



- Small construction
- Can be mounted directly in Zone 1
- Temperature can be set in Zone 1

The STW II is a compact ON/OFF type capillary tube thermostat, housed in an Ex e certified polyester enclosure. Heaters, fans, motors and other equipment are energised and de-energised by means of this thermostat when specific temperature ranges are exceeded. This device can also be used to control the temperature in air or on various surfaces.

Explosion protection

Marking	Ex II 2G Ex de IIC T6, T5
Certification	EPS 11 ATEX 1356 X
Other approvals and certificates, see www.bartec.de	

Technical data

Protection class	IP 65/EN 60529
Enclosure materia	polyester
Ambient temperature	-55 °C to +50 °C
Capillary tube	length: 1000 mm, up to 5000 mm on request OD sensor line: 1.5 mm min. bend radius: 5 mm Sensor bulb diameter: 4 to 6 mm Sensor material: stainless steel SS 1.4571
Dimensions (L x W x H)	120 mm x 122 mm x 90 mm
Weight	approx. 400 g
Terminals	4 x 2.5 mm ² + 1 PE
Heating cable connections	1 x M25

Electrical data

Switching current at 230 V	open contact 16 A (AC-1) closed contact 2.5 A (AC-1)
Minimum contact load	AC/DC 24 V, 100 mA
Switching hysteresis	depending on type, ordering information
Switching accuracy	depending on type, ordering information

Function

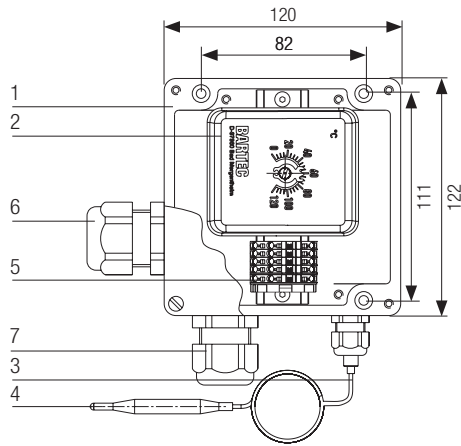
Any change in temperature at the sensor bulb causes a change in the volume of fluid in the measuring system, which in turn results in a movement of the diaphragm membrane. This membrane is connected to a mechanical device that activates a microswitch. If the temperature at the sensor bulb exceeds the pre-set value, terminals 1 and 4 are opened. If there is a rupture or break in the sensor tube (leakage), then the switch remains permanently open (fail-safe). If the temperature falls below the minimum setting, the autocontrol opens the circuit but closes again on temperature rise.

Application example

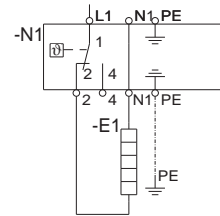
The STW II thermostat can directly switch temperature-dependent equipment loads (heaters etc.) of up to 16 A. Higher rated currents can be switched by means of a contactor; the STW II switches the contactor coil. If an interlock is installed by means of an additional relay (according to DIN VDE 0116), the STW II can also be used as a limiter.

Device for 1 heating circuit

(Heating cable connection direct via sheathed cable/PLEXO or cold lead)



- 1 Enclosure
- 2 Switch insert
- 3 Capillaries
- 4 Sensor
- 5 Rail-mounted terminals
- 6 Cable gland M25 with blind plug
- 7 Cable gland M25



Ordering information Easy device

Description	Switching temperature	Switching accuracy	Hysteresis	Order no.
STW II	-20 °C to +50 °C	+5 K/-0 K	5 K	27-6DF2-5215/1200
	+0 °C to +190 °C	+16 K/-0 K	14 K	27-6DF2-5215/1C00
	+60 °C to +300 °C	+36 K/-0 K	17 K	27-6DF2-5215/1G00

Unit for 2 heating circuits on request.

Technical data subject to change without notice.