

KTR

Air duct temperature controller



Summary

The KTR are mechanical binary temperature controllers for limitation, monitoring and control of air and non-aggressive gases.

Applications

- HVAC systems – air temperature limitation for electrical heaters etc.

Functions

The controllers switch if temperature reaches the preadjusted limit.

TR, STW: contacts 2-3 open when temperature increases above the setpoint.

STB: contacts 2-1 open when temperature increases above the setpoint. Manual re-set possible after cooling down to appr. 15...20 K below the setpoint.

The controllers are intended for operating in any environment. They do not need any servicing or maintenance and can be mounted in any position. The mounting flange is included.

Technical data

Contact load	10 (1,5) A, 24...250 V AC, $\cos \varphi = 1,0$ (0,6) min. 150 mA for 24 V AC
Contact	dustproof switch block unit as potential-free, single-pole or two-pole changeover contact
Protection degree	IP65 according to EN 60 529
Cover	polyamid, reinforced with 30 % glass fibre, colour white, similar to RAL9010
Terminals	screw terminals for wires 0,14 – 2,5 mm ²
Cover temperature	-10 °C ... 65 °C
Tolerance	Tmin +/- 5 K, Tmax +/- 3 K
Dimensions	see below
Tests	TÜV, DIN EN 14597 (TW: 120008, STB: 120108, TR: 119908, TR+STB: 120208)

Type overview

Type	Temp. range (°C)		Hysteresis, fixed (K)		Max. capillary temperature (°C)	Function
KTR (1-stage)	1.		1.			
KTR-1	-35...+35		3		+75	TR
KTR-060	0...+60		3		+75	TR
KTR-060-U	0...+60		3		+75	TW
KTR-090	0...+90		3		+120	TR
KTR-090-U	0...+90		3		+120	TW
KTR-0120	0...+120		5		+135	TR
KTR-50140	+50...+140		5		+150	TR
KTR-R6585	+65...+85		0/-15...20		+120	STB
KTR-R90110	+90...+110		0/-15...20		+120	STB
KTR (2-stage)	1.	2.	1.	2.		
KTR-090090-U	0...+90	0...+90	3	3	+120	TW+TW
KTR-060R85	0...+60	+65...+85	3	0/-15...20	+120	TR+STB
KTR-090R110	0...+90	+90...+110	3	0/-15...20	+135	TR+STB

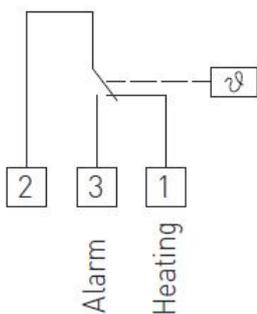
TR: temperature controller (setpoint external)

TW: temperature monitor (setpoint internal)

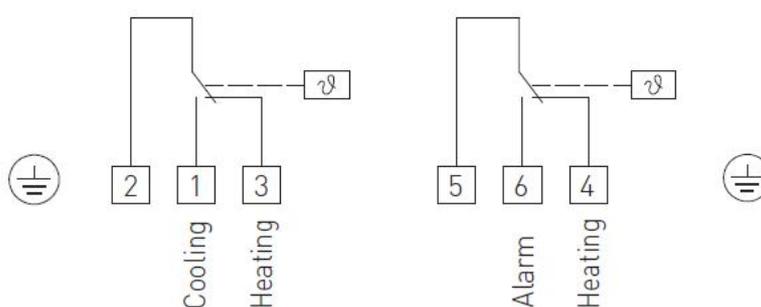
STB: safety temperature limiter (setpoint internal), external button for manual reset and confirmation

Terminals

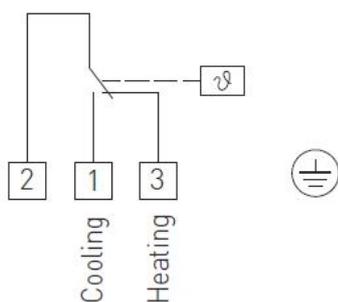
STB



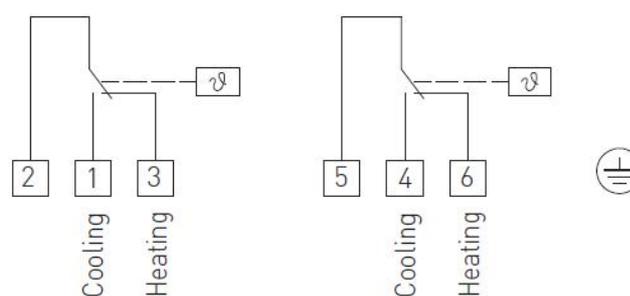
TR+STB



TW, TR

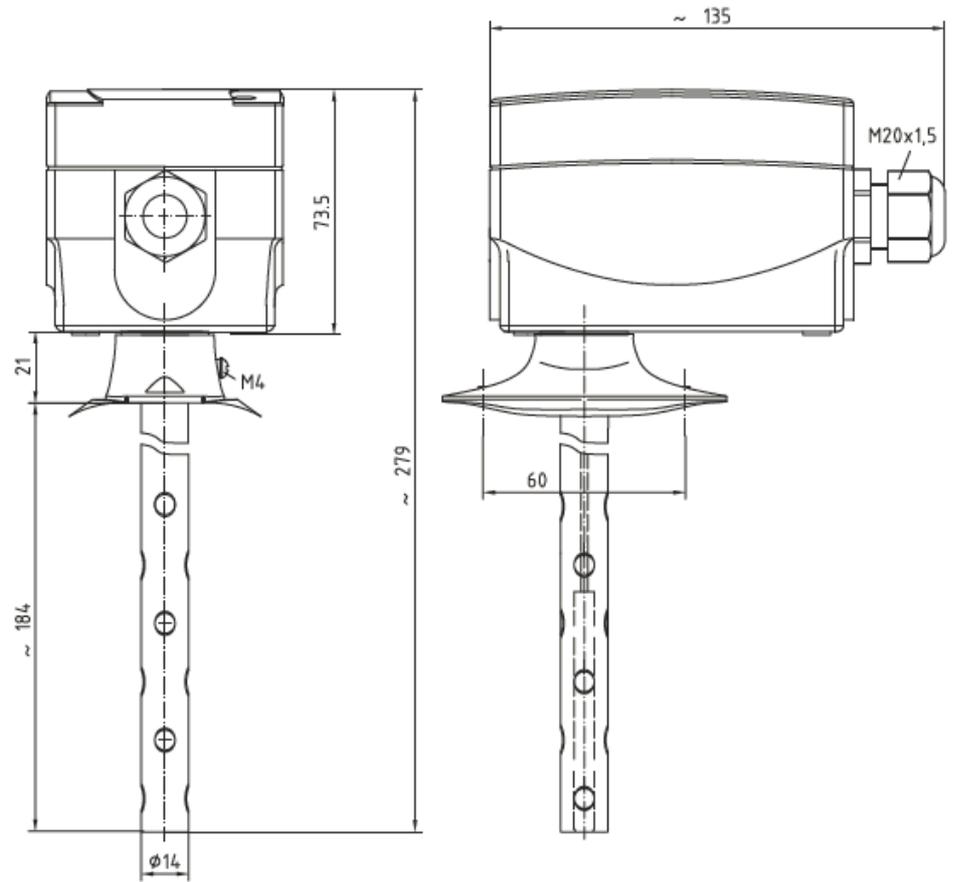


TW+TW

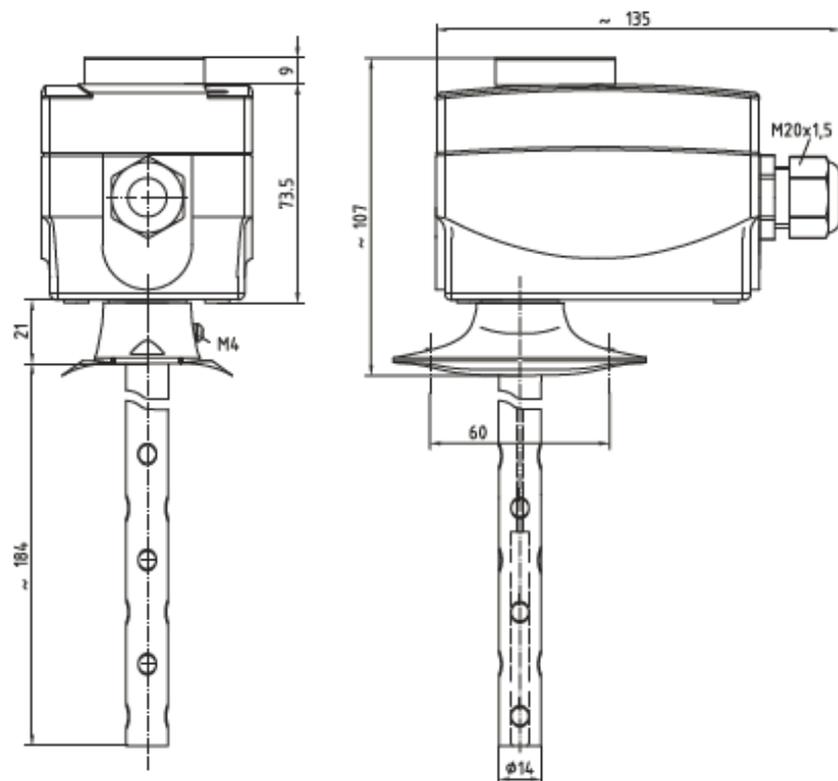


Dimensions

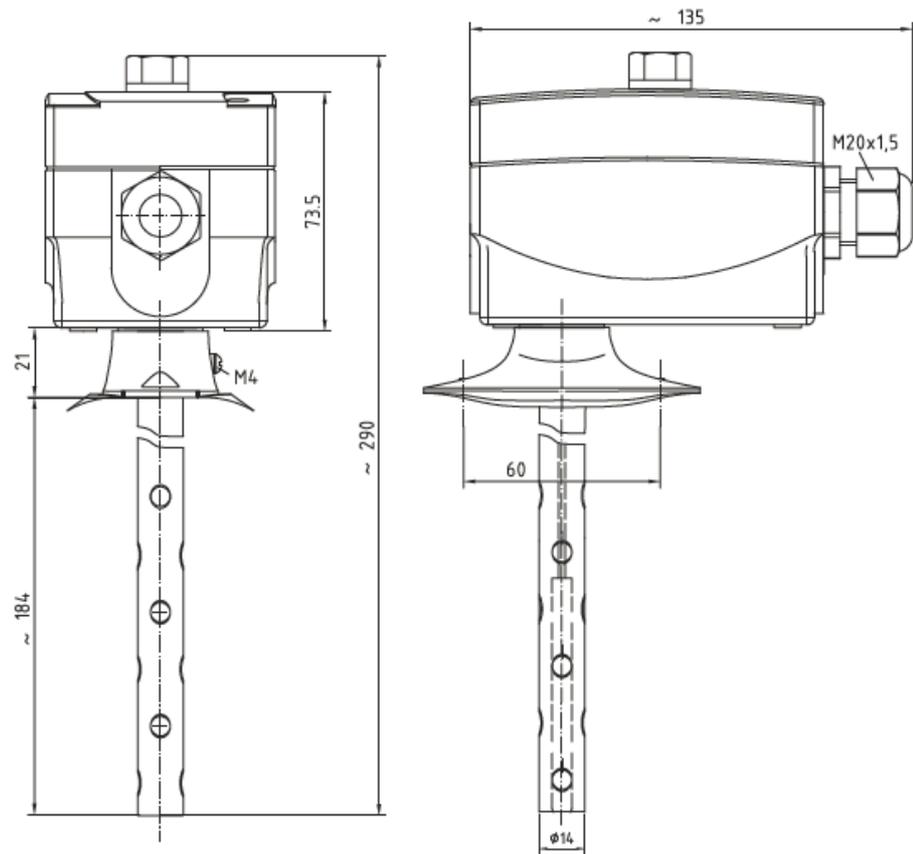
TW



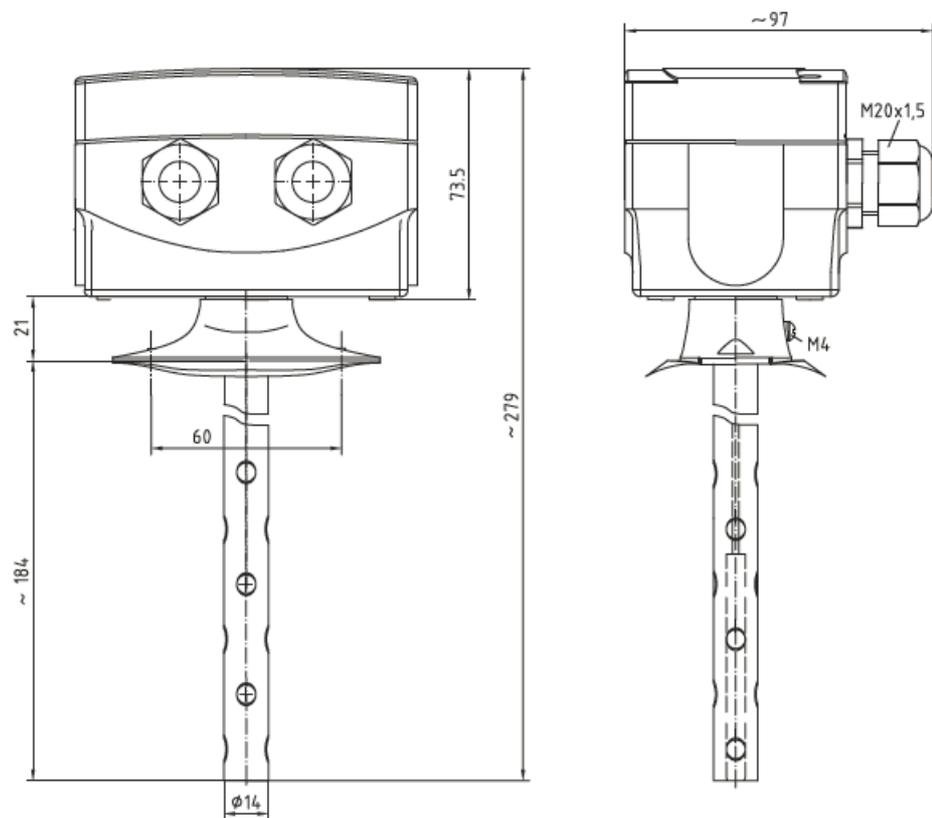
TR



STB



TW+TW



TR+STB

