

## Controllers

### Electronic Hygrotherm



#### Application

The Electronic Hygrotherm senses ambient temperature and relative air humidity and adjusts a connected device to maintain temperature and humidity set points.

#### Features

- Temperature (32-140 F) and humidity (50%-90% RH) adjustment
- High switching capacity
- Optical function displays (LED) in each control
- Long service life (100,000 cycles NO) (50,000 cycles, NC)
- Mounting clip for 35-mm DIN rail
- Change-over contact (relay)
- Connection: 5-pole terminal for AWG 14 max (2.5-mm square)
- Plastic housing UL94V-0
- Vertical mounting
- Maximum switching capacity:
  - 120 VAC 8A (Resistive Load)
  - 240 VAC 8A (Resistive Load)
  - 120 VAC 3A (Inductive Load)
  - 240 VAC 3A (Inductive Load)
  - 24 VDC 4A

#### Industry Standards

CE

cURus; File No. E164102

#### Finish

Light-gray plastic UL94V-0

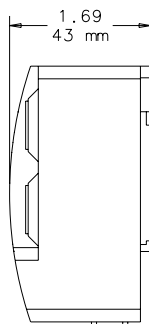
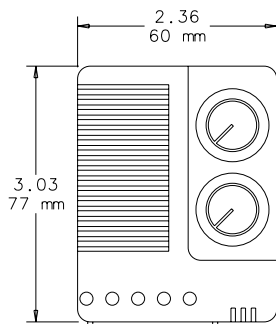
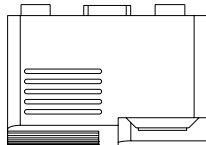
Bulletin: D85

#### Standard Product

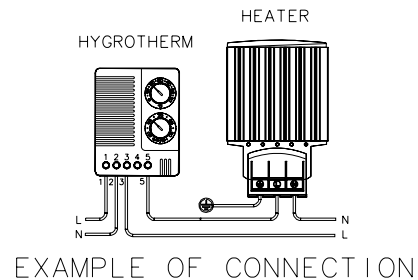
Catalog Number	AxBxC in.	AxBxC mm	Hysteresis	Humidity Set Point (adjustable)	Temperature		Storage Temperature (°F)	Storage Temperature (°C)
					Set Point (adjustable) (°F)	Operating Temperature Range (°C)		
ATEMHUM	3.03 x 2.36 x 1.69	77 x 60 x 43	~ 3.6 F (2K) ± 1.8 F (1K) tolerance	50-90% RH	32 to 140	0 to 60	-4 to 176	-20 to 80

#### Relay Output

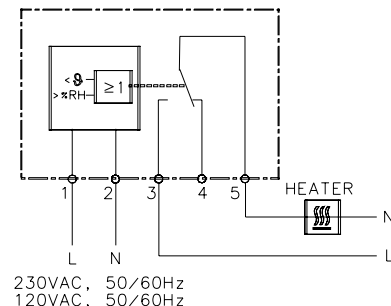
Contacts	Close at...	Open at...	Use for
3 and 5	humidity rise or temperature drop	humidity drop or temperature rise	heaters, dehumidifiers, low-temp alarms
4 and 5	humidity drop or temperature rise	humidity rise or temperature drop	cooling, humidifiers, high-temp alarms



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EXAMPLE OF CONNECTION



CONNECTION DIAGRAM

## Controllers

### Mechanical Hygrostat



#### Application

The Mechanical Hygrostat controls relative air humidity inside an enclosure to prevent condensation and corrosion that can damage components. It can also be connected to an enclosure heater, cooling fans, warning lights or other devices.

*The critical relative humidity (RH) level for most components is 65 percent. Above 65 percent RH, condensation can form and cause electronic equipment to malfunction.*

#### Features

- Adjustable relative humidity range
- High switching capacity
- Long service life (>100,000 cycles)
- Maximum permissible air velocity of 50 ft./sec. (15 m/s)
- Maximum switching voltage = 250 VAC  
*250 V should be switched only in a non-condensing environment*
- Change-over contact
- Mounting clip for 35-mm DIN rail
- Connection: 3-pole terminal for AWG 14 max. (2.5-mm squared)
- Contact resistance less than 10 mΩ

#### Finish

Light-gray plastic, UL94V-0

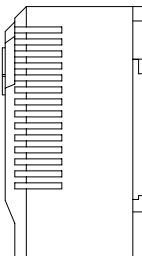
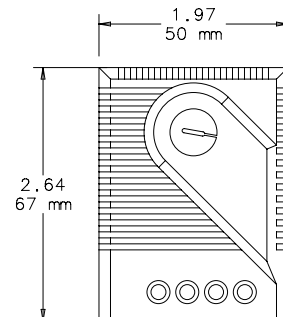
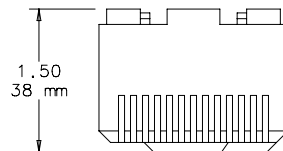
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#### Industry Standards

CE

#### Standard Product

Catalog Number	AxBxC in.	AxBxC mm	Switching Capacity (Minimum)	Switching Capacity (Maximum)	Operating Temperature Adjustable (°F)	Operating Temperature (Adjustable) (°C)	Storage Temperature (°F)	Storage Temperature (°C)	Setting Range
AMHUM	2.64 x 1.97 x 1.50	67 x 50 x 38	100mA @ AC/DC 20 V	5A @ AC 250 V (resistive load) 0.2A @ AC 250 V (inductive load at cos 0 = 0.8) DC 20W	32 to 140	0 to 60	-4 to 176	-20 to 80	35 to 95% RH



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## Controllers

### Dual Thermostat



#### Industry Standards

CE  
CSA File No. 215952

cURus; File No. E164102

#### Application

Two thermostats in one, the Dual Thermostat independently controls equipment heating and cooling systems.

#### Features

- Two thermostats; one normally closed (NC), red, and one normally open (NO), blue, in one casing
- Wide adjustable temperature range (32 -140 F)
- Thermostatic bimetallic sensor element
- Connection: 4-pole terminal for AWG 14 max (2.5 mm<sup>2</sup>)
- Mounting clip for 35-mm DIN rail

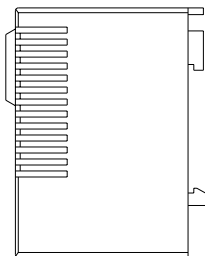
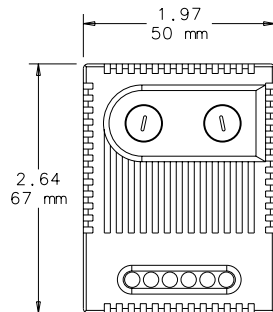
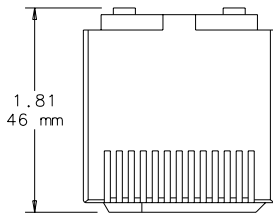
#### Finish

Light-gray plastic, UL94V-0

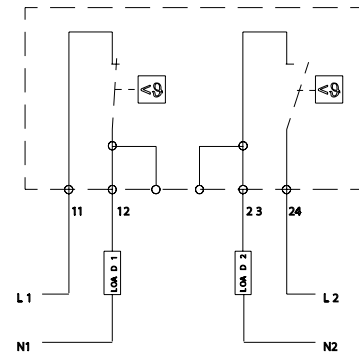
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#### Standard Product

Catalog Number	AxBxC in.	AxBxC mm	Switching Capacity (Normally Closed)	Switching Capacity (Normally Open)	Setting Range (Normally Closed)	Setting Range (Normally Open)
ADLTEMP	2.64 x 1.97 x 1.81	67 x 50 x 46	10 A resistive/2 A inductive @250 VAC, DC 30 W	5 A resistive/2 A inductive @250 VAC, DC 30 W	32-140 F	32-140 F



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CONNECTION DIAGRAM

## Controllers

### Temperature Control Switches



#### Industry Standards

cURus; File No. E164102  
UL94-VO

Protection rating IEC IP30  
CSA Certified, File Number 215952  
CE

#### Application

These easy-to-install thermostats regulate and monitor air temperature in enclosures that contain heat-emitting equipment. Thermostats prolong heater and fan life expectancy by controlling operation time and increase electrical component working efficiency by exposing them to fewer environmental contaminants.

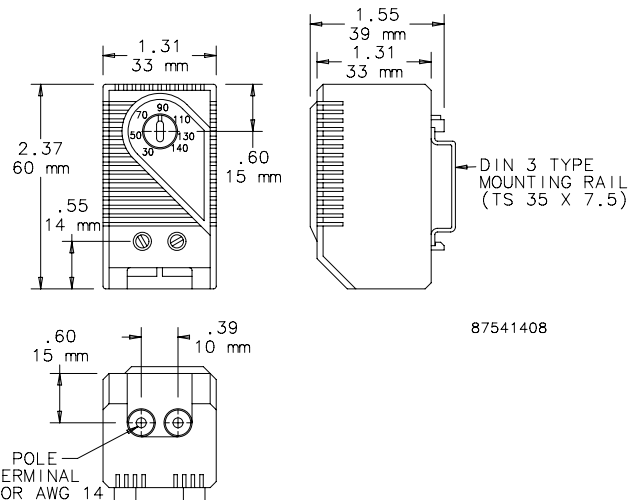
#### Features

- Additional label for conversion to Celsius scale and blank label to cover set point range label when adjustment after initial setting is not desired are included
- Bimetal temperature sensor
- Plastic housing
- Connections consist of tubular screw terminals for AWG 14 (.04 sq. in.)
- Provision for both panel mounting and DIN rail mounting

#### Finish

Molded plastic housing is black

Bulletin: D85



#### Standard Product

Catalog Number	Contact Type	Control Application
ATEMNC	NC (normally closed), quick acting	Heater
ATEMNO	NO (normally open), quick acting	Fan

#### Switching Capacity

Load	Amps
Maximum load	15 A resistive / 2 A inductive @ 120 VAC 10 A resistive / 2 A inductive @ 250 VAC
Minimum load	DC 30 W 20 mA (all voltages)