

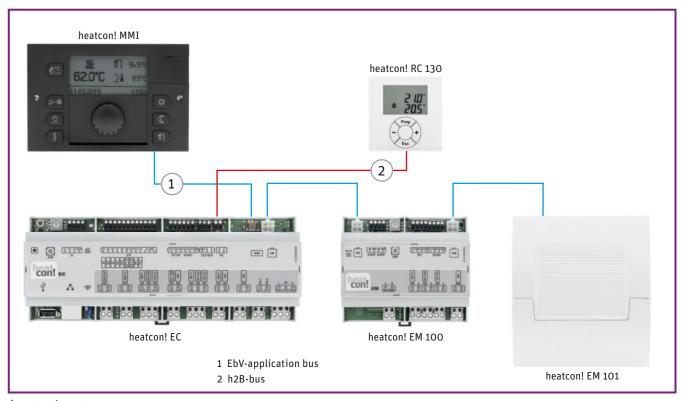




... the flexible intelligence



## we control this ...



heatcon! system

## Our system is ...

# ... intelligent

The system controller heatcon! supports modern heat sources like heat pumps with IP-based interfaces as well as conventional heating boilers for gas, oil, pellet and more. Complex hydraulics can be optimized either.

#### ... modular

heatcon! has a modular structure and can expanded easily and quickly. Up to three heatcon! EC basic controllers and up to six extension modules can be integrated in a system (s.p. 6 cascades).

With our App heatcon! could be controlled from everywhere or directly at home also with PC or interface (HMI).

#### ... efficient

heatcon! is app- and internet enabled.

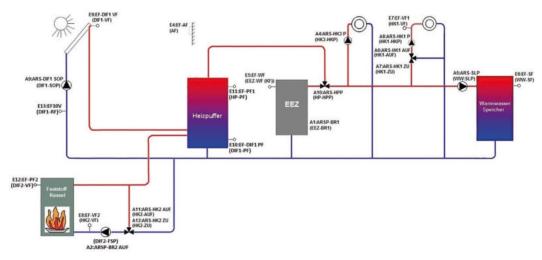
heat ready

In combination with our single room control system heatapp! the highest energy efficiency will be achived. Only the necessary energy will be produced.



### ... multivalent

Due to flexible usage of all I/O and the modular extension you can easily set up a lot of bivalent and multivalent heating systems. Further more, buffer management and domestic hot water is possible.



### ... customer-oriented

heatcon! is the new system controller of EbV.

For our OEM we build hardware, software and the app in individual cooperated design. Based on the OEM request we change colours, graphics, icon and interfaces.







### set up, control, service

Set up, control and services could be done through app, PC or HMI.

Within a few steps the heatcon! system is configured with our set up wizard. Therefore some I/O will be pre configured and all free I/O could be used flexible for other functions.

Remote control and diagnostic thru app is possible as well as sending automatically failure messages.

#### app

With our freeware heatapp! App you control the heatcon! system via smartphone or tablet.

heatapp! App is available for iOS and Android in different languages as EN, DE, NL, FR, IT, ES, TR, PL and RU. Other languages will be added.



### heatcon! EC

heatcon! EC is a electronic controller for a lot of heating and cooling generators.

EC is the central basic controller in the heatcon! system. All external devices e.g. pumps, valves, sensors will be connected and controlled from the EC.

The energy generator is connected with BUS, Relais or 0-10V to the heatcon! EC (s.p. 8)

To extend the system more data, interfaces are available.

heatcon! EC can build a cascade. Only with one EC you realise a cascade of two active heating generators and set up a multivalent system.

In combination with the optional room controller RC 130 the heatcon! is able to work as reference room controller. heatcon! is ready for our single room control system heatapp! (s.p. 7).

- > 2x mixed circuit | extendable by EM 100/101
- > 1x direct circuit
- > 2x O-10V/PWM out put | flexible usage, extendable by EM 100/101
- > domestic hot water
- > cascades
- > 3x difference controller e.g. solar, biomass
- > buffer management
- > monitoring

## heatcon! EC 1321 pro

















two-stage generator | direct circuit | domestic hot water | mixed circuits | O-10V/PWM | temperature difference controller | OpenTherm-BUS

## heatcon! EC 1351 pro

















two-stage generator | direct circuit | domestic hot water | mixed circuits | O-10V/PWM | temperature difference controller | WEZ-RS 485-interface

Optional heatcon! EC und HMI are available in a wall mounted housing.





### heatcon! MMI 200

Interface to use the heatcon! system without internet access

- > connected to EbV-systembus
- operation via quick selection buttons and control knob with rotary push funktion
- > available in anthracite and white
- > the base graphic account is configurable





### heatcon! EM 100

extension module for one more mixed circuit and other I/O's

- > DIN-rail mounting
- > EM 100 is connected thru EbV-systembus with EC
- > maximum two EM at one EC

#### I/O's

- > 3x output relay (mixed circuit extension)
- > 1x output no ground
- > 2x output O-10V/PWM (selection)
- > 2x input sensors
- > 2x input sensor/O-10V

#### heatcon! EM 101

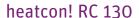
extension module for one more mixed circuit and other I/O's

- > wall mounted housing
- > EM 101 is connected thru EbV-systembus with EC
- > maximum two EM at one EC

#### I/O's

> same as heatcon! EM 100





room controller including temperature measuring

- > two wire connection (h2b-Bus) to EC
- > up to five RC 130 in a heatcon! system

#### **functions**

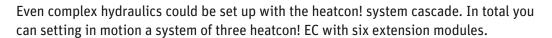
- > set point room temperature
- > measured room temperature
- > status (stand-by, summer mode, automatic mode, etc.)



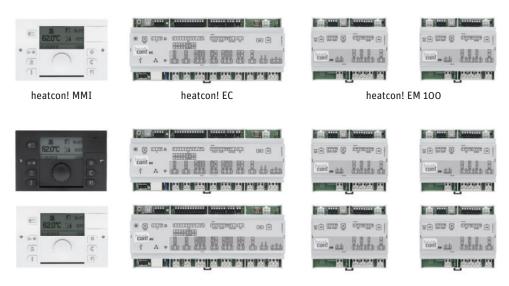


## **Cascades**

## System cascade







15 heating circuits | 15 room controller | 6 active heating boilers (cascade) | 9 difference controller | 18 outputs O-10V/PWM (selected) | 3 hot water circuits

## OpenTherm-cascade

If you combine heatcon! EC 1351 pro with the extension EM 110 you can set up an OpenTherm cascade of two boilers. Using four EM 110 builds a cascade up to eight boilers with unique OpenTherm addresses.

24 boilers with OpenTherm is the maximum setting with heatcon!.



Combining system- and OpenTherm-cascade is possible.



## Extension with heatapp! single-room control

heatapp! supplements every heating system with a radio-based single-room regulation that enables to control the temperature individually for each room. Convenient operation is possible from anywhere with smartphone or tablet via app.

heatapp! supports radiators, underfloor heating and electric heaters. Interfacing with any heating source is possible, e.g. gas, oil, solid fuel or heat pumps thru connection of heatcon! EC to the energy generator.

To enable individual room control the heatcon! system only requires the heatapp! gateway and the heatapp! radio components for recording and controlling the current temperature. The heatapp! gateway communicates via network with heatcon! and via radio protocol and WLAN/LAN with all heatapp! components.

For the regulation of radiators the radio components heatapp! drive are used. In underfloor heating systems 8-channel-zone controllers are used for individual temperature control, heatapp! sense serve to measure the room temperature.

With our heatapp! App you control the heatcon! system via smartphone or tablet.



# heatapp! App

#### Features

- > change the comfort temperature of rooms
- > name rooms and add photos
- > configure switching times for every room
- > manage users and define rights
- > regulation of hot water
- > current weather data
- > live view with current system information
- > monitoring



Find more information at www.heatapp.de.

# heatcon! | heating control system

#### Technical data

Operating system: Linux

Connections network, USB: RJ45 Ethernet, USB 2.0 Power supply voltage: 230V ±10%, 50 Hz

Power consumption: max. 9VA

Protection class: T Protection type: IP<sub>0</sub>0

**DIN EN 60730** Standards: -25 ... +60°C Storage temperature: -10 ... +50°C Operating temperature:

Housing dimensions EC: 210 x 90 x 61 mm (WxHxD) Housing dimensions MMI 200: 144 x 96 x 29 mm (WxHxD)

## **Connection possibilities heatcon! EC to the energy generator:**

Relay control (T1/T2 single-stage or T6/T8 two-stage) Modulation OPEN/CLOSE communicating EG via OT-interface (EC 1321 pro) communicating EG RS-485 interface (EC 1351 pro) Signal 0-10V Switch contact Modulation 0-10V



EbV Elektronikbau- und Vertriebs-GmbH

Tel.: +49 (0) 2736 44305-0

Fax: +49 (0) 2736 8266