MASTER 300 RS

Automatic feed boiler temperature controller

































CONTROLLER OVERVIEW

The MASTER 300 RS controller controls the operation of a boiler with automatic fuel feeding, central heating pump, and hot tap water pump in central heating systems.

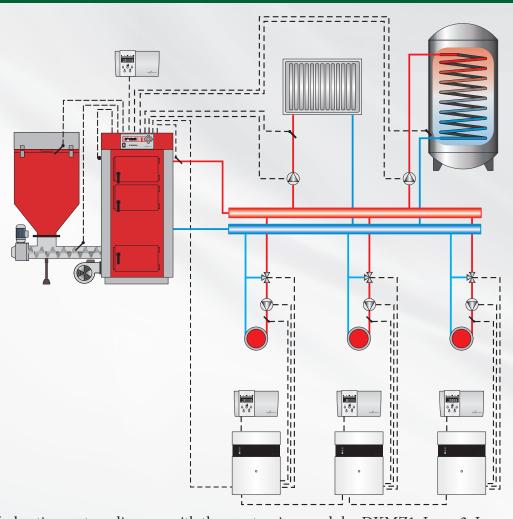
CONTROLLER'S FEATURES:

- maintain a set boiler temperature by fan and feeder control
- optional extension using three additional DKMZ 1 modules to control a loop with a pump and a three or four - way valve with a room thermostat
- additional hand-fired grate
- stepless fan operation and adjustable power
- regulated fire damping and automated power off if no fuel is available
- control of the central heating circulation pump
- enabling and disabling hot tap water priority
- control of hot tap water cylinder pump according to the required temperature
- control of boiler and hot tap water pump operation according to a weekly schedule of MASTER 300 RS
- COMFORT SYSTEM function that protects the pump from scaling
- SUMMER mode of operation
- safety system, a thermal trip as an additional, mechanical safety device protecting against uncontrolled temperature increase
- freeze protection and boiler overheating protection functions
- temperature sensor failure signals
- adjustable display brightness increased during configuration
- compatible with a room thermostat



TECHNICAL CHARACTERISTICS	MASTER 300 RS
Temperature measurement range	9°C to + 120°C
Set boiler temperature range	45°C to + 85°C
Set HTW cylinder temperature range	40°C to + 70°C
Set CH pump temperature range	30°C to + 70°C
Stepless fan start	yes
Adjustable maximum fan power	40%–100%
Fan hysteresis (on-off difference)	1°C to 9°C
HTW pump hysteresis (on-off difference)	2°C to 9°C
Blow-through regulation (can be completely turned off)	active: 0–90 s pause: 1–60 min
Adjustable fire damping duration	0–45 minutes
Maximum output load	fan: 100 W / 230 V feeder: 200 W / 230 V CH pump: 100 W / 230 V HTW pump: 100 W / 230 V
Rated supply voltage	~ 230 V, 50 Hz
Electrical safety device:	2 x 5 A
Relative air humidity	< 95%
Enclosure protection level	IP 20
Ambient temperature	0°C to + 40°C

EXAMPLE OF A HEATING SYSTEM WITH 3 EXTENSION MODULES



Example of a heating system diagram with three extension modules DKMZ1: Loop 3, Loop 4, and Loop 5.