

Certified for the
North American market!*



DeltaSol® MX – the all-rounder

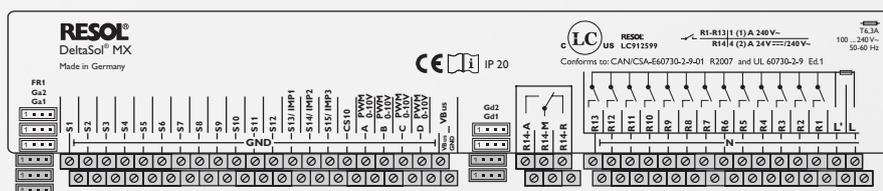
- 14 relay outputs and 12 inputs for Pt1000, Pt500 or KTY temperature sensors
- Up to 5 extension modules via RESOL VBus® (45 sensors and 39 relays in total)
- Inputs for analogue and digital Grundfos Direct Sensors™
- Integrated control of up to 4 high-efficiency pumps via PWM outputs
- Data logging, storing, easy transfer of controller adjustments prepared and firmware updates via SD card
- Cooling over the heating circuit with condensation detection by means of a dew point switch
- Simplified timer, 0-10V boiler control and DHW preheating
- Remote access to the heating circuits with room control unit(s) or the VBus®Touch HC App
- Extended optional functions, e.g. solid fuel boiler function with mixer and target temperature control

The **DeltaSol® MX** is the most versatile system controller for complex solar and heating systems in our product range. It is ideal to control a combination of solar and non-solar parts of the system.

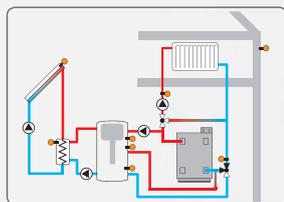
Easy combination and parameterisation of pre-programmed functions for several millions of hydraulic variants.

Customised and OEM versions are available on request. Please contact our sales team.

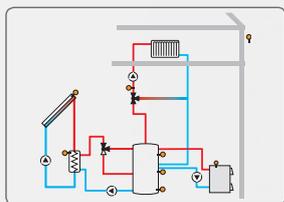
Electrical connection



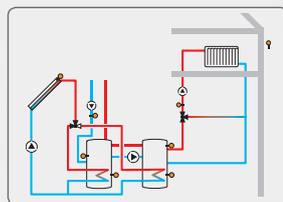
Examples



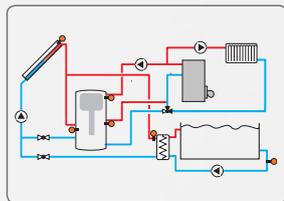
Solar system with combined store, external heat exchanger, weather-compensated heating circuit, return preheating and backup heating



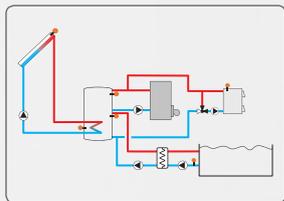
Solar system with external heat exchanger, store loading in layers and backup heating by solid fuel boiler



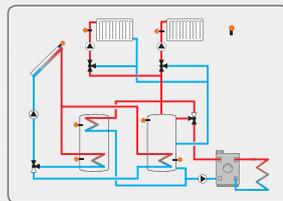
Solar system with 2 stores, circulation pump control, heat exchange control and weather-compensated heating circuit



Solar system with combined store and swimming pool, backup heating, heating circuit loading and return preheating



Solar system with store, swimming pool and backup heating over gas- and solid fuel boiler



Solar system with 2 stores and 2 weather-compensated heating circuits for heating or cooling application of a heat pump

RESOL DeltaSol® MX

Price bracket A | Article no.: **115 992 03**

RESOL DeltaSol® MX – Full kit

Incl. 6 Pt1000 sensors (2 x FKP6, 4 x FRP6)

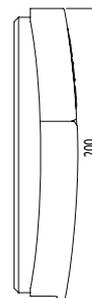
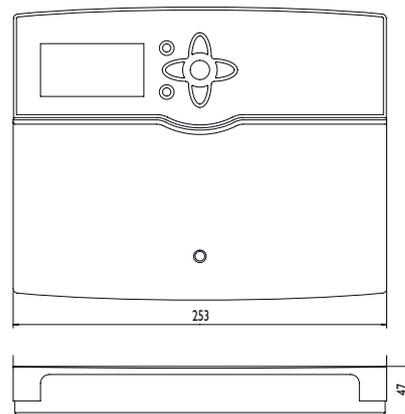
Price bracket A | Article no.: **115 992 13**

An SD card is included with the controller.



Visit www.resol.de/videos for a product video about this controller

Technical data



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, 1 input for a FlowRotor, 1 CS10 solar cell, 4 Grundfos Direct Sensors™ (2 x analogue, 2 x digital*)

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

Standby: 0.84 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: 7 integrated calorimeters and control of weather-compensated heating circuits. Adjustable system parameters and add-on options (menu-driven), balance and diagnostics functions, function control according to VDI 2169

Housing: plastic, PC-ABS and PMMA

Mounting: wall mounting, mounting into patch panels is possible

Indication/Display: full graphic display

Operation: 7 push buttons

Ingress protection: IP 20/EN 60529

Protection class: I

Ambient temperature: 0 ... 40 °C

Pollution degree: 2

Dimensions: 253 x 200 x 47 mm

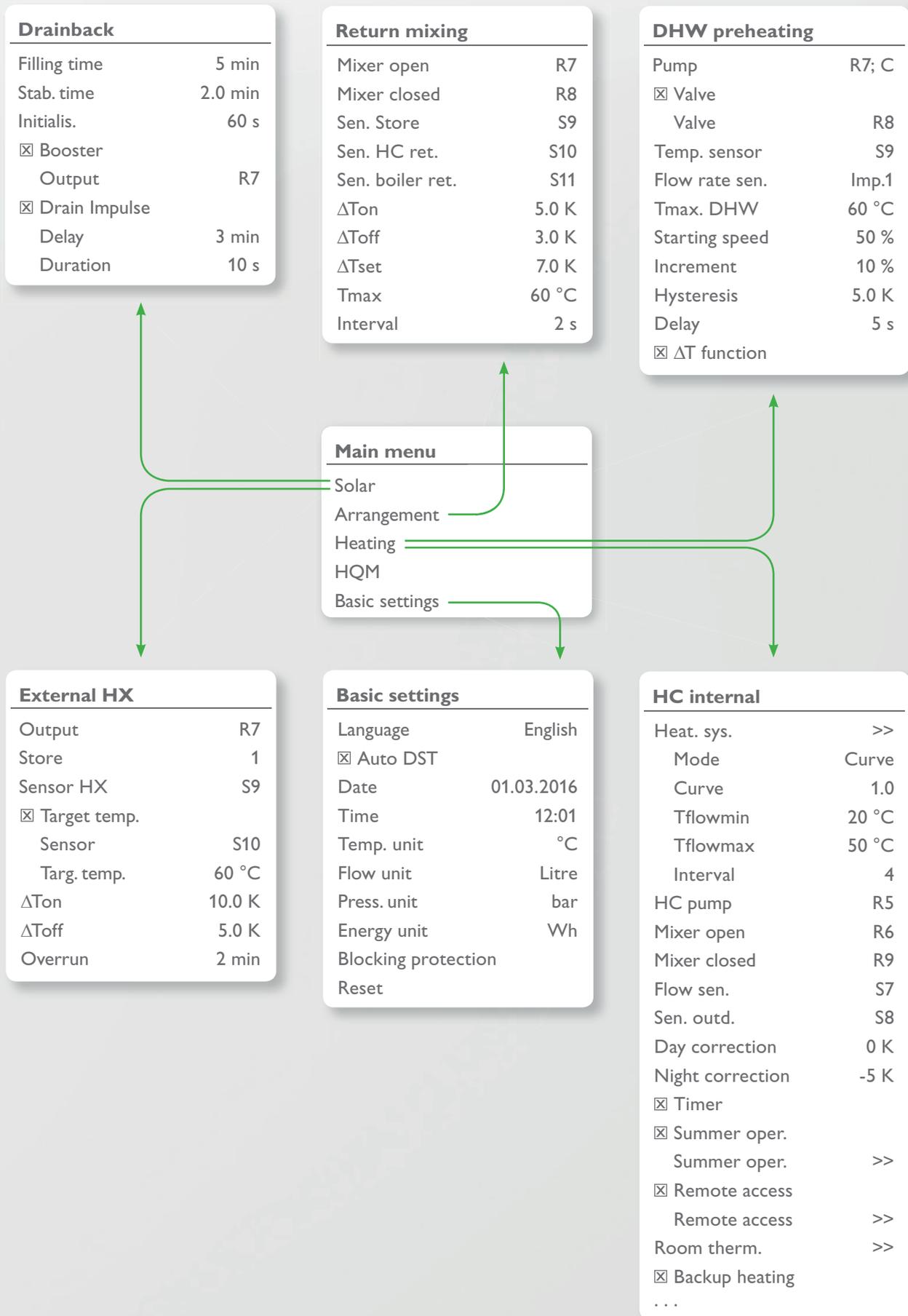
*For the digital inputs, the following sensor combinations are possible:

- 1 x RPD, 1 x VFD

- 2 x VFD, but with different measuring ranges only

Operating concept

Pre-programmed optional functions facilitate parameterisation:



Each optional function has its own menu with all adjustment channels required, clearly named.

Functional possibilities

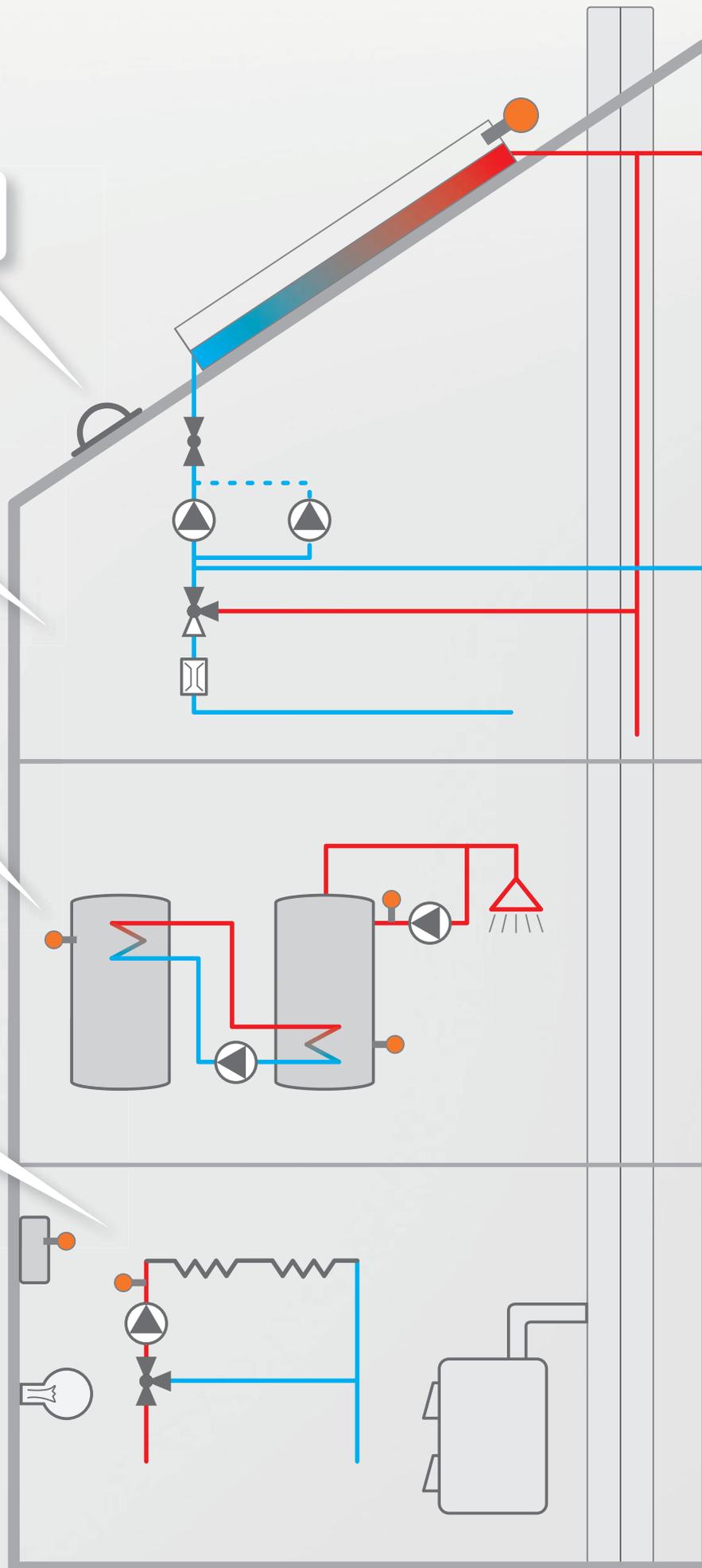
Irradiation-controlled bypass, irradiation switch

Twin pump or booster pump, with optional flow rate monitoring – in a pre-programmed optional function

Circulation, heat exchange control, thermal disinfection – in pre-programmed optional functions

Floor heating with optional room temperature monitoring, solid fuel boiler

Error relay function for optimum function control



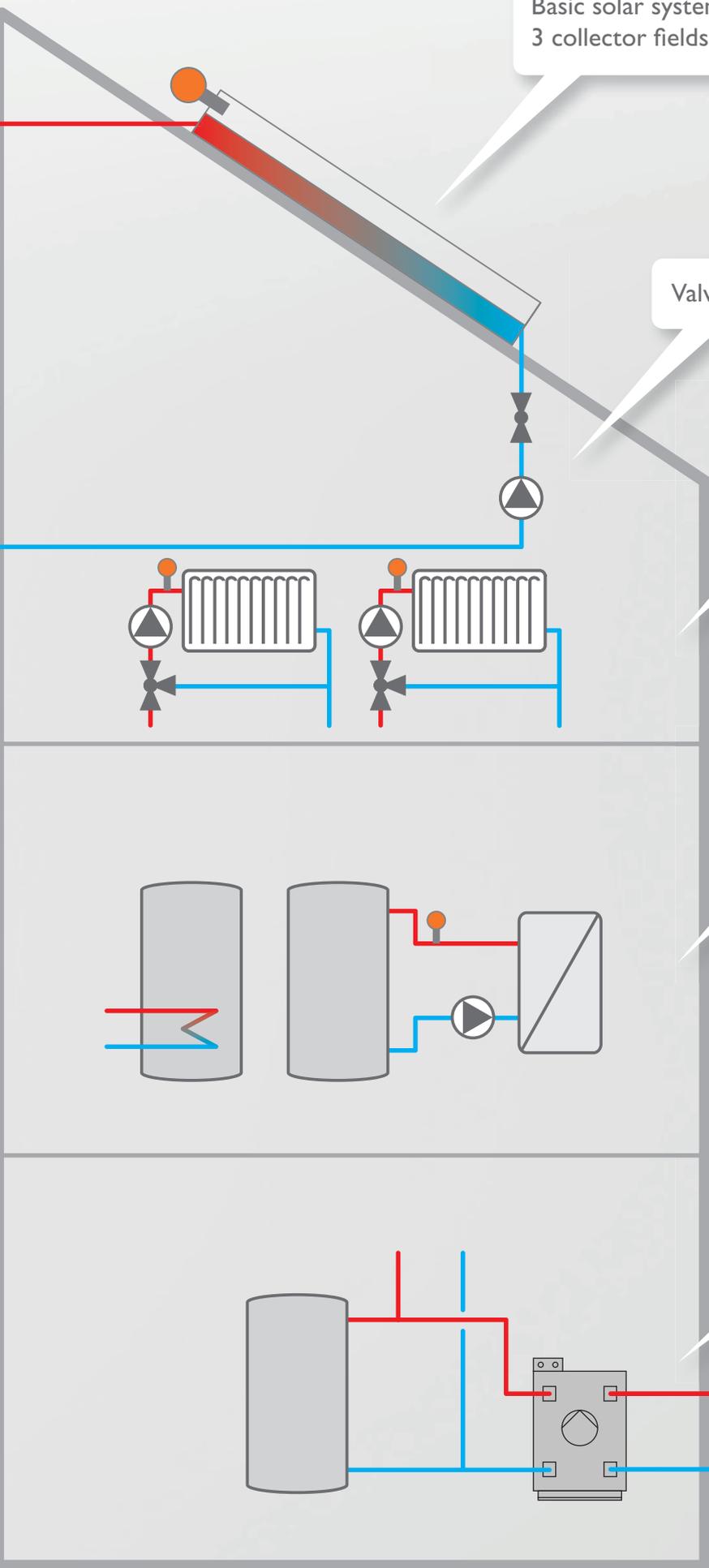
Basic solar systems also for 3 collector fields

Valve or pump logic

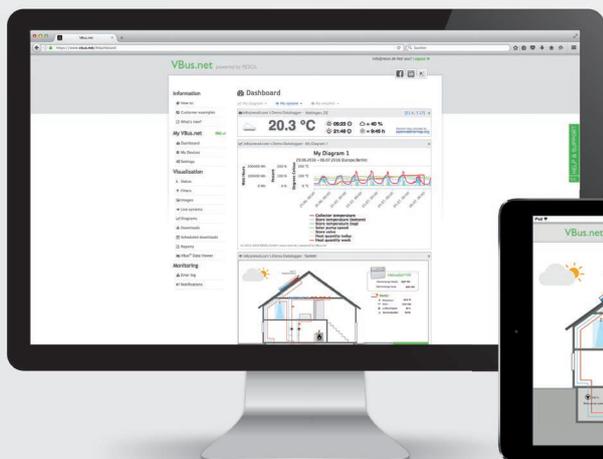
2 internal, with EM extension modules up to 5 additional weather-compensated heating circuits for heating and cooling application

Up to 5 solar stores, external heat exchanger with priority logic etc.

Implementation of a heat pump for heating and cooling purposes



Visualisation



Freely configurable Dashboard – your live system or diagram incl. weather data at a glance.

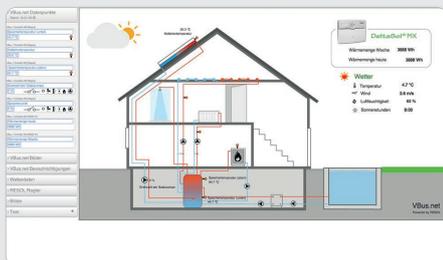
VBus.net

The Internet portal for easy and secure access to your system data – www.vbus.net.

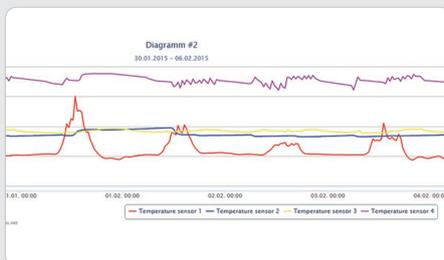
With VBus.net, you can display live data of your system. Furthermore, you can create and download diagrams for defined periods of time from the data stored.

? Why VBus.net?

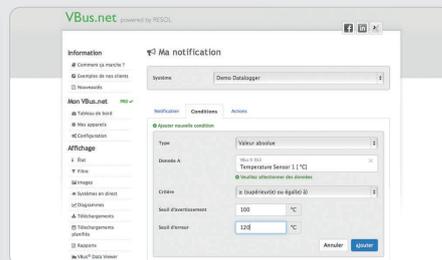
- Suitable for all RESOL controllers connected to a Datalogger
- Basic version free of charge
- For every operating system and all mobile devices worldwide – no software installation required



Live system editor with extended format and layout functions



Customise and design your own diagrams



Automatic e-mail notifications and reports



DeltaSol® MX



DL3/DL2 Datalogger or KM2 Communication module



Router

