Mechanical temperature controller **THERM**ASREG® **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.

TRxx-F



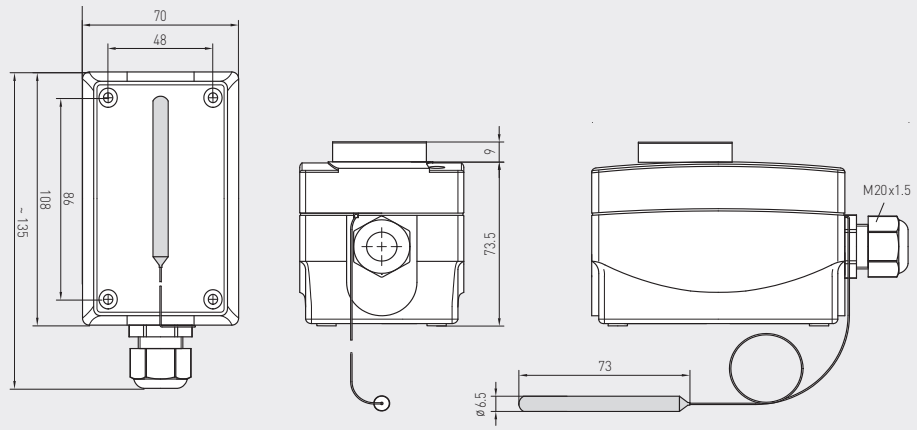
TRxx-F-U



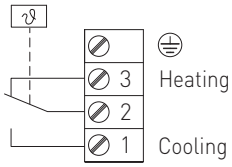
TECHNICAL DATA

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
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:	M 20 x 1.5; including strain relief
Housing 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)
Routing:	bending radius > 35mm admissible vibration load ≤ ½g admissible tensile load < 100N
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:** wire contacts 2 - 3 **Cooling:** wire contacts 2 - 1

Dimensional drawing **TRxx-F**



Connecting diagram **TRxx-F**



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

Type / WG01	Temperature Range	Thermal Operating Difference (fixed) approx.	Max. Capillary Temperature	Item No.	Price
TRxx-F				**TR** (External setting)	
TR-1-F	–35… +35 °C	3 K (± 1 K)	+60 °C	1102-1056-1110-100	**82,20 €**
TR-060-F	0… +60 °C	3 K (± 1 K)	+75 °C	1102-1050-1110-300	**82,20 €**
TR-090-F	0… +90 °C	3 K (± 1 K)	+120 °C	1102-1050-1110-400	**82,20 €**
TR-0120-F	0...+120 °C	5 K (± 1 K)	+135 °C	1102-1050-1110-500	**82,20 €**
TR-50140-F	+50...+140 °C	5 K (± 1 K)	+150 °C	1102-1050-1110-600	**82,20 €**
Extra charge:	**U** = Internal setting (**TW**), e. g. TR - 090 - F - U				**10,25 €**
ACCESSORIES					
THR-MS-08/150	Brass immersion sleeve, EL = 150 mm, Ø 8 x 0.5 mm			7100-0011-3404-000	**16,02 €**
THR-VA-09/150	Stainless steel immersion sleeve **V2A** (1.4301), EL = 150 mm, Ø 9 x 1.0 mm			7100-0012-3032-000	**42,22 €**
	For further information, see the last chapter!				