RESOL®
CONTROL TECHNOLOGY

rosenthal design **r**

VBus.net | RPT | HE pump control | MicroSD
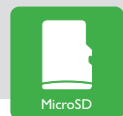
DeltaSol® SL

With its versatile software, the RESOL *DeltaSol®* SL can control even complex systems easily and reliably. 27 pre-configured system layouts with up to 3 hydraulic variants each facilitate the commissioning and enable the adaptation to the individual system requirements.
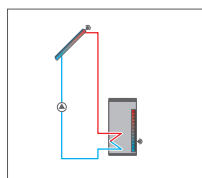
The operation via 2 main buttons and 1 adjustment dial, the Lightwheel®, follows the well-known operating concept. The manual mode and the holiday function can be activated by pressing a single button.

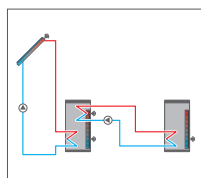## Modern design, many application possibilities!

- Integrated MicroSD card slot
- 4 relay outputs (incl. 1 potential-free extra-low voltage relay)
- 4 inputs for Pt1000, Pt500 or KTY temperature sensors
- Input for 1 analogue Grundfos Direct Sensor™
- 1 V40 impulse input (also usable as a Pt1000, Pt500 or KTY temperature sensor input)

- 2 PWM outputs for the speed control of high-efficiency pumps
- 27 basic system layouts with up to 3 hydraulic variants each to choose from
- Automatic function control according to VDI 2169
- Heat pump demand (optional)

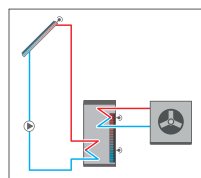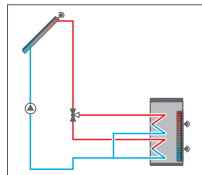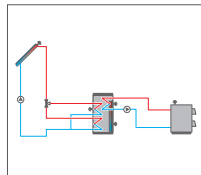| Article no.	Article	Price bracket
115 003 33	DeltaSol® SL – Solar controller	A
115 003 43	DeltaSol® SL – Full kit » incl. 4 Pt1000 sensors (2 x FKP6, 2 x FRP6)	A

EXAMPLES

Solar system with 1 store

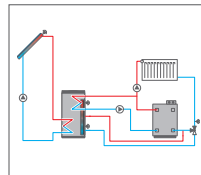Solar system with 1 store and heat exchange control

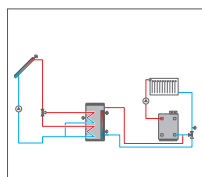Solar system with 1 store and backup heating with heat pump
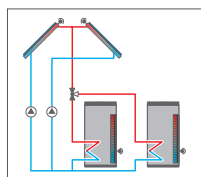
Solar system with store loading in layers

Solar system with store loading in layers and solid fuel boiler
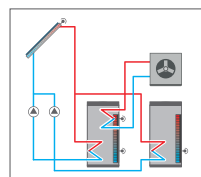
Solar system with 1 store, heating circuit return preheating and thermostatic backup heating

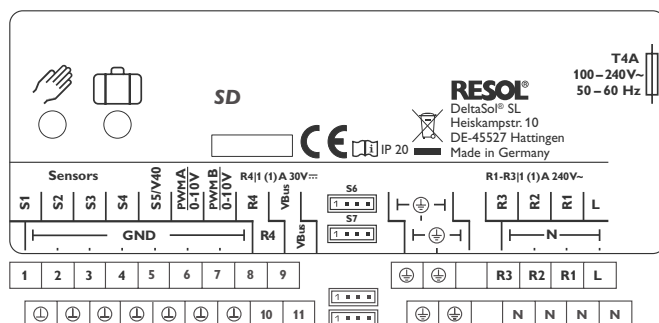Solar system with store loading in layers and heating circuit return preheating

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

Solar system with 2 stores, pump logic and backup heating with heat pump

ELECTRICAL CONNECTION

Sensor 6: Grundfos Direct Sensor™; Sensor 7: frequency input

TECHNICAL DATA

Inputs: 4 inputs for Pt1000, Pt500 or KTY temperature sensors, 1 analogue Grundfos Direct Sensor™, 1 frequency input, 1 V40 impulse input (also usable as a Pt1000, Pt500 or KTY temperature sensor input)

Outputs: 3 semiconductor relays, 1 potential-free extra-low voltage relay, 2 PWM outputs (switchable to 0-10 V)

PWM frequency: 512 Hz

PWM voltage: 10.8 V

Switching capacity:
1 (1) A 240 V~ (semiconductor relay)
1 (1) A 30 V⎓ (potential-free relay)

Total switching capacity: 3 A 240 V~

Power supply: 100–240 V~ (50–60 Hz)

Supply connection: type X attachment

Standby: 0.72 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: VBus®, MicroSD card slot

VBus® current supply: 60 mA

Functions: operating hours counter, tube collector function, thermostat function, pump speed control, heat quantity measurement, adjustable system parameters and optional functions (menu-driven), balance and diagnostics function, function control according to VDI 2169

Housing: plastic, PC-ABS and PMMA

Mounting: wall mounting, mounting into patch panels is possible

Indication/Display: System-Monitoring-Display for system visualisation, 16-segment-display, 8 symbols for indication of the system status, operating control LED (Lightwheel®)

Operation: 4 buttons and 1 adjustment dial (Lightwheel®)

Ingress protection: IP 20/EN 60529

Protection class: I

Ambient temperature: 0…40 °C

Degree of pollution: 2

Relative humidity: 10…90 %

Fuse: T4A

Maximum altitude: 2000 m above MSL

Dimensions: 110 x 166 x 47 mm

ACCESSORIES

DL2 Plus Datalogger

For remote access to 2 controllers, integrated data logging and connection to a BMS

SP10

Sensor overvoltage protection

VFS/RPS Grundfos Direct Sensor™

Analogue sensors in different versions

AM1

Alarm module for signalling system failures

MicroSD card

MicroSD card, 16 GB memory capacity, incl. adapter

Calorimeter extension kits

Calorimeter extension kits (consisting of 2 x FRP30, 1 x V40 flowmeter)