MECHANICAL THERMOSTAT

FZK 011 | 01170.0-01



The set value corresponds to the upper switching point, where the normally closed contact opens. The set value minus the switching temperature differential of 5 K (and tolerances) corresponds to the lower switching point, where the normally closed contact closes. The mechanical thermostat is used to control heating, cooling devices, filter fans or signal transmitters.

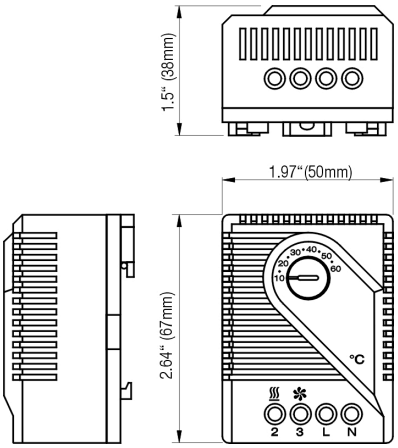
- Adjustable temperature
- Small hysteresis enables precise control
- High switching capacity
- Changeover contact (heating or cooling)
- Clip mounting

OVERVIEW TECHNICAL DATA

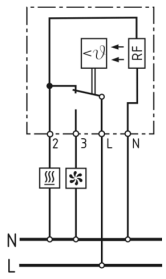
Device type	Thermostats
Setting range	40 °F - 140 °F
Contact type	Snap-action contact
Sensor	Thermostatic bimetal
Protection type	IP20
Casing	Plastic to UL94 V-0, light grey
AC/DC	AC
Operating voltage	230 V
Inrush current	16 A
Inrush current duration	10 s
Switching capacity	Normally closed: AC 10 (4) A, DC 30 W; Normally open: AC 5 (2) A, DC 30 W
Switching current ohmic	10 A(NC)
Switching current 2 ohmic	5 A(NO)
Reference voltage ohmic	250 VAC
Reference voltage 2 ohmic	120 VAC
Switching current inductive	4 A(NC)
Switching current 2 inductive	2 A(NO)
Reference voltage inductive maximum	250 VAC
Reference voltage 2	120 VAC
Switching current dc ohmic	1 A
Reference voltage dc ohmic	30 VDC
Minimal switching capacity	0,48 W
Reference voltage	24 V
Switching current	10 mA

Service life	>100000 cycles
Switching differential	5 K
Switching differential tolerance	-3/+2 K
Operating temperature	-45 °C - 65 °C
Operating humidity	≤90 % RH
Storage humidity	≤90 % RH
Storage temperature	-45 °C - 65 °C
Torque	0,5 Nm max.
Connection	4-pole clamp: Rigid wire/stranded wire² 2.5 mm² (AWG 14)
Design	Changer
Mounting	Clip for 35 mm DIN rail, EN 60715
Height	67 mm
Width	50 mm
Depth	38 mm
Weight	100 g
Note	The controller's contact system is exposed to environmental influences, which can change the contact resistance. This can lead to a voltage drop and/or self-heating of the contacts. During usage of the NC (normally closed) contact, there is the possibility of thermal return to reduce the switching temperature differential by connecting the clamp "N" (RF heating resistor). It depends on the ambient conditions and must be determined in tests for the respective application. Wire end ferrules must be used for connections with stranded wires.

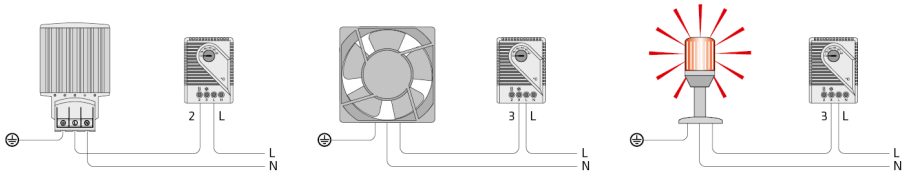
TECHNICAL DRAWINGS



Connection diagram



Heater
Filter fan, cooling equipment, signal device



Connection examples