

# STB series temperature monitors and limiters

Tested according to DIN 3440

The temperature monitors and temperature limiters meet the requirements of DIN 3440 and can thus be used for heating systems according to DIN 4751, steam and hot water systems and district heating systems. The devices with safety

function (STW, STB) are self-monitoring, i.e. in the event of breakage or leaks in the measuring system the circuit is opened and the system is switched off to the safe side.

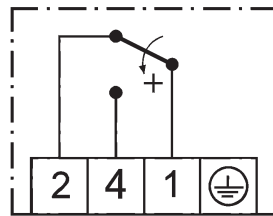
## STB+TW

### Technical data

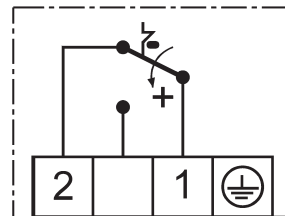
<b>Body</b>	Diecast aluminium with plastic cover.
<b>Immersion tube</b>	Brass G 1/2", included with product Stainless steel G 1/2", order separately. Type T4NSTF or T5NSTF, see Product Summary
<b>Max. ambient temperature</b>	+80°C at the switching head
<b>Switching point accuracy</b>	(in upper third of scale) for TW, STW, STB: ± 5 % for TR: ± 1.5 % (in % of scale range)
<b>Switching differential</b>	(in % of scale range) for TR, TW: 3–4 % for STW, STB: 4–6%
<b>Lead seal</b>	The cover of the switching device can be lead sealed so that the internal settings of the limiter switching points are no longer accessible after sealing.
<b>Switching capacity</b>	10 (2) A, 250 VAC
<b>Degree of protection</b>	IP 54

### Connection schemes:

In devices with a dual function there are 2 switching elements. Pay attention to the function of the relevant switch when connecting.



TW, STW, TR



STB

Type	STW 1F	STW + TRF	STB + TWf	STB + TRF	STB 1F	TWP 1F
Function	Safety temperature monitor	Safety temperature monitor and controller	Safety temperature limiter and monitor	Safety temperature limiter and controller	Safety temperature limiter	Temperature monitor
Setting range	20 to 150°C	20 to 150°C	30 to 110°C	30 to 110°C	60 to 130°C	20 to 150°C
TÜV test certificate	STW (STB) 89401S	TR/STW (STB) 89901S	TW / STB 90401	TR / STB 90001	STB 89501	TW 89201
Setting	internal	STW internal TR external	STB internal TW internal	STB internal TR external	internal	internal
Controls accessible from outside	none	Setting wheel for TR	Reclosing button	Reclosing button and setting wheel for TR	Reclosing button	none
Contact	Changeover	2 x changeover	NC (STB) and changeover (TW)	NC (STB) and changeover (TR)	NC	Changeover
Reclosing lockout (internal)	no	no	yes	yes	yes	no
Max. temperature at sensor	175°C	175°C	130°C	130°C	150°C	175°C
Immersion depth	150 mm	150 mm	150 mm	150 mm	150 mm	100 mm
Permitted pressure, brass immersion tube	40 bar	25 bar	25 bar	25 bar	40 bar	40 bar
Permitted pressure, stainless steel immersion tube	80 bar T4NSTF	40 bar T5NSTF	40 bar T5NSTF	40 bar T5NSTF	80 bar T4NSTF	80 bar T4NSTF