

rosenthal design



## DeltaTherm® HC

The DeltaTherm® HC can control a weather-compensated heating circuit, the DHW loading and the backup heating demand for both.

With up to five extension modules, further heating circuits, additional DHW functions such as circulation or thermal disinfection, and the efficient implementation of further heat sources can be controlled.

Due to the flexible application and extension possibilities, the heating controller is also ideal for larger objects such as apartment houses, residential homes and industrial buildings.

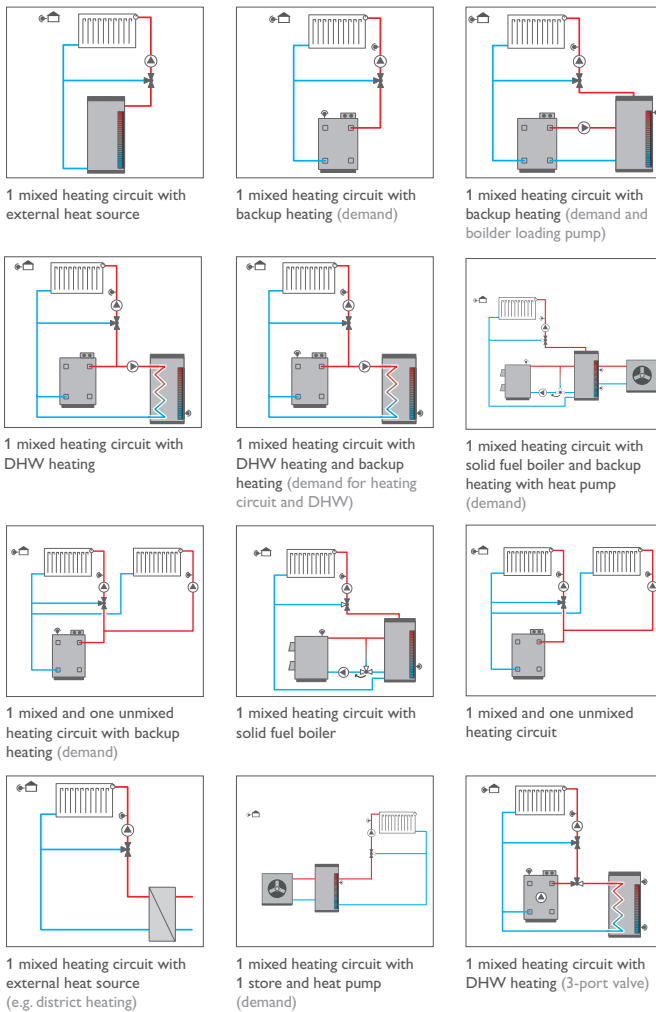


## Heat upon request!

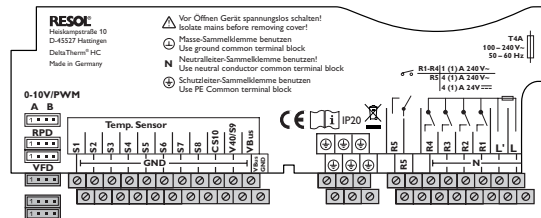
- 9 pre-configured basic systems and numerous pre-programmed optional functions
- 30 pre-programmed schemes for the temperature controls classes II, III, V, VI, VII and VIII
- Up to 5 EM extension modules can be connected via the RESOL VBus® (39 sensors and 30 relays in total), up to 6 weather-compensated heating circuits
- 2 inputs for digital Grundfos Direct Sensors™
- Screed drying function
- Data logging, storing, easy transfer of controller adjustments prepared and firmware updates via SD card
- Modulating heating control with 0-10V boiler control
- Weather-compensated control with room influence or demand-based room control with up to 5 room temperature sensors
- Remote access with a room control unit or the VBus®Touch HC App
- Heat pump demand (optional)

| Article no. | Article   | Price bracket |
|-------------|---|---------------|
| 115 002 53  | DeltaTherm® HC – Heating controller   | A             |
| 115 002 63  | DeltaTherm® HC – Full kit » incl. 5 Pt1000 sensors (1 x FAP13, 1 x FKP23, 3 x FRP6) | A             |
| 115 005 73  | DeltaTherm® HC – ErP 6 kit » incl. 1 x FAP13, 1 x RCP12, 1 x FKP23, 1 x FRP6        | A             |
| 115 005 83  | DeltaTherm® HC – ErP 8 kit » incl. 1 x FKP23, 1 x FRP6, 1 x RCP12, 2 x FRP12        | A             |

## EXAMPLES



## ELECTRICAL CONNECTION



## TECHNICAL DATA

**Inputs:** 8 (9) inputs for Pt500, Pt1000 or KTY temperature sensors, 1 V40 impulse input, inputs for 2 digital Grundfos Direct Sensors™\*, 1 input for a CS10 irradiation sensor

**Outputs:**

4 semiconductor relays, 1 potential-free relay, 2 PWM outputs

**PWM frequency:** 512 Hz

**PWM voltage:** 10.5 V

**Switching capacity:**

1 (1) A 240 V~ (semiconductor relay)

4 (1) A 24 V~/240 V~ (potential-free relay)

**Total switching capacity:** 4 A 240 V~

**Power supply:** 100–240 V~ (50–60 Hz)

**Supply connection:** type X attachment

**Standby:** 0.94 W

**Temperature controls class:** VIII

**Energy efficiency contribution:** 5 %

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

**Rated impulse voltage:** 2.5 kV

**Data interface:** VBus®, SD card slot

**VBus® current supply:** 60 mA

**Functions:** screed drying, weather-compensated heating circuit control, backup heating, DHW heating with priority logic, circulation, thermal disinfection, heat quantity measurement, optional functions such as solid fuel boiler, return preheating, etc.

**Housing:** plastic, PC-ABS and PMMA

**Mounting:** wall mounting, mounting into patch panels is possible

**Indication / Display:** full graphic display, operating control LED (directional pad) and background illumination

**Operation:** 7 buttons

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

**Protection class:** I

**Ambient temperature:** 0 ... 40 °C

**Degree of pollution:** 2

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

**Fuse:** T4A

**Maximum altitude:** 2000 m above MSL

**Dimensions:** 198 x 170 x 43 mm

\* For the Inputs Gd1 and Gd2, the following sensor combinations are possible:


- 1 x RPD, 1 x VFD

- 2 x VFD, but with different measuring ranges only

## ACCESSORIES


A 0-10V adapter cable and an SD card are included with the controller.

**KM2 Communication module**




For remote access to the controller via VBus.net

**EM Extension module**




Sensor and relay extension module with 5 outputs and 6 inputs

**RCP12 Room control unit**



The heating curve can be comfortably adjusted, incl. operating mode switch

**FRP12 Indoor temperature sensor**



Used for measuring the indoor temperature with a Pt1000 measuring element