DeltaSol[®] CS Plus







The **DeltaSol**[®] CS Plus has been especially developed for the speed control of high-efficiency pumps in standard solar and heating systems. It is equipped with two PWM outputs and an additional input for a VFD Grundfos Direct Sensor[™] that enables a precise heat quantity measurement.

The commissioning menu will lead you through the most important adjustments for the initial configuration in only eight steps.

- For the speed control of high-efficiency pumps
- 1 input for a VFD Grundfos Direct Sensor[™]
- Heat quantity measurement
- Commissioning menu
- 10 basic system layouts to choose from
- Function control
- Optional thermal disinfection function
- Drainback option
- Unit °C and °F selectable

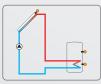
RESOL DeltaSol® CS Plus Price bracket A | Article no.: 115 003 13

RESOL DeltaSol® CS Plus – Full kit Incl. 4 Pt1000 sensors (2 x FKP6, 2 x FRP6) Price bracket A | Article no.: **115 003 03**

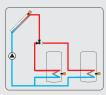
The PWM adapter cable is included with the controller.

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

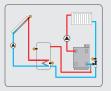
Examples



Solar system with 1 store

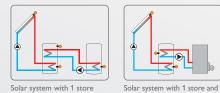


Solar system with 2 stores, valve logic





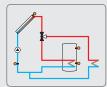




and heat exchange controller



Solar system with 2 stores, pump logic



Solar system with 1 store and

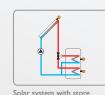
heat dump

Solar drainback system

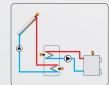
thermostatic afterheating

Solar system with east-/west

collectors and 1 store



Solar system with store loading in layers



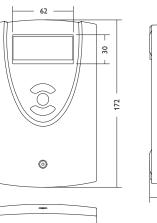
Solar system with 1 store and solid fuel boiler



Solar drainback system with booster

Technical data

110





Inputs: 4 Pt1000 temperature sensors, 1 VFD Grundfos Direct Sensor™

Outputs: 2 semiconductor relays, 2 PWM outputs Switching capacity:

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

Total switching capacity: $2\,A\,\,240\,V\!\sim$

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

Supply connection: type Y attachment

Power consumption: < 1 W (standby)

Mode of operation: type 1.C.Y action

Rated impulse voltage: 2.5 kV Data interface: RESOL VBus®

VBus[®] current supply: 35 mA

Functions: function control, operating hours counter, tube collector function, thermostat function, speed control and heat quantity measurement

Housing: plastic, PC-ABS and PMMA

Mounting: wall mounting, mounting into patch panels is possible

Indication / Display: System-Monitoring-Display for visualisation of systems, 16-segment and 7-segment display, 8 symbols for indication of system status

Operation: 3 push buttons at the front Ingress protection: IP 20/EN 60529

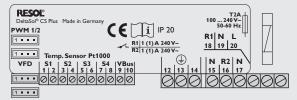
Protection class: |

Ambient temperature: 0 ... 40 °C

Pollution degree: 2

Dimensions: 172 x 110 x 46 mm





Accessories



Grundfos Direct Sensor™ VFD Digital sensors in different versions



RESOL AM1

Alarm module for signalling system failures Price bracket B |Article no.: 180 008 70



RESOL VBus® / USB interface adapter PC connection kit for RESOL controllers with VBus® incl. **RESOL ServiceCenter Software** Price bracket B |Article no.: 180 008 50



RESOL SP10 Sensor overvoltage protection Price bracket A |Article no.: 180 110 70