


## DeltaSol® BX Plus



rosenthal design 

The RESOL *DeltaSol®* BX Plus is a system controller for multi-store solar and heating systems. The intuitive commissioning menu leads you through the system configuration by requiring the most important adjustments directly after connecting the controller.

For an optimum overview, all sensor and relay allocations are listed in the service menu.

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



## More possibilities!

- 8 sensor inputs and 5 relay outputs
- Data logging, transfer of adjustments and firmware updates via SD memory card
- Pre-programmed optional functions such as drainback option, time-controlled thermostat function, thermal disinfection
- Up to 2 extension modules via RESOL VBus® connectable (21 sensors and 15 relays in total)
- 2 inputs for digital Grundfos Direct Sensors™
- 2 PWM outputs for speed control of high-efficiency pumps
- Automatic function control according to VDI 2169: Flow rate and pressure monitoring, warnings for too high  $\Delta T$  values, interchanged flow and return pipes and night circulation
- VBus® menu for configuring remote displays, e. g. SDFK

### RESOL *DeltaSol®* BX Plus

Price bracket A | Article no.: **115 001 33**

### RESOL *DeltaSol®* BX Plus – Full kit

Incl. 5 Pt1000 sensors (2 x FKP6, 3 x FRP6)

Price bracket A | Article no.: **115 001 43**

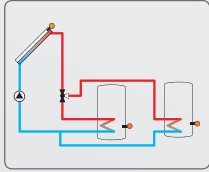
An SD card as well as a PWM/0-10V adapter cable are included with the controller.

Menu languages:

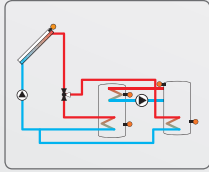


Visit [www.resol.de/videos](http://www.resol.de/videos) for a product video about this controller

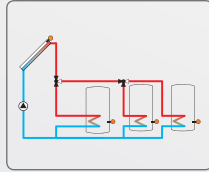
## Examples



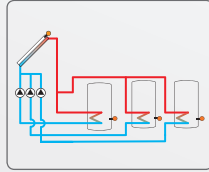
2-store system with valve logic, 1 pump, 3 sensors and 3-port valve



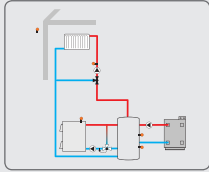
2-store solar system with valve logic and heat exchange control



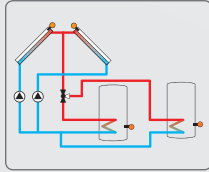
Solar system with 3 stores, 3-port-valve logic



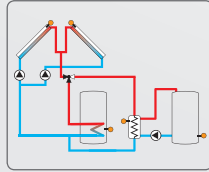
3-store solar system with pump logic and heat exchange control



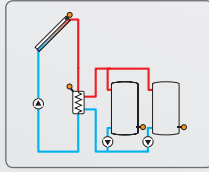
1 mixed heating circuit with solid fuel boiler and backup heating (demand)



Solar system with east-/west collectors and 2 stores (valve logic)

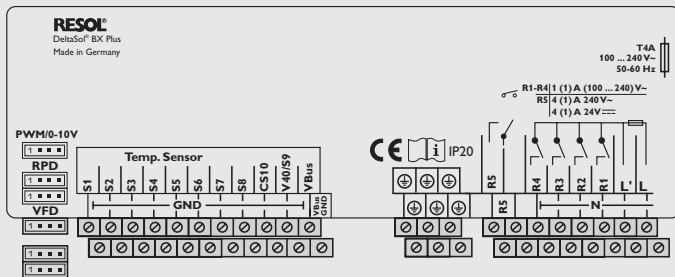


Solar system with east-/west collectors, 2 stores and external heat exchanger, 3-way valve control



Solar system with 2 stores and external heat exchanger, pump logic

## Electrical connection



## Accessories

### RESOL DL2 Datalogger



For visualisation via VBus.net, incl. SD card and network cable, mains adapter and VBus® cable pre-connected

Price bracket A | Article no.: **180 007 10**

### RESOL EM



Sensor and relay Extension module with 5 outputs and 6 inputs

Price bracket A | Article no.: **145 440 80**

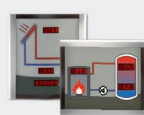
### RESOL DL3 Datalogger



For visualisation via VBus.net, incl. SD card, mains adapter, network and VBus® cable

Price bracket A | Article no.: **180 009 90**

### RESOL Smart Display SD3/SDFK



Price bracket A | Article no. SD3:

**180 004 90**

Price bracket A | Article no. SDFK:

**180 010 80**

### VFD/RPD Grundfos Direct Sensor™



Digital sensors in different versions

### RESOL SP10

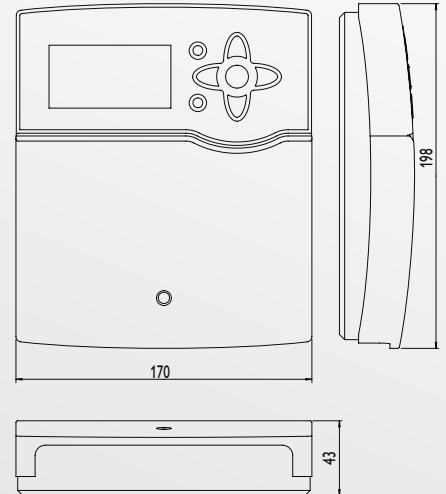


Sensor overvoltage protection

Price bracket A | Article no.:

**180 110 70**

## Technical data



**Inputs:** 8 (9) inputs for Pt1000, Pt500 or KTY temperature sensors, 1 V40 impulse input, inputs for 2 digital Grundfos Direct Sensors™\*, 1 input for a CS10 irradiation sensor

**Outputs:** 4 semiconductor relays, 1 potential-free relay, 2 PWM outputs

**PWM frequency:** 512 Hz

**PWM voltage:** 11.0 V

**Switching capacity:**

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

4 (1) A 24 V~ / 240 V~ (potential-free relay)

**Total switching capacity:** 4 A 240 V~

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

**Supply connection:** type Y attachment

**Standby:** 0.76 W

**Temperature controls class:** I

**Energy efficiency contribution:** 1 %

**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:** ΔT control, pump speed control, heat quantity measurement, operating hours counter for the solar pump, tube collector function, thermostat function, store loading in layers, priority logic, drainback option, booster function, heat dump function, thermal disinfection function, PWM pump control, function control

**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 push buttons at the front

**Ingress protection:** IP 20 / EN 60529

**Protection class:** I

**Ambient temperature:** 0 ... 40 °C

**Pollution degree:** 2

**Dimensions:** 198 x 170 x 43 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