

Not
temperature
compensated

Electro-mechanical temperature control / safety temperature limiter

RAM742...
RAM743...

in protective housing, for mounting on pipes



Registered under DM/066 622

Electro-mechanical temperature control / safety temperature limiter

Application

For the use in heat generator plants and other heating, ventilating, and air conditioning applications. The device is mounted on a pipe by means of a bracket.

Features

- Fail-safe, manual reset types, contact 11-12 will open in case of capillary failure (STL)
- Nominal value irreversibly adjustable from higher to lower temperature (STL)
- Nominal value of TW / TB variably adjustable, non fail-safe type
- If nominal value is reached, the change-over switch is activated (TW-function), or the limiter switches and stays locked in this position (STL-function)
- Reset is performed manually and is only possible after the sensing element is cooled off by approx. 20 K (STL / TB-function)
- With compensation of ambient temperature (TW) at switching head and capillary (KTK)
- Single-pole micro switch with change-over switch
- Time factor of sensing element acc. EN 14597
- Operation type TW Type 2 B acc. EN 14597
- Operation type TB Type 2 B acc. EN 14597
- Operation type STL Type 2 BDFHKL acc. EN 14597

Type summary

Type	Order-no.	Range [°C]	Function
RAM742.000M	011-4451.10	-10...50	TW
RAM742.001M	011-4452.10	15...95	TW
RAM742.003M	011-4454.10	40...120	TW
RAM742.004M	011-4455.10	50...130	TW
RAM742.0/1982M	011-4472.10	5...65	TW
RAM743.404M	011-4482.10	130/120/110/100/95	STL
RAM743.0/3345M	011-4492.10	20...60	TB
RAM743.0/3346M	011-4493.10	50...130	TB

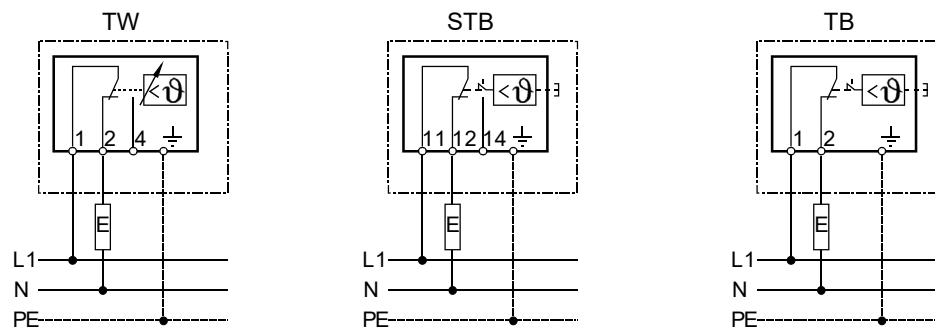
Technical data

Switching system	Switching capacity acc. VDE 0631	
	- Nominal voltage range	40...250 V~
	- Nominal current range I (I _M)	(TW / TB) 0.5...16(2.6) A
		(STL) 0.5...10(6.0) A
Service life at nominal load	(TW)	min. 100'000 operation
	(TB)	min. 10'000 operation
	(STL)	min. 15'000 operation
Protection class		I acc. VDE 0631
Protection mode of housing		IP66 acc. EN 60529
Application range	Adjustable cut-off temperature ϑ_{off}	see "Type summary"
	Thermal switching differential	approx. 4.0 K $\pm$ 2.0 K
	Ambient temperature on housing	max. 70 °C (T70)
	Max. sensing element temperature (TW / TB)	120...200 °C
	Max. sensing element temperature (STL)	180 °C
Calibration	Ambient temperature for storage and transport	-25...+75 °C
	Calibration tolerance (TW / TB)	$\pm$ 4 K
	Calibration tolerance (STL)	(0-9) K
	Calibrated for ambient temperature (TW / TB)	23 $\pm$ 2 °C (Tu23 acc. EN 14597)
	on switching head and capillary (STL)	37 $\pm$ 2 °C (Tu37 acc. EN 14597)
Specification	Time factor in water / in oil	<45 s / <60 s
	Switching head support (basic insulation)	ceramic
	Capillary	stainless steel
	Sensing element	copper
	Diaphragm	stainless steel
	Housing socket	Polyamide reinforced (PA), temperature stability up to 120 °C
	Housing cover	Polycarbonate (PC), temperature stability up to 120 °C
	Electrical connection	screw terminals
	Earth connection	screw terminals
	Cable bushing	M20
	Weight without packaging and accessories	approx. 255 gr.

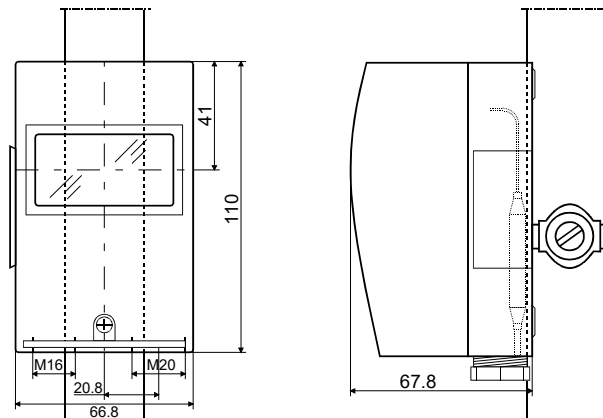
Fitting notes

See the mounting instructions inside the package.

Wiring diagram



Dimension drawing



Socket	005-1054
Cover	005-0551.3
Clamping band	005-0556