

Duct temperature controllers, including mounting flange,
EC type-tested, TÜV tested,
with switching output

DIN-tested German quality product. Temperature control and limiting device for heat generation plants in accordance with DIN EN 14597. Safety temperature limiter (STB) with EC type test (module B) according to directive 2014 / 68 / EU.

Mechanical temperature control device / rod thermostat THERMASREG® KTR with switching output, used for monitoring, controlling or limiting the temperatures of gaseous media as a boiler controller or in heating, air conditioning technology as well as in mechanical and apparatus engineering and in heat generation plants. It is available as one-step or two-step device, as adjustable temperature controller TR, temperature monitor TW, or as safety temperature limiter STB.



TECHNICAL DATA

Switching capacity: (Contact load)	24...250V AC +10%, 10A, cos φ = 1.0 24...250V AC +10%, 1.5A, cos φ = 0.6 at 24V AC min. 150mA
Contact:	dust-proof switch block unit as potential-free, single-pole or two-pole changeover contact
Housing:	plastic, UV-resistant, material polyamide, 30% glass-globe reinforced, colour traffic white (similar to RAL 9016)
Housing dimensions:	108 x 70 x 73.5 mm (Thor 2)
Cable gland:	M20 x 1.5; including strain relief
Measuring element:	torsion meter with liquid filling, liquid expansion temperature feeler
Mounting position:	arbitrary
Ambient temperature:	-10...+65 °C at the switch block housing
Tolerance:	T _{min} ± 5 K; T _{max} ± 3 K
Operating medium:	Air
Protective tube:	metal, material CuZn37 (2.0321), Ø 14 mm, NL = 205 mm
Inserted length:	approx. 205 mm (with flange); approx. 184 mm (without flange)
Process connection:	by mounting flange (included in the scope of delivery)
Electrical connection:	0.14 - 2.5 mm ² via terminal screws
Protection class:	I (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529)
Standards:	CE conformity according to EMC directive 2014 / 30 / EU, low-voltage directive 2014 / 35 / EU
Tests:	EC type test (module B) according to directive 2014 / 68 / EU, certificate No.: IS-TAF-MUC 18 03 2652130 002, DIN EN 14597, register Nos.: STB 1201, TR / STB 1202

FUNCTION

TW, TR:
Contact 2 - 3 breaks when temperature rises to the preset value.

STB:
Contact 2 - 1 or 5 - 4 (two-step) breaks when temperature rises to the preset value. Restart is possible only after cooling off by approx. 15 K - 20 K by pressing the reset button.





Configuration variants:

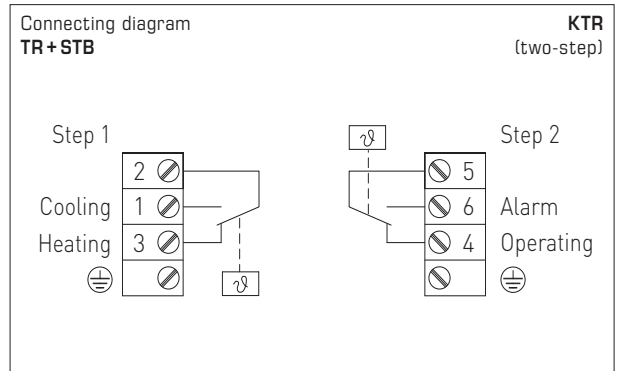
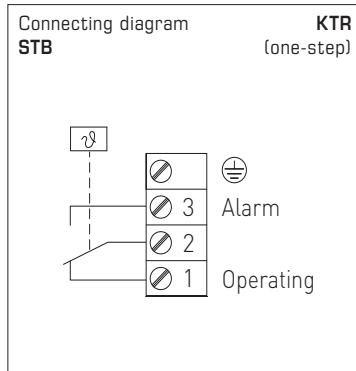
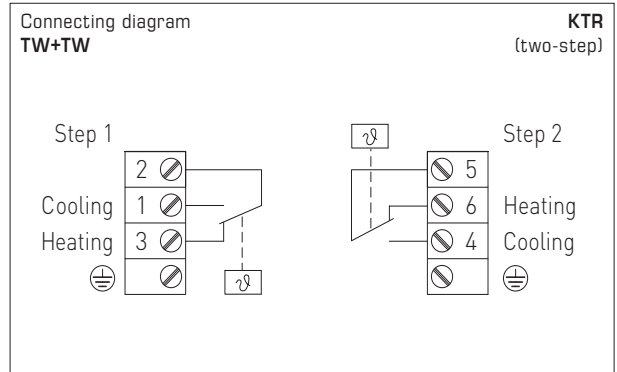
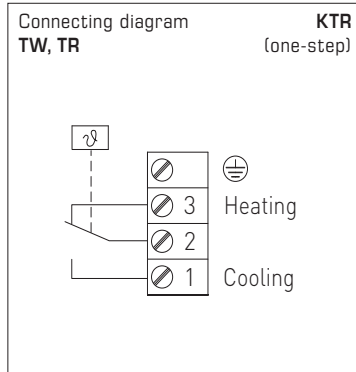
TW
Temperature monitor
(internal setting)

TR
Temperature controller
(external setting)

STB
Safety temperature limiter
(internal setting)

TW+TW
Double temperature monitor
(internal setting)

TR+STB
Temperature controller
(external setting) +
Safety temperature limiter
(internal setting)



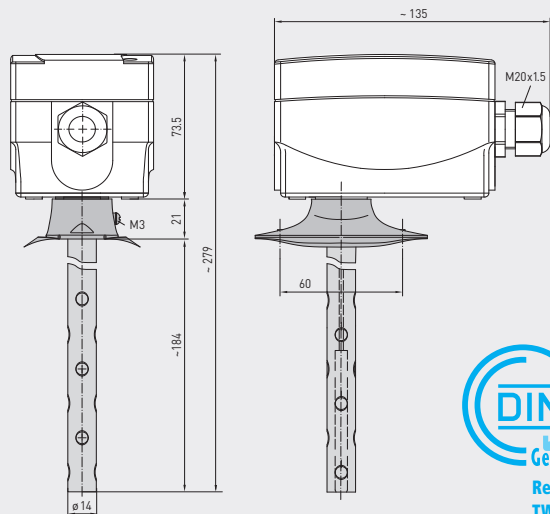
CERTIFICATE ZERTIFIKAT valid until: 25.02.2028 gültig bis: 25.02.2028 EU Type examination (module B) - production type - according to Directive 2014/68/EU... Certificate No.: Z-IS-TAF-MUC-18-03-2652130-002... Evaluation report No.: C-T 1382-01/18 dated 2018-02-25... Scope of examination: Safety temperature limiter as safety accessory type: ETR and KTR (see page 3) basis of examination and details see page 3... Manufacturing plant: S+S Regeltechnik GmbH... München, 25.02.2018

page 3 of certificate no. IS-TAF-MUC-18-03-2652130-002... Replaces certificate dated IS-TAF-MUC 08 02 100248356 001... Basis of examination: VdTUV-Merkblatt Temperatur 100:2017-03... DIN EN 14597 :2015-01... Essential safety requirements of Directive 2014/68/EU... Type code table with columns Type, Code, Technical data... The conditions listed below have to be considered: 1 To keep the specified response time the types ETR... shall be used with the provided tube and thermal conducting paste 2 Possible risks caused by external fire or by traffic, wind and earthquake loading shall be examined separately depending from the installation situation of the pressure equipment

Dimensional drawing
Temperature monitor

TW

KTR-xxU
(one-step)

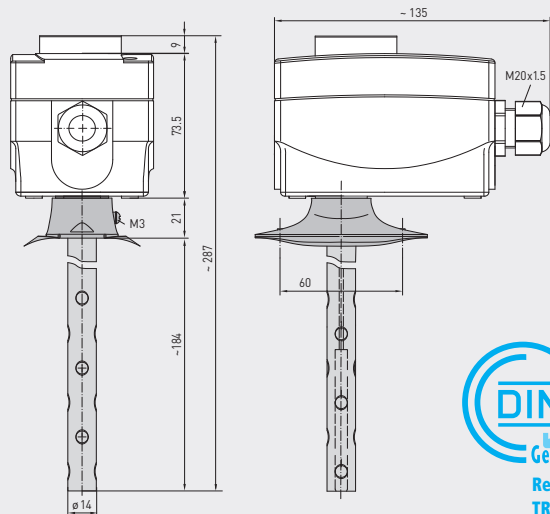


KTR-060U
KTR-090U
(one-step)
TW

Dimensional drawing
Temperature controller

TR

KTR-xx
(one-step)

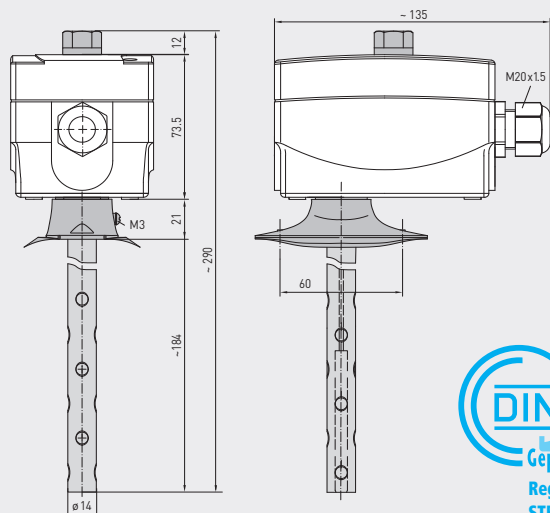


KTR-1
KTR-060
KTR-090
KTR-0120
KTR-50140
(one-step)
TR

Dimensional drawing
Safety temperature limiter

STB

KTR-Rxx
(one-step)

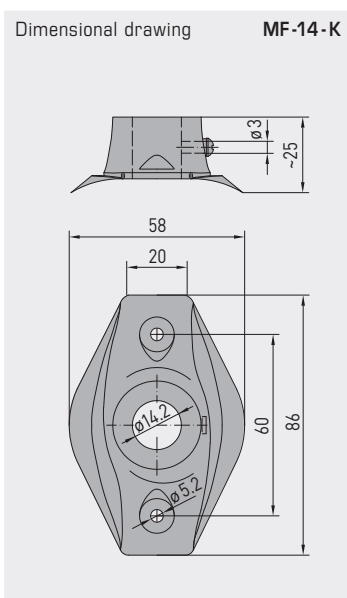


KTR-R6585
KTR-R90110
(one-step)
STB
adjustable



THERMASREG® KTR Duct temperature controllers, one-step						
Type / WG02	Ø mm	Temperature Ranges (adjustable)	Thermal Operating Difference (fixed) approx.	Maximum Capillary Temp.	Item No.	Price
KTR-060 U / 090 U					TW	
KTR-060 U	14	0...+60 °C	3K	+75 °C	1102-3010-2100-350	84,41 €
KTR-090 U	14	0...+90 °C	3K	+120 °C	1102-3010-2100-450	84,41 €
KTR-xx					TR	
KTR-1	14	-35...+35 °C	3K	+75 °C	1102-3010-1100-150	84,41 €
KTR-060	14	0...+60 °C	3K	+75 °C	1102-3010-1100-350	84,41 €
KTR-090	14	0...+90 °C	3K	+120 °C	1102-3010-1100-450	84,41 €
KTR-0120	14	0...+120 °C	5K	+135 °C	1102-3010-1100-550	84,41 €
KTR-50140	14	+50...+140 °C	5K	+150 °C	1102-3010-1100-650	84,41 €
KTR-R6585 / R90110					STB	
KTR-R6585	14	+65...+85 °C	+0 / -15...20K	+120 °C	1102-3010-6100-750	100,07 €
KTR-R90110	14	+90...+110 °C	+0 / -15...20K	+120 °C	1102-3010-6100-850	100,07 €
Extra charge:	U	= Internal setting, unless included in a certain type				10,98 €
	/2	= 2 steps, unless included in a certain type				on request
Equipment:	FT	= Manual reset when temperature drops				
	ST	= Manual reset when temperature rises				
	TR	= Temperature controller (external setting)				
	TB	= Temperature limiter (internal setting)				
	TW	= Temperature monitor (internal setting)				
	STB	= Safety temperature limiter (internal setting), selectable , with external switchpoint confirmation and restart interlock, restart by reset button at approx. 15...20 K below switching temperature (+ 0 K / - 15...20 K) with EC type test (module B) according to directive 2014 / 68 / EU				

ACCESSORIES			
MF-14-K	Mounting flange, plastic	7100-0030-2000-000	10,55 €
For further information see last chapter!			

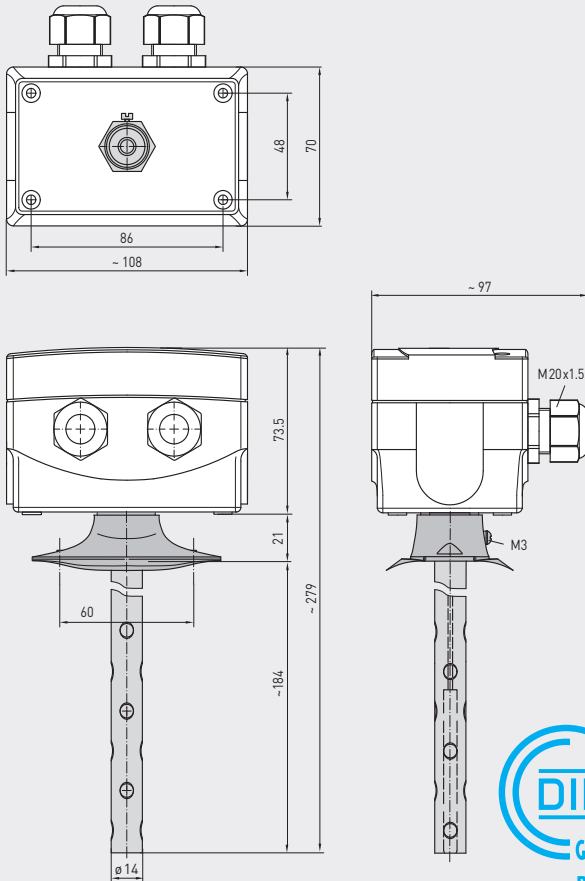


MF-14-K
Mounting flange,
plastic



Dimensional drawing
Double temperature monitor
TW + TW

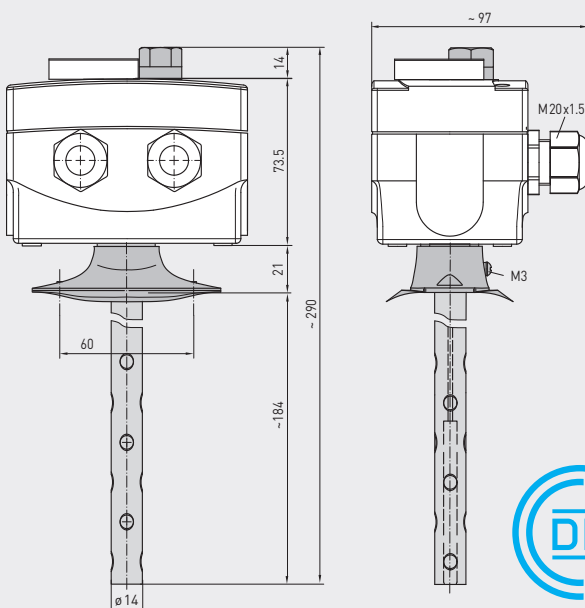
KTR-xxU
(two-step)



KTR-090090U
(two-step)
TW + TW

Dimensional drawing
Temperature controller +
safety temperature limiter
TR + STB

KTR-xxRxx
(two-step)

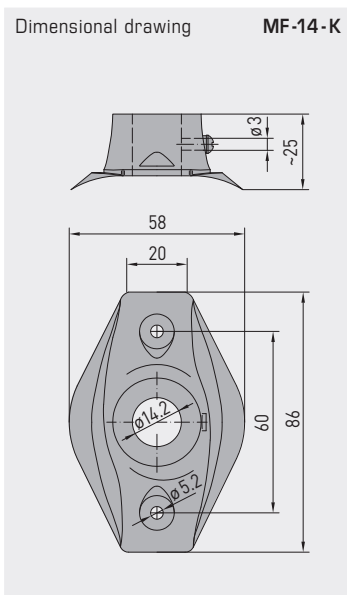


KTR-060R85
KTR-090R110
(two-step)
TR + STB
adjustable



THERMASREG® KTR Duct temperature controllers, two-step								
Type / WG02	Ø mm	Temperature Ranges (adjustable)		Thermal Operating Difference (fixed) approx.		Maximum Capillary Temp.	Item No.	Price
		1.	2.	1.	2.			
KTR-090090 U							TW+TW	
KTR-090090 U	14	0...+90°C	0...+90°C	3K	3K	+120°C	1102-3010-2205-150	125,51 €
KTR-060R85							TR+STB	
KTR-060R85	14	0...+60°C	+65...+85°C	3K	+0/-15...20K	+120°C	1102-3010-7205-250	125,51 €
KTR-090R110							TR+STB	
KTR-090R110	14	0...+90°C	+90...+110°C	3K	+0/-15...20K	+135°C	1102-3010-7205-350	125,51 €
Extra charge:	U = Internal setting, unless included in a certain type /2 = 2 steps, unless included in a certain type						on request	10,98 €
Features:	TR = Temperature controller (external setting) TW = Temperature monitor (internal setting) STB = Safety temperature limiter (internal setting), selectable, with external switchpoint confirmation and restart interlock, restart by reset button at approx. 15...20 K below switching temperature (+ 0 K/- 15...20 K) with EC type test (module B) according to directive 2014/68/EU							

ACCESSORIES			
MF-14-K	Mounting flange, plastic	7100-0030-2000-000	10,55 €
For further information see last chapter!			



MF-14-K
Mounting flange,
plastic

