

Thermal safety valves

Combustion controllers



Thermal safety valve TSK

Application To protect sealed or open solid fuel heating systems as per EN 12828 with a heating capacity of up to 80,000 kcal. Also required for dual-fuel boilers which can be operated with solid fuels.

Description Thermal safety valve with two independent sensor systems. TSK consists of a valve housing, a valve, two independent bellow type displacement probes with liquid-filled temperature probes and a pocket. The capillary tube is protected by a flexible metal hose. TSK is connected to the water outlet of the water heater or to the inlet of the safety heat exchanger. If the response temperature is exceeded, the valve is opened by the thermal probe and cooling water is supplied to keep the system from exceeding the maximum operating temperature.

Technical specifications **Operating pressure:** Max. 10 bar

Operating temperature range
 Capillary tube/probe: Max. 130 °C
 Bellows: Max. 110 °C

Response temperature: 95 °C

Blow-off capacity
 at 110 °C and $\Delta p = 1$ bar: 3,700 kg/h

Connections: 2 x G $\frac{3}{4}$ female thread

Connection stem: R $\frac{1}{2}$ male thread

Dimensions
 Stem length: 200 mm
 Capillary tube length: 1,300 mm

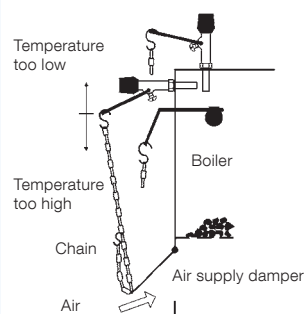
Housing: Hot-pressed brass



Combustion controller FR 1

For temperature-dependent adjustment of the air supply damper of solid fuel and dual-fuel boilers. Controls correct air supply for optimum combustion.

Installation possibilities FR 1



The FR 1 combustion controller controls the combustion air supply. The temperature in the heat generator is detected by an integrated thermostat. The thermostat is connected to the air supply damper by means of a lever and a chain. The air supply is controlled by means of opening or closing the air supply damper, depending on the boiler flow temperature.

Operating temperature range

Medium: Max. 115 °C
 Ambient: Max. 70 °C
 (at switching button)

Connection: G $\frac{3}{4}$

Dimensions

Stem length: 53 mm
 Chain length: 1.2 m

Chain load: 100 to 600 g

Mounting position: Horizontal or vertical

Materials

Housing: Plastic
 Stem: Brass
 Lever/chain: Galvanised steel

i See chapter 12 for the complete range of temperature measuring instruments and controllers.

DG: G			Part no.	Price €
Thermal safety valve TSK	1	10	42370	
Combustion controller FR 1	1	10	42294	