

MULTIPLEX SOLAR CONTROL UNIT



Product description

Multiplex solar control unit for multi-tank and complex solar and heating systems, fitted with outputs and inputs for heat quantity meters (volume measuring instrument or VFS sensor required), web-connected (module required), actuation of high-efficiency pumps and MicroSD card slot. Pre-configured systems for up to 4 tank systems and possibility to control a weather-compensating heating circuit are available. Numerous functions such as drainback, booster, timer, bypass, external WT, twin pump, thermal disinfection, time-controlled thermostat function, zone charging and blocking protection can be connected, freely-programmable function blocks. Expandable by up to 2x multiplex EM (of which 21 are temperature inputs and 15 relay outputs), e.g. for additional weather-compensating heating circuit. Automatic function check as per VDI guideline 2169.

- 5 relay outputs (incl. 1 floating low-voltage relay)
- 8 inputs for temperature sensors Pt1000, Pt500 or KTY
- 2 inputs for analogue Grundfos Direct Sensors™
- 1 input for solar cell SZ
- 2 pulse inputs for V40 (can be switched to temperature sensor input Pt1000, Pt500 or KTY)
- 4 pulse-duration modulation outputs for speed-controlled actuation of high-efficiency pumps
- Can be connected to the web (module required)
- SD card slot
- Expandable by up to 2x multiplex EM (of which 21 are temperature inputs and 15 relay outputs)
- Automatic function check as per VDI 2169

Specifications

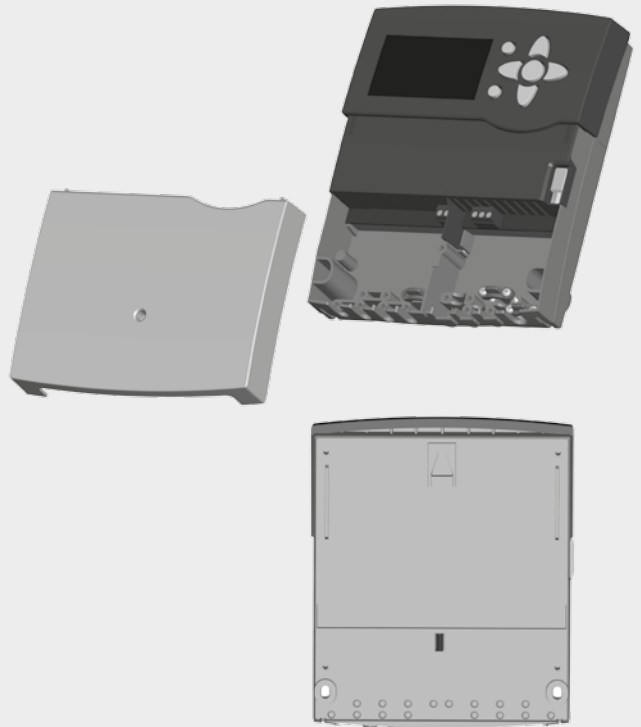
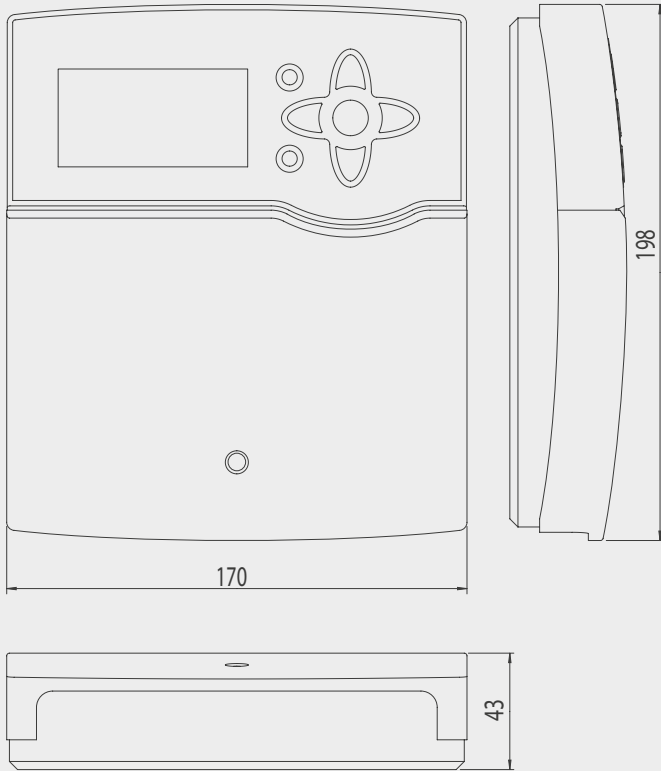
Type	Multiplex
Item no.	1510660
Inputs	8 temperature sensors Pt1000, Pt500 or KTY, 2 Grundfos Direct Sensors™ (analogue), 2 pulse inputs V40 (can be switched to temperature sensor input Pt1000, Pt500 or KTY) 1 input for solar cell SC
Outputs	4 semiconductor relays, 1 floating low-voltage relay, 4 pulse-duration modulation outputs (can be switched to 0-10 V)
Switching capacity	1 (1) A 240 V~ (semiconductor relay) 4 (1) A 24 V / 240 V~ (floating relay)
Total switching power	4 A, 240 V
Supply	100 - 240 V~ (50 - 60 Hz)
Type of connection	Y
Power consumption	< 1 W (standby)
Working principle	Type 1.B.C.Y
Rated surge voltage	2.5 kV
Data interface	VBus®, SD card slot
VBus® current output	60 mA
Functions	ΔT control, running time meter, tube collector function, thermostat function, speed control, heat quantity metering, stratified charging of tank, priority logics, drainback option, booster function, heat dump, thermal disinfection, pulse-duration modulation pump actuation, adjustable system parameters, balancing and diagnostic functions, function control in accordance with VDI 2169
Housing	Plastic, PC-ABS and PMMA
Installation	Wall installation, control panel installation possible
Display	Full-graphics display, control light (cursor keys) and backlight
Operation	7 buttons on the front of the housing
Protection class	IP 20 / DIN EN 60529
Protection class	I
Ambient temperature	0 ... 40 °C
Degree of contamination	2
Dimensions	198 x 170 x 43 mm

SOLAR CONTROL UNIT

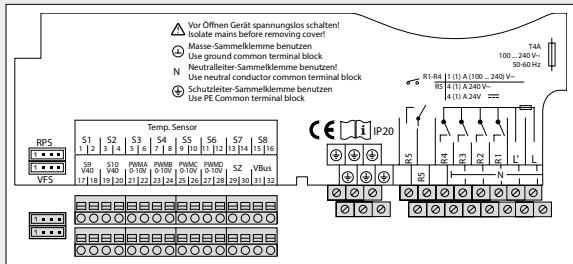


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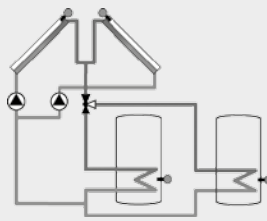
Housing dimensions and installation:



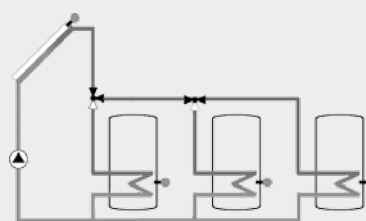
Electrical connection:



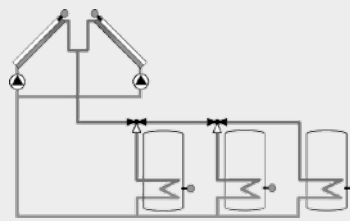
Example applications:



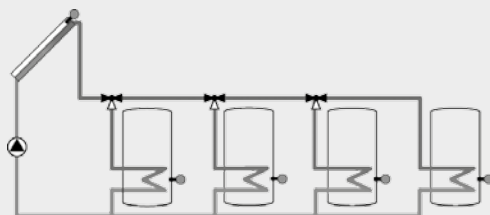
Example 01:
Solar system with east-west facing roof and 2 tanks



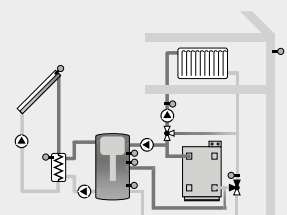
Example 02:
Solar system with 3 tanks, changeover valve logics



Example 03:
Solar system with east-west facing roof and 3 tanks, changeover valve logics



Example 04:
Solar system with 4 tanks, changeover valve logics



Example 05:
Solar system with additional heating and a weather-compensating heating circuit