



Generate current → Manage energy → Store heat

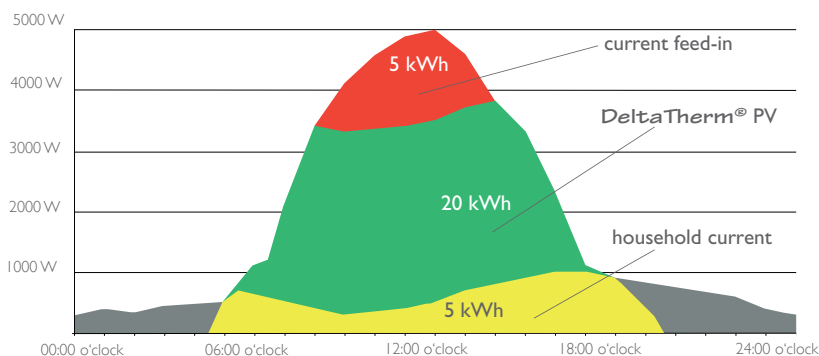
BE INDEPENDENT!



## DeltaTherm® PV POWER TO HEAT

- ✓ Increase in self-consumption
- ✓ Reduction of heating costs
- ✓ Direct control of an electric immersion heater
- ✓ Variable and grid-compliant
- ✓ Household current priority
- ✓ Can be used with all PV systems

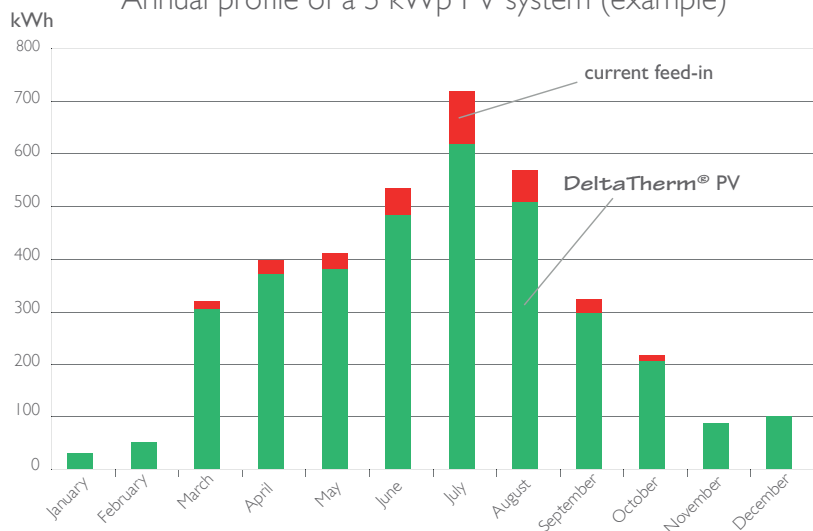
Daily profile of a 5 kWp PV system (example)



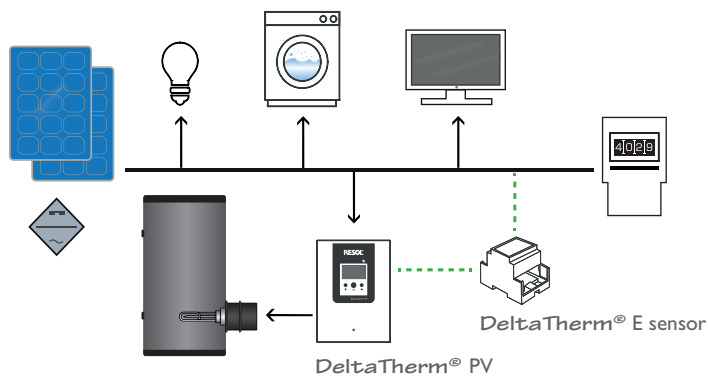
Only a small part of the self-generated PV current can be directly used as household current. With the *DeltaTherm® PV* the self-consumption of a 5 kWp PV system can be increased by up to 400 %.

Common buffer stores can store between 50 to 80 kWh of heat and are therefore a simple and economical solution for storing excess current.

Annual profile of a 5 kWp PV system (example)



The yield can be visualised over the Internet portal *VBus.net*.



The *DeltaTherm® E* sensor measures the current flow directly in front of the energy meter in the house. If a current excess is detected, the *DeltaTherm® PV* controls an electric immersion heater in the store. In this way, the excess current produced by the PV system can be used for heating and DHW heating – also for several days.

#### Technical data

##### *DeltaTherm® PV*

- Inputs:** 3 Pt1000 temperature sensors, 2 digital switching inputs, 0-10V control input
- Outputs:** 2 digital switching outputs, variable power control up to 3 kW (electric immersion heater)
- Power supply:** 100 ... 240V~ (50 ... 60 Hz)
- Supply connection:** type Y attachment
- Standby:** 1.41 W
- Rated impulse voltage:** 2.5 kV
- Data interface:** VBus®
- VBus® current supply:** 35 mA
- Functions:** controller and power controller
- Housing:** sheet metal, powder-coated
- Mounting:** wall mounting
- Indication / Display:** full graphic display
- Operation:** 3 buttons
- Ingress protection:** IP 20/EN 60529
- Protection class:** I
- Ambient temperature:** 0 ... 40 °C
- Degree of pollution:** 2
- Dimensions:** approx. 226 x 302 x 84 mm

#### Technical data

##### *DeltaTherm® E sensor*

- Inputs:** 3 current inputs and 3 voltage inputs for SW16 current sensors
- Power supply:** 100 ... 240V~ (50 ... 60 Hz)
- Supply connection:** type Y attachment
- Standby:** < 1W
- Rated impulse voltage:** 1.0 kV
- Data interface:** VBus®
- Functions:** energy measuring unit
- Housing:** plastic, PC (UL 94V-0)
- Mounting:** DIN rail in the domestic distribution board
- Indication / Display:** 2 operating control LEDs
- Ingress protection:** IP 20/EN 60529
- Protection class:** II
- Ambient temperature:** 0 ... 40 °C
- Degree of pollution:** 2
- Dimensions:** 71 x 90 x 58 mm

##### *DeltaTherm® PV – Full kit*

- Incl. measuring unit (*DeltaTherm® E* sensor), 3 current sensors and 1 Pt1000 sensor (FRP6)
- Price bracket B | Article no.: **115 006 53**

##### *Electric immersion heater 3 kW 230V~*

- 1½", incl. connection cable 3 m
- Price bracket B | Article no.: **180 112 00**