

Heating control for houses heated by a fire or a solid-fuel boiler



A solid-fuel boiler (fire) can be connected even to those variants where it is not depicted. In such a case, its circulation pump will not be controlled by the controller but will be switched either by the boiler or by a thermostat.

The dashed lines in Variants 2, 5, 7, 11 mark the load units that contain circulation pumps, a thermostatic mixing valve or also an actuated 3-way mixing valve that are being prepared for market launch as assembled insulated **CSE TSV Load Units**.



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WEATHER COMPENSATION CONTROLLERS



TRS6 K Weather Compensation Controller

TRS6 K Controller enables to control a heating circuit, DHW heating and automatic operation of solar thermal systems, solid-fuel boilers, auxiliary electric and gas-fired heat sources. It contains a pair of PWM outputs for control of high-efficiency pumps, 3 relay outputs and 6 inputs for temperature sensors. It can be connected to a CAN bus and utilized for example together with a °Caleon Room Unit.

Code: 16821

Technical Data

| | |
|--|------------------------|
| VOLTAGE | 230 V |
| CONSUMPTION | 0.5-2.5 W |
| IP RATING | IP 40 |
| PROTECTION CLASS by EN61140 ED.2 | II |
| OPERATING TEMPERATURE | 0 to 40 °C |
| FUSE | T 2A / 250 V slow-blow |
| CLASS OF CONTROLLER | VI |
| CONTRIBUTION TO SEASONAL SPACE HEATING ENERGY EFFICIENCY | 5 % |

Equipped with

3 mechanical output relays
 2 outputs, 0-10V or PWM
 6 inputs for temperature sensors
 5 Pt1000 temperature sensors (1 outdoor, 4 sheath mounted)
 CAN bus

Main Features

- depiction of graphics and texts on a backlit display
- simple viewing of the current measurement values
- statistics and system monitoring by means of statistical graphics
- extensive setting menus with explanations
- menu block can be activated to prevent unintentional setting changes
- resetting to previously selected values or factory settings

Control Options

| Variant | Solid-fuel boiler (fire) | Solat thermal system | DHW heating | After-heating | Heat exchange | Return preheating | Heating circuit |
|-----------|--------------------------|----------------------|-------------|---------------|---------------|-------------------|-----------------|
| 2 | ✓ | | ✓ | ✓ | | | ✓ |
| 7, 11, 12 | ✓ | | ✓ | | ✓ | | ✓ |
| 5 | ✓ | | | ✓ | | | ✓ |
| 3 | ✓ | | | | | ✓ | ✓ |
| 4, 10 | | ✓ | ✓ | ✓ | | | ✓ |
| 9 | | ✓ | ✓ | | ✓ | | ✓ |
| 1 | | | ✓ | ✓ | | | ✓ |
| 6 | | | ✓ | ✓ | ✓ | | ✓ |
| 8 | | | ✓ | | | ✓ | ✓ |
| 13,14 | | | | | | | ✓ |

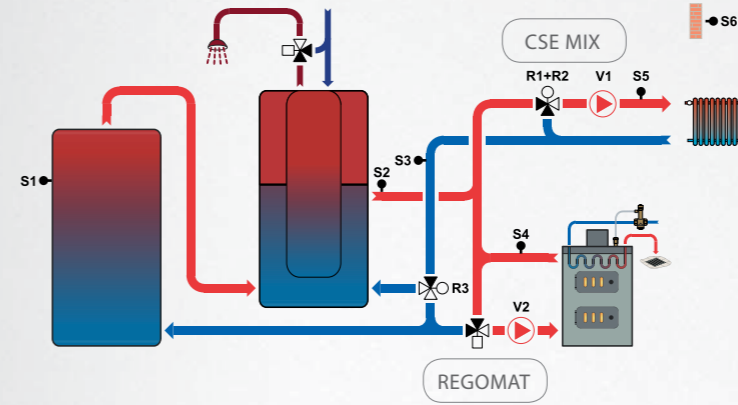
Accessories

Room sensor - Code 16167
 RC21 Room Unit - Code 9788
 RC Caleon Room Unit - Code 17150



Application Examples

A system with a solid-fuel boiler, combination thermal store (DUO/HSK), a mixed heating circuit and return preheating from another thermal store (variant 3).

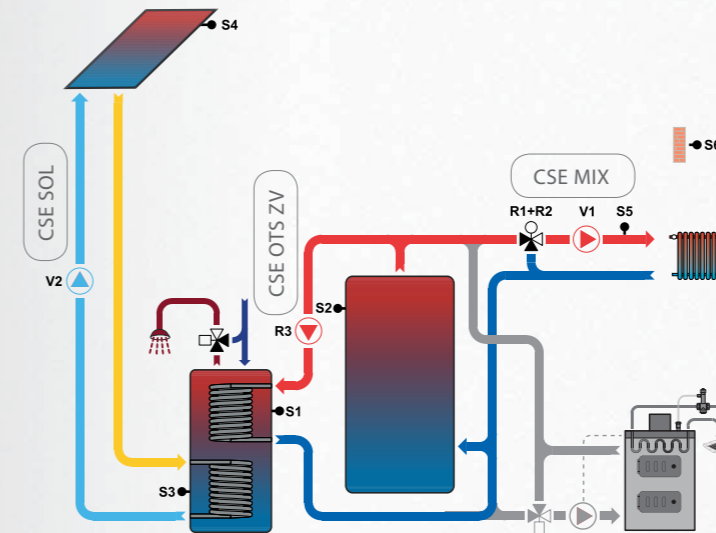


Connections:

| | |
|----|--|
| S1 | Thermal store temperature for preheating |
| S2 | Temperature in combination thermal store bottom part |
| S3 | Heating circuit return temperature |
| S4 | Solid-fuel boiler flow |
| S5 | Heating circuit temperature |
| S6 | Outdoor temperature |
| V1 | PWM signal for heating circuit circulation pump |
| V2 | PWM signal for solid-fuel boiler circulation pump |
| R1 | Heating circuit mixing valve - opening |
| R2 | Heating circuit mixing valve - closing |
| R3 | Return preheating valve |

CSE MIX (G or W PWM) – insulated pump station with a circulation pump and a heating circuit mixing valve.
REGOMAT E (G or W PWM) - insulated load unit with a circulation pump and a solid-fuel boiler thermostatic valve.

A solar thermal system for DHW heating, a thermal store with heat transfer to a hot water storage tank, a mixed heating circuit (variant 9).



Connections:

| | |
|----|--|
| S1 | Temperature in HW storage tank – upper part, heat transfer |
| S2 | Temperature in thermal store |
| S3 | Temperature in HW storage tank – lower part, solar heat |
| S4 | Temperature in solar collectors |
| S5 | Heating circuit temperature |
| S6 | Outdoor temperature |
| V1 | PWM signal for heating circuit circulation pump |
| V2 | PWM signal for solar thermal system circulation pump |
| R1 | Heating circuit mixing valve - opening |
| R2 | Heating circuit mixing valve - closing |
| R3 | Heat transfer circulation pump |

CSE MIX (G or W PWM) – insulated pump station with a circulation pump and a heating circuit mixing valve.
CSE OTS ZV (G or W) – insulated pump station with a circulation pump, non-return valve and two ball valves.
CSE SOL – insulated solar pump station.