

PV optimizer.

Optimizes PV-self consumption in combination with domestic hot water heat pump DHW.

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Glen Dimplex Thermal Solutions (GDTS) presents the proven domestic hot water heat pump from the DHW series, together with the new PV optimizer for increasing the PV self-consumption efficiently, at SHK Essen.

Each person in Germany uses on average 50 litres of domestic hot water every day for showering, washing up or brushing their teeth. This makes domestic hot water preparation the second largest energy consumption factor in the home after heating – with significant saving potential. The domestic hot water heat pump DHW from GDTS is an efficient and environmentally-friendly solution for producing domestic hot water. It largely uses heat from the surroundings as an energy source. If it is run with eco-electricity from an in-house photovoltaic plant, it operates 100 percent climate-neutral. The new PV optimiser ensures that the photovoltaic energy won is used optimally GDTS. By precisely recording the current power consumption in the home, it coordinates the domestic hot water preparation with DHW so that the PV-self consumption is maximized.

Subject: Domestic hot water heat pump and PV optimizer.
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Function and setup of the DHW.

The domestic hot water heat pumps from the DHW series take around three quarters of the required heat from the room or outside air with the help of a fan. They cover the remaining energy consumption with electricity. Via the integrated refrigerant circuit, the contents of the domestic hot water cylinder are heated up to 60°C depending on the set desired temperature. Suitable installation locations include rooms that are often heated unintentionally, e.g. by tumble dryers, washing machines or food storage. When the domestic hot water heat pump is in operation, these rooms are cooled down automatically to a pleasant temperature. Moisture is also extracted from the room where the device is located, thus helping to prevent mould formation. Connection to the outside air or a combination with domestic ventilation is also possible.

Savings in the transition period.

In the summer months – when no room heating is required – the domestic hot water heat pump reliably covers the entire hot water consumption in a single-family home. This means that the central heating system can remain switched off completely from around May until September.

Produce energy for domestic hot water preparation yourself.

The domestic hot water heat pump can be operated completely climate-neutral and efficiently with eco-electricity. Either from the socket or self-produced with the home photovoltaic plant. The combination pays off two-fold: the sun provides the required operating current free of charge and the intrinsic consumption quota of the generated solar power is also increased, which increases the yields of the photovoltaic plant. In light of the reduced feed-in remuneration for self-produced electricity into the public grid, it is more economical in many cases to use the electricity yourself instead of feeding it in to the grid.

Intelligent control for even more PV-self consumption.

Glen Dimplex Thermal Solutions

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Find out more at:
www.gdts.one

This is where the PV optimizer from GDTS comes in. As an ideal addition to domestic hot water heat pumps from the DHW series, it automatically ensures that the domestic hot water preparation is activated before the PV-surplus revenues are fed into the grid. The heat pump gives priority to heating water when the cheap, self-produced electricity is available and is not being used elsewhere in the home. In other words: the PV optimizer from GDTS increases the PV-self consumption by precisely recording the current consumption in the home and coordinating the domestic hot water preparation accordingly.

The PV optimizer impresses with simple installation, with no intervention in the existing electrical installation. **Contactless electricity sensors** measure PV-yields between the home distributor and electricity meter via simple terminals. Before surplus PV electricity is fed into the grid, the PV optimizer checks whether this surplus is sufficient to activate the DHW. If it is, the optimizer sends the domestic hot water preparation signal to the DHW. The electricity is then used to save as much domestic hot water as possible in the DHW at the set temperature. For this communication between the PV system and DHW, the PV optimizer uses the RS485 interface to increase the PV-self consumption. Operation and adjustment takes place directly on the DHW.

This makes the PV optimizer and DHW domestic hot water heat pumps the perfect retrofitted solution for existing heating and/or PV systems. **In new builds and for renovations**, the system from GDTS guarantees low-cost and environmentally-friendly domestic hot water preparation. In the summer months or on sunny days, the domestic hot water preparation can even take place practically cost-neutral.

4,827 characters including spaces

Discover GDTS product highlights online at www.gdts.one.

The Glen Dimplex Group and Glen Dimplex Thermal Solutions.

Founded in 1973, Glen Dimplex is an international company group and a leading manufacturer of electric heating systems in the world. Glen Dimplex also occupies major market shares in the field of household appliances and solutions for cooling, heating and ventilation, as well as for using renewable energies. With the Glen Dimplex Thermal Solutions (GDTS) division, Glen Dimplex is concentrating its expertise in cooling, heating and ventilation and bundling its brands Dimplex, Riedel and Koolant Koolers under one strong roof. With the future-orientated portfolio offered by its brands and the sustainable technology, Glen Dimplex Group is perfectly prepared for the market requirements of tomorrow.

Glen Dimplex Thermal Solutions

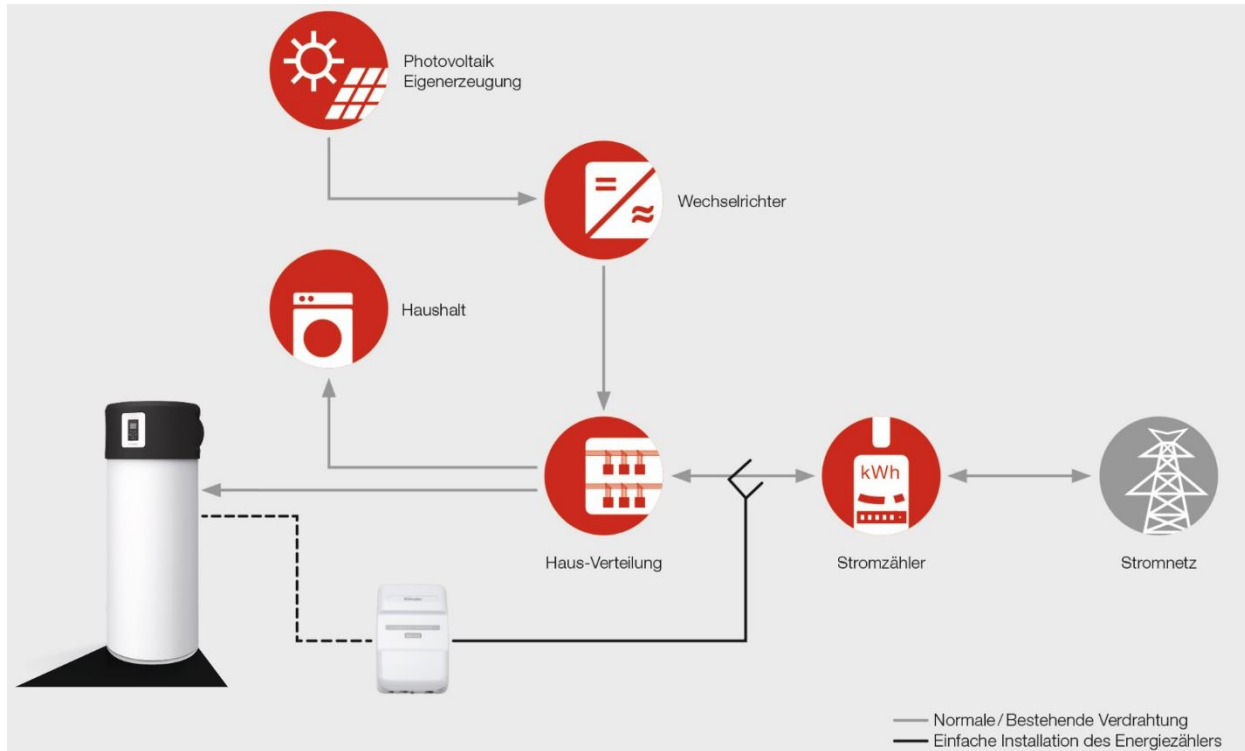
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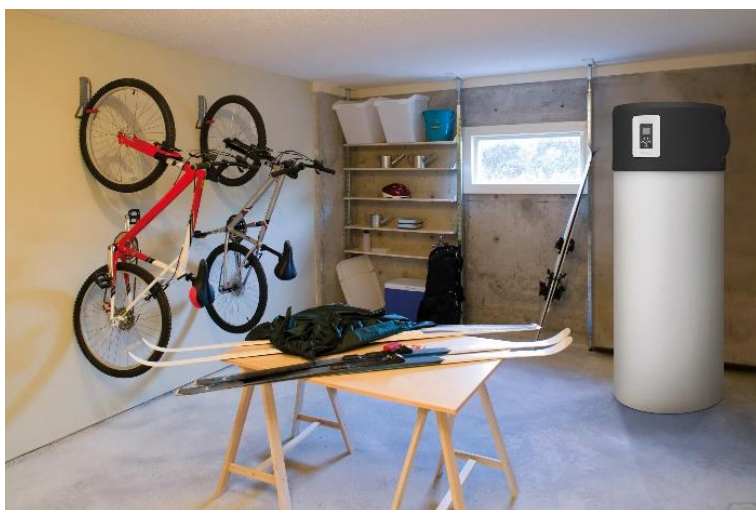
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Image 1: PV optimizer in combination with domestic hot water heat pump.



The PV optimizer from Glen Dimplex Thermal Solutions now guarantees optimal use of the generated PV energy. By precisely recording the current power consumption in the home, the PV optimizer coordinates the domestic hot water preparation so that the PV-self consumption is maximized.

Image 2: Domestic hot water preparation in the smallest of spaces with DHW 300.



The domestic hot water heat pump DHW 300 offers efficient and environmentally-friendly domestic hot water preparation in the smallest of spaces. It largely uses heat from the surroundings as an energy source and also dehumidifies the installation room.

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Image 3: Central control of the PV optimizer via DHW 300 display.



Domestic hot water heat pump and PV optimizer communicate via the RS485 interface integrated in the DHW 300. To increase the intrinsic consumption, all settings can then be controlled via the user interface of the DHW 300.

Image 4: PV optimizer is easy to install.



The PV optimizer impresses with simple installation, with no intervention in the existing electrical installation. Contactless electricity sensors measure PV-yields between the home distributor and electricity meter via simple terminals.

This and other image material, as well as this press release in Word format, are available to download at: <http://bit.ly/2FHawqv>

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