

simple solutions for greener heating suppliers of MCS accredited wood burning boilers

Safety Heat Exchanger (SHT Series)

Installation and Operation Manual













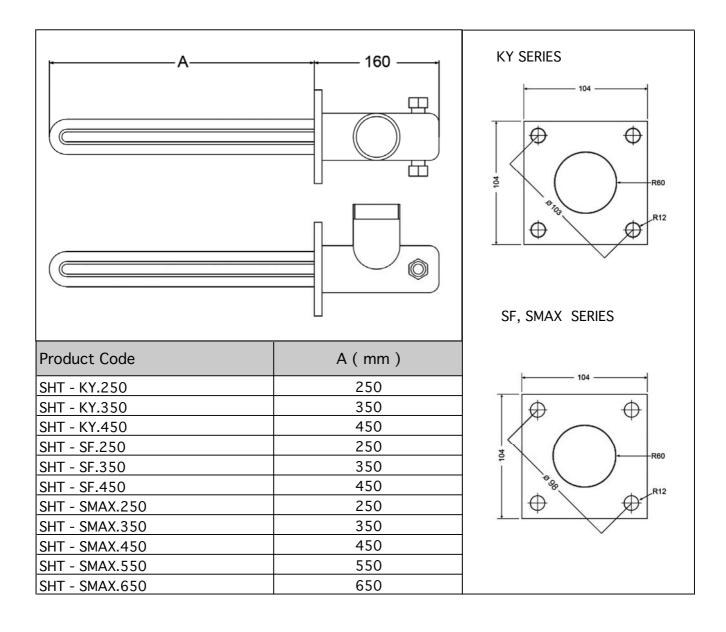






Method of Operation

The safety heat exchanger is used to save the boiler in case of overheating. In case of electricity cut, pump defect, etc. the boiler water temperature can be overheated. If the boiler water temperature exceeds 95 °C, thermostat of the of the safety valve lets cold sanitary water flows through the serpantine of the safety heat exchanger. Serpantine with cold water circulating in side cools down the boiler water temperature. When the boiler temperature decreases below the safe degree, safety valve shuts the cold sanitary water circulation and the boiler goes back to normal operation.



Honeywell

TS 131

Temperature Relief Valve



Application

The TS 131 temperature relief valve for heating systems to EN 12828 is a self - acting valve which is activated by the flow temperature of the heat generator. It opens and discharges water from the heat generator or condensing coil at a flow temperature of 95 °C and thereby prevents a significant temperature rise in the heat generator.

Special Features

Construction tested to EN 14597
Immersion pocket with double heat sensors
Test facility
Capillary tube protected against kinking by steel sheath
Immersion pocket with external thread
CE-certified to DGR 97/23/EG

Range of Application

Multi-fuel boilers with integral water heating or condensing coils in closed solid-fuel fired heating systems to EN 12828.

Technical Data

Heating system capacity Max. 100 kW

Opening temperature 95 °C

Flow capacity 2100 kg/h water at a minimum flow pressure of

1.0 bar (1 capillary tube)

Connection size Rp 3/4 " (DIN EN 10226)

Operating Pressure Max. 5 bar

Construction

The temperature relief valve comprises:

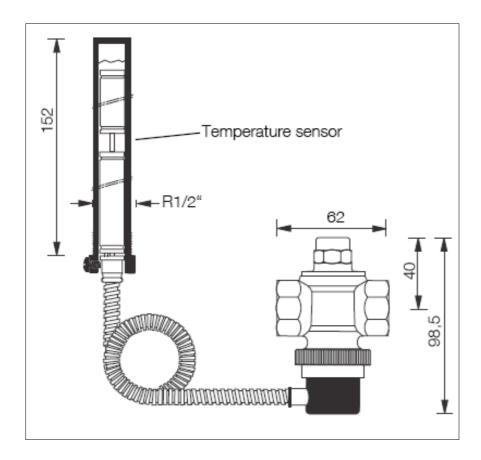
- Housing with internal thread
- Bonnet
- Valve piston with form seal
- Spring
- Remote double temperature sensor with capillary tube
- Immersion pocket G ½ " (ISO 228)

Materials

- Brass housing, bonnet and immersion pocket
- Copper temperature sensor
- Copper capillary tube
- Brass valve piston
- Hot-water-resistant elastomer seals

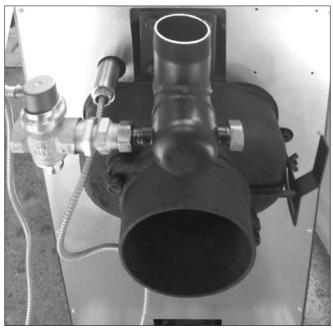
Method of Operation

The temperature relief valve is actuated by the flow temperature of the heat generator. It comprises a spring-loaded valve and a bellows operated temperature sensor. When a boiler flow temperature of 95 °C is reached the force exerted by the bellows system becomes greater than the force of the spring and the valve opens. Heated potable water then flows out and this is replaced by cold water from the supply network. This absorbs excess heat from the heat generator and prevents overheating.



Installation Examples



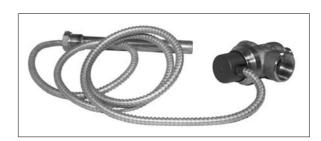


Package Content

Safety Heat Exchanger



Temperature Relief Valve Honeywell TS 131



Gasket for flanged



Brass Relief Valve Bulb (Only for KY and SF series)



- I. $\frac{1}{2}$ " $\frac{3}{4}$ " hex reducer
- II. ½ " nipple



Product Codes

Codes	Boiler Type							
	KY - 03	KY - 04	KY - 05	KY - 06	KY - 07	KY - 08	KY - 09	KY - 10
SHT - KY.250								
SHT - KY.350								
SHT - KY.450								

Codes	Boiler Type							
	SF - 03	SF - 04	SF - 05	SF - 06	SF - 07	SF - 08	SF - 09	SF - 10
SHT - SF.250								
SHT - SF.350								
SHT - SF.450								

Product Code	Boiler Type							
	SMAX-04	SMAX-05	SMAX-06	SMAX-07	SMAX-08	SMAX-09	SMAX-10	SMAX-12
SHT - SMAX.250								
SHT - SMAX.350								
SHT - SMAX.450								
SHT - SMAX.550								
SHT - SMAX.650								



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For more information please visit our website

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