

## Steca TR 0704

7 inputs,  
4 outputs

The Steca TR 0704 system controller is a universal controller for solar energy and heating systems. In addition to a selection of pre-programmed basic systems, freely programmable individual system configurations can also be realised.

The standard Steca TR 0704 has three calorimeters and one hours-of-operation logger for each of the four controller outputs. A special feature is the ability to not only display the current values of temperature, irradiation and energy volumes, but also to display the accumulated values over several days in the form of a graphical curve via a graphical LCD display. The modular construction of the Steca TR 0704 system controller allows the control system to be expanded with up to four extra Steca TA 0403 I/O modules. Every extra I/O module has its own microprocessor with four temperature recording inputs and three switching outputs, some of which can be speed controlled. This means that the controller can be expanded at any time to a maximum of 23 inputs and 16 outputs. The basic version of the Steca TR 0704 system controller has seven inputs for recording temperature, irradiation or flow rate and four outputs for controlling circulation pumps or switching valves. Communication with external peripherals is provided by an IS bus, an alarm output and an RS232 interface.

### Product features

- Electronic speed control
- High level of operational safety through fault diagnosis
- Hours-of-operation logger
- Storage tank target temperature loading
- Remote data transfer and remote parameter setting
- Modular extension with I/O module is possible
- Spring clamp terminals allow rapid and easy installation

### Displays

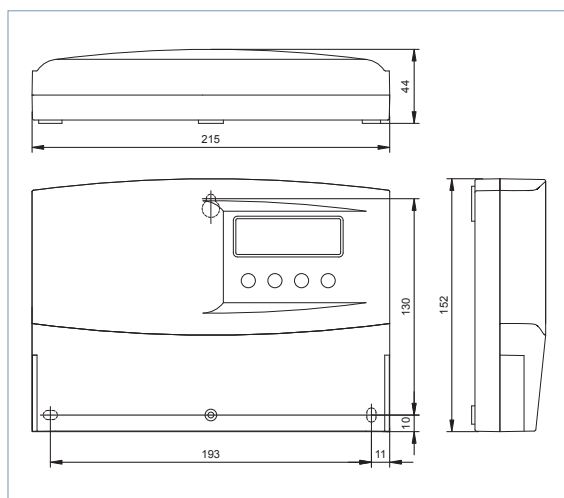
- Multifunction graphical LCD display
- Animated representation of the systems and operating states

### Operation

- Single-language menu navigation, different languages available

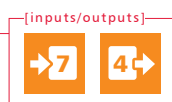
### Functions

- Data logger integrated
- Heat quantity (pulse generator)
- Heating return increase
- Reduction of stagnation phases
- Circulation (controlled by temperature / time)
- Back-up heating
- Solid fuel boiler
- Thermostat
- Differential thermostat
- Timer
- Interval / tube collector
- Anti-freeze
- Anti-legionella cyclical storage tank heating
- Alarm output
- Radiation switch
- Synchronised output
- Two loading zones



	TR 0704
System voltage	230 V (± 15 %), 50 Hz optional 115 V (± 15 %), 60 Hz
Own consumption	≤ 3 W
Inputs	7 2 x temperature (Pt1000) or radiation 5 x temperature (Pt1000) or pulse
Outputs	4 2 x triac for speed control, max. 250 W (R1), 480 W (R2) (230 V) 2 x switch output relay (R3, R4), max. 800 W (230 V) or R4 voltage free
Hydraulic schemes	> 70
Ambient temperature	0 °C ... +45 °C
Interfaces	RS232, IS bus
Degree of protection	IP 20 / DIN 40050
Dimensions (X x Y x Z)	215 x 152 x 44 mm
Weight	570 g

Technical data at 25 °C / 77 °F





### Examples of application



Application functions of the Steca TA 0403 expansion module with the Steca TR 0704 solar controller (schematic representation):

