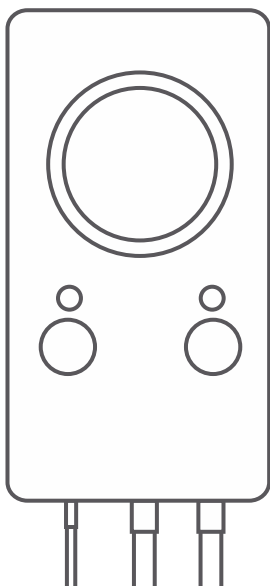


AURATON

S08



EN

USER MANUAL



www.auraton.pl

AURATON S08

Bifunctional central heating (CH) or domestic hot water (DHW) pump controller

Can be used as a CH pump controller.

AURATON S08 can be used for automatically switching on and off circulation pumps depending on the temperature. The controller-pump assembly forces the water to circulate in the central heating system with a coal-fired boiler or a gas boiler. The controller's sensor measures the temperature of the water on the supply side of the CH system. In a CH system with a coal-fired boiler, the controller switches off the circulation pump after the flame in the boiler is extinguished.

Pumping of water is not recommended when the flame is extinguished because the air draft into the chimney causes faster cooling of the water in the boiler faster than in the radiators.

The optimum temperature can be set on the controller's display (most often 40 °C).

In a CH system with a gas boiler, the temperature set on the controller must be lower than the temperature set on the CH boiler. If the temperature is set on the controller above the dew point, it prevents condensation in the boiler during the heating of the water in the CH system.

The range of settings for the CH pumps is from 20 °C to 90 °C.

Can be used as a DHW pump controller.

AURATON S08 can be used for automatically switching on and off circulation pumps depending on the temperature.

In domestic hot water (DHW) systems, the controller-pump assembly forces circulation of water in DHW systems with coal-fired and gas-fired boilers without systems controlling the operation of the pump. The controller's sensor measures the water temperature in the HDW tank.

In HDW systems, the controller maintains constant temperature of water in the tank or in the HDW circuit.

The range of settings for the HDW pumps is from 20 °C to 90 °C.

The hysteresis (the difference between the switch on temperature and the shut down temperature) can be set in the range of 2 to 8 °C.

Installation

Mounting the sensor:

Operation in the CH mode.

- Then install the sensor on an uncovered outlet pipe connected to the CH boiler (as close to the boiler as possible).
- Press the sensor against the tube using a clamp.
- It is recommended to wrap the boiler pipe from the boiler to the sensor with an insulation material.
- If a coal-fired boiler and a gas-fired boiler work in the same CH system, the sensor should be installed in a location where the two outlets merge and must be insulated.

Operation in the DHW mode.

- Install the sensor in the HDW tank.

NOTE: The sensor must not be immersed in liquids or installed at flue gas outlets to the stack.

Connecting the power supply cable to the pump:

- Connect the yellow or yellow-green conductor (ground or protective neutral grounding) to the (\perp) terminal.
- Connect the blue conductor (zero conductor) to the (**N**) terminal.
- Connect the brown conductor (phase conductor) to the (**L**) terminal.

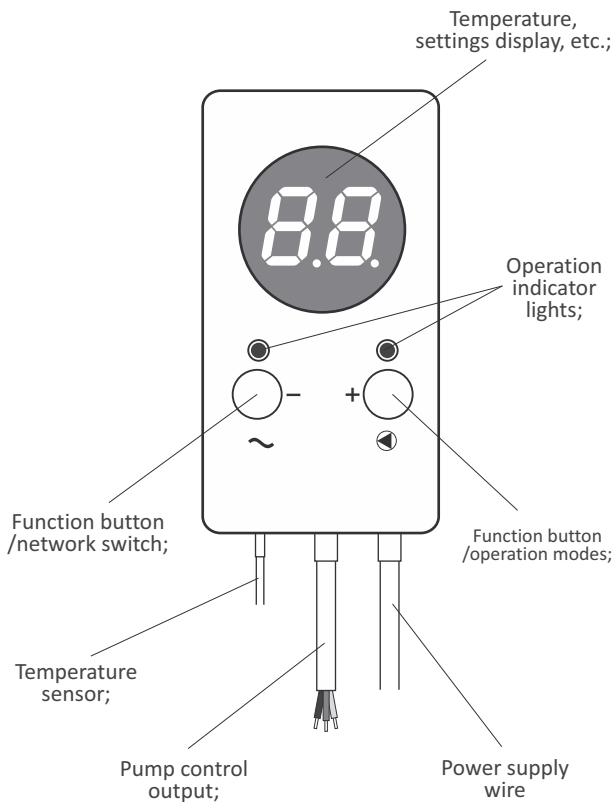
Connecting the controller:

- After the wires have been secured to prevent accidental pulling, connect the power supply cable to a 230 V/50 Hz power outlet.

Mounting the controller:

- The controller must be mounted on a wall or another support using two screws (the concrete anchors with screws are delivered with the controller).
- The cables extending from the controller must be fixed to the wall.

Description of the controller



First start

On the left side under the display there is the network switch button (⌚). Hold the button for 2 seconds to switch the controller on or off. When the controller is on, the LED is illuminated red and when it is off, the LED is illuminated green.

After the controller is switched on, the following sequence of information is shown on the display:

1) Display test (all segments are on).

2) Software version (e.g. 1.0).

3) Controller operation modes.

⌚ – CH pump

⌚ – DHW pump

4) Current temperature of the sensor.

The sensor is ready to set the appropriate operating temperature.

Setting the temperature

The temperature setting function can be activated by briefly pressing the left or right button.

The temperature value will then blink for 5 seconds on the display. The appropriate temperature can then be set using the (–) or (+) button.

After the setting has been performed, the controller automatically stores this value and the display shows the current sensor temperature.

Setting the controllers' mode of operation.

The controller can be set in one of two operation modes.

In order to check the controller's operation mode, press and hold both the (–) and the (+) button for 2 seconds. The following information will be shown on the display:

⌚ – controller in the CH pump operation mode;

⌚ – controller in the DHW pump operation mode.

The operation mode can be changed by simultaneously pressing and holding both the (–) and the (+) button for 4 seconds. The display will show the blinking symbols “⌚” or “⌚”. When this information is displayed, you can change the mode by pressing the (–) or (+) button.

The change of the operation mode is saved automatically.

Setting of the hysteresis

The hysteresis can be changed by simultaneously pressing and holding both the (–) and the (+) button for 4 seconds.

The display will show for five seconds the blinking symbols indicating the controller's operation mode (**CO** or **CU**) and then, for another 5 seconds, the value of the hysteresis setting (e.g. **H4**)..

When this information is displayed, you can change the set value by pressing the (–) or (+) button. The range of hysteresis values that can be set for the controller is **from 2°C to 8°C (H2 to H8)**. After the change is made, it is stored automatically.

Example: When setting hysteresis value of, e.g. H4 in the CO mode and temperature of e.g. 40 °C, the pump will be switched on when the temperature exceeds 42 °C and will be switched off when the temperature drops to 38 °C.

When setting hysteresis value of, e.g. H4 in the CU mode and temperature of e.g. 40 °C, the pump will be switched off when the temperature exceeds 42 °C and will be switched on when

Disabling the pump alarm

software Version 1.2 and later

In specific situations, it is possible to disable the alarm of disconnected or damaged E 1 pump. It can be done in the case of connecting a pump with a low power or electronically controlled.

To do this, enter the menu of the controller:

Change the settings by simultaneously pressing and holding buttons (–) and (+) for 5 seconds.


The display will show for 5 seconds the blinking operation mode of the controller (CO or CU) and then for another 5 seconds it will show the value of hysteresis set (e.g. H4).

The next setting is for stopping the alarm of E 1 pump; the display will show blinking message "A 1" (default setting), which indicates active fire alarm.

When this message is displayed, use buttons (–) or (+) to change this value to "A0", which means disabling alarm E 1.


Manual switching on and off of the CH or DHW pump

The controller makes it possible to manually switch on and off the CH or DHW pump.

To do so, press and hold the right button (+) for 2 seconds. Use of this functionality is indicated by illumination of the right red indicator light and the **ON** () characters shown for 10 seconds.

The pump continues to work regardless of the temperature set on the controller and the actual temperature in the location of the sensor.

In order to switch the pump off, press and hold the right button (+2) for 2 seconds again.

NOTE: In the  mode of operation, the pump will be on until the temperature reaches 90 °C. Once this value is reached, the pump will switch off. After the temperature drops below 90°C, the pump is switched on again.

Indication of operation of the pump

Automatic operation of the pump	Switching on of the pump is indicated by the right green indicator light blinking .
Manual operation of the pump	Switching on of the pump is indicated by the of right red indicator light blinking .

Error information codes

E1	The pump is disconnected or defective.	The output power supply is disconnected, waiting for the defect to be repaired; once the defect is repaired, press any button.
E2	No network synchronization signal that protects the relay is present.	The pump has been switched off; waiting for the power supply to be temporarily disconnected.
E3	Sensor short circuit took place.	CO mode – the pump has been switched on. CU mode – the pump has been switched off; waiting for the defect to be repaired (replacement of a sensor). Once the defect has been repaired, press any button.
E4	Lacking or defective sensor.	CO mode – the pump has been switched off. CU mode – the pump has been switched off; waiting for the defect to be repaired (replacement of a sensor); once the defect has been repaired, press any button.
LO	Sensor temperature below 25°C.	The pump is stopped; waiting for the defect to be repaired (higher temperature).
H1	Sensor temperature above 90°C.	High temperature warning. CO mode – the pump has been switched on. CU mode – the pump has been switched off.

NOTE: The above alarms are signaled with an intermittent acoustic signal until the relevant defect has been repaired or the controller has been switched off. After the defect has been repaired, the controller starts normal operation.

NOTE: In order to switch off the controller during an alarm, press and hold both the (-) and the (+) button for 2 seconds.

Other information codes

CO	CO The controller is in the CH mode.
CU	CU The controller is in the DHW mode.
ON	ON The pump has been switched on in the manual mode.

GUARD function

The controller also has the GUARD functions which prevents the stalling process in the rotor of the pump when it is not in use.

If the pump is not used for a long time, the built-in processor starts the pump automatically for 30 seconds every 14 days.

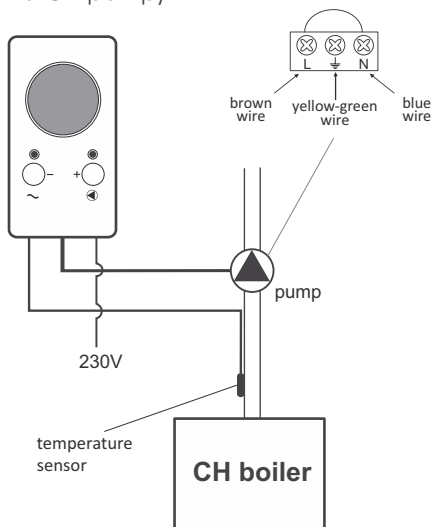
NOTE: In order for the system to work after a long period of non-use, the controller must be switched on at all times.

Switching the controller off

In order to switch the controller off, press and hold for 2 seconds the (~) button; the display is then switched off and the green LED changes its color to red.

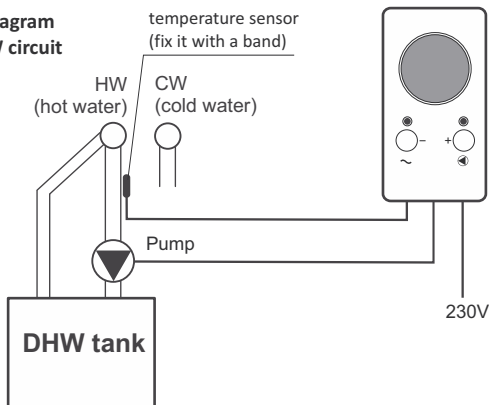
The controller is switched off but the GUARD function continues to be active.

Wiring diagram of the controller in the **CO** mode (work with a CH pump)

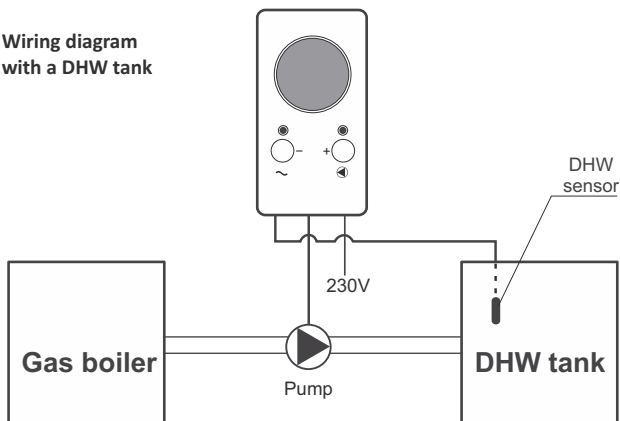


Wiring diagram of the controller in the CU mode (work with a DHW pump)

Wiring diagram of a DHW circuit



Wiring diagram with a DHW tank



Technical data

Operating temperature range:	0 – 40°C
Temperature adjustment range:	20 – 90°C
Temperature measurement range:	2 – 99°C
Hysteresis:	2 – 8°C
Power supply voltage:	230 V AC
Maximum output load:	3 A

Cleaning and maintenance

- The outside of the controller must be cleaned with a clean cloth. Do not use solvents (such as benzene, thinners, or alcohol).
- Do not touch the device with wet hands. This can lead to electric shock or serious damage to the device.
- Do not expose the device to excessive impact of smoke or dust.
- Do not touch the display with sharp objects.
- Avoid contact of the device with liquids and moisture.

Disposal of the device



The device is marked with a symbol of a crossed waste bin. Pursuant to European Directive 2002/96/EC and to the Act on waste electrical and electronic equipment, such mark indicates that the device, at the end of its service life, must not be disposed off together with other household waste.

The user is required to deliver it to a waste electrical and electronic equipment collection point.

www.auraton.pl