





DeltaTherm[®] HC MAX

The **DeltaTherm**[®] HC MAX can control up to 4 weather-compensated heating circuits, the DHW loading and the backup heating demand for both.

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



Temperature controls class VIII

Ideal for larger properties

- Up to 5 EM extension modules can be connected via the RESOL VBus[®] (45 sensors and 39 relays in total), up to 7 weather-compensated heating circuits
- Inputs for analogue and digital Grundfos Direct Sensors[™] as well as for FRH and FRHd humidity sensors
- Screed drying function
- Data logging, storing, easy transfer of controller adjustments prepared and firmware updates via SD card
- Cooling over the heating circuit with condensation detection

- Dew point calculation by means of the FRH(d) humidity sensor to avoid condensation
- 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
115 006 73	DeltaTherm® HC MAX – Heating controller	А
115 006 83	DeltaTherm® HC MAX – Full kit » incl. 5 Pt1000 sensors (1 x FAP13, 1 x FKP23, 3 x FRP6)	А
115 006 93	DeltaTherm® HC MAX – ErP 6 kit » incl. 1 x FAP13, 1 x RCP12, 1 x FKP23, 1 x FRP6	А
115 007 03	DeltaTherm® HC MAX – ErP 8 kit » incl. 1 x FKP23, 1 x FRP6, 1 x RCP12, 2 x FRP12	А

EXAMPLES

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4 mixed heating circuits with backup heating (demand)





2 mixed heating circuits with backup heating (de



(demand)

backup heating (demand)

1 mixed heating circuit with with 1 store and heat pump solid fuel boiler

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1 mixed heating circuit with 4 zones



external heat source (e.g. district heating)



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

ELECTRICAL CONNECTION



Inputs: 12 Pt1000, Pt500 or KTY temperature sensor inputs (can optionally be used for remote controls, operating mode switches or potential-free switches), 3 impulse inputs for V40 flowmeters (can optionally be used for Pt1000, Pt500 or KTY temperature sensors, remote controls, operating mode switches or potential-free switches), 1 frequency input, 1 CS10 solar cell, 2 analogue inputs for VFS/RPS Grundfos Direct Sensors™ or FRH humidity sensors, 2 digital inputs* for VFD/RPD Grundfos Direct Sensors™ or FRHd humidity sensors

Outputs: 14 relays, 13 of them semiconductor relays for pump speed control, 1 potential-free relay and 4 PWM outputs (convertible to 0-10 V signal outputs)

PWM frequency: 512 Hz PWM voltage: 10.5 V

Switching capacity:

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

4 (2) 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:** 0.83 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: 35 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: |

Ambient temperature: 0...40°C

Degree of pollution: 2

Relative humidity: 10...90 %

Fuse: T6.3A

Maximum altitude: 2000 m above MSL Dimensions: 253 x 200 x 47 mm

 st 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

/1 xVFD, 1 x FRHd / 1 x RPD, 1 x FRHd

ACCESSORIES KM2 Communication module



For remote access to the controller viaVBus.net

EM Extension module

An SD card is included with the controller.

Sensor and relay extension module with 5 outputs and



FRH (analogue) and FRHd (digital)



For measuring the relative humidity and the room temperature

RCP12 Room control unit



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

RTA12 Remote control



The heating curve can be comfortably adjusted from the living area

TECHNICAL DATA