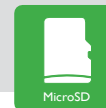




rosenthal design



## DeltaTherm® HC mini

The **DeltaTherm® HC mini** is a compact and user-friendly controller designed to operate simple hydronic heating systems. Its floating mixing, outdoor reset-based control modulates water temperature and demand of backup heating. Additionally, there's a choice of 5 different operating modes, a freeze, low temp protection options and a scheduled night temperature setback.

Due to its commissioning menu and the 4 pre-configured basic system layouts, the configuration is quick and easy.

It is designed to operate as part of a complete hydronic heating system or a standalone mixing control.

This temperature controller provides the highest contribution to seasonal space heating energy efficiency of residential hydronic space heating systems.

- CAN/CSA-E60730-2-9:18
- UL 60730-2-9 (Edition 4)

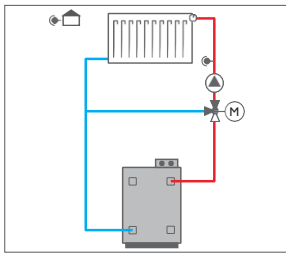


## Heating control, simple and efficient

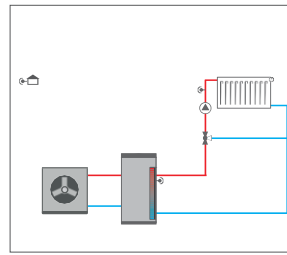
- 4 pre-configured basic hydronic system layouts
- 12 pre-programmed schemes for the temperature control for Static or Mixed heating circuits
- 4 relay outputs (incl. 1 extra-low voltage, dry-contact relay)
- 5 inputs for Pt1000 temperature sensors
- 5 operating modes, boiler protection, room thermostat and night temperature setback/schedule
- Holiday mode, chimney sweeper and screed drying functions via micro buttons
- Data logging, storing, easy transfer of controller adjustments prepared and firmware updates via SD card
- On/Off or 0-10 V Modulating setpoint boiler control
- Outdoor Reset temperature control with room feedback or demand-based room control with up to 3 zone temperature sensors
- Remote access with a room control unit (wired) or the VBus®Touch HC App (wireless)
- On/Off Heat pump demand (optional)

Article no.	Article	Price bracket
115 005 23	<b>DeltaTherm® HC mini</b> – Heating controller	A
115 005 13	<b>DeltaTherm® HC mini</b> – Full kit » incl. 3 Pt1000 sensors (1 x FAPI3, 1 x FKP23, 1 x FRP6)	A

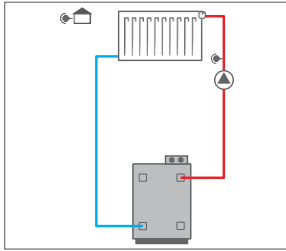
## EXAMPLES



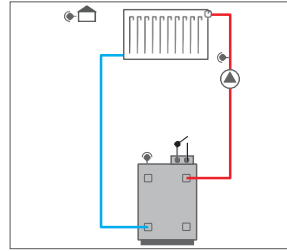
1 mixed heating circuit



1 mixed heating circuit with 1 store and heat pump (demand)

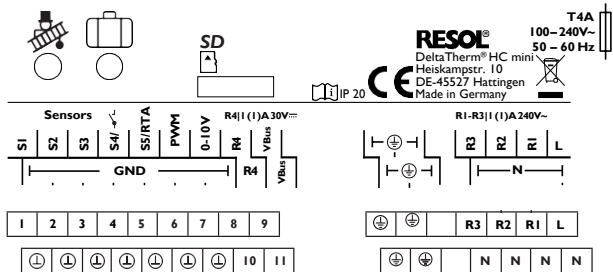


1 static heating circuit



1 static heating circuit with backup heating (demand)

## ELECTRICAL CONNECTION



## TECHNICAL DATA

**Inputs:** 5 inputs for Pt1000 temperature sensors (one of them can be converted to a Switch and one of them to RTA remote control or RCP (BAS-operating mode switch))

**Outputs:** 3 semiconductor relays, 1 dry contact extra-low voltage relay, 1 PWM output, 1 0-10 V output

**PWM frequency:** 512 Hz

**PWM voltage:** 10.8 V

**Switching capacity:**

1 (1) A 115/240 V~ (semiconductor relay)

1 (1) A 30 V<sup>DC</sup> (dry-contact relay)

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

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

**Supply connection:** type X attachment

**Standby:** 0.62 W

**Temperature controls class:** VIII (Multi-sensor room temperature control, for use with modulating heating sources)

**Energy efficiency contribution:** 5 %

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

**Rated impulse voltage:** 2.5 kV

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

**VBus® current supply:** 60 mA

**Functions:** weather-compensated heating circuit control, backup heating, room thermostat, chimney sweeper function, screed drying function

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

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

**Indication / Display:** full graphic display, operating control LED (Lightwheel®)

**Operation:**

4 buttons and 1 adjustment dial (Lightwheel®)

**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:** 110 x 166 x 47 mm

**Approvals:** c LC us Certified for use in USA and Canada

## ACCESSORIES

### KM2 Communication module



LAN or Wi-Fi remote access to the controller via VBus.net

### RTA12 Remote control



The heating curve can be comfortably adjusted from the living area

### RCPI2 Room control unit (BAS)



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

### FRPI2 temperature sensor



Used to measure the room temperature with a Pt1000 measuring element

### AMI



Alarm module for signaling system failures (built-in dry contact)