

Temperature  
compensated**Electro-mechanical temperature  
control / safety temperature limiter****RAM742...**  
**RAM743...**in protective housing, for mounting on pipes,  
with head temperature compensation**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 1-2 will open in case of capillary failure (STL)
- Nominal value adjustable from 90 °C...110 °C (STL)
- Nominal value of TW 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. 25 ± 5 K
- 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 STL      Type 2 BDFHKL      acc. EN 14597

**Type summary**

Type	Order-no.	Range [°C]	Function
RAM742.000A	011-7351.10	-5...50	TW
RAM742.001A	011-7352.10	10...95	TW
RAM742.004A	011-7355.10	40...130	TW
RAM743.404A	011-7382.10	110/100/90	STL

**Technical data**

## Switching system

Switching capacity acc. VDE 0631

- Nominal voltage range

24...250 V~

- Nominal current range I

(TW)

NC 0.5...10 A, NO 0.5...6 A

(STL)

NC 0.5...10 A, NO 0.5 A

Service life at nominal load

(TW)

min. 100'000 operation

(STL)

min. 15'000 operation

Protection class

I acc. VDE 0631

Protection mode of housing

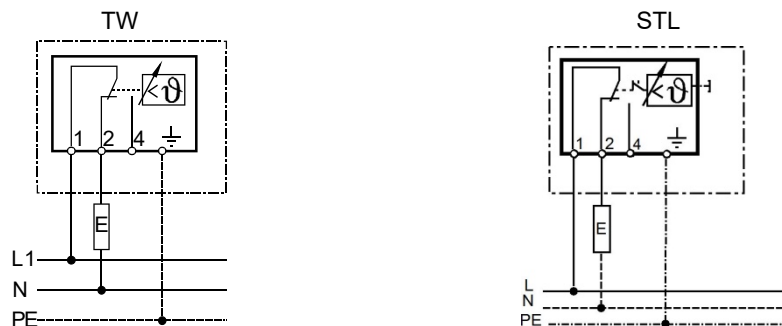
IP 66 acc. EN 60529

Application range	Adjustable cut-off temperature $\vartheta_{\text{off}}$	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)	Temperature range +20 %
	(STL)	130 °C
	Ambient temperature for storage and transport	-25...+75 °C
Calibration	Calibration tolerance (TW)	$\pm$ 4 K
	(STL)	(0-8) K
	Head temperature compensation	0.035 K/K
Specification	Time factor in water / in oil	<45 s / <60 s
	Switching head support (basic insulation)	ceramic
	Capillary	copper
	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 accesories	approx. 255 gr.

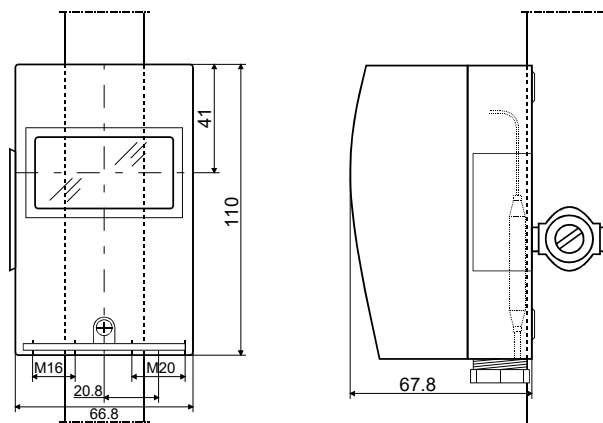
## Fitting notes

See the mounting instructions inside the package.

## Wiring diagram



## Dimension drawing



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