

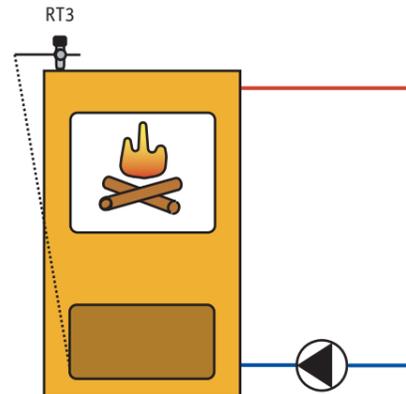
BOILER OUTPUT CONTROL

Thermostatic draft regulators are used to control output of solid fuel boilers by controlling the combustion air damper. They are robust, resistant to both mechanical and thermal stress. Thanks to a double scale they can be installed either horizontally or vertically. The high-quality thermostatic element from a renowned French manufacturer guarantees precise operation and long service life of these regulators.

RT3 Thermostatic Draft Regulator

G3/4" connection size, reducing coupler to G1" available as a special order.

The regulator needs no power supply. The desired temperature of heating water is set with a knob and kept by the regulator opening or closing the combustion air damper, which increases or decreases the output of the boiler.

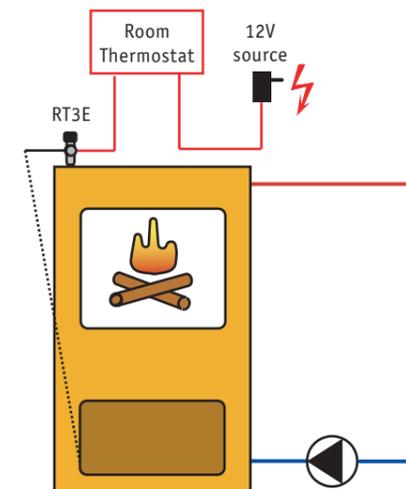


RT3E Electric Controlled Thermostatic Draft Regulator

G3/4" connection size, reducing coupler to G1" available as a special order.

The regulator works in the same manner as RT3, moreover it can reduce output of a boiler on electric signal, i.e. from a room thermostat. It is equipped with a 3m long silicone cable. If energized with 12V, the regulator will reduce the heating water temperature. When de-energized, the regulator maintains the temperature adjusted with the knob. The regulator can also be controlled continuously, with 0-12V tension.

Regulators are supplied either separately, or in a kit with a 12V source and a mechanical or electronic programmable room thermostat.



Thermostatic valves for solid fuel boilers

designed to

- cool boiler down when overheated
- prevent condensation
- control performance



Regulus

Energy-saving solutions

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BOILER PROTECTION AGAINST OVERHEATING

Solid fuel boilers may get overheated during operation, most often due to electricity breakdown. The circulation pump stops, heat from burning fuel is no more removed continuously and the temperature inside the boiler grows rapidly.

In such a situation, a temperature-controlled valve that needs no power supply will ensure safe cooling the boiler down. As soon as $97^{\circ}\text{C} \pm 2^{\circ}\text{C}$ are reached, the valve opens and lets cold water from the mains in. The boiler will be cooled down either via a heat exchanger (JBV valve) or directly (DBV valve). The heated cooling water is then discharged into a sewer.

In order to work properly, the valve shall be installed to a place where the highest temperature is reached in case of overheating - usually in the top section of the boiler or on a flow pipe close to the boiler.

The valves are fitted with a thermostatic element from a renowned French manufacturer. Since the thermostatic element is located directly in the valve body, its reaction to water temperature fluctuations is immediate. The valve has no capillary that could be damaged during installation. Each valve is tested in production.

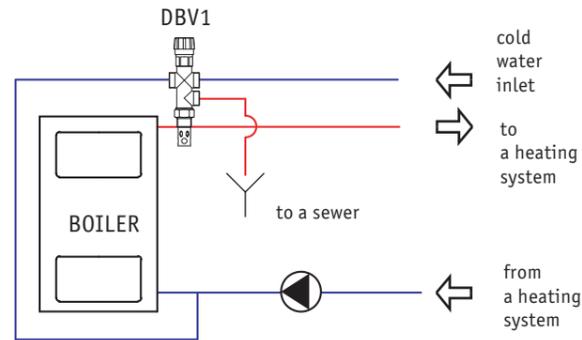
- reliable thermostatic element from a renowned French manufacturer
- quick reaction to temperature changes, probe and hot water outlet in one place
- knob for manual opening like a safety valve
- no capillary - easy installation, no risk of capillary damage
- 100% function test in the production

DBV Thermostatic Recooling Two-way Valve

Mostly used for cast-iron boilers and fireplace inserts that have no built-in recooling heat exchanger.

- a simple solution for boilers without a recooling heat exchanger
- high cooling power due to direct cooling

G 3/4" threaded connection with a protective cover for the thermostatic element.



BOILER PROTECTION AGAINST CORROSION AND CLOGGING

In the process of burning, among others also water gets released from burning fuels in the form of steam. If the flue gas temperature is high enough, the steam exits through a chimney together with flue gas. However, if the flue gas cools down at a certain spot, condensation occurs. Condensate appears, containing further combustion products that can be very aggressive, esp. when burning wood or solid fuels, and can cause corrosion very quickly as well as clog the heat transfer surfaces.

TSV3 and TSV2 thermostatic mixing valves mix cold return water with hot water from the boiler outlet. This way the whole heat exchanger (heat transfer surface) is kept warmer, at temperatures that will not allow condensation and so clogging and quick corrosion will be prevented. Clogged heat transfer surfaces deteriorate boiler efficiency substantially and increase the risk of scale formation.

Quick corrosion and clogging will not occur if the heat transfer surfaces are warm enough as condensation will not occur above certain temperatures. The heat transfer surfaces will be warmer, making their service life longer and the boiler efficiency higher. These valves are fitted with thermostatic valves by a renowned French manufacturer.

Thermostatic Mixing Valves

TSV3 Valve

- DN 25 with G1" F thread
- outlet temp. 65°C (optionally $55, 77^{\circ}\text{C}$)
- for boilers of up to 25 kW output



TSV2 Valve

- DN 50 with G2" M thread
- outlet temp. 61°C
- choice of G5/4", 6/4" and 2" F threaded couplings
- for boilers of up to 100 kW output



JBV Thermostatic Recooling One-way Valve

Mostly used for boilers with a built-in recooling heat exchanger, or with an external recooling heat exchanger.

- can be installed on a boiler in production
- can be installed into a recooling heat exchanger on a boiler outlet

G 1/2" threaded connection, no protective cover for the thermostatic element.

