MASTER 530 Boiler temperature controller with a feeder



DESCRIPTION OF A CONTROLLER

MASTER 530 controller is designed for boiler operation control with automatic fuel feeding system, central heating pump and domestic hot water pump and P3 pump that can work as a circulation pump, floor heating pump, return protection pump or 2 circuit pump in central heating installations.

THE CONTROLLER HAS THE FOLLOWING FEATURES:

- maintaining the pre-set temperature of a boiler by controlling the air blow-in and the feeder operation
- possibility of operating the boiler with an emergency grate
- modulated and adjustable power of the fan
- control of the P3 pump working as a circulation pump, a floor heating pump, return protection pump or 2nd circuit pump
- adjustable damping time and automatic control turn off after extinguishing of the boiler
- 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
- control of the boiler operation and domestic hot water pump acc. to one of several weekly programs
- option to work in the SUMMER mode
- COMFORT SYSTEM function, which protects the pump against scaling
- protection system a thermal fuse
- protection against Legionella disinfection of DHW circuit
- function of protecting the system against freezing of installation and overheating of the boiler
- damage indication of the temperature sensor
- ability to connect the remote control panel CONTROL with audible alarm function
- possibility of connecting a room thermostat



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TECHNICAL DATA	MASTER 530
Range of measured temperature	from - 9 °C to + 120 °C
Range of temperature settings for a boiler	from + 50 °C to + 85 °C
Range of temperature settings for a DHW heater	from + 40 °C to + 70 °C
Range of temperature settings for central heating pump	from + 30 °C to + 70 °C
Smooth fan start-up	yes
Adjustable max. fan power	40 % - 100 %
Hysteresis of a fan (on/off difference)	from 1 °C to 9 °C
Histereza pompy c.w.u. (różnica zał wył.)	from 2 °C to 9 °C
Adjustable blow-by (possibility to turn off the blow-by completely)	operation: 0 - 90 sec break: 5 - 240 min
Adjustable boiler damping time	0 - 45 min
Allowable outputs load	fan: 100 W / 230 V feeder: 200 W / 230 V central heating pump: 100 W / 230 V DHW pump: 100 W / 230 V P3 pump: 100 W / 230 V
Rated voltage	~ 230 V, 50 Hz
Electric protection	2 x 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. MASTER 530 controller
- 2. Feeder motor
- 3. Reed relay
- 4. Feeder temperature sensor
- 5. Central heating boiler fan
- 6. TERMIK thermal fuse
- 7. Central heating boiler temperature sensor
- 8. Central heating pump
- 9. DHW pump
- 10. DHW heater sensor
- 11. Remote control panel
- 12. Room thermostat
- 13. Circulation pump
- 14. Circulation sensor

Example of the heating installation diagram with a MASTER 530 controller in a system of P3 pump acting as a circulation pump. It does not replace a professional project at the assembly spot.