

# 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

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

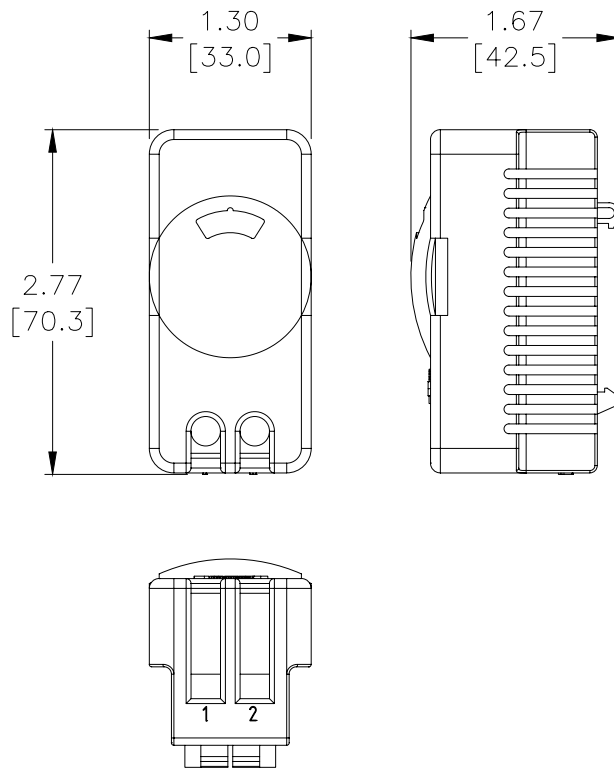
## Compact Thumbwheel Thermostats

Part Number	Price	Contact	Setting Range
<a href="#">011159-00</a>	\$;1op[:	N.C.	32 to 140°F
<a href="#">011150-00</a>	\$1opz:		0 to 60°C
<a href="#">011169-00</a>	\$1op_:	N.O.	32 to 140°F
<a href="#">011160-00</a>	\$;1op[:		0 to 60°C

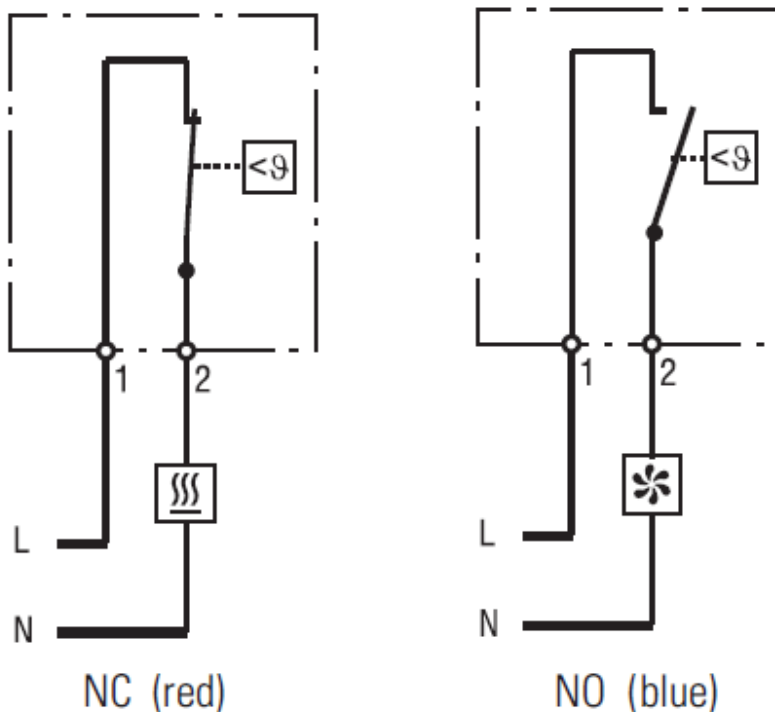
# Compact Thumbwheel Thermostats



## 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

<b>Switching Difference</b>	12.6°F [7K]
<b>Switching Tolerance</b>	±7°F [ ±4K]
<b>Sensor Element</b>	Thermostatic bimetal
<b>Contact Type</b>	Snap-action contact
<b>Service Life</b>	>100,000 cycles
<b>Max. Inrush Current</b>	AC 16A for 10 sec.
<b>Max. Operating Voltage</b>	250 VAC
<b>Connection</b>	2-pole terminal, push-in terminal 14 AWG [2.5mm] max. solid/stranded wire
<b>Housing</b>	Plastic, UL 94V-0, light gray
<b>Mounting</b>	Clip for 35mm DIN rail, EN 60715
<b>Mounting Position</b>	Variable
<b>Operating / Storage Temperature</b>	-49 to 176°F [-45 to 80°C]
<b>Weight</b>	0.09 lb [40 g]
<b>Protection Type</b>	IP20
<b>Approvals</b>	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
<u><a href="#">111000-00</a></u>	\$-5i0h:	N.C.	0 to 60°C	15A resistive / 2A inductive at 120 VAC, 10A resistive / 2A inductive at 250 VAC, 30W DC	<u><a href="#">PDF</a></u>
<u><a href="#">111000-01</a></u>	\$-5i0i:		-10 to 50°C		<u><a href="#">PDF</a></u>
<u><a href="#">111000-02</a></u>	\$-5i0j:		20 to 80°C	3A resistive / 2A inductive at 120 VAC, 3A resistive / 2A inductive at 250 VAC, 30W DC	<u><a href="#">PDF</a></u>
<u><a href="#">111009-00</a></u>	\$-5i0k:		32 to 140°F	15A resistive / 2A inductive at 120 VAC, 10A resistive / 2A inductive at 250 VAC, 30W DC	<u><a href="#">PDF</a></u>
<u><a href="#">111009-01</a></u>	\$-5i0l:		14 to 122°F		<u><a href="#">PDF</a></u>
<u><a href="#">111010-00</a></u>	\$-5i0n:	N.O.	0 to 60°C		<u><a href="#">PDF</a></u>
<u><a href="#">111010-01</a></u>	\$-5i0o:		-10 to 50°C		<u><a href="#">PDF</a></u>
<u><a href="#">111010-02</a></u>	\$-5i0p:		20 to 80°C	3A resistive / 2A inductive at 120 VAC, 3A resistive / 2A inductive at 250 VAC, 30W DC	<u><a href="#">PDF</a></u>
<u><a href="#">111019-00</a></u>	\$-5i0q:		32 to 140°F	15A resistive / 2A inductive at 120 VAC, 10A resistive / 2A inductive at 250 VAC, 30W DC	<u><a href="#">PDF</a></u>
<u><a href="#">111019-01</a></u>	\$-5i0s:		14 to 122°F		<u><a href="#">PDF</a></u>

# 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

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

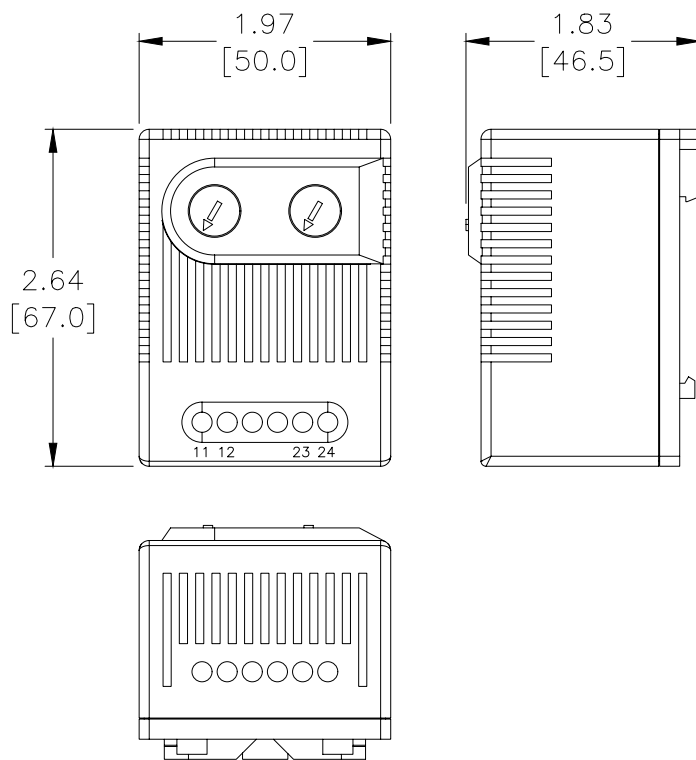
## Dual Adjustable Thermostats

Part Number	Price	Left Contact	Setting Range	Right Contact	Setting Range
<a href="#">011720-00</a>	\$0ad9:	N.C.	0 to 60°C	N.O.	0 to 60°C
<a href="#">011720-01</a>	\$0ada:		32 to 140°F		32 to 140°F
<a href="#">011750-00</a>	\$1oq0:		-10 to 50°C		20 to 80°C
<a href="#">011750-01</a>	\$1oq1:		14 to 122°F		68 to 176°F
<a href="#">011760-00</a>	\$1oq2:	N.O.	0 to 60°C		0 to 60°C
<a href="#">011760-01</a>	\$1oq3:		32 to 140°F		32 to 140°F

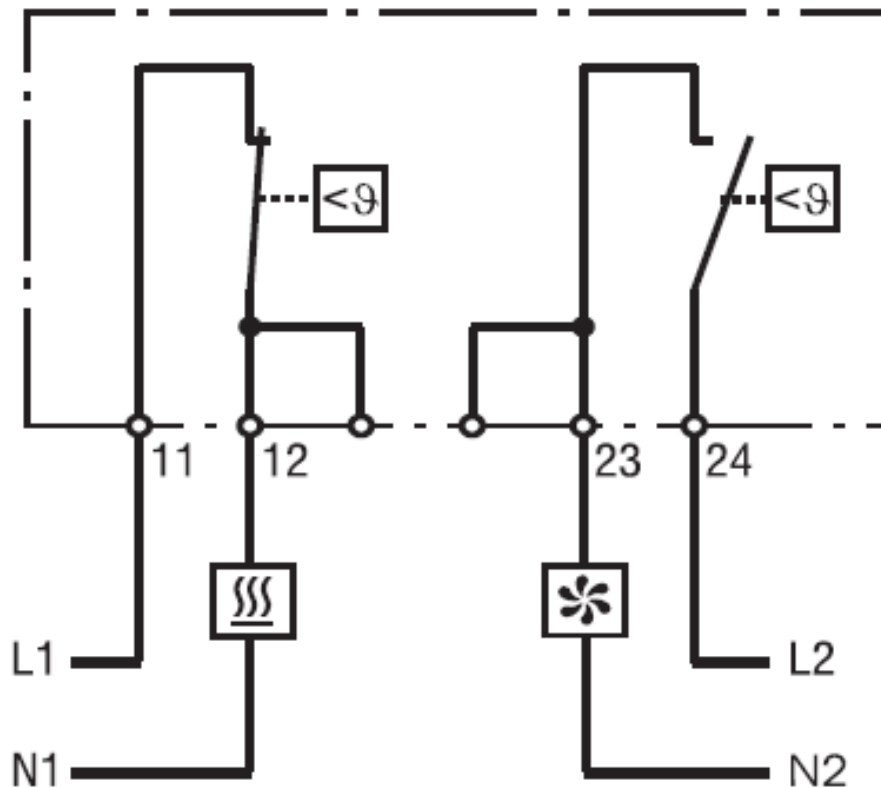
# Dual Adjustable Thermostats



## 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)

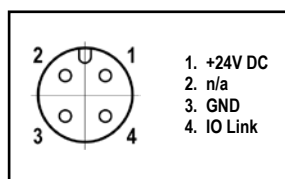
## Listings

- UL Recognized File E500143

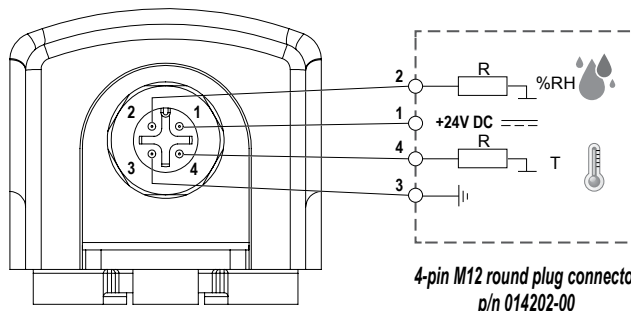


Smart Sensors			
Part Number	Price	Output	Drawing Link
<a href="#">014202-00</a>	\$-0417x:	4-20 mA, 2 channel	<a href="#">PDF</a>
<a href="#">014112-00</a>	\$-05116:	I/O-Link	<a href="#">PDF</a>

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



4-pin M12 round plug connector  
p/n 014202-00

# 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



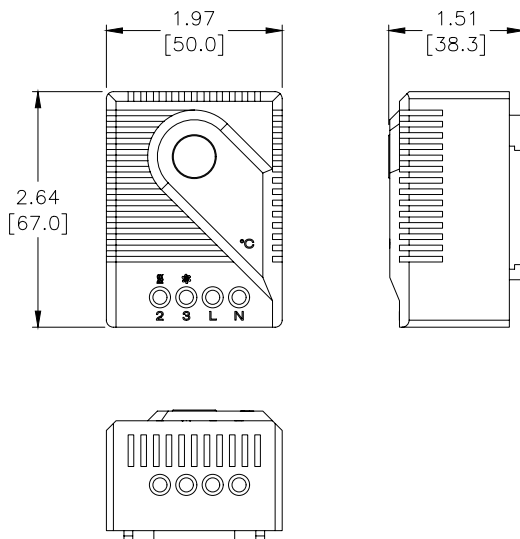
Mechanical Thermostats			
Part Number	Price	Operating* Voltage	Setting Range
<b>011700-00</b>	\$10py:	230VAC	5 to 60°C
<b>011700-01</b>	\$;10p!:		40 to 140°F
<b>011709-00</b>	\$10p?:	120VAC	40 to 140°F
<b>011709-01</b>	\$;10p.:		5 to 60°C

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

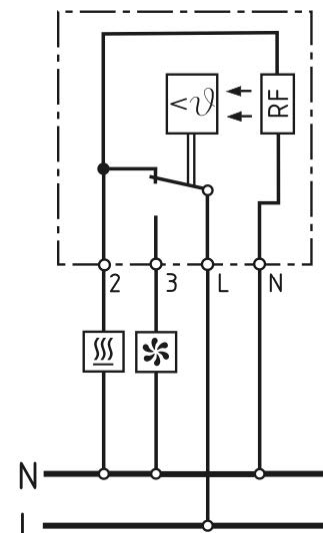
Mechanical Thermostats Specifications	
<b>Switching Difference</b>	9°F [5K]
<b>Switching Tolerance</b>	-5.4/+3.6°F [-3/+2°K]
<b>Sensor Element</b>	Thermostatic bimetal
<b>Contact Type</b>	SPDT / change-over contact
<b>Contact Resistance</b>	<10 mΩ
<b>Service Life</b>	>100,000 cycles
<b>Max. Switching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

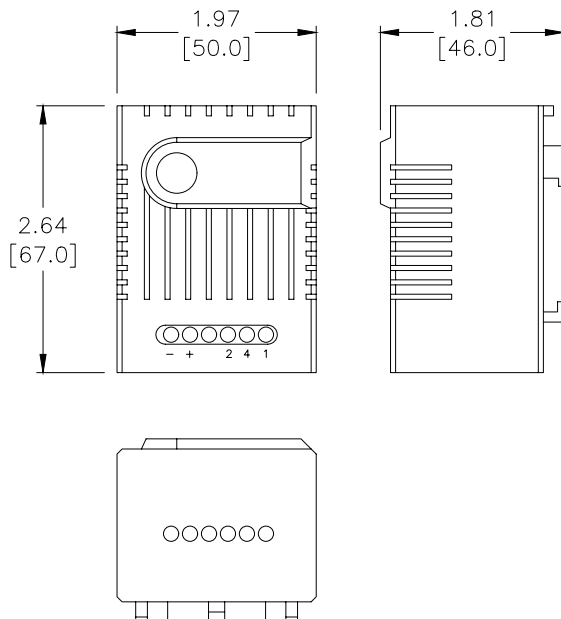
- Compact design
- Adjustable setting dial
- DIN rail mounting
- Low hysteresis
- Wide adjustment range



Electronic Thermostat			
Part Number	Price	Operating Voltage	Setting Range
011900-00	\$10q6:	DC 24V (DC 20-28V)	0 to 60°C
011900-01	\$10q7:		32 to 140°F

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

## Dimensions



## Wiring Diagram

