

SMALL COMPACT THERMOSTAT

KT011-Series



- > Safe wiring with Push-In connection terminal
- > Faster and tool-free wiring
- > Improved air intakes for ventilation

- > Easy adjustability of switch temperature setting
- > for use in up to 5,000 m altitude

The mechanical thermostats KTO 111 and KTS 111 are two state regulators for use up to 5,000 meters in altitude, thanks to optimised air gap and increased creepage distance. By use of Push-In terminals the thermostat is wired tool-free. The Push-In terminals provide constant pressure on the wires to prevent them from coming loose (e.g. during transport).

Normally closed: Thermostat (NC); contact breaker for regulating heaters. The contact opens when temperature is rising.

Normally open: Thermostat (NO); contact maker for regulating of filter fans and heat exchangers or for switching signal devices when temperature limit has been exceeded. The contact closes when temperature is rising.

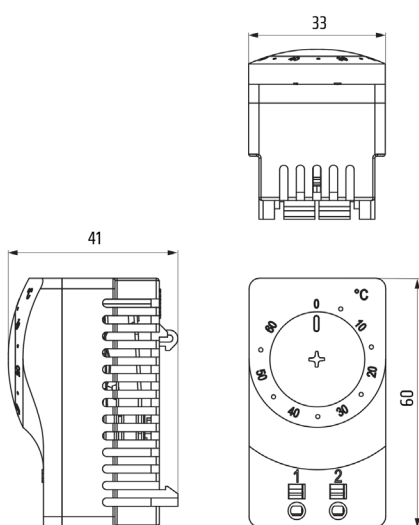


TECHNICAL DATA

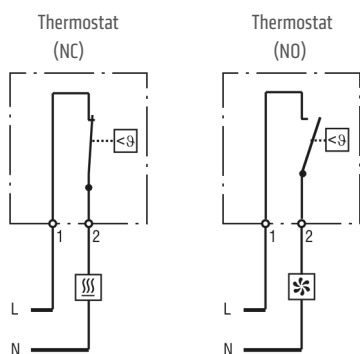
Switch temperature difference	7 K (± 4 K tolerance)
Sensor element	thermostatic bimetal
Contact type	snap-action contact
Service life	100,000 cycles verified
Max. operating voltage, frequency range	AC 250 V, 50-60 Hz
Max. inrush current	AC 16 A for 10 sec.
Connection ¹	2 Push-In clamps rigid wire 2.5 mm ² (AWG 14) stranded wire 1.5 mm ² (AWG 16)
Mounting	clip for 35 mm DIN rail, EN 60715
Casing	plastic according to UL94 V-0, light grey
Dimensions	60 x 33 x 41 mm
Weight	approx. 40 g
Fitting position	variable
Operating/Storage temperature	-45 to +80 °C (-49 to +176 °F)
Operating/Storage humidity	max. 90 % RH (non-condensing)
Protection type/Protection class	IP20 / II
Overvoltage category/Altitude	II: up to 5,000 m; III: up to 2,000 m

¹ Stripped length of rigid wire: 10 to 12 mm. When connecting with wires, wire end ferrules must be used (square or trapezoid crimp). Length of wire end ferrule: 10 mm or 12 mm.

Important note: The contact system of the regulator is subjected to environmental influences, thus the contact resistance may change. This can lead to a voltage drop and/or self-heating of the contacts.



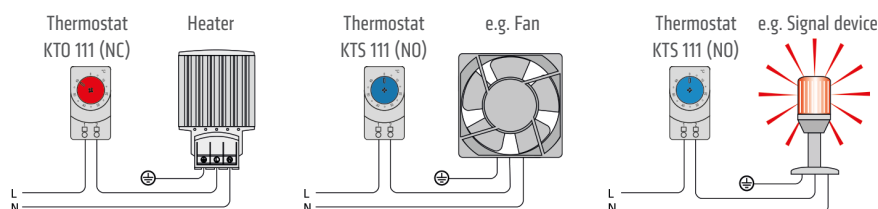
Connection diagrams



Heater

Filter fan, Cooling equipment, Signal device

Examples of connection



Setting range	Art. No. Contact breaker (NC)	Art. No. Contact maker (NO)	Switching current ² /capacity max			Approvals		
			AC 250 V	AC 120 V	DC 24-72 V			
+32 to +140 °F	KT011409-U	KT011419-U	10 (2) A	15 (2) A	30 W	VDE	UL File No. E164102	EAC
0 to +60 °C	KT011469-U	KT011479-U	10 (2) A	15 (2) A	30 W	VDE	UL File No. E164102	EAC

² The level of switching current has an influence on the tolerance accuracy;

SMALL THERMOSTAT

KT011 Series



- ✓ Compact Design
- ✓ Wide Adjustment Range
- ✓ Available with °C or °F Scale
- ✓ Color Coded Temperature Dials
- ✓ DIN Rail Mountable

Thermostat “NC” (Normally Closed):

Thermostat opens at temperature.
Comes with a RED temperature dial.

Thermostat “NO” (Normally Open):

Thermostat closes at temperature rise.
Comes with a BLUE temperature dial.

Specifications

Sensor Element: Thermostatic bi-metal

Maximum Tolerance: $\pm 7^{\circ}\text{F}$ (4K)

Switching Difference (Hysteresis):
 $12.6^{\circ}\text{F} \pm 5.4^{\circ}\text{F}$ ($7^{\circ}\text{C} \pm 3\text{K}$)

Service Life: 100,000 cycles

Switching Capacity (Max Load):

15 A resistive/2 A inductive @ 120 Vac
10 A resistive/2 A inductive @ 250 Vac
DC 30W

Minimum Load: 20 mA (all voltages)

Connections: 2-pole terminal for AWG 14 max [2.5 mm² (0.10 in²)]

Mounting: Clip for 35 mm (1.4") DIN rail (EN 50022)

Dimensions: 60 H x 33 W x 43 mm D
(2.4 x 1.3 x 1.7")

Housing: Plastic, UL94V-0

Weight: 40 g (1.4 oz)

Protection Type: NEMA 2 (IP20)

Operating Temperature: -45 to 70°C
(-49 to 158°F)

Storage Temperature: -45 to 70°C
(-49 to 158°F)

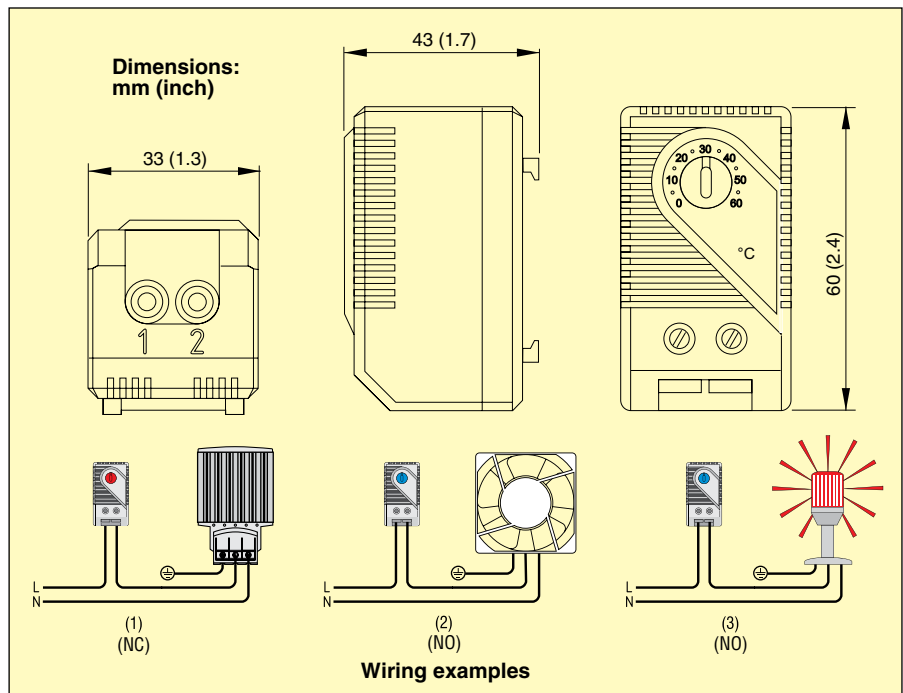
Note: Specifications are subject to change without notice. Suitability of this product for its intended use and any associated risks must be determined by the end customer/buyer in its final application.



KT011469
shown actual size.



KT011479
shown actual size.



To Order Visit omega.com/kt011_series for Pricing and Details

Model No.	Description
KT011409	Thermostat, NC—open on rise, 32 to 140°F
KT011419	Thermostat, NO—close on rise, 32 to 140°F
KT011469	Thermostat, NC—open on rise, 0 to 60°C
KT011479	Thermostat, NO—close on rise, 0 to 60°C

Comes complete with operator's manual.

Ordering Examples: KT011409, thermostat, NC—open on rise, 32 to 140°F.

KT011479, thermostat, NO—close on rise, 0 to 60°C.