

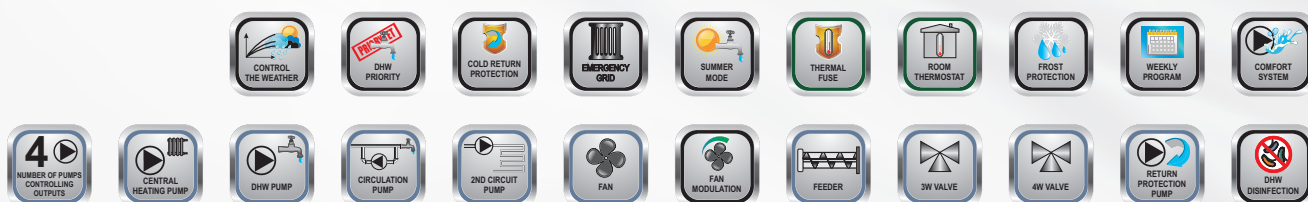
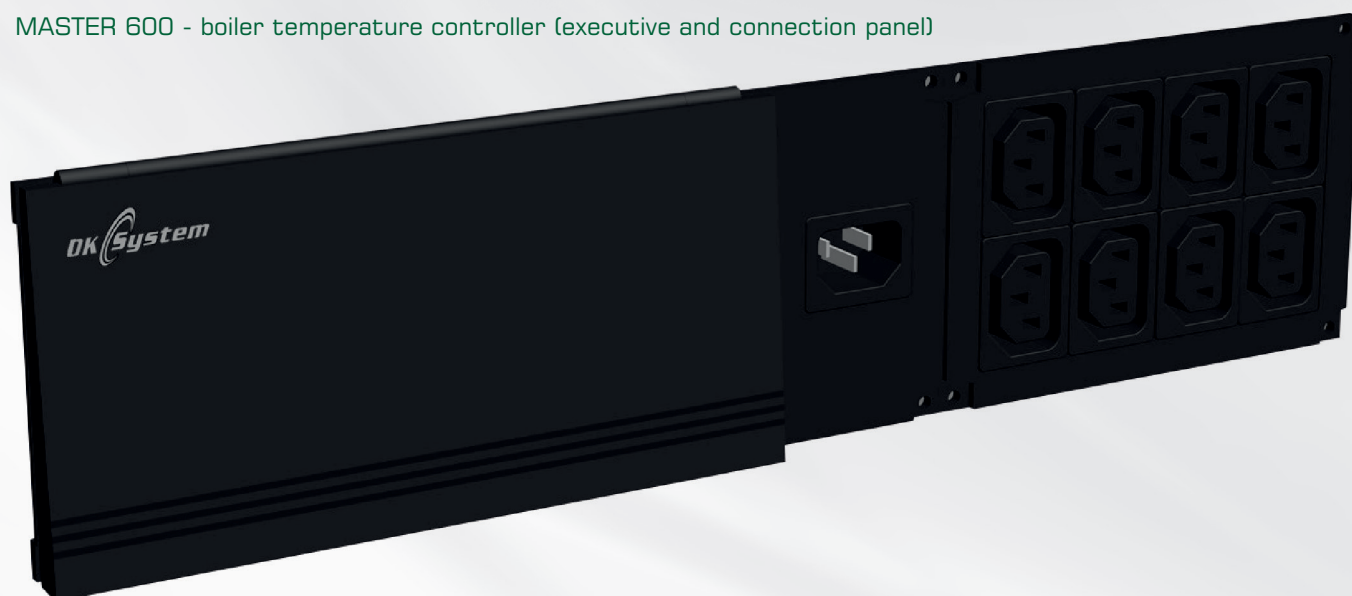
MASTER 600

Boiler temperature controller with a feeder

MASTER 600 - LCD control panel



MASTER 600 - boiler temperature controller (executive and connection panel)



INTELIGENTNE ROZWIĄZANIA

Biuro Handlowe: 53-030 Wrocław, ul. Przyjaźni 141 | tel. 71 / 333 73 88 | tel. 71 / 333 74 36 | fax. 71 / 333 73 31
www.dksystem.pl | biuro@dksystem.pl | GIOŚ: E0002018W

MASTER 600

Boiler temperature controller with a feeder

DESCRIPTION OF A CONTROLLER

MASTER 600 controller is designed for an automatic fuel feeding system boiler operation control, domestic hot water pump control, 2. circuit pump, circulation pump, 3- or 4-way valve control depending on the external temperature in central heating installations.

THE CONTROLLER HAS THE FOLLOWING FEATURES:

- maintaining the preset temperature of a boiler by controlling the air blow-in and the feeder operation
- possibility of operating the boiler with an emergency grate
- adjustment of the heating temperature of two circuits on the basis of the outside temperature acc. to the selected heating curve
- possibility of choosing an independent heating curve for the boiler and a circuit with the mixing valve
- function of moving the curve up or down to better match the thermal characteristics of the building
- high-temperature silicone cables of temperature sensors
- protection of floor heating systems against overheating
- smooth operation of a fan and preset power
- function of supporting the combustion process by the so-called blow-bys
- adjustable damping time and automatic turn off during fuel shortage
- control of the central heating circulation pump
- control of the 3- or 4-way valve
- 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 3rd circuit pump working as a circulation pump, a pump protecting the boiler from cold return or a floor heating pump
- control of the boiler operation and domestic hot water pump acc. to one of several weekly programs
- protection of domestic hot water heater against Legionella
- option to work in the SUMMER mode
- COMFORT SYSTEM function, which protects the pump and mixing valve against scaling
- protection system - a TERMIK thermal fuse as an additional, mechanical protection of the boiler against uncontrolled temperature increase
- cooperation with liquid STB protection
- detection and sound and optical alarm of the STB protection activation
- 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
- possibility of connecting a room thermostat
- large, readable, alphanumeric LCD display with 4x16 characters

MASTER 600

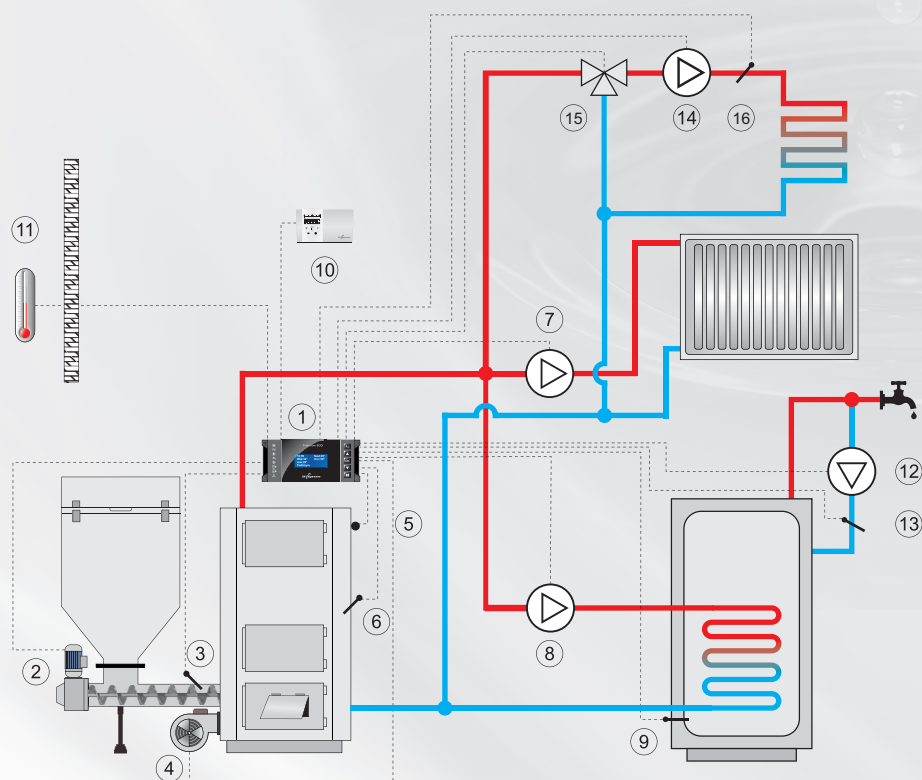
Boiler temperature controller with a feeder

TECHNICAL DATA	MASTER 600
Range of measured temperature	from - 9 °C to + 120 °C
Range of temperature settings for a boiler	from + 40 °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	40% - 100 %
Hysteresis of a fan (on/off difference)	from 1 °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 feeder: 200 W / 230 V central heating pump: 100 W / 230 V DHW pump: 100 W / 230 V circulation pump: 100W / 230 V 3W/4W valve: 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	from 0 °C to + 40 °C

MASTER 600

Boiler temperature controller with a feeder

CONNECTION DIAGRAM OF THE CONTROLLER TO HEATING INSTALLATION



- | | |
|--|------------------------------------|
| 1. MASTER 600 controller | 9. DHW heater sensor |
| 2. Feeder motor | 10. Room thermostat |
| 3. Feeder temperature sensor | 11. External temperature sensor |
| 4. Fan | 12. Circulation pump |
| 5. TERMIK thermal fuse | 13. Circulation circuit sensor |
| 6. Central heating boiler temperature sensor | 14. 2nd circuit pump |
| 7. Central heating pump | 15. 3/4 – way valve |
| 8. DHW pump | 16. 2nd circuit temperature sensor |

Example of the heating installation diagram with a MASTER 600 controller without the cutting off and protecting devices. It does not replace a professional project at the assembly spot.