

Temperature
compensatedElectro-mechanical
temperature control

RAK712...

in protective housing, for mounting on immersion tubes,
with head temperature compensation

Registered under DM/066 622

Electro-mechanical temperature control acc. EN 14597

Application

For the use in heat generator plants and other heating, ventilating and air conditioning applications. The device is mounted on an immersion tube.

Features

- If nominal value is reached, the limiter switches
- 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: Type 2 B, EN 14597

Type summary

Type	Order-no.	Range [°C]	Immersion length
RAK712.0000A	011-7000.10	-5...50	100mm
RAK712.0001A	011-7001.10	-5...50	150mm
RAK712.0002A	011-7002.10	-5...50	200mm
RAK712.0003A	011-7003.10	-5...50	280mm
RAK712.0004A	011-7004.10	-5...50	450mm
RAK712.0005A	011-7005.10	-5...50	600mm
RAK712.0010A	011-7006.10	10...95	100mm
RAK712.0011A	011-7007.10	10...95	150mm
RAK712.0012A	011-7008.10	10...95	200mm
RAK712.0013A	011-7009.10	10...95	280mm
RAK712.0014A	011-7010.10	10...95	450mm
RAK712.0015A	011-7011.10	10...95	600mm
RAK712.0030A	011-7019.10	40...130	100mm
RAK712.0031A	011-7020.10	40...130	150mm
RAK712.0032A	011-7021.10	40...130	200mm
RAK712.0033A	011-7022.10	40...130	280mm
RAK712.0034A	011-7023.10	40...130	450mm
RAK712.0035A	011-7024.10	40...130	600mm

Technical data

Switching system

Switching capacity acc. VDE 0631

- Nominal voltage range

- Nominal current range I

Service live at nominal load

Protection class

Protection mode of housing

24...250 V~

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

min. 100'000 operation

I acc. VDE 0631

IP 66 acc. EN 60529

Application range	Adjustable cut-off temperature ϑ_{off}	see "Type summary"
	Thermal switching differential	approx. $4.0 \text{ K} \pm 2.0 \text{ K}$
	Ambient temperature on housing	max. $70 \text{ }^{\circ}\text{C}$ (T70)
	Max. sensing element temperature	Temperature range $+20 \%$
	Ambient temperature for storage and transport	$-25 \dots +75 \text{ }^{\circ}\text{C}$
Calibration	Calibration tolerance	$\pm 4 \text{ K}$
	Head temperature compensation	0.035 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 $120 \text{ }^{\circ}\text{C}$
	Housing cover	Polycarbonate (PC), temperature stability up to $120 \text{ }^{\circ}\text{C}$
	Immersion length R of immersion tube	100, 150, 200, 280, 450 or 600 mm
	Electrical connection	screw terminals
	Earth connection	screw terminals
	Cable bushing	M20
	Weight without packaging and immersion tube	approx. 255 gr.

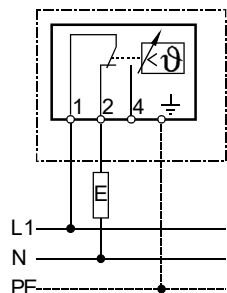
Fitting notes

See the mounting instructions inside the package.

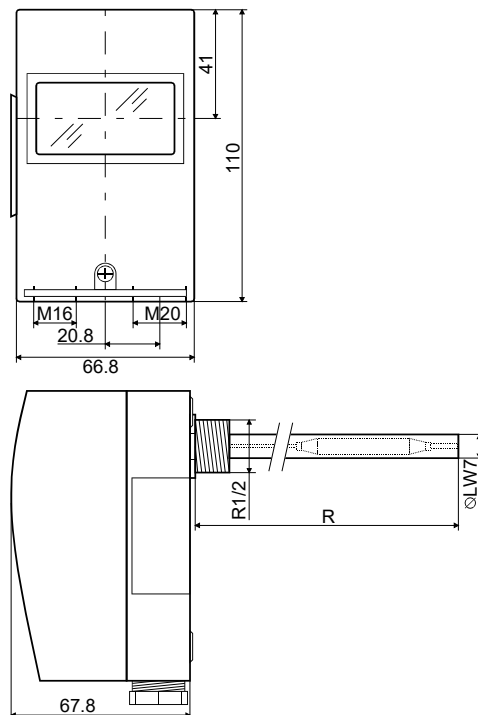
The immersion tube material depends on the installation (medium, tank material, etc.) and must be specified by the user.

To comply with the time factor requirements acc. EN 14597 the immersion tubes must conform to drawing H 1 7111 3459 (see also data sheet „Immersion tubes 1130“)

Wiring diagram



Dimension drawing



Socle 005-1054
Cover 005-0551.3