

Compact Thumbwheel Thermostats



011159-00 and 011150-00



011169-00 and 011160-00

Applications

Normally Closed (N.C.)

Normally Closed thermostats have a red adjustment thumbwheel and contacts that open when the air temperature rises above the setpoint. Uses may include regulating heaters or switching signal devices when temperature falls below the setpoint value.

Normally Open (N.O.)

Normally Open thermostats have a blue adjustment thumbwheel and contacts that close when the air temperature rises above the setpoint. Uses may include regulating cooling devices (heat exchangers, filter fans, or vortex coolers, etc) or for include switching signal devices when temperature rises above the maximum setpoint.

Features

- Compact design
- Adjustable thumbwheel setting
- DIN rail mounting
- SPST regulator with small hysteresis
- Housing design ensures optimized circulation around sensor element



Compact Thumbwheel Thermostats Specifications

Switching Difference	7°F [4K]
Switching Tolerance	±5.4°F [±3K]
Sensor Element	Thermostatic bimetal
Contact Type	Snap-action contact
Contact Resistance	<10 mΩ
Service Life	>100,000 cycles
Max. Switching Capacity	15A resistive / 2A inductive @ 120 VAC 10A resistive / 2A inductive @ 250 VAC DC 30W (24-72 VDC)
Max. Inrush Current	AC 16A for 10 sec.
Minimum Load	20mA (all voltages)
Connection	2-pole terminal, 1 Nm max. clamping torque 14 AWG [2.5mm] max. solid wire or stranded wire with wire end ferrule
Housing	Plastic, UL 94V-0, light gray
Mounting	Clip for 35mm DIN rail, EN 60715
Mounting Position	Vertical
Operating / Storage Temperature	-49 to 176°F [-45 to 80°C]
Weight	1.8 oz [50 g]
Protection Type	IP20
Approvals	Recognized File No. E164102, CE, VDE, EAC, RoHS 2 compliant

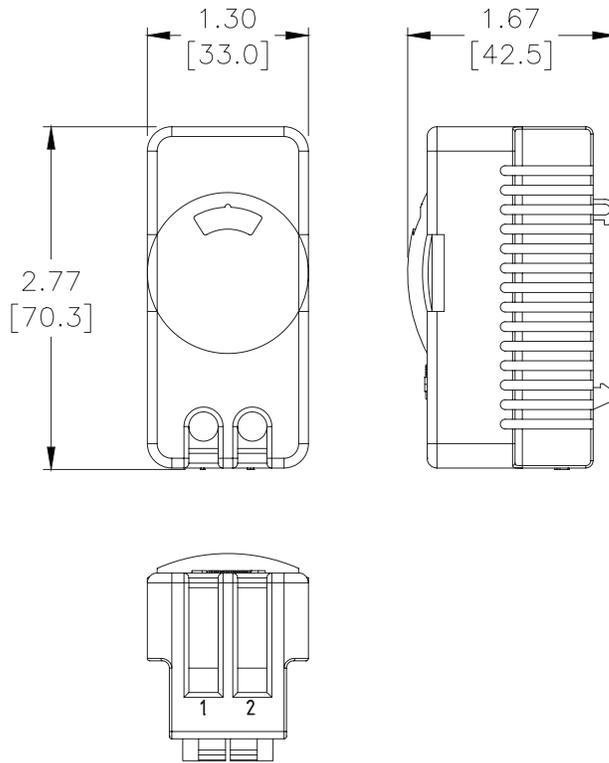
Compact Thumbwheel Thermostats

Part Number	Price	Contact	Setting Range
011159-00		N.C.	32 to 140°F
011150-00			0 to 60°C
011169-00		N.O.	32 to 140°F
011160-00			0 to 60°C

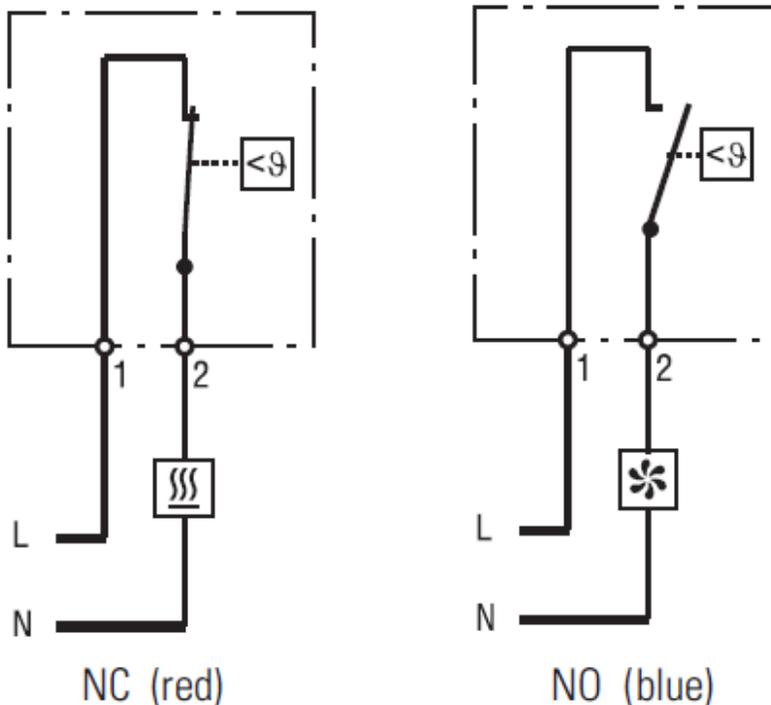
Compact Thumbwheel Thermostats



Dimensions



Wiring Diagram



Adjustable Thermostats



[111000-00](#), [111000-01](#), [111000-02](#),
[111009-00](#), and [111009-01](#)



[111010-00](#), [111010-01](#), [111010-02](#),
[111019-00](#), and [111019-01](#)

Applications

Normally Closed (N.C.)

Normally Closed adjustable thermostats have a red adjustment dial and contacts that open when the air temperature rises above the setpoint. Uses may include regulating heaters or switching signal devices when temperature falls below the setpoint value.

Normally Open (N.O.)

Normally Open adjustable thermostats have a blue adjustment dial and contacts that close when the air temperature rises above the setpoint. Uses may include regulating cooling devices (heat exchangers, filter fans vortex coolers, etc), or switching signal devices when temperature rises above the setpoint value.

Features

- Compact design
- Wide adjustment range
- Color coded temperature dials
- DIN rail mounting
- Push-in terminals for tool-free installation
- For use up to 16,400 ft. [5000 m] altitude



General Specifications

Switching Difference	12.6°F [7K]
Switching Tolerance	±7°F [±4K]
Sensor Element	Thermostatic bimetal
Contact Type	Snap-action contact
Service Life	>100,000 cycles
Max. Inrush Current	AC 16A for 10 sec.
Max. Operating Voltage	250 VAC
Connection	2-pole terminal, push-in terminal 14 AWG [2.5mm] max. solid/stranded wire
Housing	Plastic, UL 94V-0, light gray
Mounting	Clip for 35mm DIN rail, EN 60715
Mounting Position	Variable
Operating / Storage Temperature	-49 to 176°F [-45 to 80°C]
Weight	0.09 lb [40 g]
Protection Type	IP20
Approvals	CE, CSA, VDE, EAC, UL Recognized File No. E164102; RoHS 2 compliant

Note: When using stranded wire, wire-end ferrules (square or trapezoid crimp) must be used.

Adjustable Thermostats

Part Number	Price	Contact	Setting Range	Max. Switching Capacity	Drawing Link
111000-00		N.C.	0 to 60°C	15A resistive / 2A inductive at 120 VAC, 10A resistive / 2A inductive at 250 VAC, 30W DC	PDF
111000-01			-10 to 50°C		PDF
111000-02			20 to 80°C	3A resistive / 2A inductive at 120 VAC, 3A resistive / 2A inductive at 250 VAC, 30W DC	PDF
111009-00			32 to 140°F		PDF
111009-01			14 to 122°F		PDF
111010-00		N.O.	0 to 60°C	15A resistive / 2A inductive at 120 VAC, 10A resistive / 2A inductive at 250 VAC, 30W DC	PDF
111010-01			-10 to 50°C		PDF
111010-02			20 to 80°C	3A resistive / 2A inductive at 120 VAC, 3A resistive / 2A inductive at 250 VAC, 30W DC	PDF
111019-00			32 to 140°F		PDF
111019-01			14 to 122°F		PDF

Dual Adjustable Thermostats



Applications

This unit houses two separate thermostats, allowing independent control of heating, cooling or other equipment.

Normally Closed (N.C.)

Normally Closed (N.C.) thermostats have a red adjustment dial and contacts that open when the air temperature rises above the setpoint. N.C. thermostats are used for regulating heaters or for switching signal devices when the temperature falls below the setpoint temperature.

Normally Open (N.O.)

Normally Open (N.O.) thermostats have a blue adjustment dial and contacts that close when the air temperature rises above the setpoint. N.O. thermostats are used for regulating cooling devices (heat exchangers, filter fans, vortex coolers, etc) or for switching signal devices when the temperature rises above the setpoint temperature.

Features

- N.C. and N.O. in one unit
- Compact design
- Separate adjustable temperatures
- Color coded temperature dials
- DIN rail mounting



011720-01



011760-00

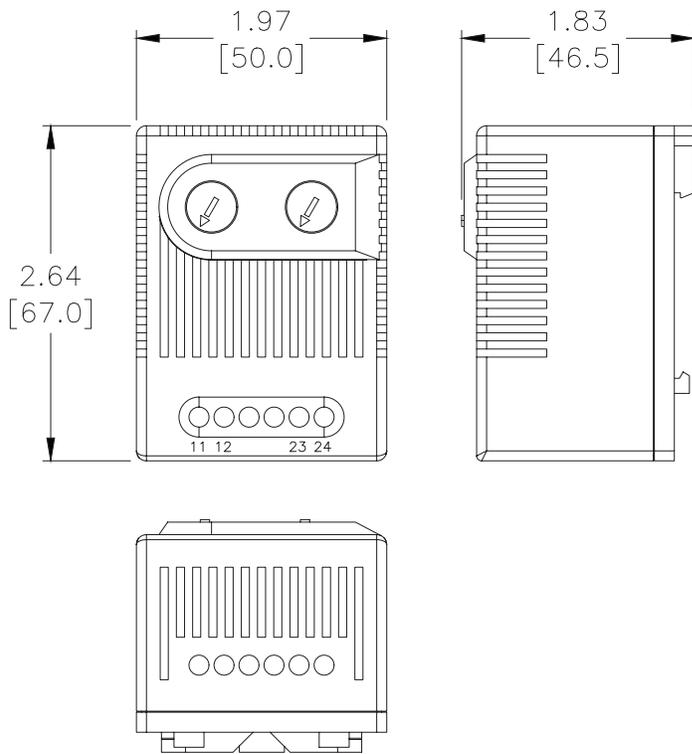
Dual Adjustable Thermostats Specifications	
Switching Difference	12.6°F [7K]
Switching Tolerance	±7°F [± 4K]
Sensor Element	Thermostatic bimetal
Contact Type	Snap-action contact
Contact Resistance	<10 mΩ
Service Life	>100,000 cycles
Max. Switching Capacity	NC: 10A resistive / 2A inductive @ 250VAC NO: 5A resistive / 2A inductive @ 250VAC 15 resistive / 2A inductive @ 120VAC DC 30W (24-72 VDC)
Max. Inrush Current	AC 16A for 10 sec.
Minimum Load	20mA (all voltages)
Connection	4-pole terminal, 0.5 Nm max. clamping torque; 14 AWG [2.5mm] max. solid wire 16 AWG [1.5mm ²] max. stranded wire with wire end ferrule
Housing	Plastic, UL 94V-0, light gray
Mounting	Clip for 35mm DIN rail, EN 60715
Mounting Position	Vertical
Operating / Storage Temperature	-49 to 176°F [-45 to 80°C]
Weight	0.2 lb [90 g]
Protection Type	IP20
Approvals	CE, CSA, VDE, EAC, UL Recognized File No. E164102, RoHS 2 compliant

Dual Adjustable Thermostats					
Part Number	Price	Left Contact	Setting Range	Right Contact	Setting Range
011720-00		N.C.	0 to 60°C	N.O.	0 to 60°C
011720-01			32 to 140°F		32 to 140°F
011750-00			-10 to 50°C		20 to 80°C
011750-01			14 to 122°F		68 to 176°F
011760-00		N.O.	0 to 60°C		0 to 60°C
011760-01			32 to 140°F		32 to 140°F

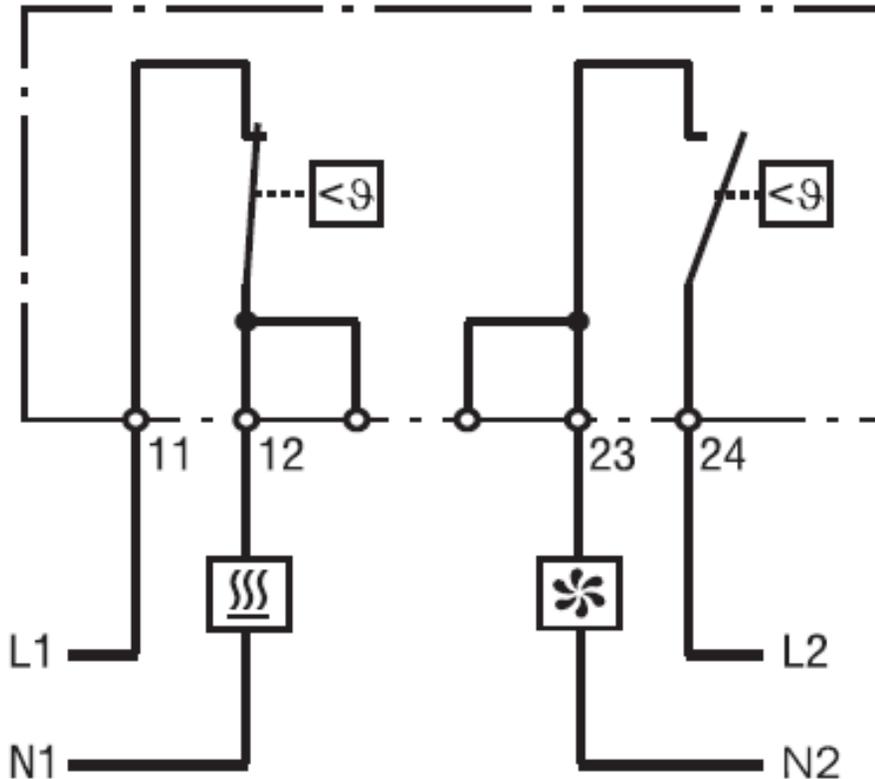
Dual Adjustable Thermostats



Dimensions



Wiring Diagram



Smart Sensor For Temperature and Humidity



014202-00

Applications

The compact Smart Sensor electronically measures temperature and humidity and converts measured data into a standardized analog 4 to 20 mA signal or an IO-Link protocol signal. The converted value signals can be used and processed by a control monitoring unit, e.g., a PLC control (*IO-Link devices require an IO-Link Master to communicate with a PLC*). The Smart Sensor is suitable for use in a wide variety of applications and can be used even in harsh environmental conditions, such as wind power.

Features

- Analog/I/O-Link digital interface
- Compact size
- DIN rail and/or screw mount
- High accuracy
- Quick connection (M12 plug-in connector)
- Wide temperature and humidity range
- Various application areas (IEC 61010-1/DIN EN 61010-1)

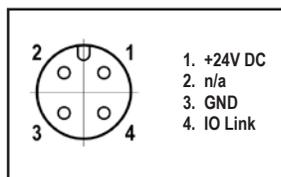
Listings

- UL Recognized File E500143

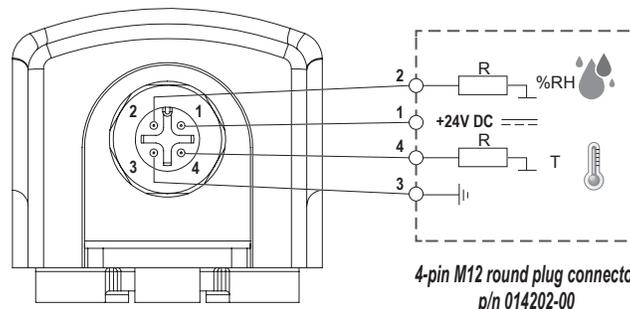


Smart Sensors			
Part Number	Price	Output	Drawing Link
014202-00		4-20 mA, 2 channel	PDF
014112-00		I/O-Link	PDF

General Specifications	
Operating Voltage	24 VDC
Temperature Measuring Range	-40 to 140°F [-40 to 60°C] ±1 K tolerance
Humidity Measuring Range	0 to 100 % RH ±4 % RH tolerance
Max. Reaction Time	3 minutes.
Load Resistance (External)	≤ 500 Ω
Max. Power Consumption	1.8 W (typically 0.4 W)
Connection	M12 round plug connector, IEC 61076-2-101, 4-pin, A-coded, shielded
Electrical Protection	Reverse-polarity, short circuit, overvoltage protection
Mounting	Clip for 35mm DIN rail, EN 60715 and screw mount (M5, not included)
Housing	Plastic, UL94 V-0, light gray
Dimensions	5.5 x 1.6 x 1.5in [140 x 40 x 38mm]
Weight	Approx. 1.8 oz. [50g]
Mounting Position	Vertical (connection on top)
Operating Temperature	-40 to 158°F [-40 to 70°C]
Storage Temperature	-40 to 185°F [-40 to 85°C]
Operating / Storage Humidity	Max. 90% RH (non-condensing)
Protection Class	III (SELV)
Protection Type	IP20
Approvals	EAC, CE, VDE, UL File Recognized File E500143), (acc. to IEC 61010-1 / DIN EN 61010-1)



4-pin M12 round plug connector
p/n 014112-00



Mechanical Thermostats



Applications

The STEGO mechanical thermostat is used for controlling heating and cooling equipment, filter fans or signal devices where a higher° of sensing accuracy is required. An integrated resistor (RF) can be connected to improve the switch temperature difference (see Option note). The thermostat registers the surrounding air and can switch both inductive and resistive loads via snap-action contact.

Features

- Compact design
- Adjustable setting dial
- DIN rail mounting
- High switching capacity



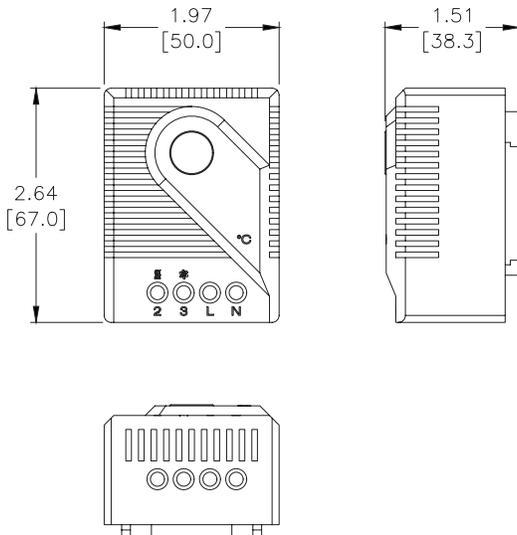
Mechanical Thermostats			
Part Number	Price	Operating* Voltage	Setting Range
011700-00		230VAC	5 to 60°C
011700-01			40 to 140°F
011709-00		120VAC	40 to 140°F
011709-01			5 to 60°C

Note: *Voltage only needs to be specified if the optional use of the RF register is desired.

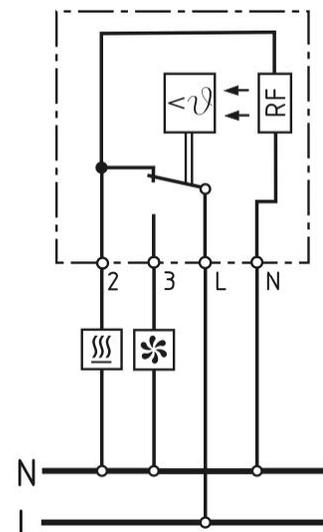
Mechanical Thermostats Specifications	
Switching Difference	9°F [5K]
Switching Tolerance	-5.4/+3.6°F [-3/+2°K]
Sensor Element	Thermostatic bimetal
Contact Type	SPDT / change-over contact
Contact Resistance	<10 mΩ
Service Life	>100,000 cycles
Max. Switching Capacity, NC	10A resistive / 4A inductive @ 120VAC 10A resistive / 4A inductive @ 250VAC DC 30W (24-72 VDC)
Max. Switching Capacity, NO	5A resistive / 2A inductive @ 120VAC; 5A resistive / 2A inductive @ 250VAC; DC 30W (24-72 VDC)
Connection	4-pole terminal, 0.5 Nm max. wire or clamping torque 14 AWG [2.5mm ²] max. solid wire or stranded wire with wire end ferrule
Housing	Plastic, UL 94V-0, light gray
Mounting	Clip for 35mm DIN rail, EN 60715
Mounting Position	Vertical
Operating / Storage Temperature	-49 to 149°F [-45 to 65°C]
Weight	1.8 oz [50 g]
Protection Type	IP20
Approvals	Recognized File No. E164102, CE, EAC, RoHS 2 compliant

Note: If the Normally Closed contact is used, the switch temperature difference could be reduced by connecting terminal "N" (RF heating resistor). It causes the thermal feedback, which is subject to surrounding conditions and thus has to be determined for each application.

Dimensions



Wiring Diagram



Electronic Thermostats



011900-00

Applications

- Used for regulating high-performance DC 24V equipment
- Heating or cooling equipment, and signal devices can be switched via the SPDT (change-over) contact

Features

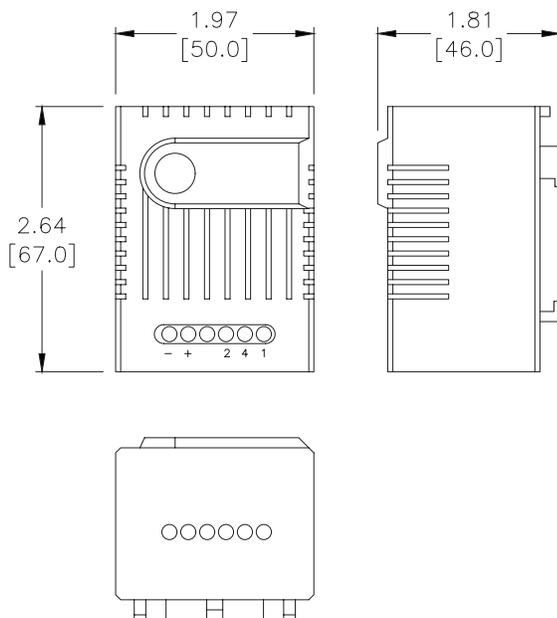
- Compact design
- Adjustable setting dial
- DIN rail mounting
- Low hysteresis
- Wide adjustment range



Electronic Thermostat			
Part Number	Price	Operating Voltage	Setting Range
011900-00		DC 24V (DC 20-28V)	0 to 60°C
011900-01			32 to 140°F

Electronic Thermostats Specifications	
Switching Difference	5.4°F [3K]
Switching Tolerance	±1.8°F [±1K]
Sensor Element	PTC
Contact Type	SPDT / change-over contact
Service Life	>100,000 cycles
Max. Switching Capacity	16A @ DC 28V
Max. Inrush Current	DC 16A
Connection	5-pole terminal, 0.5 Nm max. clamping torque 14 AWG [2.5mm ²] max. solid wire 16 AWG [1.5mm ²] max. stranded wire with wire end ferrule
Housing	Plastic, UL 94V-0, light gray
Mounting	Clip for 35mm DIN rail, EN 60715
Mounting Position	Vertical
Operating / Storage Temperature	14 to 140°F [-10 to 60°C] / -49 to 176°F [-45 to 80°C]
Operating / Storage Humidity	Max 95% RH (non-condensing)
Weight	2.4 oz [70 g]
Protection Type	IP20
Approvals	CE, EAC, RoHS 2 compliant

Dimensions



Wiring Diagram

