# AURATON 1100 K

OPERATING INSTRUCTIONS FOR AURATON 1100K CONTROLLERS

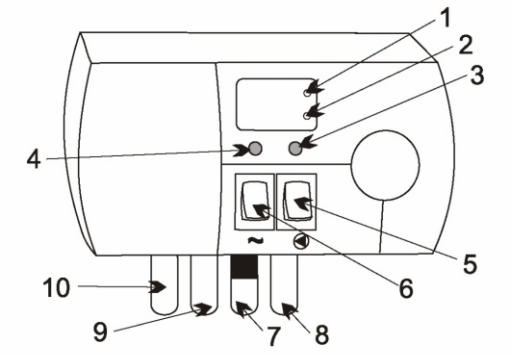
## 1. Application

The AURATON 1100K is a modern processor-based electronic controller, designed for work with central heating fireplaces (fireplaces with a water jacket). The 1100K controller has two control outputs:

1. for a fireplace circuit water pump,
2. for an actuator valve or a second pump,

with are required for the correct operation of the fireplace with the central heating system. After power-on, the temperature in the water jacket of the central heating fireplace is measured (with a digital sensor) with the possibility to split the signal into two independent channels. Depending on the water temperature in the fireplace circuit, the controller automatically switches on or off the water pump in the central heating installation of the fireplace and operates a valve or starts a second pump.

**The AURATON 1100K controller is equipped with the ANTI-STOP system, which prevents the pump rotor from seizing when not used**. After the heating season, the AURATON 1100K starts the pump automatically every 14 days to run for 30 seconds. The controller should be left turned on for the system to work after the season end.




1. Valve operation indicator
2. Pump operation indicator
3. Pump operation mode, temperature setting +
4. Valve operation mode, temperature setting -
5. Continuous central heating operation switch
6. Power switch
7. Valve or pump power supply cable, 230 V AC
8. Temperature sensor
9. Pump power supply cable, 230 V AC
10. Power supply cable, 230 V AC

## 2. Installation

a. Mounting the controller
- mount the controller on a wall or a console, using two screws (expansion plugs with screws are supplied with the controller),
- fix the outgoing cables to the wall, using holders.

b. Mounting the sensor
- **do not immerse the sensor in liquids and do not install it in flue gas outlets,**
- install the sensor on the outside surface of the fireplace water jacket or on an uncovered outlet pipe of the central heating boiler (as close as possible to the boiler),
- the maximum temperature measurement value is 99°C.

c. Connecting the power supply cable to the pump
- connect the yellow or yellow/green wire (ground wire) to the (⏚) terminal,
- connect the blue wire to the (N) terminal,
- connect the brown wire to the (L) terminal.

d. Connecting the power supply cable to the valve (cable marked with a blue strip)
- connect the yellow or yellow/green wire (ground wire) to the (⏚) terminal,
- connect the blue wire to the (N) terminal,
- connect the brown wire to the (L) terminal.

e. Checking the correct connection
- check the correct connection of the cable and screw on the pump motor terminal box cover.

f. Connecting the controller
- after protecting the cables against accidental breaking, **connect the power supply cable to a grounded 230V/50Hz mains socket.**

**NOTE:** The ambient temperature in the place of installation of the controller should not exceed 40°C.
**Wait about 30 seconds after start-up for the controller to start normal operation.**

## 3. Operating the controller

a. Turning on the controller
- set the switch marked with (~) (the one on the left) in the "I" position,
- upon turning on, all display segments will light for about 2 seconds,
- the controller will then show the current sensor temperature, switching on the relays according to the factory settings (the threshold temperatures are set to 50°C).

b. Display description (information display)
- in normal operation mode, the controller displays the current sensor temperature,
- flashing display shows the pump or valve temperature setting,
- ighted red LED indicates valve operation,
- lighted green indicates pump operation.

c. Changing the temperature values

- setting the valve temperature – press the left-hand button under the display (the digits will start flashing and will indicate the current set value),
- setting the pump temperature – press the right-hand button under the display (the digits will start flashing and will indicate the current set value),
- set the desired temperature using the right-hand (increasing) or the left-hand (decreasing) button,
- after setting the temperature, wait for about 4 seconds, until the display stops flashing and the temperature is stored in the memory,
- the display will show the current sensor temperature.

d. Automatic operation

- set the right-hand switch marked with (►) in the "0" position,
- the controller will switch the pump and the valve on or off depending on the temperature setting,
- in the central heating system, the pump and the valve are switched on, when the temperature at the sensor location is higher than the set value by 2°C, and switched off, when the temperature falls by 3°C below the controller set value.

e. Continuous operation

- set the switches marked with (~) and (►) in the "I" position,
- the pump will run regardless of the temperature setting of the controller and the real temperature at the sensor location.

## 4. Technical data

a) temperature setting range: 10°C – 80°C
b) measurement range: 1°C – 99°C
c) hysteresis (on/off value difference): 5°C
d) supply voltage: 230V AC
e) maximum load: 6A AC

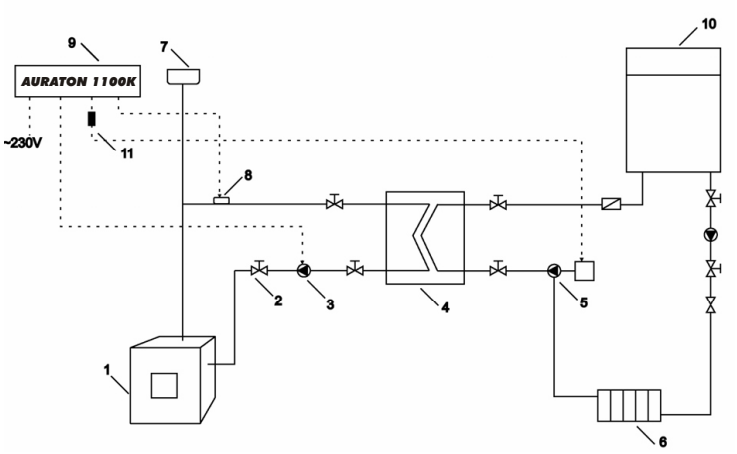
## 5. Kit contents

a) controller with sensor
b) sensor band clip
c) expansion plugs
d) instruction
e) mounting template

## 6. Controller connection diagrams

Example connection diagram. The presented diagram is simplified and does not contain all the elements required for the correct operation of the installation.

### In hot water circuit




Legend:
1. Fireplace with water jacket
2. Cut-off valve
3. Pump
4. Exchanger
5. 3-way valve with actuator or pump
6. Heat receiver – radiator
7. Expansion tank
8. Temperature sensor
9. Controller
10. Central heating boiler