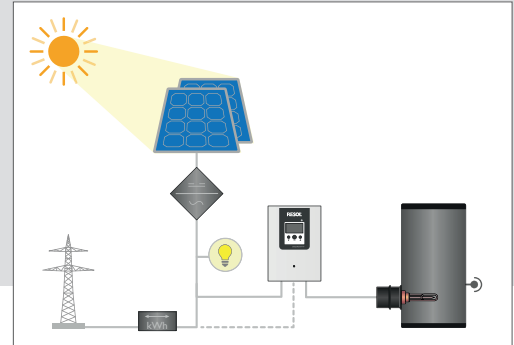




EXAMPLE



DeltaTherm® PV

The **DeltaTherm® PV** detects excess current, e.g. produced by PV systems, calculates the power available and redirects it to an electric heater. Thus, excess PV current can be directly converted into thermal energy and stored.

- Increase in self-consumption
- Stepless control of an electric immersion heater
- Household current priority
- Suitable for all grid-connected PV systems
- 0-10 V power control (optional)
- Internal backup heating with mains current (optional)
- Smart Remote access (optional)
- Inverter power limitation (optional)



Sensor module
DeltaTherm® E

TECHNICAL DATA

Inputs: 3 Pt1000 temperature sensors, 2 digital switching inputs, 0-10 V control input

Outputs: 2 digital switching outputs, variable power control up to 3 kW (electric immersion heater)

Power supply: 100–240 V~ (50–60 Hz)

Supply connection: type X attachment

Standby: 1.47 W

Rated impulse voltage: 2.5 kV

Data interface: VBus®, MicroSD card slot

VBus® current supply: 35 mA

Functions: controller and power controller, backup heating internal, 0-10 V power control, Smart Remote, inverter power limitation

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

Relative humidity: 10 ... 90 %

Fuse: F16A, T16A

Overvoltage category: 2

Maximum altitude: 2000 m above MSL

Dimensions: approx. 226 x 302 x 84 mm

TECHNICAL DATA

Inputs: 3 current inputs and 3 voltage inputs for SW16 current sensors

Power supply: 100–240 V~ (50–60 Hz)

Supply connection: Y

Standby: < 1W

Rated impulse voltage: 1.0 kV

Data interface: VBus®

Functions: energy measuring unit

Housing: plastic, PC (UL 94 V-0)

Mounting: DIN rail in the domestic distribution board

Indication / Display: 2 operating control LEDs

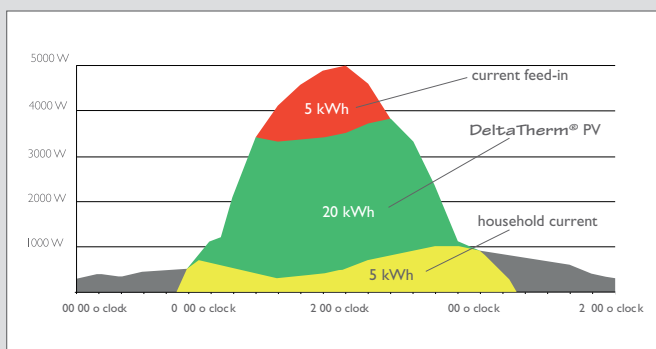
Ingress protection: IP 20/EN 60529

Protection class: II

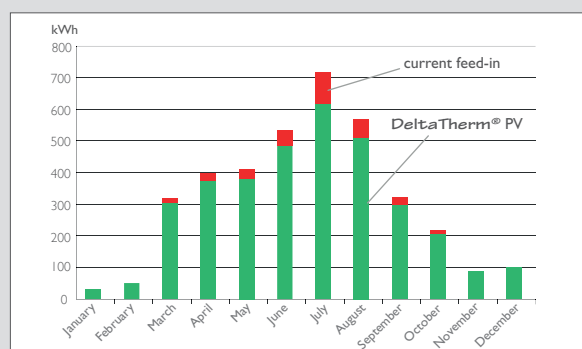
Ambient temperature: 0 ... 40 °C

Degree of pollution: 2

Dimensions: 71 x 90 x 58 mm

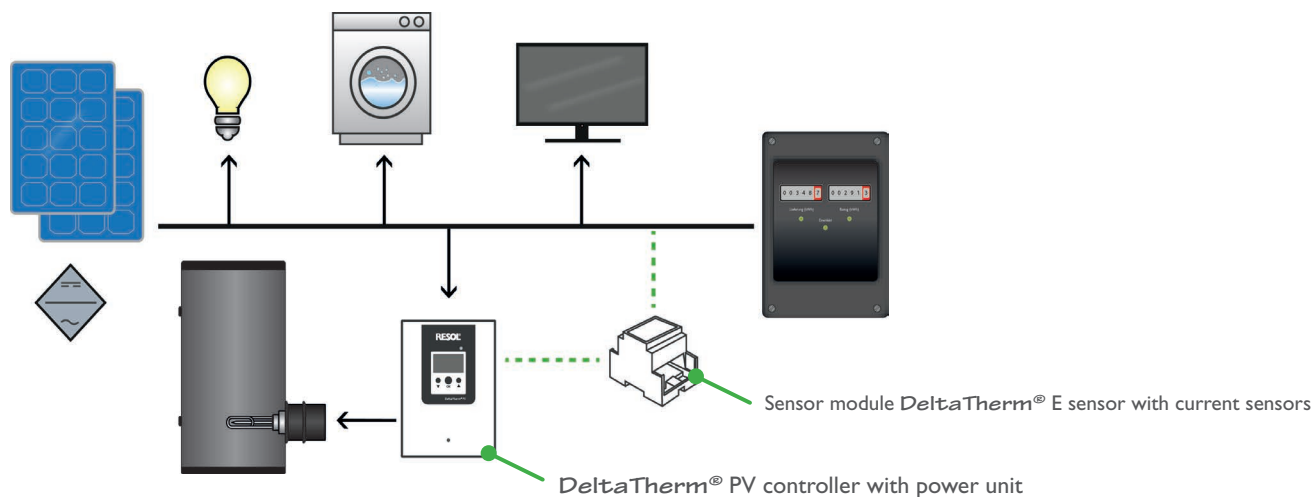


Daily profile of a 5 kWp PV system (example) with heat storage via the DeltaTherm® PV power-to-heat controller



Annual profile of a 5 kWp PV system (example, without household current)

EXAMPLE



Article no.	Article	Price bracket
115 006 53	DeltaTherm® PV – Power-to-Heat controller – Full kit » incl. sensor module, 3 current sensors and 1 Pt1000 sensor (FRP6)	B
290 030 80	Spare fuses DeltaTherm® PV – 3 x T16A and 3 x F16 A	C

Electric immersion heater

The electric immersion heater is designed for installation into a hot water store and can be used for heating as well as for DHW heating. In combination with the DeltaTherm® PV / PHM it converts excess PV current into thermal energy.



- Single-phase electric immersion heater up to 3 kW, grid compliant
- Stepless control (e.g. via the DeltaTherm® PV)
- Thermal cut-out at 95 °C
- Using excess current for heating a water store

TECHNICAL DATA

Material: heating element: 2.4858, INCOLOY® 825
Operating pressure: max. 10 bar
Maximum temperature seal pipe end: 120 °C
Maximum temperature pipe surface: 120 °C
Operating voltage: 230 V~
Power: 3 kW
Immersion depth: 250 mm
Unheated length: 95 mm
Thermal cut-out: 95 °C

Article no.	Article	Price bracket
180 112 00	Electric immersion heater 3 kW 230V~ (1½") » incl. connection cable	B