RESOL®
CONTROL TECHNOLOGY

rosenthal design

VBus.net RPT HE pump control

DeltaTherm® HC Plus

The DeltaTherm® HC Plus can control 2 weather-compensated heating circuits and their backup heating demands.

Additional DHW functions such as circulation or thermal disinfection, and the efficient implementation of further heat sources are possible. With extension modules, further heating circuits can be controlled.

In summer, the heating circuits take over the demand-based cooling by means of a humidity sensor for dew point calculation.

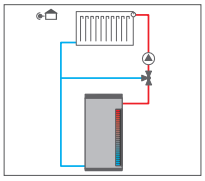
VIII Temperature controls class VIII

Cool in summer – warm in winter!

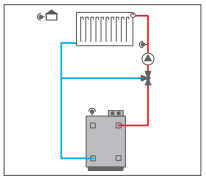
- 2 mixed heating circuits with backup heating
- Cooling over the heating circuit with humidity sensor
- 9 pre-configured basic systems and numerous pre-programmed schemes and optional functions
- Up to 5 EM extension modules can be connected via the RESOL VBus®, up to 7 weather-compensated heating circuits
- Screed drying function
- Data logging, storing, easy transfer of controller adjustments prepared and firmware updates via SD card
- Modulating heating control with 0-10 V boiler demand
- 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
- Heat pump demand (optional)

Article no.	Article	Price bracket
115 007 43	DeltaTherm® HC Plus – Heating controller	A
115 007 53	DeltaTherm® HC Plus – Full kit » incl. 5 Pt1000 sensors (1 x FAP13, 1 x FKP23, 3 x FRP6)	A

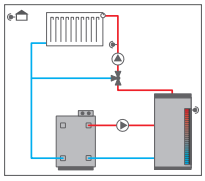
EXAMPLES



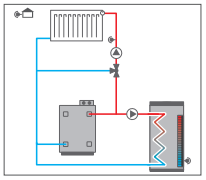
1 mixed heating circuit with external heat source



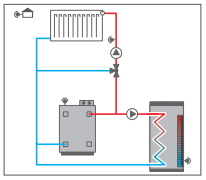
1 mixed heating circuit with backup heating (demand)



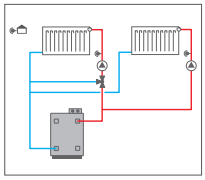
1 mixed heating circuit with backup heating (demand and boilder loading pump)



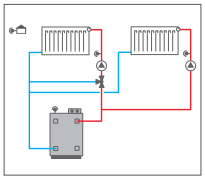
1 mixed heating circuit with DHW heating



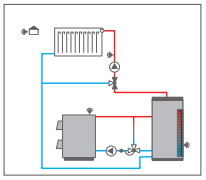
1 mixed heating circuit with DHW heating and backup heating (demand for heating circuit and DHW)



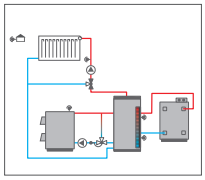
1 mixed and one unmixed heating circuit



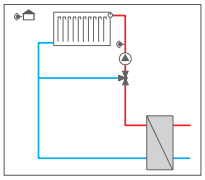
1 mixed and one unmixed heating circuit with backup heating (demand)



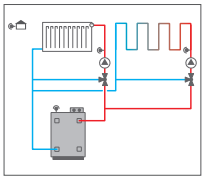
1 mixed heating circuit with solid fuel boiler



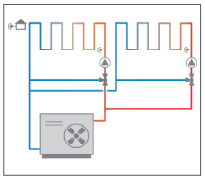
1 mixed heating circuit with solid fuel boiler and backup heating (demand)



1 mixed heating circuit with external heat source (e.g. district heating)

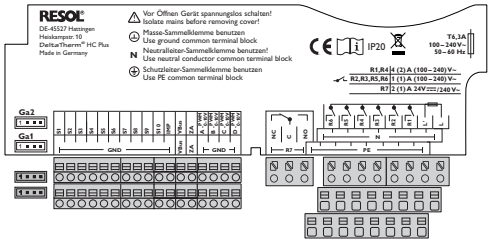


2 mixed heating circuits with backup heating (demand)



2 mixed heating circuits for heating and cooling

ELECTRICAL CONNECTION



TECHNICAL DATA

Inputs: 10 inputs for Pt500, Pt1000 or KTY temperature sensors, 1 V40 impulse input, inputs for 2 analogue Grundfos Direct Sensors™ or FRH humidity sensors
Outputs: 4 semiconductor relays, 2 electromechanical relays, 1 potential-free relay and 4 PWM / 0-10 V outputs
PWM frequency: 512 Hz
PWM voltage: 10.5 V
Switching capacity:
1 (1) A 240 V~ (semiconductor relay)
4 (2) A 240V~ (electromechanical relay)
2 (1) A 24 V⎓ / 240 V~ (potential-free relay)
Total switching capacity: 6.3 A 240 V~
Power supply: 100 – 240 V~ (50 – 60 Hz)
Supply connection: type X attachment
Standby: approx. 1 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: RESOL 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: T6.3A
Maximum altitude: 2000 m above MSL
Dimensions: 198 x 170 x 43 mm

ACCESSORIES

An SD card is 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

RTS room control unit

For measuring the relative humidity and the room temperature as well as for adjusting the set room temperature

FRH (analog)

For measuring the relative humidity and the room temperature

Central outdoor sensor unit

Measures the outdoor temperature and transmits this value to the controllers connected