



Two reliable models

# The Future of Heating

## SolvisBen and SolvisMax



Heat. Life. Future.

A man with a beard and dark hair, wearing a light blue shirt, is pointing his right index finger directly at the camera. The background is blurred, showing green foliage and warm, out-of-focus lights. The word "Contents" is centered over the tip of his finger.

# Contents



**Solvis heating system**  
from page 4



**Fresh water system**  
from page 6



**SolvisBen**  
from page 8



**SolvisMax**  
from page 14



**Solvis collectors**  
from page 20



**SolvisPV2Heat and  
SolvisRemote**  
Page 23



**Technical data**  
from page 24



**About Solvis**  
from page 26

# The future starts here

We must build for the future. With the SolvisBen and SolvisMax we have not just developed boilers, we have created heating systems for future generations.



**SolvisBen**  
The Ultimate Boiler

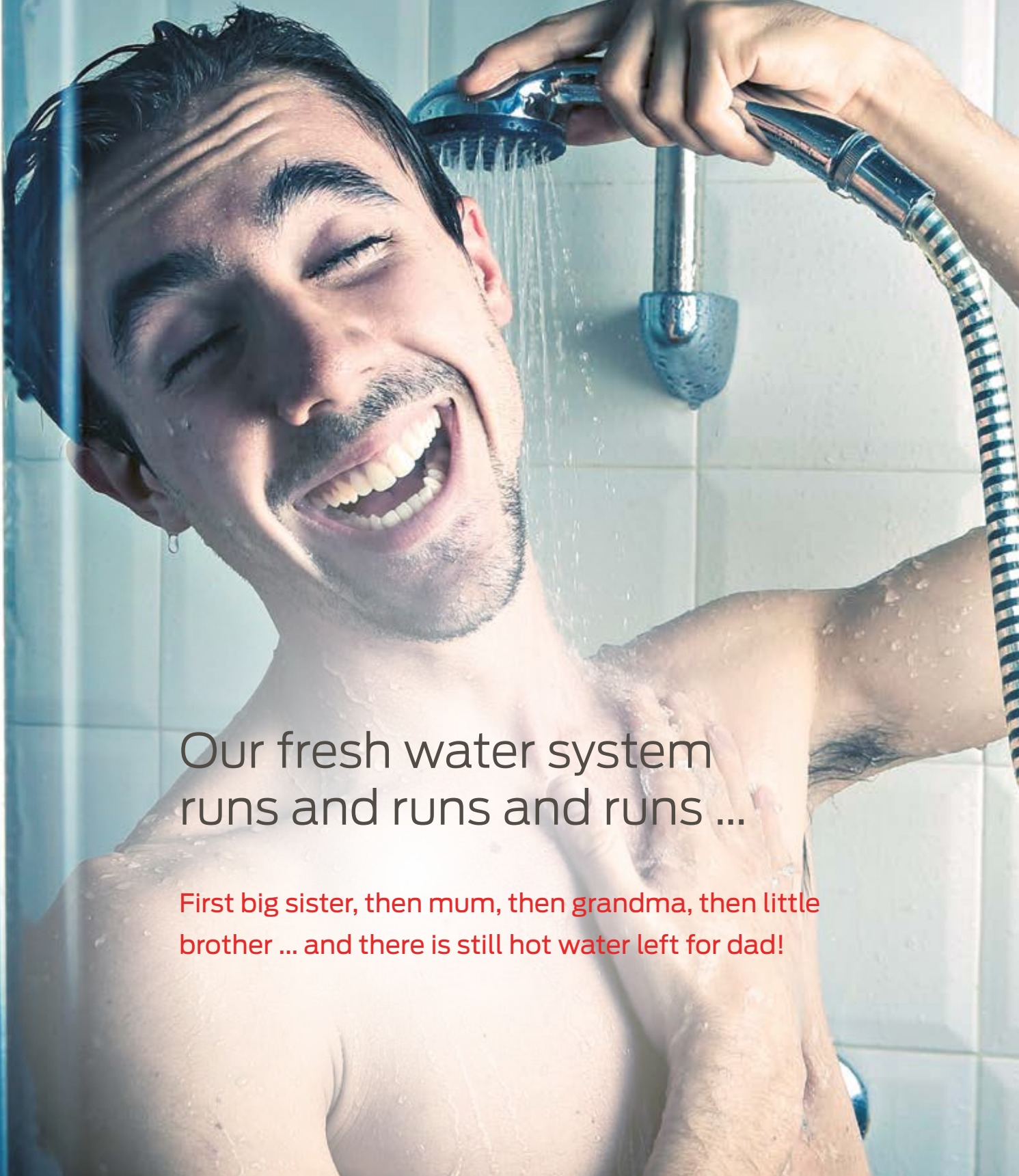
**SolvisMax**  
The All-Rounder

- Extremely durable
- Solvis warranties: 5 years or 10 years
- Fresh water system: Hot water of drinking water quality with maximum convenience
- Flexibility and retrofitting capabilities, e.g. changing the sources of energy
- Additional components / expansion options such as a solar thermal system, photovoltaic units, woodstove, heating pump, etc.
- Integrated combustion chamber, extremely low heat loss

***Did you know?***

*Up to 68.6% of the energy consumption of a private household is attributable to heating. Solvis heating systems can save you up to 50%!*

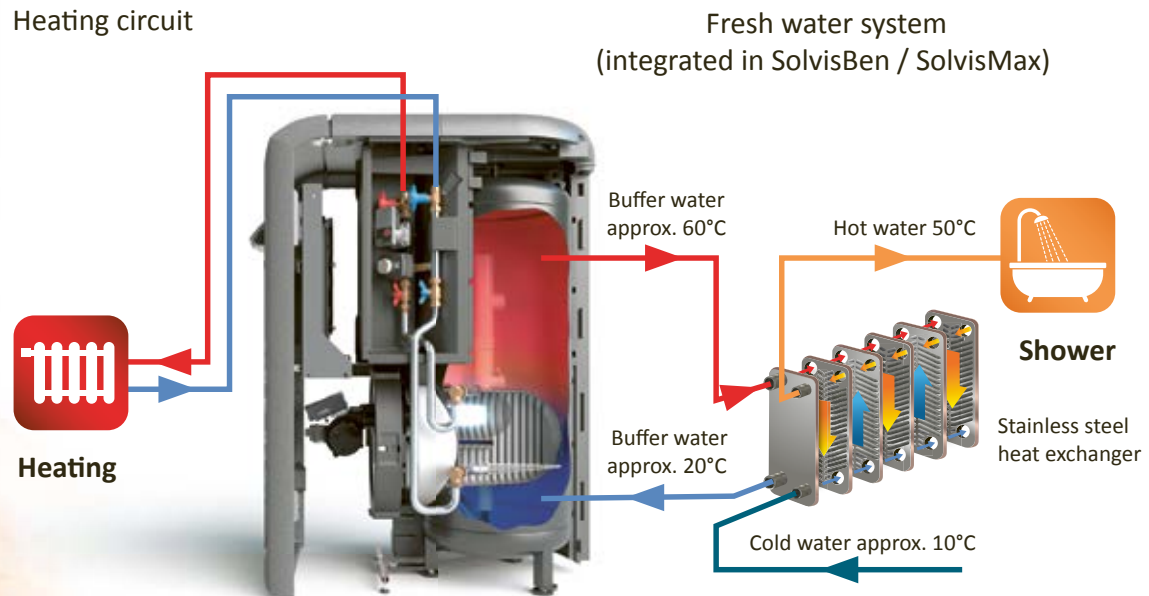




Our fresh water system  
runs and runs and runs ...

First big sister, then mum, then grandma, then little  
brother ... and there is still hot water left for dad!

# And this is how it works



At the heart of the heat station is a buffer tank. The heating module is integrated – and supplies heat directly to the buffer tank.

The hot water in the upper section supplies the integrated fresh water system. Therefore, hygienically clean drinking water is heated only when needed. This prevents the formation of Legionella.

The central section ensures that your radiators and underfloor heating are kept at the ideal temperature.

**Please note:**

*The installation of a buffer tank in your heating system is subsidised by the state. Please contact us for further information.*

# SolvisBen: Ideal for any home

Not just because it is well designed and compact.

- Long service life (never seems to show its age)
- Low initial cost
- Low consumption, low operating costs
- Fresh water system
- Change to gas/oil burner at any time
- Modularly expandable, e.g. by utilising solar thermal energy or excess photovoltaic electricity

## **Award-winning!**

*Nobody does form-follows-function quite as well as we do:*



**reddot** design award  
winner 2018



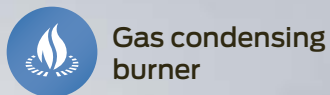
**GERMAN  
DESIGN  
AWARD  
SPECIAL  
2019**





# SolvisBen: Compact yet ingenious

We warmly welcome  
the future into our home!



Gas condensing burner



Oil condensing burner



Heating



Hygienic hot water

## Optional

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Solar collector



Photovoltaics

## Energy efficiency class

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A+ / A+++\*  
\* see page 24



Looking to the future, look no further than SolvisBen – the ultimate boiler! Why is it the ultimate boiler? Because it can do so much more than traditional gas or oil condensing boilers.

It not only provides you with heat for the heating system, but also fresh water for the home and can easily be combined with a solar thermal system or photovoltaic modules.

Designed as a compact stand-alone unit, SolvisBen is the ideal solution for new buildings without cellars.

## Compatible components for Ben

### **Solvis collectors**

*The ultimate boiler can be expanded at any time by adding a solar thermal system (collector surface of up to 5 m<sup>2</sup>).*

### **SolvisPV2Heat**

*With the Solvis PV2Heat, it is possible to convert excess photovoltaic electricity into heat.*

### **SolvisRemote**

*With SolvisRemote, SolvisBen can be controlled simply and remotely – at home via the home network or on the go.*



# SolvisBen – the ultimate boiler

Regardless of how impressive the exterior, it's the internal components that really set us apart.

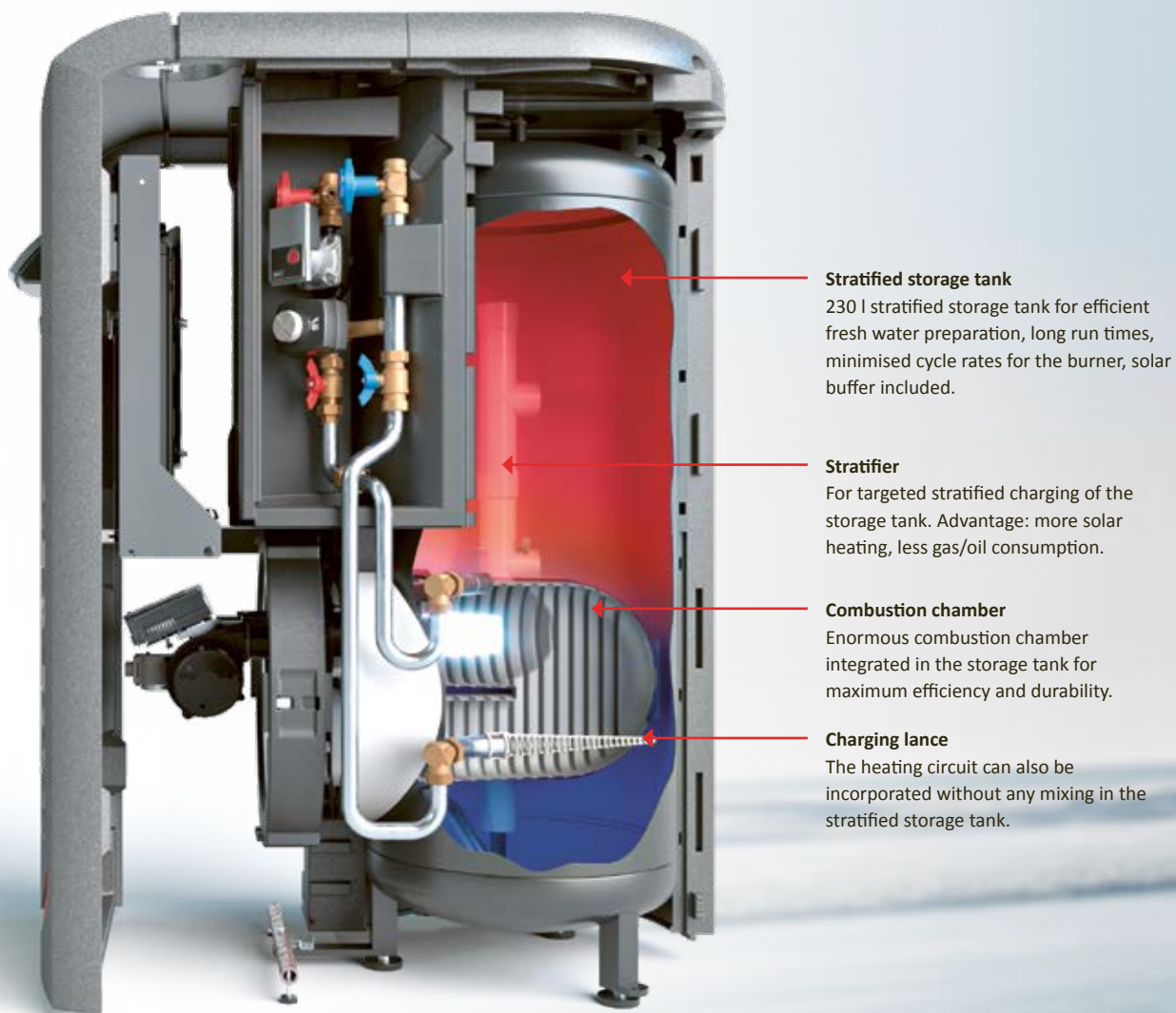
Outstanding material quality, compact design, unbeatable insulation and premium technology make SolvisBen last for generations, ensuring fault-free operation for years to come.

Even better: Increase the durability of the boiler by adding collectors, which ease the workload and, therefore, conserve the burner. At the same time, you save energy costs!

## ***Did you know?***

*A subsidy of up to EUR 3000\* is available for the SolvisBen.*

\*As at December 2018. With solar thermal energy.



**Stratified storage tank**  
230 l stratified storage tank for efficient fresh water preparation, long run times, minimised cycle rates for the burner, solar buffer included.

**Stratifier**  
For targeted stratified charging of the storage tank. Advantage: more solar heating, less gas/oil consumption.

**Combustion chamber**  
Enormous combustion chamber integrated in the storage tank for maximum efficiency and durability.

**Charging lance**  
The heating circuit can also be incorporated without any mixing in the stratified storage tank.

# Give me five

## Good reasons to choose SolvisBen

1. Spans the generations thanks to high quality German manufacturing standards. A large combustion chamber ensures a high degree of efficiency and a very long service life.
2. Future-proof, since the heating system can be expanded to include solar thermal energy or excess photovoltaic electricity at any time. Which other heating system can offer you this?
3. Wholesome fresh water for long baths and showers. No need to panic, even if your friends turn up at the door unexpectedly.
4. Unique long-term warranty: You get a five-year Solvis warranty on the SolvisBen components, and a ten-year functional warranty on collectors, storage tanks and combustion chambers.
5. Experts in the field: Solvis exclusively partners with technicians who have proven themselves as experienced energy saving experts.



## SolvisMax – the All-Rounder

To heat cost-effectively, you need a reliable energy manager. One that not only takes into account your current requirements, but also your future requirements.



- Heating of every kind!
- Maximum choice of energy sources
- Burner can be changed from oil to gas
- Extremely durable
- Fresh water system that offers maximum convenience
- High level of subsidies – what more could you ask for
- Low consumption, low operating costs
- Modularly expandable

Europäisches  
Patentamt








And by the way: All attempts to imitate this perfectly functioning system in Europe fail thanks to patent number EP 0795109.




# SolvisMax – the energy manager. Anyway, anyhow, anywhere.



-  Gas condensing burner
-  Oil condensing burner
-  Heating
-  Hygienic hot water
-  Washing machine  
Dishwasher

### Energy efficiency class

-  A+ / A+++\*  
\* with solar thermal

### Optional

-  Solar collector
-  Photovoltaics

### Optional adjacent

-  Heat pumps
-  Wood pellet boiler
-  Firewood/  
woodstove
-  District heating
-  Thermal power station
-  Fuel cell

SolvisMax is the innovative all-rounder among heating systems. The core component is a hot water tank. We do not use oil, gas, air, the earth or the sun to heat – we heat using hot water.

It quickly becomes clear that this is truly a heating system for the future. It does not matter which energy source you want to use today, tomorrow or your children will use in many years to come.

SolvisMax makes you completely self-sufficient.

## Compatible components for the SolvisMax

### **Solvis collectors**

*The all-rounder can be extended at any time with a solar thermal system (collector surface of up to 22 m<sup>2</sup>).*

### **SolvisPV2Heat**

*With the Solvis PV2Heat, it is possible to convert excess photovoltaic electricity into heat.*

### **SolvisRemote**

*With SolvisRemote, SolvisMax can be controlled simply and remotely.*

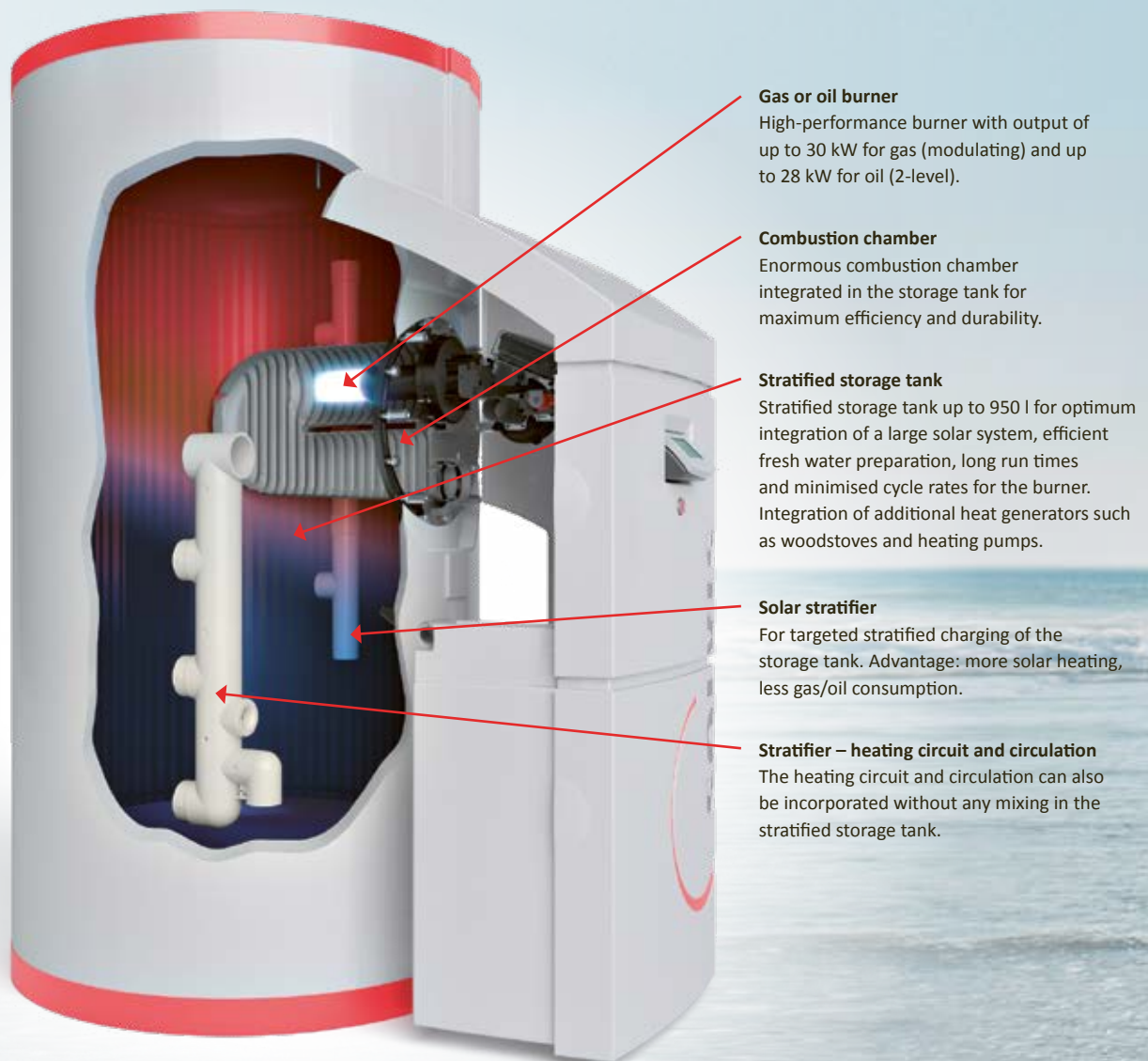
### **Woodstove**

*A water-circulated woodstove makes you more self-sufficient.*



# SolvisMax – heating couldn't be simpler

Rather than a burner, the core component here is the patented three-layer storage tank with a capacity of up to 950 litres. This is where SolvisMax differs fundamentally from other heating systems on the market. The integrated heating module can be used for oil, gas or district heating and feeds the heat directly into the storage tank. No energy is lost.



## Six good reasons to choose SolvisMax

1.

**Award-winning:** SolvisMax is the energy-saving champion with its patented stratified storage tank technology.

2.

**Wholesome fresh water:** Powerful fresh water system heats the water hygienically and on demand.

3.

**Future-proof:** No matter what happens in the energy sector – you remain self-sufficient.

4.

**Unbeatable savings:** Save an unbeatable 50% on heating costs.

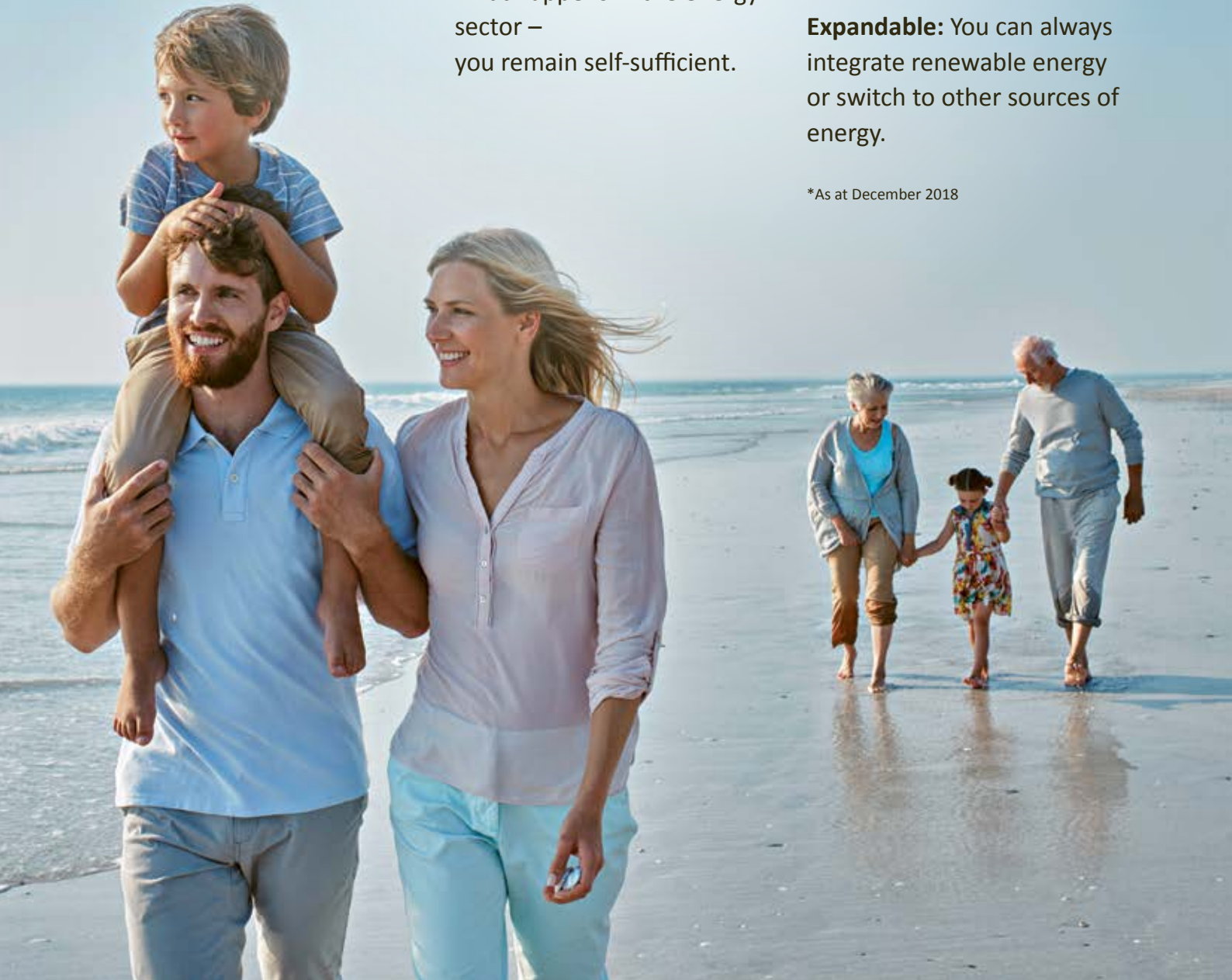
5.

**High level of subsidies:** Depending on the system configuration, up to EUR 6000\* is available.

6.

**Expandable:** You can always integrate renewable energy or switch to other sources of energy.

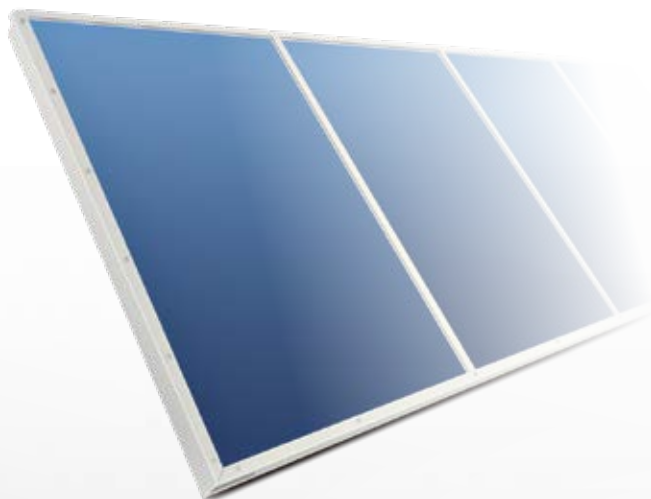
\*As at December 2018



# Solvis collectors – find your place in the sun

Hot, hot, hot: Heat your home for free using our collectors and the power of the sun. Thanks to our proven design of self-regulating charging using patented stratified chargers, the heat that is obtained is fed immediately into the heating system without mixing losses. So you are fuelled by the sun.





## Flat-plate collectors

### SolvisCala Eco

To ensure that every property owner can benefit from free solar energy, we have developed the SolvisCala Eco Compact collectors. High quality collectors for a low price.

### SolvisCala

With our SolvisCala, you can harness even more energy from the sun. Its anti-reflective glass with optimised absorber makes almost every roof a sun trap. (See left)

### SolvisFera

The large-surface collector, SolvisFera, is the best choice for those who do not want to waste an ounce of solar energy. The anti-reflective glass and double meander guarantee lower losses. Benefit from the multi award-winner on your roof! (See above)

### **Please note:**

*As an example, two SolvisCala devices with a collector surface of just 5 m<sup>2</sup> can meet the energy needs of a four-person household over the summer! This protects your wallet and extends the life of your boiler.*

## Evacuated tube collectors

### SolvisLuna

Is your roof fairly small? It's no longer an issue for solar thermal energy. The sophisticated mirror system of the SolvisLuna vacuum tube collectors directs the sun's rays from different angles into a vacuum tube. The energy from the sun's rays is transmitted with virtually no loss. Its utilisation ratio is actually higher than flat-plate collectors. (See below)





## SolvisPV2Heat

### Heat recovery from conversion of excess photovoltaic electricity

Does your photovoltaic system produce more electricity than you need? Once all the electricity consumers in the house are supplied with the necessary energy, SolvisPV2Heat simply converts your surplus electricity into heat. The heat can be fed into our SolvisMax and SolvisBen heating systems.

The optimal way to fuel your home. This will give you even more independence from your energy provider!

#### ***Did you know?***

*You can also use our SolvisBen with an electric heating rod.*

# SolvisRemote

## Web-based remote control for your heating

Whether you are relaxing on the couch, on vacation or on the way home on the train – with SolvisRemote remote control you can conveniently monitor your heating system from anywhere to ensure the optimal temperature of your home. Thanks to the web-based remote control, your heating can be controlled at all times.



# Technical data for specialists

## SolvisBen

<b>Rated volume</b>	<b>230 l</b>
Actual volume	229 l
<b>Output data</b>	
Tank material	S235JR, primed exterior, raw interior
Heating flow/return connection	1" male thread, flat sealing
Cold/hot drinking water connection	1" male thread, flat sealing
Max. operating pressure	3 bar
Max. operating temperature	95°C
<b>Dimensions</b>	
Max. width	640 mm
Max. depth	1150 mm
Max. height	1550 mm
Storage tank tilt height without insulation	1400 mm
Minimum front spacing	500 mm

## Values for all sizes

	<b>SolvisBen Gas (SBG)</b>	<b>SolvisBen Oil (SBO)</b>	<b>SolvisBen Solo (SBSL)</b>
Nominal heat output selectable	1,9 – 10 kW 2,9 – 18 kW 4,8 – 25 kW 4,8 – 30 kW	10 – 17 kW or 14 – 23 kW	–
Transport weight including pallet	162 kg	172 kg	144 kg
Max. filling weight	391 kg	401 kg	390 kg
Energy efficiency class without thermal collectors	A/A (1,9 – 10 kW) A+/A (2,9 – 18 kW) A+/A (4,8 – 25 kW) A+/A (4,8 – 30 kW)	A/A (10 – 17 kW) A/A (14 – 23 kW)	C
Energy efficiency class with thermal collectors (e. g. 2x SolvisCala Eco C-254-E)	A+/A++ (1,9 – 10 kW) A+/A++ (2,9 – 18 kW) A+/A++ (4,8 – 25 kW) A+/A++ (4,8 – 30 kW)	A/A++ (10 – 17 kW) A/A++ (14 – 23 kW)	–

## Thermal Solvis collectors

	<b>SolvisCala Eco C-254-E</b>	<b>SolvisCala C-254-AR</b>	<b>SolvisFera F-553-I-AR</b>	<b>SolvisLuna LU-304</b>
Collector length	2168 mm	2176 mm	3793 mm	2032 mm
Collector width	1168 mm	1176 mm	1480 mm	1412 mm
Collector surface area (gross)	2.53 m <sup>2</sup>	2.56 m <sup>2</sup>	5.61 m <sup>2</sup>	2.87 m <sup>2</sup>
Absorber type	Aluminium with mirotherm® coating			Sydney tubes
Anti-reflective glass	–	Yes	Yes	–
Glass transmission	> 91%	> 96%	> 96%	–
Solar Keymark certificate	011-7S2768 F	011-7S567 F	011-7S2482 F	011-7S2628 R

## SolvisMax

Rated volume	450 l	750 l	950 l
Actual volume	458 l	713 l	902 l
Output data			
Total height without insulation	1648	1724	2114
Total height without insulation with adjustable feet	1683	1759	2149
Total height with insulation and adjustable feet	1800	1920	2300
Diameter without insulation	650	790	790
Diameter with insulation	870	1020	1020
Storage tank tilt height	1670	1760	2140

All dimension specifications in mm.

For all sizes, the space requirement is increased by 0.45 m for the cover that protects the hot water and solar stations.

### Values for all sizes

	SolvisMax Gas (SX)	SolvisMax Oil (SÖ-BW)	SolvisMax Teo (Teo)*	SolvisMax Vaero (Vaero)*
Nominal heat output selectable	1.9 – 10 kW 2.9 – 18 kW 4.8 – 25 kW 4.8 – 30 kW	10 – 17 kW or 14 – 23 kW or 20 – 28 kW	6 kW 10 kW	8 kW 11 kW 15 kW
Energy efficiency class without thermal collectors	A/A (1.9 – 10 kW) A+/A (2.9 – 18 kW) A+/A (4.8 – 25 kW) A+/A (4.8 – 30 kW)	A/A (10 – 17 kW) A/A (14 – 23 kW) A/A (20 – 28 kW)	A+/A (6 kW) A+/A (10 kW)	A+/A (8 kW) A++/A (11 kW) A+/A (15 kW)
Energy efficiency class with thermal collectors (e.g. 4x SolvisCala C-254)	A+/A+++ (1.9 – 10 kW) A+/A+++ (2.9 – 18 kW) A+/A+++ (4.8 – 25 kW) A+/A+++ (4.8 – 30 kW)	A+/A+++ (10 – 17 kW) A+/A+++ (14 – 23 kW) A+/A+++ (20 – 28 kW)	A++/A+++ (6 kW) A++/A+++ (10 kW)	A++/A+++ (8 kW) A++/A+++ (11 kW) A++/A+++ (15 kW)

\* SolvisMax Teo and SolvisMax Vaero are offered with a rated volume of 750 l or 950 l only.

### Thermal Solvis collectors

	SolvisCala Eco C-254-E	SolvisCala C-254-AR	SolvisFera F-553	SolvisFera F-653	SolvisFera F-803	SolvisLuna LU-304
Collector length	2168 mm	2176 mm	3793 mm	4735 mm	5677 mm	2032 mm
Collector width	1168 mm	1176 mm	1480 mm	1480 mm	1480 mm	1412 mm
Collector surface area (gross)	2.53 m <sup>2</sup>	2.56 m <sup>2</sup>	5.61 m <sup>2</sup>	7.01 m <sup>2</sup>	8.40 m <sup>2</sup>	2.87 m <sup>2</sup>
Absorber type	Aluminium with mirotherm® coating					Sydney tubes
Anti-reflective glass	–	Yes	Yes	Yes	Yes	–
Glass transmission	> 91%	> 96%	> 96%	> 96%	> 96%	–
Solar Keymark certificate	011-7S2768 F	011-7S567 F	011-7S1750 F/011-7S2482 F			011-7S2628 R

# Solvis is heat. Heat is life. Life is the future.

For more than 30 years, we have been driven by our vision of using the natural elements sun, air, water and earth to develop sustainable technologies for heat energy.

That's why we think long-term and across generations. Today's decisions determine tomorrow's success.

Since the company was founded in 1988, we have pursued our goal and developed thermal systems that combine ecology and economy.

This has certainly paid off: not only for mankind and the environment, but also in terms of technical progress.


As a driver of innovation, Solvis has become the technological leader for heating systems in Europe.

Many of our products are multi award-winners.

What makes Solvis heating systems unique? Our primary aim is efficient heat storage and energy self-sufficiency.

Solvis products are modular and grow with the future needs of our customers.

Solvis creates warmth. Life. Future.



Ms. Gabriele Münzer  
Managing Director Solvis GmbH



Mr. Markus Kube  
Managing Director Solvis GmbH





"Our motivation:  
Striving to produce the most efficient  
and sustainable heating system in the  
world every single day and making sure  
our customers are wholly satisfied with  
Solvis heating systems in our role as service  
provider to the craft trades".



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