310
<b>Heat generator characteristic data</b>					
Nominal output	kW	3,7 - 20,0	3,7 - 20,0	6.5-30.0	8.0-35.0
Rated thermal load	kW	3,7 - 21,0	3,7 - 21,0	6.6-30.9	8.5-36.1
Device type		B <sub>23</sub> / C <sub>13x</sub> / C <sub>43x</sub> / C <sub>53x</sub> / C <sub>63x</sub> / C <sub>83x</sub>			
Product ID number		CE-0085 BM 0065			
NO <sub>x</sub> class		5	5	5	5
Electrical data	V/Hz	230/50	230/50	230/50	230/50
Electrical power consumption (including heating circulation pump)	W	max. 114	max. 114	max. 135	max. 148
Protection rating	IP	20	20	20	20
Maximum permissible operating pressure	bar	3.0	3.0	3.0	3.0
Maximum permitted operating temperature	°C	85	85	85	85
Maximum boiler efficiency	%	110	110	110	110
Flue gas / air infeed connection diameter	mm	80/125	80/125	80/125	80/125
<b>Pipe connections</b>					
Cold and hot water	Inch	1" AG	1" AG	1" AG	1" AG
Heating inflow and return flow	Inch	1" IG	1" IG	1" IG	1" IG

<sup>1)</sup> At nominal output, 80 °C feed temperature, 65 °C storage tank temperature, 45 °C hot water temperature and 10 °C cold water temperature

<sup>2)</sup> Explanation: The specific water flow as defined in EN 625 is the domestic hot water flow which the GasSolarUnit can supply at an average temperature increase of 30 K with two successive withdrawals of water of ten minutes duration each, assuming a charging temperature of 65 °C. An interval of 20 minutes is normally assumed between the withdrawals. The GasSolarUnit achieves these values even with shorter intervals.

Solaris flat collectors	V 21 P	V 26 P	H 26 P
			
Dimensions L x B x H	2000 x 1006 x 85 mm	2000 x 1300 x 85 mm	1300 x 2000 x 85 mm
Net surface area	2,01 m <sup>2</sup>	2,60 m <sup>2</sup>	2,60 m <sup>2</sup>
Aperture surface area	1,79 m <sup>2</sup>	2,35 m <sup>2</sup>	2,35 m <sup>2</sup>
Absorbing surface area	1,80 m <sup>2</sup>	2,36 m <sup>2</sup>	2,36 m <sup>2</sup>
Weight	35 kg	42 kg	42 kg
Water content	1,3 Litres	1,7 Litres	2,1 Litres
Absorber	harp-shaped copper pipe register with laser-welded highly selective coated aluminium plate		
Coating	Sunselect (absorption max. 96 %, emission approx. 5 % ± 2 %)		
Glazing	Single pane safety glass, Transmission approx. 92 %		
Heat insulation	Rock wool 50 mm		
Max. pressure drop at 100 l/min	3,5 mbar	3,0 mbar	0,5 mbar
Possible pitch min. - max.	15° - 80°		
On-roof and flat roof Possible pitch min. - max.	15° - 80°		
In-roof			
Max. standstill temperature	approx. 200 °C		
Max. operating pressure	6 bar		
The collectors are standstill resistant over a long period and are tested for thermal shock. Minimum collector yield over 525 kWh/m <sup>2</sup> at 40 % covering proportion, Location Würzburg, Germany.			

### Control and pump unit RPS 3



Dimensions W x D x H	230 x 142 x 815 mm
Operating voltage	230 V/50 Hz
Max. electrical power consumption	245 W (modulating* 20-120 W)
Control	digital differential temperature controller with clear text display
Collector sensor	Pt 1000
Storage tank and return sensor	PTC
Feed temperature and flow sensor (accessories)	FLS 20

\* modulating operation mode only possible with FLS

For pressure applications, please use the RPS3 M.





# ROTEX EcoHybrid® – the complete heating system.

## What is EcoHybrid®?

The word "hybrid" originates from Greek and means "mixed, from two different origins". A hybrid heating system allows the different types of energy to work together, such as heat pumps and solar energy, but also allows other types of energy to be integrated, such as oil, gas, pellet, or even log burning boilers. This means you are equipped to face any contingencies in the future. Consistent use of renewable energies and efficiency that is practically impossible to surpass.

## Everything from a single source

ROTEX manufactures all the important system components for the EcoHybrid® heating system itself. This means you can rely on the fact that all components are optimally made to work together and thus guarantee the greatest energy efficiency and highest level of comfort. As a system manufacturer for know-how in development and manufacturing, ROTEX stands for decades of system experience. Your heating is our profession!

## ROTEX EcoHybrid® – variable and extendable

Regardless of the way in which you start using hybrid technology today, the good thing about the EcoHybrid® is that you can extend the system at a later date.

## ROTEX EcoHybrid® – Safety and comfort for your future!

### The entire system from a single source:

- Modern calorific value technology
- Regenerative air / water heat pump
- Thermal solar plant for heating and hot water
- Hygienic hot water storage tank
- Cosy underfloor heating system
- Odour-locked safety heating oil tank
- A plastic pipework connection system suitable for both domestic water and heating installations.

You can find additional information at [www.rotex.de](http://www.rotex.de).



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