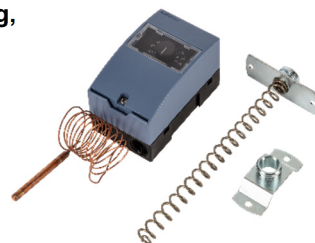


Temperature  
compensated

## Electro-mechanical temperature control / frost protection controller

RAK722...  
RAK732...

In protective housing, with accessories for on-wall mounting,  
with head temperature compensation


Registered under DM/066 622

Electro-mechanical temperature control acc. EN 14597

Electro-mechanical safety temperature limiter acc. EN 14597, fail-safe

### Application

For the use in heat generator plants and other heating, ventilating and air conditioning applications.  
The device is mounted on a bracket for on-wall fixing.

### 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)
- If nominal value is reached, the change-over switch is activated (TC-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 (STL-function)
- With compensation of ambient temperature at switching head and capillary (KTK)
- Single-pole micro switch with change-over switch
- Time factor of sensing element acc. EN 14597
- Operation STL      Type 2 BDFHKL      acc. EN 14597
- Operation TL      Type 2 B      acc. EN 14597

### Type summary

Type	Order-no.	Range [°C]	Immersion length
RAK722.0001A	011-7202.10	-5...50	1500mm
RAK722.0015A	011-7203.10	10...95	1000mm
RAK722.0045A	011-7205.10	40...130	1000mm
RAK723.0046A      (STB)	011-7232.10	90...110	1000mm
RAK722.0/1974A*	011-7260.10	-5...50	1500mm

\* for mounting on ducts, see dimension drawing

### Technical data

#### Switching system

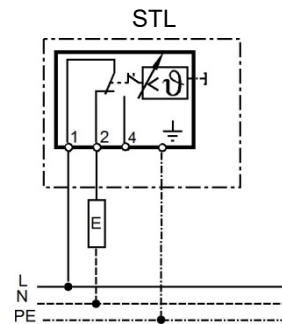
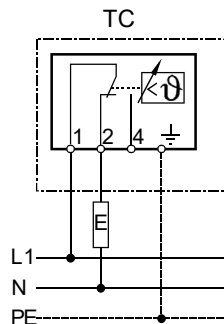
Switching capacity acc. VDE 0631		
- Nominal voltage range	(TC)	24...250 V~
- Nominal current range I	(STL)	NC 0.5...10 A, NO 0.5...6 A
Service live at nominal load	(TC)	min. 100'000 operation
	(STL)	min. 15'000 operation
Protection class		I acc. VDE 0631
Protection mode of housing		IP 66 acc. EN 60529

Application range	Adjustable cut-off temperature $\vartheta_{\text{off}}$	see "Type summary"
	Thermal switching differential	approx. $4.0\text{ K} \pm 2.0\text{ K}$
	Ambient temperature on housing	max. $70^{\circ}\text{C}$ (T70)
	Max. sensing element temperature (TC)	Temperature range $+20\%$
	(STL)	$130^{\circ}\text{C}$
	Ambient temperature for storage and transport	$-25\dots+75^{\circ}\text{C}$
Calibration	Calibration tolerance (TC)	$\pm 4\text{ K}$
	(STL)	$(0-8)\text{ K}$
	Head temperature compensation	$0.035\text{ K/K}$
	Time factor in water / in oil	$< 45\text{ s} / < 60\text{ s}$
Specification	Switching head support (basic insulation)	ceramic
	Capillary	copper
	Sensing element	copper
	Diaphragm	stainless steel
	Housing socket	Polyamide reinforced (PA), temperature stability up to $120^{\circ}\text{C}$
	Housing cover	Polycarbonate (PC), temperature stability up to $120^{\circ}\text{C}$
	Electrical connection	screw terminals
	Earth connection	screw terminals
	Cable bushing	M20
	Weight without packaging and accessories	approx. $255\text{ gr.}$

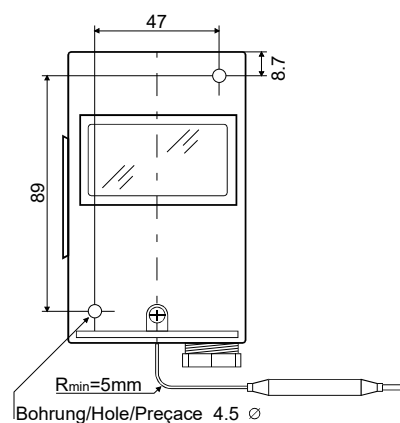
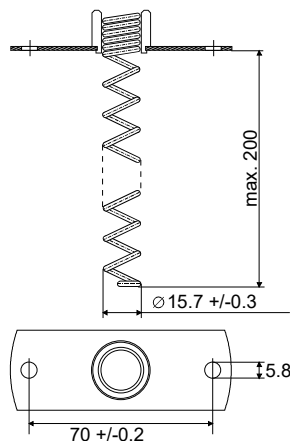
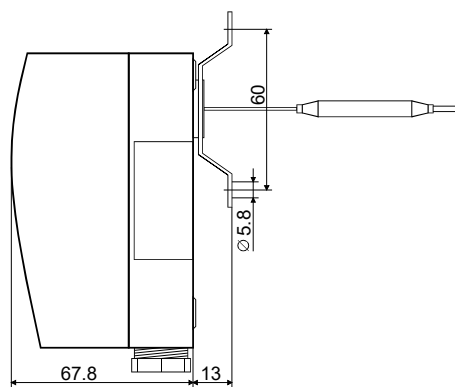
## Fitting notes

See the mounting instructions inside the package

## Wiring diagram



## Dimension drawing



Socle	005-1054
Cover	005-0551.3
Protection spring	005-0591
Mounting bracket	005-0412