# **Controller SP-17**

The controller SP-17 is steering the pump of central heating and also the forced draught fan. The controller is designed to control the boilers for solid fuel, wood, coal and fine coal. The controller is very easy in use. The one thing the user has to do before starting the exploitation is to set the temperature of the stove, which the controller is going to keep during the work of the boiler and to choose the working mode of the controller in the menu(F).

Function F1-wood and coal(continuous power of the blower)

Function F2 wood (power of the blower 20%+blow-offs)

Function F3 coal (power of the blower 50%+blow-offs)

Function F4 fine coal (power of the blower 100%+blow-offs)

P- priority function of hot water pump (C.W.U.)

L- summer mode

P function(priority)- while the priority function is switching on ,the pumps work in priority. The hot tap water pump activates firstly( C.W.U). Storage heating pump is switched on only after reaching the set temperature. When the priority function is off, pumps work independently without priority for the hot tap water pump.

L function (summer mode) - blocks the pump of central heating (C.O.), the pump of hot tap water only works (C.W.U.). Pump C.O. turns on only in cases when the boiler reaches a temperature of 90  $^{\circ}$  C . It is a function which protects the boiler against the overheating.

#### The pumps for continuous operation.

Holding down the button F and button+ simultaneously causes the continuous operation of the central heating pump (C.O.). The pump will work until the user switch it off manually by holding down the button F and the button +.

Holding down the button F and - at the same time will activate the hot water pump (C.W.U.) for continuous operation. The pump will work to the point where the user manually turns her off by holding the button F and -.

### The lock of the blower and starting the blower:

To block the blower you need to press the symbol START/ STOP. On the LCD there will be announcement for F .To unlock the blower you need to press the symbol START/STOP again. Other parameters of the controller, it is a power of the blower, the temperature of activating the central heating pump and hot tap water pump, the temperature of damping the stove, the controller automatically adjust thanks to using the algorithm control smart. The power of the blower is lowered in the function F1, when the temperature of the boiler is going to reach the temperature of the stove set by the user.

The damping of the boiler is in the range between  $35 \circ C$  to  $50 \circ C$ , heating pump is activated in the range between  $30 \circ C$  to  $40 \circ C$ , depending on the set temperature of the stove.

Hot tap water pump (C.W.U) works on the temperature difference, it means that the pump switch on at the moment in which the boiler's temperature exceeds tray's temperature. In case when the boiler's temperature falls below the tank temperature, the pump of hot water switches off automatically, which prevents from cooling of a tray.

Hot water pump also switches off, when a tray reaches set temperature. The controller shows only a boiler's temperature.

In service options you can change the type and power of the blower during the firing up. Entering the service options is possible by switching off the power and again switching it on by holding the [F] symbol, then pressing the button+.

d- type of blower

d1-WPA120 blower

d2-DP-01, DP-02 blower

- d3-RV-14 blower
- d4-DP-120 blower

F1- the maximum power of the blower during the lighting , only for the F1 function in the menu

After setting the type and power of the blower, after 5 seconds the controller will automatically switch to the options set in the service parameters.

The controller has an alarm system which warns the user if the boiler's temperature exceeds 85 ° C. The controller is equipped with additional thermal protection, which should be

installed with a temperature sensor in the location specified by the boiler's producer. Do not flood the sensors with oil and other liquids.

The controller should be installed on the boiler in an open system, according to the Polish standards.

The temperature of the boiler we can change by pressing the +/ - keys. The temperature is regulated in range from 40 to 85 °C..

Connecting the power supply of pump CO:

- 1. To terminal  $\equiv$  yellow-green wire
- 2. To terminal N blue wire
- 3. To terminal L brown wire

## Notes!!!

The installation should be done by the person having the proper electrical qualifications. Before any work connected with power supply (wiring installation device, etc.), make sure that the controller is not connected to the network!

### **Installation instructions**

The installation should be done by the person having the proper electrical qualifications. The sensor should be placed at the exit of the boiler by the wire-tie and isolated from the external factors by the isolation tape(it cannot be immersed in any liquid). The power cord for the pump should be connected in the following way: blue-brown- 230V, yellow-green(protective) should be connected to the ground. The controller has the thermal security which should be installed together with the central heating sensor. This is the additional security which in case of the failure of the controller, at 90 °C, cuts off the power supply to the blower. Information concerning disposal of electrical and electronic appliances.



The symbol shown above placed on the products or the enclosed documentation informs that the faulty electrical or electronic appliances cannot be thrown away together with the domestic waste. The correct way in case of disposal, reuse or recycling of actuators is to give the appliance to the specialized waste collecting centers, where it will be taken free of charge. In some countries you may give your product away to the local distributor while buying another appliance. The correct utilization of the appliance enables preventing the precious resources and avoiding the negative impact on health and environment, which may be endangered by the improper conduct with the waste. You can get the specific information concerning the nearest collection point at the local authorities. The incorrect utilization of waste is subject to penalty provided in the appropriate local provisions.

## Guarantee

The producer ensures the buyer that the product will work faultlessly for 24 months since the date of sale. The guarantor promises to repair the appliance, if the failures occurred due to his fault. The appliance should be delivered to the place where it was bought, enclosing this guarantee with the confirmed date of purchase. All the expenses connected with it will be due to the user. The guarantee does not cover the failures caused as a result of lightning strikes or short circuits. The guarantee for the sold commodity does not exclude, restrict nor suspend

PRODUCER	DATE OF SALE