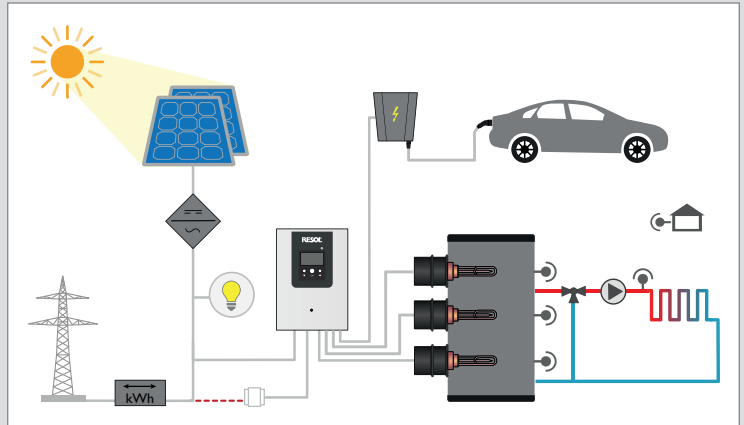




## EXAMPLE



## DeltaTherm® PV MAX

### For maximum self-consumption

Whether in new or existing buildings, the **DeltaTherm® PV MAX** combines Power-to-Heat and heating control. It detects excess PV current reliably and calculates the power available. Furthermore, it distributes the current available in a modulating manner to up to 3 electric immersion heaters with a total power of 9000 W, controls an SG-ready heat

pump and a charging station for electric vehicles as needed. Numerous optional functions can be activated and heating circuits\* controlled with extension modules.

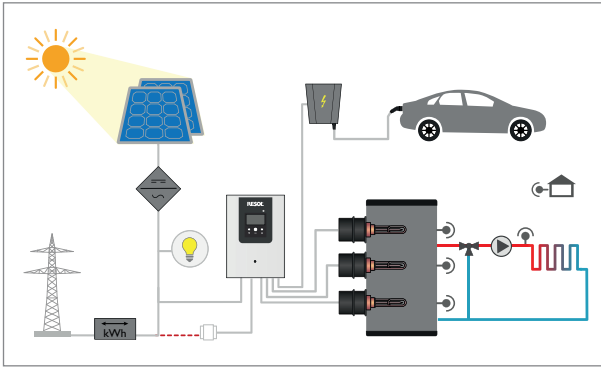
- Suitable for all grid-connected PV systems
- Maximisation of self-consumption
- Household current priority
- Stepless control of up to 3 electric immersion heaters
- Control of a heat pump
- Control of a wallbox
- Time-controlled backup heating (with mains current)

- Optional functions via extension modules: 5 mixed heating circuits\*, DHW heating\*, circulation\* and thermal disinfection\*, solid fuel boiler, heat exchange
- 0-10 V control\* (optional)
- Smart Remote access (optional)
- Access to the VBus.net visualisation portal via LAN

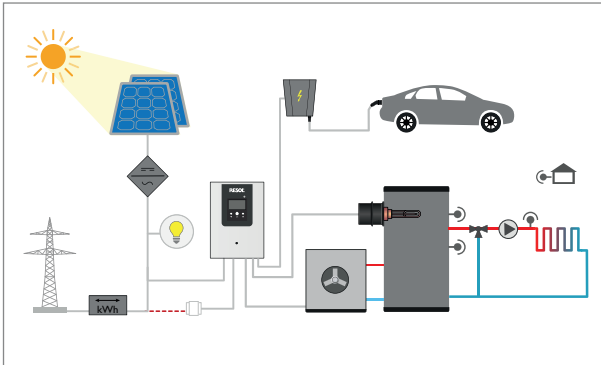
\* from version 2

Article no.	Article	Price bracket
115 007 33	DeltaTherm® PV MAX – Power-to-Heat controller » incl. 3 Pt1000 sensors (3x FRP6)	B
115 007 23	DeltaTherm® PV MAX – Power-to-Heat controller – Full kit » incl. sensor module, 3 current sensors (SW16) and 3 Pt1000 sensors (3x FRP6)	B

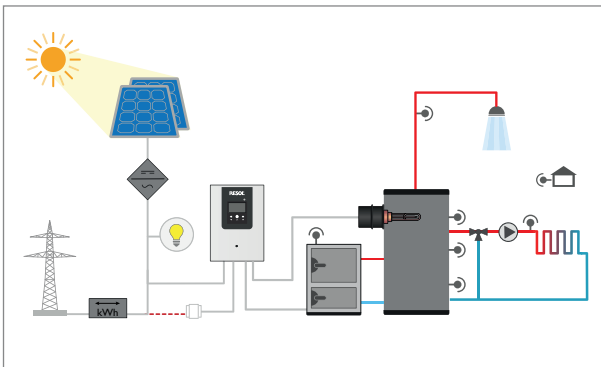
## APPLICATION EXAMPLES



Control of 3 electric immersion heaters and of a wallbox, control of a mixed heating circuit\* (via extension module)



Control of an electric immersion heater, control of a heat pump and a wallbox, control of a mixed heating circuit\* (via extension module)



Control of an electric immersion heater and of a solid fuel boiler, control of a mixed heating circuit\* and DWH heating\* (via extension module)

## TECHNICAL DATA

**Inputs:** 5 Pt1000 temperature sensors (2 of them convertible to switch), 1 analogue input for Grundfos Direct Sensor™ or FRH humidity sensor  
**Outputs:** 3 outputs for electric immersion heaters (variable power control up to 9 kW), 2 potential-free extra-low voltage relays and 2 PWM outputs (convertible to 0-10V)

### Switching capacity:

13 A 240 V~ (output for electric immersion heater)

1 A 30 V = (potential-free relay)

**Total switching capacity:** 3 x 13 A 240 V~

### Power supply:

3-phase with PE and neutral conductor (100 – 240 V~/50 – 60 Hz)

**Supply connection:** type X attachment

**Standby:** approx. 1 W

**Mode of operation:** type 1.B.C. action

**Rated impulse voltage:** 2.5 kV

**Data interface:** VBus®, MicroSD card slot, LAN

**VBus® current supply:** 35 mA

**Functions:** control of 3 electric immersion heaters, backup heating with mains current, control of a heat pump / wallbox, control of mixed heating circuits\*, DHW heating\*, numerous optional functions, 0-10V control\*, Smart Remote

**Housing:** sheet metal, powder-coated

**Mounting:** wall mounting

**Indication / Display:** full graphic display, operating control LED

**Operation:** 3 buttons

**Ingress protection:** IP 20 / EN 60529

**Protection class:** I

**Ambient temperature:** 0 ... 40 °C

**Degree of pollution:** 2

**Maximum altitude:** 2000 m above MSL

**Relative humidity:** 10 ... 90 %

**Dimensions:** 226 x 302 x 84 mm

### Sensor module DeltaTherm® E sensor

#### Inputs:

3 voltage inputs and 3 current inputs for SW16 (Ø 16 mm) current sensors

**Power supply:** 100–240 V~ (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

**Protection type:** IP 20 / EN 60529

**Protection class:** II

**Ambient temperature:** 0 ... 40 °C

**Degree of pollution:** 2

**Dimensions:** 71 x 90 x 58 mm



\* from version 2

## ACCESSORIES

### Electric immersion heater



Electric immersion heater  
3 kW 230V~ (1½")

### DeltaTherm® E sensor XL



Sensor module for power  
measurement up to approx.  
200 kW, SW24 current sensors  
included

### DL2 Plus Datalogger



For remote access to 2  
controllers, integrated data  
logging and connection to  
a BMS

### EM Extension module



Sensor and relay extension  
module with 5 outputs and  
6 inputs