

SSC/1



The SSC/1 controller is used for speed control of a HE pump in small standard solar thermal and heating systems.

They are equipped with a PWM output as well as with an input for a VFD Grundfos Direct Sensor™ which enables precise heat quantity measurement.

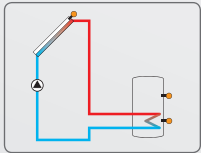
The commissioning menu ensures an easy and quick configuration.



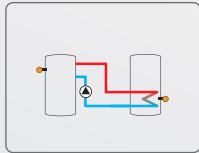
High-efficiency even for small systems!

- For the speed control of high-efficiency pumps
- 1 input for a VFD Grundfos Direct Sensor™
- Heat quantity measurement
- Commissioning menu
- Function control
- Drainback option
- Unit °C and °F selectable

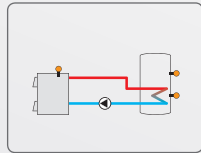
Examples



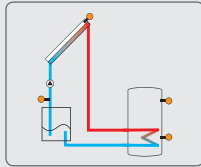
Solar system with 1 store



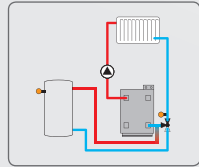
Heat exchange control*



Solid fuel boiler*



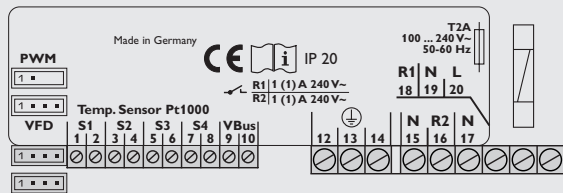
Solar drainback system*



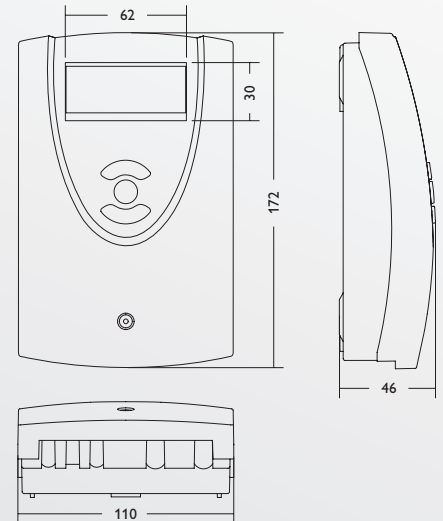
Heating circuit return preheating*

*Application examples

Electrical connection



Technical data



Inputs:

4 Pt1000 temperature sensors, 1 VFD Grundfos Direct Sensor™

Outputs: 1 semiconductor relay, 1 PWM output

PWM frequency: 512 Hz

PWM voltage: 10.5 V

Switching capacity:

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

Total switching capacity: 1 A 240 V~

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

Supply connection: type Y attachment

Standby: 0.58 W

Mode of operation: type 1.C.Y action

Rated impulse voltage: 2.5 kV

Data interface: VBus®

VBus® current supply: 35 mA

Functions: function control, operating hours counter, speed control, drainback option 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: I

Ambient temperature: 0 ... 40 °C

Pollution degree: 2

Dimensions: 172 x 110 x 46 mm

Accessories

Moisture-proof housing



Moisture-proof housing for controller installation outdoors or in highly humid locations (without controller)

Price bracket B | Article no.: **290 028 70**

AM1



Alarm module for signalling system failures

Price bracket B | Article no.: **180 008 70**

VFD Grundfos Direct Sensor™



Digital sensors in different versions

VBus®/USB interface adapter



PC connection kit for controllers with VBus® incl. Service CD

Price bracket B | Article no.: **180 008 50**

SP10



Sensor overvoltage protection

Price bracket A | Article no.: **180 110 70**

KM1 Communication module



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

Price bracket A | Article no.: **180 011 30**

SSC/2



The SSC/2 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.

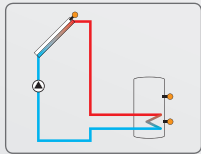
The commissioning menu will lead you through the most important adjustments for the initial configuration in only eight steps.



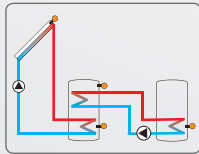
Heat quantity measurement with VFD Grundfos Direct Sensor™

- 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

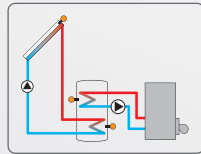
Examples



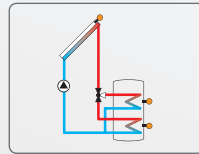
Solar system with 1 store



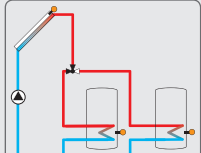
Solar system with 1 store and heat exchange control



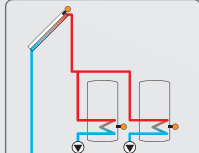
Solar system with 1 store and thermostatic afterheating



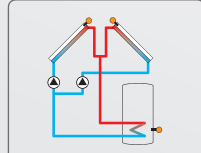
Solar system with store loading in layers



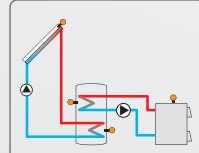
Solar system with 2 stores, valve logic



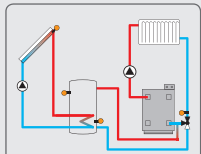
Solar system with 2 stores, pump logic



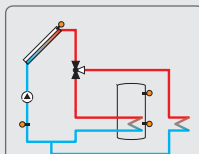
Solar system with east-/west collectors and 1 store



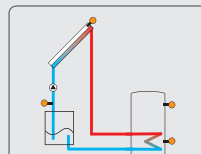
Solar system with 1 store and solid fuel boiler



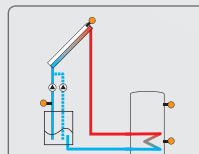
Solar system with heating circuit return preheating



Solar system with 1 store and heat dump



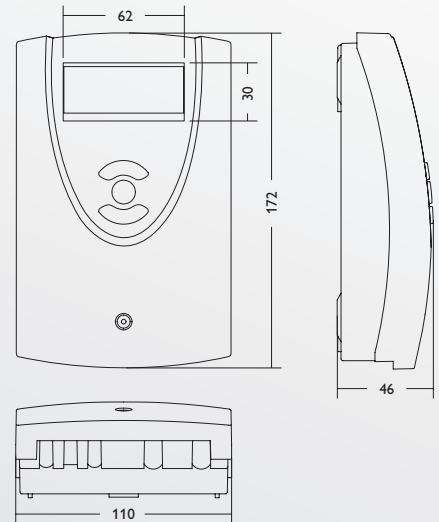
Solar drainback system*



Solar drainback system with booster*

*Application examples

Technical data



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

Outputs: 2 semiconductor relays, 2 PWM outputs

PWM frequency: 512 Hz

PWM voltage: 10.5 V

Switching capacity:

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

Total switching capacity: 2 A 240 V~

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

Supply connection: type Y attachment

Standby: 0.59 W

Mode of operation: type 1.C.Y action

Rated impulse voltage: 2.5 kV

Data interface: 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

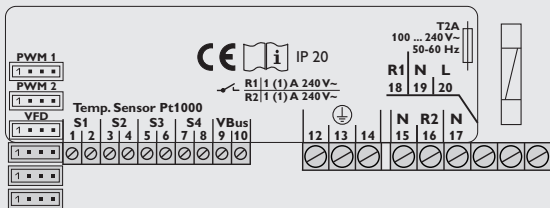
Protection class: I

Ambient temperature: 0 ... 40 °C

Pollution degree: 2

Dimensions: 172 x 110 x 46 mm

Electrical connection



Accessories

KM1 Communication module



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

Price bracket A | Article no.: **180 011 30**

Moisture-proof housing



Moisture-proof housing for controller installation outdoors or in highly humid locations (without controller)

Price bracket B | Article no.: **290 028 70**

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Digital sensors in different versions

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Sensor overvoltage protection

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Alarm module for signalling system failures

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