



rosenthal design



## DeltaSol® SLL

The RESOL *DeltaSol*® SLL is the smallest controller of the SL series. Its equipment is optimised for small and medium-sized solar thermal and heating systems, 10 pre-configured basic systems are available. The *DeltaSol*® SLL is also the first controller of its category to offer the automatic function control according to the VDI 2169 directive.

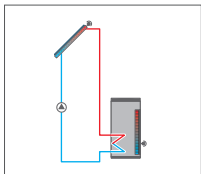
Additionally, it is equipped with a potential-free extra-low voltage relay for backup heating demand and a V40 flowmeter input for heat quantity measurement.

### Versatile and easy to operate!

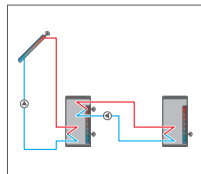
- Microbuttons for quick access to the manual mode and the holiday function
- 3 relay outputs (incl. 1 potential-free extra-low voltage relay)
- 4 inputs for Pt1000, Pt500 or KTY temperature sensors
- 1 V40 impulse input
- 2 PWM outputs for the speed control of high-efficiency pumps
- 10 basic system layouts to choose from
- Automatic function control according to VDI 2169
- Heat pump demand (optional)

Article no.	Article	Price bracket
115 431 53	DeltaSol® SLL – Solar controller	A
115 431 63	DeltaSol® SLL – Full kit » incl. 3 Pt1000 sensors (1 x FKP6, 2 x FRP6)	A

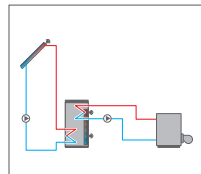
## EXAMPLES



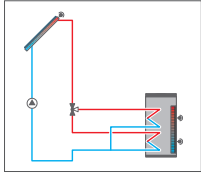
Solar system with 1 store



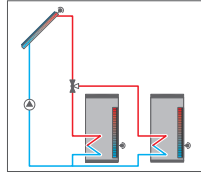
Solar system with 1 store and heat exchange control



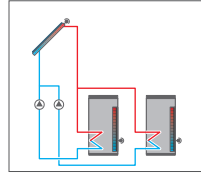
Solar system with 1 store and thermostatic backup heating



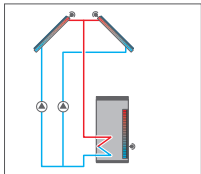
Solar system with store loading in layers



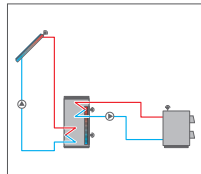
Solar system with 2 stores, valve logic



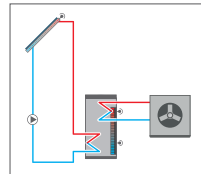
Solar system with 2 stores, pump logic



Solar system with east-/west collectors and 1 store



Solar system with 1 store and solid fuel boiler



Solar system with 1 store and backup heating with heat pump

## TECHNICAL DATA

**Inputs:** 4 inputs for Pt1000, Pt500 or KTY temperature sensors, 1 V40 impulse input

**Outputs:** 2 semiconductor relays, 1 potential-free extra-low voltage relay, 2 PWM outputs

**PWM frequency:** 1000 Hz

**PWM voltage:** 10.5 V

**Switching capacity:**

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

1 (1) A 30 V== (potential-free relay)

**Total switching capacity:** 2 A 240 V~

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

**Supply connection:** type X attachment

**Standby:** 0.66 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®

**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

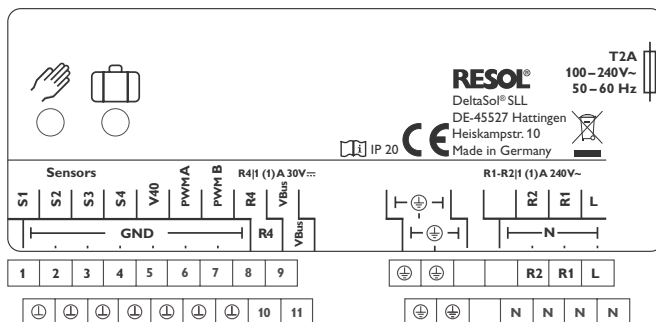
**Relative humidity:** 10 ... 90 %

**Fuse:** T2A

**Maximum altitude:** 2000 m above MSL


**Dimensions:** 110 x 166 x 47 mm

## ELECTRICAL CONNECTION




## ACCESSORIES

**KM2 Communication module**




For remote access to the controller via VBus.net

**V40**




V40 flowmeter in different versions

**SP10**




Sensor overvoltage protection

**AM1**



Alarm module for signalling system failures

**Calorimeter extension kits**



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