

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 <sub>min</sub> ± 5 K; T <sub>max</sub> ± 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 <sup>2</sup> via terminal screws
Protection class:	I (according to EN 60 730)
Protection type:	IP 65 (according to EN 60 529)
Standards:	CE conformity, 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

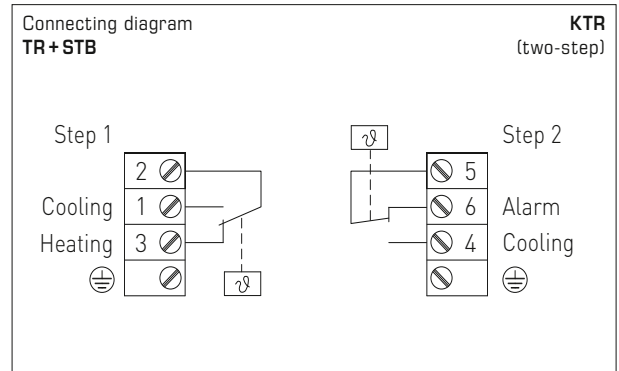
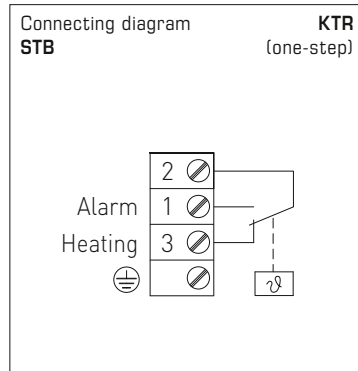
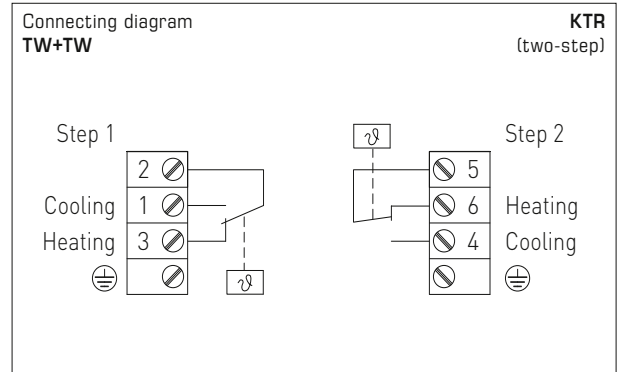
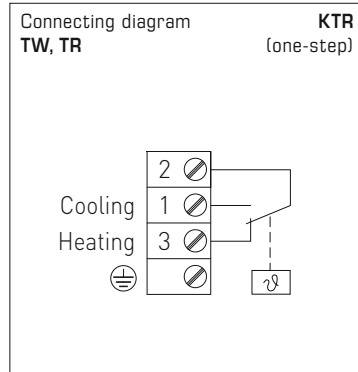
<b>FUNCTION</b>	<b>TW, TR:</b> Contact 2 - 3 breaks when temperature rises to the preset value.
	<b>STB:</b> Contact 2 - 1 or 5 - 4 (two-step) breaks when temperature rises to the preset value. Restart is possible only after cooling off by approx. 15 K - 20K by pressing the reset button.





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

valid until: 25.02.2028  
**ZERTIFIKAT**  
gültig bis: 25.02.2028

EU Type examination (module B) - production type - according to Directive 2014/68/EU

EU-Baumusterprüfung (Modul B) - Baumuster - nach Richtlinie 2014/68/EU

Certificate No.: **Z-IS-TAF-MUC-18-03-2652130-002**  
Zertifikat-Nr.:

Name and address of manufacturer: **S+S Regeltechnik GmbH**  
Name und Anschrift des Herstellers: **Pirnaer Str. 20  
90411 Nürnberg**

We herewith certify that the type mentioned below meets the requirements of the Directive 2014/68/EU.

Nimmt wird bescheinigt, dass das unten genannte Baumuster die Anforderungen der Richtlinie 2014/68/EU erfüllt

Evaluation report No.: **C-T 1382-01/18 dated 2018-02-26**  
Prüfbericht Nr.:

Scope of examination: **Safety temperature limiter as safety accessory**  
Geltungsbereich: **type: ETR and KTR (see page 3)  
basis of examination and details see page 3**

Manufacturing plant: **S+S Regeltechnik GmbH**  
Fertigungsstätte: **Pirnaer Str. 20  
90411 Nürnberg**

München, 26.02.2018  
(Place, date)

TÜV SÜD Industrie Service GmbH  
Certification Body for pressure equipment

*Johannes Steigelmeyer*  
Johannes Steigelmeyer

Verification of Certificate by TÜV SÜD App Verify  
Echtheitsprüfung durch App TÜV SÜD Verify

Notified Body, No. 0238  
Notifizierte Stelle, Kennnummer 0238  
TÜV SÜD Industrie Service GmbH  
Wiederstraße 199  
90488 München  
GERMANY

089 5190-1027  
fscert@tuev-sud.de

Page 1 of the certificate No. / Seite 1 zum Zertifikat Nr. Z-IS-TAF-MUC-18-03-2652130-002

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**

Type	Code	Technical data
ETR-R6585	STB	Range: from 65 °C to 85 °C
ETR-R90110	STB	Range: from 90 °C to 110 °C
KTR-R6585	STB	Same function as ETR R6585, with the following difference: The tube is not closed to the medium.
KTR-R90110	STB	Same function as ETR R90110, with the following difference: The tube is not closed to the medium.

Type	Code	Technical data
ETR-060R85	TR/STB	Combination of two single types: TR and STB with the range: TR: from 0 °C to +60 °C STB: from +65 °C to + 85°
ETR-090R110	TR/STB	Combination of two single types: TR and STB with the range: TR: from 0 °C to +90 °C STB: from +90 °C to + 110°
KTR-060R85	TR/STB	Same function as ETR-060R85, with the following difference: The tube is not closed to the medium
KTR-090R110	TR/STB	Same function as ETR-090R110, with the following difference: The tube is not closed to the medium

**The conditions listed below have to be considered:**

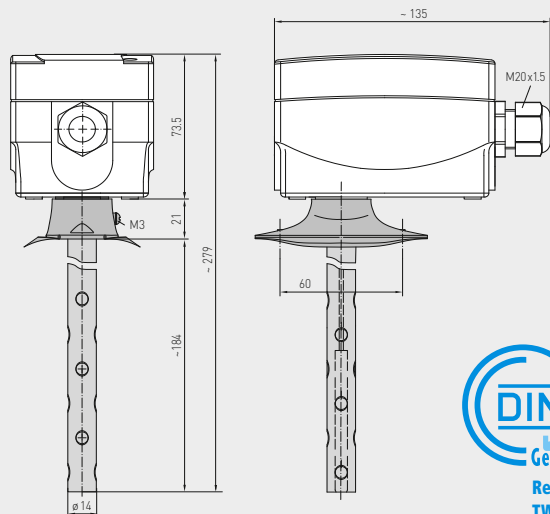
- To keep the specified response time the types ETR... shall be used with the provided tube and thermal conducting paste
- Possible risks caused by external fire or by traffic, wind and earthquake loading shall be examined separately depending from the installation situation of the pressure equipment

Appendix of certificate / Anlage zum Zertifikat Z-IS-TAF-MUC-18-03-2652130-002

Dimensional drawing  
Temperature monitor

TW

KTR-xxU  
(one-step)

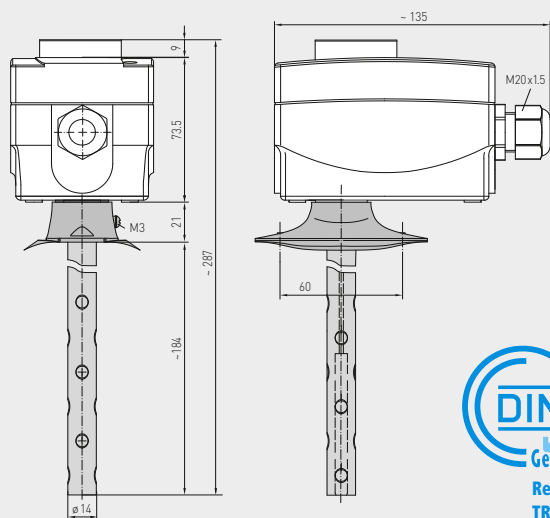


KTR-060U  
KTR-090U  
(one-step)  
TW

Dimensional drawing  
Temperature controller

TR

KTR-xx  
(one-step)

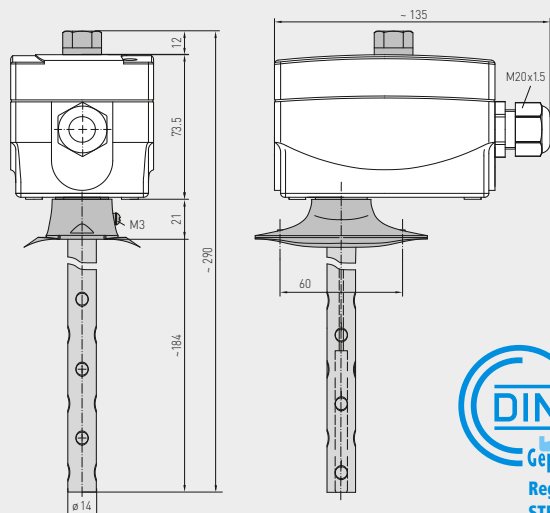


KTR-1  
KTR-060  
KTR-090  
KTR-0120  
KTR-50140  
(one-step)  
TR

Dimensional drawing  
Safety temperature limiter

STB

KTR-Rxx  
(one-step)

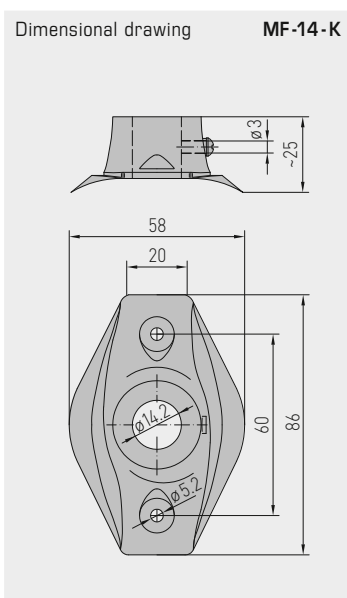


KTR-R6585  
KTR-R90110  
(one-step)  
STB  
adjustable



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
<b>KTR-060 U / 090 U</b>					<b>TW</b>	
KTR-060 U	14	0...+60 °C	3K	+75 °C	1102-3010-2100-350	<b>67,46 €</b>
KTR-090 U	14	0...+90 °C	3K	+120 °C	1102-3010-2100-450	<b>67,46 €</b>
<b>KTR-xx</b>					<b>TR</b>	
KTR-1	14	-35...+35 °C	3K	+75 °C	1102-3010-1100-150	<b>67,46 €</b>
KTR-060	14	0...+60 °C	3K	+75 °C	1102-3010-1100-350	<b>67,46 €</b>
KTR-090	14	0...+90 °C	3K	+120 °C	1102-3010-1100-450	<b>67,46 €</b>
KTR-0120	14	0...+120 °C	5K	+135 °C	1102-3010-1100-550	<b>67,46 €</b>
KTR-50140	14	+50...+140 °C	5K	+150 °C	1102-3010-1100-650	<b>67,46 €</b>
<b>KTR-R6585 / R90110</b>					<b>STB</b>	
KTR-R6585	14	+65...+85 °C	+0 / -15...20K	+120 °C	1102-3010-6100-750	<b>79,98 €</b>
KTR-R90110	14	+90...+110 °C	+0 / -15...20K	+120 °C	1102-3010-6100-850	<b>79,98 €</b>
Extra charge:	<b>U</b>	= Internal setting, unless included in a certain type				<b>8,78 €</b>
	<b>/2</b>	= 2 steps, unless included in a certain type				on request
Equipment:	<b>FT</b>	= Manual reset when temperature drops				
	<b>ST</b>	= Manual reset when temperature rises				
	<b>TR</b>	= Temperature controller ( <b>external setting</b> )				
	<b>TB</b>	= Temperature limiter ( <b>internal setting</b> )				
	<b>TW</b>	= Temperature monitor ( <b>internal setting</b> )				
	<b>STB</b>	= Safety temperature limiter ( <b>internal setting</b> ), <b>selectable</b> , with external switchpoint confirmation and restart interlock, restart by reset button at approx. 15...20 K below switching temperature (+ 0 K / - 15...20 K) <b>with EC type test (module B) according to directive 2014 / 68 / EU</b>				

ACCESSORIES			
<b>MF-14-K</b>	<b>Mounting flange, plastic</b>	7100-0030-2000-000	<b>8,43 €</b>
For further information see last chapter!			

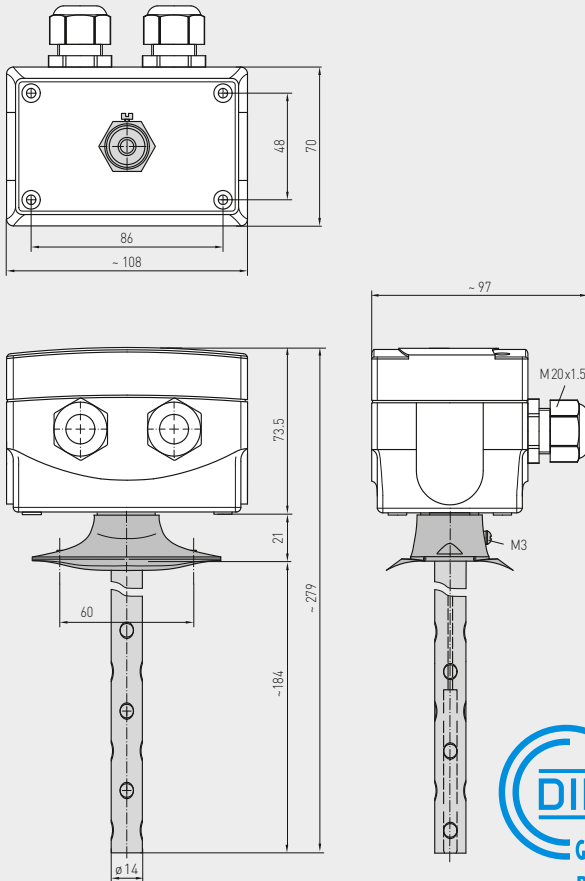


**MF-14-K**  
Mounting flange,  
plastic



Dimensional drawing  
Double temperature monitor  
TW + TW

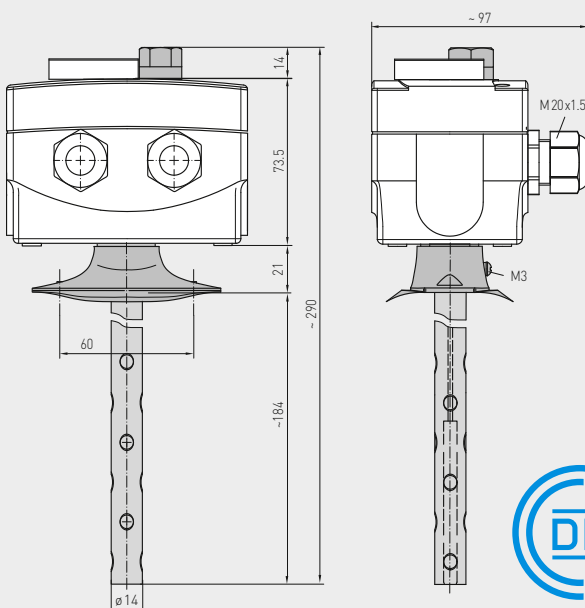
**KTR-xxU**  
(two-step)



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

Dimensional drawing  
Temperature controller +  
safety temperature limiter  
TR + STB

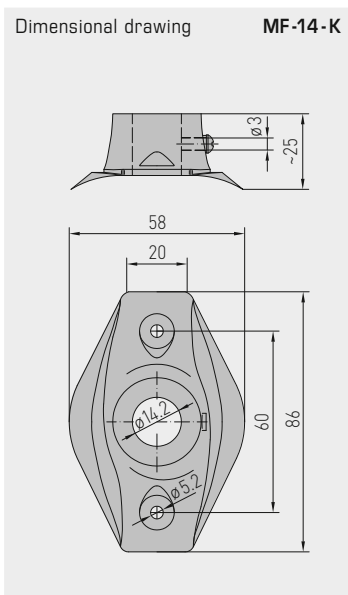
**KTR-xxRxx**  
(two-step)



**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.			
<b>KTR-090090 U</b>							<b>TW+TW</b>	
KTR-090090 U	14	0...+90°C	0...+90°C	3K	3K	+120°C	1102-3010-2205-150	<b>100,31 €</b>
<b>KTR-060R85</b>							<b>TR+STB</b>	
KTR-060R85	14	0...+60°C	+65...+85°C	3K	+0/-15...20K	+120°C	1102-3010-7205-250	<b>100,31 €</b>
<b>KTR-090R110</b>							<b>TR+STB</b>	
KTR-090R110	14	0...+90°C	+90...+110°C	3K	+0/-15...20K	+135°C	1102-3010-7205-350	<b>100,31 €</b>
Extra charge:	<b>U</b> = Internal setting, unless included in a certain type <b>/2</b> = <b>2 steps, unless included in a certain type</b>						on request	<b>8,78 €</b>
Features:	<b>TR</b> = Temperature controller ( <b>external setting</b> ) <b>TW</b> = Temperature monitor ( <b>internal setting</b> ) <b>STB</b> = Safety temperature limiter ( <b>internal setting</b> ), <b>selectable</b> , with external switchpoint confirmation and restart interlock, restart by reset button at approx. 15...20 K below switching temperature (+ 0 K / - 15...20 K) <b>with EC type test (module B) according to directive 2014/68/EU</b>							
ACCESSORIES								
<b>MF-14-K</b>	<b>Mounting flange, plastic</b>						7100-0030-2000-000	<b>8,43 €</b>
For further information see last chapter!								



**MF-14-K**  
Mounting flange,  
plastic

