

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 97 / 23 / EC.

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. 150 mA
Contact:	dust-proof switch block unit as potential-free, single-pole or two-pole changeover contact
Enclosure:	plastic, material polyamide, 30% glass-globe-reinforced, colour traffic white (similar to RAL 9016)
Enclosure 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 enclosure
Tolerance:	T _{min} ± 5 K; T _{max} ± 3 K
Operating medium:	Air
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, EMC directive 2014 / 30 / EU, low-voltage directive 2014 / 35 / EU
Tests:	EC type test (module B) according to directive 97 / 23 / EC, certificate No.: IS-TAF - MUC 08 02 100248356 001, 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. 15K- 20K by pressing the reset button.





Configuration variants:

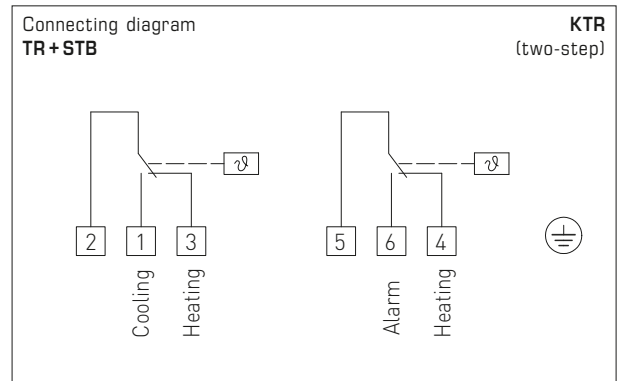
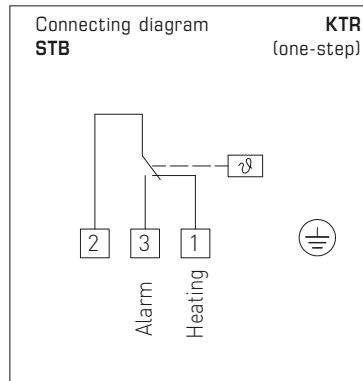
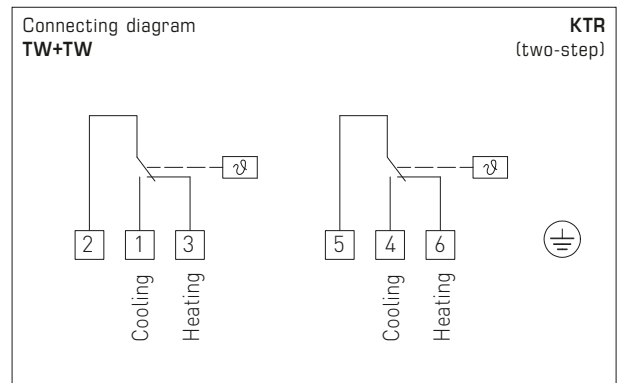
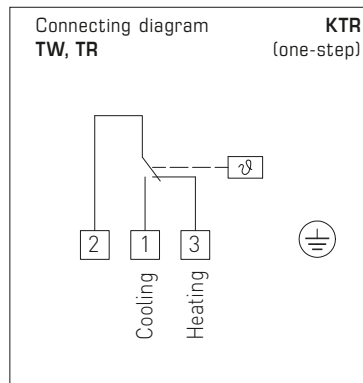
TW
Temperature monitor
(internal setting)

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)



ZERTIFIKAT Certificate

EG-Baumusterprüfung (Modul B) nach Richtlinie 97/23/EG
EG Type-examination (Module B) according to Directive 97/23/EC

Zertifikat-Nr.: IS-TAF-MUC 08 02 100248356 001
Certificate No.:

Name und Anschrift des Herstellers: S+S Regeltechnik GmbH
Klingenhofstraße 11
90411 Nürnberg
Name and Postal Address of Manufacturer:

Hiermit wird bescheinigt, daß das unten genannte EG-Baumuster die Anforderungen der Richtlinie 97/23/EG erfüllt.
We herewith certify that the type mentioned below meets the requirements of the Directive 97/23/EC.

Produktart product category: **Safety temperature limiter as safety accessory**

Typ, Ausführung type, model: **ETR and KTR**
(The listing of the single types, see page 2)

Prüfgrundlage basis of examination: **Essential safety requirements of Directive 97/23/EC of the European Parliament and of the Council of 25. May 1997, annex I for safety accessories according Article 3 paragraph 1.4.**
DIN EN 14597:2005-12.

Prüfbericht Nr. test report no.: **C-T 1382-0008 of 2008-02-22**
TÜV SÜD Industrie Service GmbH

Fertigungsstätte manufacturing plant: **S+S Regeltechnik GmbH**
Klingenhofstraße 11
90411 Nürnberg, Germany

TÜV SÜD Industrie Service GmbH
TÜV-CERT-Certification body
for pressure devices

[Signature]
Bertram Stöck, Fachnummer 0030
Notified Body, No. 0030

Mitglied der CONFEDERATION EUROPEENNE DE CERTIFICATION
CEOC
ORGANISATION DE COORDINATION

(Location, Date)
Munich, 2008-02-22

Bitte beachten Sie die untenigen Hinweise.
Please refer the remarks on the second page.

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Festungs- und Wärmelechnik Fax: +49 89 65 00 - 33 07
Rilberstraße 55 E-Mail: tsi@tuev-sud.de
80339 München www.tuev-sud.de

Seite 2 zum Zertifikat Nr. page 2 of certificate no. IS-TAF-MUC 08 02 100248356 001

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.

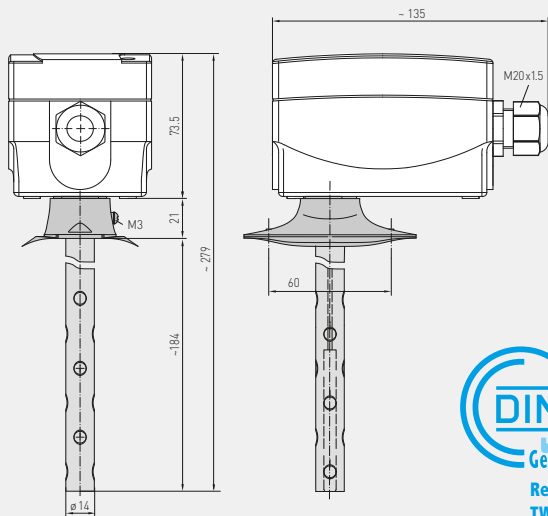
Type	Code	Technical data
ETR-060R85	TR/STB	Combination of two single types: TR and STB with the range: TR: from 0 °C to +60 °C STB: from +65 °C to +85 °C
ETR-060R110	TR/STB	Combination of two single types: TR and STB with the range: TR: from 0 °C to +90 °C STB: from +90 °C to +110 °C
KTR-060R85	TR/STB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

Dimensional drawing
Temperature monitor
TW

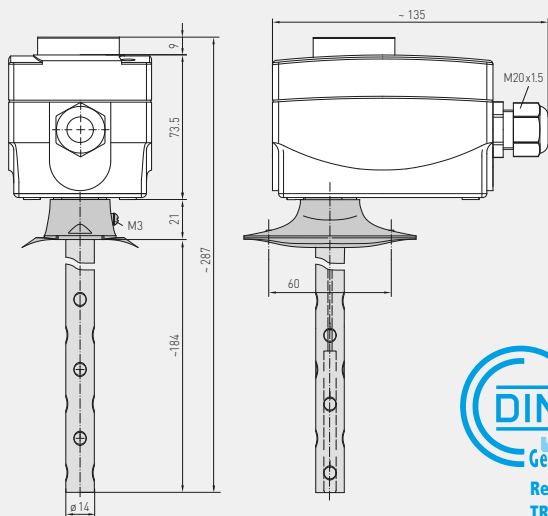
KTR-xxU
(one-step)



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

Dimensional drawing
Temperature controller
TR

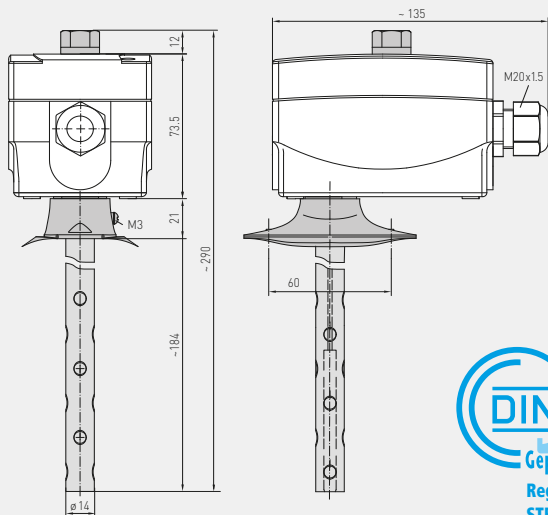
KTR-xx
(one-step)



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

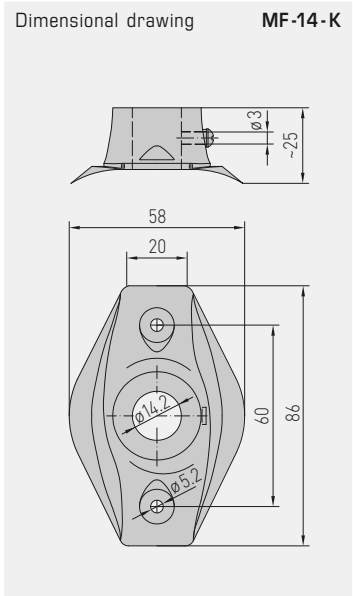
Type / WG02	Ø mm	Temperature Ranges (adjustable)	Thermal Operating Difference (fixed) approx.	Maximum Capillary Temp.	Item No.	Price
KTR-060 U / 090 U					TW	
KTR-060 U	14	0...+60 °C	3K	+75 °C	1102-3010-2100-350	64,53 €
KTR-090 U	14	0...+90 °C	3K	+120 °C	1102-3010-2100-450	64,53 €
KTR-xx					TR	
KTR-1	14	-35...+35 °C	3K	+75 °C	1102-3010-1100-150	64,53 €
KTR-060	14	0...+60 °C	3K	+75 °C	1102-3010-1100-350	64,53 €
KTR-090	14	0...+90 °C	3K	+120 °C	1102-3010-1100-450	64,53 €
KTR-0120	14	0...+120 °C	5K	+135 °C	1102-3010-1100-550	64,53 €
KTR-50140	14	+50...+140 °C	5K	+150 °C	1102-3010-1100-650	64,53 €
KTR-R6585 / R90110					STB	
KTR-R6585	14	+65...+85 °C	+0 / -15...20K	+120 °C	1102-3010-6100-750	76,50 €
KTR-R90110	14	+90...+110 °C	+0 / -15...20K	+120 °C	1102-3010-6100-850	76,50 €

Extra charge:	U = Internal setting, unless included in a certain type /2 = 2 steps, unless included in a certain type	8,40 € 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 97 / 23 / EC	

Accessories

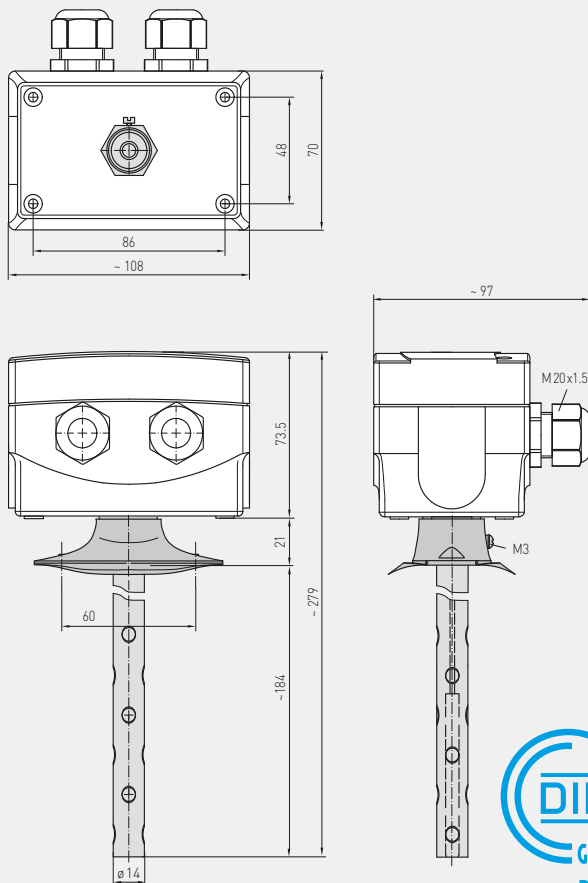
MF-14-K	Mounting flange, plastic	7100-0030-2000-000	8,06 €
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For further information see last chapter!



Dimensional drawing
Double temperature monitor
TW + TW

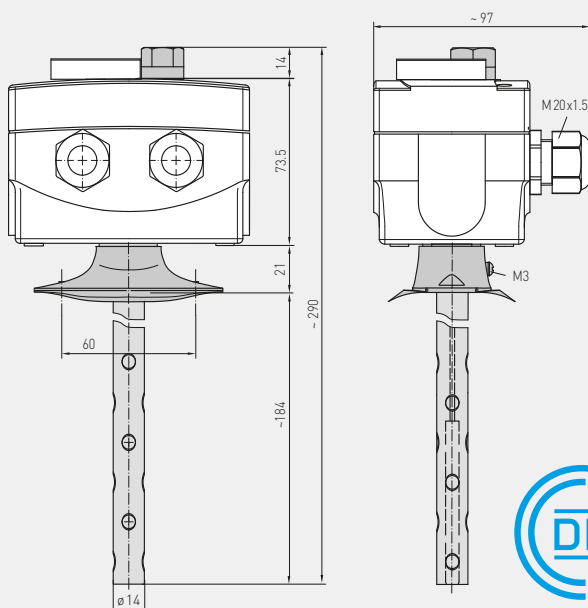
KTR-xx U
(two-step)



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

Dimensional drawing
Temperature controller +
safety temperature limiter
TR + STB

KTR-xx Rxx
(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	95,94 €
KTR-060R85							TR + STB	
KTR-060R85	14	0...+60 °C	+65...+85 °C	3K	+0 / -15...20K	+120 °C	1102-3010-7205-250	95,94 €
KTR-090R110							TR + STB	
KTR-090R110	14	0...+90 °C	+90...+110 °C	3K	+0 / -15...20K	+135 °C	1102-3010-7205-350	95,94 €
Extra charge:	U = Internal setting, unless included in a certain type /2 = 2 steps, unless included in a certain type						on request	8,40 €
Features:	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 97 / 23 / EC							
Accessories								
MF-14-K	Mounting flange, plastic						7100-0030-2000-000	8,06 €
For further information see last chapter!								

