

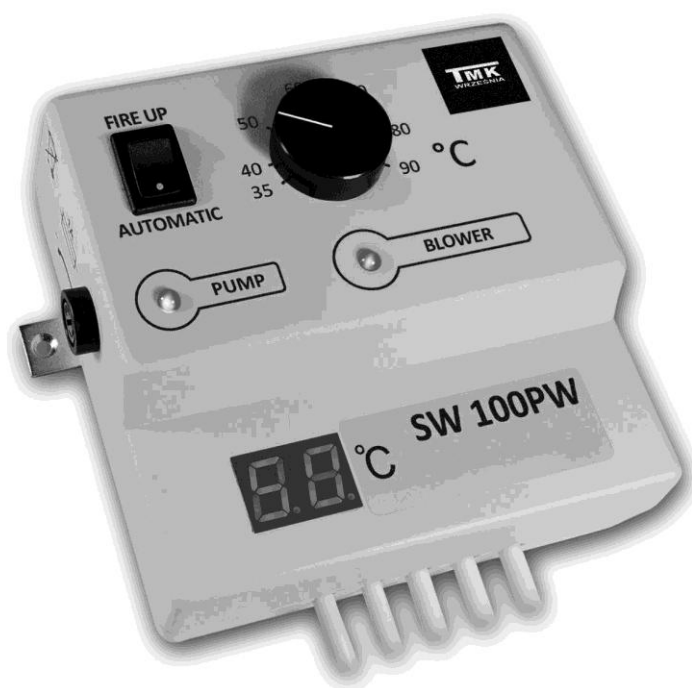


TMK sp.j. Września
ul. Szosa Witkowska 105
tel./fax +48 61 437 97 60
www.tmk.com.pl

**Controller for blower and CH circulating pump
with digital temperature display**

SW 100PW

Installation and Operation Manual



Applications

SW 100PW is a controller designed for automatically switching on/off the blower and circulating pump operating with a CH boiler.

The controller maintains the temperature level set in the scale, and ensures the combustion of gases accumulating inside the boiler. After the boiler is extinguished, the blower and the pump become deactivated, which reduces energy consumption. The controller is equipped with an additional protective device (a thermal cut-out) to lower the risk of boiler overheating. The digital display shows the temperature of water in the system.

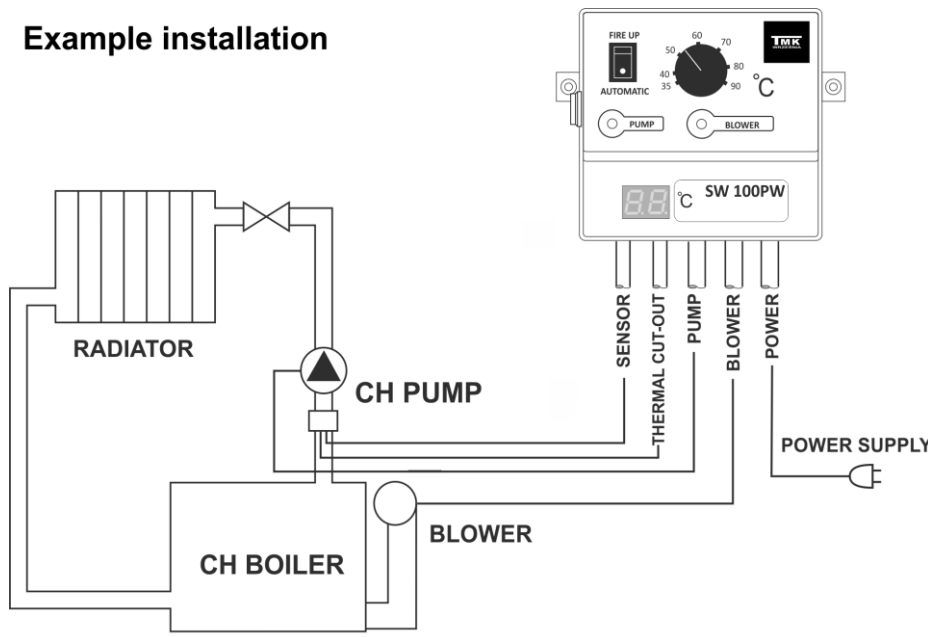
SW 100PW is a very simple-to-operate model.

Technical specifications

- Supply voltage	230V / 50Hz
- Maximum load capacity	2 x 100VA
- Range of boiler temperature adjustment	35-90°C
- Temperature measurement range	20-99°C
- Pump activation temperature	30°C
- Pump hysteresis	2°C
- Blower hysteresis	2°C
- Duration of blow-through	0-18 s
- Intervals between blow-through operations	6 min

INSTALLATION

Example installation



1. Mounting of controller

Mount the controller on a suitable wall near the CH boiler using 6 mm wall plugs (the plugs complete with screws are a part of the delivery set).

2. Mounting of sensor and thermal cut-out

Mount the sensor and the thermal cut-out on a non-insulated pipe going out of the boiler.

Fasten the sensor and the thermal cut-out to the pipe using two clamps (included in the delivery set) so that they both adhere properly to the pipe.

It is advisable to wrap the pipe with the sensor and the thermal cut-out with a thermal insulation material.

Note: The sensor and the thermal cut-out are not suited for being used directly in the liquid!

3. Connection of the supply cable to the blower and the CH pump

- Connect the green-yellow wire (protective neutral conductor) of the 3-wire supply cable to the protective neutral terminal of the motor (marked with an appropriate symbol);
- Connect the brown and blue wires to the **L** and **N** terminals of the 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 may not exceed 40°C.

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

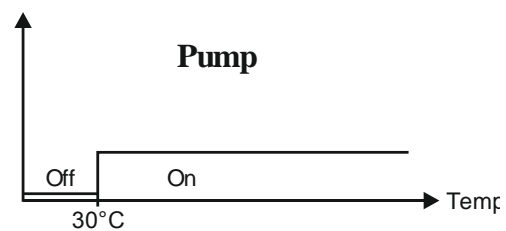
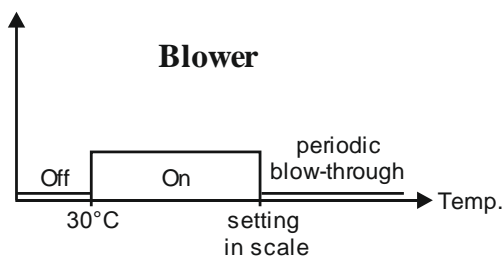
CONTROLLER OPERATION

1. Switch in the “AUTOMATIC” setting

- The controller switches the blower on or off depending on the temperature of the sensor.
- Use the rotary knob to set the temperature above which the continuous operation of the blower is automatically switched off.
- If the temperature is higher than the set value, the blower switches on for 0÷18 seconds every 6 minutes (periodic boiler blow-through). The time setting can be adjusted using a small screwdriver (one full rotation corresponds to ca. 1 second) through the opening on the left-hand side of the housing next to the fuse base (factory setting: 6 seconds).

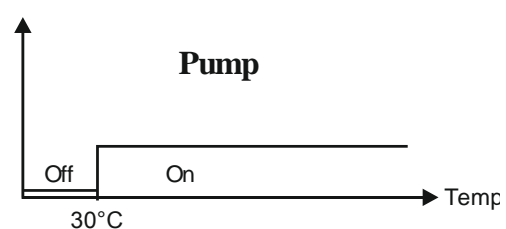
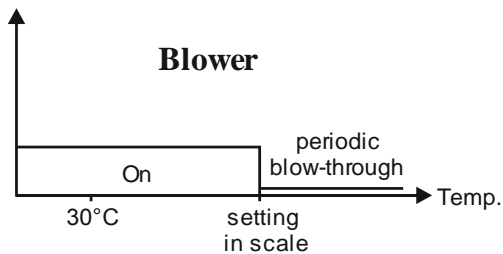
Note: Blow-through should not be deactivated for safety reasons.

- After the CH boiler is extinguished and the temperature drops below 30°C, the continuous operation of the blower and the CH pump is switched off, and periodic boiler blow-through is deactivated.
- If the red indicators are lit, they denote PUMP and BLOWER operation, respectively.



2. Switch in the “FIRE UP” setting

- If the CH boiler is cold (temperature below 30°C), the blower is switched on to enable the firing of the boiler. The CH pump is activated after the 30°C temperature level is exceeded.
- If the temperature rises above the setting in the scale, the continuous operation of the blower is switched off (as in the “AUTOMATIC” mode), and periodic boiler blow-through is performed.



3. If (after boiler firing) the temperature exceeds 30°C, put the switch to the “AUTOMATIC” setting so that the blower is switched off after the boiler is extinguished.

4. The controller is equipped with an electronic thermometer with a digital display for indicating the temperature on the boiler (range: 20-99°C).

SAFETY DEVICES

The controller, the blower motor and the pump motor are protected by means of a 1 A fuse which blows up in emergency situations (e.g. short-circuit in the motor or in the controller).

An additional protective device is a thermal cut-out which switches off the blower independently of the controller when the temperature of the boiler exceeds 90°C (the thermal cut-out is switched on again when the temperature drops by ca. 30°C), e.g. in the event of pump or controller failure.

DELIVERY SET

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

WARRANTY

TMK sp.j. grants the user a warranty for the SW 100PW 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:

TMK sp.j.
62-300 Wrzeźnia
Szosa Witkowska 105
tel./fax + 48 61 437 97 60
www.tmk.com.pl

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DATE OF MANUFACTURE