

KRM Capillary tube thermostat

Closed-loop and Open-loop Control System, 16 A



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.

- 16 A switching capacity
- Compact enclosure
- Double units are standard

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Technical data

Temperature setting range	-20°C to 50°C	0 °C to +100 °C	0 °C to +300 °C
Rated voltage	AC 400 V/50 Hz	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	AC 230 V/16 A AC 400 V/10 A
Supply cable, cross section	2.5 mm²	2.5 mm²	2.5 mm²
Protective earth terminal	4 x 2.5 mm²	4 x 2.5 mm²	4 x 2.5 mm²
Switching differential	approx. 4 K	approx. 3 K	approx. 8 K
Protection class according to EN 60529	IP 65	IP 65	IP 65
Capillary tube length	1600 mm	1600 mm	1600 mm
Min. bend radius	20 mm	20 mm	20 mm
Max. sensor temperature	+70 °C	+115 °C	+345 °C
Min. sensor temperature	-40 °C	-40 °C	-15 °C
Sensor diameter	6 mm	6 mm	4 mm
Sensor length	135 mm	140 mm	
Sensor material	SS	SS	SS
Cable glands clamping range	M25, 9 to 16 mm M20, 6 to 12 mm		
Cable glands Installed	KRM single 1 x M25, 1 x M20 1 x M25, 1 x M20 KRM combination 1 x M25, 2 x M20, 2 x M20 (blanking plug included)		

Dimensions (mm) KRM, single







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Circuit diagram



Typical installation



Ordering information

	Dimensions (mm)	Temperature setting range	Order no.
1 thermostat in polyester enclosure GRP	122 x 120 x 90	-20 °C to +50 °C	27-6AA3-615D2000
1 thermostat in polyester enclosure GRP	122 x 120 x 90	0 °C to +100 °C	27-6AA3-61522000
1 thermostat in polyester enclosure GRP	122 x 120 x 90	0 °C to +300 °C	27-6AA3-615B2000
2 thermostats in polyester enclosure GRP	220 x 120 x 90	2 x-20 °C to +50 °C	27-6AK3-616D2000
2 thermostats in polyester enclosure GRP	220 x 120 x 90	2 x 0 °C to +100 °C	27-6AK3-61622000
2 thermostats in polyester enclosure GRP	220 x 120 x 90	2 x 0 °C to +300 °C	27-6AK3-616B2000
2 thermostats in polyester enclosure GRP	220 x 120 x 90	1 x 0 °C to +100 °C 1 x 0 °C to +300 °C	27-6AK3-61602P2B