
KRM Capillary tube thermostat 16 A

Features

- 16 A switching capacity
- Capillary tube length of 1600 mm giving installation flexibility
- Compact enclosure
- Double units are standard

Description

The weather-proof capillary tube thermostat, KRM, is a mechanical change-over controller housed in a polyester enclosure. Heaters, fans, motors and other equipment are energised and de-energised when temperatures fall below or rise above certain limits. It can also be used to control the temperature in air, liquids and on various surfaces.

Function

Any change in temperature at the sensor causes a change in the volume of fluid in the measuring system, which in turn results in a movement of the diaphragm membrane. This membrane is connected to a mechanical device that activates a microswitch. If the temperature at the sensor bulb exceeds the pre-set value, terminals 1 and 2 are opened. If the temperature falls below the minimum setting, the contacts automatically close.

Application example

The KRM thermostat can directly switch temperature-dependent equipment loads (heaters etc.) of up to 16 A. Higher switching currents of 3-phase applications are switched by means of a contactor.

Technical data

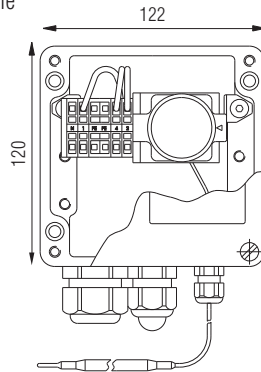
Temperature setting range	0 °C up to +100 °C	0 °C up to +300 °C
Rated voltage	AC 400 V/50 Hz	AC 400 V/50 Hz
Switching capacity	AC 230 V/16 A AC 400 V/10 A	AC 230 V/16 A AC 400 V/10 A
Supply cable, cross section	2.5 mm ²	2.5 mm ²
Protective earth terminal	4 x 2.5 mm ²	4 x 2.5 mm ²
Switching differential	ca. 3 K	ca. 8 K
Protection class according to EN 60529	IP 65	IP 65
Capillary tube length	1600 mm	1600 mm
Min. bend radius	20 mm	20 mm
Max. sensor temperature	+115 °C	+345 °C
Min. sensor temperature	-40 °C	-15 °C
Sensor diameter	6 mm	4 mm
Sensor length	140 mm	165 mm
Cable glands	1 x M25, clamping range 9 to 16 mm 1 x M20, clamping range 6 to 12 mm	
Cable glands KRM, single	1 x M25, 1 x M20	
KRM combination	1 x M25, 2 x M20 2 x M20 blanking plug included	

Electrical data

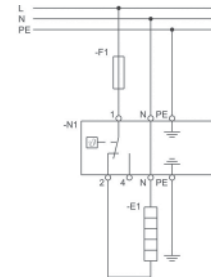
Contacts	1 change-over contact
Terminals	4 x 2.5 mm ² + 2 PE
Application temperature range	-20 °C up to +65 °C

Dimensions (mm)

KRM, single



Circuit diagram

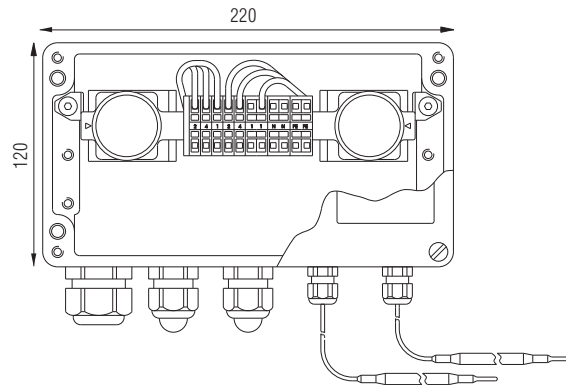


ϑ actual < ϑ setpoint \Rightarrow NC 1-4

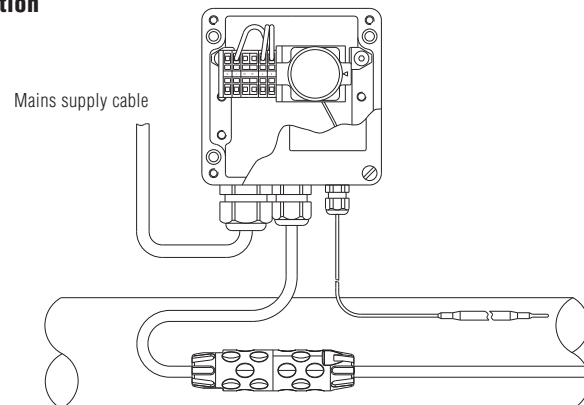
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Dimensions (mm)

KRM, double



Typical installation



Selection chart

Designation	Temperature setting range	➔ Order no.
1 thermostat in polyester enclosure GRP 122 x 120 x 90	0 °C up to +100 °C	27-6AA3-61522000
1 thermostat in polyester enclosure GRP 122 x 120 x 90	0 °C up to +300 °C	27-6AA3-615B2000
2 thermostats in polyester enclosure GRP 220 x 120 x 90	2 x 0 °C up to +100 °C	27-6AK3-61622000
2 thermostats in polyester enclosure GRP 220 x 120 x 90	2 x 0 °C up to +300 °C	27-6AK3-616B2000
2 thermostats in polyester enclosure GRP 220 x 120 x 90	1 x 0 °C up to +100 °C 1 x 0 °C up to +300 °C	27-6AK3-61602P2B