

Universal capillary thermostat RTKSA

Capillary system – TÜV-tested



Technical data

Colour:	Anthracite grey (similar to RAL 7016), front side transparent
Sensor material:	Cu
Sensor length:	2 m
Max. sensor temperature:	Top scale value +15%
Max. head temperature:	80 °C
Permissible atmospheric humidity:	Max. 95% rel. humidity, non-condensing
Operating voltage:	none
Max. switching current:	NC contact: 16 (2.5) A at 230 VAC +10% 0.25 A at 230 VDC +10% NO contact TR/TW/STW: 6.3 (2.5) A at 230 VAC +10% 0.25 A at 230 VDC +10% NO contact TB: 2.0 (0.4) A at 230 VAC +10% 0.25 A at 230 VDC +10%
Min. switching current:	Min. 100 mA at 24 V (AC/DC)
Max. switching voltage:	230 VAC 50/60 Hz, 230 VDC
Min. switching voltage:	24 VAC/50 Hz, 24 VDC
Switching element:	microswitch
Switching contact:	toggler, potential-free
Control range:	heating or cooling
Electrical connection:	Push-in terminals
Mounting/attachment:	Wall mounting or with optional process connection (immersion sleeve, protection coil or mounting set JZ-31 for pipe mounting)
Protection class:	I
Protection rating:	RTKSA-xxx.x0x IP 40, RTKSA-xxx.x1x IP 54, optional IP 65
Safety and EMC:	In accordance with DIN EN 60730 (VDE 0631)
Sensor:	liquid-filled capillary
General features:	Scale: degrees Celsius

Application

This series of devices was specially developed for use in heating technology; in boiler systems or storage tanks; district heating transfer stations and heat transfer systems; in ventilation technology to monitor supply air or as limiters for electrical heating coils, as well as for controlling and monitoring temperatures in pipelines and tanks.

Immersion sleeves, protection coils and mounting sets are not included in the scope of delivery. The JZ-29 mounting set must be used in conjunction with immersion sleeves or protection coils. When used as contact controller (pipe mounting), mounting set JZ-31 must be used.

Type testing by TÜV in accordance with DIN EN 14597



Type	Item no.	Control range	Hysteresis	Sensor Ø x L	Features	PG
RTKSA-000.100	KA000000	0 ... 50 °C	1.3 K	6 x 175 mm	TR, external setting	II
RTKSA-000.200	KA000001	0 ... 120 °C	3 K	6 x 87 mm	TR, external setting	II
RTKSA-000.300	KA000002	20 ... 150 °C	9.1 K	6 x 56 mm	TR, external setting	II
RTKSA-001.100	KA000100	0 ... 50 °C	1.3 K	6 x 175 mm	TW, internal setting	II
RTKSA-001.200	KA000101	0 ... 120 °C	3 K	6 x 87 mm	TW, internal setting	II
RTKSA-001.300	KA000102	20 ... 150 °C	9.1 K	6 x 56 mm	TW, internal setting	II
RTKSA-001.301	KA000103	20 ... 150 °C	3.3 K	6 x 82 mm	TW, internal setting	II
RTKSA-002.310	KA000201	20 ... 150 °C	-10 ... -15 K*	6 x 55 mm	TB, internal setting, external reset	II
RTKSA-002.410	KA000200	30 ... 110 °C	-10 ... -15 K*	6 x 72 mm	TB, internal setting, external reset	II
RTKSA-003.310	KA000300	20 ... 150 °C	-10 ... -15 K*	6 x 55 mm	STB, internal setting, external reset	II
RTKSA-004.310	KA000400	20 ... 150 °C	-10 K	6 x 55 mm	STW, internal setting	II

TR = temperature controller, TW = temperature monitor, TB = temperature limiter, STB = safety temperature limiter, STW = safety temperature monitor

* Manual reset after cooling down by 10–15 K (depending on configured setpoint)