

THERMAL SAFETY VALVE SERIES VST100



ESBE thermal safety valve series VST100 prevents excess temperatures in solid fuel fired boilers in water-based closed circuit heating systems. Internally threaded inlet connection, DN20.

OPERATION

The thermal safety valve series VST100 prevents excess temperatures in solid fuel fired boilers in water-based closed circuit heating systems, in accordance with EN12828. Heating capacities of up to a maximum of 100 kW are allowed for these systems. It is indispensable to install a thermal safety valve in systems in which the heat-generating device is equipped with a water heater.

The thermal safety valve series VST100 is a pressure-relieved single-seated valve that opens in case of rising temperature. It is controlled by means of two independent temperature transmitters. The compact temperature transmitter can be removed to facilitate the assembly of the valve. A metal hose coating prevents any damages on the capillary tubes from the sensor to the transmitter. Length of the capillary tubes is 1.3m.

The thermal safety valves carry CE-marking, according to the European directive PED 2014/68/EU.

MOUNTING

Install the thermal safety valve preferably in the cold water inlet of the safety heat exchanger. This type of installation protects the valve against impurities due to lime scale deposits or similar effects. Install the valve in the warm water outlet only in case of older boiler models where the protection is provided by an integrated potable water heater without temperature control. The boiler is indirectly cooled down by the cold water flowing into the potable water heater, which prevents the temperature from exceeding the admissible maximum of 115°C. The valve might be mounted in any position.

It is recommended to install a potable water filter in order to ensure perfect and durable functionality. Note that this is mandatory in some countries.

The warranty is not applicable when the malfunction of the valve is caused by dirt.

SERVICE AND MAINTENANCE

For control of its functionality the thermal safety valve might be flushed manually.

When necessary the valve can be opened and seat and seal might be cleaned. Cleaning the seat and seal does not change the temperature setting.

TECHNICAL DATA

Operating conditions

Pressure class: _____ PN 10

Temperature: _____ max. +125°C

Function

Opening temperature: _____ 95°C +0/-4°C

Boiler heat capacity: _____ max. 100 kW

Length of capillary tube: _____ 1.3m

Connection - _____

Valve: _____ Internal thread (G), ISO 228/1

Immersion pocket: _____ External thread (G), ISO 228/1

Material

Valve housing and other metal parts with fluid contact:

_____ Brass CW 614N

Made for ESBE by SYR

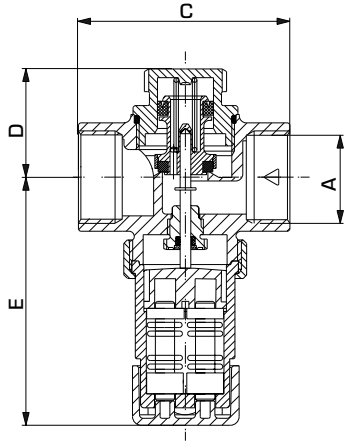
Acc. to PED 2014/68/EU, IV and standards EN 14597, VdTÜV-

Merkblatt Temperatur 100

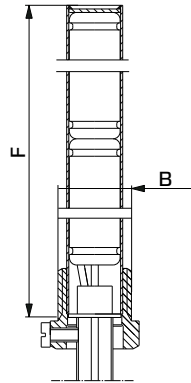
CE 0085

TÜV

THERMAL SAFETY VALVE SERIES VST100



Valve



Immersion pocket

SERIES VST112, INTERNAL THREAD

Art. No.	Reference	Opening temperature [°C]	Relief capacity [m ³ /h] ¹⁾	DN	Connection		C	D	E	F	Weight [kg]
					A	B					
36027000	VST112	95 ⁺⁰ / ₋₄	2.1	20	G 3/4"	G 1/2"	60	31	70	150	0.58

Note 1) At 1 Bars pressure differential

INSTALLATION EXAMPLES

