



## Differential temperature controller / heating controller

**CETA**

GB

**Ebv**  
elektronik  
*always a bit more*

The CETA series of units was developed to control heating and solar systems for both new buildings and for retrofitting; the programme comprises various functional versions.

Standard systems can be controlled simply by CETA, but sophisticated applications can be realised using a combination of CETA modules.

If so desired, the CETA RC living room unit is available with a remote control to control the room temperature precisely. It is connected to the corresponding heating circuit via a two-wire data bus.

System monitoring is carried out by the CETA SMS add-on module. It offers the option of transmitting system information, like error messages for example, via the mobile telephone SMS network to a mobile phone or other SMS receiver. System temperatures can be monitored and remotely corrected. Insofar, the combination with the CETA SMS contributes to additional safety and functional comfort.

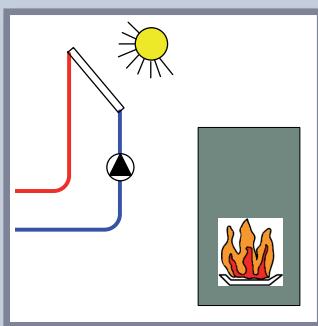
The elegant design of the controller and the clearly arranged programming by way of the four operating buttons round off the appearance of the relevant CETA module.

CETA is designed to be simply wall mounted. The rear of the enclosure is also designed to be alternatively mounted on a 35 mm top-hat rail. This type of mounting lends itself particularly well for a combination of several modules alongside one another or for installation in a switch cabinet.

Ample connection space can be accessed beneath the screw-on cover, where the wires are connected to coded screw-down terminals. Strain relief devices are provided in the connection space, to relieve strain on the connections.

## Versions and Functions

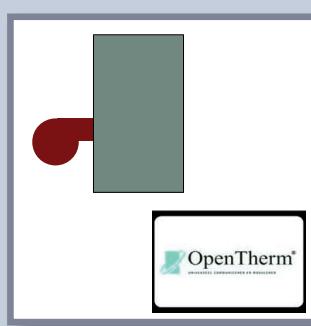
The CETA series is made up of four basic versions. For hydraulic and application examples, see page 6.



### CETA 100 Differential temperature control

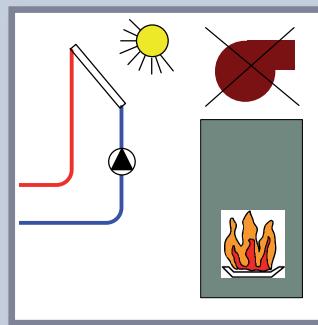
Differential temperature controller with a relay output and three sensor inputs, heat balancing option via optional return flow sensors, ideally suited for controlling solar systems, four-button operation, LCD, wall or top-hat rail mounting, extendable via data bus.

Optional accessories: CETA SMS



### CETA 104 Heating controller for single-stage or modulating heat generators (Open- Therm), unmixed heating circuit and hot water

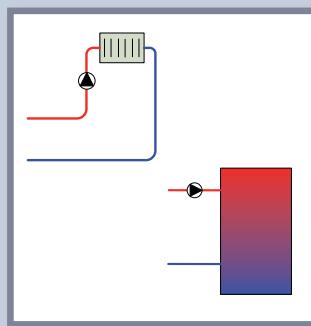
Heat generator:  
Controls single-stage burner via relay output, alternatively for modulating boiler with standardised OpenTherm interface, limit temperature monitoring, start-up protection, operating hours counter, information displays for temperatures, switching states and counter.



### CETA 101 Twin differential temper- ature control

Differential temperature controller with three relay outputs and four sensor inputs, parameterising for two separate differential controls, optional heat generator inhibiting, heat balancing option via optional return flow sensors, ideally suited for controlling solar systems, four-button operation, LCD, wall or top-hat rail mounting, extendable via data bus.

Optional accessories: CETA SMS



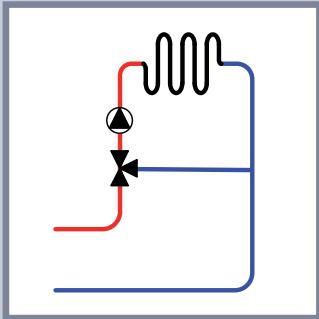
Unmixed heating circuit:  
Weather dependent control of an unmixed heating circuit via relay output, timer program with two switching cycles per day, room influence or room control via an optional room station, various operating modes available, summer switch-off, frost protection function, information displays for temperature and switching states.

Domestic hot water control:  
Control over a DHW charging pump for charging warm water via relay output, timer program with two switching cycles per day, various operating modes available, priority/parallel switching, legionella protection function.

Optional accessories: CETA RC, CETA SMS

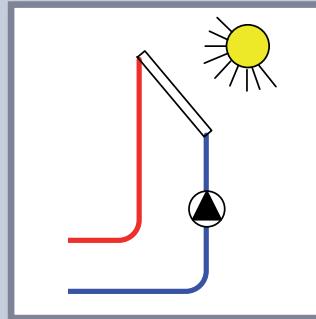
## CETA 106

### Heating controller for mixer heating circuit and differential temperature control



Mixed heating circuit:  
Weather dependent control of a mixed heating circuit via three relay outputs, timer program with two switching cycles per day, room influence or room control via an optional room station, various operating modes

available, summer switch-off, frost protection function, information displays for temperature and switching states.



Differential temperature control:  
Differential temperature control with one relay output and two sensor inputs, heat balancing option via optional return feed sensors, ideally suited to controlling solar systems.

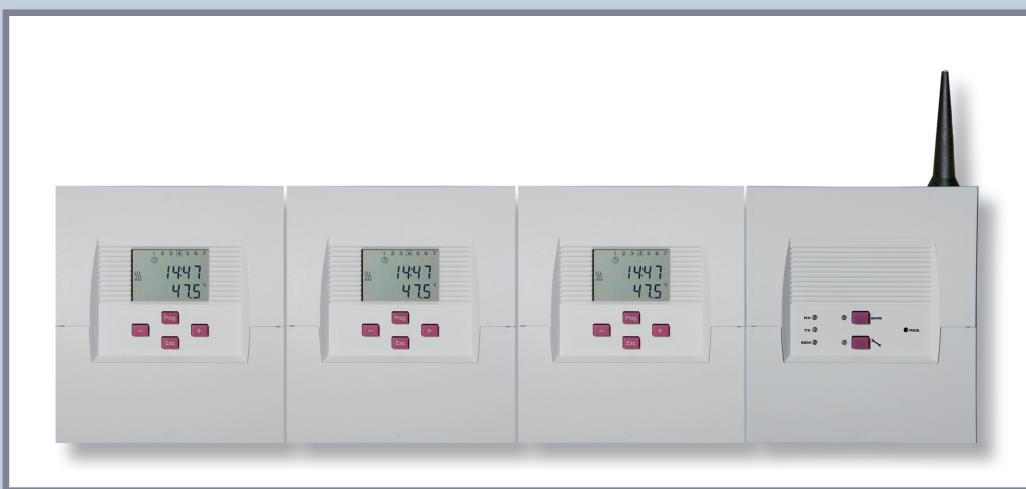
Optional accessories: CETA RC, CETA SMS

#### Operation:

The unit is operated by four functional keys. Optical feedback of programming steps taken is shown on the display.

#### Modular expansion:

Several controllers can be combined in series via the integrated data bus. This means that additional heating circuits or system functions can be retrofitted at a later point in time.



## **Optional:**

### **CETA RC**

Room station for connection to CETA series heating circuit controllers.

Remote control for the convenient operation of all heating circuit parameters from the living room, room sensors for acquiring the room temperature, connection via a 2-wire data bus.



## **Optional:**

### **CETA SMS**

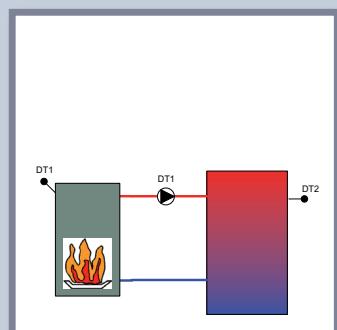
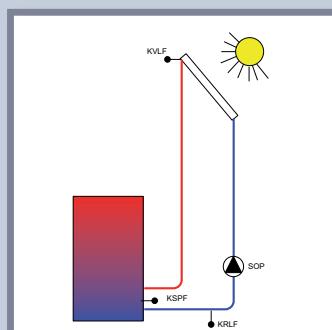
By combining CETA series with the CETA SMS data transfer module, the data from all sensors connected can be transmitted per mobile telephone. This provides the owner of a system in a sporadically used property (holiday home, weekend house, unoccupied house during holidays) with the corresponding safety during the heating period.

The operating mode can be changed and the heating setpoint can be modified per mobile phone via the CETA SMS.

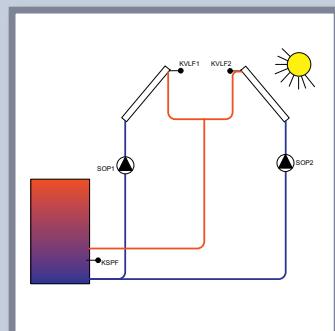
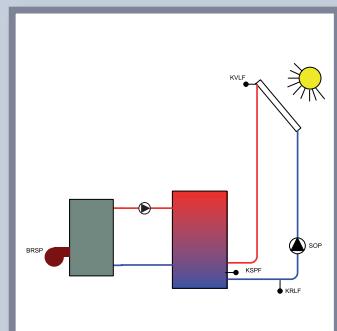
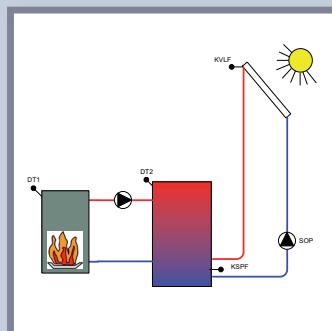


## Hydraulic examples / combination options

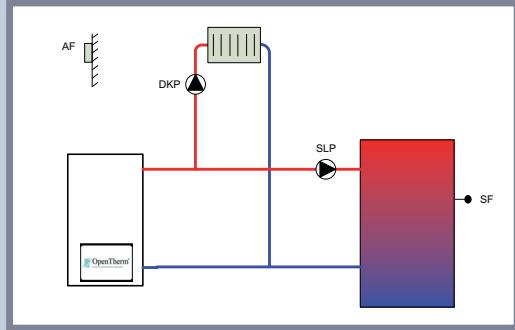
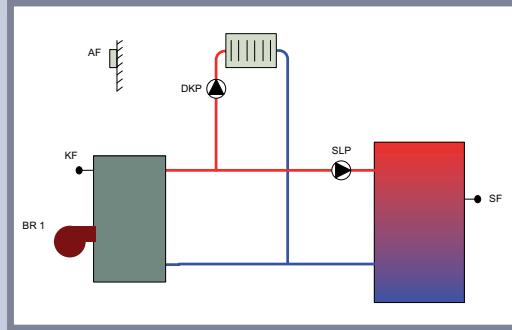
CETA 100



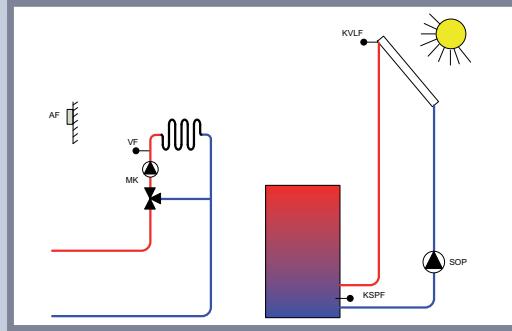
CETA 101



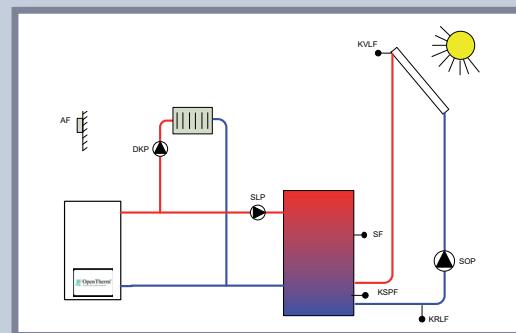
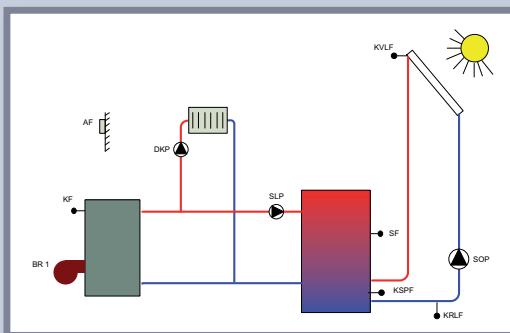
CETA 104



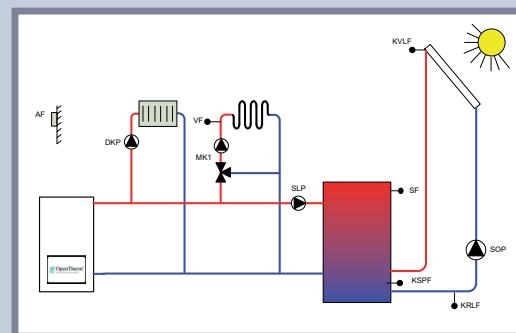
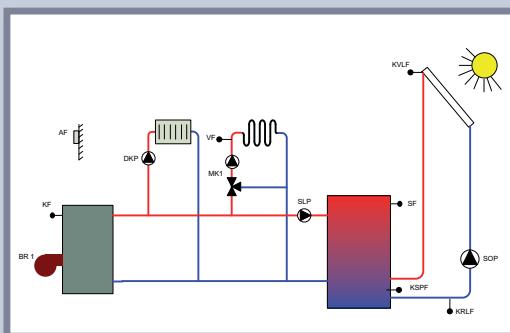
CETA 106



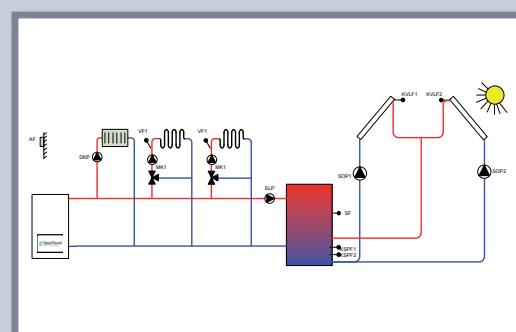
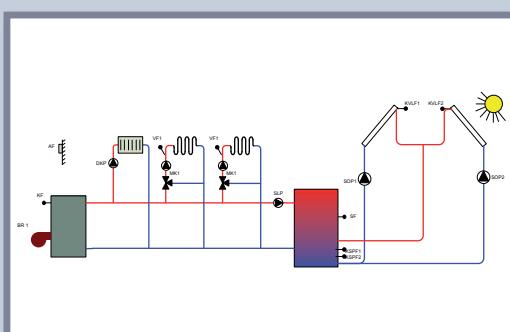
CETA 104 + 100



CETA 104 + 106



CETA 104 + 106 + 106



## Overview of the series:

	CETA 100	CETA 101	CETA 104	CETA 106
<b>Function:</b>				
Differential control 1	X	X		X
Differential control 2		X		
Heat balancing	X	X		
Burner clogging		X		
Burner single-stage			X	
Controlling OpenTherm			X	
Unmixed heating circuit			X	
Mixed heating circuit				X
Hot water charging			X	
<b>Combination option:</b>				
CETA RC			X	X
CETA SMS	X	X	X	X

## Technical Data

Mains connection voltage:	230V ~ +6% / -10%
Nominal frequency:	50...60Hz
Power consumption:	max. 2.1VA
Fusing:	6.3A
Output relay contact loading:	2 (2)A
Bus interfaces:	OpenTherm, RS485 EbV
Ambient temperature:	-10...+50°C
Storage temperature:	-25...+80°C
Degree of protection:	IP 30
Protection class in accordance with EN 60730:	II
CE compliance:	89/336/EC
Enclosure dimensions:	145.5 x 161 x 48 mm (W x H x D)
Enclosure material:	ABS V0
Weight:	420g
Connection technology:	Screw-down terminals 1.5 mm <sup>2</sup>
Sensor connection technology:	Screw-down terminals 0.5 mm <sup>2</sup>

## Dimensions

