

# Thermal safety valve Combustion controllers

- High response temperature
- Short stem
- Very simple function test



## Thermal safety valve TAS 03

**Application** To protect sealed or open solid fuel heating systems as per EN 12828 with a heating capacity of up to 86,000 kcal. Also required for dual-fuel boilers which can be operated with solid fuels.

**Description** Thermal safety valve with two independent sensor systems. TAS 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. TAS 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. Correct operation of TAS can be verified quickly and easily by simply pressing the valve head.

### Technical specifications

**Operating pressure: Max. 10 bar**

**Operating temperature range: Ambient: 80 °C**

**Response temperature: 99 °C**

#### Blow-off capacity

At 110 °C and  $\Delta p = 1 \text{ bar} > 2.4 \text{ m}^3/\text{h}$

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

**Connection pocket: G $\frac{1}{2}$  male thread**

#### Dimensions

Pocket length: 146 mm

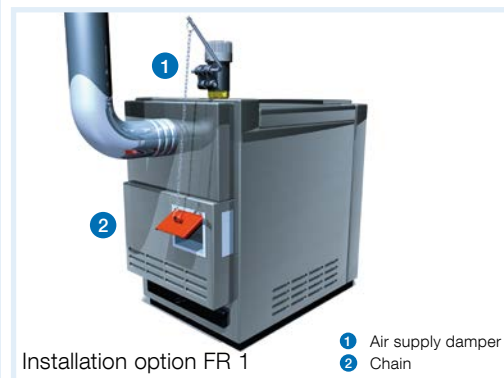
Capillary tube length: 1,300 or 4,000 mm

**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.



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:** Pocket 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

| DG: G, PG: 2   |   |    | Part no.     | Price € |
|--|---|----|--------------|---------|
| <b>Thermal safety valve TAS 03, capillary tube 1.3 m</b> | 1 | -  | <b>42415</b> |         |
| <b>Thermal safety valve TAS 03, capillary tube 4 m</b>   | 1 | -  | <b>42418</b> |         |
| <b>Screw connector kit for TAS 03</b>                    | 1 | 20 | <b>42450</b> |         |
| <b>Pocket G<math>\frac{1}{2}</math> for TAS 03</b>       | 1 | 10 | <b>42449</b> |         |
| <b>Combustion controller FR 1</b>                        | 1 | 10 | <b>42294</b> |         |

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See chapter 11 for the complete range of temperature measuring instruments and controllers.