

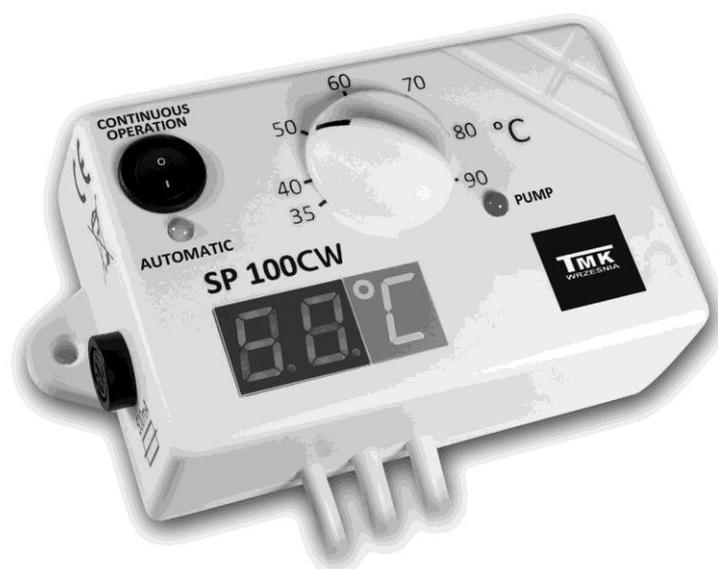


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**Controller for tap water (TW) circulation pumps
with digital temperature display**

SP 100CW

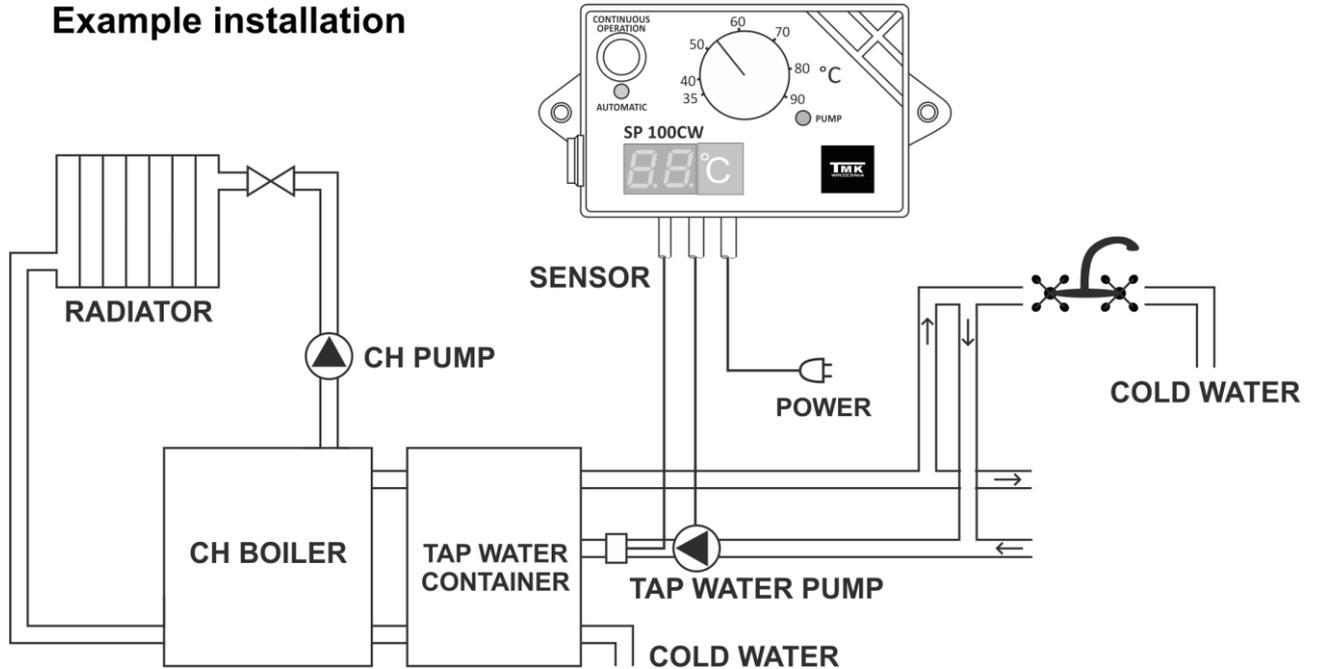
Installation and Operation Manual



APPLICATIONS

SP 100CW is a controller designed for maintaining preset temperature of tap water (TW) circulation in all drawing points. The controller measures the temperature of water on the return pipe of the TW system. If the measured temperature is lower than the preset value, the controller switches on the pump. If the preset temperature is exceeded, the pump is switched off. As a result, power consumption is lower, while the comfort of using hot water is maintained. The device is also a good solution for any other applications in which stable temperature must be maintained. The digital display of the device shows the actual temperature of water in the system.

Example installation



INSTALLATION

1. Mounting of controller

Mount the controller on a suitable wall in the vicinity of the TW pump, using 6 mm wall plugs (the plugs complete with screws are a part of the delivery set).

2. Mounting of temperature sensor

Mount the sensor on a non-insulated return pipe in the TW system, near the TW pump.

Fasten the sensor to the pipe using two clamps (included in the delivery set) so that it adheres properly to the pipe.

It is advisable to wrap the pipe with the sensor with thermal insulation material

Note: The sensor is not suited for being used directly in the liquid!

3. Connection of the supply cable to the pump

- Connect the green-yellow wire (protective neutral conductor) of the 3-wire pump supply cable to the protective neutral terminal (marked with an appropriate symbol);
- Connect the brown and blue wires to the **L** and **N** terminals of the pump motor.

Note: Always ensure that regulator installation is performed by a properly qualified electrician.

4. Connection of the controller

Connect the supply cable to a **230 V, 50 Hz power outlet with an earth contact**.
The ambient temperature in the controller mounting location must not exceed 40°C.

Note: The connection cable of the regulator may only be replaced by the manufacturer.

CONTROLLER OPERATION

1. The switch marked “**CONTINUOUS OPERATION – AUTOMATIC**” makes it possible to switch between two operation modes of the circulating pump: automatic and continuous.

1) **automatic operation mode:**

- the green indicator marked “AUTOMATIC” is lit,
- the controller switches the pump on or off depending on the temperature determined by the sensor,
- the rotary knob is used to set the temperature at which the pump is switched off,
- the circulating pump operates at temperatures lower than the value set in the temperature scale; as soon as the temperature determined by the sensor increases, the pump switches off.

2) **continuous operation mode:**

- the green indicator goes out,
- the pump operates on a continuous basis (e.g. to check pump operation).

2. If the red indicator light is on, the pump is working.

3. The controller is equipped with an electronic thermometer featuring a digital display indicating the temperature on the return pipe (in the 20-99°C range).

SAFETY DEVICES

The pump and the controller are protected by means of a 500 mA fuse which blows up in emergency situations (e.g. short-circuit in the pump or in the controller).

DELIVERY SET

- controller
- clamps (2 pcs.)
- 6 mm wall plugs (2 pcs.)

WARRANTY

TMK sp.j. grants the user a warranty for the SP 100CW controller. The warranty period is 3 years from the date of purchase of the device, however not longer than 4 years from the date of manufacture.

WARRANTY TERMS AND CONDITIONS

Warranty claims shall be accepted provided that the terms and conditions of warranty, and general rules of operation of electronic devices, are complied with as required. TMK sp.j. guarantees appropriate workmanship, high quality and reliable operation of the controller. In the event of any faults in the controller's operation, or defects which can be attributed to the manufacturer, TMK sp.j. shall repair or replace the faulty controller with a defect-free device within 14 working days from the date of returning the controller (in person or through post). The warranty scheme explicitly excludes all defects arising due to the user's fault and, particularly, defects caused by mechanical damage, faulty mounting, water ingress or operation of the device contrary to the general rules of operation of electronic devices.

The warranty is only valid with a proof of purchase.

DATE OF SALE:

.....
day, month, year

.....
Seller's stamp and signature

MANUFACTURER:

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DATE OF MANUFACTURE