

# DIETRISOL

SOLAR WATER HEATING SYSTEMS

ENERGY SAVINGS AND  
ECOLOGICAL BENEFITS



SUSTAINED  
COMFORT



SIMPLICITY  
AND  
RELIABILITY



INNOVATIVE,  
MODULAR SYSTEMS

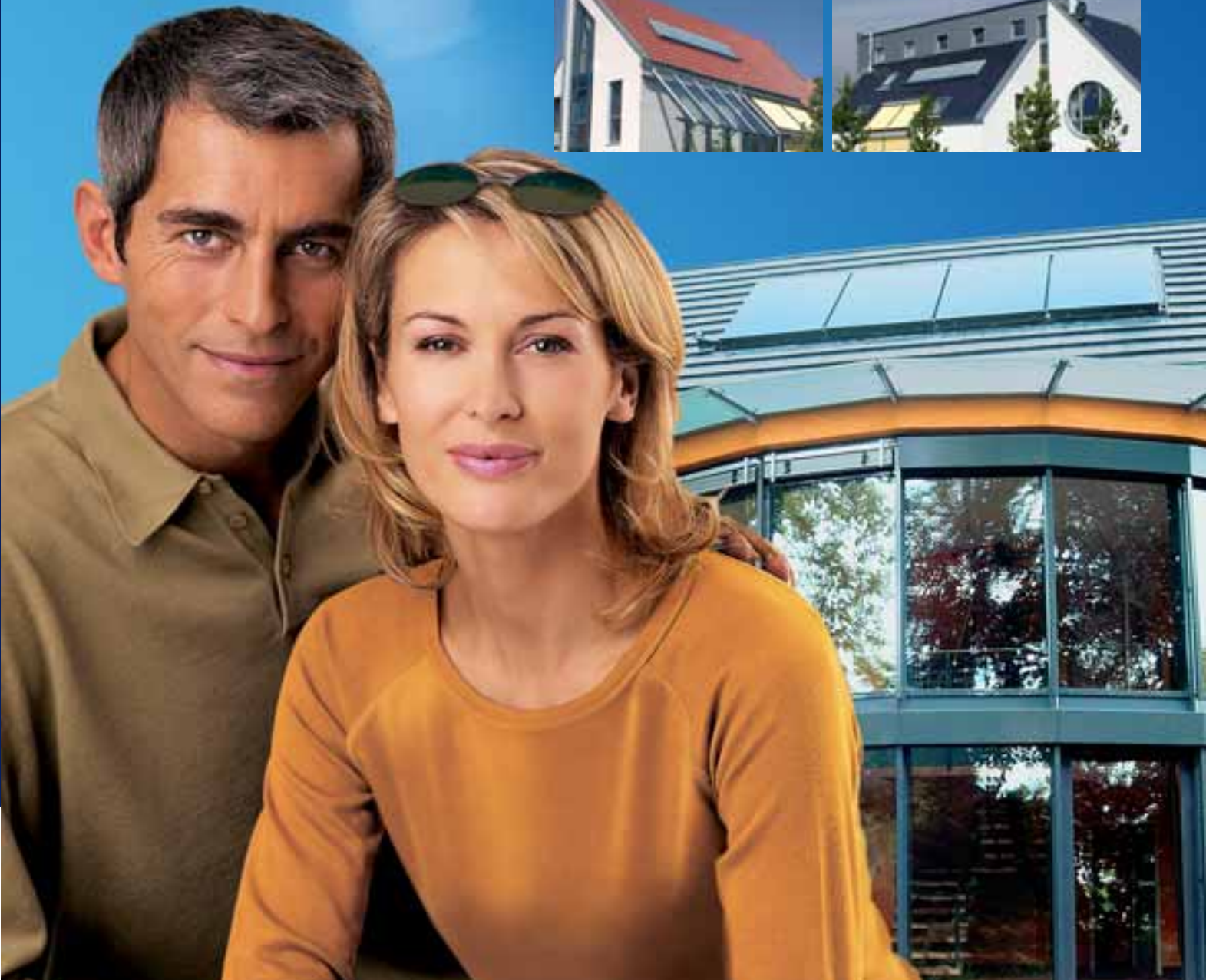
De Dietrich 

# DIETRISOL SOLAR WATER HEATING SYSTEMS

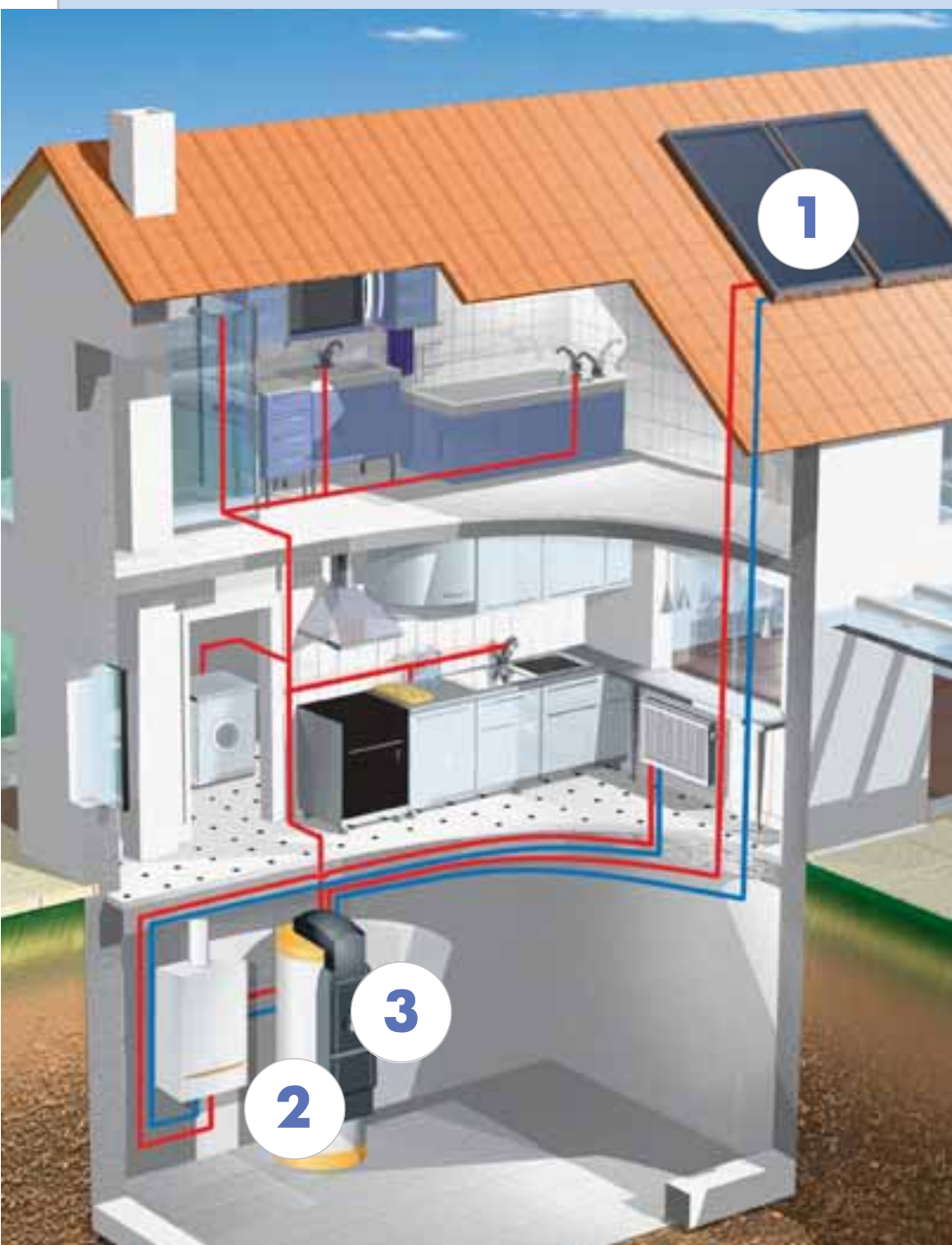
NON-POLLUTING, EVERLASTING ENERGY  
FOR DOMESTIC HOT WATER COMFORT  
AND OPTIMAL HEATING

By using the sun rays to provide hot water, Diestrisol promises that you will benefit from an energy source which is free, clean, and everlasting.

For a long time, putting solar energy into practical use has seemed like a difficult task, but now, thanks to significant technological progress, we know how to collect and use it in an efficient way. The efficiency of solar energy systems in northern European countries (Germany in particular) proves that we do receive enough sunshine to reap the benefits of this natural energy source.



# DIETRISOL SOLAR WATER HEATING SYSTEMS



**SOLAR  
COLLECTORS**



**SOLAR TANKS**



**REGULATION  
SYSTEMS**

## **SOLAR TAILORED TO YOUR NEEDS**

De Dietrich's new solar water heating systems offer consists of three product ranges. These are the solar collectors, tanks and regulation units. Therefore, numerous combinations are possible for creating a system which is virtually tailor made: for example, you can have a system only for domestic hot water production or a combined system including heating support, at a limited or high capacity. TAILOR MADE SOLAR WATER HEATING.



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## SOLAR COLLECTORS

### DIETRISOL PRO

DIETRISOL PRO solar panels benefit from all of the latest advances in solar technology which combine all the significant advantages of using solar energy.

Higher efficiency - thanks to the high-transparency glass cover (92% transmission), an absorber with a copper coil and the "Sunselect" selective surface, they collect the maximum amount of sunrays. Reinforced (recyclable) insulation reduces heat loss and improves performance.

The use of hail resistant safety glass and casing with aluminium-coated profiles ensures increased solidity and a longer service life. The choice of colour for this structure, anthracite grey, allows the solar collectors to blend in well with roofs like loft conversion windows.

DIETRISOL PRO is available in two versions: 2.3 or 2.5 m<sup>2</sup>, so that it can be adapted as well as possible to the fitting conditions.

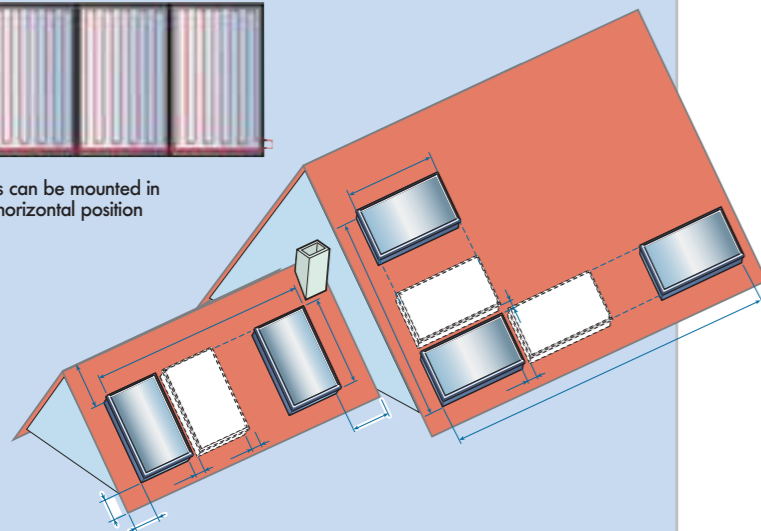
### EASY-TO-MOUNT COLLECTORS

DIETRISOL PRO collectors can be mounted on a roof or terrace, in a vertical or horizontal position. Thanks to the new mounting system which integrates the collectors into the roof in form of a trough, the collectors can be integrated into an existing roof.

From the mounting systems adapted to each support, to the hydraulic connecting kits and solar collectors, everything is designed to make mounting the collectors easier.



The collectors can be mounted in a vertical or horizontal position (4 in a row).



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## SOLAR TANKS

### B.../1 ELECTRO SOLAR TANKS

An enamel coil is dedicated to the solar circuit. If additional heating support is necessary, this is provided by electrical resistance identical to that in De Dietrich's Corémail electrical tanks. It has the double advantage of being inserted in a sheath which protects against scaling, while remaining accessible without having to drain the water heater off.



### B.../2 SOLAR TANKS

These are high-performance, independent domestic hot water tanks equipped with 2 large enamel coils which are welded into the tank. One of these is for the solar circuit, the other for the auxiliary boiler. These tanks are protected against corrosion by two magnesium anodes. An insulating 50 mm layer of injected polyurethane foam reduces thermal heat loss. (CFC free).



### DC 750 AND DC 1000 DIETRISOL COMBI SOLAR TANKS

These tanks allow solar energy obtained throughout the day to be stored so that it can be used according to your needs, e.g. for heating and/or for producing domestic hot water. They consist of a domestic hot water preparation tank positioned in the upper section of a storage tank.

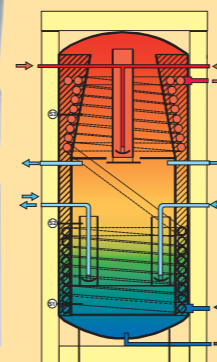
Water is reheated by a bain-marie.

It is drawn off by a tube which runs all the way down to the exchanger at the bottom of the storage tank. The domestic hot water tank made of sheet steel is coated with a hygienic, high quartz content vitrified enamel, in order to maintain water quality.



### DIETRISOL QUADRO

The DIETRISOL QUADRO Combi tank is divided up into 4 zones: a hot water availability zone, a reheating zone, a collecting zone for heating and a cold water return zone. These 4 zones are controlled independently. The solar energy system reheats the water. Depending on its temperature, the water is pumped into the storage zone or into the hot water zone. This function allows domestic hot water to be produced instantaneously and the water in the heating circuit to be preheated, allowing the system to run as it would in "total sunshine", especially during the winter season.



- Zone 1: Hot water availability zone
- Zone 2: Zone for reheating sanitary hot water
- Zone 3: Collecting zone for heating
- Zone 4: Zone for cold water return

### DIETRISOL QUADRODENS

A compendium of De Dietrich technology with a DIETRISOL QUADRO tank, condensation boiler, solar module, DIEMASOL regulation unit and the connecting tube all in one casing.

This is an environment friendly unit par excellence: it combines solar energy and condensation and allows two ecological processes to run together.

It is also extremely compact, all components are enclosed in one casing which has a small surface area.

Due to its one piece set-up, the majority of its connections are already in place and it is considerably easier to implement.

### DIETRISOL TRIO DT 250/3 AND DT 350/3

A new approach for the individual production of domestic hot water.

The DIETRISOL TRIO tank is running on the principle of stratifying the water by temperature: in this way, 2 different temperature zones and 3 exchangers allow hot water to be produced instantaneously and economically.

The DHW (domestic hot water) temperature is rapidly achieved with solar energy, thanks to the integrated DIEMASOL B regulation unit and 2 exchangers placed above and below the tank.

DIETRISOL TRIO gives you the option of having a hydraulic or electrical compensation support.

The range of DIETRISOL TRIO tanks already includes all the required components (resistance device per zone, safety equipment, expansion tank, pump, regulation unit). Installation has been made considerably easier and the time required to mount it reduced.

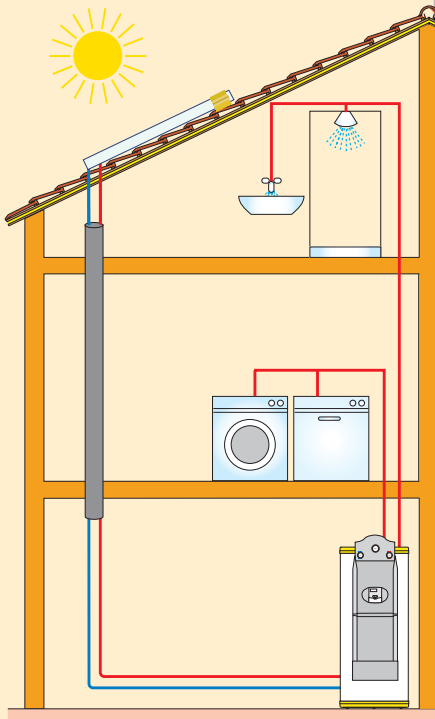


DIETRISOL TRIO is available in 2 versions:

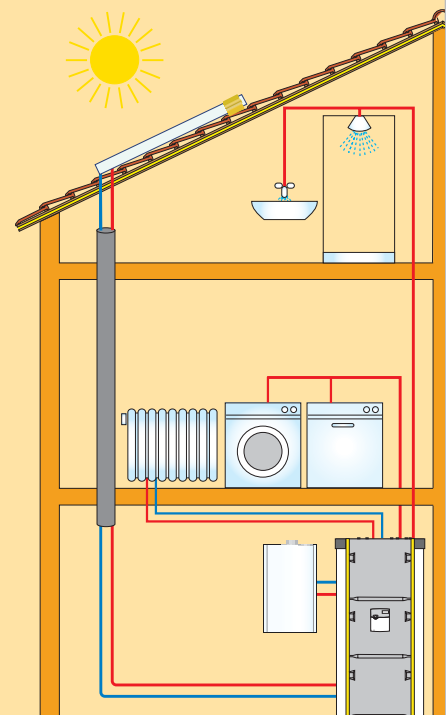
- 250 l, to meet the needs of a family of 1-4 people, and
- 350 l, for a household of 4-6 people.



## SOLAR ENERGY FOR DOMESTIC HOT WATER



## SOLAR ENERGY FOR DOMESTIC HOT WATER AND HEATING SUPPORT



# 3

## THE REGULATION UNITS



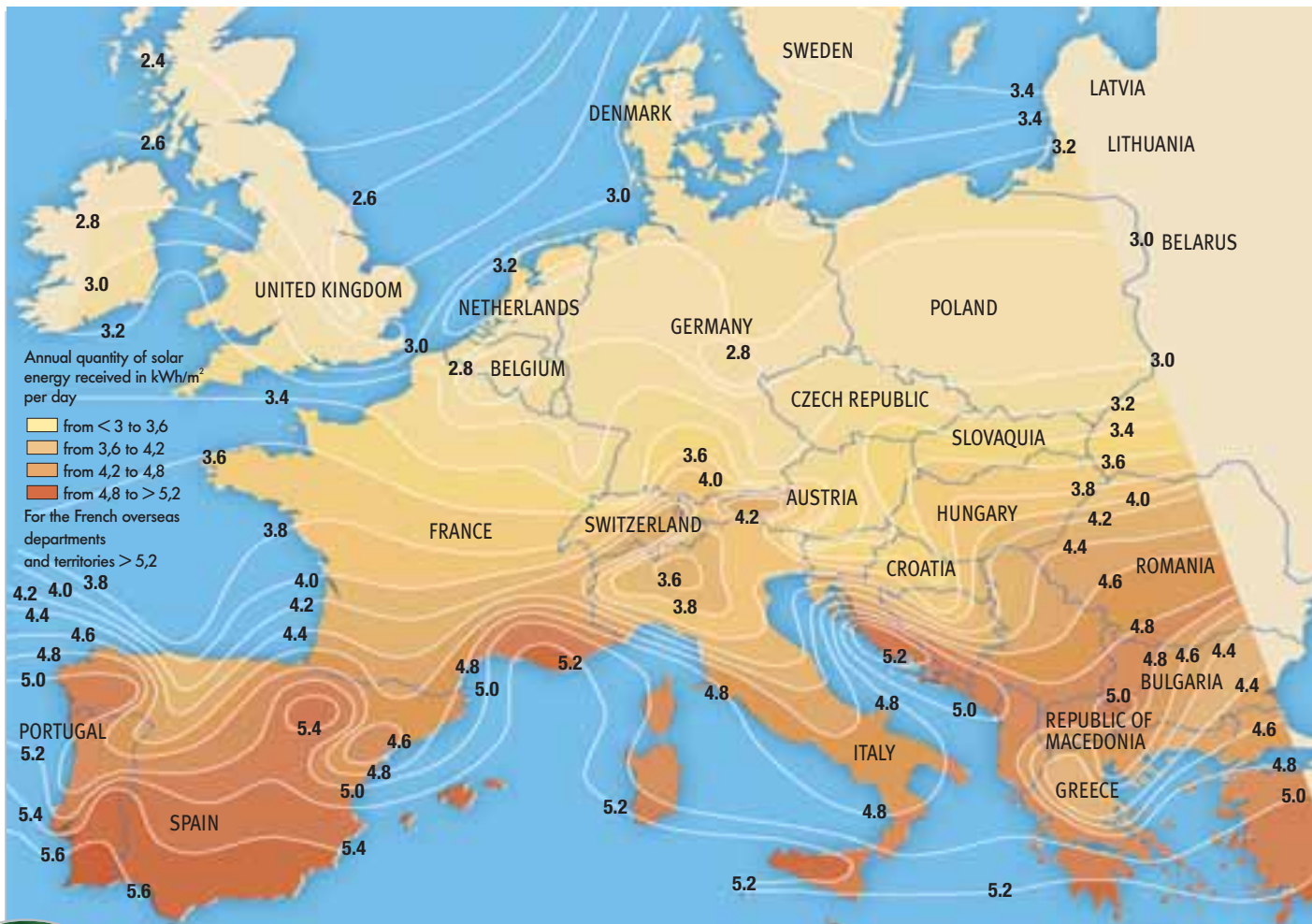
DIEMASOL B



DIEMASOL C

### DIEMASOL REGULATION UNITS

DIEMASOL is an intelligent and autonomous regulation unit which controls the solar water heating system in an optimal way according to the solar collector and tank temperatures. It also enables an optimal "matched flow" regulation concept to be defined for the system. As DIEMASOL regulation units are pre-set in the factory, installing them has been made significantly easier. The instructions for using DIEMASOL regulation units are simple and clear. Pictograms, information on the 2 temperatures, the mode and state of operation currently selected are simultaneously displayed. Safety is guaranteed thanks to the "solar collector safety" and "tank safety" modes with nighttime cooling. **2 models are provided:** DIEMASOL B (already integrated in DIETRISOL TRIO calorifiers) for circuits with a solar tank with integrated exchanger for domestic hot water, and DIEMASOL C (already mounted in DIETRISOL QUADRO and DIETRISOL QUADRODENS calorifiers), for circuits with plate exchangers for domestic hot water and heating.



### SOLAR ENERGY IS EVERYWHERE, AND IS AVAILABLE ALL YEAR ROUND

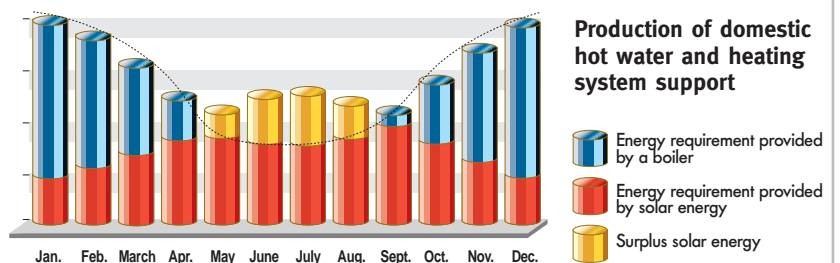
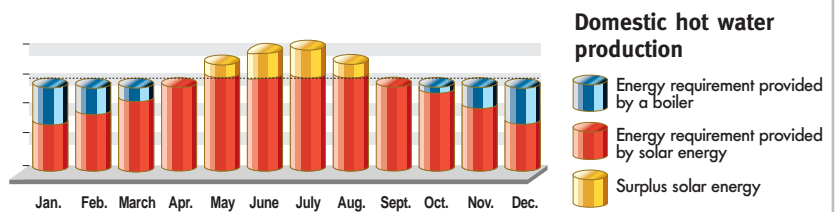
■ The Earth constantly receives solar energy in varying amounts. This varies depending on the seasons and amount of annual sunshine. However, whether you are in Madrid or in Stockholm, there are always enough sunrays to run a solar energy system.

### MODULAR SYSTEMS WHICH ARE ENVIRONMENTALLY FRIENDLY.

■ Using solar energy is easy. Given that it is a natural energy source, no by-products are emitted which are harmful to the environment. In opposite to fossil fuels, it does not produce pollutant waste materials (NO<sub>x</sub> and CO<sub>2</sub>). The new and innovative range of Dietrisol solar systems offers a wide range of components for reaping the benefits of solar energy.

### FREE ENERGY FOR BIG SAVINGS

■ In the case of domestic hot water production, up to 60% of the hot water needs of a family of four can be met by a solar energy system, i.e. by using a form of energy which costs absolutely nothing and will never run out. This gives you a lot more freedom when compared with the costs of traditional sources of energy (heating oil, gas...) and leaves you feeling calmer when it comes to paying the heating bills.

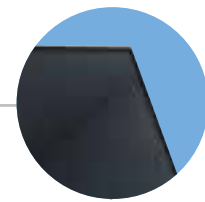




# DIETRISOL

OUR RANGE OF SOLAR ENERGY SYSTEMS

PREPARATION OF SANITARY HOT WATER			1-2 people		3-4 people		5-6 people	
Number of people per household:	DHW (Sanitary/domestic hot water) consumption:		standard	comfort	standard	comfort	standard	comfort
	PRO 2,5	PRO 2,3						
<b>Solar collectors</b>	PRO 2,5	PRO 2,3						
<b>Dimensions in mm</b>	2,15/1,25	2,0/1,15						
<b>Net surface area</b>								
2,5 m <sup>2</sup>	1		•					
4,3 m <sup>2</sup>		2		•	•			
5 m <sup>2</sup>	2					•		•
6,5 m <sup>2</sup>		3					•	•
<b>Solar tank completely equipped with auxiliary energy and/or electrical support</b>								
Dietrisol Trio DT 250/3			•	•	•			
Dietrisol Trio DT 350/3						•	•	•
<b>Electro Solar tank (with electrical support)</b>								
B200/1			•					
B300/1				•	•			
B400/1						•		
B500/1							•	•
<b>Solar tank with auxiliary energy support</b>								
B300/2			•	•	•	•		
B400/2							•	
B500/2								•
<b>Solar tank with external support</b> (electric water heater or boiler with an integrated tank)								
B150 or SRL150			•	•				
B200 or SRL200					•	•		
B300 or SRL300							•	•



SOLAR COLLECTORS  
DIETRISOL PRO



DIETRISOL TRIO DT .../3



SOLAR TANKS  
B .../1 ET B .../2

PRODUCTION OF DOMESTIC HOT WATER AND HEATING SYSTEM SUPPORT									
Living space:		100 m <sup>2</sup>	130 m <sup>2</sup>	150 m <sup>2</sup>	180 m <sup>2</sup>	200 m <sup>2</sup>	250 m <sup>2</sup>		
Geographical location:		South	North	South	North	South	North	South	North
<b>Solar collectors</b>	PRO 2,5	PRO 2,3							
<b>Dimensions in mm</b>	2,15/1,25	2,0/1,15							
<b>Net surface area</b>									
8,5 m <sup>2</sup>		4	•						
10 m <sup>2</sup>	4		•	•					
13 m <sup>2</sup>		6	•	•	•				
15 m <sup>2</sup>	6		•	•	•	•			
17 m <sup>2</sup>		8	•	•	•	•	•		
20 m <sup>2</sup>	8		•	•	•	•	•	•	
<b>System with a Combi tank</b>									
	Number of people per household								
DC 750	< 5		•	•	•	•	•	•	
DC 1000	< 6								•
<b>System with a Dietrisol Quadro tank</b>									
DU 750 -10	< 10		•	•	•	•	•	•	
DU 750-20	< 10		•	•	•	•	•	•	•
<b>System with a Dietrisol Quadrodens heatcenter</b>									
DUC 15/25 750 -10	< 8		•	•	•	•	•	•	
DUC 15/25 750-20	< 8		•	•	•	•	•	•	•
<b>System with a solar collector and solar DHW tank</b>									
PS800 + B300 /2-1	< 4		•	•	•	•	•	•	
PS1000 + B300-400 /2-1	< 6								•
PS1500 + B400-500 /2-1	< 8								•

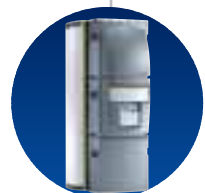
○ without swimming pool ● with swimming pool



SOLAR TANKS  
COMBI/PS



DIETRISOL QUADRO DU 750- ...



DIETRISOL QUADRODENS

Your installer

REGULATION  
UNITS  
DIEMASOL



DIEMASOL B



DIEMASOL C

**De Dietrich**

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