

THERMASREG® TR 22

THERMASREG® TR-F



S+S REGELTECHNIK

ⓓ Bedienungs- und Montageanleitung

Temperaturregler, einstufig,
mit schaltendem Ausgang

ⒼⒷ Operating Instructions, Mounting & Installation

Temperature controllers, one-step,
with switching output

Ⓕ Notice d'instruction

Thermostat ambiant à un étage,
avec sortie en tout ou rien

ⓇⓊ Руководство по монтажу и обслуживанию

Терморегулятор одноступенчатый,
с переключающим выходом



TR 22

(für Feuchtraum)
(for wet room)
(pour locaux humides)
(повышенной влажностью)

TR



TR-F

(mit Fernfühler)
(with remote sensor)
(avec sonde de détection
à distance)
(с дистанционным датчиком)

TR



S+S REGELTECHNIK

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Herzlichen Glückwunsch!

Sie haben ein deutsches Qualitätsprodukt erworben.

Congratulations!

You have bought a German quality product.

Félicitations!

Vous avez fait l'acquisition d'un produit allemand de qualité.

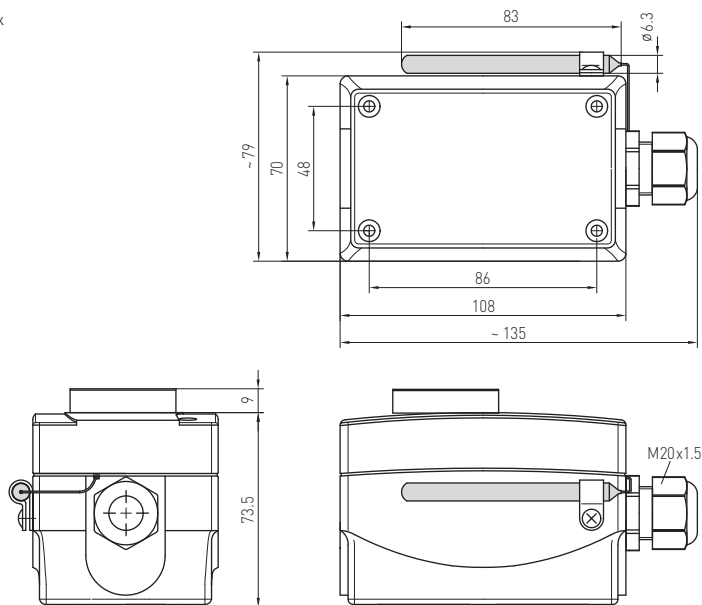
Примите наши поздравления!

Вы приобрели качественный продукт, изготовленный в Германии.

THERMASREG[®] TR 22

Maßzeichnung
Dimensional drawing
Plan coté
Габаритный чертеж

TR 22



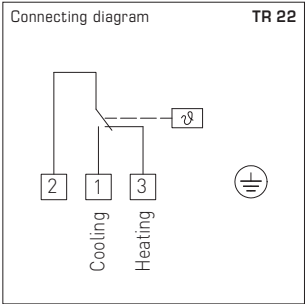
TR 22
(für Feuchtraum)
(for wet room)
(pour locaux humides)
(повышенной влажностью)
TR



TR 22
(für Feuchtraum)
(for wet room)
(pour locaux humides)
(повышенной влажностью)
TW

Mechanical temperature controller / wet room temperature controller **THERMASREG® TR 22** with switching output (one-step) and copper capillary, working without external voltage. It is used for monitoring and controlling temperatures in heat generation plants, in heating, ventilation and air conditioning systems, for ventilation, cooling and climate control in halls, cold storage rooms, greenhouses, nurseries, stables, breeding rooms, as industrial room thermostat or surface-mounted thermostat in industrial applications as well as in wet room and outdoor areas.

TECHNICAL DATA	
Switching capacity:	24...250V AC +10 %, 16 A, cos φ = 1.0
(Contact load)	24...250V AC +10 %, 1.5 A, cos φ = 0.6 at 24 V AC min. 150 mA
Contact:	dust-proof switch block unit as potential-free single-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
Enclosure temperature:	−35...+65 °C
Design principle:	torsion meter with liquid filling
Capillary:	copper
Tolerance:	T _{min} ± 3 K; T _{max} ± 3 K
Electrical connection:	0.14 - 2.5 mm² 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
FUNCTION	Heating: The preset setpoint (scale value) is equivalent to the switch-off value of the heating. The switch-on value is lower by the amount of operating difference. Contact 2 - 3 breaks when temperature rises to the preset value.
	Cooling: The preset setpoint (scale value) is equivalent to the switch-on value of the cooling. The switch-off value is lower by the amount of operating difference. Contact 1 - 2 closes when temperature rises to the preset value.

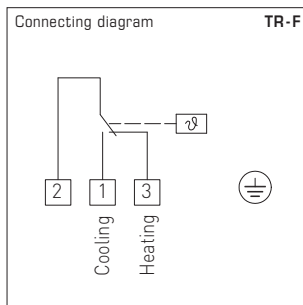


THERMASREG® TR 22 – Temperature controllers, one-step				
Type / WG01	Temperature Range	Thermal Operating Difference (fixed) approx.	Max. Capillary Temperature	Item No.
TR 22				TR (External setting)
TR-22	−35...+35 °C	3 K (± 1 K)	+60 °C	1102-1050-1100-100
TR 22 U				TW (Internal setting)
TR-22 U	−35...+35 °C	3 K (± 1 K)	+60 °C	1102-1050-2100-100

Mechanical temperature controller **THERMASREG® TR xx-F** with remote sensor and switching output (one-step), working as capillary thermostat / capillary controller without external voltage. This capillary controller is used for monitoring and to control temperatures of non-aggressive liquid or gaseous media in heating, ventilation and air conditioning technology as well as in mechanical and apparatus engineering, for installation in immersion sleeves or air conditioning ducts.

TECHNICAL DATA

Switching capacity: (Contact load)	24...250 V AC +10 %, 16 A, cos φ = 1.0 24...250 V AC +10 %, 1.5 A, cos φ = 0.6 at 24 V AC min. 150 mA
Contact:	dust-proof switch block unit as potential-free single-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 (Thor2)
Cable gland:	M20 x 1.5; including strain relief
Enclosure temperature:	-10...+65 °C
Design principle:	torsion meter with liquid filling
Sensor:	copper tube, length of capillary = 1 m with PVC protective hose, Ø 6.8 mm
Tolerance:	T _{min} ± 3 K; T _{max} ± 3 K
Inserted length:	immersion sleeves EL = 150 mm (accessories see table)
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
FUNCTION	Heating: wire contacts 2-3 Cooling: wire contacts 2-1



THERMASREG® TR xx-F – Temperature controllers, one-step

Type / WG01	Temperature Range	Thermal Operating Difference (fixed) approx.	Max. Capillary Temperature	Item No.
TRxx-F				TR (External setting)
TR-1-F	-35... +35 °C	3K (± 1K)	+60 °C	1102-1056-1110-100
TR-060-F	0... +60 °C	3K (± 1K)	+75 °C	1102-1050-1110-300
TR-090-F	0... +90 °C	3K (± 1K)	+120 °C	1102-1050-1110-400
TR-0120-F	0...+120 °C	5K (± 1K)	+135 °C	1102-1050-1110-500
TR-50140-F	+50...+140 °C	5K (± 1K)	+150 °C	1102-1050-1110-600
Extra charge:	U = Internal setting (TW), e.g. TR-090-F-U			
Accessories				
THR-MS-08/150	Brass immersion sleeve, EL = 150mm, Ø 8x0.5mm			7100-0011-3404-000
THR-VA-09/150	Stainless steel immersion sleeve, EL = 150mm, Ø 9x1.0mm			7100-0012-3032-000

Our "General Terms and Conditions for Business" together with the "General Conditions for the Supply of Products and Services of the Electrical and Electronics Industry" (ZVEI conditions) including supplementary clause "Extended Retention of Title" apply as the exclusive terms and conditions.

In addition, the following points are to be observed:

- These instructions must be read before installation and putting in operation and all notes provided therein are to be regarded!
- Devices must only be connected to safety extra-low voltage and under dead-voltage condition. To avoid damages and errors the device (e.g. by voltage induction) shielded cables are to be used, laying parallel with current-carrying lines is to be avoided, and EMC directives are to be observed.
- This device shall only be used for its intended purpose. Respective safety regulations issued by the VDE, the states, their control authorities, the TÜV and the local energy supply company must be observed. The purchaser has to adhere to the building and safety regulations and has to prevent perils of any kind.
- No warranties or liabilities will be assumed for defects and damages arising from improper use of this device.
- Consequential damages caused by a fault in this device are excluded from warranty or liability.
- These devices must be installed by authorised specialists only.
- The technical data and connecting conditions of the mounting and operating instructions delivered together with the device are exclusively valid. Deviations from the catalogue representation are not explicitly mentioned and are possible in terms of technical progress and continuous improvement of our products.
- In case of any modifications made by the user, all warranty claims are forfeited.
- This device must not be installed close to heat sources (e.g. radiators) or be exposed to their heat flow. Direct sun irradiation or heat irradiation by similar sources (powerful lamps, halogen spotlights) must absolutely be avoided.
- Operating this device close to other devices that do not comply with EMC directives may influence functionality.
- This device must not be used for monitoring applications, which serve the purpose of protecting persons against hazards or injury, or as an EMERGENCY STOP switch for systems or machinery, or for any other similar safety-relevant purposes.
- Dimensions of enclosures or enclosure accessories may show slight tolerances on the specifications provided in these instructions.
- Modifications of these records are not permitted.
- In case of a complaint, only complete devices returned in original packing will be accepted.

These instructions must be read before installation and putting in operation and all notes provided therein are to be regarded!

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Errors and technical changes excepted.

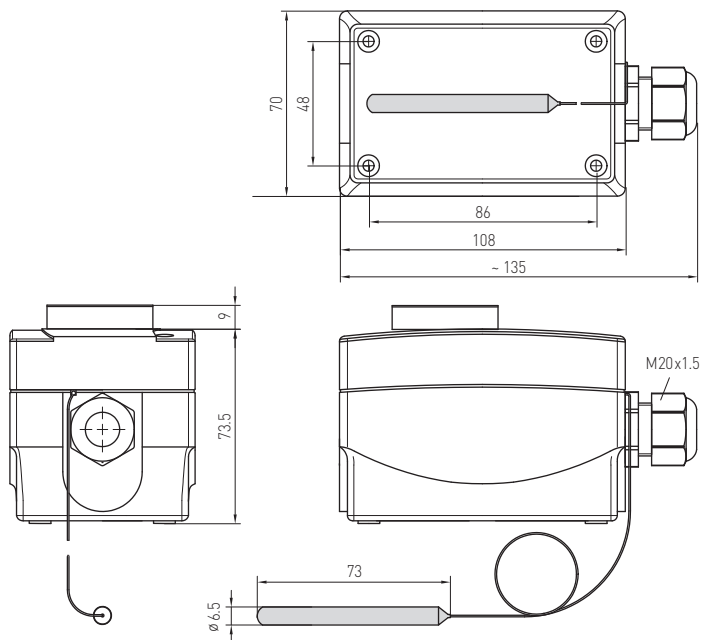
Sous réserve d'erreurs et de modifications techniques.

Возможны ошибки и технические изменения.

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