



### **Product overview**

The Axio AX-ET-1-24R single stage electronic thermostat is used for monitoring and controlling temperature between  $-5^{\circ}$ C to  $+95^{\circ}$ C. The units control either heating or cooling in response to the temperature, with an on/off relay output. The set point and differential are adjustable with potentiometers. The modules are 24Vac/dc powered and are provided in a DIN rail carrier.

#### Features

- Four temperature ranges link selectable
- Adjustable differential (0.5 to 12°C)
- Heating or Cooling control

- Simple setup with potentiometers
- 24Vac or 24Vdc powered
- High quality rising clamp terminals

### **Product specifications**

Power Supply	24Vac $\pm 15\%$ at 70mA, or 24Vdc $\pm 15\%$ at 30mA
Inputs	Sensor: 10K3A1 (See Axio temperature sensor range)
Temperature Ranges	$-5^{\circ}C$ to $+35^{\circ}C$
	$+10^{\circ}$ C to $+50^{\circ}$ C
	+35°C to +75°C
	+55°C to +95°C
Differential	0.5°C to 12°C
Output Contacts	SPCO Relay - NO contact 5A, NC contact 3A at 250Vac, resistive load
Terminals	Rising clamp for 0.5-1.5mm <sup>2</sup> cable
Dimensions	34(W) x 80(H) x 42(D)mm
Weight	45gms
Ambient Temperature Range	0 to 50°C
Country of Origin	United Kingdom

Order codes AX-ET-1-24R Single Stage Electronic Thermostat - 24Vac/dc

Order Online at: www.annicom.com Email orders and enquiries to: Sales@annicom.com

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### Installation

The AX-ET-1-24R should be installed by suitably qualified technician in conjunction with any guidelines for the equipment it is to be connected to and any local regulations. Field wiring should be installed to satisfy the requirements set out by the manufacturer of the equipment that the module is being connected to.

## Connections



### Setup

Select heating or Cooling with the Mode jumper: Position H for Heating Position C for Cooling

Select the setpoint range with the Range Select jumper:

Position A for -5°C to +35°C Position B for +10°C to +50°C Position C for +35°C to +75°C Position D for +55°C to +95°C Set the Set point by turning the Set point potentiometer within the range selected above.

Set the differential by turning the Differential potentiometer. The range of this is 0.5°C to 12°C.

Please note that if precise setting of the Set point and differential is a requirement of the application, then consider using the AX-ET-1L thermostat in the Axio range. The AX-ET-1L has an LCD display for exact setting of the setpoint, and also has many other additional features.

Alternatively a fixed resistor corresponding to the set point temperature value from the 10K3 sensor table can be fitted temporarily in place of the sensor, and the Set point potentiometer adjusted so that the relay activates as required.

# **Operation examples**

Assume a Setpoint of 25°C and Differential of 3°C:-

#### Heating:

Assume the temperature is increasing from below set point, the relay will be on until the sensor temperature reaches 25°C at which point the relay will turn off until the sensor temperature drops to 22°C, when the relay will turn on again.

#### Cooling:

Assume the temperature is decreasing from above set point, the relay will be on until the sensor temperature reaches 25°C at which point the relay will turn off until the sensor temperature rises to 28°C, when the relay will turn on again.

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