

EKOster 420 ver.1

Solid fuel boiler temperature controller (2 pumps)



DESCRIPTION OF A CONTROLLER

Central heating boiler temperature controller with domestic hot water heater service EKOSter 420 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 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
- protection system - a TERMIK thermal fuse as an additional, mechanical protection of the boiler against uncontrolled temperature increase
- option to work in the SUMMER mode
- 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 sensor
- 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

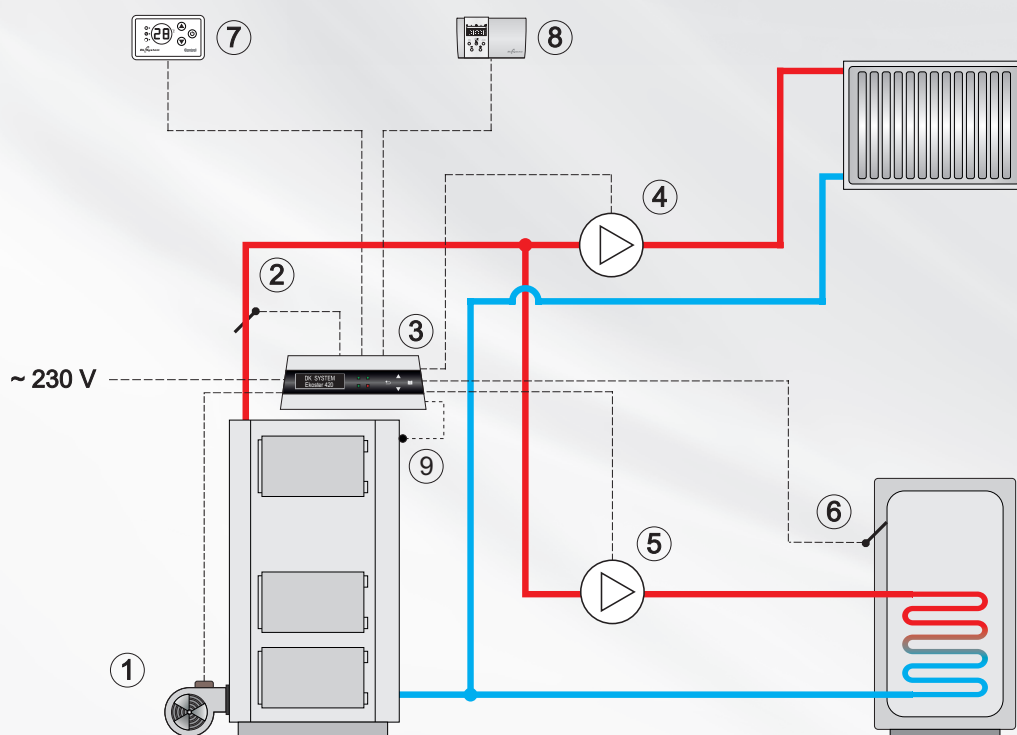


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TECHNICAL DATA	EKOster 420 ver.1
Range of measured temperature	from - 9 °C to + 120 °C
Range of temperature settings for a boiler	from + 40 °C to + 90 °C
Range of temperature settings for a DHW heater	from + 40 °C to + 70 °C
Adjustable switching threshold 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



- | | |
|--|------------------------|
| 1. Fan | 6. DHW heater sensor |
| 2. Central heating boiler temperature sensor | 7. CONTROL panel |
| 3. EKOster 420 controller | 8. Room thermostat |
| 4. Central heating pump | 9. TERMIK thermal fuse |
| 5. DHW pump | |

Example of the heating installation diagram with a EKOster 420 controller without the cutting off and protecting devices. It does not replace a professional project at the assembly spot.