EKOSter 300 ver.3.1

Solid fuel boiler temperature controller (2 pumps)





















DESCRIPTION OF A CONTROLLER

Central heating boiler temperature controller with domestic hot water heater service EKOSter 300 is designed for boiler blow-in control, switching on the circulation pump in heating installations and domestic hot water heater charging pump (DHW).

The controller is located in a metal housing fixed on the boiler.

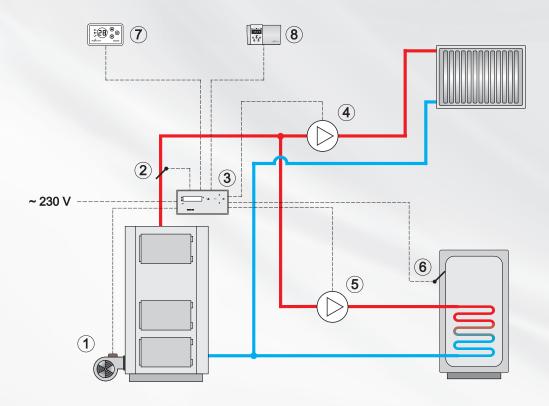
THE CONTROLLER HAS THE FOLLOWING FEATURES:

- maintaining the preset temperature of a boiler by controlling the air blow-in
- modulated and adjustable power of the fan
- function of supporting the combustion process by the so-called blow-bys
- adjustable damping time and automatic control turn off after extinguishing of the boiler
- stopping the fan operation when adding fuel to a boiler / damping
- control of the central heating circulation pump
- option of enabling or disabling the DHW priority
- control of the domestic hot water heater charging pump depending on the required temperature
- COMFORT SYSTEM function, which protects the pump against scaling
- function of protecting the system against freezing and overheating of the boiler
- damage indication of the temperature sensors
- adjustable display brightness increased during settings modification
- ability to connect the remote control panel CONTROL with audible alarm function
- possibility of connecting a room thermostat
- large, readable, alphanumeric LCD display with 2x16 characters



TECHNICAL DATA	EKOSter 300
Range of measured temperature	from - 9 °C to + 99 °C
Range of temperature settings for a boiler	from + 35 °C to + 90 °C
Range of temperature settings for a DHW heater	from + 40 °C to + 70 °C
Adjustable switching threshold pump central heating	min. 35 °C
Infinitely adjustable blower (modulation)	yes
Adjustable minimum fan power	30 % - 70 %
Adjustable max. fan power	30 % - 100 %
Hysteresis of a fan (on/off difference)	from 0 °C to 9 °C
Hysteresis of a DHW pump (on/off difference)	from 2 °C to 9 °C
Adjustable blow-by (possibility to turn off the blow-by completely)	operation: 0 - 90 sec. break: 1 - 60 min.
Adjustable boiler damping time	0 - 45 min.
Allowable outputs load	fan: 100 W / 230 V central heating pump: 100 W / 230 V DHW pump: 100 W / 230V
Rated voltage	~ 230 V, 50 Hz
Electric protection	2 x 2,5 A
Relative air humidity	< 95 %
Housing protection class	IP 20
Ambient temperature	from 0 °C to + 40 °C

CONNECTION DIAGRAM OF THE CONTROLLER TO HEATING INSTALLATION



- Far
- 2. Central heating boiler temperature sensor
- 3. EKOSter 300 controller
- 4. Central heating pump

- 5. DHW pump
- 6. DHW heater sensor
- 7. CONTROL panel
- 8. Room thermostat

Example of the heating installation diagram with a EKOSter 300 controller without the cutting off and protecting devices. It does not replace a professional project at the assembly spot.