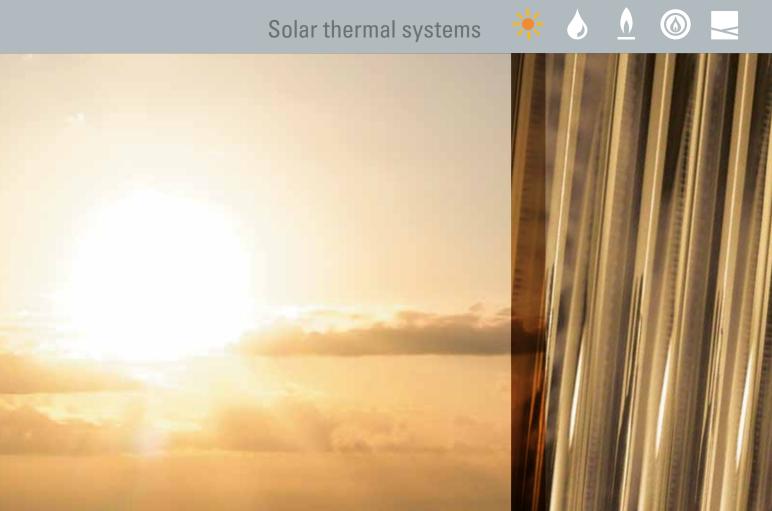


# Solar thermal systems





# Energy from the sun – delivered free to your door

Anyone investing in a new heating system today should design it from the outset to include a solar thermal system. This will allow you to benefit from lower energy consumption and also look forward to lower monthly energy bills.

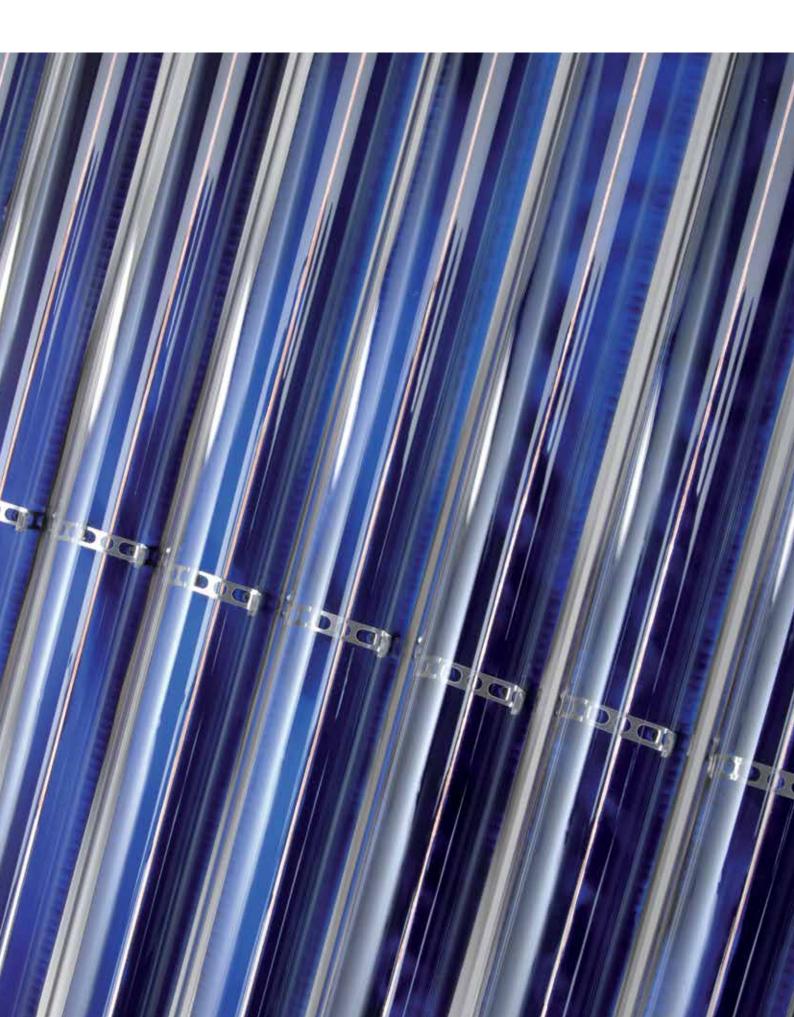
By installing solar collectors, you are demonstrating your commitment to protecting the environment by sustainably lowering  $CO_2$  emissions. By choosing Viessmann technology you are opting for a futureproof system in which all components interact optimally.

Investing in solar technology also increases the value of your property.

On the following pages, you will find comprehensive information about Viessmann solar technology and the possibilities it allows for energy efficient DHW heating and central heating backup.

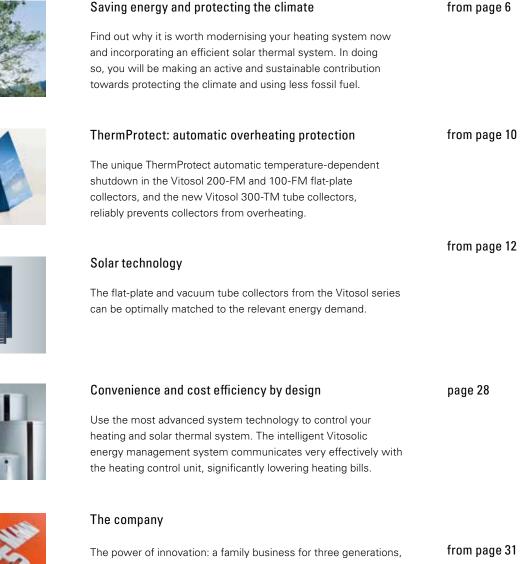
With more than 40 years' experience in the development and manufacture of solar thermal systems, you can count on our high quality and technical expertise.

All Viessmann systems are designed to work in combination with solar technology, so it makes no difference whether you opt for a new condensing boiler for oil or gas, a heating system for wood, or a heat pump.



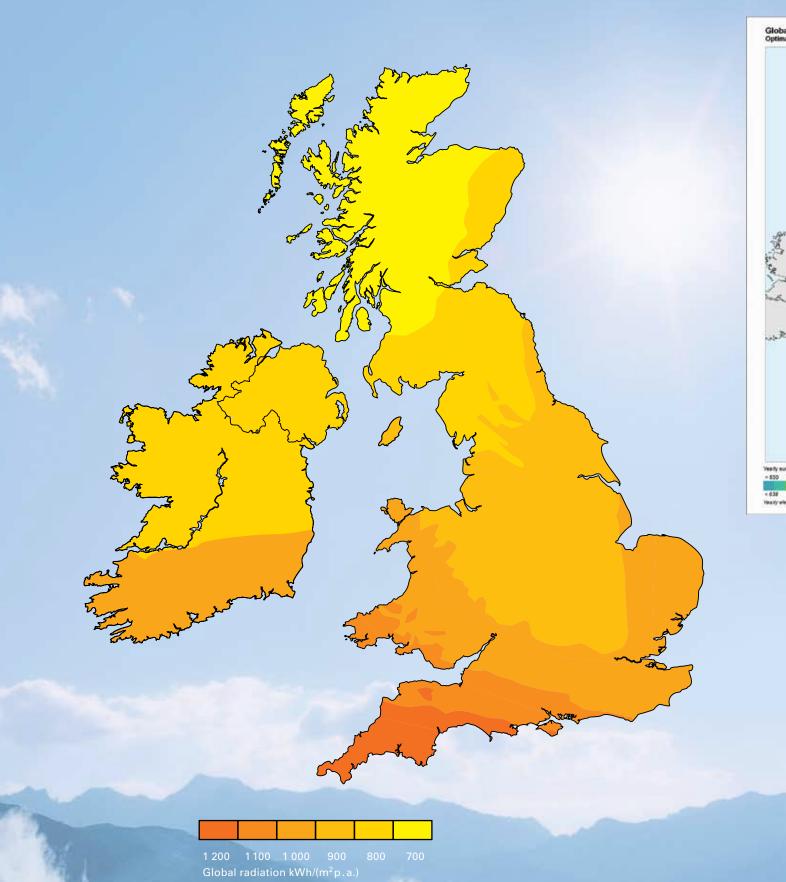


# Viessmann flat-plate and vacuum tube collectors meet every requirement for efficient and cost effective DHW heating and central heating backup.



ALLER'S

The power of innovation: a family business for three generations, from page 3 Viessmann offers state of the art technology and takes its responsibilities seriously.

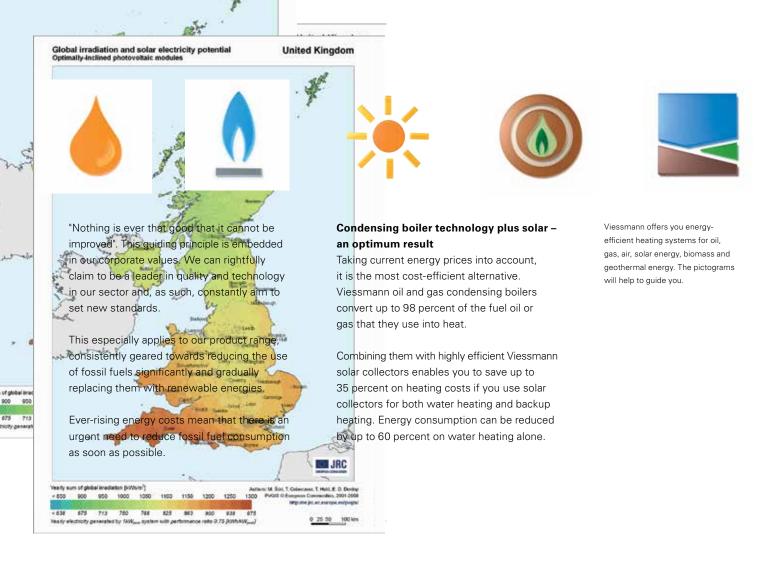


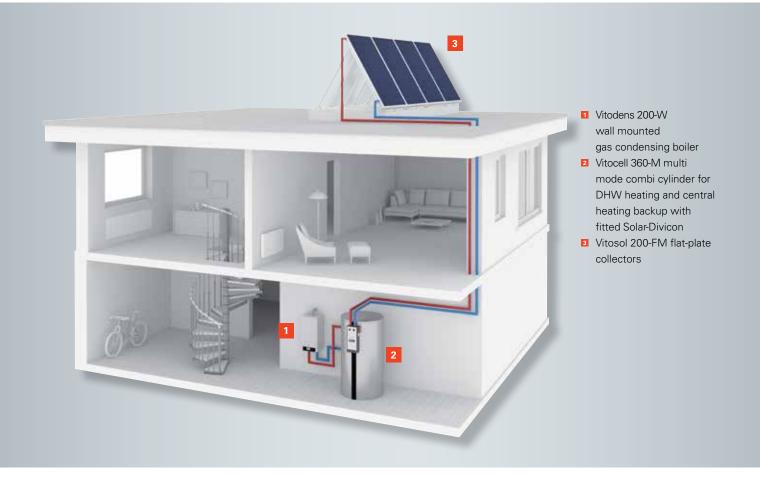
### Saving energy and protecting the climate

l irradiation and solar electricity potential

tial United Kingdom

Viessmann is aware of its responsibility towards sustained environmental protection. Our company philosophy and products have been developed with this in mind.





Energy efficiency class: A In combination with A+ solar collectors

# DHW heating and central heating backup with solar energy

Solar thermal systems are the perfect choice for DHW heating and central heating backup. By harnessing freely available solar energy, you can save on the use of fossil fuels. What's more, investments in solar thermal energy pay off in just a few years.

Fundamentally, you have the option of using solar energy for DHW heating and central heating backup. Savings on oil and gas are considerable in all cases, as you will be able to reduce your annual energy consumption by around 60 percent. This is the energy that would otherwise be required for your day to day DHW heating. If you combine the heating of DHW and heating water, you will save around 35 percent of the total energy required – every year.

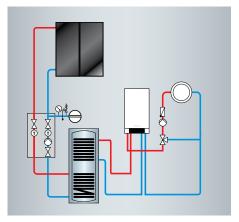
# Solar thermal system with dual mode DHW cylinder

A dual mode DHW cylinder is central to this type of system. When there is sufficient insolation, the solar medium in the solar thermal system heats up the water in the DHW cylinder via the lower indirect coil.

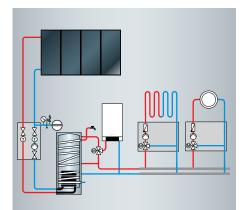
When the temperature drops through hot water being drawn off, such as for a bath or shower, the boiler starts – if necessary – to provide additional heating via the second circuit.

#### Solar thermal system for DHW heating and central heating backup

The solar medium heated in the solar collectors can be used to bring heating water and DHW up to temperature. For this, the heating circuit, via a heat exchanger, uses the water in the solar cylinder that is continuously heated by the solar collectors. The control unit checks whether the required room temperature can be achieved. If the temperature is below the set value, the boiler will also start.



Solar DHW heating



With Viessmann, heating and solar technology come entirely from a single source. All components are perfectly matched.

Solar DHW heating and central heating backup

### ThermProtect

ThermProtect: automatic overheating protection for flat-plate and tube collectors



# ThermProtect, with its innovative automatic shutdown function, now protects both the Vitosol 200-FM / 100-FM flat-plate collectors, as well as the Vitosol 300-TM vacuum tube collectors, from overheating.

With ThermProtect automatic temperaturedependent shutdown in the Vitosol 200-FM and Vitosol 100-FM flat-plate collectors, Viessmann set a benchmark for efficient, operationally reliable solar thermal systems. Now Vitosol 300-TM vacuum tube collectors also feature this automatic shutdown facility, for reliably preventing the collectors from overheating.

# Solar thermal systems with ThermProtect: durable and reliable

Thanks to ThermProtect, large collector areas can also be realised without having to take stagnation into consideration during system engineering. Viessmann's technology causes the collectors to shut down when a set temperature limit is reached. The temperature-dependent shutdown functions completely independently of collector system configuration, control unit settings and installation location. The thermal loads on system components and the heat transfer medium always stay within their normal range. This increases service life and operational reliability, compared to conventional solar thermal systems.

#### Easy to install

Installation is easier, as there is no need for pre-cooling vessels or stagnation coolers. As the formation of steam from the heat transfer medium no longer has to be taken into consideration for the collectors, there are also more options when it comes to routing the hydraulic lines.

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# Vitosol 200-FM and 100-FM: crystals prevent overheating

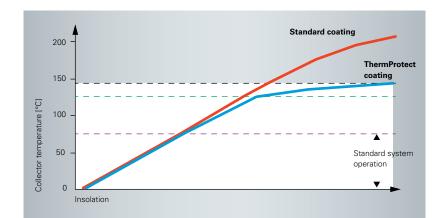
A crystalline absorber coating on the Vitosol 200-FM and 100-FM flat-plate collectors controls energy absorption. In physical terms, the ThermProtect coating function is ensured by temperaturedependent changes in the structure of the crystals. At collector temperatures of around 75 °C and above, the reflection of incoming solar radiation is increased. Further temperature rises are limited, reliably preventing the formation of steam.

Once the temperature in the collector falls again, the crystalline structure returns to its original state. The energy drawn by the collector is then no longer irradiated back into the environment and can be used in the solar thermal system. There is no limit to the number of times the change in crystalline structure can be activated, making this function permanently available.

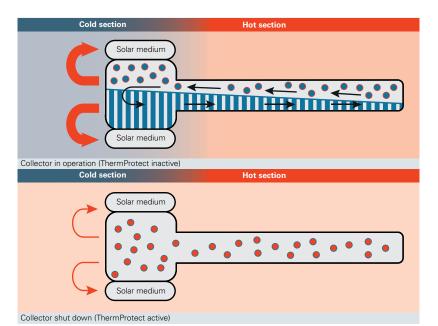
## Vitosol 300-TM: heat pipe with automatic temperature-dependent shutdown

In the new Vitosol 300-TM vacuum tube collectors, a self-regulating heat pipe dryconnected inside the collector heat exchanger is responsible for ThermProtect automatic temperature-dependent shutdown. Solar energy causes the medium sealed inside the heat pipe to evaporate. When it reverts to its liquid state inside the condenser, the heat absorbed is transferred to the solar thermal system and the medium flows back to the sunlit area of the vacuum tube.

Once the temperature limit of approx. 120 °C is reached, the medium is no longer able to condense. Thanks to this phase-change temperature shutdown, heat transfer is interrupted and the system is thus protected against excessively high stagnation temperatures. Circulation in the heat pipe only restarts at lower collector temperatures, so that solar heat can once again be transferred into the heating system.



In standard collector mode, the ThermProtect coating of the flat-plate collectors acts like any conventional absorber coating. At collector temperatures of 75 °C and above, heat transfer increases many times over, reliably preventing overheating and the formation of steam in the event of stagnation.



The self-regulating heat pipe in the Vitosol 300-TM vacuum tube collectors: once the temperature limit of approx. 120 °C is reached, the medium is no longer able to condense. As a result, heat transfer is interrupted and the system is thus protected against excessively high stagnation temperatures.



### VITOSOL

With a wide range of flat-plate and vacuum tube collectors, Viessmann provides flexible and individual solutions for every kind of modern heating system.

Every year, the sun radiates on average 1000 kWh onto every square metre of ground in central Europe. This corresponds to the energy content of 100 litres of fuel oil. With Viessmann solar collectors, you can utilise this energy to generate heat. A solar thermal system is the ideal extension to any heating system, and sustainably lowers energy consumption.

# The heating system that loves the environment

Even when it comes to environmental compatibility, with Viessmann solar thermal systems you'll be on the sunny side of the street: on average, carbon dioxide  $(CO_2)$  emissions are reduced by about three quarters of a tonne for a detached house.

#### Futureproof in every respect

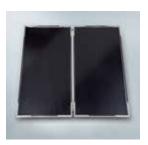
All Viessmann flat-plate and tube collectors are distinguished by their high operational reliability and long service life. Vitosol solar collectors are made of corrosion and UVresistant materials. This is most impressively verified by quality tests according to the EN 12975 test standard or ISO 9801, which at the same time confirm the consistently high thermal output.

Viessmann can draw on 30 years of experience in the development and manufacture of solar collectors.











#### Vitosol 300-TM

(type SP3C) Vacuum tube collectors with heat pipe technology and ThermProtect Absorber area: 1.51 and 3.03 m<sup>2</sup> Suitable for domestic and commercial installations Page 14

#### Vitosol 200-FM

(types SV2F and SH2F, types SV2G and SH2G) Flat-plate collectors with ThermProtect Absorber area: 2.32 m<sup>2</sup> Suitable for domestic and commercial installations **Page 18** 

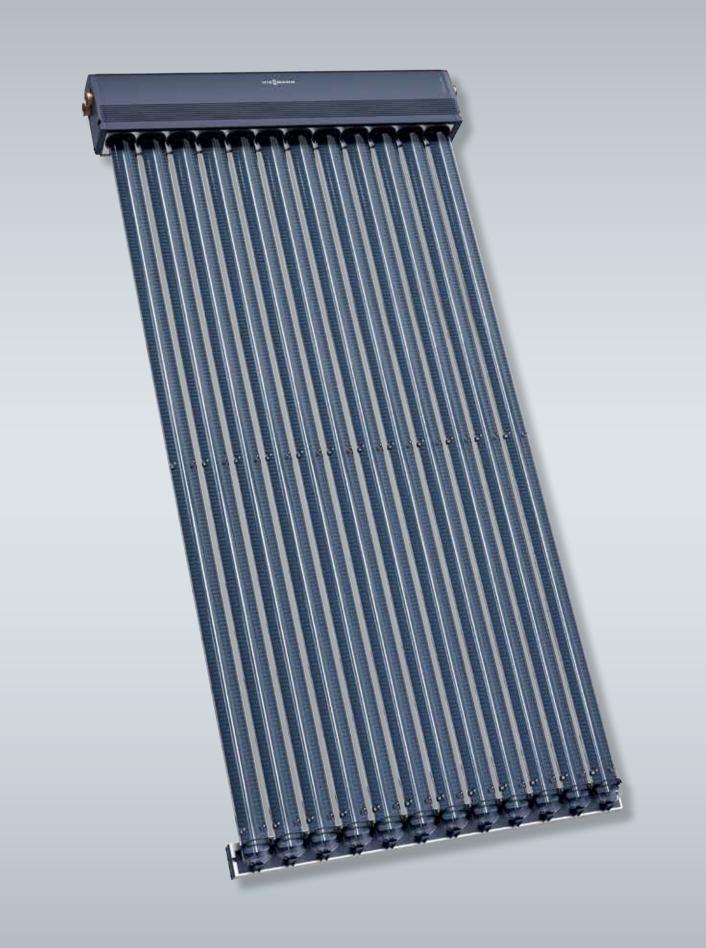
#### Vitosol 100-FM

(types SV1F and SH1F) Flat-plate collectors with ThermProtect Absorber area: 2.32 m<sup>2</sup> Suitable for domestic and commercial installations **Page 18** 

#### Vitosol 100-FM

(types SVKF and SVKG) Domestic hot water solar package Vitosol 100-FM flatplate collectors (type SVKF for on-roof installation, type SVKG for roof integration) Page 22

Vitodens 242-F (type B2UB) Solar heating tower with integral 170 litre cylinder Page 24



### VITOSOL 300-TM

Highly efficient vacuum tube collectors based on the heat pipe principle with ThermProtect

#### Effective use of the sun's heat

The absorbers with highly selective coating collect a vast amount of solar energy and thereby ensure high efficiency. At the same time, the vacuum in the tubes provides very effective thermal insulation. This means there are almost no losses between the glass tubes and the absorber, enabling the collector to convert even low levels of insolation into useful energy. The vacuum tube collectors use the available insolation extremely efficiently, particularly in the spring and autumn, and in the winter when outside temperatures are low.

#### High energy yields for years to come

Viessmann solar collectors are designed for an exceptionally long service life. This is guaranteed by the use of high grade, corrosion-resistant materials, such as glass, aluminium, copper and stainless steel. The absorber is an integral part of the vacuum tube. This protects it from weather influences and contamination, and ensures high energy yields for years to come.

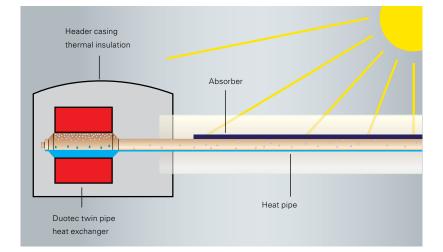
## Heat pipe principle for high operational reliability

The Vitosol 300-TM are highly efficient vacuum tube collectors based on the heat pipe principle.

In heat pipe systems, the solar medium does not flow directly through the tubes. Instead, a process medium evaporates in the heat pipe below the absorber and transfers the heat to the solar medium. The dry connection of the heat pipe tubes inside the header, the small amount of fluid inside the collector and ThermProtect automatic temperaturedependent shutdown ensure particularly high operational reliability.

#### Quick and safe installation

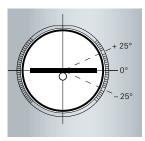
Vitosol tube collectors are delivered in a pre-assembled modular design. An innovative push-fit system enables the tubes to be quickly and easily installed. The tubes can be rotated individually for optimum alignment with the sun. The tubes are connected in a dry state, i.e. without direct contact between the process medium and the solar medium, allowing individual tubes to be replaced without draining the system. Individual collectors are interconnected by stainless steel corrugated push-fit connectors.



The medium heated by the sun evaporates and shifts to the colder part of the tube. There, the steam condenses, transferring the heat to the header, and the water is then reheated in a new cycle.

### Vitosol 300-TM

### Solar technology Tube collectors



Straightforward installation and quick absorber alignment using the angle indicator on the tube holders



Universal application through vertical or horizontal installation in any location, either on rooftops, walls or for freestanding installation.

# With the Vitosol 300-TM, Viessmann offers a high performance vacuum tube collector that meets the highest demands for safety and efficiency.

The Vitosol 300-TM high performance collector is one of the most efficient models on the market and is particularly recommended for use in restricted spaces. The absorber angle can be adjusted by +/-25° to deliver an exceptionally high yield, even when the sun is in less favourable positions. The collector can be installed and used in any position and is designed for use on detached houses and apartment buildings. It features ThermProtect automatic temperaturedependent shutdown, which is activated if heat draw-off stagnates for a long period whilst there is a high level of insolation.

#### **Operational reliability with ThermProtect**

The Vitosol 300-TM is currently the only collector on the market that can be installed horizontally (min. 3° tube incline) and includes ThermProtect automatic temperature-dependent shutdown. It prevents overheating of the collectors when no heat is drawn off and there is a high level of insolation. The Vitosol 300-TM is therefore also suitable for buildings that are not in use all year round, such as residential buildings during holiday periods.

#### Maximum heat transfer with Duotec

The collector works according to the heat pipe principle, where the solar medium does not flow directly through the tubes. Instead, a process medium evaporates inside the heat pipe and transfers the absorbed heat through condensation to the solar medium via the Duotec twin pipe heat exchanger. This method guarantees optimum heat transfer.

#### **Exceptionally long service life**

The Vitosol 300-TM is designed for an exceptionally long service life thanks to its high grade, corrosion-resistant materials, including glass, aluminium, copper and stainless steel. The absorber is an integral part of the vacuum tube. This protects it from weather influences and contamination, and ensures high energy yields for years to come.

#### Quick, straightforward and safe installation

The above roof installation system with rafter anchors simplifies the task of securing the collectors. The rafter hooks and flanges are designed to be fixed directly onto the rafters, enabling the collectors to be perfectly integrated into any kind of roof cover. The two mounting rails also save additional time during installation.

In systems with multiple collectors, dark blue cover panels create a seamless visual transition between the collector casing and absorber surfaces. Retaining caps in the base rail, in the same colour as the casing, prevent the tubes from slipping.

Should a service be required, heat pipe tubes can be replaced quickly and easily without having to drain the system, due to their dry connection.

### Vitosol 300-TM

- Collector casing with highly effective thermal insulation
- 2 Duotec twin pipe heat exchanger
- Absorber panel with selective coating inside the vacuum tube
- Heat pipe with ThermProtect automatic temperature-dependent shutdown
- Base rail with tube retainer in the same colour as the casing



Vitosol 300-TM offers universal application options



Vitosol 300-TM high performance vacuum tube collector (type SP3C)

#### Take advantage of these benefits

- Highly efficient vacuum tube collector based on the heat pipe principle, with ThermProtect automatic temperature-dependent shutdown for high operational reliability
- Protection against overheating during prolonged insolation
- Long service life due to low stagnation temperatures and prevention of steam forming within the system
- The absorber surfaces with highly selective coating, which are integrated into the vacuum tube, are not susceptible to contamination
- Efficient heat transfer through condensers fully surrounded by the copper Duotec twin pipe heat exchanger
- Optimum alignment with the sun, thanks to uncomplicated absorber alignment
- Dry connection, no contact between process medium and solar medium, i.e. individual tubes can be replaced whilst the system is fully charged
- Dark blue collector casing and absorber surfaces form a visually seamless appearance
- Highly effective thermal insulation of the header casing for minimum thermal losses
- Easy, quick installation with the Viessmann installation and connection systems

For specification, see page 30

Solar technology Flat-plate collectors



VITOSOL 200-FM VITOSOL 100-FM

Viessmann's patented switching absorber layer protects high performance flat-plate collectors from overheating and stagnation.

The Vitosol 200-FM and Vitosol 100-FM high performance flat-plate collectors are the perfect addition to any heating system. With an individual absorber area of 2.3 m<sup>2</sup>, solar collectors can be effectively matched to any energy demand. On average, they can replace up to 60 percent of the energy that would otherwise be required each year for DHW heating, as well as contributing to central heating backup. When used in conjunction with a condensing boiler, free solar energy can help you reduce your annual energy consumption for heating and DHW by over one third.

#### ThermProtect prevents overheating

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An intelligent absorber layer protects the collectors from overheating. Viessmann's patented ThermProtect technology prevents further energy absorption once a certain temperature has been reached, when the solar cylinder is fully heated. If the switching temperature is exceeded, the crystalline structure of the absorber layer changes, increasing the rate of heat radiation many times over and reducing collector output. The stagnation temperature thus drops significantly, preventing the formation of steam.

By lowering the collector temperature, the crystalline structure returns to its original state. More than 95 percent of the incoming solar energy can now be absorbed and converted into heat. Only the remaining five percent is reflected. There is no limit to the number of times the change in crystalline structure can be activated, making this function permanently available.

ThermProtect also leads to higher yields with the Vitosol 200-FM and Vitosol 100-FM compared to conventional flat-plate collectors, as more generous sizing is possible.

### Vitosol 200-FM Vitosol 100-FM



Vitosol 200-FM Semi-detached home, Geisenfeld

#### Attractive on any roof

The Vitosol 200-FM is the right choice if the collector is required with a frame in an individual RAL colour. It is finished in dark blue as standard and blends in with any roof. The Vitosol 100-FM is only available with an aluminium coloured frame.

The Vitosol 200-FM, type SV2G (vertical) or type SH2G (horizontal) can be selected for seamless roof integration, lying almost flush with the roof cladding when installed.

#### Permanently sealed and well insulated

The all-round folded aluminium frame and seamless pane mounting ensure permanent tightness and a highly stable collector. The back panel is puncture-proof and corrosionresistant. Highly effective thermal insulation reduces heat losses, particularly in spring, autumn and winter.

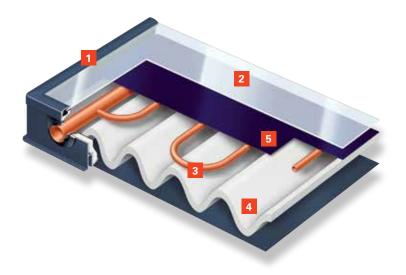
#### Straightforward installation

Both collectors are particularly easy to install. The integral flow and return pipes enable safe installation, even for larger collector arrays, using flexible corrugated stainless steel pipe push-fit connectors. Up to twelve solar collectors can be easily linked together.

The flat-plate collectors can be used universally for above roof installation, roof integration and installation on collector supports, for example on flat roofs. The easy-to-assemble Viessmann fixing system consists of load-tested and corrosion-resistant components made from stainless steel and aluminium.

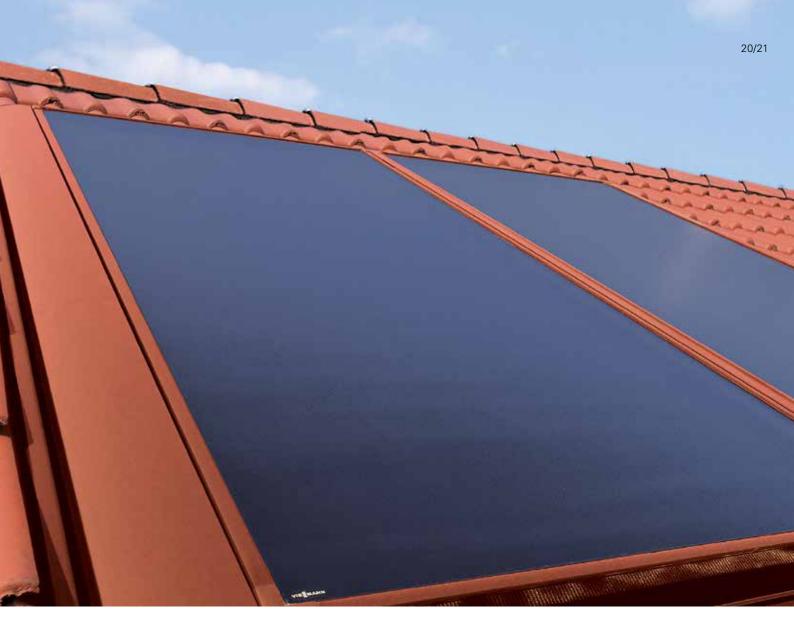


Collector frame with special roof integration profile for fitting the flashing frame

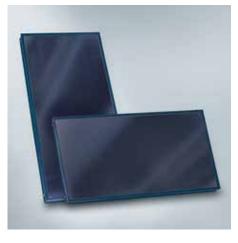


#### Vitosol 200-FM

- All-round folded aluminium frame with glazing bead
- Stable, highly transparent cover made from special glass with ThermProtect
- Meander shaped absorber
- 4 Highly effective thermal insulation
- Absorber panel with ThermProtect coating with automatic temperature-dependent shutdown



With optional edge trim in all RAL colours, the Vitosol solar collectors blend harmoniously into most roofs



Vitosol 200-FM with ThermProtect switching absorber layer

#### Take advantage of these benefits

- Vitosol 200-FM and Vitosol 100-FM high performance flat-plate collectors with ThermProtect switching absorber layer
- No overheating when outside temperatures are high or heat transfer is low
- Higher solar coverage for central heating backup and DHW heating
- Permanently sealed by all-round frame and seamless pane mounting
- Quick and reliable connection through flexible corrugated stainless steel pipe push-fit connectors
- Universally suitable for above roof installation, roof integration, flat roof installation, or wall mounting
- Can be installed horizontally or vertically
- Attractive design, individually finished in any RAL colour (Vitosol 200-FM)

For specifications, see page 30

#### Powerful and durable flat-plate collectors at an attractive price

# Matching system for highly economical operation

In size, performance and price, the DHW solar pack is intended specifically for detached houses. This provides an ecologically and economically interesting option for DHW heating.

By selecting this product you will be opting for a highly efficient, cost effective package that will cut the amount of energy required for your DHW heating by up to 60 percent.

#### Tailor-made for every demand

With an individual absorber area of 2.32 m<sup>2</sup>, the Vitosol 100-FM flat-plate collectors can be effectively matched to any energy demand. These collectors are available as vertical or horizontal models.

#### Easy to plan and install

All appliances and components are a perfect match for each other, which makes the installation as easy as can be. Now, new rafter hooks are available for above roof installation to make things even easier. With roof integration, the flat-plate collectors are directly secured to the roof structure. No tools are required for the interconnection between collectors, they are fully assembled hydraulic push-fit connectors.

Not only is your investment outlay modest, this system also takes less time to install.



Fixing of collector to rail



Collector pushes over connection



Roof hooks fix to rafters - no requirements to remove several tiles to fit to roof timbers



Push-fit flow and return pipe connection (no tools required) complete with flexi pipe



Vitosol 100-FM twin panel pack fully installed



Vitosol 100-FM SVK twin solar thermal panel pack as delivered

#### Take advantage of these benefits

- Solar system designed specifically for domestic hot water heating
- Considerably simplified setting up for reduced installation time
- No tool required to join collectors (push-fit system)
- Prefabricated hydraulic connection sets
- New rafter hooks for superior system structural integrity
- Surface optimised flat-plate collector with highly selectively coated absorber
- High performance solar collectors accredited to Solar Keymark

### Vitosol 100-FM SVK twin panel pack contents:

- Flat plate collectors
- Solar Divicon PS10
- Vitosolic 100 controller
- Roof kit
- Connection set
- Sensor pocket
- Manual air vent
- Through roof flexi pipes
- Expansion vessel
- Tyfocor GLS

For specification, see page 30

Gas condensing technology Solar heating tower



Vitodens 242-F

### VITODENS 242-F SOLAR DHW STORAGE

This storage combined floor standing condensing boiler is designed specifically for direct connection to a solar thermal system. Incorporating three technologies in one; gas condensing boiler, DHW cylinder and solar control package, for where space is at a premium.

#### **High DHW convenience**

For particularly high DHW convenience, the gas condensing boiler is equipped with a dual mode enamelled DHW loading cylinder with 170 litres capacity. The water heated to the required temperature is continually charged and therefore immediately available. Sensors ensure uniform temperature heating. In the event of higher DHW demand, the MatriX cylinder burner automatically starts and maintains the required water temperature.

# Automatic combustion control reduces costs

The Vitodens 200 series of gas condensing boilers feature the integral Lambda Pro Control Plus combustion controller. It automatically adapts to the quality of different gas types (natural gas E/L, LPG, biogas) and ensures consistently high energy efficiency. Lambda Pro Control Plus helps to keep maintenance costs down.

#### **Convenient control via app**

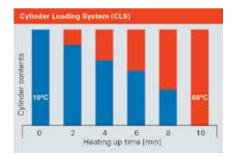
Controlling the heating centre is particularly convenient via app and the Vitoconnect 100 WiFi adaptor. This establishes the connection to the home router and enables access to the Vitodens 242-F via the internet from a smartphone or tablet computer. The ViCare app controls one heating circuit; for up to three heating circuits, use the Vitotrol Plus app.

#### Extremely easy to maintain

By selecting this boiler, the user will also benefit from low maintenance costs: All components are accessible from the front, no side clearance for servicing is required. When controlling the Vitodens 242-F via ViCare or the Vitotrol Plus app, the contractor can automatically be notified in the event of a fault.

#### **Cylinder Loading System (CLS)**

Most unvented cylinders use a heating coil to heat up the cylinder. The CLS technology replaces the coil with a plate heat exchanger. A DHW pump circulates the cold water from the bottom of the cylinder, through the plate heat exchanger and puts the hot water back to the top of the cylinder.





Weather compensation control features a 5" colour touchscreen with energy cockpit





Incorporating three technologies in one; gas condensing boiler, DHW cylinder and solar control package, for where space is at a premium



#### Take advantage of these benefits

- Gas condensing solar heating tower with integral 170 litre cylinder, solar coverage: > 50 %
- Easy to operate Vitotronic control unit with 5 inch colour touchscreen
- Control via app and internet (with optional Vitoconnect 100 WiFi adaptor)
- High heating and DHW convenience including solar integration
- MatriX cylinder burner with Lambda Pro Control combustion controller for permanently high efficiency and clean combustion
- With a floor area of just 0.4 m<sup>2</sup>, this storage combi boiler takes up only a relatively small amount of space, so can fit into any recess.
- Combined PRV and condensate connection, for fast and simple installation
- Energy efficiency class: A
- Energy efficiency class, DHW heating: A

10 Year Warranty on all stainless steel heat exchangers for gas condensing boilers up to 150 kW

Part No.	Description
B2UB060	Vitodens 242-F 19 kW Solar heating tower
B2UB061	Vitodens 242-F 26 kW Solar heating tower
7348552	Standard top connection set
7347985	Standard RH or LH side connection set
Controls	
7141709	Vitotrol 100 room thermostat (hard wired)
7170149	Vitotrol 100 UTA programmable room thermostat 24h analogue (hard wired)
7408012	Room temperature sensor (hard wired)
Z008341	Vitotrol 200A remote control with LCD display for 1 heating circuit (only with Vitotronic 200) (hard wired)
Z011471	Vitotrol 200 RF pack 1 (includes RF control and receiver) for Vitodens 200/222/242 (only in conjunction with weather compensation Vitotronic 200)
Z011219	Vitotrol 200 RF remote control unit c/w LCD display (to be used with Vitotronic 200 only)
Z008342	Vitotrol 300A remote control with LCD display for up to 3 heating circuits (only with Vitotronic 200) (hard wired)
7438537	Room temperature sensor (optional for Vitotrol 300A- only)
Z011962	Vitotrol 300 RF RC with table stand and receiver (only in conjunction with weather compensation Vitotronic 200)
Z011963	Vitotrol 300 RF RC with wall mount and receiver (only in conjunction with weather compensation Vitotronic 200)
Z011413	Vitotrol 300/200 RF receiver unit (only in conjunction with weather compensation Vitotronic 200)
Z011410	Vitotrol 300 RF RC with table stand (only in conjunction with weather compensation)
Z011412	Vitotrol 300 RF RC with wall mount (only in conjunction with weather compensation)
7661174	Vitotronic 100 HC1B const temp, no programmer
7661470	Vitotronic 200 HO2B weather compensated controller
7637691	Vitoconnect 100 OPTO1 wifi modem for remote monitoring
Z011396	Vitocom 100 (Type GSM 2) for remote control via GSM/mobile phone network (excl SIM card)
Z011224	Vitocom 100 LAN 1 with LON module (not for Vitodens 100 range)
Flues	
7373230	Standard concentric vertical flue terminal Ø 60/100 mm
7441467	Standard concentric 1 m horizontal flue kit Ø 60/100 mm (1000 mm black terminal, 87° bend)
7667547	Standard concentric 1.75 m horizontal flue kit 60/100 mm
7373223	Standard concentric 0.5 m flue extension pipe Ø 60/100 mm
7373224	Standard concentric 1 m flue extension pipe Ø 60/100 mm
7373225	Standard concentric 1.95 m flue extension pipe Ø 60/100 mm
7667546	Standard concentric 3 m flue extension pipe 60/100 mm
7373226	Standard concentric 3 mille extension pipe 60/100 mm
7373220	Standard concentric 45° flue elbow Ø 60/100 mm (pair)
7176762	Standard concentric flue mounting clip Ø 100 mm
7337276 7373238	Terminal guard
7373238	Plume management kit
	Flue bend 45° Ø 60 mm (pair)
7373267	Flue bend 87° Ø 60 mm
7373268	Plume kit 1 m flue extension Ø 60 mm
7452499	Roof tile Ø 125 red (for 60/100 mm flue system)
7452500	Roof tile Ø 125 red (for 60/100 mm flue system)
7426187	Flat Roof Collar Alu D=125 H=250 S
ZK00028	Chimney flue kit 60/100- 12.5 m / room sealed
ZK00029	Chimney flue kit Ø 60/100 mm- 12.5 m / open flued (for longer flue lengths upgrade to Ø 80/125 mm)
7502602	Chimney kit for recess installation 60/100 with flexi 60 mm
7502603	Chimney kit for recess installation 60/100 with flexi 80 mm
7590109	Open flued water protection cap
7373240	Flue adaptor 60/100 to 80/125 mm

### Technical Data

	Туре	B2UB	B2UB
Rated heating output			
50/30 °C 80/60 °C	kW kW	1.9 - 19 1.7 - 17.6	2.6 - 26 2.4 - 24.1
DHW performance @ 35°C temp. rise	l/min	16.4	19
DHW output range	kW	1.7 - 17.2	2.4 - 29.3
Content loading cylinder	Litre	170	170
Dimensions			
Length (depth)	mm	595	595
Width	mm	600	600
Height	mm	1875	1875
Weight	kg	161	165
Energy efficiency class	transa		
Heat	Tana	А	A
DHW heating, tap profile XL	÷	А	А



The Vitocell range from Viessmann offers the right DHW cylinder for every demand, ideally matched to your heat generator.

## Convenience and cost efficiency by design

#### Viessmann supplies you with all the technology you need from a single source.

For the complete solar thermal range, Viessmann offers optimally matching system technology from a single source. All components work together perfectly. This gives you the guarantee of outstanding efficiency and high operational reliability of your heating and solar thermal system.

The comprehensive Viessmann product range includes solar collectors, specially developed combi DHW cylinders for use with solar thermal systems, solar control units, the Solar-Divicon pump module for reliable hydraulics and thermal protection of solar thermal systems, plus oil and gas condensing boilers, wood boilers and heat pumps.

Correctly sized solar thermal systems with matching system components cover up to 60 percent of the annual energy demand for DHW heating of detached and two-family houses, or up to 35 percent of the total demand of low energy houses for DHW and central heating.

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#### **DHW cylinders**

The Vitocell range comprising dual mode DHW cylinders, combi cylinders and heating water buffer cylinders, offers a cylinder to suit every need and is perfectly matched to the solar thermal system.



### Solar control units

With Vitosolic solar control units, solar energy is used particularly effectively. The intelligent energy management system covers all conventional applications and can control up to four separate consumers. By communicating with the Vitotronic boiler control unit, the Vitosolic ensures that optimum use is made of the heat captured by the solar collectors, and that as little additional energy as possible is used for DHW or central heating.



#### Solar-Divicon

The solar pump assembly is distinguished by its elegant and compact design. The thermal insulation encases all components and reduces heat losses to a minimum.



#### Connectivity

With Vitoconnect 100 and a smartphone, operating Viessmann heating systems couldn't be easier. The Vitotrol app enables the remote control of heating systems in conjunction with solar collectors. The app is available for mobile devices with iOS or Android operating systems.







### Vitosol 300-TM vacuum tube collectors

	Type SP3C		SP3C
Absorber area	m <sup>2</sup>	151	3.03
Gross area	m <sup>2</sup>	2.36	4.62
Aperture area	m <sup>2</sup>	1.60	3.19
Dimensions			
Length (depth)	mm	150	150
Width	mm	1053	2061
Height	mm	2241	2241
Weight	kg	39	79

### Vitosol 200-FM flat-plate collectors

	Туре	SV2F Vertical	SH2F Horizontal	SV2G Vertical	SH2G Horizontal
Gross area	m <sup>2</sup>	2.51	2.51	2.56	2.56
Absorber area	m <sup>2</sup>	2.32	2.32	2.32	2.32
Aperture surface	m <sup>2</sup>	2.33	2.33	2.33	2.33
Dimensions					
Width	mm	1056	2380	1070	2394
Height	mm	2380	1056	2394	1070
Depth	mm	90	90	90	90
Weight	kg	41	41	41	41

Vitosol 200-FM (Type SV2F) for above roof installation and Vitosol 200-FM (Type SV2G) for roof integration

### Vitosol 100-FM flat-plate collectors

Туре		SV1F Vertical	SH1F Horizontal
Gross area	m²	2.51	2.51
Absorber area	m²	2.32	2.32
Aperture surface	m²	2.33	2.33
Dimensions			
Width	mm	1056	2380
Height	mm	2380	1056
Depth	mm	72	72
Weight	kg	42	42

Vitosol 100-FM (Type SV1F) for above roof installation and Vitosol 100-FM (Type SH1F) for roof integration

### Vitosol 100-FM solar pack

Vitosol 100-FM individual collector	Туре	SVKF Vertical	SVKG Vertical
Gross area	m²	2.18	2.23
Absorber area	m <sup>2</sup>	2.01	2.01
Aperture area	m <sup>2</sup>	2.02	2.02
Dimensions			
Width	mm	1056	1070
Height	mm	2066	2080
Depth	mm	73	73
Weight	kg	37	38

Vitosol 100-FM (type SVKF) for above roof installation and Vitosol 100-FM (type SVKG) for roof integration







### The company

Viessmann is one of the leading international manufacturers of efficient heating, industrial and refrigeration systems.

#### Acting in a sustainable manner

As a family business Viessmann takes the long view and places great value on acting responsibly; sustainability is firmly enshrined in the company's principles. For Viessmann, sustainability in action means striking a balance between economy, ecology and social responsibility throughout the company; meeting current needs without compromising the quality of life of future generations.

With its strategic sustainability project, Viessmann demonstrates at its own head office in Allendorf (Eder) that the energy and climate policy goals set by the German government for 2050 can in fact be achieved today with the help of commercially available technology.

#### The Viessmann comprehensive range

As environmental pioneer and technological trailblazer for the heating sector, Viessmann has for decades been supplying exceptionally clean and efficient systems for heating, refrigeration and decentralised power generation. Many of the company's developments are recognised as heating equipment milestones.

#### **Practical partnership**

As part of its comprehensive range, Viessmann also offers a wide selection of complementary services. These services include a comprehensive training and further development programme for trade partners at the well equipped training facilities of the Viessmann Academy.

With its new digital services, Viessmann offers innovative solutions such as the operation and monitoring of heating systems by smartphone. Users benefit from greater reassurance and convenience, whilst contractors can keep a constant eye on the systems for which they are responsible.



German Sustainability Award for Production/Brand/Resource Efficiency



Energy Efficiency Award

#### Viessmann Group

#### Company details

- Established in: 1917
- Employees: 12,000
- Group turnover: 2.25 billion euros
- Export share: 54 percent
- 23 production companies in 12 countries
- 74 countries with sales companies and branches
- 120 sales offices worldwide

### Comprehensive range from the Viessmann Group

- Boilers for oil or gas
- Combined heat and power generation
- Hybrid appliances
- Heat pumps
- Wood combustion technology
- Biogas production plants
- Biogas upgrading plants
- Solar thermal
- Photovoltaics
- Accessories
- Refrigeration systems



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Your trade partner:

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