

Temperature
compensated

**Electro-mechanical
safety temperature limiter**

RAK713...

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



Version to EN 14597

and Pressure Equipment Directive 97/23/EC

Registered under DM/066 622

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 an immersion tube.

Features

- Fail-safe, manual reset types, contact 1-2 will open in case of capillary failure
- Nominal value adjustable from 90 °C...110 °C
- If nominal value is reached, the limiter switches and stays locked in this position
- Reset is performed manually and is only possible after the sensing element is cooled off by approx. 25 ± 5 K
- Single-pole micro switch with change-over switch
- Time factor of sensing element acc. EN 14597
- Operation: Type 2 BDEFHKL, EN 14597

Type summary

Type	Order-no.	Range [°C]	Immersion length
RAK713.0030A	011-7117.10	90...110	100mm
RAK713.0031A	011-7118.10	90...110	150mm
RAK713.0032A	011-7119.10	90...110	200mm
RAK713.0033A	011-7120.10	90...110	280mm
RAK713.0034A	011-7121.10	90...110	450mm
RAK713.0035A	011-7122.10	90...110	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 A
min. 15'000 operation
I acc. VDE 0631
IP 66 acc. EN 60529

Application range	Adjustable cut-off temperature ϑ_{off} Ambient temperature on housing Max. sensing element temperature Ambient temperature for storage and transport	see "Type summary" max. 70 °C (T70) 130 °C -25...+75 °C
Calibration	Calibration tolerance Head temperature compensation Time factor in water / in oil	(0-8) K 0.035 K/K <45 s / <60 s
Specification	Switching head support (basic insulation) Capillary Sensing element Diaphragm Housing socket Housing cover Immersion length R of immersion tube Electrical connection Earth connection Cable bushing Weight without packaging and immersion tube	ceramic copper copper stainless steel Polyamide reinforced (PA), temperature stability up to 120 °C Polycarbonate (PC), temperature stability up to 120 °C 100, 150, 200, 280, 450 or 600 mm screw terminals screw terminals M20 approx. 255 gr.

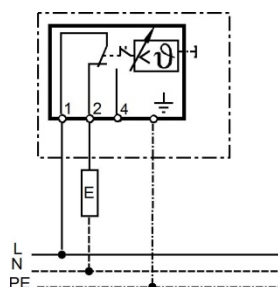
Fitting notes

See the mounting instructions inside the package.

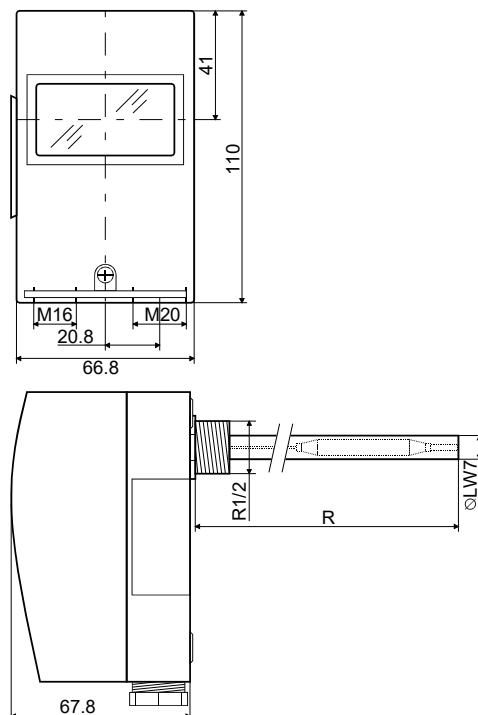
The immersion tube material depends on the installation (medium, tank material, etc.) and must be specified by the user.

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